A Survey on Impediments to Trade and Foreign Direct Investment Between Latin American and East Asian Countries

March 2005

THE JAPAN INSTITUTE OF INTERNATIONAL AFFAIRS

COMMISSIONED BY THE MINISTRY OF FOREIGN AFFAIRS, JAPAN

PREFACE

The principal aims of this project are to provide a review of the current trends in trade and Foreign Direct Investment (FDI) between East Asia and Latin America, and to identify how the private and public sectors in these regions can further enhance their business relationships. At the request of the Ministry of Foreign Affairs (MOFA), Japan, this report was prepared for the Forum for East Asia-Latin America Cooperation (FEALAC) by the Japan Institute of International Affairs (JIIA).

This attempt to draw an overall picture of the economic interdependence between Asia and Latin America is based upon the Ministry's strong desire to further enhance inter-regional relations, also a matter of common interest to the member countries of FEALAC. Established in 2001, FEALAC is a multilateral initiative involving government officials and other experts that aims to promote better understanding and cooperation between the two regions in various fields. At the first meeting held in 2001 in Santiago, Chile, three working groups were established: Politics and Culture, Economy and Society, and Education, Science, and Technology. Japan has been actively involved in the Economy and Society Working Group and has served as a co-chair with Latin American countries. One of the major issues that has recently been raised in the working group is the development and promotion of business relations between East Asia and Latin America, which have not been drawing enough attention despite their large potential. In response to such interest among the member countries, the decision has been made by the Japanese MOFA to conduct a survey on the current situation regarding trade and FDI between these regions.

To develop this report, three approaches were taken. First, statistical data analysis was conducted on the trade and FDI trends of the past decade and the result reflected in the Overview. In addition to statistical data, the results from several existing surveys pursued by other private and governmental agencies were also studied and utilized. Third and most importantly, interviews were conducted with business and government agents who are daily involved in pursuing or promoting economic activities between these two regions. Among them are the two small workshops held at JIIA in February that focused on issues related to Japanese-foreign business relations.

In the workshops held at JIIA, four guest speakers contributed extensively to identifying central problems in business activities between Japanese and foreign firms. Takatomo Tozuka (Japan External Trade Organization (JETRO)) and Koji Uchida (Corporate Strategy and Research Department, Mitsui Corporation) discussed general difficulties facing Japanese business in Latin America. Nicholas Benes (The American Chamber of Commerce in Japan, and JTP Corporation) and Arthur Lord (The American Chamber of Commerce in Japan) presented general impediments to foreign businesses in Japan from their own experience. We would like to express our heartfelt gratitude toward them. We would also like to thank the many other people to whom we are indebted for providing a substantial amount of useful information through the interviews conducted in the Asian and Latin American countries.

Finally, this project and the report were shaped by JIIA in extensive cooperation with three economists: Shujiro Urata, Kozo Kiyota, and Mitsuyo Ando. Without them, it would have been impossible to conduct all the interviews, to exchange views on the information collected, and to develop this report. We thank them all.

The opinions and views expressed herein represent those of the individual authors and do not necessarily reflect those of the government of Japan, nor JIIA. We truly hope this report helps people in both the private and public sectors who are devotedly engaged in the promotion of economic and business cooperation between East Asia and Latin America.

March 2005

Makio Miyagawa Director The Japan Institute of International Affairs

LIST OF PROJECT MEMBERS

Shujiro Urata

Professor of International Economics Graduate School of Asia-Pacific Studies Waseda University

Kozo Kiyota

Associate Professor Faculty of Business Administration Yokohama National University

Mitsuyo Ando

Assistant Professor Faculty of Economics Hitotsubashi University

<u>Aya Kachi</u>

Research Fellow The Japan Institute of International Affairs

TABLE OF CONTENTS

PREFACE LIST OF PROJECT MEMBERS

1. INTRODUCTION

2. OVERVIEW: PATTERNS OF TRADE AND FDI BETWEEN EAST ASIA AND LATIN AMERICA

- 2-1. TRENDS OF TRADE AND FDI
- 2-2. FEATURES OF TRADE PROTECTION IN EAST ASIA AND LATIN AMERICA

3. ISSUES AND IMPEDIMENTS BY COUNTRY: ASIA

- 3-1. China
- 3-2. KOREA
- 3-3. JAPAN
- 3-4. THAILAND

4. ISSUES AND IMPEDIMENTS BY COUNTRY: LATIN AMERICA

- 4-1. BRAZIL
- 4-2. CHILE
- 4-3. MEXICO

5. CONCLUDING REMARKS: SOME SUGGESTIONS FOR THE PROMOTION OF TRADE AND FDI BETWEEN EAST ASIA AND LATIN AMERICA

6. **References**

1. INTRODUCTION

The globalization of economic activities has been accelerating rapidly as cross-border movements of goods, money, information, and people have expanded remarkably in recent years. Although globalization has allegedly brought some negative consequences such as widening income gaps among as well as within countries, on the whole it has had positive impacts on rapid economic growth and technological progress. One factor that has contributed to globalization is the liberalization of trade and foreign direct investment (FDI) policies which has been pursued by a large number of countries.

Vying with rapid globalization, regionalization, or regional economic integration, has emerged in various parts of the world in recent years. Regionalization takes two forms. One type of regionalization arises as a result of natural economic developments in that the benefits of agglomeration -- including economies of scope, scale, and speed - outweigh the costs of agglomeration such as congestion. Indeed, rapidly growing economies in proximity interact with each other through market and non-market channels, resulting in the promotion of economic growth. The other type of regionalization involves institutional arrangements such as regional trade agreements (RTAs), which include free trade agreements (FTAs) and customs unions. RTAs are discriminatory trade agreements, providing only members with preferential treatment. The former type of regionalization may be characterized as 'market-driven,' and the latter as 'institution-driven.' Both East Asian and Latin American regions have been witnessing the two types of regionalization in recent years. Regionalization in East Asia was mainly driven by market forces until the beginning of the 21st century. However, market-driven regionalization has been supplemented by institution-driven regionalization in recent years, as many East Asian countries have begun establishing FTAs with other East Asian countries. Compared to East Asia, Latin America has had significantly longer and more experience in institution-driven regionalization, as it began setting up FTAs and customs unions in the 1960s.

In light of these recent developments in the world economy as well as East Asian and Latin American regional economies, this report examines the recent developments in trade and FDI relationships between East Asia and Latin America. Specifically, this report attempts to identify the impediments that have discouraged trade and FDI between the two regions with the view that removal of the impediments would result in an increase in trade and FDI, which in turn would contribute to the economic growth of the two regions.

The report has adopted basically three approaches for examining the issues. One is analyzing statistical data on trade and FDI from the two regions in order to discern relationships from a broad perspective. Another approach is utilizing the results of the surveys, which have been conducted by several organizations, in order to identify the impediments to trade and FDI. The third approach is conducting interviews with relevant organizations and persons knowledgeable about the impediments. By combining these three approaches, we may be able to obtain an accurate picture of the problems so that we can formulate recommendations for overcoming the impediments. In the analysis, we selected six countries, three each from the two regions (Japan, Korea, and Thailand from East Asia and Brazil, Chile and Mexico from Latin America), in order to undertake an in-depth analysis. Although there are country-specific impediments, there appear to be a number of impediments common to many countries. Accordingly, our findings from these six countries should prove useful for formulating policies to promote trade and FDI for other countries as well.

This report has been prepared for the Forum for East Asia-Latin America Cooperation (FEALAC) by the Japan Institute of International Affairs with financial support from Japan's Ministry of Foreign Affairs.

2. OVERVIEW: PATTERNS OF TRADE AND FDI BETWEEN EAST ASIA AND LATIN AMERICA

2-1 Trends in Trade and FDI

(1) Overall Trends

Tables 2-1-1 and 2-1-2 present trade and FDI in East Asia and Latin America, and Table 2-1-3 shows their growth expressed as an index based on 1996 figures (values in 1996 = 100). Here, trade includes both trade in goods (exports and imports) and trade in services (credit and debit). Trade in travel services is also presented in the tables since it accounts for a large portion of trade in services as a whole. Other indicators presented in Table 2-1-1 and 2-1-3 are the level and growth of FDI (assets and liabilities). Assets and liabilities here are equivalent to the monetary values of the outward and inward FDI of the country, respectively.

Trade in goods												
Ū.	Exports				Imports				Net (Exports -	- Imports)		
	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	200
Argentina	24,043	26,341	26,543	25,709	22,283	23,889	19,158	8,470	1,760	2,452	7,385	17,239
Brazil	47,851	55,086	58,223	60,362	53,304	55,783	55,572	47,219	-5,453	-698	2,650	13,143
Chile	16,627	19,210	18,466	18,340	17,699	17,091	16,411	15,827	-1,072	2,119	2,054	2,513
China	151,077	249,131	266,075	325,651	131,542	214,657	232,058	281,484	19,535	34,474	34,017	44,167
Hong Kong	n.a.	202,698	190,926	200,220	n.a.	210,891	199,257	205,352	n.a.	-8,193	-8,331	-5,132
Indonesia	50,188	65,406	57,364	58,773	44,240	40,366	34,669	35,652	5,948	25,040	22,695	23,121
Japan	400,287	459,513	383,592	395,581	316,702	342,797	313,378	301,751	83,585	116,716	70,214	93,830
Korea	129,968	175,948	151,262	162,554	144,933	159,076	137,770	148,374	-14,965	16,872	13,492	14,180
Malaysia	76,985	98,429	87,981	93,383	73,137	77,602	69,597	75,248	3,848	20,827	18,383	18,135
Mexico	96,002	166,455	158,443	160,763	89,469	174,458	168,396	168,679	6,533	-8,003	-9,953	-7,916
Peru	5,877	6,951	7,007	7,647	7,869	7,407	7,273	7,440	-1,991	-455	-267	207
Philippines	20,543	37,295	31,243	34,383	31,885	33,481	31,986	33,975	-11,342	3,814	-743	408
Singapore	129,547	139,861	124,443	128,374	123,894	127,563	109,675	109,825	5,653	12,298	14,768	18,549
Taiwan	115,462	147,548	122,079	129,882	97,919	133,531	101,898	105,184	17,543	14,017	20,181	24,698
Thailand	54,408	67,894	63,202	66,795	63,897	56,193	54,620	57,020	-9,488	11,701	8,582	9,775
United States	614,013	774,632	721,842	685,384	803,112	1,224,430	1,145,950	1,164,760	-189,099	-449,798	-424,108	-479,376
Foreign direct i	nvestment				•							
	Asset				Liabilities				Net (Asset - L	iabilities)		
	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	200
Argentina	1,601	901	161	-643	6,949	10,418	2,166	775	-5,348	-9,517	-2,005	-1,418
Brazil	-467	2,282	-2,258	2,482	11,200	32,779	22,457	16,566	-11,667	-30,498	-24,715	-14,084
Chile	1,298	3,987	1,432	574	4,979	3,639	4,477	1,713	-3,681	348	-3,045	-1,140
China	2,114	916	6,884	2,518	40,180	38,399	44,241	49,308	-38,066	-37,483	-37,357	-46,790
Hong Kong	n.a.	59,352	11,345	17,694	n.a.	61,924	23,776	13,718	n.a.	-2,572	-12,431	3,976
Indonesia	600	n.a.	n.a.	n.a.	6,194	-4,550	-3,278	-1,513	-5,594	n.a.	n.a.	n.a
Japan	23,447	31,534	38,497	32,017	208	8,227	6,191	9,087	23,239	23,307	32,306	22,930
Korea	4,671	4,999	2,420	2,674	2,326	9,283	3,528	1,972	2,345	-4,285	-1,108	703
Malaysia	n.a.	2,026	267	1,905	5,078	3,788	554	3,203	n.a.	-1,762	-287	-1,299
Mexico	n.a.	n.a.	4,404	969	9,186	16,075	26,204	14,622	n.a.	n.a.	-21,800	-13,653
Peru	-17	n.a.	74	n.a.	3,471	810	1,144	2,391	-3,488	n.a.	-1,070	n.a
Philippines	182	-108	-160	85	1,517	1,345	982	1,111	-1,335	-1,453	-1,142	-1,026
Singapore	6,234	6,061	9,548	4,082	9,303	12,463	10,949	6,097	-3,069	-6,402	-1,401	-2,015
Taiwan	3,843	6,701	5,480	4,886	1,864	4,928	4,109	1,445	1,979	1,773	1.371	3,441
		-23	344	106	2,336	3,366	3,820	900	-1,405	-3,389	-3,476	-794
Thailand	931	-23		100		5,500						

Table 2-1-1. Trade in Goods and Foreign Direct Investment in East Asia and Latin America

	rade in Services af		vices in East P	151a allu Laulii .	America						(Millions of	US Dollars)
Trade in service					DI					1 •		
	Credit 1996	2000	2001	2002	Debit 1996	2000	2001	2002	Net (Credit - De 1996	2000	2001	2002
Argentina	4,339	4,765	4,398	2,945	7,865	9,039	8,298	4,541	-3,527	-4,274	-3,900	-1,595
Brazil	4,655	9,498	9,322	2,945 9,606	12,714	16,660	17,081	14,644	-8,059	-4,274	-3,700	-5,038
Chile	3,588	4,078	4,105	3,960	3,589	4,726	5,023	4,917	-8,059	-648	-918	-5,038 -957
China	20,601	30,431	33,334	39,745	22,585	36,031	39,267	4,917	-1,984	-5,600	-5,933	-6,784
								40,328 24,204		-3,000 16,175	-3,933	20,954
Hong Kong	n.a.	40,759	41,428	45,159	n.a.	24,584	24,314		n.a.		,	
Indonesia	6,599	5,213	5,500	6,574	15,139	15,011	15,880	17,117	-8,540	-9,798	-10,380	-10,542
Japan	67,712	69,238	64,516	65,712	129,988	116,864	108,249	107,940	-62,276	-47,626	-43,733	-42,228
Korea	23,412	30,534	29,055	28,143	29,592	33,423	32,883	35,603	-6,179	-2,889	-3,828	-7,461
Malaysia	15,136	13,941	14,455	14,878	17,573	16,747	16,657	16,448	-2,437	-2,807	-2,202	-1,570
Mexico	10,723	13,756	12,701	12,740	10,817	17,360	17,194	17,660	-94	-3,604	-4,493	-4,920
Peru	1,414	1,604	1,510	1,545	2,085	2,295	2,345	2,493	-671	-691	-835	-948
Philippines	12,947	3,972	3,148	3,056	9,429	6,402	5,198	4,320	3,518	-2,430	-2,050	-1,264
Singapore	30,453	29,099	28,855	29,702	22,101	26,938	26,886	27,298	8,351	2,161	1,969	2,404
Taiwan	16,260	19,952	19,495	21,385	24,381	26,930	24,700	25,217	-8,121	-6,978	-5,205	-3,832
Thailand	17,007	13,868	13,024	15,319	19,585	15,460	14,619	16,722	-2,578	-1,592	-1,595	-1,403
United States	236,890	295,421	285,738	288,722	150,629	221,012	219,444	227,380	86,261	74,409	66,294	61,342
Trade in travel s	ervices											
	Credit				Debit				Net (Credit - De			
	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	2002
Argentina	2,621	2,904	2,642	1,535	3,584	4,425	3,893	2,328	-963	-1,521	-1,251	-793
Brazil	718	1,810	1,731	1,998	4,387	3,894	3,199	2,396	-3,669	-2,084	-1,468	-398
Chile	931	819	799	733	736	620	708	788	195	200	90	-54
China	10,200	16,231	17,792	20,385	4,474	13,114	13,909	15,398	5,726	3,117	3,883	4,987
Hong Kong	n.a.	7,930	n.a.	n.a.	n.a.	12,502	n.a.	n.a.	n.a.	-4,572	n.a.	n.a.
Indonesia	6,184	4,974	5,276	5,285	2,399	3,197	3,406	3,368	3,785	1,777	1,870	1,916
Japan	4,081	3,373	3,306	3,497	37,058	31,884	26,531	26,656	-32,977	-28,512	-23,224	-23,159
Korea	4,880	6,834	6,384	5,294	7,482	7,132	7,617	9,068	-2,603	-298	-1,233	-3,774
Malaysia	4,477	5,011	6,863	7,118	2,569	2,075	2,614	2,618	1,908	2,936	4,249	4,500
Mexico	6,756	8,294	8,401	8,858	3,388	5,499	5,702	6,060	3,368	2,795	2,699	2,798
Peru	670	911	788	801	350	530	592	616	320	381	196	185
Philippines	1,546	2,134	1,723	1,740	1,266	1,005	1,229	871	280	1,129	494	869
Singapore	7,391	5,202	4,586	4,381	5,003	4,547	5,604	5,213	2,388	656	-1,018	-833
Taiwan	3,636	3,738	3,990	4,229	8,152	8,107	7,319	6,963	-4,516	-4,369	-3,329	-2,734
Thailand	9,089	7,483	7,075	7,901	4,286	2,772	2,924	3,303	4,803	4,711	4,151	4,598
United States	81,786	97,943	88,977	85,262	49,548	67,045	62,788	60,843	32,238	30,898	26,190	24,418

Table 2-1-2. Trade in Services and Travel Services in East Asia and Latin America

(Millions of US Dollars)

Source: IMF (2004) Balance of Payments Statistics (CD-ROM), Washington, D.C.: IMF.

	Trade in goo	ds							Trade in serv	vices						
	Exports				Imports				Credit				Debit			
	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	2002
Argentina	100.0	109.6	110.4	106.9	100.0	107.2	86.0	38.0	100.0	109.8	101.4	67.9	100.0	114.9	105.5	57.7
Brazil	100.0	115.1	121.7	126.1	100.0	104.7	104.3	88.6	100.0	204.0	200.3	206.4	100.0	131.0	134.4	115.2
Chile	100.0	115.5	111.1	110.3	100.0	96.6	92.7	89.4	100.0	113.7	114.4	110.4	100.0	131.7	140.0	137.0
China	100.0	164.9	176.1	215.6	100.0	163.2	176.4	214.0	100.0	147.7	161.8	192.9	100.0	159.5	173.9	206.0
Hong Kong	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	100.0	130.3	114.3	117.1	100.0	91.2	78.4	80.6	100.0	79.0	83.3	99.6	100.0	99.2	104.9	113.1
Japan	100.0	114.8	95.8	98.8	100.0	108.2	99.0	95.3	100.0	102.3	95.3	97.0	100.0	89.9	83.3	83.0
Korea	100.0	135.4	116.4	125.1	100.0	109.8	95.1	102.4	100.0	130.4	124.1	120.2	100.0	112.9	111.1	120.3
Malaysia	100.0	127.9	114.3	121.3	100.0	106.1	95.2	102.9	100.0	92.1	95.5	98.3	100.0	95.3	94.8	93.6
Mexico	100.0	173.4	165.0	167.5	100.0	195.0	188.2	188.5	100.0	128.3	118.4	118.8	100.0	160.5	159.0	163.3
Peru	100.0	118.3	119.2	130.1	100.0	94.1	92.4	94.6	100.0	113.4	106.8	109.2	100.0	110.1	112.5	119.5
Philippines	100.0	181.5	152.1	167.4	100.0	105.0	100.3	106.6	100.0	30.7	24.3	23.6	100.0	67.9	55.1	45.8
Singapore	100.0	108.0	96.1	99.1	100.0	103.0	88.5	88.6	100.0	95.6	94.8	97.5	100.0	121.9	121.7	123.5
Taiwan	100.0	127.8	105.7	112.5	100.0	136.4	104.1	107.4	100.0	122.7	119.9	131.5	100.0	110.5	101.3	103.4
Thailand	100.0	124.8	116.2	122.8	100.0	87.9	85.5	89.2	100.0	81.5	76.6	90.1	100.0	78.9	74.6	85.4
United States	100.0	126.2	117.6	111.6	100.0	152.5	142.7	145.0	100.0	124.7	120.6	121.9	100.0	146.7	145.7	151.0
	Foreign direc	et investmen	nt						Trade in trav	el services						
	Asset				Liabilities				Credit				Debit			
	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	2002	1996	2000	2001	2002
Argentina	100.0	56.3	10.1	-40.2	100.0	149.9	31.2	11.1	100.0	110.8	100.8	58.6	100.0	123.5	108.6	64.9
Brazil	100.0	-488.6	483.4	-531.5	100.0	292.7	200.5	147.9	100.0	252.1	241.0	278.3	100.0	88.8	72.9	54.6
Chile	100.0	307.1	110.3	44.2	100.0	73.1	89.9	34.4	100.0	88.0	85.8	78.8	100.0	84.2	96.2	107.0
China	100.0	43.3	325.6	119.1	100.0	95.6	110.1	122.7	100.0	159.1	174.4	199.9	100.0	293.1	310.9	344.2
Hong Kong	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	100.0	n.a.	n.a.	n.a.	100.0	-73.5	-52.9	-24.4	100.0	80.4	85.3	85.5	100.0	133.3	142.0	140.4
Japan	100.0	134.5	164.2	136.6	100.0	3,962.2	2,981.6	4,376.4	100.0	82.6	81.0	85.7	100.0	86.0	71.6	71.9
Korea	100.0	107.0	51.8	57.3	100.0	399.1	151.7	84.8	100.0	140.1	130.8	108.5	100.0	95.3	101.8	121.2
Malaysia	n.a.	n.a.	n.a.	n.a.	100.0	74.6	10.9	63.1	100.0	111.9	153.3	159.0	100.0	80.8	101.8	101.9
Mexico	n.a.	n.a.	n.a.	n.a.	100.0	175.0	285.3	159.2	100.0	122.8	124.3	131.1	100.0	162.3	168.3	178.9
Peru	100.0	n.a.	-437.4	n.a.	100.0	23.3	33.0	68.9	100.0	136.0	117.6	119.6	100.0	151.5	169.2	176.0
Philippines	100.0	-59.3	-87.9	46.7	100.0	88.7	64.7	73.2	100.0	138.0	111.4	112.5	100.0	79.4	97.1	68.8
Singapore	100.0	97.2	153.2	65.5	100.0	134.0	117.7	65.5	100.0	70.4	62.0	59.3	100.0	90.9	112.0	104.2
Taiwan	100.0	174.4	142.6	127.1	100.0	264.4	220.4	77.5	100.0	102.8	109.7	116.3	100.0	99.4	89.8	85.4
Thailand	100.0	-2.5	36.9	11.4	100.0	144.1	163.5	38.5	100.0	82.3	77.8	86.9	100.0	64.7	68.2	77.1
United States		173.3	130.6	150.0	100.0	371.3	175.2	45.8	100.0	119.8	108.8	104.2	100.0	135.3	126.7	122.8

Table 2-1-3. The Growth of Trade in Goods, Foreign Direct Investment, Trade in Services, and Trade in Travel Services in East Asia and Latin America

Source: IMF (2004) Balance of Payments Statistics (CD-ROM), Washington, D.C.: IMF.

Comparing the trade volumes in 1996 and any year in the 2000's, exports increased rapidly in all countries in the table. If we look at annual trends, however, the growth is very low or slightly negative in the 2000's, except in such countries as Brazil and Peru, where exports continued to grow after 2000. As for Japan, total exports in 2001 were about 95.8% of those in 1996. Some attribute this to the gradual recovery of the Japanese economy after the long recession beginning in 1997. No remarkable feature can be seen in import values either in Asia or in Latin America, except for China and Mexico having experienced high growth in imports from 1996 through 2002.

The trends in services vary more widely across countries than those in goods. In many countries and areas such as Brazil, Chile, China, Korea, Mexico, Peru, and Taiwan, trade in services is higher in the 2000's than in 1996, while only China experienced significant growth from 2000 on. If we focus on travel services, Brazil's large growth in credits is noteworthy: credits in 2002 were 2.7 times as much as those in 1996.

Trends in FDI also widely vary across countries, both in terms of value and growth rate. By value, Asian countries generally are larger investors than Latin American countries. Above all, Japanese outward FDI is particularly large, although it is not growing fast. China in Asia and Brazil and Mexico in Latin America receive a great amount of FDI each year as host countries. We will analyze the factors behind the larger investment in these countries in Section 2-1-(3).

If we look at overall trends, China's growth as seen in all three trade indicators is outstanding. The annual average growth rate of trade in goods and services is approximately 11.6 percent in China. Another noteworthy figure in Asia is that of Japanese inward FDI. Although there has been no remarkable growth since 2000, the level of inflows (liabilities) in the 2000's has been far higher than in the 1990's; the inward FDI in 2002 was 44 times as much as that in 1996. There are also several features to note concerning Latin American countries. First, Mexico gives an impression of being an all-rounder. Both in the level and the growth rate of these indicators, Mexico shows greater performance than other Latin American countries. Although Brazil and Chile show similarly steady growth in trade, there is a stark difference between these two countries in that Brazil receives a large amount of FDI every year, while Chile does not.

(2) Trade

Major Trading Partners for Selected East Asian and Latin American Countries

Tables 2-1-4 through 2-1-10 present summaries of the trading partners for seven countries in East Asia and Latin America, each table describing several indicators, including the exports, imports, and FDI in/outflows of individual countries. In this section, our discussion will focus on the trade data in the first and the second rows of each table.

First, if we look at the trade partners of the four East Asian countries, the US is included in the top five exporting and importing partners of all four Asian countries, and Hong Kong has been one of the major exporting partners of these countries since 2000. China, Japan, and Korea are among each other's top five major partners, both in exports and imports since the 1990's. It is particularly noteworthy that China's share has been consistently increasing, both as an exporting and importing partner of Japan and Korea, being the largest export destination for Korea, and the second largest for Japan by 2002. Another feature seen in the Asian countries is that Japan is the largest importing partner of all the other Asian countries.

Compared to the other three countries, Thailand has a slightly different set of trade partners. Singapore has ranked among Thailand's top five exporting partners, and Singapore and Malaysia among its major importing partners, since the 1990's.

Looking at the patterns of Asian countries by region, non-Asian countries other than the US, such as Australia, Germany, and Saudi Arabia have become major trade partners since 2000, although their shares are only less or around 5 percent. No Latin American countries are listed in the top five trading partners of these four Asian countries.

Now if we switch our focus to the trade partners of Latin American countries, the patterns seem to vary more widely than in Asia, partly being affected by their history and regional cooperation frameworks. Mexico's trade pattern, for example, shows the clear effect of NAFTA and the legacy of its historical ties to Spain, and Brazil's and Argentina's patterns represent their economic ties as also symbolized in MERCOSUL (MERCOSUR). For all these Latin American countries, the US is the largest or at least the second largest trade partner, and among Asian countries, China and Japan appear in the top five partners.

The US, Argentina, Germany, and the Netherlands have continually been among the major exporting partners of Brazil since 1995. In addition to these four countries, Japan had been among the top five until China entered the top five in 2002, replacing Japan. Brazil's top five

importing partners have been the US, Argentina, Germany, Japan, and Italy, a lineup unchanged since the 1990's. The country's economic ties with Japan, Germany, and Italy are oftentimes attributed to the large Japanese, German, and Italian immigrant communities in Brazil.

Japan and the US have been Chile's two largest exporting partners since the early 1990's. Recently, China has been expanding its presence and was Chile's third largest export destination in 2003. Mexico became a larger exporter to Latin American countries than Brazil in 2002. Another notable feature is that Korea became one of the top five exporting partners in 2003, and this could be interpreted as a pre-effect of the Chile-Korea FTA that came into force in 2004. As a result, the three largest economic powers in Asia, i.e., China, Japan, and Korea, came to be included in Chile's top five export destinations in 2003. The set of the five major countries constituting Chile's key importing partners and their rankings -- Argentina, the US, Brazil, China, and Germany, in descending order – have remained unchanged. Japan was in the top five until 2000; however, its presence declined as that of China expanded, putting China among Chile's top five importing partners in 2001.

The set of Mexico's largest trade partners shows the substantial effect of NAFTA, with its largest partner, the US, accounting for a remarkable 80 to 90 percent share in exports and a 60 to 80 percent share in imports since the 1990's. No other country's trade pattern shows such a large share occupied by a single country. Since 2000, the top four exporting partners have been the US, Canada, Germany, Spain. Japan and the Netherlands have appeared in the fifth rank, although the shares of these two countries have been less than 1 percent. The US, Japan, and Germany, in order of share, have been among the top five importing partners since the 1990's. Worthy of note is the rapid increase in China's presence. In 2003, China became Mexico's second largest importing partner, achieving a 5 percent share second only to the US' 61.8 percent.

Although it is difficult to draw general conclusions, Latin American countries seem to be more dependent on Asia for trade than vice versa. Other points that stands out from the above observations are the US' continuing large presence in both regions, and the clear rise of China.

Table 2-1-4. Major	 Trading and 	FDI Partners:	China
--------------------	---------------------------------	---------------	-------

								• • •			• • •			• • •			,	f US Dollars and	d Percent)
		199 Country		Share	199		Share	200 Country		Share	200	-	Share	200		Share	200		Share
Exports		Country World	Value 62,760		Country World	Value 148,955		World	Value 249,195	100.0	Country World	Value 266,698	100.0	Country World	Value 325,711	100.0	Country World	Value 438,250	Snare 100.0
Exports	1	Hong Kong	27,163		Hong Kong	36,004		United States	52,162	20.9	United States	200,098 54,395	20.4	United States	70,064	21.5	United States	438,230 92,633	21.1
	2	Japan	9,210		Japan	28,466		Hong Kong	44,520	20.9 17.9	Hong Kong	46,503	20.4 17.4	Hong Kong	58,483	18.0	Hong Kong	92,033 76,289	17.4
	3	United States	5,314		United States	28,400		Japan	41,654	16.7	Japan	45,078	16.9	Japan	48,483	14.9	Japan	59,423	17.4
	4	Germany	2,062		Korea	6,688		Korea	11,293	4.5	Korea	12,544	4.7	Korea	15,508		Korea	20,096	4.6
	5	U.S.S.R.	2,002		Germany	5,672		Germany	9,278	3.7	Germany	9,759	3.7	Germany	11,382	3.5	Germany	17,536	4.0
Imports	5	World	53,809		World	132,163		World	224,942	100.0	World	243,567	100.0	World	295,440	100.0	World	412,836	100.0
importo	1	Hong Kong	14,565		Japan	29,007		Japan	40,083	17.8	Japan	42,810	17.6	Japan	53,489	18.1	Japan	74,151	18.0
	2	Japan	7,656		United States	16,123		Taiwan	25,494	11.3	Taiwan	27,339	11.2	Taiwan	38,061	12.9	Taiwan	49,362	12.0
	3	United States	6,591	12.2	Taiwan	14,784		Korea	22,452	10.0	United States	26,221	10.8	Korea	28,581	9.7	Korea	43,135	10.4
	4	Germany	2,980		Korea	10,288		United States	21,663	9.6	Korea	23,396	9.6	United States	27,251	9.2	United States	33,939	8.2
	5	U.S.S.R.	2,213		Hong Kong	8,599		Hong Kong	21,617	9.6	Germany	13,695	5.6	Germany	16,434	5.6	Germany	24,341	5.9
Outward F			, -		6 6	- ,		World	55,097	100.0	World	70,754	100.0	World	98,268	100.0		7-	
	1							Myanmar	3,287	6.0	Hong Kong	20,067	28.4	Hong Kong	35,560	36.2			
	2							Laos	2,440	4.4	United States	5,370	7.6	United States	15,153	15.4			
	3							United States	2,314	4.2	Brazil	3,179	4.5	Korea	8,344	8.5			
	4							Brazil	2,109	3.8	Vietnam	2,679	3.8	Australia	4,857	4.9			
	5							Vietnam	1,761	3.2	Russia	1,240	1.8	Russia	3,545	3.6			
Inward FD	Ι													World	82,768	100.0	World	115,070	100.0
	1	Hong Kong	383		Hong Kong	40,996		Hong Kong	16,961		Hong Kong	20,685		Hong Kong	25,202	30.4	Hong Kong	40,708	35.4
	2	Taiwan	88		Singapore	8,666		United States	8,000		Virgin Islands	8,771		Virgin Islands	12,650	15.3	Virgin Islands	12,664	11.0
	3	Japan	46		Japan	7,592		Virgin Islands	7,521		United States	7,514		United States	9,156	11.1	United States	10,161	8.8
	4	United States	36		United States	7,471		Taiwan	4,041		Taiwan	6,914		Taiwan	6,741	8.1	Korea	9,177	8.0
	5	Singapore	10		Taiwan	5,849		Japan	3,681		Japan	5,419		Japan	5,298	6.4	Taiwan	8,558	7.4
Outward F	DI (sl	lected countries)																	
		China			China			China			China			China			China		
		Japan			Japan	130		Japan	26		Japan	167		Japan	1,816		Japan		
		Korea			Korea	159		Korea	423		Korea	81		Korea	8,344		Korea		
		Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
		Brazil			Brazil	20		Brazil	2,109		Brazil	3,179		Brazil	930		Brazil		
		Chile			Chile	98		Chile			Chile			Chile			Chile		
		Mexico			Mexico	25		Mexico	1,978		Mexico	23		Mexico	200		Mexico		
Inward FD	I (sele	ected countries)																	
		China			China			China			China			China			China		
		Japan	46		Japan	7,592		Japan	3,681		Japan	5,419		Japan	5,298		Japan		
		Korea			Korea			Korea			Korea			Korea			Korea	9,177	
		Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
		Brazil			Brazil	452		Brazil	425		Brazil	n.a.		Brazil	n.a.		Brazil	n.a.	
		Chile			Chile	597		Chile	18		Chile	n.a.		Chile	n.a.		Chile	n.a.	
		Mexico			Mexico	168		Mexico	118		Mexico	n.a.		Mexico	n.a.		Mexico	n.a.	

	199	0		199	5		200	0		200	1		200	2		200	13	
	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share
Exports	World	287,678	100.0	World	443,047	100.0	World	478,179	100.0	World	403,383	100.0	World	416,632	100.0	World	473,911	100.0
. 1	United States	91,121	31.7	United States	122,034	27.5	United States	144,009	30.1	United States	122,701	30.4	United States	120,798	29.0	United States	117,384	24.8
2	Germany	17,926	6.2	Korea	31,292	7.1	Taiwan	36,054	7.5	China	30,948	7.7	China	39,958	9.6	China	57,480	12.1
3	Korea	17,500	6.1	Taiwan	28,969	6.5	Korea	30,703	6.4	Korea	25,292	6.3	Taiwan	26,202	6.3	Korea	34,823	7.3
4	Taiwan	15,430	5.4	Hong Kong	27,780	6.3	China	30,356	6.3	Taiwan	24,337	6.0	Korea	25,292	6.1	Taiwan	31,174	6.6
5	Hong Kong	13,106	4.6	Singapore	23,006	5.2	Hong Kong	27,187	5.7	Hong Kong	23,352	5.8	Hong Kong	23,252	5.6	Hong Kong	29,918	6.3
Imports	World	253,307	100.0	World	336,027	100.0	World	379,530	100.0	World	349,056	100.0	World	337,149	100.0	World	383,025	100.0
1	United States	52,842	20.9	United States	75,880	22.6	United States	72,514	19.1	United States	63,713	18.3	China	61,792	18.3	China	75,559	19.7
2	Indonesia	12,774	5.0	China	35,922	10.7	China	55,156	14.5	China	57,780	16.6	United States	58,589	17.4	United States	59,892	15.6
3	Australia	12,359	4.9	Korea	17,330	5.2	Korea	20,454	5.4	Korea	17,221	4.9	Korea	15,498	4.6	Korea	17,931	4.7
4	China	12,057	4.8	Australia	14,514	4.3	Taiwan	17,967	4.7	Indonesia	14,883	4.3	Indonesia	14,174	4.2	Indonesia	16,353	4.3
5	Korea	11,734	4.6	Taiwan	14,366	4.3	Indonesia	16,371	4.3	Australia	14,385	4.1	Australia	13,986	4.1	Australia	15,005	
Outward FDI		56,852	100.0	World	51,101.0) 100.0	World	49,030	100.0	World	32,292	100.0	World	36,861	100.0	World	36,092	100.0
1	United States	26,128	46.0	United States	22,193	43.4	United Kingdom	19,176	39.1	United States	6,461	20.0	United States	8,215	22.3	United States	10,577	29.3
2	United Kingdom	6,806	12.0	China	4,473	8.8	United States	12,349	25.2	Cayman Islands	4,996	15.5	United Kingdom	4,412	12.0	Netherlands	6,869	19.0
3	Australia	3,669	6.5	United Kingdom	3,445	6.7	Netherlands	2,764	5.6	Netherlands	4,521	14.0	Cayman Islands	4,036	10.9	China	3,143	8.7
4	Netherlands	2,744	4.8	Australia	2,635	5.2	Cayman Islands	2,736	5.6	United Kingdom	3,968	12.3	France	3,574	9.7	Cayman Islands	2,123	
5	Hong Kong	1,785	3.1	Panama	1,660		Panama	1,325	2.7	China	1,453	4.5	Netherlands	3,295	8.9	United Kingdom	1,785	
Inward FDI		2,788	100.0	World	3,811	100.0	World	28,274	100.0	World	17,402	100.0	World	17,937	100.0	World	18,722	100.0
1	Netherlands	734	26.3	United States	1,837	48.2	Japan	10,326	36.5	Netherlands	6,575	37.8	United States	4,876	27.2	Japan	3,181	17.0
2	United States	664	23.8	Netherlands	555	14.6	United States	9,141	32.3	United States	5,139	29.5	Japan	4,462	24.9	United States	3,090	
3	Japan	350	12.6	Japan	241	6.3	Germany	2,530	8.9	Japan	2,108	12.1	Netherlands	3,221	18.0	Netherlands	2,800	
4	Germany	259	9.3	Germany	174	4.6	Switzerland	1,966	7.0	United Kingdom	1,164	6.7	Cayman Islands	1,671	9.3	Cayman Islands	2,586	
5	Canada, Switzerland	142	5.1	United Kingdom	118	3.1	Cayman Islands	1,193	4.2	Canada	394	2.3	Germany	980	5.5	Bermuda	1,431	7.6
Outward FDI	(slected countries)																	
	China	348		China	4,473		China	1,008		China	1,453		China	1,766		China	3,143	
	Japan			Japan			Japan			Japan			Japan			Japan		
	Korea	285		Korea	446		Korea	816		Korea	563		Korea	626		Korea	284	
	Thailand	1,154		Thailand	1,233		Thailand	932		Thailand	884		Thailand	504		Thailand	629	
	Brazil	607		Brazil	296		Brazil	236		Brazil	1,373		Brazil	406		Brazil	1,551	
	Chile	29		Chile	140		Chile	28		Chile	52		Chile	6		Chile	4	
	Mexico	169		Mexico	208		Mexico	208		Mexico	46		Mexico	85		Mexico	140	
Inward FDI (s	elected countries)																	
	China	3		China	12		China	5		China	3		China	3		China	3	
	Japan	350		Japan	241		Japan	10,326		Japan	2,108		Japan	4,462		Japan	3,181	
	Korea	8		Korea	95		Korea	48		Korea	24		Korea	25		Korea	34	
	Thailand	1		Thailand			Thailand	0		Thailand	1		Thailand			Thailand		
	Brazil	5		Brazil	0		Brazil			Brazil			Brazil			Brazil		
	Chile	0		Chile	0		Chile			Chile			Chile	0		Chile		
	Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		

Notes: investment by the foreign affiliates located in Japan.

ind outward FDI are notification basis.

Table 2-1-6. Major	 Trading and 	I FDI Partners:	Korea
--------------------	---------------------------------	-----------------	-------

	199	0		199	£		-	2000		200	01		2	002		(Millions of US 200		I ciccii
	Country	Value	Share	Country		Share	Country	Value	Share	Country		Share	Country	Value	Share	Country	Value	Share
Exports	World	67,812	100.0	World	131,312	100.0	World	171,826	100.0	World	149,836	100.0	World	161,480	100.0	World	192,750	100
porto	1 United States	19,420	28.6	United States	24,344	18.5	United States	37,806	22.0	United States	31,358	20.9	United States	32,943	20.4	China	35,110	18
	2 Japan	12,638	18.6	Japan	17,048	13.0	Japan	20,466	11.9	China	18,190	12.1	China	23,754	14.7	United States	34,369	17
	3 Hong Kong	3,780	5.6	Hong Kong	10,682	8.1	China	18,455	10.7	Japan	16,506	11.0	Japan	15,143	9.4	Japan	17,276	9
	4 Singapore	1,805	2.7	China	9,144	7.0	Hong Kong	10,708	6.2	Hong Kong	9,452	6.3	Hong Kong	10,146	6.3	Hong Kong	14,654	7
	5 United Kingdom	1,751	2.6	Singapore	6,689	5.1	Singapore	5,648	3.3	Germany	4,322	2.9	Taiwan	6,632	4.1	Taiwan	7,045	3
nports	World	74,405	100.0	World	135,110	100.0	World	160,479	100.0	World	141,096	100.0	World	152,123	100.0	World	178,824	100
•	1 Japan	18,574	25.0	Japan	32,606	24.1	Japan	31,828	19.8	Japan	26,633	18.9	Japan	29,856	19.6	Japan	36,313	20
	2 United States	16,946	22.8	United States	30,420	22.5	United States	29,286	18.2	United States	22,431	15.9	United States	23,111	15.2	United States	24,935	13
	3 Germany	3,283	4.4	China	7,402	5.5	China	12,799	8.0	China	13,303	9.4	China	17,400	11.4	China	21,909	12
	4 Australia	2,590	3.5	Germany	6,584	4.9	Saudi Arabia	9,641	6.0	Saudi Arabia	8,058	5.7	Saudi Arabia	7,551	5.0	Saudi Arabia	9,268	5
	5 Indonesia	1,601	2.2	Saudi Arabia	5,432	4.0	Australia	5,959	3.7	Australia	5,534	3.9	Australia	5,973	3.9	Germany	6,822	3
utward FE	DI																	
	1			China	814		United States	1,144		Netherlands	1,569		China	896		China	1,343	
	2			United States	534		China	659		United States	1,412		United States	545		United States	1,009	
	3			ASEAN	415		Hong Kong	283		China	547		Netherlands	193		Singapore	234	
	4			Indonesia	200		Singapore	208		United Kingdom	320		Hong Kong	162		Vietnam	136	
	5			Vietnam	178		Japan	139		Indonesia	169		Vietnam	135		United Kingdom	94	
ward FDI																		
	1 United States	317		United States	645		United States	2,916		United States	3,890		United States	4,500		Belgium	1,346	
	2 Japan	236		Japan	418		Japan	2,448		Canada	1,506		Japan	1,403		United States	1,240	
	3 Germany	62		Netherlands	170		Germany	1,599		Netherlands	1,245		Netherlands	451		United Kingdom	871	
	4 United Kingdom	46		United Kingdom	87		Malaysia	1,408		Malaysia	785		Germany	284		Japan	541	
	5 Netherlands	36		Singapore	65		Bermuda	1,385		Japan	772		Canada	261		Malaysia	417	
itward FE	OI (slected countries)																	
	China			China	814		China	659		China	547		China	896		China	1,343	
	Japan			Japan	111		Japan	139		Japan	101		Japan	75		Japan	50	
	Korea			Korea			Korea			Korea			Korea			Korea		
	Thailand			Thailand			Thailand			Thailand			Thailand	31		Thailand	27	
	Brazil			Brazil	17		Brazil	5		Brazil	41		Brazil	14		Brazil		
	Chile			Chile	(13))	Chile	1		Chile	0		Chile	0		Chile		
	Mexico			Mexico	29		Mexico	38		Mexico	7		Mexico	43		Mexico	7	
ward FDI	(selected countries)																	
	China			China			China			China			China	249		China	50	
	Japan	236		Japan	418		Japan	2,448		Japan	772		Japan	1,403		Japan	541	
	Korea			Korea			Korea			Korea			Korea			Korea		
	Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil	4		Brazil	0		Brazil	0		Brazil			Brazil		
	Chile			Chile			Chile			Chile			Chile			Chile		
	Mexico			Mexico			Mexico			Mexico	0		Mexico			Mexico		

Notes: slected countries) in 1995 indicate net values.

DI: BOP basis for 1996-2000 and the the notification basis after 2001.

Table 2-1-7. Major	Trading and	FDI Partners:	Thailand
--------------------	-------------	---------------	----------

10010 2 1		lajor Trading and	1 D11 urtile	is. Thuhu	iiu												(Millions of U	S Dollars and	Percent)
		199	-			1995		1	2000			2001		2	2002		20	03	
		Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country	Value	Share
Exports		World	23,072	100.0	World	57,201	100.0	World	68,962	100.0	World	65,112	100.0	World	68,851	100.0	World	80,330	100.0
		United States	5,240	22.7	United States	10,078	17.6	United States	14,706	21.3	United States	13,246	20.3	United States	13,522	19.6	United States	13,669	
	2	Japan	3,969	17.2	Japan	9,477	16.6	Japan	10,164	14.7	Japan	9,964	15.3	Japan	10,001	14.5	Japan	11,403	14.2
	3	Singapore	1,696	7.4	Singapore	7,917	13.8	Singapore	5,997	8.7	Singapore	5,287	8.1	Singapore	5,554	8.1	Singapore	5,873	7.3
	4	Germany	1,198	5.2	Hong Kong	2,921	5.1	Hong Kong	3,474	5.0	Hong Kong	3,298	5.1	Hong Kong	3,699	5.4	China	5,707	7.1
	5	Netherlands	1,115	4.8	Netherlands	1,801	3.1	China	2,806	4.1	China	2,863	4.4	China	3,553	5.2	Hong Kong	4,331	5.4
Imports		World	33,408	100.0	World	73,692	100.0	World	61,924	100.0	World	62,957	100.0	World	64,721	100.0	World	75,805	100.0
	1	Japan	10,144	30.4	Japan	21,625	29.3	Japan	15,315	24.7	Japan	13,881	22.0	Japan	14,902	23.0	Japan	18,267	24.1
	2	United States	3,600	10.8	United States	8,507	11.5	United States	7,291	11.8	United States	7,198	11.4	United States	6,197	9.6	United States	7,185	9.5
	3	Singapore	2,480	7.4	Singapore	4,162	5.6	Singapore	3,416		China	3,711	5.9	China	4,928	7.6	China	6,067	8.0
	4	Germany	1,702	5.1	Germany	3,748	5.1	China	3,377	5.5	Malaysia	3,078	4.9	Malaysia	3,640	5.6	Malaysia	4,536	6.0
		Malaysia	1,125	3.4	Malaysia	3,235	4.4	Malaysia	3,344	5.4	Singapore	2,854	4.5	Singapore	2,904	4.5	Singapore	3,269	4.3
Outward I	FDI																		
	1																		
	2																		
	3																		
	4																		
Inward FI	0	illions of Thai Bhat)																	
in ward I I		Japan	69,231		Japan	196,613		Japan	107,382		Japan	83,962		Japan	38,398		Japan	97,597	
		Europe	37,098		United States	64,335		United States	37,752		United States	40,131		Singapore	13,103		United States	24,574	
		United States	27,913		Taiwan	45,098		Singapore	19,910		Singapore	27,895		Taiwan	11,237		United Kingdom	20,513	
		Hong Kong	27,412		Korea	42,467		Taiwan	17,632		Taiwan	13,719		United States	11,113		Taiwan	13,553	
		United Kingdom	19,567		Singapore	38,055		Germany	10,166		India	9,710		Switzerland	3,727		Singapore	6,730	
Outward I		slected countries)	-,,,		2008-F 200							,,			0,1,2,		~~~8~F ***	0,100	
		China			China			China			China			China			China		
		Japan			Japan			Japan			Japan			Japan			Japan		
		Korea			Korea			Korea			Korea			Korea			Korea		
		Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
		Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
		Chile			Chile			Chile			Chile			Chile			Chile		
		Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		
Inward FI	DI (sel	lected countries, Mil	lions of Thai	Baht)															
		China			China	723		China	367		China	8,690		China	379		China		
		Japan	69,231		Japan	196,613		Japan	107,382		Japan	83,962		Japan	38,398		Japan	97,597	
		Korea			Korea	42,467		Korea	1,394		Korea	1,437		Korea	3,213		Korea		
		Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
		Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
		Chile			Chile			Chile			Chile			Chile			Chile		
		Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		

Table 2-1-8. Major Trading and FDI Partners: Brazil

																	JS Dollars and	Percent)
		990	~	199		~	20		~		01	~	20		~		003	~
	Country	Value	Share	Country	Value	Share	Country	Value	Share	Country		Share	Country	Value	Share	Country	Value	Share
Exports	World	31,414	100.0	World	46,605	100.0	World	59,642		World	63,510	100.0	World	64,132	100.0	World	78,462	100.0
1	United States	7,734	24.6	United States	8,799	18.9	United States	13,381	22.4	United States	15,597	24.6	United States	16,798	26.2	United States	18,075	23.0
2		2,494	7.9	Argentina	4,041	8.7	Argentina	6,233		Argentina	5,402	8.5	Netherlands	3,389	5.3	Argentina	4,789	6.1
-		2,349	7.5	Japan	3,102	6.7	Netherlands	2,796		Netherlands	3,082	4.9	Germany	2,665	4.2	China	4,729	6.0
4		1,844	5.9	Netherlands	2,918	6.3	Germany	2,526		Germany	2,673	4.2	China	2,617	4.1	Netherlands	4,555	5.8
		1,615	5.1	Germany	2,158	4.6	Japan	2,472	4.1	Japan	2,180	3.4	Argentina	2,484	3.9	Germany	3,317	4.2
Imports	World	24,977	100.0	World	54,363	100.0	World	61,875		World	61,412	100.0	World	51,956	100.0	World	57,316	100.0
1	United States	4,956	19.8	United States	11,499	21.2	United States	14,303		United States	14,342	23.4	United States	11,482	22.1	United States	11,474	20.0
2		2,229	8.9	Argentina	6,127	11.3	Argentina	7,528		Argentina	6,828	11.1	Argentina	5,222	10.1	Argentina	5,610	9.8
3		1,816		Germany	5,192	9.6	Germany	4,863	7.9	Germany	5,293	8.6	Germany	4,838	9.3	Germany	4,974	8.7
4	bupun	1,773	7.1	Japan	3,607	6.6	Japan	3,255	5.3	Japan	3,370	5.5	Japan	2,582	5.0	Japan	2,994	5.2
		1,666	6.7	Italy	3,144	5.8	Italy	2,387	3.9	Italy	2,404	3.9	Italy	1,938	3.7	China	2,515	4.4
Outward FD	I																	
1	l																	
2	2																	
3	3																	
4	1																	
	5																	
Inward FDI																		
1	United States	10,488		United States	18,983		Spain	9,593		United States	45,408		Netherlands	3,372		United States	2,383	
2	2 Germany	5,615		Germany	7,054		United States	5,398		Spain	2,776		United States	2,614		Cayman Islands	1,909	
3	3 Japan	3,440		United Kingdom	5,216		Portugal	2,515		France	1,908		France	1,815		Netherlands	1,444	
4	4 Switzerland	3,222		Japan	4,475		Netherlands	2,228		Netherlands	1,897		Cayman Islands	1,555		Japan	1,368	
4	5 United Kingdom	2,708		Switzerland	3,637		Cayman Islands	2,035		Cayman Islands	1,752		Bermuda	1,469		France	825	
Outward FD	I (slected countries)						-											
	China			China			China			China			China			China		
	Japan			Japan			Japan			Japan			Japan			Japan		
	Korea			Korea			Korea			Korea			Korea			Korea		
	Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
	Chile			Chile			Chile			Chile			Chile			Chile		
	Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		
Inward EDL	(selected countries)			INICALCO			meneo			MCARO			mento			meneo		
mwauTDI	China			China			China			China			China			China		
	Japan	3,440		Japan	4,475			385		Japan	827		Japan	504			1,368	
	Korea	5,440		Korea	4,473		Japan Korea	25		Korea	25		Korea	304 4		Japan Korea	1,508	
	Thailand			Thailand			Thailand	25		Thailand	25		Thailand	4		Korea Thailand		
	Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
	Chile			Chile			Chile			Chile			Chile	47		Chile		
	Mexico			Mexico			Mexico			Mexico	61		Mexico	24		Mexico		

Note: d 1995 are stocks (not flows).

Table 2-1-9. Major	Trading and	FDI Partners:	Chile
--------------------	-------------	---------------	-------

		~			_											(Millions of US I		reiceiit,
	199		C1	199		C1	200		C1	20		<i>a</i> 1	200		<i>a</i> 1	2003		
_	Country		Share	Country	Value	Share	Country	Value	Share	Country		Share	Country	Value	Share	Country	Value	Share
Exports	World	8,631	100.0	World	16,538	100.0	World	19,295	100.0	World	18,554	100.0	World	18,285	100.0	World	21,464	
1	United States	1,489	17.3	Japan	2,906	17.6	United States	3,243	16.8	United States	3,428	18.5	United States	3,484	19.1	United States	3,468	
2	1	1,388	16.1	United States	2,398	14.5	Japan	2,547	13.2	Japan	2,547	13.7	Japan	1,928	10.5	Japan	2,247	10.5
3	0	1,076	12.5	United Kingdom	1,076	6.5	United Kingdom	1,073	5.6	United Kingdom	1,232	6.6	China	1,233	6.7	China	1,847	8.0
4	Brazil	1,057	12.2	Brazil	1,057	6.4	Brazil	953	4.9	China	1,015	5.5	Mexico	909	5.0	Korea	1,014	4.
5		984	11.4	Korea	897	5.4	China	906	4.7	Brazil	835	4.5	Italy	857	4.7	Mexico	921	4.3
Imports	World	7,227	100.0	World	15,479	100.0	World	18,535	100.0	World	17,830	100.0	World	17,014	100.0	World	19,413	
1	United States	1,373	19.0	United States	3,793	24.5	United States	3,297	17.8	Argentina	3,057	17.1	Argentina	3,059	18.0	Argentina	3,768	19.4
2		568	7.9	Argentina	1,385	8.9	Argentina	2,869	15.5	United States	2,867	16.1	United States	2,528	14.9	United States	2,525	13.0
3	Bruen	564	7.8	Brazil	1,195	7.7	Brazil	1,332	7.2	Brazil	1,492	8.4	Brazil	1,615	9.5	Brazil	2,022	10.4
4	Germany	523	7.2	Japan	1,013	6.5	China	950	5.1	China	1,014	5.7	China	1,102	6.5	China	1,289	6.0
5		503	7.0	Germany	790	5.1	Japan	706	3.8	Germany	689	3.9	Germany	736	4.3	Germany	711	3.7
Outward FDI											3,587	100.0		3,435	100.0		7,051	100.0
1										United States	1,702	47.4	United States	2,743	79.9	United States	5,828	82.7
2										Cayman Islands	1,039	29.0	United Kingdom	175	5.1	Cayman Islands	803	11.4
3										United Kingdom	391	10.9	Argentina	107	3.1	United Kingdom	96	
4										Brazil	119	3.3	Netherlands	89	2.6	Ireland	61	0.9
5										Venezuela	94	2.6	Cayman Islands	65	1.9	Mexico	58	
Inward FDI											4,782	100.0		3,375	100.0		1,276	
1	Canada	492		Canada	2,012		United States	751		United States	1,759	36.8	United Kingdom	1,504	44.6	United States	480	
2	e intea battes	229		South Africa	1,500		Spain	723		Italy	920	19.2	United States	594	17.6	Canada	187	14.0
3	United Kingdom	227		Cayman Islands	353		Canada	713		Australia	430	9.0	Canada	506	15.0	United Kingdom	130	
4				Finland	255		United Kingdom	180		Spain	393	8.2	Other	289	8.6	Spain	122	9.0
5				Austria	225		Sweden	116		United Kingdom	382	8.0	Spain	248	7.3	International Organiz	2 64	5.(
Outward FDI	(slected countries)																	
	China			China			China			China	0		China	0		China	(4)	t -
	Japan			Japan			Japan			Japan			Japan			Japan		
	Korea			Korea			Korea			Korea			Korea			Korea		
	Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil			Brazil			Brazil	119		Brazil	(18)		Brazil	28	
	Chile			Chile			Chile			Chile			Chile			Chile		
	Mexico			Mexico			Mexico			Mexico	32		Mexico	16		Mexico	58	
Inward FDI (selected countries)																	
	China			China	26		China			China			China			China		
	Japan			Japan	0		Japan	56		Japan	126		Japan	54		Japan	29	
	Korea			Korea			Korea	0		Korea	0		Korea	0		Korea		
	Thailand			Thailand	24		Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil			Brazil	5		Brazil	17		Brazil	9		Brazil		
	Chile			Chile	1		Chile			Chile			Chile			Chile		
	Mexico			Mexico			Mexico	4		Mexico	14		Mexico	3		Mexico		

Table 2-1-10. Major Trading and FDI Partners: Mexico

	1.07	20		100	-			000		2001			2002			200		Percent
	199 Country	90 Value	Share	199 Country	5 Value	Share	2 Country	2000 Value	Share	2001 Country		Share	2002 Country	Value	Share	200 Country		Share
Exports	World	27,167	100.0	World	79,541	100.0	World	166,455	100.0	World	158,443	100.0	World	160,763	100.0	World	164,922	100.0
1	United States	18,837	69.3	United States	66,475	83.6	United States	147,686		United States	140,296	88.5	United States	143,048	89.0	United States	144,466	87.6
2		1,502	5.5	Canada	1,979	2.5	Canada	3,353		Canada	3,070	1.9	Canada	2,806	1.7	Canada	3,022	1.8
3	Spain	1,445	5.3	Japan	928	1.2	Germany	1,544	0.9	Germany	1,504	0.9	Spain	1,431	0.9	Germany	1,991	1.2
4	France	549	2.0	Brazil	800	1.0	Spain	1,520		Spain	1,254	0.8	Germany	1,236	0.8	Spain	1,468	0.9
5	Germany	341	1.3	Spain	779	1.0	Japan	931	0.6	Netherlands Antilles		0.5	Netherlands Antilles		0.4	Japan	1,173	0.7
Imports	World	33,016	100.0	World	79,697	100.0	World	191,904	100.0	World	185,236	100.0	World	185,547	100.0	World	187,600	100.0
1	United States	21,830	66.1	United States	59,394	74.5	United States	140,288		United States	125,143	67.6	United States	117,212	63.2	United States	115,897	61.8
2	Germany	1,835	5.6	Japan	3,969	5.0	Japan	7,112		Japan	8,894	4.8	Japan	10,283	5.5	China	10,341	5.5
3	Japan	1,411	4.3	Germany	2,956	3.7	Germany	6,334	3.3	Germany	6,688	3.6	China	6,902	3.7	Japan	8,355	4.5
4	France	788	2.4	Canada	1,512	1.9	Canada	4,418		Canada	4,658	2.5	Germany	6,672	3.6	Germany	6,840	3.0
5	United Kingdom	649	2.0	France	1,081	1.4	Korea	4,240	2.2	China	4,430	2.4	Canada	4,928	2.7	Korea	4,551	2.4
Outward FDI																		
1																		
2																		
3																		
4																		
5																		
Inward FDI																		
1	United States	2,308		United States	4,912		United States	10,852		United States	19,115		United States	8,227		United States	5,101	
2	Germany	288		Netherlands	712		Netherlands	2,233		Netherlands	2,251		Netherlands	1,155		Spain	1,381	
3	Netherlands	126		Germany	546		Spain	1,726		Canada	803		United Kingdom	1,144		United Kingdom	853	
4	Japan	121		United Kingdom	207		Canada	558		Spain	156		Germany	583		Netherlands	470	
5	United Kingdom	114		Switzerland	200		Japan	415		Japan	151		Switzerland	422		Switzerland	318	
Outward FDI	(slected countries)																	
	China			China			China			China			China			China		
	Japan			Japan	111		Japan	357		Japan	101		Japan	53		Japan		
	Korea			Korea	44		Korea	0		Korea	26		Korea	19		Korea		
	Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
	Chile			Chile	8		Chile	4		Chile	4		Chile	30		Chile		
	Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		
Inward FDI (s	selected countries)																	
	China			China			China			China	1		China	(3)		China	6	
	Japan	121		Japan			Japan	415		Japan	177		Japan	150		Japan	104	
	Korea			Korea			Korea			Korea	44		Korea	31		Korea	38	
	Thailand			Thailand			Thailand			Thailand			Thailand			Thailand		
	Brazil			Brazil			Brazil			Brazil			Brazil			Brazil		
	Chile			Chile			Chile			Chile	4		Chile	30		Chile	4	
	Mexico			Mexico			Mexico			Mexico			Mexico			Mexico		

Major Trading Commodities

Tables 2-1-11 through 2-1-17 present the major commodities traded by the seven countries in East Asia and Latin America with the rest of the world.

When we look at Asia, various types of machinery (SITC-71 through 77) make up the major exporting and importing commodities for all four countries. For countries such as China and Thailand, textiles (SITC-65) and garments (SITC-84) are also major trading commodities, and for Japan and Korea, road vehicles (SITC-78) are the main products traded.

Machinery, textiles, and garments are the main trading products of China. The share of machinery¹ rapidly increased from 1990 to 2002, while the shares of textiles and garments declined in the same period, both in exports and imports. The pattern is similar in Thailand, especially for exports. In 1990, garments held the largest share in Thailand's exports, but this share had declined to half by 2002. On the other hand, exports of machinery² grew rapidly over the same period. Thailand's major import product is also machinery, accounting for about half of total imports.

The key trading commodities of Japan and Korea are similar in composition. The major exports of these two countries are machinery and road vehicles. In Japan, the total share of machinery exports has slightly been decreasing since the 1990's, while that share has been on the rise in Korea. The share of road vehicles has remained unchanged in Japan since the 1990's, while it has been increasing in Korea. The main import commodities of Japan and Korea are machinery and natural resources, such as petroleum (SITC-33) and natural gas (SITC-34).

In Latin American countries, export and import products vary more widely than those of Asian countries. Therefore, we will look below at the trends by country.

Brazil has three major export commodities: food products, natural resources, and transportation machinery. Food products here include meat (SITC-01), vegetables and fruit (SITC-05), sugar (SITC-06), coffee (SITC-07), and feeding stuff for animals (SITC-08), while natural resources include petroleum (SITC-33), metalliferous ores (SITC-28), iron and steel (SITC-67), and non-ferrous metals (SITC-68). The major components of transportation machinery are road vehicles (SITC-78) and other transport equipment (SITC-79). It should be noted that Brazil is a major

¹ "Machinery" here includes mainly office machinery (SITC-75), telecommunications machinery (SITC-76), and electrical machinery (SITC-77).

² "Machinery" here includes mainly office machinery (SITC-75), telecommunications machinery (SITC-76), and electrical machinery (SITC-77).

producer of aircraft, which is included in "other transport equipment (SITC-79)" in this classification. Among these export commodities, petroleum and road vehicles are seeing their shares of total exports climb. The major import products are petroleum, machinery, and transportation machinery, and there have been no noticeable change in their trends.

Chile's major export products are food products, pulp, and metals. Food products include fish (SITC-03) and vegetables and fruits (SITC-05). Fish products are mostly related to salmon. Chile is one of the largest producers of non-ferrous metals such as copper, nickel, and molybdenum. The share of non-ferrous metals (SITC-68) has, however, been decreasing since the 1990's; once at 42.8 percent in 1990, this share decreased to 27.4 percent by 2002. Chile's major import products are petroleum (SITC-33), various machinery (SITC-71 through 77)³, and road vehicles (SITC-78). As road vehicles are not produced in Chile, the majority of automotive imports are finished cars; their share has been consistently around 10 percent since the 1990's.

Mexico's principal export commodities are petroleum (SITC-33), road vehicles (SITC-78), and machinery. Machinery in Mexico's exports mainly includes general industrial machinery (SITC-74), office machines (SITC-75), telecommunications machinery (SITC-76), and electrical machinery (SITC-77), and the share of machinery expanded remarkably from 6.2 percent in 1990 to 36.5 percent in 2002. The share of road vehicles has also been increasing since the 1990's. On the other hand, the share of petroleum exports rapidly declined from 35.2 percent in 1990 to 8.9 percent in 2002. The major import products are machinery and road vehicles, both of which have been maintaining steady shares of just under 40 and 10 percent respectively.

Finally, please refer to Figure 2-2-3 in Section 2-2 for further details of the machinery traded in East Asia and Latin America. The figure lists the proportions of parts and components, which are all included in machinery together with final goods in the classifications for trading commodities used in the above analysis. The figure shows the differences in the trade and production patterns for machinery in these countries. In some countries such as China, a clearer pattern of processing trade is demonstrated in the greater proportion of parts and components in machinery imports than that in exports, while the figure shows that Thailand exports parts and components that are imported and processed in Thailand. We can also see from the figure that patterns of machinery trade in Latin America vary more than in Asia.

³ The breakdown is power-generating machinery (SITC-71), machinery specialized for particular industries (SIT-72), metalworking machinery (SITC-73), general industrial machinery and equipment (SITC-74), office machines (SITC-75), telecommunications machinery (SITC-76), and electrical machinery (SITC-77).

Commodity category (classification: SITC 2-digit)	Exports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	2002
Total	64,897	150,105		294,745	358,565	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	446	479	412	379	365	0.7	0.3	0.2	0.1	0.1
01-Meat and meat preparations	820	1,379	1,340	1,627	1,502	1.3	0.9	0.5	0.6	0.4
02-Dairy products and birds' eggs	57	61	90	84	104	0.1	0.0	0.0	0.0	0.0
03-Fish, crustaceans, and mollucs 04-Cereals and cereal preparations	1,441 629	2,878 354	3,924 2,095	4,424 1,582	4,915 2,257	2.2 1.0	1.9 0.2	1.5 0.8	1.5 0.5	1.4 0.6
05-Vegetables and fruit	1,847	3,428	2,093 3,593	4,152	4,713	2.8	2.3	1.3	1.4	1.3
06-Sugars, sugar preparations and honey	329	322	271	267	325	0.5	0.2	0.1	0.1	0.1
07-Coffee, tea, cocoa, and spices	553	514	579	633	651	0.9	0.3	0.2	0.2	0.2
08-Feeding stuff for animals	788	349	324	369	468	1.2	0.2	0.1	0.1	0.1
09-Miscl.edible products and preparations	111	232	420	464	535	0.2	0.2	0.2	0.2	0.1
11-Beverages	178	374	485	549	607	0.3	0.2	0.2	0.2	0.2
12-Tobacco and tobacco manufactures	177	1,005	317	419	466	0.3	0.7	0.1	0.1	0.1
21-Hides, skins, and furskins	160	51	12	12	14	0.2	0.0	0.0	0.0	0.0
22-Oil-seeds and oleaginous fruits 23-Crude rubber	640 65	525 88	437 113	496 152	498 198	1.0 0.1	0.3 0.1	0.2 0.0	0.2 0.1	0.1 0.1
24-Cork and wood	116	485	484	505	510	0.1	0.1	0.0	0.1	0.1
25-Pulp and waste paper	2	29	11	8	15	0.2	0.0	0.2	0.2	0.0
26-Textile fibres (except wool tops)	1,145	743	1,119	768	951	1.8	0.5	0.4	0.3	0.3
27-Crude fertilizers and crude materials	542	978	1,166	1,299	1,199	0.8	0.7	0.4	0.4	0.3
28-Metalliferous ores and metal scrap	221	164	120	135	217	0.3	0.1	0.0	0.0	0.1
29-Crude animal and vegetable materials, n.e.s	850	1,350	1,302	1,230	1,268	1.3	0.9	0.5	0.4	0.4
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	782	1,702	2,527	3,911	3,795	1.2	1.1	0.9	1.3	1.1
33-Petroleum, and petroleum products	4,690	3,270	4,743	3,881	4,399	7.2	2.2	1.8	1.3	1.2
34-Gas, natural and manufactured	3	11 391	244 649	255	295 685	0.0 0.0	0.0	0.1 0.2	0.1 0.3	0.1 0.2
35-Electric current 3X-Res: Mineral fuels, and lubricants	8	391 0	649 0	746 0	685 0	0.0	0.3 0.0	0.2	0.3	0.2
41-Animal oils and fats	1	2	9	6	8	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	152	444	104	105	88	0.0	0.3	0.0	0.0	0.0
43-Animal or vegetable oils and fats	5	12	10	10	10	0.0	0.0	0.0	0.0	0.0
51-Organic chemicals	877	2,298	3,320	3,806	4,494	1.4	1.5	1.2	1.3	1.3
52-Inorganic chemicals	884	2,236	2,758	3,074	3,295	1.4	1.5	1.0	1.0	0.9
53-Dyeing, tanning and colouring materials	375	707	1,161	1,251	1,449	0.6	0.5	0.4	0.4	0.4
54-Medicinal and pharmaceutical products	679	1,597	1,893	2,172	2,563	1.0	1.1	0.7	0.7	0.7
55-Essential oils & perfume mat.;toilet prep.	333	388	496	592	745	0.5	0.3	0.2	0.2	0.2
56-Fertilizers,manufactured	26	130	324	367	361	0.0	0.1	0.1	0.1	0.1
57-Explosives and pyrotechnic products	0 228	0 692	0 954	0 985	0 1,258	0.0 0.4	0.0 0.5	0.0 0.4	0.0 0.3	0.0 0.4
58-Artif.resins, plastic mat., cellulose esters 59-Chemical materials and products, n.e.s.	228 479	912	934 1,635	985 1,940	2,202	0.4	0.5	0.4	0.3	0.4
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	2,202	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	191	935	1,320	1,930	2,049	0.3	0.6	0.5	0.7	0.6
62-Rubber manufactures, n.e.s.	201	696	1,557	1,647	2,017	0.3	0.5	0.6	0.6	0.6
63-Cork and wood manufactures	287	936	1,794	2,075	2,626	0.4	0.6	0.7	0.7	0.7
64-Paper,paperboard,artic.of paper,paper-pulp	306	925	1,474	1,606	1,836	0.5	0.6	0.6	0.5	0.5
65-Textile yarn,fabrics,made-upart.	7,560	14,193	17,506	18,732	22,696	11.6	9.5	6.5	6.4	6.3
66-Non-metallic mineral manufactures, n.e.s.	1,369	3,456	5,119	5,432	6,788	2.1	2.3	1.9	1.8	1.9
67-Iron and steel	1,314	5,493	5,117	3,981	4,366	2.0	3.7	1.9	1.4	1.2
68-Non-ferrous metals 69-Manufactures of metal,n.e.s.	619 1,497	1,940 4,399	3,530 8,665	3,638 9,900	4,167 12,111	1.0 2.3	1.3 2.9	1.3 3.2	1.2 3.4	1.2 3.4
6X-Res: Manufactured goods classified chiefly	1,497	4,399	8,005 0	9,900 0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	282	1,450	3,205	3,326	4,061	0.4	1.0	1.2	1.1	1.1
72-Machinery specialized for particular industry	1,542	1,225	2,148	2,708	3,336	2.4	0.8	0.8	0.9	0.9
73-Metalworking machinery	268	380	561	584	623	0.4	0.3	0.2	0.2	0.2
74-General industrial machinery & equipment	566	1,728	5,533	6,998	9,120	0.9	1.2	2.1	2.4	2.5
75-Office machines & automatic data processing	381	4,373	19,209	25,194	38,558	0.6	2.9	7.2	8.5	10.8
76-Telecommunications	2,731	8,493	21,165	26,576	35,400	4.2	5.7	7.9	9.0	9.9
77-Electrical machinery, apparatus & appliance	1,252	9,628	26,681	29,038	36,172	1.9	6.4	10.0	9.9	10.1
78-Road vehicles	3,943	2,717	6,596	6,829	8,349	6.1	1.8	2.5	2.3	2.3
79-Other transport equipment	258	1,093	2,510	2,636	2,776	0.4	0.7	0.9	0.9	0.8
7X-Res: Machinery and transport equipment 81-Sanitary,plumbing,heating and lighting fix	0 142	1,038	0 2,438	0 2,778	0 3,543	0.0	0.0	0.0	0.0	0.0
82-Furniture and parts thereof	342	1,038	5,012	5,733	7,478	0.2	1.2	1.9	1.9	2.1
83-Travel goods and handbags	405	2,901	4,209	4,393	4,893	0.6	1.2	1.5	1.5	1.4
84-Articles of apparel and clothing accessories	10,171	24,361	38,976	40,835	45,568	15.7	16.2	14.6	13.9	12.7
85-Footwear	2,081	6,341	10,271	10,878	11,851	3.2	4.2	3.8	3.7	3.3
87-Professional, scientific & controling instruments	222	950	3,088	3,088	4,001	0.3	0.6	1.2	1.0	1.1
88-Photographic apparatus, optical goods, watch	1,202	3,438	5,661	5,705	5,959	1.9	2.3	2.1	1.9	1.7
89-Miscellaneous manufactured articles, n.e.s.	3,912	14,105	24,337	25,212	30,094	6.0	9.4	9.1	8.6	8.4
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	1,200	511	543	623	683	1.8	0.3	0.2	0.2	0.2
94-Animals,live,n.e.s.,incl. zoo-animals 95-Armoured fighting vehicles,arms of war	11 0	30 11	11 4	13 2	15 2	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
95-Armoured righting venicles, arms of war 96-Coin(other than gold)	0	0	4	2 0	2	0.0	0.0	0.0	0.0	0.0
	0	0	0	0	1	0.0	0.0	0.0	0.0	0.0
97-Gold, non-monetary										0.0
97-Gold,non-monetary 99-Non-identified products	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0

diterreturn (starting CITC 2 divit)	Imports	1005	2000	2001	2002	Share	1005	2000	2001	2
mmodity category (classification: SITC 2-digit) tal	1990 56 840	1995 166,812	2000 257,279	2001 270,847	2002 328,045	1990 100.0	1995 100.0	2000	2001 100.0	20
00-Live animals chiefly for food	13	20	237,279	270,047	320,043	0.0	0.0	0.0	0.0	10
01-Meat and meat preparations	88	435	1,057	1,038	940	0.2	0.3	0.4	0.4	
02-Dairy products and birds' eggs	87	149	320	335	384	0.2	0.1	0.1	0.1	
03-Fish, crustaceans, and mollucs	149	729	1,413	1,415	1,343	0.3	0.4	0.5	0.5	
04-Cereals and cereal preparations	2,113	3,462	645	643	613	3.7	2.1	0.3	0.2	
05-Vegetables and fruit	93	329	857	1,051	938	0.2	0.2	0.3	0.4	
06-Sugars, sugar preparations and honey	367	1,116	215	379	240	0.6	0.7	0.1	0.1	
07-Coffee, tea, cocoa, and spices	47	99	143	118	125	0.1	0.1	0.1	0.0	
08-Feeding stuff for animals	204	420	689	486	648	0.4	0.3	0.3	0.2	
09-Miscl.edible products and preparations	79	194	305	306	260	0.1	0.1	0.1	0.1	
11-Beverages	92	435	256	245	229	0.2	0.3	0.1	0.1	
12-Tobacco and tobacco manufactures	386	840	347	370	247	0.7	0.5	0.1	0.1	
21-Hides, skins, and furskins	27	598	1,118	1,410	1,350	0.0	0.4	0.4	0.5	
22-Oil-seeds and oleaginous fruits	23	138	2,621	3,033	2,530	0.0	0.1	1.0	1.1	
23-Crude rubber	389	1,019	1,378	1,430	1,762	0.7	0.6	0.5	0.5	
24-Cork and wood	464	591	2,406	2,541	3,101	0.8	0.4	0.9	0.9	
25-Pulp and waste paper	270	772	1,814	2,150	2,435	0.5	0.5	0.7	0.8	
26-Textile fibres (except wool tops)	1,910	4,413	2,665	2,489	2,868	3.4	2.6	1.0	0.9	
27-Crude fertilizers and crude materials	60	158	539	583	701	0.1	0.1	0.2	0.2	
28-Metalliferous ores and metal scrap	543	2,668	4,416	5,847	6,478	1.0	1.6	1.7	2.2	
29-Crude animal and vegetable materials, n.e.s	130	2,000	467	473	471	0.2	0.1	0.2	0.2	
2X-Res: Crude materials, inedible, except fuel	0	0	407			0.0	0.0	0.2	0.2	
32-Coal,coke and briquettes	71	69	64	82	290	0.0	0.0	0.0	0.0	
33-Petroleum, and petroleum products	1,439	5,549	04 19,336	82 14,972	290 15,074	2.5	3.3	0.0 7.5	5.5	
34-Gas, natural and manufactured	23	3,349	936	875	1,157	0.0	0.2	0.4	0.3	
35-Electric current	102	97	930 84	100	1,137	0.0	0.2	0.4	0.3	
	102	97	04	0	155	0.2	0.1	0.0	0.0	
3X-Res: Mineral fuels, and lubricants	27				114					
41-Animal oils and fats		143	111	82		0.0	0.1	0.0	0.0	
42-Fixed vegetable oils and fats	748	2,441	766	627	1,493	1.3	1.5	0.3	0.2	
43-Animal or vegetable oils and fats	90	101	105	95	216	0.2	0.1	0.0	0.0	_
51-Organic chemicals	1,236	3,920	8,170	9,032	10,709	2.2	2.3	3.2	3.3	
52-Inorganic chemicals	241	479	950	1,066	1,292	0.4	0.3	0.4	0.4	
53-Dyeing, tanning and colouring materials	319	1,089	1,867	1,924	2,200	0.6	0.7	0.7	0.7	
54-Medicinal and pharmaceutical products	451	971	1,176	1,354	1,525	0.8	0.6	0.5	0.5	
55-Essential oils & perfume mat.;toilet prep.	159	354	587	588	675	0.3	0.2	0.2	0.2	
56-Fertilizers, manufactured	2,344	3,546	1,461	1,370	1,090	4.1	2.1	0.6	0.5	
58-Artif.resins, plastic mat., cellulose esters	2,547	10,613	15,794	16,030	18,789	4.5	6.4	6.1	5.9	
59-Chemical materials and products, n.e.s.	561	1,682	3,274	3,232	4,005	1.0	1.0	1.3	1.2	
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	
61-Leather, leather manuf., n.e.s.	789	3,470	4,493	4,534	4,688	1.4	2.1	1.7	1.7	
62-Rubber manufactures, n.e.s.	90	350	678	715	876	0.2	0.2	0.3	0.3	
63-Cork and wood manufactures	701	1,455	910	662	672	1.2	0.9	0.4	0.2	
64-Paper,paperboard,artic.of paper,paper-pulp	1,116	2,934	4,436	4,047	4,601	2.0	1.8	1.7	1.5	
65-Textile yarn, fabrics, made-upart.	5,960	16,561	19,108	18,143	18,534	10.5	9.9	7.4	6.7	
66-Non-metallic mineral manufactures, n.e.s.	531	1,614	2,731	3,009	3,364	0.9	1.0	1.1	1.1	
67-Iron and steel	2,881	7,866	10,470	10,559	14,794	5.1	4.7	4.1	3.9	
68-Non-ferrous metals	672	3,797	7,046	6,483	7,777	1.2	2.3	2.7	2.4	
69-Manufactures of metal, n.e.s.	665	1,954	2,242	2,389	3,071	1.2	1.2	0.9	0.9	
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	
71-Power generating machinery and equipment	2,056	3,871	5,461	5,517	6,748	3.6	2.3	2.1	2.0	
72-Machinery specialized for particular industry	4,565	12,937	12,110	13,729	17,304	8.0	7.8	4.7	5.1	
73-Metalworking machinery	742	3,490	2,507	2,881	4,137	1.3	2.1	1.0	1.1	
74-General industrial machinery & equipment	2,106	8,605	8,452	9,968	12,610	3.7	5.2	3.3	3.7	
75-Office machines & automatic data processing	889	4,279	13,849	17,306	22,138	1.6	2.6	5.4	6.4	
76-Telecommunications	3,028	11,159	14,623	16,153	19,596	5.3	6.7	5.7	6.0	
77-Electrical machinery, apparatus & appliance	2,901	12,326	40,604	42,944	56,805	5.1	7.4	15.8	15.9	
78-Road vehicles	1,875	4,613	3,653	4,692	7,940	3.3	2.8	13.8	13.9	
79-Other transport equipment	1,875	2,500	3,700	4,614	5,880	3.1	1.5	1.4	1.7	
7X-Res: Machinery and transport equipment	1,700	2,500	3,700	4,014	3,880 0	0.0	0.0	0.0	0.0	
81-Sanitary, plumbing, heating and lighting fix	104	301	202	210	214	0.0	0.0	0.0	0.0	
82-Furniture and parts thereof	84	173	320	375	441	0.2	0.2	0.1	0.1	
83-Travel goods and handbags	27	59	61	73	441 74	0.0	0.0	0.0	0.1	
84-Articles of apparel and clothing accessories	421	1,300	2,959	2,981	3,237	0.0	0.0	1.2	1.1	
	421				3,237 105	0.7		0.0	0.0	
85-Footwear 87 Professional scientific & controling instruments		62 2.474	65	76 8 632			0.0			
87-Professional, scientific & controling instruments	974	2,474	6,085	8,632	10,620	1.7	1.5	2.4	3.2	
88-Photographic apparatus, optical goods, watch	1,128	2,580	3,971	3,870	4,433	2.0	1.5	1.5	1.4	
89-Miscellaneous manufactured articles, n.e.s.	1,860	3,807	5,169	5,022	5,776	3.3	2.3	2.0	1.9	
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	
93-Special transactions & commod.	947	1,950	2,465	3,094	4,732	1.7	1.2	1.0	1.1	
94-Animals,live,n.e.s.,incl. zoo-animals	3	22	21	10	16	0.0	0.0	0.0	0.0	
95-Armoured fighting vehicles, arms of war	2	4	315	4	4	0.0	0.0	0.1	0.0	
97-Gold, non-monetary	51	26	201	364	392	0.1	0.0	0.1	0.1	
	0	0	0	0	0	0.0	0.0	0.0	0.0	

Table 2-1-12. Major Exporting Commodities: Japan

(Millions of US Dollars and Percent)

	Exports					Share				
Commodity category (classification: SITC 2-digit)	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Total	296,844	445,743	502,739	434,619	447,629	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	1	5	6	16	22	0.0	0.0	0.0	0.0	0.0
01-Meat and meat preparations	17 1	18 2	18 5	14 6	8 5	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
02-Dairy products and birds' eggs 03-Fish, crustaceans, and mollucs	685	693	5 817	807	5 827	0.0	0.0	0.0	0.0	0.0
04-Cereals and cereal preparations	256	254	265	1,246	262	0.2	0.2	0.2	0.2	0.2
05-Vegetables and fruit	139	113	85	80	105	0.0	0.0	0.0	0.0	0.0
06-Sugars, sugar preparations and honey	39	57	60	53	55	0.0	0.0	0.0	0.0	0.0
07-Coffee, tea, cocoa, and spices	27	36	56	72	82	0.0	0.0	0.0	0.0	0.0
08-Feeding stuff for animals	154	104	85	77	84	0.1	0.0	0.0	0.0	0.0
09-Miscledible products and preparations	172	334	419	396	422	0.1	0.1	0.1	0.1	0.1
11-Beverages	69	125	164	141	154	0.0	0.0	0.0	0.0	0.0
12-Tobacco and tobacco manufactures	100	372	176	259	244	0.0	0.1	0.0	0.1	0.1
21-Hides, skins, and furskins	84	86	35	61	66	0.0	0.0	0.0	0.0	0.0
22-Oil-seeds and oleaginous fruits	7	1	1	1	1	0.0	0.0	0.0	0.0	0.0
23-Crude rubber	547	892	957	923	996	0.2	0.2	0.2	0.2	0.2
24-Cork and wood	29	21	11	9	15	0.0	0.0	0.0	0.0	0.0
25-Pulp and waste paper	13	70	134	150	223	0.0	0.0	0.0	0.0	0.0
26-Textile fibres (except wool tops)	833	1,276	1,048	986	994 102	0.3	0.3	0.2	0.2	0.2
27-Crude fertilizers and crude materials	173	245	193	185	192	0.1	0.1	0.0	0.0	0.0
28-Metalliferous ores and metal scrap	193 159	362 178	889 174	1,144 157	1,201 168	0.1 0.1	0.1 0.0	0.2 0.0	0.3 0.0	0.3 0.0
29-Crude animal and vegetable materials, n.e.s	159	1/8	1/4	157	108	0.1	0.0	0.0	0.0	0.0
2X-Res: Crude materials, inedible, except fuel 32-Coal,coke and briquettes	185	339	209	205	227	0.0	0.0	0.0	0.0	0.0
33-Petroleum, and petroleum products	1,230	2,403	1,677	1,697	1,602	0.4	0.1	0.3	0.0	0.1
34-Gas, natural and manufactured	1,230	2,405	1,077	1,097	23	0.4	0.0	0.0	0.4	0.4
35-Electric current	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats	51	17	20	20	18	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	18	20	29	26	31	0.0	0.0	0.0	0.0	0.0
43-Animal or vegetable oils and fats	23	23	34	34	31	0.0	0.0	0.0	0.0	0.0
51-Organic chemicals	5,842	11,201	11,790	10,994	11,603	2.0	2.5	2.3	2.5	2.6
52-Inorganic chemicals	1,170	1,687	2,132	1,885	2,000	0.4	0.4	0.4	0.4	0.4
53-Dyeing, tanning and colouring materials	1,181	1,686	2,120	1,659	1,768	0.4	0.4	0.4	0.4	0.4
54-Medicinal and pharmaceutical products	910	1,853	2,878	2,953	3,027	0.3	0.4	0.6	0.7	0.7
55-Essential oils & perfume mat.;toilet prep.	600	899	1,254	1,164	1,251	0.2	0.2	0.2	0.3	0.3
56-Fertilizers, manufactured	104	119	95	84	89	0.0	0.0	0.0	0.0	0.0
58-Artif.resins, plastic mat., cellulose esters	4,200	7,995	9,256	7,991	8,971	1.4	1.8	1.8	1.8	2.0
59-Chemical materials and products, n.e.s.	1,904	3,954	6,059	5,209	5,739	0.6	0.9	1.2	1.2	1.3
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	295	228	176	157	138	0.1	0.1	0.0	0.0	0.0
62-Rubber manufactures, n.e.s.	3,680	5,319	5,510	5,011	5,489	1.2	1.2	1.1	1.2	1.2
63-Cork and wood manufactures	93	96	84	60	57	0.0	0.0	0.0	0.0	0.0
64-Paper,paperboard,artic.of paper,paper-pulp	2,082	2,420	2,644	2,111	2,363	0.7	0.5	0.5	0.5	0.5
65-Textile yarn,fabrics,made-upart.	6,061	7,223	7,269	6,572	6,503	2.0 1.2	1.6	1.4	1.5	1.5
66-Non-metallic mineral manufactures, n.e.s.	3,417	5,906	6,755	6,268	4,931		1.3	1.3	1.4	1.1
67-Iron and steel	13,016		15,681	14,731	16,787	4.4	4.0	3.1	3.4	3.8
68-Non-ferrous metals 69-Manufactures of metal,n.e.s.	2,307 4,853	4,068 7,079	5,103 6,937	4,550 6,329	4,418 6,521	0.8 1.6	0.9 1.6	1.0 1.4	1.0 1.5	1.0 1.5
6X-Res: Manufactured goods classified chiefly	4,855	0	0,937	0,329	0,521	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	10,229	19,269	19,013	18,302	17,955	3.4	4.3	3.8	4.2	4.0
72-Machinery specialized for particular industry	15,428	25,349	28,823	21,875	22,427	5.2	5.7	5.7	5.0	5.0
73-Metalworking machinery	4,892	8,059	8,458	7,011	5,930	1.6	1.8	1.7	1.6	1.3
74-General industrial machinery & equipment	16,575	28,782	26,257	22,880	23,094	5.6	6.5	5.2	5.3	5.2
75-Office machines & automatic data processing	22,742	34,090	33,449	27,938	26,884	7.7	7.6	6.7	6.4	6.0
76-Telecommunications	29,866	28,476	32,164	26,192	26,500	10.1	6.4	6.4	6.0	5.9
77-Electrical machinery, apparatus & appliance	31,770	73,565	86,329	64,030	64,245	10.7	16.5	17.2	14.7	14.4
78-Road vehicles	67,884	78,595	92,962	87,495	99,924	22.9	17.6	18.5	20.1	22.3
79-Other transport equipment	6,316	11,813	12,265	11,071	11,362	2.1	2.7	2.4	2.5	2.5
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
81-Sanitary, plumbing, heating and lighting fix	165	172	120	114	99	0.1	0.0	0.0	0.0	0.0
82-Furniture and parts thereof	491	563	646	601	668	0.2	0.1	0.1	0.1	0.1
83-Travel goods and handbags	56	39	41	37	37	0.0	0.0	0.0	0.0	0.0
84-Articles of apparel and clothing accessories	593	536	560	498	509	0.2	0.1	0.1	0.1	0.1
85-Footwear	54	79	36	31	29	0.0	0.0	0.0	0.0	0.0
87-Professional, scientific & controling instruments	7,099	12,677	19,437	16,726	16,507	2.4	2.8	3.9	3.8	3.7
88-Photographic apparatus, optical goods, watch	12,408	15,958	17,265	14,214	11,247	4.2	3.6	3.4	3.3	2.5
89-Miscellaneous manufactured articles, n.e.s.	8,572	10,668	12,955	10,916	11,265	2.9	2.4	2.6	2.5	2.5
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	4,556	9,128	17,729	17,416	18,310	1.5	2.0	3.5	4.0	4.1
94-Animals,live,n.e.s.,incl. zoo-animals	1	4	2	4	3	0.0	0.0	0.0	0.0	0.0
95-Armoured fighting vehicles, arms of war	38	40	210	92	129	0.0	0.0	0.0	0.0	0.0
97-Gold, non-monetary	186 0	369	694	667	795	0.1 0.0	0.1 0.0	0.1	0.2 0.0	0.2
9X-Res: Commodities & trans. not classified Source: Statistics Canada (2004)	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0

Table 2-1-12 (continued). Major Importing Commodities: Japan

(Millions of US Dollars and Percent)

	Imports					Share				
Commodity category (classification: SITC 2-digit) Total	1990	1995	2000	2001 326,185	2002	1990 100.0	1995 100.0	2000	2001 100.0	2002
1 otal 00-Live animals chiefly for food	222,066 140	314,384 197	352,933 172	326,185 157	323,528 112	0.1	0.1	0.0	100.0 0.0	100.0
01-Meat and meat preparations	4,630	9,157	7,350	7,318	6,434	2.1	2.9	2.1	2.2	2.0
02-Dairy products and birds' eggs	414	724	738	819	810	0.2	0.2	0.2	0.3	0.3
03-Fish, crustaceans, and mollucs	9,974	16,240	13,390	12,253	12,122	4.5	5.2	3.8	3.8	3.7
04-Cereals and cereal preparations	4,231	4,817	4,009	4,148	4,374	1.9	1.5	1.1	1.3	1.4
05-Vegetables and fruit	3,110	5,341	5,229	5,192	4,985	1.4	1.7	1.5	1.6	1.5
06-Sugars, sugar preparations and honey	507	806	410	490	422	0.2	0.3	0.1	0.2	0.1
07-Coffee, tea, cocoa, and spices	1,158	1,858	1,619	1,399	1,397	0.5	0.6	0.5	0.4	0.4
08-Feeding stuff for animals	1,059	1,913	1,897	1,901	2,003	0.5	0.6	0.5	0.6	0.6
09-Miscl.edible products and preparations	301	801	992	1,070	1,031	0.1	0.3	0.3	0.3	0.3
11-Beverages	1,688	2,173	1,937	1,926	1,863	0.8	0.7	0.5	0.6	0.6
12-Tobacco and tobacco manufactures 21-Hides, skins, and furskins	1,926 809	2,251 445	2,721	1,855 239	1,434 165	0.9	0.7	0.8	0.6	0.4
22-Oil-seeds and oleaginous fruits	1,949	2,251	1,787	1,795	1,955	0.4	0.1	0.1	0.1	0.1
23-Crude rubber	802	1,310	746	697	816	0.4	0.4	0.2	0.0	0.3
24-Cork and wood	6,750	9,802	6,120	5,448	5,165	3.0	3.1	1.7	1.7	1.6
25-Pulp and waste paper	1,876	2,949	1,835	1,255	1,098	0.8	0.9	0.5	0.4	0.3
26-Textile fibres (except wool tops)	2,347	1,534	796	687	615	1.1	0.5	0.2	0.2	0.2
27-Crude fertilizers and crude materials	1,381	1,290	1,155	1,069	937	0.6	0.4	0.3	0.3	0.3
28-Metalliferous ores and metal scrap	7,552	7,882	6,997	6,289	6,315	3.4	2.5	2.0	1.9	2.0
29-Crude animal and vegetable materials, n.e.s	1,295	1,634	1,482	1,441	1,359	0.6	0.5	0.4	0.4	0.4
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	5,643	5,250	4,908	5,757	5,815	2.5	1.7	1.4	1.8	1.8
33-Petroleum, and petroleum products	41,653	34,775	49,959	39,691	40,336	18.8	11.1	14.2	12.2	12.5
34-Gas, natural and manufactured	7,808	9,025	11,826	12,071	13,256	3.5	2.9	3.4	3.7	4.1
35-Electric current 3X-Res: Mineral fuels, and lubricants	0 0	0 0	1 0	0 0	0 0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0
41-Animal oils and fats	56	102	64	94	86	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	219	474	380	346	417	0.0	0.0	0.0	0.0	0.0
43-Animal or vegetable oils and fats	71	164	147	130	121	0.0	0.1	0.0	0.0	0.0
51-Organic chemicals	4,029	6,423	6,406	6,498	6,508	1.8	2.0	1.8	2.0	2.0
52-Inorganic chemicals	2,383	3,015	3,031	2,733	2,891	1.1	1.0	0.9	0.8	0.9
53-Dyeing, tanning and colouring materials	649	829	717	663	662	0.3	0.3	0.2	0.2	0.2
54-Medicinal and pharmaceutical products	2,708	4,519	4,420	4,818	5,108	1.2	1.4	1.3	1.5	1.6
55-Essential oils & perfume mat.;toilet prep.	720	1,377	1,588	1,670	1,715	0.3	0.4	0.4	0.5	0.5
56-Fertilizers, manufactured	379	480	386	386	225	0.2	0.2	0.1	0.1	0.1
58-Artif.resins,plastic mat.,cellulose esters	1,435	1,857	2,646	2,507	2,468	0.6	0.6	0.7	0.8	0.8
59-Chemical materials and products, n.e.s.	1,537	2,787	3,445	3,401	3,436	0.7	0.9	1.0	1.0	1.1
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather,leather manuf.,n.e.s. 62-Rubber manufactures,n.e.s.	496 697	505 911	511 916	542 892	502 909	0.2 0.3	0.2 0.3	0.1 0.3	0.2 0.3	0.2 0.3
63-Cork and wood manufactures	1,727	3,775	3,593	3,350	3,331	0.3	1.2	1.0	1.0	1.0
64-Paper,paperboard,artic.of paper,paper-pulp	1,053	2,196	2,223	2,098	2,061	0.8	0.7	0.6	0.6	0.6
65-Textile yarn,fabrics,made-upart.	4,249	6,179	5,233	5,209	4,924	1.9	2.0	1.5	1.6	1.5
66-Non-metallic mineral manufactures, n.e.s.	5,262	6,295	4,850	4,496	4,474	2.4	2.0	1.4	1.4	1.4
67-Iron and steel	4,375	5,775	3,667	2,716	2,519	2.0	1.8	1.0	0.8	0.8
68-Non-ferrous metals	9,449	9,961	8,320	6,331	5,874	4.3	3.2	2.4	1.9	1.8
69-Manufactures of metal,n.e.s.	1,791	3,133	3,470	3,676	3,785	0.8	1.0	1.0	1.1	1.2
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	1,865	3,558	5,271	5,408	5,238	0.8	1.1	1.5	1.7	1.6
72-Machinery specialized for particular industry	3,267	4,096	5,416	4,894	4,181	1.5	1.3	1.5	1.5	1.3
73-Metalworking machinery	859	842	1,132	892	768	0.4	0.3	0.3	0.3	0.2
74-General industrial machinery & equipment	2,794	4,168	4,972	5,347	5,664	1.3	1.3	1.4	1.6	1.8
75-Office machines & automatic data processing	5,110	15,240	26,829	23,214	22,483	2.3	4.8	7.6	7.1	6.9
76-Telecommunications	2,680	9,862	13,736	14,009	13,013	1.2	3.1	3.9	4.3	4.0
77-Electrical machinery, apparatus & appliance 78-Road vehicles	8,159	20,678 13,075	33,299 10,750	29,057 10,184	28,492 10,963	3.7 3.7	6.6 4.2	9.4 3.0	8.9 3.1	8.8 3.4
79-Other transport equipment	8,268 4,295	3,406	4,972	3,822	5,554	1.9	4.2	1.4	1.2	1.7
7X-Res: Machinery and transport equipment	4,295 0	0,400 0	4,972	0	0	0.0	0.0	0.0	0.0	0.0
81-Sanitary,plumbing,heating and lighting fix	197	372	411	442	423	0.1	0.0	0.0	0.1	0.0
82-Furniture and parts thereof	1,346	2,917	3,611	3,715	3,500	0.6	0.9	1.0	1.1	1.1
83-Travel goods and handbags	1,086	2,622	2,609	2,652	2,373	0.5	0.8	0.7	0.8	0.7
84-Articles of apparel and clothing accessories	8,624	17,631	20,079	20,172	18,123	3.9	5.6	5.7	6.2	5.6
85-Footwear	1,264	2,602	2,628	2,673	2,532	0.6	0.8	0.7	0.8	0.8
87-Professional, scientific & controling instruments	3,273	5,877	9,259	9,160	9,000	1.5	1.9	2.6	2.8	2.8
88-Photographic apparatus, optical goods, watch	2,263	4,416	4,895	4,697	4,390	1.0	1.4	1.4	1.4	1.4
89-Miscellaneous manufactured articles, n.e.s.	9,354	12,085	13,961	13,719	12,837	4.2	3.8	4.0	4.2	4.0
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	3,484	3,508	3,986	3,784	6,131	1.6	1.1	1.1	1.2	1.9
94-Animals, live, n.e.s., incl. zoo-animals	40	42	22	25 401	24 410	0.0	0.0	0.0	0.0	0.0
95-Armoured fighting vehicles, arms of war	177	367	313	401 396	410	0.1	0.1	0.1	0.1	0.1
97-Gold,non-monetary 9X-Res: Commodities & trans. not classified	1,371 0	1,835 0	473 0	396 0	593 0	0.6 0.0	0.6 0.0	0.1 0.0	0.1 0.0	0.2 0.0
Source: Statistics Canada (2004)	0	0	0	0	U	0.0	0.0	0.0	0.0	0.0

Table 2-1-13. Major Exporting Commodities: Korea

(Millions of US Dollars and Percent)

	Exports					Share				
Commodity category (classification: SITC 2-digit)	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Total	66,479	125,719	180,571	159,732	174,161	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	0	0	0	0	1	0.0	0.0	0.0	0.0	0.0
01-Meat and meat preparations	58	109	89	52	32	0.1	0.1	0.0	0.0	0.0
02-Dairy products and birds' eggs	0	3	5	6	6	0.0	0.0	0.0	0.0	0.0
03-Fish, crustaceans, and mollucs	1,401	1,558	1,436	1,222	1,106	2.1	1.2	0.8	0.8	0.6
04-Cereals and cereal preparations	93	220	249	289	325	0.1	0.2	0.1	0.2	0.2
05-Vegetables and fruit	282	335	348	353	337	0.4	0.3	0.2	0.2	0.2
06-Sugars, sugar preparations and honey	156	236	172	182	169	0.2	0.2	0.1	0.1	0.1
07-Coffee, tea, cocoa, and spices	23	54	54	66	79	0.0	0.0	0.0	0.0	0.0
08-Feeding stuff for animals	16	29	33	40	40	0.0	0.0	0.0	0.0	0.0
09-Miscl.edible products and preparations	43	113	120	140	164	0.1	0.1	0.1	0.1	0.1
11-Beverages	43	110	160	173	203	0.1	0.1	0.1	0.1	0.1
12-Tobacco and tobacco manufactures	83	48	89	136	166	0.1	0.0	0.0	0.1	0.1
21-Hides, skins, and furskins	8	25	10	9	7	0.0	0.0	0.0	0.0	0.1
	8 1	23	0	9	1	0.0	0.0	0.0	0.0	
22-Oil-seeds and oleaginous fruits	75			377	394	0.0	0.0	0.0	0.0	0.0 0.2
23-Crude rubber		167	390							
24-Cork and wood	53	17	10	10	8	0.1	0.0	0.0	0.0	0.0
25-Pulp and waste paper	0	14	2	1	7	0.0	0.0	0.0	0.0	0.0
26-Textile fibres (except wool tops)	369	1,062	1,026	857	846	0.6	0.8	0.6	0.5	0.5
27-Crude fertilizers and crude materials	108	114	116	79	71	0.2	0.1	0.1	0.0	0.0
28-Metalliferous ores and metal scrap	60	52	87	94	176	0.1	0.0	0.0	0.1	0.1
29-Crude animal and vegetable materials, n.e.s	345	344	268	260	233	0.5	0.3	0.1	0.2	0.1
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	1	1	0	0	0	0.0	0.0	0.0	0.0	0.0
33-Petroleum, and petroleum products	703	2,448	9,657	8,230	6,974	1.1	1.9	5.3	5.2	4.0
34-Gas, natural and manufactured	15	53	214	126	70	0.0	0.0	0.1	0.1	0.0
35-Electric current	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats	0	2	2	4	3	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	0	12	4	4	7	0.0	0.0	0.0	0.0	0.0
43-Animal or vegetable oils and fats	1	7	11	9	12	0.0	0.0	0.0	0.0	0.0
51-Organic chemicals	705	2,684	5,066	4,389	4,806	1.1	2.1	2.8	2.7	2.8
-		· · ·								
52-Inorganic chemicals	142	288	466	482	474	0.2	0.2	0.3	0.3	0.3
53-Dyeing, tanning and colouring materials	159	397	575	582	652	0.2	0.3	0.3	0.4	0.4
54-Medicinal and pharmaceutical products	112	261	341	342	382	0.2	0.2	0.2	0.2	0.2
55-Essential oils & perfume mat.;toilet prep.	65	138	253	281	331	0.1	0.1	0.1	0.2	0.2
56-Fertilizers,manufactured	189	254	130	129	135	0.3	0.2	0.1	0.1	0.1
58-Artif.resins, plastic mat., cellulose esters	985	4,423	6,555	6,137	6,692	1.5	3.5	3.6	3.8	3.8
59-Chemical materials and products, n.e.s.	133	429	832	885	1,013	0.2	0.3	0.5	0.6	0.6
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	468	1,819	1,823	1,639	1,563	0.7	1.4	1.0	1.0	0.9
62-Rubber manufactures, n.e.s.	1,006	1,527	1,710	1,753	1,873	1.5	1.2	0.9	1.1	1.1
63-Cork and wood manufactures	97	147	106	90	75	0.1	0.1	0.1	0.1	0.0
64-Paper,paperboard,artic.of paper,paper-pulp	459	1,185	2,009	1,773	1,750	0.7	0.9	1.1	1.1	1.0
65-Textile yarn,fabrics,made-upart.	6,107	12,390	13,294	11,297	11,697	9.2	9.9	7.4	7.1	6.7
66-Non-metallic mineral manufactures, n.e.s.	683	693	1,091	1,293	981	1.0	0.6	0.6	0.8	0.6
67-Iron and steel	3,845	5,590	7,146	6,362	6,234	5.8	4.4	4.0	4.0	3.6
68-Non-ferrous metals	381	1,106	2,031	1,838	2,075	0.6	0.9	1.1	1.2	1.2
	1,691					2.5	2.8			
69-Manufactures of metal, n.e.s.		3,497	3,031	2,757	2,998			1.7	1.7	1.7
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	738	1,219	1,675	1,863	1,959	1.1	1.0	0.9	1.2	1.1
72-Machinery specialized for particular industry	681	2,711	3,468	3,154	4,149	1.0	2.2	1.9	2.0	2.4
73-Metalworking machinery	141	400	586	570	576	0.2	0.3	0.3	0.4	0.3
74-General industrial machinery & equipment	999	2,931	4,760	4,865	5,164	1.5	2.3	2.6	3.0	3.0
75-Office machines & automatic data processing	2,739	4,903	20,407	14,320	17,455	4.1	3.9	11.3	9.0	10.0
76-Telecommunications	6,380	8,912	15,065	17,178	21,644	9.6	7.1	8.3	10.8	12.4
77-Electrical machinery, apparatus & appliance	7,778	28,612	33,131	22,826	25,183	11.7	22.8	18.3	14.3	14.5
78-Road vehicles	3,415	10,172	16,149	16,284	18,482	5.1	8.1	8.9	10.2	10.6
79-Other transport equipment	3,132	5,957	9,303	10,619	11,745	4.7	4.7	5.2	6.6	6.7
7X-Res: Machinery and transport equipment	0	0,557	0	0	0	0.0	0.0	0.0	0.0	0.0
81-Sanitary,plumbing,heating and lighting fix	102	121	99	92	95	0.2	0.0	0.0	0.0	0.1
82-Furniture and parts thereof	235	215	248	237	238	0.2	0.1	0.1	0.1	0.1
83-Travel goods and handbags	1,132	686	350	251	151	1.7	0.2	0.1	0.1	0.1
55 Traver 50005 and nandougs		5,012		4,425	4,262	12.4	4.0	2.9	2.8	2.4
84-Articles of apparel and clothing appaceries	Q 167	5,012	5,294	4,425	4,262					
84-Articles of apparel and clothing accessories	8,267	1 252			209	6.5	1.0	0.3	0.2	0.2
85-Footwear	4,300	1,253	460			07	07		0.0	
85-Footwear 87-Professional, scientific & controling instruments	4,300 437	862	1,268	1,279	1,331	0.7	0.7	0.7	0.8	0.8
85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch	4,300 437 530	862 986	1,268 1,039	1,279 967	1,331 842	0.8	0.8	0.7 0.6	0.6	0.5
85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s.	4,300 437 530 4,088	862 986 4,321	1,268 1,039 4,639	1,279 967 4,509	1,331 842 4,345	0.8 6.1	0.8 3.4	0.7 0.6 2.6	0.6 2.8	0.5 2.5
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 	4,300 437 530 4,088 0	862 986 4,321 0	1,268 1,039 4,639 0	1,279 967 4,509 0	1,331 842 4,345 0	0.8 6.1 0.0	0.8 3.4 0.0	0.7 0.6 2.6 0.0	0.6 2.8 0.0	0.5 2.5 0.0
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 91-Postal packages 	4,300 437 530 4,088 0 0	862 986 4,321 0 0	1,268 1,039 4,639 0 0	1,279 967 4,509 0 0	1,331 842 4,345 0 0	0.8 6.1 0.0 0.0	0.8 3.4 0.0 0.0	0.7 0.6 2.6 0.0 0.0	0.6 2.8 0.0 0.0	0.5 2.5 0.0 0.0
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 	4,300 437 530 4,088 0	862 986 4,321 0	1,268 1,039 4,639 0	1,279 967 4,509 0	1,331 842 4,345 0	0.8 6.1 0.0	0.8 3.4 0.0	0.7 0.6 2.6 0.0	0.6 2.8 0.0	0.5
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 91-Postal packages 	4,300 437 530 4,088 0 0	862 986 4,321 0 0	1,268 1,039 4,639 0 0	1,279 967 4,509 0 0	1,331 842 4,345 0 0	0.8 6.1 0.0 0.0	0.8 3.4 0.0 0.0	0.7 0.6 2.6 0.0 0.0	0.6 2.8 0.0 0.0	0.5 2.5 0.0 0.0
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 91-Postal packages 93-Special transactions & commod. 	4,300 437 530 4,088 0 0 0 0	862 986 4,321 0 0 0	1,268 1,039 4,639 0 0 0	1,279 967 4,509 0 0 0	1,331 842 4,345 0 0 42	0.8 6.1 0.0 0.0 0.0	0.8 3.4 0.0 0.0 0.0	0.7 0.6 2.6 0.0 0.0 0.0	0.6 2.8 0.0 0.0 0.0	0.5 2.5 0.0 0.0 0.0
 85-Footwear 87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch 89-Miscellaneous manufactured articles,n.e.s. 8X-Res: Miscellaneous manufactured articles 91-Postal packages 93-Special transactions & commod. 94-Animals,live,n.e.s.,incl. zoo-animals 	4,300 437 530 4,088 0 0 0 0 23	862 986 4,321 0 0 0 10	1,268 1,039 4,639 0 0 0 1	1,279 967 4,509 0 0 1	1,331 842 4,345 0 0 42 0	0.8 6.1 0.0 0.0 0.0 0.0	0.8 3.4 0.0 0.0 0.0 0.0	0.7 0.6 2.6 0.0 0.0 0.0 0.0	0.6 2.8 0.0 0.0 0.0 0.0	0.5 2.5 0.0 0.0 0.0 0.0 0.0

Table 2-1-13 (continued). Major Importing Commodities: Korea

(Millions of US Dollars and Percent)

	Imports					Share				
Commodity category (classification: SITC 2-digit)	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Total	64,412	127,180	151,711	129,163	145,126	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	10	20	13	14	15	0.0	0.0	0.0	0.0	0.0
01-Meat and meat preparations	317	745	1,102	877	1,308	0.5	0.6	0.7	0.7	0.9
02-Dairy products and birds' eggs	15	119	131	163	162	0.0	0.1	0.1	0.1	0.1
03-Fish, crustaceans, and mollucs	210	769	1,256	1,632	1,740	0.3	0.6	0.8	1.3	1.2
04-Cereals and cereal preparations	1,157	1,945	1,551	1,574	1,697	1.8	1.5	1.0	1.2	1.2
05-Vegetables and fruit	242	476	534	578	610	0.4	0.4	0.4	0.4	0.4
06-Sugars, sugar preparations and honey	198	502	214	325	287	0.3	0.4	0.1	0.3	0.2
07-Coffee, tea, cocoa, and spices	146	298	225	197	216	0.2	0.2	0.1	0.2	0.1
08-Feeding stuff for animals	186	476	499	609	609	0.3	0.4	0.3	0.5	0.4
09-Miscledible products and preparations	52	202	288	367	425	0.1	0.2	0.2	0.3	0.3
11-Beverages	47	167	271	320	405	0.1	0.1	0.2	0.2	0.3
12-Tobacco and tobacco manufactures	154	795	288	291	329	0.2	0.6	0.2	0.2	0.2
21-Hides, skins, and furskins	1,218	1,093	760	787	646	1.9	0.0	0.2	0.2	0.2
22-Oil-seeds and oleaginous fruits	282	478	398	377	403	0.4	0.4	0.3	0.3	0.3
23-Crude rubber	425	718	453	431	473	0.7	0.4	0.3	0.3	0.3
24-Cork and wood	873	1,360	719	648	726	1.4	1.1	0.5	0.5	0.5
	764	1,300	1,450	910	1,034	1.4	1.1	1.0	0.3	0.3
25-Pulp and waste paper										
26-Textile fibres (except wool tops)	1,294	1,353	724	767	686	2.0	1.1	0.5	0.6	0.5
27-Crude fertilizers and crude materials	228	394	365	363	379	0.4	0.3	0.2	0.3	0.3
28-Metalliferous ores and metal scrap	1,902	2,789	3,320	3,188	3,475	3.0	2.2	2.2	2.5	2.4
29-Crude animal and vegetable materials, n.e.s	222	326	280	257	305	0.3	0.3	0.2	0.2	0.2
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	941	1,761	1,752	2,057	2,040	1.5	1.4	1.2	1.6	1.4
33-Petroleum, and petroleum products	7,696	14,296	24,940	15,003	17,157	11.9	11.2	16.4	11.6	11.8
34-Gas, natural and manufactured	743	1,849	3,951	4,587	4,588	1.2	1.5	2.6	3.6	3.2
35-Electric current	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats	34	59	34	28	42	0.1	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	101	218	184	177	232	0.2	0.2	0.1	0.1	0.2
43-Animal or vegetable oils and fats	33	73	68	64	80	0.1	0.1	0.0	0.0	0.1
51-Organic chemicals	3,065	5,031	4,220	4,073	4,022	4.8	4.0	2.8	3.2	2.8
52-Inorganic chemicals	610	1,154	1,201	1,193	1,154	0.9	0.9	0.8	0.9	0.8
53-Dyeing,tanning and colouring materials	668	906	883	886	987	1.0	0.7	0.6	0.7	0.7
54-Medicinal and pharmaceutical products	286	686	807	983	1,195	0.4	0.5	0.5	0.8	0.8
55-Essential oils & perfume mat.;toilet prep.	230	544	643	775	1,031	0.4	0.5	0.3	0.6	0.8
56-Fertilizers,manufactured	120	186	223	213	1,031	0.4	0.4	0.4	0.0	0.1
		1,881	1,944	1,829	2,113	1.7	1.5	1.3	1.4	1.5
58-Artif.resins, plastic mat., cellulose esters	1,118									
59-Chemical materials and products, n.e.s.	795	1,819	2,032	1,987	2,217	1.2	1.4	1.3	1.5	1.5
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	752	949	667	772	799	1.2	0.7	0.4	0.6	0.6
62-Rubber manufactures, n.e.s.	152	329	317	308	421	0.2	0.3	0.2	0.2	0.3
63-Cork and wood manufactures	366	917	577	644	795	0.6	0.7	0.4	0.5	0.5
64-Paper,paperboard,artic.of paper,paper-pulp	428	917	740	704	925	0.7	0.7	0.5	0.5	0.6
65-Textile yarn, fabrics, made-upart.	2,015	4,082	3,509	3,257	3,465	3.1	3.2	2.3	2.5	2.4
66-Non-metallic mineral manufactures, n.e.s.	900	1,656	1,441	1,612	2,066	1.4	1.3	1.0	1.2	1.4
67-Iron and steel	2,635	6,377	5,117	4,121	5,380	4.1	5.0	3.4	3.2	3.7
68-Non-ferrous metals	1,625	4,114	4,266	3,651	3,686	2.5	3.2	2.8	2.8	2.5
69-Manufactures of metal,n.e.s.	766	1,292	1,191	1,195	1,422	1.2	1.0	0.8	0.9	1.0
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	1,447	3,547	2,482	2,251	2,946	2.2	2.8	1.6	1.7	2.0
72-Machinery specialized for particular industry	4,048	7,533	6,425	4,400	4,597	6.3	5.9	4.2	3.4	3.2
73-Metalworking machinery	1,163	1,958	1,270	1,043	958	1.8	1.5	0.8	0.8	0.7
74-General industrial machinery & equipment	3,892	7,186	4,461	3,946	4,681	6.0	5.7	2.9	3.1	3.2
75-Office machines & automatic data processing	1,702	3,378	7,586	5,466	5,768	2.6	2.7	5.0	4.2	4.0
76-Telecommunications	1,702	2,810	4,964	4,523	4,951	1.9	2.7		4.2 3.5	3.4
			4,964 28,172					3.3		
77-Electrical machinery, apparatus & appliance	6,482	14,329		22,298	24,889	10.1	11.3	18.6	17.3	17.1
78-Road vehicles	999	2,211	1,900	2,028	2,914	1.6	1.7	1.3	1.6	2.0
79-Other transport equipment	1,665	3,122	3,132	3,425	3,147	2.6	2.5	2.1	2.7	2.2
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
81-Sanitary, plumbing, heating and lighting fix	92	92	87	112	158	0.1	0.1	0.1	0.1	0.1
82-Furniture and parts thereof	129	288	300	321	457	0.2	0.2	0.2	0.2	0.3
83-Travel goods and handbags	57	156	332	404	396	0.1	0.1	0.2	0.3	0.3
84-Articles of apparel and clothing accessories	168	1,162	1,492	1,872	2,423	0.3	0.9	1.0	1.4	1.7
85-Footwear	22	190	200	223	301	0.0	0.1	0.1	0.2	0.2
87-Professional, scientific & controling instruments	1,654	3,904	4,827	3,945	4,528	2.6	3.1	3.2	3.1	3.1
88-Photographic apparatus, optical goods, watch	867	2,166	2,243	1,898	2,119	1.3	1.7	1.5	1.5	1.5
89-Miscellaneous manufactured articles, n.e.s.	998	2,358	2,768	2,887	3,233	1.5	1.9	1.8	2.2	2.2
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	1,188	1,360	2,485	2,456	3,385	1.8	1.1	1.6	1.9	2.3
94-Animals,live,n.e.s.,incl. zoo-animals	2	7	2,103	2,430	5,505	0.0	0.0	0.0	0.0	0.0
95-Armoured fighting vehicles, arms of war	318	251	258	219	371	0.5	0.0	0.0	0.0	0.3
97-Gold,non-monetary	251	1,316	238 777	648	1,009	0.5	1.0	0.2	0.2	0.5
97-Gold, non-monetary 9X-Res: Commodities & trans. not classified	231	1,510	0	048	1,009	0.4	0.0	0.3	0.3	0.7
		0	0	U	0	0.0	0.0	0.0	0.0	0.0

mmodity category (classification: SITC 2-digit)	Exports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	20
al	23,801	57,027	71,744	69,654	68,312	100.0	100.0	100.0	100.0	10
00-Live animals chiefly for food	2	7	5	6	6	0.0	0.0	0.0	0.0	
01-Meat and meat preparations	324	557	813	1,067	1,080	1.4	1.0	1.1	1.5	
02-Dairy products and birds' eggs	26	39	42	94	74	0.1	0.1	0.1	0.1	
03-Fish, crustaceans, and mollucs	2,329	4,501	4,576	4,372	3,720	9.8	7.9	6.4	6.3	
04-Cereals and cereal preparations	1,380	2,184	1,943	1,996	1,569	5.8	3.8	2.7	2.9	
05-Vegetables and fruit	1,564	1,497	1,265	1,346	1,436	6.6	2.6	1.8	1.9	
06-Sugars, sugar preparations and honey	777	1,280	767	862	577	3.3	2.2	1.1	1.2	
07-Coffee, tea, cocoa, and spices	69	218	89	69	76	0.3	0.4	0.1	0.1	
08-Feeding stuff for animals	156	239	306	292	311	0.7	0.4	0.4	0.4	
09-Miscl.edible products and preparations	75	273	336	360	371	0.3	0.5	0.5	0.5	
11-Beverages	31	87	106	110	82	0.1	0.2	0.1	0.2	
12-Tobacco and tobacco manufactures	74	54	72	71	68	0.3	0.1	0.1	0.1	
21-Hides, skins, and furskins	3	3	2	2	5	0.0	0.0	0.0	0.0	
22-Oil-seeds and oleaginous fruits	19	11	9	10	5	0.1	0.0	0.0	0.0	
23-Crude rubber	956	2,492	1,665	1,502	1,899	4.0	4.4	2.3	2.2	
24-Cork and wood	58	108	167	177	265	0.2	0.2	0.2	0.3	
25-Pulp and waste paper	2	77	181	130	86	0.0	0.1	0.3	0.2	
26-Textile fibres (except wool tops)	89	216	262	248	250	0.4	0.4	0.4	0.4	
27-Crude fertilizers and crude materials	99 25	142	319	273	114	0.4	0.2	0.4	0.4	
28-Metalliferous ores and metal scrap	25	95	178	100	80	0.1	0.2	0.2	0.1	
29-Crude animal and vegetable materials, n.e.s	106	123	136	133	192	0.4	0.2	0.2	0.2	
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	
32-Coal,coke and briquettes	0	0	0	0	0	0.0	0.0	0.0	0.0	
33-Petroleum, and petroleum products	91	260	1,865	1,655	1,463	0.4	0.5	2.6	2.4	
34-Gas, natural and manufactured	108	154	277	210	129	0.5	0.3	0.4	0.3	
35-Electric current	0	0	0	1	0	0.0	0.0	0.0	0.0	
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	
41-Animal oils and fats	0	1	2	1	1	0.0	0.0	0.0	0.0	
42-Fixed vegetable oils and fats	6	9	43	86	59	0.0	0.0	0.1	0.1	
43-Animal or vegetable oils and fats	1	12	34	27	16	0.0	0.0	0.0	0.0	
51-Organic chemicals	56	240	884	677	645	0.2	0.4	1.2	1.0	
52-Inorganic chemicals	17	65	98	104	141	0.1	0.1	0.1	0.1	
53-Dyeing, tanning and colouring materials	31	463	107	106	103	0.1	0.8	0.1	0.2	
54-Medicinal and pharmaceutical products	28	127	118	126	69	0.1	0.2	0.2	0.2	
55-Essential oils & perfume mat.;toilet prep.	45	148	293	392	341	0.2	0.3	0.4	0.6	
56-Fertilizers, manufactured	2	4	20	19	8	0.0	0.0	0.0	0.0	
58-Artif.resins, plastic mat., cellulose esters	137	719	2,168	2,014	2,049	0.6	1.3	3.0	2.9	
59-Chemical materials and products, n.e.s.	140 0	378	465	487	521	0.6	0.7	0.6	0.7	
5X-Res: Chemicals and related products, n.e.s. 61-Leather,leather manuf.,n.e.s.	255	0 478	0 453	0 435	0 279	0.0	0.0	0.0	0.0	
62-Rubber manufactures, n.e.s.	173	440	705	433 786	742	0.7	0.8	1.0	1.1	
63-Cork and wood manufactures	173	300	395	391	439	0.7	0.8	0.6	0.6	
64-Paper, paperboard, artic. of paper, paper-pulp	50	300 346	691	711	643	0.0	0.5	1.0	1.0	
	963	2,008	2,032	1,986	1,579	4.0	3.5	2.8	2.9	
65-Textile yarn,fabrics,made-upart. 66-Non-metallic mineral manufactures,n.e.s.	1,115	1,882	1,728	1,986	2,066	4.0	3.3	2.8 2.4	2.9	
	,	· · · ·	,	· ·	· ·					
67-Iron and steel 68-Non-ferrous metals	144 119	489 113	957 394	687 351	659 259	0.6 0.5	0.9 0.2	1.3	1.0 0.5	
								0.5		
69-Manufactures of metal,n.e.s. 6X-Res: Manufactured goods classified chiefly	290 0	729 0	1,047 0	1,028 0	952 0	1.2 0.0	1.3 0.0	1.5 0.0	1.5 0.0	
	114	541	1,279		1,355	0.0	0.0		1.8	
71-Power generating machinery and equipment 72-Machinery specialized for particular industry	62	206	363	1,281 396	353	0.5	0.9	1.8 0.5	1.8 0.6	
73-Metalworking machinery	62 33	206 100	363 123	396 84	353 108	0.5	0.4	0.5	0.6	
73-Metalworking machinery 74-General industrial machinery & equipment	33 419				2,190	1.8	3.0	2.9	3.2	
	419 1,608	1,711	2,115	2,228	2,190 9,247	1.8 6.8	3.0 9.8	2.9 12.6	3.2 12.1	
75-Office machines & automatic data processing 76-Telecommunications	1,608	5,586 3,068	9,007 4,233	8,432 3,789	9,247 5,018	6.8 4.6	9.8 5.4	5.9	5.4	
76-Telecommunications 77-Electrical machinery, apparatus & appliance	1,091	3,068 6,441		3,789 9,956	5,018 8,796	4.6 7.0	5.4 11.3	5.9 15.9	5.4 14.3	
77-Electrical machinery, apparatus & appliance 78-Road vehicles	229		11,433			1.0	11.5	3.5	4.1	
78-Road vehicles 79-Other transport equipment	229 7	731 637	2,518 113	2,867 54	2,849 37	1.0 0.0	1.3	3.5 0.2	4.1 0.1	
79-Other transport equipment 7X-Res: Machinery and transport equipment	0	037	0	54 0	37 0	0.0	0.0	0.2	0.1	
81-Sanitary, plumbing, heating and lighting fix	43	153	170	170	157	0.0	0.0	0.0	0.0	
	321	762		937		1.3	1.3		1.3	
82-Furniture and parts thereof	321 241	458	1,002 505	937 478	1,132 364	1.5	0.8	1.4 0.7	0.7	
83-Travel goods and handbags										
84-Articles of apparel and clothing accessories	2,914	5,099	4,001	3,922	4,071	12.2	8.9 3 7	5.6	5.6	
85-Footwear	767 67	2,112	823	848 546	878 816	3.2	3.7	1.1	1.2	
87-Professional, scientific & controling instruments	67 250	316	502	546	816	0.3	0.6	0.7	0.8	
88-Photographic apparatus, optical goods, watch	250	860	918	923	1,058	1.0	1.5	1.3	1.3	
89-Miscellaneous manufactured articles, n.e.s.	1,604	4,115	2,838	3,024	3,200	6.7	7.2	4.0	4.3	
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	
93-Special transactions & commod.	281	486	1,715	2,425	1,171	1.2	0.9	2.4	3.5	
94-Animals,live,n.e.s.,incl. zoo-animals	1	4	26	20 5	14 0	0.0 0.0	0.0	0.0 0.0	0.0 0.0	
05 A				5	0	0.0	0.0	0.0	0.0	
95-Armoured fighting vehicles, arms of war 97-Gold, non-monetary	1 2	6 63	3 43	44	74	0.0	0.0 0.1	0.0	0.0	

Commodity category (classification: SITC 2-digit) Total 00-Live animals chiefly for food	1990	1995	2000							
			2000	2001	2002	1990	1995	2000	2001	2002
00-Live animals chiefly for food	32,064	70,738	59,709	58,005	53,332	100.0	100.0	100.0	100.0	100.0
-	20	21	21	25	20	0.1	0.0	0.0	0.0	0.0
01-Meat and meat preparations	5	8	8	7	16	0.0	0.0	0.0	0.0	0.0
02-Dairy products and birds' eggs	94	269	249	289	277	0.3	0.4	0.4	0.5	0.5
03-Fish, crustaceans, and mollucs	525	550	549	794	436	1.6	0.8	0.9	1.4	0.8
04-Cereals and cereal preparations	141	333	281	301	283	0.4	0.5	0.5	0.5	0.5
05-Vegetables and fruit	54	161	105	120	146	0.2	0.2	0.2	0.2	0.3
06-Sugars, sugar preparations and honey	4	15	20	29	33	0.0	0.0	0.0	0.0	0.1
07-Coffee, tea, cocoa, and spices	21	49	58	57	88	0.1	0.1	0.1	0.1	0.2
08-Feeding stuff for animals	171	457	443	509	458	0.5	0.6	0.7	0.9	0.9
09-Miscl.edible products and preparations	27	85	92	92	117	0.1	0.1	0.2	0.2	0.2
11-Beverages	151	188	126	130	160	0.5	0.3	0.2	0.2	0.3
12-Tobacco and tobacco manufactures	84	126	113	127	119	0.3	0.2	0.2	0.2	0.2
21-Hides, skins, and furskins	118	174	139	186	109	0.4	0.2	0.2	0.3	0.2
22-Oil-seeds and oleaginous fruits	11	72	283	297	295	0.0	0.1	0.5	0.5	0.6
23-Crude rubber	67	145	132	135	154	0.2	0.2	0.2	0.2	0.3
24-Cork and wood	455	874	310	281	173	1.4	1.2	0.5	0.5	0.3
25-Pulp and waste paper	112	450	304	221	242	0.3	0.6	0.5	0.4	0.5
26-Textile fibres (except wool tops)	568	843	568	547	512	1.8	1.2	1.0	0.9	1.0
27-Crude fertilizers and crude materials	114	174	121	112	129	0.4	0.2	0.2	0.2	0.2
28-Metalliferous ores and metal scrap	177	254	235	266	192	0.6	0.4	0.4	0.5	0.4
29-Crude animal and vegetable materials, n.e.s	49	94	62	79	68	0.2	0.1	0.1	0.1	0.1
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal, coke and briquettes	24	70	134	151	95	0.1	0.1	0.2	0.3	0.2
33-Petroleum, and petroleum products	3,217	4,439	5,819	4,232	2,384	10.0	6.3	9.7	7.3	4.5
34-Gas, natural and manufactured	51	9	115	652	12	0.2	0.0	0.2	1.1	0.0
35-Electric current	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats	3	9	5	6	6	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	9	41	20	22	32	0.0	0.1	0.0	0.0	0.1
43-Animal or vegetable oils and fats	9	31	33	35	32	0.0	0.0	0.1	0.1	0.1
51-Organic chemicals	859	2,246	1,566	1,524	1,464	2.7	3.2	2.6	2.6	2.7
52-Inorganic chemicals	207	362	394	449	428	0.6	0.5	0.7	0.8	0.8
53-Dyeing, tanning and colouring materials	316	536	420	416	458	1.0	0.8	0.7	0.7	0.9
54-Medicinal and pharmaceutical products	219	543	522	579	557	0.7	0.8	0.9	1.0	1.0
55-Essential oils & perfume mat.;toilet prep.	146	287	343	392	393	0.5	0.4	0.6	0.7	0.7
56-Fertilizers,manufactured	424	541	343	407	265	1.3	0.8	0.6	0.7	0.5
58-Artif.resins, plastic mat., cellulose esters	707	1,366	1,353	1,251	1,248	2.2	1.9	2.3	2.2	2.3
59-Chemical materials and products, n.e.s.	362	840	959	966	924	1.1	1.2	1.6	1.7	1.7
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	186	336	284	281	205	0.6	0.5	0.5	0.5	0.4
62-Rubber manufactures, n.e.s.	125	316	300	297	230	0.4	0.4	0.5	0.5	0.4
63-Cork and wood manufactures	25	87	46	50	50	0.1	0.1	0.1	0.1	0.1
64-Paper,paperboard,artic.of paper,paper-pulp	291	718	466	462	473	0.9	1.0	0.8	0.8	0.9
65-Textile yarn, fabrics, made-upart.	935	1,616	1,717	1,636	1,234	2.9	2.3	2.9	2.8	2.3
66-Non-metallic mineral manufactures, n.e.s.	1,412	1,986	1,657	1,600	1,642	4.4	2.8	2.8	2.8	3.1
67-Iron and steel	2,465	4,998	2,562	2,290	2,699	7.7	7.1	4.3	3.9	5.1
68-Non-ferrous metals	686	1,726	1,443	1,435	1,343	2.1	2.4	2.4	2.5	2.5
69-Manufactures of metal, n.e.s.	614	1,775	1,377	1,423	842	1.9	2.5	2.3	2.5	1.6
6X-Res: Manufactured goods classified chiefly	0	0	0	0	11	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	1,228	1,754	1,275	1,483	1,525	3.8	2.5	2.1	2.6	2.9
72-Machinery specialized for particular industry	2,281	4,487	2,227	2,321	2,232	7.1	6.3	3.7	4.0	4.2
73-Metalworking machinery	434	1,042	562	564	602	1.4	1.5	0.9	1.0	1.1
74-General industrial machinery & equipment	1,681	4,745	2,492	2,628	2,690	5.2	6.7	4.2	4.5	5.0
75-Office machines & automatic data processing	948	2,802	4,139	4,036	3,804	3.0	4.0	6.9	7.0	7.1
76-Telecommunications	1,098	2,774	2,106	2,959	3,256	3.4	3.9	3.5	5.1	6.1
77-Electrical machinery, apparatus & appliance	2,664	9,699	13,172	10,878	9,367	8.3	13.7	22.1	18.8	17.6
78-Road vehicles	2,371	5,371	1,948	1,967	2,317	7.4	7.6	3.3	3.4	4.3
79-Other transport equipment	1,020	1,871	816	1,069	797	3.2	2.6	1.4	1.8	1.5
7X-Res: Machinery and transport equipment	0	0	0	0	48	0.0	0.0	0.0	0.0	0.1
81-Sanitary, plumbing, heating and lighting fix	23	67	38	42	38	0.1	0.1	0.1	0.1	0.1
82-Furniture and parts thereof	24	76	72	102	99	0.1	0.1	0.1	0.2	0.2
83-Travel goods and handbags	7	23	43	46	30	0.0	0.0	0.1	0.1	0.1
84-Articles of apparel and clothing accessories	34	104	180	162	159	0.1	0.1	0.3	0.3	0.3
85-Footwear	7	21	39	34	35	0.0	0.0	0.1	0.1	0.1
87-Professional, scientific & controling instruments	361	1,098	932	908	1,030	1.1	1.6	1.6	1.6	1.9
88-Photographic apparatus, optical goods, watch	382	828	641	621	602	1.2	1.2	1.1	1.1	1.1
89-Miscellaneous manufactured articles, n.e.s.	628	1,967	1,809	1,733	1,508	2.0	2.8	3.0	3.0	2.8
8X-Res: Miscellaneous manufactured articles	0	0	0	0	6	0.0	0.0	0.0	0.0	0.0
	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	452	1,373	883	985	1,677	1.4	1.9	1.5	1.7	3.1
91-Postal packages 93-Special transactions & commod.	432									
	432	1	1	2	3	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod. 94-Animals,live,n.e.s.,incl. zoo-animals			1 67	2 10	3 8	0.0 0.3	0.0 0.2	0.0 0.1	0.0 0.0	
93-Special transactions & commod.	0	1								0.0 0.0 0.8

Table 2-1-15. Ma	jor Exporting	g Commodities: Brazil
------------------	---------------	-----------------------

ommodity category (classification: SITC 2-digit)	Exports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	200
otal	33,437	49,577	58,019	60,964	63,604	100.0	100.0	100.0	100.0	100.
00-Live animals chiefly for food	4	5	6	5	5	0.0	0.0	0.0	0.0	0.
01-Meat and meat preparations	673	1,397	2,031	3,049	3,328	2.0	2.8	3.5	5.0	5.
02-Dairy products and birds' eggs	3	10	25	41 301	52	0.0	0.0	0.0	0.1	0.
03-Fish, crustaceans, and mollucs 04-Cereals and cereal preparations	151 6	172 45	253 74	501 606	364 348	0.5 0.0	0.3 0.1	0.4 0.1	0.5 1.0	0. 0.
05-Vegetables and fruit	1,850	1,562	1,588	1,331	1,571	5.5	3.2	2.7	2.2	2.
06-Sugars, sugar preparations and honey	560	2,099	1,360	2,310	2,188	1.7	4.2	2.3	3.8	3.
07-Coffee, tea, cocoa, and spices	1,876	2,974	2,188	1,824	1,820	5.6	6.0	3.8	3.0	2.
08-Feeding stuff for animals	1,842	2,288	1,814	2,260	2,371	5.5	4.6	3.1	3.7	3.
09-Miscl.edible products and preparations	14	40	379	303	177	0.0	0.1	0.7	0.5	0.
11-Beverages	52	103	73	60	35	0.2	0.2	0.1	0.1	0.
12-Tobacco and tobacco manufactures	674	1,232	889	1,001	1,079	2.0	2.5	1.5	1.6	1.
21-Hides, skins, and furskins	1	15	4	9	8	0.0	0.0	0.0	0.0	0.
22-Oil-seeds and oleaginous fruits	971	815	2,313	2,891	3,228	2.9	1.6	4.0	4.7	5.
23-Crude rubber	24	125	121	118	148	0.1	0.3	0.2	0.2	0.
24-Cork and wood	161	523	744	731	810	0.5	1.1	1.3	1.2	1
25-Pulp and waste paper	604 234	1,463 175	1,668 79	1,295 211	1,223 161	1.8 0.7	3.0 0.4	2.9 0.1	2.1 0.3	1.
26-Textile fibres (except wool tops) 27-Crude fertilizers and crude materials	148	175	294	278	299	0.7	0.4	0.1	0.5	0
28-Metalliferous ores and metal scrap	2,933	3,041	3,758	3,605	3,664	8.8	6.1	6.5	5.9	5
29-Crude animal and vegetable materials, n.e.s	62	138	148	161	185	0.2	0.3	0.3	0.3	0
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0
32-Coal,coke and briquettes	0	0	0	0	0	0.0	0.0	0.0	0.0	0
33-Petroleum, and petroleum products	721	434	930	2,075	3,015	2.2	0.9	1.6	3.4	4
34-Gas, natural and manufactured	1	0	2	1	21	0.0	0.0	0.0	0.0	0
35-Electric current	0	2	3	3	0	0.0	0.0	0.0	0.0	C
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0
41-Animal oils and fats	0	3	4	11	9	0.0	0.0	0.0	0.0	(
42-Fixed vegetable oils and fats	443	1,183	406	577	873	1.3	2.4	0.7	0.9	1
43-Animal or vegetable oils and fats	73	131	82	73	64	0.2	0.3	0.1	0.1	(
51-Organic chemicals	763	1,155	1,224	1,022	1,314	2.3	2.3	2.1	1.7	2
52-Inorganic chemicals	237	332	385	346	351	0.7	0.7	0.7	0.6	(
53-Dyeing, tanning and colouring materials	58	169	216	194	151	0.2	0.3	0.4	0.3	(
54-Medicinal and pharmaceutical products	82	180	279	292	303	0.2	0.4	0.5	0.5	(
55-Essential oils & perfume mat.;toilet prep.	70	211	240	249	295	0.2	0.4	0.4	0.4	(
56-Fertilizers, manufactured	41	66	54	60	78	0.1	0.1	0.1	0.1	(
58-Artif.resins,plastic mat.,cellulose esters	493	740	814	663	678	1.5	1.5	1.4	1.1	1
59-Chemical materials and products, n.e.s.	220 0	385	447	474	543	0.7	0.8	0.8	0.8	(
5X-Res: Chemicals and related products, n.e.s. 61-Leather, leather manuf., n.e.s.	407	0 729	0 916	0 1,058	0 1,182	0.0	0.0	0.0	0.0	1
62-Rubber manufactures, n.e.s.	303	614	695	643	659	0.9	1.3	1.0	1.7	1
63-Cork and wood manufactures	217	611	764	793	985	0.9	1.2	1.2	1.1	
64-Paper, paperboard, artic. of paper, paper-pulp	747	1,425	1,050	1,053	1,038	2.2	2.9	1.3	1.5	
65-Textile yarn,fabrics,made-upart.	864	1,100	957	913	906	2.6	2.2	1.6	1.5	
66-Non-metallic mineral manufactures, n.e.s.	392	764	956	919	1,030	1.2	1.5	1.6	1.5	
67-Iron and steel	3,871	4,666	3,868	3,353	4,138	11.6	9.4	6.7	5.5	
68-Non-ferrous metals	1,446	1,992	1,819	1,391	1,640	4.3	4.0	3.1	2.3	
69-Manufactures of metal,n.e.s.	371	719	712	743	661	1.1	1.5	1.2	1.2	
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	
71-Power generating machinery and equipment	1,087	1,408	1,597	1,795	1,906	3.3	2.8	2.8	2.9	
72-Machinery specialized for particular industry	647	1,059	968	1,053	1,152	1.9	2.1	1.7	1.7	
73-Metalworking machinery	65	181	178	154	135	0.2	0.4	0.3	0.3	
74-General industrial machinery & equipment	811	1,611	1,606	1,468	1,561	2.4	3.2	2.8	2.4	
75-Office machines & automatic data processing	181	270	495	404	239	0.5	0.5	0.9	0.7	
76-Telecommunications	472	392	1,711	1,883	1,828	1.4	0.8	2.9	3.1	
77-Electrical machinery, apparatus & appliance	561	1,015	1,276	1,202	1,189	1.7	2.0	2.2	2.0	
78-Road vehicles	1,684	2,856	4,546	4,556	4,535	5.0	5.8	7.8	7.5	
79-Other transport equipment	732	591	3,826	3,837	3,017	2.2	1.2	6.6	6.3	
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	
81-Sanitary, plumbing, heating and lighting fix	24	31	27	28	35	0.1	0.1	0.0	0.0	
82-Furniture and parts thereof	49	360	543	536	596	0.1	0.7	0.9	0.9	
83-Travel goods and handbags	9	8	6	5	6	0.0	0.0	0.0	0.0	
84-Articles of apparel and clothing accessories	266	321	296	296	234	0.8	0.6	0.5	0.5	
85-Footwear 87 Professional scientific & controling instruments	1,193 95	1,523	1,641	1,708	1,542	3.6	3.1	2.8	2.8	1
87-Professional, scientific & controling instruments 88-Photographic apparatus,optical goods,watch	95 151	161 308	304 241	331 189	291 139	0.3 0.5	0.3 0.6	0.5 0.4	0.5 0.3	
88-Photographic apparatus, optical goods, watch 89-Miscellaneous manufactured articles, n.e.s.	320	308 447	593	612	655	0.5	0.6 0.9	0.4 1.0	0.5 1.0	
89-Miscellaneous manufactured articles, n.e.s. 8X-Res: Miscellaneous manufactured articles	520 0	447	593 0	012	055	0.0	0.9	1.0 0.0	0.0	
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	
93-Special transactions & commod.	406	668	1,132	1,253	1,109	1.2	1.3	2.0	2.1	
94-Animals, live, n.e.s., incl. zoo-animals	400	008	1,132	1,253	0	0.0	0.0	0.0	0.0	(
95-Armoured fighting vehicles, arms of war	4	6	3	2	63	0.0	0.0	0.0	0.0	(
97-Gold, non-monetary	16	382	396	355	372	0.0	0.8	0.0	0.6	Ì
· · · · · · · · · · · · · · · · · · ·	10	0	0	0	0	0.0	0.0	0.0	0.0	

Table 2-1-15 (continued). Major Importing Commodities: Brazil

(Millions of US Dollars and Percent)

Table 2 T Te (continued). Major importing Commound	Imports					Share				
Commodity category (classification: SITC 2-digit)	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Total	23,867	55,558	60,126	60,059	50,745	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	106	172	37	22	32	0.4	0.3	0.1	0.0	0.1
01-Meat and meat preparations 02-Dairy products and birds' eggs	312 153	233 677	130 391	71 188	88 261	1.3 0.6	0.4 1.2	0.2 0.6	0.1 0.3	0.2 0.5
03-Fish, crustaceans, and mollucs	133	422	298	264	201	0.0	0.8	0.5	0.3	0.3
04-Cereals and cereal preparations	774	1,780	1,593	1,415	1,362	3.2	3.2	2.6	2.4	2.7
05-Vegetables and fruit	369	922	526	519	409	1.5	1.7	0.9	0.9	0.8
06-Sugars, sugar preparations and honey	15	61	49	36	25	0.1	0.1	0.1	0.1	0.0
07-Coffee, tea, cocoa, and spices	12	178	105	88	150	0.0	0.3	0.2	0.1	0.3
08-Feeding stuff for animals	7	45	69	78	129	0.0	0.1	0.1	0.1	0.3
09-Miscl.edible products and preparations	12	101	125	113	100	0.0	0.2	0.2	0.2	0.2
11-Beverages	77	360	145	153	129	0.3	0.6	0.2	0.3	0.3
12-Tobacco and tobacco manufactures	3	56	27	60	32	0.0	0.1	0.0	0.1	0.1
21-Hides, skins, and furskins	20	16	10	8	14	0.1	0.0	0.0	0.0	0.0
22-Oil-seeds and oleaginous fruits	26 176	159 289	150 254	145 242	180 265	0.1 0.7	0.3 0.5	0.2 0.4	0.2 0.4	0.4 0.5
23-Crude rubber 24-Cork and wood	23	289 17	234 14	12	265	0.7	0.3	0.4	0.4	0.5
25-Pulp and waste paper	63	189	253	12	192	0.1	0.0	0.0	0.0	0.0
26-Textile fibres (except wool tops)	214	672	356	143	121	0.9	1.2	0.6	0.2	0.2
27-Crude fertilizers and crude materials	134	172	200	164	164	0.6	0.3	0.3	0.3	0.3
28-Metalliferous ores and metal scrap	510	609	402	372	317	2.1	1.1	0.7	0.6	0.6
29-Crude animal and vegetable materials, n.e.s	52	107	128	121	124	0.2	0.2	0.2	0.2	0.2
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	622	806	646	758	822	2.6	1.5	1.1	1.3	1.6
33-Petroleum, and petroleum products	5,056	5,641	6,786	5,751	5,534	21.2	10.2	11.3	9.6	10.9
34-Gas, natural and manufactured	183	339	600	786	715	0.8	0.6	1.0	1.3	1.4
35-Electric current	0	0	96	126	34	0.0	0.0	0.2	0.2	0.1
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats 42-Fixed vegetable oils and fats	22 46	28 293	18 181	7 127	7 164	0.1 0.2	0.1 0.5	0.0 0.3	0.0 0.2	0.0 0.3
42-Animal or vegetable oils and fats	40	293	22	20	21	0.2	0.0	0.3	0.2	0.3
51-Organic chemicals	1,327	2,869	2,786	2,962	2,505	5.6	5.2	4.6	4.9	4.9
52-Inorganic chemicals	344	474	534	616	622	1.4	0.9	0.9	1.0	1.2
53-Dyeing,tanning and colouring materials	200	414	425	427	407	0.8	0.7	0.7	0.7	0.8
54-Medicinal and pharmaceutical products	370	933	1,731	1,808	1,830	1.6	1.7	2.9	3.0	3.6
55-Essential oils & perfume mat.;toilet prep.	75	275	348	342	306	0.3	0.5	0.6	0.6	0.6
56-Fertilizers, manufactured	352	587	1,071	1,048	968	1.5	1.1	1.8	1.7	1.9
58-Artif.resins, plastic mat., cellulose esters	330	1,217	1,592	1,544	1,450	1.4	2.2	2.6	2.6	2.9
59-Chemical materials and products, n.e.s.	272	636	931	972	964	1.1	1.1	1.5	1.6	1.9
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
61-Leather,leather manuf.,n.e.s.	103	175	188	184	125	0.4	0.3	0.3	0.3	0.2
62-Rubber manufactures, n.e.s.	112	468	579	582	472	0.5	0.8	1.0	1.0	0.9
63-Cork and wood manufactures	15 264	36 1,032	54 827	51 643	39 471	0.1 1.1	0.1 1.9	0.1 1.4	0.1 1.1	0.1 0.9
64-Paper,paperboard,artic.of paper,paper-pulp 65-Textile yarn,fabrics,made-upart.	264 269	1,052	1,203	1,055	471 895	1.1	2.5	2.0	1.1	1.8
66-Non-metallic mineral manufactures, n.e.s.	181	478	439	542	396	0.8	0.9	0.7	0.9	0.8
67-Iron and steel	296	467	655	728	590	1.2	0.8	1.1	1.2	1.2
68-Non-ferrous metals	393	933	1,057	1,082	785	1.6	1.7	1.8	1.8	1.5
69-Manufactures of metal, n.e.s.	261	741	763	818	785	1.1	1.3	1.3	1.4	1.5
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	808	1,273	2,319	3,635	3,156	3.4	2.3	3.9	6.1	6.2
72-Machinery specialized for particular industry	1,254	3,137	2,760	2,753	2,204	5.3	5.6	4.6	4.6	4.3
73-Metalworking machinery	290	614	478	577	421	1.2	1.1	0.8	1.0	0.8
74-General industrial machinery & equipment	943	2,526	2,661	3,000	2,719	4.0	4.5	4.4	5.0	5.4
75-Office machines & automatic data processing	525	1,838	2,779	2,547	1,830	2.2	3.3	4.6	4.2	3.6
76-Telecommunications	794	2,734	3,768	3,455	1,969	3.3	4.9	6.3	5.8	3.9
77-Electrical machinery, apparatus & appliance	1,423	3,520	5,331	4,975	3,639	6.0	6.3	8.9	8.3	7.2
78-Road vehicles	675	6,464	4,381	4,279	3,215	2.8	11.6	7.3	7.1	6.3
79-Other transport equipment 7X-Res: Machinery and transport equipment	1,145 0	1,045 0	1,955 0	2,140 0	1,871 0	4.8 0.0	1.9 0.0	3.3 0.0	3.6 0.0	3.7 0.0
81-Sanitary, plumbing, heating and lighting fix	6	35	44	45	26	0.0	0.0	0.0	0.0	0.0
82-Furniture and parts thereof	14	148	203	210	145	0.0	0.1	0.3	0.3	0.1
83-Travel goods and handbags	8	72	66	66	67	0.0	0.1	0.1	0.1	0.1
84-Articles of apparel and clothing accessories	62	364	237	248	183	0.3	0.7	0.4	0.4	0.4
85-Footwear	25	213	51	59	54	0.1	0.4	0.1	0.1	0.1
87-Professional, scientific & controling instruments	581	1,125	1,663	1,793	1,464	2.4	2.0	2.8	3.0	2.9
88-Photographic apparatus, optical goods, watch	311	788	623	603	526	1.3	1.4	1.0	1.0	1.0
89-Miscellaneous manufactured articles, n.e.s.	404	1,653	1,263	1,164	1,099	1.7	3.0	2.1	1.9	2.2
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	262	501	710	1,071	903	1.1	0.9	1.2	1.8	1.8
94-Animals, live, n.e.s., incl. zoo-animals	1	1	2	1	2	0.0	0.0	0.0	0.0	0.0
95-Armoured fighting vehicles, arms of war	5 3	22	17 20	15	6 12	0.0	0.0	0.0	0.0	0.0 0.0
97-Gold,non-monetary 9X-Res: Commodities & trans. not classified	3	3 0	20 0	31 0	12 0	0.0 0.0	0.0 0.0	0.0 0.0	0.1 0.0	0.0 0.0
9A-Res: Commodities & trains. not classified	U	U	U	U	U	0.0	0.0	0.0	0.0	0.0

Table 2-1-16. Major E	xporting Commodities: Chile
-----------------------	-----------------------------

Commodity category (classification: SITC 2-digit)	Exports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	2002
Total	9,031	17,023	19,141	19,630	18,428	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food 01-Meat and meat preparations	5 22	7 30	12 106	12 167	8 184	0.1 0.2	0.0 0.2	0.1 0.6	0.1 0.8	0.0 1.0
02-Dairy products and birds' eggs	7	36	30	56	43	0.2	0.2	0.0	0.3	0.2
03-Fish, crustaceans, and mollucs	503	1,103	1,637	1,714	1,633	5.6	6.5	8.6	8.7	8.9
04-Cereals and cereal preparations	61	100	121	140	146	0.7	0.6	0.6	0.7	0.
05-Vegetables and fruit	964	1,485	1,628	1,703	1,779	10.7	8.7	8.5	8.7	9.
06-Sugars, sugar preparations and honey	10	33	25	30	24	0.1	0.2	0.1	0.2	0.
07-Coffee, tea, cocoa, and spices	10	50	53	72	55	0.1	0.3	0.3	0.4	0.
08-Feeding stuff for animals	416	715	270	343	366	4.6	4.2	1.4	1.7	2.
09-Miscl.edible products and preparations 11-Beverages	7 58	188 204	127 626	178 696	161 654	0.1	1.1	0.7	0.9	0.9
12-Tobacco and tobacco manufactures	12	15	14	18	12	0.0	0.1	0.1	0.1	0.
21-Hides, skins, and furskins	6	3	2	3	5	0.1	0.0	0.0	0.0	0.
22-Oil-seeds and oleaginous fruits	1	10	16	5	4	0.0	0.1	0.1	0.0	0.
23-Crude rubber	1	3	4	4	5	0.0	0.0	0.0	0.0	0.
24-Cork and wood	409	759	682	826	801	4.5	4.5	3.6	4.2	4.
25-Pulp and waste paper	293	1,284	1,174	1,075	848	3.2	7.5	6.1	5.5	4.
26-Textile fibres (except wool tops)	21	12	4	5	5	0.2	0.1	0.0	0.0	0.
27-Crude fertilizers and crude materials	57	65	70	89	73	0.6	0.4	0.4	0.5	0.
28-Metalliferous ores and metal scrap 29-Crude animal and vegetable materials, n.e.s	925 89	2,699 172	2,983 212	2,754 216	2,357 188	10.2 1.0	15.9 1.0	15.6 1.1	14.0 1.1	12. 1.
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
32-Coal,coke and briquettes	0	1	2	0	2	0.0	0.0	0.0	0.0	0.
33-Petroleum, and petroleum products	46	29	188	263	197	0.5	0.2	1.0	1.3	1.
34-Gas, natural and manufactured	0	12	25	23	19	0.0	0.1	0.1	0.1	0.
35-Electric current	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
41-Animal oils and fats	15	54	5	5	14	0.2	0.3	0.0	0.0	0.
42-Fixed vegetable oils and fats	1	2	3	3	3	0.0	0.0	0.0	0.0	0.
43-Animal or vegetable oils and fats	1	28	4 349	7	1	0.0	0.2	0.0	0.0	0.
51-Organic chemicals	82 141	181 243	349 365	414 393	356 388	0.9 1.6	1.1 1.4	1.8 1.9	2.1 2.0	1. 2.
52-Inorganic chemicals 53-Dyeing,tanning and colouring materials	2	243 7	303 7	393 7	588	0.0	0.0	0.0	0.0	2.
54-Medicinal and pharmaceutical products	11	24	38	45	50	0.0	0.0	0.0	0.0	0.
55-Essential oils & perfume mat.;toilet prep.	8	35	57	82	77	0.1	0.2	0.3	0.4	0.
56-Fertilizers,manufactured	23	33	96	100	104	0.3	0.2	0.5	0.5	0.
58-Artif.resins, plastic mat., cellulose esters	10	23	87	98	92	0.1	0.1	0.5	0.5	0.
59-Chemical materials and products, n.e.s.	8	29	48	56	51	0.1	0.2	0.3	0.3	0.
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
61-Leather, leather manuf., n.e.s.	2	16	29	30	25	0.0	0.1	0.2	0.2	0.
62-Rubber manufactures, n.e.s.	28 39	72	85	96 255	91	0.3	0.4	0.4	0.5	0.
63-Cork and wood manufactures 64-Paper,paperboard,artic.of paper,paper-pulp	39 105	89 256	179 377	255 463	263 415	0.4 1.2	0.5 1.5	0.9 2.0	1.3 2.4	1. 2.
65-Textile yarn, fabrics, made-upart.	39	230 99	128	128	413 95	0.4	0.6	0.7	0.7	2. 0.
66-Non-metallic mineral manufactures, n.e.s.	17	18	37	43	37	0.4	0.0	0.2	0.2	0.
67-Iron and steel	70	102	99	94	107	0.8	0.6	0.5	0.5	0.
68-Non-ferrous metals	3,862	5,313	5,457	5,173	5,057	42.8	31.2	28.5	26.4	27.
69-Manufactures of metal, n.e.s.	30	75	115	113	82	0.3	0.4	0.6	0.6	0.4
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
71-Power generating machinery and equipment	2	4	20	13	16	0.0	0.0	0.1	0.1	0.
72-Machinery specialized for particular industry	7	35	41	70	33	0.1	0.2	0.2	0.4	0.
73-Metalworking machinery	0	1	1	1	3	0.0	0.0	0.0	0.0	0.
74-General industrial machinery & equipment	9	50	63	71	66	0.1	0.3	0.3	0.4	0.
75-Office machines & automatic data processing 76-Telecommunications	1	7 5	16 11	18 13	16 16	0.0 0.0	0.0 0.0	0.1 0.1	0.1 0.1	0. 0.
77-Electrical machinery, apparatus & appliance	10	40	71	81	47	0.0	0.0	0.1	0.1	0.
78-Road vehicles	20	123	215	210	186	0.1	0.2	1.1	1.1	1.
79-Other transport equipment	20 46	34	78	67	72	0.5	0.2	0.4	0.3	0.
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
81-Sanitary, plumbing, heating and lighting fix	9	13	17	20	17	0.1	0.1	0.1	0.1	0.
82-Furniture and parts thereof	17	42	62	65	63	0.2	0.2	0.3	0.3	0.
83-Travel goods and handbags	1	2	1	1	1	0.0	0.0	0.0	0.0	0.
84-Articles of apparel and clothing accessories	41	70	39	47	33	0.5	0.4	0.2	0.2	0.
85-Footwear	38	28	8	11	7	0.4	0.2	0.0	0.1	0.
87-Professional, scientific & controling instruments	2	4	8	9	8	0.0	0.0	0.0	0.0	0.
88-Photographic apparatus, optical goods, watch	2	4	3	3	3	0.0	0.0	0.0	0.0	0.
89-Miscellaneous manufactured articles, n.e.s. 8X-Res: Miscellaneous manufactured articles	39 0	217 0	168 0	202 0	148 0	0.4 0.0	1.3 0.0	0.9 0.0	1.0 0.0	0. 0.
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.
93-Special transactions & commod.	122	230	435	478	553	1.3	1.3	2.3	2.4	3.
94-Animals,live,n.e.s.,incl. zoo-animals	122	230	-35	478	1	0.0	0.0	0.0	0.0	0.
95-Armoured fighting vehicles, arms of war	0	0	2	2	2	0.0	0.0	0.0	0.0	0.
97-Gold,non-monetary	245	393	306	249	254	2.7	2.3	1.6	1.3	1.
9X-Res: Commodities & trans. not classified	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0

Table 2-1-16 (continued). Major Importing Commodities: Chile

(Millions of US Dollars and Percent)

ommodity category (classification: SITC 2-digit)	Imports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	2002
otal	7,603	15,948	17,462	16,473	15,621	100.0	1993	100.0	100.0	100.0
00-Live animals chiefly for food	2	4	4	4	4	0.0	0.0	0.0	0.0	0.0
01-Meat and meat preparations	7	141	186	169	180	0.1	0.9	1.1	1.0	1.
02-Dairy products and birds' eggs	20	51	56	36	24	0.3	0.3	0.3	0.2	0.
03-Fish, crustaceans, and mollucs	10	47	24	25	25	0.1	0.3	0.1	0.1	0.
04-Cereals and cereal preparations	49	246	276	239	251	0.6	1.5	1.6	1.5	1.
05-Vegetables and fruit	26	77	88	71	87	0.3	0.5	0.5	0.4	0.
06-Sugars, sugar preparations and honey	60	66	84	83	85	0.8	0.4	0.5	0.5	0.
07-Coffee, tea, cocoa, and spices	42	83	82	91	84	0.6	0.5	0.5	0.6	0.
08-Feeding stuff for animals	15	51	148	155	166	0.2	0.3	0.8	0.9	1.
09-Miscl.edible products and preparations	15	37	94	71	99	0.2	0.2	0.5	0.4	0.
11-Beverages	24	42	37	40	36	0.3	0.3	0.2	0.2	0.1
12-Tobacco and tobacco manufactures	20	46	16	19	15	0.3	0.3	0.1	0.1	0.
21-Hides, skins, and furskins	1	2	1	0	0	0.0	0.0	0.0	0.0	0.
22-Oil-seeds and oleaginous fruits	2	8	20	22	27	0.0	0.1	0.1	0.1	0.
23-Crude rubber	26	47	27	28	31	0.3	0.3	0.2	0.2	0.
24-Cork and wood	3	5	13	18	15	0.0	0.0	0.1	0.1	0.
25-Pulp and waste paper	3	13	18	10	22	0.0	0.0	0.1	0.1	0.
26-Textile fibres (except wool tops)	101	141	77	65	55	1.3	0.9	0.4	0.4	0.
27-Crude fertilizers and crude materials	23	27	23	21	26	0.3	0.9	0.4	0.4	0.
28-Metalliferous ores and metal scrap	18	177	33	41	46	0.2	1.1	0.2	0.3	0.
29-Crude animal and vegetable materials, n.e.s	16	26	38	35	37	0.2	0.2	0.2	0.2	0.
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0
32-Coal,coke and briquettes	91	114	120	88	91	1.2	0.7	0.7	0.5	0
33-Petroleum, and petroleum products	938	1,125	2,298	2,072	1,883	12.3	7.1	13.2	12.6	12
34-Gas, natural and manufactured	15	41	360	415	388	0.2	0.3	2.1	2.5	2
35-Electric current	0	0	23	29	35	0.0	0.0	0.1	0.2	0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0
41-Animal oils and fats	1	1	17	29	19	0.0	0.0	0.1	0.2	0
42-Fixed vegetable oils and fats	45	113	34	13	7	0.6	0.7	0.2	0.1	0
43-Animal or vegetable oils and fats	5	10	31	66	83	0.1	0.1	0.2	0.4	0
51-Organic chemicals	125	235	225	222	205	1.6	1.5	1.3	1.3	1
52-Inorganic chemicals	98	143	159	175	168	1.3	0.9	0.9	1.1	1
53-Dyeing, tanning and colouring materials	58	115	152	175	140	0.8	0.7	0.9	1.1	C
54-Medicinal and pharmaceutical products	59	182	255	306	270	0.8	1.1	1.5	1.9	1
55-Essential oils & perfume mat.;toilet prep.	56	138	209	230	220	0.7	0.9	1.2	1.4	1
56-Fertilizers,manufactured	92	150	137	122	80	1.2	0.9	0.8	0.7	0
58-Artif.resins,plastic mat.,cellulose esters	175	425	477	475	452	2.3	2.7	2.7	2.9	2
-										
59-Chemical materials and products, n.e.s.	151	283	310	314	321	2.0	1.8	1.8	1.9	2
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	0
61-Leather, leather manuf., n.e.s.	9	33	28	27	21	0.1	0.2	0.2	0.2	0
62-Rubber manufactures,n.e.s.	95	191	201	219	203	1.2	1.2	1.2	1.3	1
63-Cork and wood manufactures	15	49	85	81	76	0.2	0.3	0.5	0.5	C
64-Paper,paperboard,artic.of paper,paper-pulp	107	397	434	388	349	1.4	2.5	2.5	2.4	2
65-Textile yarn, fabrics, made-upart.	239	560	490	426	409	3.1	3.5	2.8	2.6	2
66-Non-metallic mineral manufactures, n.e.s.	87	216	239	216	209	1.1	1.4	1.4	1.3	1
67-Iron and steel	266	506	377	390	380	3.5	3.2	2.2	2.4	2
68-Non-ferrous metals	52	140	130	117	101	0.7	0.9	0.7	0.7	0
69-Manufactures of metal,n.e.s.	198	415	379	423	351	2.6	2.6	2.2	2.6	2
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	(
71-Power generating machinery and equipment	258	368	247	348	363	3.4	2.3	1.4	2.1	2
72-Machinery specialized for particular industry	713	1,124	883	936	839	9.4	7.0	5.1	5.7	5
73-Metalworking machinery	51	85	40	39	36	0.7	0.5	0.2	0.2	(
74-General industrial machinery & equipment	606	955	862	879	818	8.0	6.0	4.9	5.3	4
75-Office machines & automatic data processing	142	457	641	590	530	1.9	2.9	3.7	3.6	3
1 0										
76-Telecommunications	349	775	1,013	836	796	4.6	4.9	5.8	5.1	4
77-Electrical machinery, apparatus & appliance	335	703	645	676	650	4.4	4.4	3.7	4.1	4
78-Road vehicles	660	2,069	1,726	1,418	1,471	8.7	13.0	9.9	8.6	ç
79-Other transport equipment	408	405	504	216	270	5.4	2.5	2.9	1.3	1
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	(
81-Sanitary, plumbing, heating and lighting fix	18	52	62	58	53	0.2	0.3	0.4	0.4	(
82-Furniture and parts thereof	12	56	80	71	79	0.2	0.3	0.5	0.4	(
83-Travel goods and handbags	4	33	46	37	36	0.1	0.2	0.3	0.2	(
84-Articles of apparel and clothing accessories	58	377	643	601	539	0.8	2.4	3.7	3.6	3
85-Footwear	10	189	209	204	206	0.1	1.2	1.2	1.2	1
87-Professional, scientific & controling instruments	120	224	214	240	239	1.6	1.4	1.2	1.5	1
88-Photographic apparatus, optical goods, watch	84	201	185	149	131	1.1	1.3	1.1	0.9	(
89-Miscellaneous manufactured articles, n.e.s.	204	646	702	633	573	2.7	4.1	4.0	3.8	3
89-Miscellaneous manufactured articles, n.e.s. 8X-Res: Miscellaneous manufactured articles	204	040	0	055	0	0.0	4.1 0.0	4.0 0.0	5.8 0.0	
	0	0	0	0	0				0.0	
91-Postal packages						0.0	0.0	0.0		0
93-Special transactions & commod.	112	308	241	273	218	1.5	1.9	1.4	1.7	1
94-Animals,live,n.e.s.,incl. zoo-animals	0	0	0	0	0	0.0	0.0	0.0	0.0	0
95-Armoured fighting vehicles, arms of war	2	4	1	1	1	0.0	0.0	0.0	0.0	0
97-Gold, non-monetary	0	0	1	0	0	0.0	0.0	0.0	0.0	0
	0	0	0	0	0	0.0	0.0	0.0	0.0	0

Table 2-1-17. Major Exporting Commonites. Mexico	Exports					Share	~			r creent)
Commodity category (classification: SITC 2-digit)	1990	1995	2000	2001	2002	1990	1995	2000	2001	2002
Total	29,180	84,642		166,638	169,650	100.0	100.0	100.0	100.0	100.0
00-Live animals chiefly for food	393	577	442	434	326	1.3	0.7	0.3	0.3	0.2
01-Meat and meat preparations	40	75	254	271	247	0.1	0.1	0.1	0.2	0.1
02-Dairy products and birds' eggs	0	10	48	53	47	0.0	0.0	0.0	0.0	0.0
03-Fish, crustaceans, and mollucs	375	735	760	663	631	1.3	0.9	0.4	0.4	0.4
04-Cereals and cereal preparations	38	185	350	380	409	0.1	0.2	0.2	0.2	0.2
05-Vegetables and fruit	1,651	2,857	3,486	3,581	3,547	5.7	3.4	2.0	2.1	2.1
06-Sugars, sugar preparations and honey	64	270	325	318	417	0.2	0.3	0.2	0.2	0.2
07-Coffee, tea, cocoa, and spices	456	920	852	401	370	1.6	1.1	0.5	0.2	0.2
08-Feeding stuff for animals	3	15	25	40	46	0.0	0.0	0.0	0.0	0.0
09-Miscledible products and preparations	31	93	237	326	289	0.1	0.1	0.1	0.2	0.2
11-Beverages	305	563	1,602	1,733	2,038	1.0	0.7	0.9	1.0	1.2
12-Tobacco and tobacco manufactures	31	56	89	57	58	0.1	0.1	0.1	0.0	0.0
21-Hides, skins, and furskins	6	45	107	121	130	0.0	0.1	0.1	0.1	0.0
22-Oil-seeds and oleaginous fruits	42	23	35	27	150	0.1	0.0	0.0	0.0	0.0
23-Crude rubber	65	114	168	155	162	0.2	0.0	0.0	0.1	0.0
24-Cork and wood	116	179	145	119	102	0.4	0.2	0.1	0.1	0.1
25-Pulp and waste paper	7	26	46	28	27	0.4	0.2	0.0	0.0	0.0
				279	317	0.6	0.8	0.0	0.0	0.0
26-Textile fibres (except wool tops)	186 354	655 287	343 249	219	209	1.2			0.2	
27-Crude fertilizers and crude materials							0.3	0.1		0.1
28-Metalliferous ores and metal scrap	325	676	664	556	529	1.1	0.8	0.4	0.3	0.3
29-Crude animal and vegetable materials, n.e.s	77	118	178	170	172	0.3	0.1	0.1	0.1	0.1
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
32-Coal,coke and briquettes	0	0	1	1	2	0.0	0.0	0.0	0.0	0.0
33-Petroleum, and petroleum products	10,285	8,522	16,789	13,163	15,094	35.2	10.1	9.6	7.9	8.9
34-Gas, natural and manufactured	280	160	83	125	22	1.0	0.2	0.0	0.1	0.0
35-Electric current	84	83	6	26	31	0.3	0.1	0.0	0.0	0.0
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
41-Animal oils and fats	1	3	6	5	5	0.0	0.0	0.0	0.0	0.0
42-Fixed vegetable oils and fats	12	46	44	31	27	0.0	0.1	0.0	0.0	0.0
43-Animal or vegetable oils and fats	4	6	10	9	9	0.0	0.0	0.0	0.0	0.0
51-Organic chemicals	593	1,281	1,054	914	935	2.0	1.5	0.6	0.5	0.6
52-Inorganic chemicals	402	438	468	407	421	1.4	0.5	0.3	0.2	0.2
53-Dyeing,tanning and colouring materials	113	251	287	361	374	0.4	0.3	0.2	0.2	0.2
54-Medicinal and pharmaceutical products	113	421	921	1,146	1,237	0.4	0.5	0.5	0.7	0.7
55-Essential oils & perfume mat.;toilet prep.	65	307	827	933	1,145	0.2	0.4	0.5	0.6	0.7
56-Fertilizers, manufactured	122	262	101	108	36	0.4	0.3	0.1	0.1	0.0
58-Artif.resins, plastic mat., cellulose esters	386	876	1,160	1,118	1,140	1.3	1.0	0.7	0.7	0.7
59-Chemical materials and products, n.e.s.	133	263	649	606	533	0.5	0.3	0.4	0.4	0.3
5X-Res: Chemicals and related products, n.e.s.	0	0	0	000	0	0.0	0.0	0.0	0.0	0.0
61-Leather, leather manuf., n.e.s.	55	261	394	284	238	0.0	0.3	0.0	0.0	0.0
62-Rubber manufactures, n.e.s.	43	251	618	451	238 527	0.2	0.3	0.2	0.2	0.1
63-Cork and wood manufactures	40	232	433	298	280	0.1	0.3	0.4	0.3	0.3
		674		298 972						0.2
64-Paper,paperboard,artic.of paper,paper-pulp	173		986		971	0.6	0.8	0.6	0.6	
65-Textile yarn,fabrics,made-upart.	384	1,378	2,690	2,203	2,342	1.3	1.6	1.5	1.3	1.4
66-Non-metallic mineral manufactures, n.e.s.	505	1,101	2,020	1,984	1,860	1.7	1.3	1.2	1.2	1.1
67-Iron and steel	828	2,476	1,922	1,430	1,926	2.8	2.9	1.1	0.9	1.1
68-Non-ferrous metals	918	1,446	1,403	1,317	1,230	3.1	1.7	0.8	0.8	0.7
69-Manufactures of metal, n.e.s.	428	1,562	3,977	4,489	4,587	1.5	1.8	2.3	2.7	2.7
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
71-Power generating machinery and equipment	1,696	4,145	6,548	6,356	6,650	5.8	4.9	3.8	3.8	3.9
72-Machinery specialized for particular industry	213	1,126	1,577	1,509	1,474	0.7	1.3	0.9	0.9	0.9
73-Metalworking machinery	32	114	54	50	56	0.1	0.1	0.0	0.0	0.0
74-General industrial machinery & equipment	504	1,908	4,885	4,804	5,629	1.7	2.3	2.8	2.9	3.3
75-Office machines & automatic data processing	572	2,863	12,135	13,714	12,557	2.0	3.4	7.0	8.2	7.4
76-Telecommunications	60	8,112	20,121	20,072	19,178	0.2	9.6	11.5	12.0	11.3
77-Electrical machinery, apparatus & appliance	659	12,530	27,320	23,391	23,741	2.3	14.8	15.7	14.0	14.0
78-Road vehicles	3,444	13,009	29,351	29,417	29,548	11.8	15.4	16.8	17.7	17.4
79-Other transport equipment	189	448	952	951	964	0.6	0.5	0.5	0.6	0.6
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
81-Sanitary, plumbing, heating and lighting fix	56	356	1,010	1,155	1,220	0.2	0.4	0.6	0.7	0.7
82-Furniture and parts thereof	71	958	3,494	3,477	3,622	0.2	1.1	2.0	2.1	2.1
83-Travel goods and handbags	17	102	239	147	112	0.1	0.1	0.1	0.1	0.1
84-Articles of apparel and clothing accessories	111	2,929	9,044	8,415	8,182	0.1	3.5	5.2	5.0	4.8
85-Footwear	84	2,929	337	300	269	0.4	0.2	0.2	0.2	4.8 0.2
87-Professional, scientific & controling instruments	130	1,042	3,600	4,310	4,671	0.4	1.2	2.1	2.6	2.8
88-Photographic apparatus, optical goods, watch	186	657	1,215	1,187	1,034	0.6	0.8	0.7	0.7	0.6
89-Miscellaneous manufactured articles, n.e.s.	515	3,144	4,998	4,898	5,477	1.8	3.7	2.9	2.9	3.2
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
91-Postal packages	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
93-Special transactions & commod.	10	53	96	112	106	0.0	0.1	0.1	0.1	0.1
94-Animals,live,n.e.s.,incl. zoo-animals	1	0	0	1	0	0.0	0.0	0.0	0.0	0.0
95-Armoured fighting vehicles, arms of war	0	4	7	7	7	0.0	0.0	0.0	0.0	0.0
97-Gold, non-monetary	99	174	85	60	87	0.3	0.2	0.0	0.0	0.1
9X-Res: Commodities & trans. not classified	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
Source: Statistics Canada (2004)										

mmodity category (classification: SITC 2-digit)	Imports 1990	1995	2000	2001	2002	Share 1990	1995	2000	2001	20
tal	39,692	72,819	170,360	162,813	163,758	100.0	100.0	100.0	100.0	100
00-Live animals chiefly for food	109	44	213	221	210	0.3	0.1	0.1	0.1	0
01-Meat and meat preparations 02-Dairy products and birds' eggs	407 570	501 387	1,605 553	1,811 749	1,732 602	1.0 1.4	0.7 0.5	0.9 0.3	1.1 0.5	1
02-Daily products and birds eggs 03-Fish, crustaceans, and mollucs	55	587 65	333 117	149 147	172	0.1	0.3	0.3	0.3	(
04-Cereals and cereal preparations	1,024	1,216	1,914	2,243	2,472	2.6	1.7	1.1	1.4	1
05-Vegetables and fruit	417	314	885	989	1,027	1.0	0.4	0.5	0.6	0
06-Sugars, sugar preparations and honey	575	82	156	172	122	1.4	0.1	0.1	0.1	0
07-Coffee, tea, cocoa, and spices	87	106	301	430	275	0.2	0.1	0.2	0.3	(
08-Feeding stuff for animals	166	247	357	580	459	0.4	0.3	0.2	0.4	0
09-Miscl.edible products and preparations	94	220	545	626	635	0.2	0.3	0.3	0.4	0
11-Beverages	143	150	196	284	302	0.4	0.2	0.1	0.2	0
12-Tobacco and tobacco manufactures	44	29	43	41	59	0.1	0.0	0.0	0.0	0
21-Hides, skins, and furskins	109	78	193	181	168	0.3	0.1	0.1	0.1	(
22-Oil-seeds and oleaginous fruits	285	810	1,146	1,199	1,290	0.7	1.1	0.7	0.7	
23-Crude rubber 24-Cork and wood	137 171	251 167	267 375	217 345	264 379	0.3 0.4	0.3 0.2	0.2 0.2	0.1 0.2	
25-Pulp and waste paper	399	730	563	488	548	1.0	1.0	0.2	0.2	
26-Textile fibres (except wool tops)	180	352	734	488 704	606	0.5	0.5	0.3	0.3	
27-Crude fertilizers and crude materials	188	225	290	254	232	0.5	0.3	0.2	0.2	
28-Metalliferous ores and metal scrap	291	349	665	607	754	0.7	0.5	0.4	0.4	
29-Crude animal and vegetable materials, n.e.s	144	200	323	456	581	0.4	0.3	0.2	0.3	
2X-Res: Crude materials, inedible, except fuel	0	0	0	0	0	0.0	0.0	0.0	0.0	
32-Coal,coke and briquettes	36	107	129	192	266	0.1	0.1	0.1	0.1	
33-Petroleum, and petroleum products	847	1,077	3,972	3,221	2,799	2.1	1.5	2.3	2.0	
34-Gas, natural and manufactured	187	329	918	840	1,043	0.5	0.5	0.5	0.5	
35-Electric current	0	0	0	0	0	0.0	0.0	0.0	0.0	
3X-Res: Mineral fuels, and lubricants	0	0	0	0	0	0.0	0.0	0.0	0.0	
41-Animal oils and fats	80	153	110	107	123	0.2	0.2	0.1	0.1	
42-Fixed vegetable oils and fats	220	347	238	193	307	0.6	0.5	0.1	0.1	
43-Animal or vegetable oils and fats	25	66	56	61	110	0.1	0.1	0.0	0.0	
51-Organic chemicals	1,007	1,899	3,167	3,023	3,224 669	2.5	2.6	1.9	1.9	
52-Inorganic chemicals	286 167	435 402	707 813	709 775	809 809	0.7 0.4	0.6 0.6	0.4 0.5	0.4 0.5	
53-Dyeing,tanning and colouring materials 54-Medicinal and pharmaceutical products	292	402 572	1,307	1,554	1,747	0.4	0.8	0.3	1.0	
55-Essential oils & perfume mat.;toilet prep.	181	372	739	988	1,747	0.7	0.8	0.8	0.6	
56-Fertilizers,manufactured	30	93	285	264	93	0.1	0.1	0.4	0.0	
58-Artif.resins, plastic mat., cellulose esters	862	1,928	4,363	4,344	4,574	2.2	2.6	2.6	2.7	
59-Chemical materials and products, n.e.s.	405	858	1,881	2,006	2,017	1.0	1.2	1.1	1.2	
5X-Res: Chemicals and related products, n.e.s.	0	0	0	0	0	0.0	0.0	0.0	0.0	
61-Leather, leather manuf., n.e.s.	88	294	756	761	746	0.2	0.4	0.4	0.5	
62-Rubber manufactures, n.e.s.	284	776	1,922	1,919	1,953	0.7	1.1	1.1	1.2	
63-Cork and wood manufactures	92	174	437	423	480	0.2	0.2	0.3	0.3	
64-Paper,paperboard,artic.of paper,paper-pulp	751	1,833	3,092	3,039	3,027	1.9	2.5	1.8	1.9	
65-Textile yarn, fabrics, made-upart.	812	1,801	5,889	5,400	5,601	2.0	2.5	3.5	3.3	
66-Non-metallic mineral manufactures, n.e.s.	367	679	1,718	1,649	1,825	0.9	0.9	1.0	1.0	
67-Iron and steel	1,275	1,910	3,645	3,465	3,455	3.2	2.6	2.1	2.1	
68-Non-ferrous metals	481	1,060	2,369	2,161	2,128	1.2	1.5	1.4	1.3	
69-Manufactures of metal,n.e.s.	1,045	2,741	6,091	5,286	5,265	2.6	3.8	3.6	3.2	
6X-Res: Manufactured goods classified chiefly	0	0	0	0	0	0.0	0.0	0.0	0.0	
71-Power generating machinery and equipment	1,228	2,443	6,512	6,399	6,412	3.1	3.4	3.8	3.9	
72-Machinery specialized for particular industry	2,100	3,026	6,329	5,828	5,170 949	5.3	4.2	3.7	3.6	
73-Metalworking machinery 74-General industrial machinery & equipment	407 1,897	641 3,425	1,220 7,609	1,341 7,241	949 7,129	1.0 4.8	0.9 4.7	0.7 4.5	0.8 4.4	
75-Office machines & automatic data processing	1,897	2,460	6,417	7,241	9,882	2.8	3.4	4.5 3.8	4.4	
76-Telecommunications	2,565	2,400 3,509	9,240	8,931	7,653	6.5	4.8	5.4	5.5	
77-Electrical machinery, apparatus & appliance	4,215	13,020	33,329	27,410	25,197	10.6	17.9	19.6	16.8	
78-Road vehicles	4,079	5,995	17,213	17,360	19,419	10.3	8.2	10.1	10.7	
79-Other transport equipment	686	359	1,035	1,424	910	1.7	0.5	0.6	0.9	
7X-Res: Machinery and transport equipment	0	0	0	0	0	0.0	0.0	0.0	0.0	
81-Sanitary, plumbing, heating and lighting fix	68	158	220	225	275	0.2	0.2	0.1	0.1	
82-Furniture and parts thereof	365	699	1,281	1,279	1,215	0.9	1.0	0.8	0.8	
83-Travel goods and handbags	31	43	144	162	162	0.1	0.1	0.1	0.1	
84-Articles of apparel and clothing accessories	591	1,941	3,716	3,587	3,457	1.5	2.7	2.2	2.2	
85-Footwear	79	85	195	243	289	0.2	0.1	0.1	0.1	
87-Professional, scientific & controling instruments	989	1,537	3,774	3,673	4,208	2.5	2.1	2.2	2.3	
88-Photographic apparatus, optical goods, watch	452	616	1,309	1,429	1,562	1.1	0.8	0.8	0.9	
89-Miscellaneous manufactured articles, n.e.s.	1,626	4,153	8,959	8,646	8,734	4.1	5.7	5.3	5.3	
8X-Res: Miscellaneous manufactured articles	0	0	0	0	0	0.0	0.0	0.0	0.0	
91-Postal packages	0	0	0 5 280	0	0	0.0	0.0	0.0	0.0	
93-Special transactions & commod.	1,670	2,204	5,380	4,611 3	4,772 3	4.2	3.0	3.2	2.8	
94-Animals,live,n.e.s.,incl. zoo-animals 95-Armoured fighting vehicles,arms of war	2 2	1 6	6 15	3	3 18	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	
z - ALHOULET HEIDER VEHICLES ATTIS OF WAT	2	o	15	11	18	0.0	0.0	0.0		
97-Gold, non-monetary	99	55	408	292	195	0.2	0.1	0.2	0.2	

Trade between Selected Countries in Asia and Latin America

There are several points worthy of mention concerning trade between East Asia and Latin America. First of all, as can be seen in Tables 2-1-4 through 2-1-7, the volume of trade between these two regions is small, and no Latin American countries appear in the top five trade partners of the Asian countries. Some Asian countries, such as China, Japan, and Korea, however, are included in the top five partners of the Latin American countries (as can be observed in Tables 2-1-8 through 2-1-10), showing the significance and the potential of the inter-regional economic relationship.

Tables 2-1-18 through 2-1-21 summarize the trading commodities between East Asia and Latin America – more specifically for China, Japan, Korea, Thailand, Brazil, Chile, and Mexico – in 2002. It is difficult to generalize from the patterns of trade for each and every case of bilateral trade between these two regions, because the trade volume is small and the patterns vary among pairs of countries. It can still be concluded, though, that various types of machinery are the major products exported from Asia to Latin America. Natural resources or primary products such as metals and ores, vegetal products, and machinery are the major products exported from Latin America to Asia. At the same time, however, it should also be noted that these trends are not necessarily peculiar to trade between these two regions.

(3) FDI

Major FDI Partners for Selected East Asian and Latin American Countries

The major FDI partners for each of the seven countries are summarized in the third and the fourth rows of Tables 2-1-4 through 2-1-10. Each table also contains the data for inward/outward FDI volume between the selected seven East Asian and Latin American countries in the fifth and the sixth rows, whenever available. The data are, however, rather scarce because there is little FDI between these two regions.

These countries can be categorized into three types based on their FDI patterns. First, Brazil, Mexico, and Thailand are net receivers of FDI, while China, Japan, and Korea serve both as investors and receivers. Japan is a particularly big investor in absolute terms. Chile falls into the third category, which is of countries with little FDI inflow nor outflow.

If we look at the net receivers of FDI, sets of partners vary to a great extent. In Thailand, Japan and the US have been the two largest investors since the 1990's. Taiwan and Singapore have

also always been among Thailand's five major partners since the 1990's. The Netherlands, Japan, France, and Spain have been in and out of the top five partners for Brazil, while the US has remained within the top five since the 1990's. The US and the Netherlands have always been in the major FDI partners for Mexico since the 1990's. In addition to those two investors, Spain, the UK, Switzerland, and Japan have appeared among Mexico's major FDI partners in some years.

Now if we look at the "investor and receiver" type of countries, i.e., China, Japan, and Korea, again their FDI partners vary widely, although to a lesser extent than for net receivers. The leading investors in China have been Hong Kong, the US, Taiwan, and Japan or Korea, and Chinese capital has invested in such countries/areas as Hong Kong, the US, Korea, Australia, Russia, Vietnam, and Laos; however, the pattern varies from year to year, and it is hard to describe the overall trend. The principal investors in Japan have been the US, Netherlands, and capital based in Cayman Islands or Bermuda Islands. It is also notable that foreign affiliates located in Japan have recently been increasing their presence in FDI in Japan, becoming the largest investor in 2003. The major host countries for Japanese capital have been the US, the Netherlands, China, and (from 2000) the Cayman Islands. The flow of funds to China has been increasing, as can easily be surmised. For Korea, Japan and the US have always been the major investors since the 1990's. Other than these two countries, the UK, Malaysia, Germany, the Netherlands, Canada, have also been among the top 5 countries in some years. Regarding Korea's outward FDI, China and the US have always been in top 5 since the 1990's.

FDI between Asia and Latin America for Selected Countries

Finally, if we look at inter-regional FDI between East Asia and Latin America, it can easily be seen that there has been almost no FDI from Latin America. However, some Asian countries invest in Latin America. For example, the Japanese automobile industry invests a substantial amount in Brazil and Mexico, and Japanese companies in the fishery industry invest in Chile. Chinese, Korean and Japanese electronics companies also have plants in Mexico. It should be pointed out that Japan has even been ranked among the top five investors in Brazil and Mexico several times since the 1990's.

	18. Trade Matrix, 2002: World and China									ž							Percent)
F (Importers		v	TT1 '1 1	C1 ·	D "I	C1 '1		Importers		17	T T1 '1 1	C1 ·	D 1	C1 '1	. ·
Exporters	Commodity category (classification: SITC)	World	Japan	Korea	Thailand	China	Brazil	Chile	Mexico		Japan	Korea	Thailand				Mexico
World	TOTL-Total - All commodities	6,705,971	323,528	145,126	53,332	328,045	50,745	15,621	163,758	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0-Food and live animals chiefly for food	378,274	33,690	7,070	1,873	5,529	2,772	1,006	7,705	5.6	10.4	4.9	3.5	1.7	5.5	6.4	4.7
	1-Beverages and tobacco	63,446	3,297	734	279	475	161	51	361	0.9	1.0	0.5	0.5	0.1	0.3	0.3	0.2
•	2-Crude materials, inedible, except fuels	198,840	18,425	8,127	1,874	21,697	1,389	259	4,823	3.0	5.7	5.6	3.5	6.6	2.7	1.7	2.9
	3-Mineral fuels, lubricants and related materials	607,433	59,407	23,785	2,491	16,656	7,105	2,397	4,108	9.1	18.4	16.4	4.7	5.1	14.0	15.3	2.5
	32-Coal,coke and briquettes	25,090	5,815	2,040	95	290	822	91	266	0.4	1.8	1.4	0.2	0.1	1.6	0.6	0.2
	33-Petroleum and petroleum products	489,693	40,336	17,157	2,384	15,074	5,534	1,883	2,799	7.3	12.5	11.8	4.5	4.6	10.9	12.1	1.7
	34-Gas, natural and manufactured	80,424	13,256	4,588	12	1,157	715	388	1,043	1.2	4.1	3.2	0.0	0.4	1.4	2.5	0.6
	35-Electric current	12,226	0	0	1	135	34	35	0	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.0
	4-Animal and vegetable oils, fats and waxes	25,895	624	353	70	1,823	191	109	540	0.4	0.2	0.2	0.1	0.6	0.4	0.7	0.3
	5-Chemicals and related products, n.e.s.	673,794	23,013	12,862	5,737	40,284	9,051	1,855	14,134	10.0	7.1	8.9	10.8	12.3	17.8	11.9	8.6
	6-Manufactured goods classified chiefly by material	930,014	28,378	18,958	8,729	58,377	4,565	2,098	24,479	13.9	8.8	13.1	16.4	17.8	9.0	13.4	14.9
	7-Machinery and transport equipment	2,714,420	96,358	54,850	26,639	153,160	21,025	5,772	82,720	40.5	29.8	37.8	49.9	46.7	41.4	37.0	50.5
	71-Power generating machinery and equipment	178,776	5,238	2,946	1,525	6,748	3,156	363	6,412	2.7	1.6	2.0	2.9	2.1	6.2	2.3	3.9
	72-Machinery specialized for particular industry	193,218	4,181	4,597	2,232	17,304	2,204	839	5,170	2.9	1.3	3.2	4.2	5.3	4.3	5.4	3.2
	73-Metalworking machinery	32,734	768	958	602	4,137	421	36	949	0.5	0.2	0.7	1.1	1.3	0.8	0.2	0.6
	74-General industrial machinery & equipment	231,999	5,664	4,681	2,690	12,610	2,719	818	7,129	3.5	1.8	3.2	5.0	3.8	5.4	5.2	4.4
	75-Office machines & automatic data processing	359,898	22,483	5,768	3,804	22,138	1,830	530	9,882	5.4	6.9	4.0	7.1	6.7	3.6	3.4	6.0
	76-Telecommunications	307,418	13,013	4,951	3,256	19,596	1,969	796	7,653	4.6	4.0	3.4	6.1	6.0	3.9	5.1	4.7
	77-Electrical machinery, apparatus & appliance	587,635	28,492	24,889	9,367	56,805	3,639	650	25,197	8.8	8.8	17.1	17.6	17.3	7.2	4.2	15.4
	78-Road vehicles (incl. air cushion vehicles	642,166	10,963	2,914	2,317	7,940	3,215	1,471	19,419	9.6	3.4	2.0	4.3	2.4	6.3	9.4	11.9
	79-Other transport equipment	180,146	5,554	3,147	797	5,880	1,871	270	910	2.7	1.7	2.2	1.5	1.8	3.7	1.7	0.6
	8-Miscellaneous manufactured articles	866,623	53,178	13,616	3,507	24,900	3,563	1,856	19,902	12.9	16.4	9.4	6.6	7.6	7.0	11.9	12.2
	9-Commodities & trans. not classified	247,232	7,158	4,771	2,134	5,145	923	219	4,987	3.7	2.2	3.3	4.0	1.6	1.8	1.4	3.0
China	TOTL-Total - All commodities	358,565	54,436	16,478	3,161		1,422	947	2,718	100.0	100.0	100.0	100.0		100.0	100.0	100.0
	0-Food and live animals chiefly for food	15,835	5,728	1,888	126		28	3	28	4.4	10.5	11.5	4.0		2.0	0.3	1.0
	1-Beverages and tobacco	1,073	53	13	9		0	0	0	0.3	0.1	0.1	0.3		0.0	0.0	0.0
	2-Crude materials, inedible, except fuels	4,870	1,181	492	71		8	4	27	1.4	2.2	3.0	2.2		0.6	0.4	1.0
-	3-Mineral fuels, lubricants and related materials	9,174	2,029	1,417	36		248	2	148	2.6	3.7	8.6	1.1		17.4	0.2	5.5
	32-Coal,coke and briquettes	3,795	1,190	829	12		222	0	90	1.1	2.2	5.0	0.4		15.6	0.0	3.3
	33-Petroleum and petroleum products	4,399	838	587	24		25	2	58	1.2	1.5	3.6	0.8		1.8	0.2	2.1
	34-Gas, natural and manufactured	295	1	1	0		0	0	0	0.1	0.0	0.0	0.0		0.0	0.0	0.0
	35-Electric current	685	0	0	0		0	0	0	0.2	0.0	0.0	0.0		0.0	0.0	0.0
	4-Animal and vegetable oils, fats and waxes	106	6	7	1		0	0	0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
	5-Chemicals and related products, n.e.s.	16,367	1,760	1,126	391		227	41	220	4.6	3.2	6.8	12.4		16.0	4.3	8.1
	6-Manufactured goods classified chiefly	58,658	6,650	3,772	547		142	139	425	16.4	12.2	22.9	17.3		10.0	14.7	15.6
-	7-Machinery and transport equipment	138,395	17,636	5,040	1,749		545	196	1,401	38.6	32.4	30.6	55.3		38.3	20.6	51.6
	71-Power generating machinery and equipment	4,061	675	307	57		17	1,00	28	1.1	1.2	1.9	1.8		1.2	0.1	1.0
	72-Machinery specialized for particular industry	3,336	269	67	75		15	6	48	0.9	0.5	0.4	2.4		1.0	0.6	1.8
	73-Metalworking machinery	623	209 64	13	9		3	2	13	0.9	0.5	0.4	0.3		0.2	0.0	0.5
	74-General industrial machinery & equipment	9,120	1,134	219	133		44	21	78	2.5	2.1	1.3	4.2		3.1	2.2	2.9
	75-Office machines & automatic data processing	38,558	5,858	1,052	536		44 74	21	356	2.3 10.8	10.8	1.5 6.4	4.2 17.0		5.2	2.2	13.1
	75-Office machines & automatic data processing 76-Telecommunications		,	1,052	536 490		222	62	356 415	10.8 9.9		6.4 6.2				2.3 6.6	
		35,400 36,172	4,142	1,023	490 363		141	62 53	415 366	9.9 10.1	7.6	6.2 11.6	15.5 11.5		15.6 9.9	6.6 5.6	15.3 13.5
	77-Electrical machinery, apparatus & appliance	,	4,181	,			29	53 23	366 97		7.7	2.3				5.6 2.4	
	78-Road vehicles (incl. air cushion vehicles	8,349	1,028	383	42					2.3	1.9		1.3		2.0		3.6
	79-Other transport equipment	2,776	283	68	45	20	0	5	1	0.8	0.5	0.4	1.4		0.0	0.5	0.0
	8-Miscellaneous manufactured articles	113,387	19,353	2,723	223	36	223	564	468	31.6	35.6	16.5	7.1		15.7	59.5	17.2
	9-Commodities & trans. not classified	701	41	1	6		0	0	1	0.2	0.1	0.0	0.2		0.0	0.0	0.0

Table 2-1-19. Trade Matrix, 2002: Japan and Korea

(Millions of US Dollars and Percent)

		Importers									Importers							
Exporters	Commodity category (classification: SITC)	World	Japan	Korea	Thailand	China	Brazil	Chile	e I	Mexico	World	Japan	Korea	Thailand	China	Brazil	Chile	Mexico
Japan	TOTL-Total - All commodities	447,629		30,443	14,091	49,788	2,16	56	578	5,645	100.0		100.0	100.0	100.0	100.0	100.0	100.0
	0-Food and live animals chiefly for food	1,872		243	96	187		4	1	3	0.4		0.8	0.7	0.4	0.2	0.1	0.1
	1-Beverages and tobacco	398		49	2	2		0	0	0	0.1		0.2	0.0	0.0	0.0	0.0	0.0
	2-Crude materials, inedible, except fuels	3,855		589	167	1,252	1	2	2	5	0.9		1.9	1.2	2.5	0.5	0.4	0.1
	3-Mineral fuels, lubricants and related materials	1,852		561	64	413	4	43	0	6	0.4		1.8	0.5	0.8	2.0	0.0	0.1
	32-Coal,coke and briquettes	227		6	0	0	3	39	0	0	0.1		0.0	0.0	0.0	1.8	0.0	0.0
	33-Petroleum and petroleum products	1,602		533	63	412		4	0	6	0.4		1.8	0.4	0.8	0.2	0.0	0.1
	34-Gas, natural and manufactured	23		22	0	1		0	0	0	0.0		0.1	0.0	0.0	0.0	0.0	0.0
	35-Electric current	0		0	0	0		0	0	0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
	4-Animal and vegetable oils, fats and waxes	80		13	3	4		0	0	0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
	5-Chemicals and related products, n.e.s.	34,447		4,254	1,186	5,671	22	23	24	185	7.7		14.0	8.4	11.4	10.3	4.1	3.3
	6-Manufactured goods classified chiefly by material	47,207		5,502	2,639	9,220	18	38	56	670	10.5		18.1	18.7	18.5	8.7	9.7	11.9
	7-Machinery and transport equipment	298,320		14,545	8,586	26,991	1,45	51	455	4,153	66.6		47.8	60.9	54.2	67.0	78.7	73.6
	71-Power generating machinery and equipment	17,955		680	732	1,151	19	95	19	524	4.0		2.2	5.2	2.3	9.0	3.3	9.3
	72-Machinery specialized for particular industry	22,427		1,936	848	3,940	9	93	15	167	5.0		6.4	6.0	7.9	4.3	2.7	3.0
	73-Metalworking machinery	5,930		500	428	885	4	18	0	40	1.3		1.6	3.0	1.8	2.2	0.0	0.7
	74-General industrial machinery & equipment	23,094		1,503	1,320	3,061	26	53	31	309	5.2		4.9	9.4	6.1	12.1	5.3	5.5
	75-Office machines & automatic data processing	26,884		779	399	1,801	10)1	11	308	6.0		2.6	2.8	3.6	4.7	1.9	5.5
	76-Telecommunications	26,500		1,261	402	1,906	8	37	19	558	5.9		4.1	2.9	3.8	4.0	3.3	9.9
	77-Electrical machinery, apparatus & appliance	64,245		6,892	3,073	11,293	30)5	14	1,288	14.4		22.6	21.8	22.7	14.1	2.4	22.8
	78-Road vehicles (incl. air cushion vehicles	99,924		877	1,343	2,681	35	50	346	957	22.3		2.9	9.5	5.4	16.1	59.8	17.0
	79-Other transport equipment	11,362		116	42	272		9	0	1	2.5		0.4	0.3	0.5	0.4	0.0	0.0
	8-Miscellaneous manufactured articles	40,361		3,527	912	4,325	21	4	33	523	9.0		11.6	6.5	8.7	9.9	5.7	9.3
	9-Commodities & trans. not classified	19,238		1,160	437	1,723	3	31	7	100	4.3		3.8	3.1	3.5	1.4	1.2	1.8
Korea	TOTL-Total - All commodities	174,161	16,02		2,496	27,413			481	2,740	100.0	100.0		100.0	100.0	100.0	100.0	100.0
	0-Food and live animals chiefly for food	2,257	1,23	3	43	121		2	1	8	1.3	7.7		1.7	0.4	0.2	0.2	0.3
	1-Beverages and tobacco	369	11	9	3	11		0	0	0	0.2	0.7		0.1	0.0	0.0	0.0	0.0
	2-Crude materials, inedible, except fuels	1,743	26	2	27	486		9	2	1	1.0	1.6		1.1	1.8	1.0	0.5	0.0
	3-Mineral fuels, lubricants and related materials	7,045	2,59	9	27	1,382	6	52	48	1	4.0	16.2		1.1	5.0	6.5	10.1	0.0
	32-Coal,coke and briquettes	0		0	0	0		0	0	0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
	33-Petroleum and petroleum products	6,974	2,58	4	27	1,338		52	48	1	4.0	16.1		1.1	4.9	6.5	10.1	0.0
	34-Gas, natural and manufactured	70	1	5	0	44		0	0	0	0.0	0.1		0.0	0.2	0.0	0.0	0.0
	35-Electric current	0		0	0	0		0	0	0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
	4-Animal and vegetable oils, fats and waxes	22		3	2	4		0	0	0	0.0	0.0		0.1	0.0	0.0	0.0	0.0
	5-Chemicals and related products, n.e.s.	14,486	1,07		311	5,368			46	223	8.3	6.7		12.5	19.6	11.0	9.6	8.1
	6-Manufactured goods classified chiefly	29,247	2,12		536	6,801	25		84	539	16.8	13.2		21.5	24.8	26.8	17.5	19.7
	7-Machinery and transport equipment	106,357	6,80		1,444	11,913			283	1,767	61.1	42.5		57.9	43.5	47.5	58.9	64.5
	71-Power generating machinery and equipment	1,959	12		15	262		9	4	60	1.1	0.7		0.6	1.0	1.0	0.8	2.2
	72-Machinery specialized for particular industry	4,149	22		100	1,189		8	7	113	2.4	1.4		4.0	4.3	1.9	1.4	4.1
	73-Metalworking machinery	576	5	4	13	146		2	0	15	0.3	0.3		0.5	0.5	0.2	0.0	0.5
	74-General industrial machinery & equipment	5,164	48	1	100	809	4	45	12	158	3.0	3.0		4.0	3.0	4.8	2.4	5.8
	75-Office machines & automatic data processing	17,455	1,56		196	1,966		71	3	397	10.0	9.8		7.9	7.2	7.5	0.7	14.5
	76-Telecommunications	21,644	82	1	300	3,086	9	91	57	417	12.4	5.1		12.0	11.3	9.5	11.8	15.2
	77-Electrical machinery, apparatus & appliance	25,183	3,27	2	439	4,047	14	17	40	468	14.5	20.4		17.6	14.8	15.5	8.4	17.1
	78-Road vehicles (incl. air cushion vehicles	18,482	25-		47	387		59	160	138	10.6	1.6		1.9	1.4	7.2	33.3	5.0
	79-Other transport equipment	11,745	1	0	234	22		0	0	1	6.7	0.1		9.4	0.1	0.0	0.0	0.0
	8-Miscellaneous manufactured articles	11,532	1,78		73	1,296		57	15	202	6.6	11.1		2.9	4.7	7.0	3.1	7.4
	9-Commodities & trans. not classified	1,104	2	5	29	37 30		0	0	0	0.6	0.2		1.2	0.1	0.0	0.0	0.0

Table 2-1-20. Trade Matrix, 2002: Thailand and Brazil

(Millions of US Dollars and Percent)

		Importers								Importers	;						
Exporters	Commodity category (classification: SITC)	World	Japan	Korea	Thailand	China	Brazil Chil		Mexico			Korea	Thailand (Mexico
Thailand	TOTL-Total - All commodities	75,043	10,510	1,702		5,600		94	839	100.0	100.0	100.0		100.0	100.0	100.0	100.0
	0-Food and live animals chiefly for food	9,221	2,271	225		346		11	8	12.3	21.6	13.2		6.2	1.9	11.3	0.9
	1-Beverages and tobacco	149	8	0		3	0	0	0	0.2	0.1	0.0		0.0	0.0	0.0	0.0
_	2-Crude materials, inedible, except fuels	2,894	607	177		676	41	0	16	3.9	5.8	10.4		12.1	20.1	0.4	1.9
	3-Mineral fuels, lubricants and related materials	1,592	49	130		349		0	0	2.1	0.5	7.6		6.2	0.1	0.0	0.0
	32-Coal,coke and briquettes	0	0	0		0	0	0	0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
	33-Petroleum and petroleum products	1,463	48	124		250		0	0	1.9	0.5	7.3		4.5	0.1	0.0	0.0
	34-Gas, natural and manufactured	129	1	5		99		0	0	0.2	0.0	0.3		1.8	0.0	0.0	0.0
	35-Electric current	0	0	0		0	0	0	0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
	4-Animal and vegetable oils, fats and waxes	76	10	4		10	0	0	0	0.1	0.1	0.2		0.2	0.0	0.0	0.0
	5-Chemicals and related products, n.e.s.	3,876	449	76		1,038	13	2	9	5.2	4.3	4.5		18.5	6.2	2.0	1.1
	6-Manufactured goods classified chiefly by material	7,617	916	246		650		19	63	10.2	8.7	14.5		11.6	12.0	20.1	7.5
	7-Machinery and transport equipment	29,952	4,140	744		2,392	93	50	657	39.9	39.4	43.7		42.7	46.1	53.7	78.3
	71-Power generating machinery and equipment	1,355	145	59		116	8	0	5	1.8	1.4	3.5		2.1	4.0	0.2	0.6
	72-Machinery specialized for particular industry	353	48	3		15	1	0	6	0.5	0.5	0.2		0.3	0.5	0.4	0.7
	73-Metalworking machinery	108	24	2		18	0	0	0	0.1	0.2	0.1		0.3	0.2	0.0	0.0
	74-General industrial machinery & equipment	2,190	437	52		109	9	3	20	2.9	4.2	3.1		1.9	4.3	3.1	2.3
	75-Office machines & automatic data processing	9,247	845	158		986	15	4	188	12.3	8.0	9.3		17.6	7.3	4.5	22.4
	76-Telecommunications	5,018	818	62		155	19	4	218	6.7	7.8	3.6		2.8	9.3	4.4	25.9
	77-Electrical machinery, apparatus & appliance	8,796	1,526	398		977	39	4	217	11.7	14.5	23.4		17.4	19.1	4.5	25.9
	78-Road vehicles (incl. air cushion vehicles	2,849	297	9		17	3	34	3	3.8	2.8	0.5		0.3	1.4	36.6	0.3
	79-Other transport equipment	37	2	1		0	0	0	0	0.0	0.0	0.1		0.0	0.0	0.0	0.0
	8-Miscellaneous manufactured articles	11,675	1,553	99		136	27	12	83	15.6	14.8	5.8		2.4	13.6	12.5	9.8
	9-Commodities & trans. not classified	7,991	507	1		0	0	0	4	10.6	4.8	0.1		0.0	0.0	0.1	0.5
Brazil	TOTL-Total - All commodities	63,604	2,265	964	373	3 2,734		1,565	2,481	100.0	100.0	100.0	100.0	100.0		100.0	100.0
	0-Food and live animals chiefly for food	12,227	578	239	97	7 13		228	29	19.2	25.5	24.8	25.9	0.5		14.6	1.2
	1-Beverages and tobacco	1,113	72	17	3	3 55		3	21	1.8	3.2	1.8	0.8	2.0		0.2	0.9
	2-Crude materials, inedible, except fuels	9,727	860	278	44	1,774		21	93	15.3	38.0	28.8	11.7	64.9		1.4	3.7
-	3-Mineral fuels, lubricants and related materials	3,036	1	0	() 0		90	3	4.8	0.0	0.0	0.0	0.0		5.8	0.1
	32-Coal,coke and briquettes	0	0	0	() 0		0	0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
	33-Petroleum and petroleum products	3,015	1	0	() 0		86	3	4.7	0.0	0.0	0.0	0.0		5.5	0.1
	34-Gas, natural and manufactured	21	0	0	() 0		4	0	0.0	0.0	0.0	0.0	0.0		0.3	0.0
	35-Electric current	0	0	0	() 0		0	0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
	4-Animal and vegetable oils, fats and waxes	945	13	1	() 155		3	1	1.5	0.6	0.1	0.0	5.7		0.2	0.0
	5-Chemicals and related products, n.e.s.	3,711	136	66	10) 73		201	126	5.8	6.0	6.9	2.6	2.7		12.9	5.1
	6-Manufactured goods classified chiefly	12,240	470	331	160) 351		335	413	19.2	20.8	34.3	43.0	12.8		21.4	16.6
-	7-Machinery and transport equipment	15,563	107	28	58	3 298		563	1,667	24.5	4.7	2.9	15.6	10.9		36.0	67.2
	71-Power generating machinery and equipment	1,906	15	0	1	I 83		30	152	3.0	0.7	0.0	0.2	3.0		1.9	6.1
	72-Machinery specialized for particular industry	1,152	4	1	7	7 14		81	77	1.8	0.2	0.1	1.8	0.5		5.2	3.1
	73-Metalworking machinery	135	0	0	2	2 2		2	33	0.2	0.0	0.0	0.4	0.1		0.1	1.3
	74-General industrial machinery & equipment	1,561	11	5	2	2 48		60	85	2.5	0.5	0.5	0.6	1.7		3.8	3.4
	75-Office machines & automatic data processing	239	1	0	() 1		11	28	0.4	0.0	0.0	0.0	0.0		0.7	1.1
	76-Telecommunications	1,828	37	3	() 11		76	66	2.9	1.6	0.3	0.1	0.4		4.8	2.6
	77-Electrical machinery, apparatus & appliance	1,189	35	14	3	3 41		56	107	1.9	1.5	1.5	0.8	1.5		3.6	4.3
	78-Road vehicles (incl. air cushion vehicles	4,535	5	5	(5 99		246	1,120	7.1	0.2	0.5	1.6	3.6		15.7	45.1
	79-Other transport equipment	3,017	0	0	38	3 0		0	0	4.7	0.0	0.0	10.1	0.0		0.0	0.0
	8-Miscellaneous manufactured articles	3,498	22	3	2			117	126	5.5	1.0	0.3	0.5	0.5		7.5	5.1
	9-Commodities & trans. not classified	1,544	5	0	() 1		3	2	2.4	0.2	0.0	0.0	0.0		0.2	0.1

Exporters Chile											1						
Chile	Commodity category (classification: SITC)		Japan	Korea	Thailand	China	Brazil		e Mexic				Korea	Thailand			nile Mexi
	TOTL-Total - All commodities	18,428	2,015	751	5	,	352	727		985	100.0	100.0	100.0	100.0	100.0		100
	0-Food and live animals chiefly for food	4,399	785	37	1	5 1	.44	102		241	23.9	39.0	5.0	27.3	10.6	14.1	24
	1-Beverages and tobacco	666	30	1		1	10	14		14	3.6	1.5	0.2	2.7	0.7	1.9	1
	2-Crude materials, inedible, except fuels	4,285	1,064	268	2	.8 4	81	198		134	23.3	52.8	35.7	52.4	35.6	27.3	13
	3-Mineral fuels, lubricants and related materials	218	0	0		0	0	3		0	1.2	0.0	0.0	0.2	0.0	0.4	(
	32-Coal,coke and briquettes	2	0	0		0	0	0		0	0.0	0.0	0.0	0.0	0.0	0.1	(
	33-Petroleum and petroleum products	197	0	0		0	0	2		0	1.1	0.0	0.0	0.2	0.0	0.3	(
	34-Gas, natural and manufactured	19	0	0		0	0	0		0	0.1	0.0	0.0	0.0	0.0	0.0	(
	35-Electric current	0	0	0		0	0	0		0	0.0	0.0	0.0	0.0	0.0	0.0	(
	4-Animal and vegetable oils, fats and waxes	18	5	0		2	0	1		1	0.1	0.3	0.0	4.6	0.0	0.1	(
	5-Chemicals and related products, n.e.s.	1,123	25	8		1	39	121		52	6.1	1.2	1.1	1.1	2.9	16.6	4
_	6-Manufactured goods classified chiefly by material	6,172	100	435		6 6	574	218		378	33.5	4.9	58.0	11.2	49.8	30.0	38
	7-Machinery and transport equipment	456	0	0		0	3	42		127	2.5	0.0	0.0	0.5	0.2	5.7	12
	71-Power generating machinery and equipment	16	0	0		0	0	0		4	0.1	0.0	0.0	0.0	0.0	0.0	(
	72-Machinery specialized for particular industry	33	0	0		0	0	1		1	0.2	0.0	0.0	0.5	0.0	0.1	(
	73-Metalworking machinery	3	0	0		0	0	2		0	0.0	0.0	0.0	0.0	0.0	0.3	(
	74-General industrial machinery & equipment	66	0	0		0	0	1		7	0.4	0.0	0.0	0.0	0.0	0.2	(
	75-Office machines & automatic data processing	16	0	0		0	0	1		0	0.1	0.0	0.0	0.0	0.0	0.1	(
	76-Telecommunications	16	0	0		0	0	0		1	0.1	0.0	0.0	0.0	0.0	0.1	(
	77-Electrical machinery, apparatus & appliance	47	0	0		0	0	3		2	0.3	0.0	0.0	0.0	0.0	0.4	(
	78-Road vehicles (incl. air cushion vehicles	186	0	0		0	0	12		109	1.0	0.0	0.0	0.0	0.0	1.7	11
	79-Other transport equipment	72	0	0		0	3	21		3	0.4	0.0	0.0	0.0	0.2	2.9	(
	8-Miscellaneous manufactured articles	280	1	0		0	0	20		32	1.5	0.0	0.0	0.0	0.0	2.8	3
	9-Commodities & trans. not classified	811	5	0		0	0	9		7	4.4	0.2	0.0	0.0	0.0	1.2	(
Mexico	TOTL-Total - All commodities	169,650	614	165	4	7 6	517	618	473		100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0-Food and live animals chiefly for food	6,328	88	10		0	5	11	10		3.7	14.4	6.2	0.8	0.9		2.0
	1-Beverages and tobacco	2,095	15	3		0	14	2	4		1.2	2.4	1.6	0.9	2.3		0.7
	2-Crude materials, inedible, except fuels	1,670	56	3		2	40	9	10		1.0	9.2	1.7	4.0	6.5		2.1
-	3-Mineral fuels, lubricants and related materials	15,149	107	0		0	0	0	10		8.9	17.5	0.0	0.1	0.0		2.2
	32-Coal,coke and briquettes	2	0	0		0	0	Õ	0		0.0	0.0	0.0	0.0	0.0		0.0
	33-Petroleum and petroleum products	15,094	107	0		0	0	Õ	10		8.9	17.5	0.0	0.1	0.0		2.2
	34-Gas, natural and manufactured	22	0	0		0	0	0	0		0.0	0.0	0.0	0.0	0.0		0.0
	35-Electric current	31	0	0		0	0	0	0		0.0	0.0	0.0	0.0	0.0		0.0
	4-Animal and vegetable oils, fats and waxes	41	1	0		0	0	0	Ő		0.0	0.2	0.0	0.0	0.0		0.0
	5-Chemicals and related products, n.e.s.	5.821	52	34		-	71	180	130		3.4	8.5	20.6	12.6	11.5		27.6
	6-Manufactured goods classified chiefly	13,962	50	27			18	32	62		8.2	8.2	16.5	2.2	3.0		13.0
-	7-Machinery and transport equipment	99,798	181	78	3		53	345	223		58.8	29.5	47.0	76.5	73.5		47.2
	71-Power generating machinery and equipment	6,650	24	0			21	52	223		3.9	3.9	0.2	0.0	3.4		0.4
	72-Machinery specialized for particular industry	1,474	5	0		0	3	15	3		0.9	0.7	0.2	0.4	0.5		0.7
	73-Metalworking machinery	56	0	0		0	0	2	0		0.9	0.0	0.2	0.4	0.0		0.0
	74-General industrial machinery & equipment	5.629	15	3			11	15	7		3.3	2.4	1.6	6.0	1.8		1.5
	75-Office machines & automatic data processing	12,557	57	5	2		362	42	40		5.5 7.4	2.4 9.3	4.1	45.0	58.6		8.4
	75-Office machines & automatic data processing 76-Telecommunications	12,537	28	46			12	42 83	40 130		11.3	9.5 4.6	28.0	43.0	38.0 1.9		8.4 27.4
		23,741				0	12 26	83 45									27.4 2.9
	77-Electrical machinery, apparatus & appliance	,	28	5		-			14		14.0	4.6	2.9	16.6	4.2		
	78-Road vehicles (incl. air cushion vehicles	29,548	24	17			18	91	27		17.4	3.9	10.0	8.3	3.0		5.8
	79-Other transport equipment	964	0 57	0		0	0 14	0 36	1 23		0.6 14.5	0.1 9.3	0.0 6.3	0.0 2.1	0.0 2.3		0.2 4.8
	8-Miscellaneous manufactured articles	24,587	57	10		1										5.0	4 X

2-2 Features of Trade Protection in East Asia and Latin America⁷

2-2-1 Trade Protection by MFN Tariffs and Preferential Tariffs

During the 1990s, tariffs were reduced through multilateral trade negotiations in both developed and developing countries. The Uruguay Round Agreements and the establishment of the World Trade Organization (WTO) in particular promoted further trade liberalization on a multilateral basis through tariff reduction as well as an increase in the number of tariff bindings. The last decade also witnessed a movement toward regional integration and the development of free trade agreements (FTAs), regional trade agreements (RTAs), or preferential trade agreements (PTAs), which allow their member countries to enjoy preferential tariffs that are even lower than Most Favored Nation (MFN) tariffs. In other words, trade liberalization during the last decade proceeded on a bilateral or regional basis as well.

East Asia and Latin America are not exceptions to the above-described global trend, and have remarkably reduced tariffs since the late 1980s, especially during the mid-1990s (Table 2-2-1). As Ando and Estevadeordal (2004) discuss, however, the two regions' trade policy strategies in terms of tariffs are different in several points. First, the strategy for tariff binding and establishing tariff rates is different; there is narrower coverage of tariff bindings and lower MFN tariffs in East Asia and wider coverage of tariff bindings and higher MFN tariffs in Latin America. Latin America increased the percentage of bound tariff lines, from 38 percent for industrial products and 36 percent for agricultural products prior to the Uruguay Round, to 100 percent thereafter. In other words, tariff ceilings (maximum tariff rates) now exist on all products at the WTO bound rates (Table 2-2-2 and Table 2-2-3).⁸ On the other hand, MFN applied tariff rates, which are lower than the bound rates, were still higher than 10 percent in 1999-2000: 16 percent for Argentina, 16 percent for Brazil, 10 percent for Chile, 12 percent for Colombia, 18 percent for Mexico, 14 percent for Peru, and 13 percent for Venezuela.

⁷ The contents of this section are heavily drawn from Ando and Estevadeordal (2004) and Ando (2004).

⁸ WTO bound rates were on average 35 percent for Argentina, 32 percent for Brazil, 25 percent for Chile, 52 percent for Colombia, 49 percent for Mexico, 32 percent for Peru, and 39 percent for Venezuela in 1999-2000.

					(%)
	1988	1993	1996	2000	2003
China	39.5	37.5	23.0	16.4	11.0
Indonesia	18.1	17.0	13.9	7.3	7.2
Korea	19.2	11.6	14.4	13.7	13.3
Malaysia	13.6	12.8	9.0	9.2	9.3
Philippines	27.9	23.5	14.0	6.9	5.3
Singapore	0.3	0.4	0.0	0.0	0.0
Thailand	31.2	37.8	17.0	15.4	13.8
	1988	1994	1997	1999	2003
Argentina	30.8	15.4	14.1	15.5	11.9
Brazil	41.5	12.4	14.9	15.8	12.0
Chile	15.1	10.9	10.8	10.0	6.0
Colombia	46.3	11.3	11.4	12.2	-
Mexico	10.2	12.4	13.7	17.9	14.8
Peru	70.5	15.6	13.1	13.6	-
Venezuela	42.2	11.3	11.5	12.8	-

Table 2-2-1 Trends of applied tariffs for major developing countries in East Asia and Latin America

Drawn from Ando and Estevadeordal (2004).

Note: tariff rates are the simple average of applied tariffs.

	1996	2000							2003							
	All products	All products	All products	Agriculture	Fish and Fish products	Petroleum oils	Wood, pulp, paper, and furniture	Texitile and clothing	Leather, rubber, and footwear etc.	Metals	Chemicals and photographic supplies	Transport equipment		Electric machinery	Mineral products and precious stones etc.	Manufactu 1 red articles, n.e.s
East Asia																
China																
WTO bound rate: simple average (%)	n.a.	n.a.	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-
MFN applied rate: simple average (%)	23.0	16.4	11.0	16.8	12.2	6.1	7.0	15.2	13.6	7.4	7.4	15.9	8.6	9.9	9.4	12.3
Bound tariff lines (%)	n.a.	n.a.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Specific tariff lines			52 (7445)	7 (1061)	0 (171)	1 (19)	0 (348)	0 (1069)	0 (217)	0 (737)	36 (1235)	0 (296)	0 (876)	8 (482)	0 (356)	0 (578)
Indonesia																
WTO bound rate: simple average (%)		37.2	37.2	37.2	47.7	40.0	39.6	29.2	39.7	38.4	38.2	39.0	34.0	28.1	39.1	36.0
MFN applied rate: simple average (%)	13.9	7.3	7.2	8.6	5.0	5.0	4.1	10.5	6.6	8.1	5.5	17.0	2.3	6.1	4.6	7.7
Bound tariff lines (%)	93.9	93.9	93.9	100.0	100.0	100.0	98.7	100.0	99.6	93.8	96.3	31.4	92.3	90.1	94.8	85.1
Specific tariff lines			12 (7542)	12 (1045)	0 (154)	0 (20)	0 (551)	0 (1203)	0 (271)	0 (883)	0 (1240)	0 (225)	0 (645)	0 (402)	0 (346)	0 (557)
Japan																
WTO bound rate: simple average (%)			8.0	23.8	5.0	3.4	1.9	7.1	20.5	1.1	2.5	0.1	0.0	0.2	0.8	1.4
WTO bound rate: import-weighted (%)	7.4	5.7	3.5	15.3	4.4	3.6	2.0	8.9	11.3	0.6	2.0	0.0	0.0	0.1	0.3	0.7
MFN applied rate: simple average (%)			7.5	21.5	6.0	3.5	1.7	7.0	20.5	1.0	2.5	0.1	0.0	0.2	0.9	1.3
MFN applied rate: import-weighted (%) 5.0	4.4	2.5	9.8	4.5	0.9	1.5	8.8	11.3	0.6	2.0	0.0	0.0	0.1	0.3	0.7
Bound tariff lines (%)		98.9	98.9	99.9	88.1	40.4	93.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	100.0
Specific tariff lines			661 (9303)) 302 (1813)	3 (327)	24 (47)	0 (465)	258 (2106)	28 (435)	33 (883)	8 (1174)	0 (151)	0 (592)	0 (387)	2 (344)	2 (579)
Korea																
WTO bound rate: simple average (%)	27.6	19.5	17.7	6.1	15.3	11.5	4.8	19.7	12.5	8.2	8.3	8.4	6.6	7.6	9.3	9.5
WTO bound rate: import-weighted (%)	15.4	9.6	10.2	89.2	4.0	0.8	3.1	22.3	10.6	5.2	8.7	7.7	6.2	2.3	5.2	7.1
MFN applied rate: simple average (%)	14.4	13.7	13.3	52.2	16.8	5.8	3.7	9.8	8.9	5.2	7.0	6.0	6.1	5.5	6.0	6.4
MFN applied rate: import-weighted (%) 10.9	8.3	9.0	79.7	13.4	4.5	3.8	10.0	7.2	3.5	6.8	5.6	5.0	2.1	3.1	5.8
Bound tariff lines (%)	90.4	91.8	91.4	97.6	34.0	54.6	87.5	99.3	85.7	99.4	95.5	79.6	93.6	70.3	91.4	95.0
Specific tariff lines			31 (11261)	0 (1537)	0 (341)	0 (77)	0 (519)	0 (1363)	0 (371)	0 (938)	30 (2313)	0 (319)	0 (1179)	0 (644)	0 (666)	1 (994)
Malaysia																
WTO bound rate: simple average (%)		17.2	17.2	-	-	-	-	-	-	-	-	-	-	-	-	-
MFN applied rate: simple average (%)	9.0	9.2	9.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bound tariff lines (%)		61.8	61.8	-	-	-	-	-	-	-	-	-	-	-	-	-
Specific tariff lines			83 (10458)) 70 (1316)	0 (144)	0 (30)	2 (2305)	0 (1089)	5 (399)	4 (1044)	1 (1508)	0 (481)	1 (714)	0 (494)	0 (350)	0 (584)
Philippines																
WTO bound rate: simple average (%)	31.6	27.6	25.5	33.9	33.5	-	24.4	29.2	32.8	26.1	20.3	20.0	17.9	19.4	22.3	22.6
WTO bound rate: import-weighted (%))	14.5	20.0	28.7	11.5		24.7	27.0	32.2	25.6	22.4	13.4	26.1	4.4	13.9	10.3
MFN applied rate: simple average (%)		6.9	5.3	7.0	7.1	2.6	6.0	9.5	5.6	4.5	3.6	8.1	2.1	3.9	4.3	4.0
MFN applied rate: import-weighted (%		3.9	3.1	5.1	3.8	3.0	5.5	6.3	6.6	3.5	5.2	8.6	1.8	1.0	3.9	2.6
Bound tariff lines (%)		63.3	64.6	12.3	0.1	0.0	2.0	14.6	1.1	3.6	11.7	1.0	7.8	4.2	2.4	4.1
Specific tariff lines			(5556)	(685)	(109)	(10)	(297)	(820)	(173)	(648)	(910)	(161)	(572)	(389)	(313)	(469)

Table 2-2-2 WTO bound tariffs and applied tariffs by sector in major APEC member countries in East Asia and Latin America

(Continue)

	1996	2000							2003							
	All products	All products	All products	Agriculture	Fish and Fish products	Petroleum oils	Wood, pulp, paper, and furniture	Texitile and clothing	Leather, rubber, and footwear etc.	Metals	Chemicals and photographic supplies	Transport equipment	Non- electric machinery	Electric machinery	Mineral products and precious stones etc.	Manufactu red articles, n.e.s
Singapore																
WTO bound rate: simple average (%)	10.0	6.5	5.3	6.2	6.5	6.5	2.3	6.5	6.5	4.3	5.0	6.2	4.5	4.0	6.5	4.9
WTO bound rate: import-weighted (%)		3.0	3.1	4.2	6.5	6.5	1.6	6.5	6.5	4.6	5.0	6.4	1.5	1.0	6.5	3.6
MFN applied rate: simple average (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MFN applied rate: import-weighted (%)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bound tariff lines (%)	70.0	85.0	91.1	99.8	100.0	100.0	96.2	82.6	100.0	86.9	97.6	99.4	88.9	89.3	99.0	72.7
Specific tariff lines			4 (6036)	4 (871)	0 (121)	0 (23)	0 (293)	0 (930)	0 (198)	0 (663)	0 (987)	0 (158)	0 (602)	0 (408)	0 (293)	0 (473)
Thailand																
WTO bound rate: simple average (%)		39.7	28.2	31.9	8.4	23.0	24.6	33.2	29.1	22.5	26.4	50.8	28.0	19.8	27.4	29.6
MFN applied rate: simple average (%)	17.0	15.4	13.8	27.4	5.4	3.3	14.7	21.4	19.5	12.2	5.6	26.0	1.0	11.5	7.4	14.4
Bound tariff lines (%)		73.1	68.4	94.0	100.0	7.6	82.2	92.3	49.5	48.8	54.7	16.7	83.0	57.4	51.0	75.0
Specific tariff lines			93 (6204)	59 (780)	0 (97)	15 (53)	5 (314)	0 (896)	0 (303)	0 (637)	9 (923)	0 (215)	1 (629)	0 (453)	0 (522)	4 (208)
Latin America																
Chile																
WTO bound rate: simple average (%)	25.0	25.1	25.1	25.6	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
MFN applied rate: simple average (%)	11.0	9.2	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Bound tariff lines (%)		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Specific tariff lines			0 (7901)	0 (1125)	0 (383)	0 (24)	0 (397)	0 (1144)	0 (276)	0 (704)	0 (1305)	0 (343)	0 (745)	0 (520)	0 (336)	0 (599)
Mexico																
WTO bound rate: simple average (%)		36.2	36.2	47.9	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
WTO bound rate: import-weighted (%)			-	-	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
MFN applied rate: simple average (%)		16.2	16.4	25.9	27.7	10.5	15.2	23.5	20.1	15.3	10.8	17.1	12.8	16.2	12.3	17.4
MFN applied rate: import-weighted (%)		3.1	2.8	6.3	8.3	1.5	1.5	2.2	3.9	1.4	2.3	3.0	1.3	1.0	1.0	2.2
Bound tariff lines (%)		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Specific tariff lines			58 (11809)	55 (1054)	0 (130)	0 (73)	0 (385)	0 (1244)	0 (364)	0 (922)	3 (2811)	0 (370)	0 (1432)	0 (1063)	0 (201)	0 (1760)

Drawn from Ando and Estevadeordal (2004). Data for Japan, Chile, and Mexico are added to the original table, based on APEC Individual Action Plan for each country.

Notes: data for 2000 are of 2000 or 2001.

Bound tariff lines (%) present the shares in total tariff lines in corresponding sectors.

Figures in parenthesis for specific tariff lines are the total number of tariff lines in corresponding sectors.

WTO bound rates for Indonesia in 2003 are of 2001.

WTO bound rates for Malaysia are the simple average of tariffs on industrial products.

Data for applied tariffs and the total number of tariff lines in the Philippines do not include "sensitive" agriculture products under E.O. 313 and E.O. 328.

In calcurating applied tariffs in Thailand, the ad valorem equivalents of specific tariffs are assumed to be 30 percent for rice and 20% and 25% for sugar.

	All products	Agriculture	Manufacturing
Argentina			
WTO bound rate (%)	35.0	23.0	31.0
MFN applied rate (%)	15.5	13.5	15.8
MFN applied rate (stand.dev.)	6.1	4.9	6.3
Brazil			
WTO bound rate (%)	32.0	36.0	32.0
MFN applied rate (%)	15.7	13.1	16.1
MFN applied rate (stand.dev.)	6.2	5.2	6.2
Chile			
WTO bound rate (%)	25.0	32.0	25.0
MFN applied rate (%)	9.9	10.0	9.9
MFN applied rate (stand.dev.)	0.4	0.0	0.5
Colombia			
WTO bound rate (%)	52.0	85.0	40.0
MFN applied rate (%)	12.2	16.1	11.5
MFN applied rate (stand.dev.)	6.1	4.6	6.1
Mexico			
WTO bound rate (%)	49.0	47.0	49.0
MFN applied rate (%)	17.8	24.8	16.7
MFN applied rate (stand.dev.)	14.8	33.7	8.0
Peru			
WTO bound rate (%)	32.0	38.0	30.0
MFN applied rate (%)	13.6	16.6	13.1
MFN applied rate (stand.dev.)	3.6	6.0	2.7
Venezuela			
WTO bound rate (%)	39.0	50.0	35.0
MFN applied rate (%)	12.8	16.9	12.1
MFN applied rate (stand.dev.)	6.4	5.2	6.3

Table 2-2-3 WTO Bound Tariffs and Applied Tariffs by Sector in Latin America: 1999-2000

Drawn from Ando and Estevadeordal (2004).

Note: WTO bound rates and applied rates are the simple average.

In contrast, East Asian countries other than China have not bound all tariff lines (Table 2-2-2). Coverage of bound tariffs was 94 percent for Indonesia, 99 percent for Japan, 91 percent for Korea, 62 percent for Malaysia, 63 percent for the Philippines, 85 percent for Singapore, and 73 percent for Thailand in 2000 and 100 percent for China in 2003.⁹ Average tariffs *per se*, however, are lower in East Asia: the average MFN tariff rate in the region is approximately seven percent, which is much lower than the 10+ percent rate in Latin America (Figure 2-2-1). MFN applied rates (simple average) for each country were 16 percent for China, seven percent for Indonesia, 14 percent for Korea, nine percent for Malaysia, seven percent for the Philippines, 0 percent for Singapore, and 15 percent for Thailand in 2000.¹⁰ Although some tariffs could theoretically be raised without a ceiling since they are not bounded, contrary to Latin America, overall tariff rates in terms of ad valorem tariffs are actually lower in East Asia.

Second, the two regions take different approaches to import substitution and export promotion. East Asian countries have gradually shifted their focus to export orientation from import substitution, though they have long taken "the dual-track approach".¹¹ Particularly since the mid-1980s or the early 1990s, they have implemented various types of trade and FDI facilitation measures to aggressively attract incoming FDI, formulate industrial clusters, and develop international production/distribution networks.¹² As one export-oriented policy, East Asian countries have effectively utilized a duty drawback system, i.e., a system of refunds of duties and indirect taxes on imported intermediate inputs used in producing exported goods. Under this system, export-oriented affiliates of multinational enterprises (MNEs), who account for a large share of imports particularly in manufacturing sectors such as general machinery and electric machinery, pay extremely low tariffs on imported intermediate goods used for the production of exports. As Figure 2-2-2 clearly shows, average tariff rates in terms of custom duty import ratios are adjusted down to rates far below the MFN rates.

⁹ China bound all tariffs upon its accession to the WTO.

¹⁰ Korea's simple average of MFN applied tariffs exceeds 10 percent, as do the corresponding averages of China and Thailand. The high simple average tariff rate is due to much higher tariffs imposed on the agricultural and fishery sectors than on manufacturing sectors, particularly high out-quota tariffs. The import-weighted average tariff rates are much lower.

¹¹ Pangestu (2003, Tables 17.1 and 17.2) provides an excellent review on the evolution of industrial policies in East Asia in the 1950s-1990s as well as various policies and measures for promoting exports implemented in Asian countries. Also, see Ando and Kimura (2005) for further discussion on the drastic changes in export promotion and development strategies applied by the East Asian developing economies. ¹² See Ando and Kimura (2005) and Kimura and Ando (2003, 2005a, 2005b) for micro-data analysis of MNEs (Japanese and U.S. firms) and discussion on the formation of international production/distribution networks in East Asia and other regions.

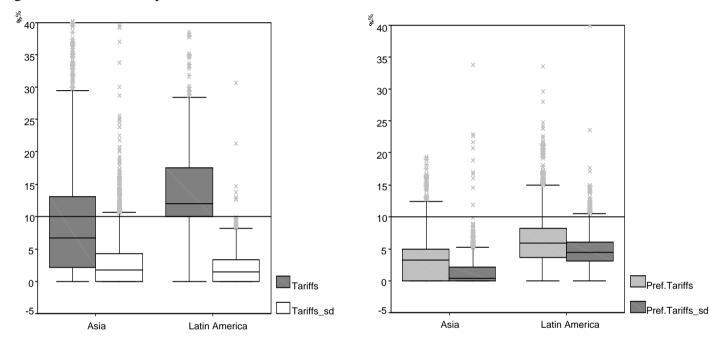
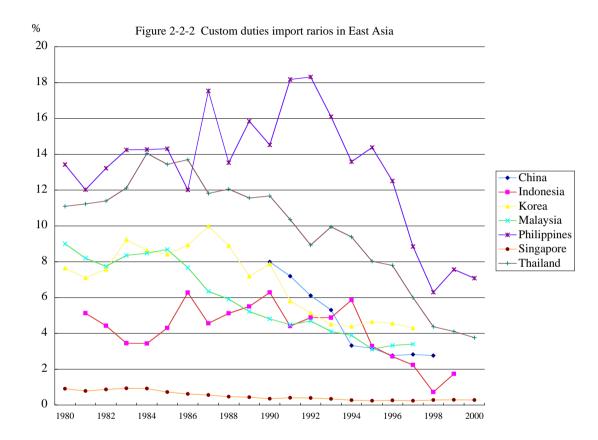


Figure 2-2-1 MFN and preferential tariffs in East Asia and Latin America: 2000

Drawn from Ando and Estevadeordal (2004).

Notes: "Tariffs_sd" and "Pref. Tariffs_sd" stand for standard deviation of MFN tariffs and preferential tariffs, respectively. Data includes preferential tariffs in most Latin American Agreements currently in force for Latin America and those in AFTA and ANZSCEP agreements for Asia. In the figure, average level (medium) is expressed by the horizontal line within each box. Boxes surround the interquartile range from the 25th to 75th percentile, and whiskers extend up and down to "adjacent values", defined as 1.5 times the length of the interquartile range. Each plot outside the box and line presents an outlier.



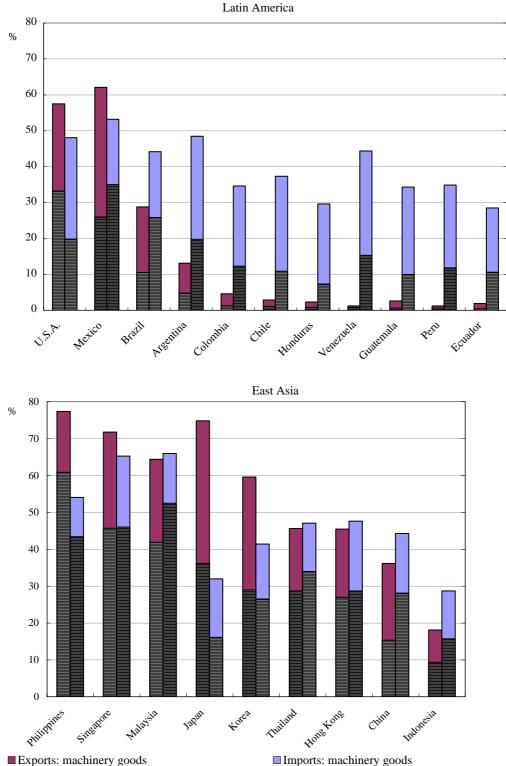
Drawn from Ando and Estevadeordal (2004).

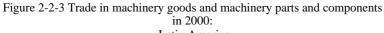
In East Asia, trade in machinery goods, particularly machinery parts and components, is astonishingly sizeable. Figure 2-2-3 presents the shares of machinery goods and machinery parts and components in each country's total exports and imports, where machinery goods include general machinery, electric machinery, transport equipment, and precision machinery (HS 84-92). The shares of machinery goods for most of the East Asian countries reach as high as 40 percent or even up to around 70 percent. Moreover, the shares of parts and components in machinery trade are also very high: more than half of machinery trade is in machinery parts and components. East Asian trade includes a large portion of back-and-forth transactions of parts and components of manufactured products among countries in the region, utilizing various types of trade facilitation measures, including the duty drawback system.¹³

In contrast, Latin America has not actively implemented those types of export-oriented policies. Rather, import-substituting policies in manufacturing sectors seem to be reflected in their tariff rates by sector: tariffs in manufacturing sectors are almost the same or even higher than those in agricultural sectors in some countries such as Argentina and Brazil, while tariffs in manufacturing sectors are basically much lower than those in agricultural sectors in East Asia (Table 2-2-2 and Table 2-2-3). Of course, Latin American countries provide many member countries of FTAs/PTAs with preferential tariffs that are much lower than MFN tariffs since they have concluded FTAs/PTAs (Table 2-2-4). As Figure 2-2-1 clearly shows, the gap between MFN tariffs and preferential tariffs, or the marginal preference, is much wider in Latin America than in East Asia. These lower preferential tariffs may contribute to an increase in exports to/imports from the member countries, but non-members are doubtlessly forced to bear much higher MFN tariffs when they export to Latin America.¹⁴

¹³ See Ando (2005) for an analysis of the development of trade structures and vertical production sharing in East Asia in the 1990s.

¹⁴ Since local supporting industries are typically immature in developing countries, MNEs must often import key parts and components from the home country. Thus, MNEs from non-member countries would face serious disadvantages in competition with intra-regional MNEs.





Drawn from Ando and Estevadeordal (2004).

Notes: Machinery goods are defined as HS 84-92; i.e., they include general machinery, electric machinery, transport equipment, and precision machinery.

■Exports: parts and components in machinery goods ■Imports: parts and components in machinery goods

	Given/				CI 11	<u> </u>							Preferential	MFN
	Receiving	Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Peru	Paraguay	Uruguay	Venezuela		tariffs
	0						10.0		11.0		0.4			(average)
All Products	Argentina		7.7	0	7.6	11.9	10.2	11.1		0.1				15.5
	Bolivia	5.4		5.4	8.6	0	0	2		5.4				9.7
	Brazil	0	6.2		6.5	11.8	9.4	12.9		0.2				15.7
	Chile	4.1	7	4.1		0.9	0.3	9.1		4				9.9
	Colombia	10.9	0	11.1	1.3		0	7		9.4				12.2
	Ecuador	13.5	0	13.7	0.6	0		13.7		8.9				14.2
	Mexico	13	2.9	15.2	14.1	6.5	11.4		13.1	8.9				17.8
	Peru	12.8	0	13	9.4	4.1	1.6	12.8		12.2	12.6	3.9	8.2	13.6
	Paraguay	0.4	6	0.4	6.2	12.2	8.1	12.1	1.1 11.9 2 0 2.9 11.8 $.1$ 5.6 7 4.2 3.7 4.3 13.1 2.8 2.1 12.1 $.7$ 12.1 $.5$ 4 $.1$ 9.1 $.5$ 0 0.8 9.7 $.9$ 4.7 1.4 3.1 7.9 3.1 19.3 5.8 2.4 12.3 $.3$ 0 3.2 12.1 $.1$ 5.7 $.3$ 4.3 2.9 4.5 12 2.3 2 12 $.6$ 12.2		0.4	11.9	7	13.1
	Uruguay	0.5	6.3	0.5	6.4	12.1	8	6.7	12.1	0.7		uguayVenezuelatariffs (average) 0.1 12.17.3 5.4 03.2 0.1 11.87.1 4 0.23.9 10.5 05.4 8.8 06.4 4.2 8.19.7 12.6 3.98.2 0.4 11.97 12.6 3.98.2 0.4 11.97 12.1 6.6 0 9.55.3 5.9 03.8 0 9.75.4 3.3 0.63.6 13 07 9.6 07.9 10.6 14.216.4 14.4 3.39.3 0.3 12.46.7 11.5 5.8 14.5 7.2 0.1 12.57.5 5.3 03.1 0 12.17.3 4.1 0.13.9 10 05.2 8.7 06.1 3.2 78.6 12.3 3.98 0.4 11.87 12.2 6.6	13.7	
	Venezuela	11.6	0	11.7	0.3	0	0	8.5	4	9.4	10.9		5.6	12.8
Agriculture	Argentina		5.1	0	4.5	9.5	7	8.1	9.1	0	0	9.5	5.3	13.5
	Bolivia	6		6	8.1	0	0	6.5	0	5.8	5.9	0	3.8	9.9
	Brazil	0	3.2		3.7	9.7	7.4	10.8	9.7	0	0	9.7	5.4	13.1
	Chile	3.3	5.6	3.3		2	1.3	8.9	4.7	3.3	3.3	0.6	3.6	10
	Colombia	13.7	0	14.1	3.4		0	11.4	3.1	10.9	13	0	7	16.1
	Ecuador	17	0	17.4	3.2	0		17.9	3.1	10.7	9.6	0	7.9	18.3
	Mexico	19.3	13.7	21.7	20.5	14.4	17.4		19.3	13.1	10.6	14.2	16.4	24.8
	Peru	14.6	0	15.1	11.4	3.5	1.8	15.8		13.5	14.4	3.3	9.3	16.6
	Paraguay	0.3	4.7	0.3	4.1	12.4	7.6	12.4	12.3		0.3	12.4	6.7	13.3
	Uruguay	0.3	4.6	0.3	3.9	11.5	6.7	7	11.4	0.4		11.5	5.8	13
	Venezuela	15.1	0	15.3	1.3	0	0	11.3	3.1	11.8	14.5		7.2	16.9
Manufactures	s Argentina		8	0	8	12.2	10.6	11.5	12.3	0.1	0.1	12.5		15.8
	Bolivia	5.3		5.3	8.6	0	0	1.3		5.3	5.3		3.1	9.6
	Brazil	0	6.7		6.9	12.1	9.7	13.2		0.2				16.1
	Chile	4.1	7.2	4.1		0.6	0	9.1	5.7	4.1	4.1	0.1		9.9
	Colombia	10.4	0	10.6	0.9		0	6.3		9				11.5
	Ecuador	12.8	0	13.1	0.1	0	-	12.9		8.5				13.6
	Mexico	11.9	1.1	14.1	13	5.1	10.4			8.1	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		16.7	
	Peru	12.4	0	12.6	9.1	4.1	1.5	12.3		12		13.1		
	Paraguay	0.4	6.1	0.4	6.5	12.1	8.2	12:5	12	12				13.1
	Uruguay	0.4	6.5	0.5	6.7	12.1	8.1	6.6		0.7	0.1			13.1
	Venezuela	0.5	0.5	11	0.7	0	0.1	8	4.1	9	10.3	12.2		12.1
Drown from				11	0.1	U	U	0	4.1	7	10.5		J. 4	14.1

Table 2-2-4 Preferential tariff rates in Latin America, 1999-2000

Drawn from Ando and Estevadordal (2004).

In fact, Latin American countries, with Mexico as a notable exception, present by far lower shares of machinery exports than those observed for countries in East Asia (Figure 2-2-3). In particular, the shares of machinery parts and components are fairly low: 26 percent for Mexico, 11 percent for Brazil, and less than 5 percent for the remaining countries. Furthermore, the shares of machinery imports are much higher than the shares of exports. These indicate that manufacturing production activities in Latin America are basically of an import-substituting type, except the production sharing between the United States and Mexico.

Third, the types of tariffs implemented are different. Latin America imposes only ad valorem tariffs on imports; Chile, a typical country, has applied uniform tariffs. In contrast, East Asia still implements not only ad valorem tariffs but also specific tariffs or a combination of the two. In 2003, for instance, China has 52 specific tariff lines out of 7,445 tariff lines, Indonesia 12 out of 7,542, Japan 661 out of 9,303, Korea 31 out of 11,261, Malaysia 83 out of 10,458, Singapore 4 out of 6,036, and Thailand 93 out of 6,204 (Table 2-2-2). The sectors in which specific tariffs are implemented vary among countries, but many of the tariff lines with specific tariffs cannot automatically be converted into ad valorem rates, average rates of ad valorem tariffs may in some cases underestimate the degree of trade protection created by tariffs on the whole in East Asia.

Fourth, methods for protecting specific products are different. In Latin America, the standard deviations of MFN tariffs are small (less than 10 percent), except for the agricultural sector in Mexico, indicating that MFN tariffs are relatively uniform across products (Table 2-2-3). In addition, when dispersion (standard deviation) among MFN tariffs is compared to dispersion among preferential tariffs, Latin America shows greater spreads among preferential tariffs (Figure 2-2-1). Latin America is perhaps protecting specific products by imposing differentiated levels of preferential tariffs in addition to higher MFN tariffs that are relatively uniform across products. In contrast, East Asia shows greater spreads among MFN tariffs than among preferential tariffs (Figure 2-2-1). Moreover, East Asian countries present variation across sectors in MFN tariff rates, the percentage of bound tariff lines, and the application of specific tariffs (Table 2-2-2). East Asia seems to favor the use of MFN tariffs over preferential tariffs as a method for effectively protecting specific products.P

52

2-2-2 Trade Protection by Non-tariff Measures

So far, we have discussed tariff policies in the two regions, focusing on their differences. Yet differences are also reflected in measures other than tariffs, or non-tariff measures (NTMs). Table 2-2-5 and Table 2-2-6 present by-type frequency ratios of NTMs, i.e., the percentage of tariff lines subject to NTMs, in 21 sectors and all sectors in East Asia and Latin America, respectively.¹⁵ In constructing by-type frequency ratios, based on the information available from the UNCTAD database, variable measures that are reported by each country are categorized into the following types since they are inconsistent across countries: 1. Price control measures, 1-(1) Administrative pricing, 1-(3) Variable charges, 1-(4) Anti-dumping (AD) measures, 1-(5) Countervailing (CV) measures, 3. Automatic licensing measures, 4. Quantity control measures, 4-(1) Non-automatic licensing measures, 4-(2) Import quota, 4-(3) Import prohibition, 4-(4) Export restraint agreements, 5. Monopolistic measures, 5-(1) Single channel for imports, 6. Technical measures, 6-(1) Technical regulations, and 6-(3) Special customs formalities. Note that the types of measures reported are inconsistent among countries, and thus a small number of incidences does not necessarily mean low protection provided by NTMs in the case of countries with only a few types of NTMs reported. Also, unfortunately, the NTM data for some countries is several years old.

The tables illustrate that both East Asia and Latin America implement NTMs, in particular price control measures, quantity control measures, and technical measures. Two significant differences are observed. First, the scope of NTM application considerably varies. In Latin America, NTMs are implemented more widely within and across sectors than in East Asia. It should be borne in mind, however, that the UNCTAD database Trade Analysis and Information System (TRAINS), used for frequency-ratio calculations, is provided on a reporting base. Data for Latin America have been firmly corrected with additional data collection at the Inter-American Development Bank, while data for East Asia have not. Even so, a difference in the range of products subject to NTMs is clearly apparent. Second, the principal measures implemented in the two regions are dissimilar. Latin America as a whole generally depends upon technical measures while East Asia mainly employs quantity control measures.

¹⁵ See Ando (2002) and Ando (2004) for the details of frequency ratios of NTMs.

	Number of	1					3		тыс туре	e of NTN 4	10			5		6	
Sector (HS classification)	Number of tariff lines	-	1-(1)	1-(3)	1-(4)	1-(5)		3-(1)	3-(2)	-	4-(1)	4-(2)	4-(3)	-	5-(1)	~	6-(1) 6
hina 1 Live animals and animal products	277									11.6			11.6			0.7	0.7
2 Vegetable products	415	1.9	1.9							6.3	1.7		4.6	1.7	1.7	3.6	3.6
3 Aminal and vegetable oils and fats	47									27.7	27.7					40.4	40.4
4 Products of food industry	241	0.8	0.8							8.3	5.4	4.6		2.9	2.9	5.0	5.0
5 Mineral products 6 Chemicals	186 1108	4.3	4.3							4.3 8.8	4.3	3.2 0.1	8.7			14.0 0.2	14.0 0.2
7 Plastic and plastic materials	233	1.7	1.7							5.2	1.7	5.2	0.7			9.4	9.4
8 Leather	87															19.5	19.5
9 Wood and wood products	113	0.9	0.9							15.9	15.9					3.5	3.5
0 Pulp and papers	161		0.2							5.6	2.0		5.6		0.0	31.7	31.7
1 Textiles 2 Footwear	1054 60	0.3	0.3							4.7	3.0	4.6	0.1	0.2	0.2	8.1	8.1
3 Rock products	171																
4 Precious stones	67																
5 Base metals and base metal products										15.3	15.3					30.1	30.1
6 General and electronic machinery	1263	0.2	0.2							12.6		12.5	0.8			17.8	17.8
7 Transport equipment 8 Precision machinery	277 309									30.3 9.4		30.3 9.4				21.7 12.0	21.7 12.0
9 Firearms and munitions	17									9.4 100.0		9.4	100.0			12.0	12.0
0 Various manufactured goods	162									100.0			100.0			6.8	6.8
1 Works of art, antiques, collections	8																
tal	6911	0.4	0.4							9.8	2.8	5.1	2.7	0.2	0.2	11.4	11.4
donesia																	
1 Live animals and animal products	273						2.6	2.6								95.6	95.6
2 Vegetable products 3 Aminal and vegetable oils and fats	388 70						2.6	2.6								85.1 92.9	85.1 92.9
4 Products of food industry	315						2.2	2.2		8.3	8.3					14.9	14.9
5 Mineral products	180						2.2	2.2		2.8	2.8			1.7	1.7	3.3	3.3
6 Chemicals	1024	0.2			0.2					2.4	1.5		1.0	0.4	0.4	6.8	6.8
7 Plastic and plastic materials	354									2.0	0.6		1.4			1.4	1.4
8 Leather	96																
9 Wood and wood products 0 Pulp and papers	269 188									4.3	4.3						
1 Textiles	1196						1.3	1.3		4.5	4.5						
2 Footwear	75						1.5	1.5									
3 Rock products	184									0.5	0.5						
4 Precious stones	66						3.0	3.0									
5 Base metals and base metal products		1.3			1.3					4.2	4.2						
6 General and electronic machinery	1028									1.4	1.4						
7 Transport equipment 8 Precision machinery	215 274									2.8	2.8						
9 Firearms and munitions	35																
20 Various manufactured goods	182																
1 Works of art, antiques, collections	14																
otal	7252	0.2			0.2		0.6	0.6		1.8	1.5		0.2	0.1	0.1	10.8	10.8
pan																	
1 Live animals and animal products	549	5.1		5.1			3.3	3.3		49.7	49.4	8.6		18.0	18.0	96.9	96.9
2 Vegetable products	561	0.4		0.4			4.1	4.1		4.8	1.8	3.0		4.6	4.6	90.2	90.2
3 Aminal and vegetable oils and fats 4 Products of food industry	82 762									7.3	7.3					90.2	90.2
5 Mineral products	207						4.3	4.3		1.4		1.4		0.5	0.5	31.9	31.9
6 Chemicals	1025	0.1		0.1						9.1	0.3	8.8		2.1	2.1	80.7	80.7
7 Plastic and plastic materials	283									1.4		1.4				12.0	12.0
8 Leather	173									22.0	22.0					37.0	37.0
9 Wood and wood products	213									16.0	16.0					31.5	31.5
0 Pulp and papers 1 Textiles	174 2087									43.2	43.2			0.5	0.5	15.5	15.5
2 Footwear	145									43.2	43.2			0.5	0.5		
3 Rock products	173															8.7	8.7
4 Precious stones	78															3.8	3.8
5 Base metals and base metal products	835	4.2		4.1	0.1					36.2	36.0	0.1				4.7	4.7
6 General and electronic machinery	991									1.8		1.8		0.1	0.1	3.0	3.0
7 Transport equipment 8 Precision machinery	152 308									5.3 0.6		5.3 0.6				5.9 19.8	5.9 19.8
9 Firearms and munitions	308 21									0.6 100.0		0.6				19.8 42.9	19.8 42.9
20 Various manufactured goods	206									100.0						18.4	18.4
21 Works of art, antiques, collections	7									14.3		14.3					
otal	9032	0.7		0.7	0.0		0.6	0.6		19.2	17.3	2.3		1.8	1.8	26.6	26.6
orea																	
1 Live animals and animal products	300																
2 Vegetable products 3 Aminal and vegetable oils and fats	387 71																
4 Products of food industry	278																
5 Mineral products	204	3.4			3.4												
6 Chemicals	1062									0.1	0.1						
7 Plastic and plastic materials	211	0.5			0.5												
8 Leather	84																
9 Wood and wood products	92 158																
0 Pulp and papers 1 Textiles	158 867	1.0			1.0												
2 Footwear	807 61	1.0			1.0												
3 Rock products	164																
4 Precious stones	62																
5 Base metals and base metal products																	
6 General and electronic machinery	1014																
7 Transport equipment	183																
8 Precision machinery 9 Firearms and munitions	337 21																
9 Firearms and munitions 0 Various manufactured goods	21 156																
	10																
1 Works of art, antiques, collections	10																

(Continue)

Continue)					т	The type of NT	Ma							
Sector (HS classification)	Number of tariff lines	1 1-(1)	1-(3) 1-(4) 1-	3	3-(1)	4		4-(2)	4-(3)	5	5-(1)	6	6-(1)	6-(
alaysia							31.9					10.0		
1 Live animals and animal products 2 Vegetable products	288 362					31.9 9.7	31.9 8.0	0.6		2.5	2.5	18.8 53.0	18.8 53.0	
3 Aminal and vegetable oils and fats	167					4.2	4.2							
4 Products of food industry	435					10.1	7.1			0.7	0.7	0.2	0.2	
5 Mineral products 6 Chemicals	199 1197					9.0 6.5	9.0 6.4					0.2	0.2	
7 Plastic and plastic materials	627	0.3	0.3			2.9	2.9					0.2	0.2	
8 Leather	105													
9 Wood and wood products	319					28.5	28.5							
0 Pulp and papers 1 Textiles	253 1093					3.6 3.8	3.6 3.8							
2 Footwear	85					2.4	2.4							
3 Rock products	200													
4 Precious stones	61					9.8	9.8							
5 Base metals and base metal products 6 General and electronic machinery	s 1052 1215					4.6 5.4	4.6 4.9					4.2	4.2	
7 Transport equipment	389					39.8	39.8					0.3	0.3	
8 Precision machinery	283					1.8	1.8							
9 Firearms and munitions	21					100.0	95.2					0.4	0.4	
20 Various manufactured goods 21 Works of art, antiques, collections	235 10					9.4	3.8					0.4	0.4	
otal	8596	0.0	0.0			8.8	8.3	0.0	0.5	0.1	0.1	3.5	3.5	
hilippines	202													
1 Live animals and animal products 2 Vegetable products	283 288					1.4	1.4							
3 Aminal and vegetable oils and fats	47						••							
4 Products of food industry	235													
5 Mineral products 6 Chemicals	159 817					2.5 7.1	2.5 6.9		0.2			0.9	0.9	
7 Plastic and plastic materials	231					1.3	1.3		0.2			0.9	0.9	
8 Leather	83					1.5	1.5							
9 Wood and wood products	86													
0 Pulp and papers	170					0.6	0.6		0.4					
1 Textiles 2 Footwear	838 55					0.4			0.4					
3 Rock products	166													
4 Precious stones	58					3.4	3.4							
5 Base metals and base metal products						1.0	1.0							
6 General and electronic machinery	958					25.1	24.6		0.6			15.4	15.0	
7 Transport equipment 8 Precision machinery	167 259					25.1 1.2	24.6 1.2		0.6			15.6	15.6	
9 Firearms and munitions	17					88.2	1.2		88.2					
20 Various manufactured goods	147					2.0			2.0					
21 Works of art, antiques, collections otal	7 5692					2.5	2.1		0.4			0.6	0.6	
ngapore	5672					-10	2.1		0.1			010	0.0	
1 Live animals and animal products	240			23.3	23.3	76.3	75.0					5.8	5.8	
2 Vegetable products	318			43.1	43.1	55.7	54.7							
3 Aminal and vegetable oils and fats	55					100.0	100.0					25	2.5	
4 Products of food industry 5 Mineral products	278 185					7.6	7.2					2.5	2.5	
6 Chemicals	829					37.8	37.8					0.1	0.1	
7 Plastic and plastic materials	238					0.4	0.4							
8 Leather	81					18.5	18.5							
9 Wood and wood products 0 Pulp and papers	96					7.0	7.0							
1 Textiles	154 975					7.8 1.3	7.8 1.3							
2 Footwear	60					6.7	6.7							
3 Rock products	142													
4 Precious stones	54													
5 Base metals and base metal products	s 627 928					4.5	4.5					8.8	8.8	
6 General and electronic machinery 7 Transport equipment	928 148					4.5 19.6	4.3					8.8 24.3	8.8 24.3	
8 Precision machinery	236					6.8	6.8							
9 Firearms and munitions	17						100.0							
0 Various manufactured goods	160					12.5 25.0	5.6 25.0							
1 Works of art, antiques, collections otal	8 5829			3.3	3.3	25.0 15.8	25.0 15.0		1.1			2.4	2.4	
nailand												<i>c</i> -	<i>c</i> -	
1 Live animals and animal products	270					11.9	11.5					85.6	85.6	
2 Vegetable products 3 Aminal and vegetable oils and fats	412 90			86.7		4.9 14.4	4.9 14.4			0.2	0.2	90.3 100.0	90.3 100.0	
4 Products of food industry	272			13.2		9.6	14.4 9.6			1.8	1.8	46.3	46.3	
5 Mineral products	202					6.9	6.9				-	12.4	12.4	
6 Chemicals	947					0.8	0.1					48.4	48.4	
7 Plastic and plastic materials 8 Leather	272											2.9	2.9	
8 Leather 9 Wood and wood products	117 141					54.6	54.6							
0 Pulp and papers	163					54.0	54.0							
1 Textiles	967					32.9	32.9							
2 Footwear	70						_					2.9	2.9	
3 Rock products	164					12.8	5.5					2.4	2.4	
4 Precious stones 5 Base metals and base metal products	78 646					7.7 1.4	7.7 1.4					0.9	0.9	
J Dase metals and dase metal products	1317					1.4	2.4					5.2	5.2	
						27.0	8.7					5.2	5.2	
6 General and electronic machinery	230													
6 General and electronic machinery 7 Transport equipment 8 Precision machinery	274					1.1	1.1							
 General and electronic machinery Transport equipment Precision machinery Firearms and munitions 	274 32													
6 General and electronic machinery 7 Transport equipment 8 Precision machinery	274					1.1 4.3 25.0	4.3 25.0							

Data source: Ando (2002), Ando (2004), and Ando and Estevadeordal (2004).

Notes:

Notes: 21 sectors at the HS two-digit level are as follows: 1. HS Chapter 01-05, 2. HS Chapter 06-14, 3. HS Chapter 15, 4. HS Chapter 16-24, 5. HS Chapter 25-27, 6. HS Chapter 28-38, 7. HS Chapter 39-40, 8. HS Chapter 41-43, 9. HS Chapter 44-46, 10. HS Chapter 47-49, 11. HS Chapter 50-63, 12. HS Chapter 64-67, 13. HS Chapter 68-70, 14. HS Chapter 71, 15. HS Chapter 72-83, 16. HS Chapter 84-85, 17. HS Chapter 86-89, 18. HS Chapter 90-92, 19. HS Chapter 93, 20. HS Chapter 94-96, and 21. HS Chapter 97. The types of NTMs are as follows:

1-(4) Anti-dumping measure: 1-(5) Counter vailing measures

1. Price control measures 3. Automatic licensing measures 4. Quantity control measures 5. Monopolistic meaures 6. Technical measures

 1-(1) Administrative pricing
 1-(3) Variable charges
 1

 3-(1) Automatic lisence
 3-(2) Import monitoring
 1

 4-(1) Non-automatic licensin
 4-(2) Import quotes
 4

 5-(1) Single channel for imports
 5 5

 6-(1) Technical regulations
 6-(3) Special custom formalities

4-(3) Import prohibition

Image 		,	The type of NTMs																
	Sector (HS classification)	Number of tariff lines		1-(1)	1-(3)	1-(4)	1-(5)	3	3-(1)				4-(2)	4-(3)	5	5-(1)	6	6-(1)	6-(3)
1 0 0.3 0.3 0.3 0.3 0.3 0.3 0.4 </td <td>Argentina</td> <td></td> <td></td> <td>. (.)</td> <td>. (5)</td> <td></td> <td>. (5)</td> <td></td> <td>5 (1)</td> <td>5 (2)</td> <td>00.2</td> <td></td> <td>. (2)</td> <td></td> <td></td> <td>5 (1)</td> <td>00.0</td> <td></td> <td></td>	Argentina			. (.)	. (5)		. (5)		5 (1)	5 (2)	00.2		. (2)			5 (1)	00.0		
i hadra for for landary 27 3 1.6 0.8 27.4 1.8 7.8 80.8						0.8	0.3												91.5 92.3
5 Amountain product 200																			5.8
6 Concerisé 235 60 60 84.1 84.0 84.1 84.0			2.3		1.6		0.8												
A latir Model <	6 Chemicals	2855									84.1	84.0		4.8			85.5	83.9	13.5
9 9. Maria is solutions is body makes. 100 100 100 <t< td=""><td></td><td></td><td>0.5</td><td></td><td></td><td>0.3</td><td>0.3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>8.3</td></t<>			0.5			0.3	0.3												8.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			10.0			10.0													50.0 61.0
12 is lock approaches 62 53.0	10 Pulp and papers																	2.8	16.9
11 lock spectra start products 202 2 2 2 1 7,4 1 7,4 1 1 6 7,4 1 1 6 7,4 1 1 1 5 1 <td></td> <td></td> <td>0.2</td> <td></td> <td></td> <td>0.2</td> <td></td> <td>3.2</td> <td></td>			0.2			0.2												3.2	
15 Base marks and since mean products 718 1.7 199 18.4 3.6 -2.2 2.9 19.1 19.9 11.1 16 Breach and Anternation mutuke 180 0.2			2.5			2.5								50.0				5.4	10.9
16 General and electronic machines 1715 0.3 55. 93 9.1 1.1 7.1																		10.0	21.0
17 manual and algoring explorem 10 78.4 10.3 20.4 7.4.3 9.8.4 8.4.5 18 bracket manual scalar 7 0.6 0.6 0.6 0.0 10.4																			7.7
P Herms and numbers 11 5.6	17 Transport equipment	201	1.0			1.0					78.1	31.3	20.4	70.1			47.3	39.3	18.9
M bit of at attrapped concertain and attrapped concertain attr						0.2												39.9	43.5
1 0.000 0.0						0.6	0.6											9.4	58.9 68.1
	21 Works of art, antiques, collections	7									14.3	14.3					100.0		100.0
I branchs and animal products 299 Job 1 Job 2 1/1 Job 2 1/1 Job 2 20 2	Total	9361	0.6		0.0	0.5	0.1				57.2	45.5	0.4	24.6			53.8	43.6	25.4
2 Segrets products 362 1.4 0.8 0.6 38.4 2.0 1.7 8.80 8.0 1.6 3 Samial and synchronic formation of the internation of the		250										00.0	1.0	10.7				00.0	
			14			0.8	0.6						1.2						0.3
5 Marcing products 285 0.1 0.1 282 24.3 1.6 4.0 48.3 82.2 2.1 7 Finite and plate matrials 37.0 0.3 0.3 0.3 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 11 11 11 10	3 Aminal and vegetable oils and fats		1.4			0.0	0.0												0.5
6 Chemicals 284 0.1 0.1 84.0 82.0	4 Products of food industry	257	0.8			0.4	0.4				21.8	18.3		3.5			82.5	82.5	4.7
7 Pairs and plane: matrinals 74 0.3 0.3 5.5 4.3 1.6			0.1			0.1													21.4
9 90 and wood products 100 1 7.0 7.0 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.1 7.00 1.0													0.7		0.4	0.4			0.5
10 Pained pages 11 1.1												22.2		7.0					
11 Tentish." 943 944												11		7.0					
													5.1	0.5					0.1
						0.5								0.0					
			0.5			0.5					2.8	1.9		0.9			6.1	6.1	
17 Transport equipment 201 43.3 2.4 47.3 <t< td=""><td>15 Base metals and base metal products</td><td>s 718</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	15 Base metals and base metal products	s 718																	
18 Precision matchinery 469 36. 35. 35.2 35.2 20 Varios runnifictured gools 160 0.6 0.6 26.0 21.3 4.4 88.9 16.7 7 Toal 970 0.2 0.1 0.0 37.2 34.5 0.8 23.1 0.5 0.5 0.4 0.9 97.9			0.1			0.1									0.2	0.2			
19 Finance and munificancy goods 16 96 96.0 25.0 21.3 4.4 95.0 9.5 9.4 9.1 6.7 21 Warks of art, antiques, collections 7 0.0 25.0 21.3 4.4 5.0 0.5 0.5 0.4 49.1 6.7 Cml 977 0.2 0.1 0.0 0.5 1.5 0.4 4.1 1.6 5.0 9.0 9.7 7.6 7.4 7.6 7.4 7.6 7.6 7.6 7.6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>25.4</td><td></td><td></td><td></td><td></td><td></td></td<>														25.4					
21 Works of art, antiques, collections 7 0.1 0.0 37.2 34.5 0.8 2.1 0.5 0.5 0.5 0.4 0.1 0.0 1 Live antinuls and animal products 27.6 0.3 0.3 0.3 0.4 2.4 31.6 1.6.3 99.7 <td>19 Firearms and munitions</td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>94.4</td> <td>88.9</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	19 Firearms and munitions	18									94.4	88.9							
Total 9370 0.2 0.1 0.0 37.2 34.5 0.8 2.3.1 0.5 0.5 4.9.1 4.9.1 6.7 Chile I. Live animals and animal products 276 3.0.3 0.3 0.3 0.4 3.1 1.3.1 0.5 95.9 95.2 92.9 92.2 <th< td=""><td></td><td></td><td>0.6</td><td></td><td></td><td>0.6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4.4</td><td></td><td></td><td>26.3</td><td>26.3</td><td>0.6</td></th<>			0.6			0.6								4.4			26.3	26.3	0.6
			0.2			0.1	0.0						0.8	23.1	0.5	0.5	49.1	49.1	6.7
	Chile																		
$ \begin{array}{ccccccccccccccccccccccccccccccccccc$	1 Live animals and animal products																		95.3
4 Products of food industry 231 1.7 1.7 6.1 3.5 4.3 .94.8 94.8														16.3					99.7
5 Mineral products 171 0.6 0.6 0.6 5.8 5.8 5.3 5.7 7.4 7.4 6 Chemicals 229 0.4 0.4 0.4 0.4 0.4 3.5 3.5 1.7 8 Leather 7.8 7.0 7.4 7.5 7.6 7.6 9 Wood and wood products 100 2.0 2.0 80.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4.3</td><td></td><td></td><td></td><td></td><td>92.2 94.8</td></td<>														4.3					92.2 94.8
7 Plastic and plastic materials 29 0.4 0.4 0.4 0.4 3.5 1.7 8 Leather 78 - - 2.0 8000 800 800											0.6			0.6				5.8	5.8
8 Leadher 78 78 78 76 2.0 2.0 8.00 80.0																			74.7
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											0.4	0.4		0.4			5.0	5.5	1.7
11 Texilies 934 0.7 0.7 5.8 5.8 3.4 12 Footwear 59 -														2.0			80.0	80.0	80.0
12 Footwar 59 13 Bock products 53 15 Base metals and base metal products 593 16 General and electronic machinery 880 17 Transport equipment 227 18 Precision machinery 342 19 Firearms and munitors 19 20 Various manufactured goods 135 70 Transport equipment 227 21 Works of art, antiques, collections 7 7 0.7 0.7 2.2 21 Works of art, antiques, collections 7 28.6 3.0 32.7 3.6 8.3 20 Various manufactured goods 135 0.5 0.5 8.8 6.5 3.0 32.7 3.6 8.4 20 Various manufactured goods 350 8.9 8.8 6.5 3.0 32.7 3.6 8.8 4.6 2 Vorks of art, antiques, collections 7 2.0 2.0 9.6 9.6 9.0.3 5.1 9.6.7 9.5 9.5 8.8 4.6 4.6 4.4 4.4 4.4 4.4 4.6 4.6 4.6 4.6 4.6 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>/.6</td><td></td><td>07</td><td></td><td></td><td>5.8</td><td>5.8</td><td>3.4</td></t<>												/.6		07			5.8	5.8	3.4
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	12 Footwear	59																	
15 Base metals and base metal products 593 0.8 0.8 0.8 0.9 0.5 16 General and electronic machinery 880 11 1.1 1.1 9.8 9.8 18 Precision machinery 242 4.1 4.1 40.5 40.5 20.2 19 Firearms and munitions 19 9 6.7 0.7 0.7 2.2 7.1 7.0 7.0 3.0 3.2 7.1 3.0 8.9 9.0 6.5 3.0 3.2.7 7.8 7.8 7.5 7.2 7.2 2.2 2.2 7.1 5.3 2.2 0.7 5.8 8.3 4.0 6.4 4.4 4.4 4.4 4.4 4.4 4.4 4.4 4.4 </td <td></td>																			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$											0.8	0.8					0.5	0.5	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	16 General and electronic machinery	880									1.1	1.1							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $														26.0			40.5	40.5	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $																	40.5	40.5	
Total 5854 0.5 0.5 8.8 6.5 3.0 32.7 32.6 28.3 Colombia 1 Live animals and animal products 250 20.4 20.4 20.4 98.8 98.8 98.8 100.0 98.4 96.6 2 Vegetable products 350 8.9 8.9 90.6 90.3 5.1 95.7 95.1 88.0 3 Aminal and vegetable oils and fats 63 57.1 3.2 57.1 3.2 57.1 3.2 57.1 3.2 57.1 3.2 57.1 3.3 84.6 82.8 80.0 5.0 89.2 88.8 40.0 5.0 5.0 7.0 13.0 8.6 5.4 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5 5.5	20 Various manufactured goods										0.7	0.7							
Colombia I Live animals and animal products 250 20.4 20.4 98.8 94.4 44.6 36.8 58.0 58.0 58.0 58.0 58.0			0.5		0.5									3.0					14.3 28.3
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		505 1			0.0						510	0.0		5.0				22.0	_0.0
2 Vegetable products 350 8.9 8.9 90.6 90.3 5.1 95.7 95.1 88.0 3 Aminal and vegetable oils and fats 63 57.1 3.2 57.1 13.1 13.1 23.5 89.2 89.2 84.0 4 Products of food industry 251 13.1 13.1 13.1 13.1 23.5 23.5 89.2 84.0 54.0 5 Mineral products 185 7.0 13.0 8.6 5.4 6 6 6 6 6.6 5.4 6 7.7 5.8 2.0 3.3 3.3 84.6 82.2 6.6 7 Plastic and plastic materials 27.4 7.7 5.8 5.80 7.7 9.5 9.7 9.5 9.5 9.7 9.7 9.5 9.5 9.5 0		250	20.4		20.4						98.8	98.8					100.0	98.4	96.0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2 Vegetable products	350	8.9		8.9						90.6	90.3					95.7	95.1	88.0
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				3.2										1.6	1.6	1.6			54.0 40.2
6 Chemicals 1291 0.5 0.5 7.7 5.8 2.0 3.3 3.3 84.6 82.2 6.4 7 Plastic and plastic materials 274 7.7 5.5 2.2 0.7 0.7 19.7 9.5 15.5 8 Leather 81 58.0 58.0 58.0 58.0 97.9 9.5 9.5 96.9 96.9 96.9 97.9 97.9 96.5 10 Plup and papers 200 9.5 9.5 9.6 94.0 2.7 93.5 94.0 2.7 93.5 12 Footwear 57 31.6 31.6 31.6 57.9 8.8 54.4 13 Rock products 164 14.0 15.2 2.4 14.0 15.2 2.4 14.0 15.2 2.4 14.0 15.2 2.4 14.0 14.2 2.4 14.0 15.2 2.6 2.2 0.0 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3 14.3			13.1		13.1							23.3		7.0					40.2 5.4
8 Leather8158.058.045.745.79 Wood and wood products9797.997.996.910 Pulp and papers2009.59.5 -5 -5 11 Textiles8984.64.63.63.694.02.712 Footwear5731.631.631.657.98.854.413 Rock products1641415.22.41415.22.414 Precious stones561.71.70.10.126.814.122.316 General and electronic machinery11790.10.113.47.29.417 Transport equipment19217.216.15.253.125.546.18 Precision machinery3122.62.00.0100.0100.04.04.019 Firearms and munitions2596.096.0100.0100.04.04.020 Various manufactured goods151602.04.08.62.66.021 Works of art, antiques, collections714.314.314.314.314.3	6 Chemicals	1291	0.5		0.5						7.7			2.0			84.6	82.2	6.4
9 Wood and wood products 97 96.9 96.9 97.9 96.9 97.9 96.9 10 Pulp and papers 200 9.5 9.5														2.2	0.7	0.7		9.5	15.7 45.7
10 Pulp and papers 200 9,5 9,5 9,5 0.5 11 Textiles 898 4,6 4,6 3,6 3,6 3,6 94,0 2,7 93,5 12 Footwear 57 31 80,6 31,6 31,6 31,6 31,6 57,9 8,8 54,4 13 Rock products 164 14,0 15,2 2,4 14 Precious stones 56 17 1,7 0,1 0,1 2,8 14,1 12,2 4,4 16 General and electronic machinery 1179 0,1 0,1 13,4 7,2 9,5 4,6 18 Precision machinery 1192 17,2 16,1 5,2 53,1 2,5 4,6 18 Precision machinery 312 2,6 2,2 0,0 10,0 10,0 10,0 4,0 4,0 19 Firearms and munitions 2,5 46,0 2,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,																		97.9	45.7 96.9
12 Footwar 57 31.6 31.6 31.6 57.9 8.8 54.4 13 Rock products 164 15.2 2.4 14 Precious stones 56 1.7 0.1 0.1 26.8 14.1 22.3 16 General and electronic machinery 1179 0.1 0.1 13.4 7.2 9.2 17 Transport equipment 192 16.1 5.2 53.1 25.5 46.6 18 Precision machinery 312 2.6 2.2 0.0 19 Firearms and numitions 25 96.0 96.0 100.0 100.0 4.0 4.0 20 Various manufactured goods 151 60.0 2.0 4.0 4.0 21 21 Works of art, antiques, collections 7 14.3 14.3 14.3	10 Pulp and papers											a -						0.5	00.0
13 Rock products 164 14 Precious stones 56 15 Base metals and base metal products 687 16 General and electronic machinery 117 17 Transport equipment 192 18 Precision machinery 312 20 Various manufactured goods 151 20 Various manufactured goods 151 21 Works of art, antiques, collections 7			4.6	4.6															93.9 54.4
15 Base metals and base metal products 687 1.7 1.7 0.1 0.1 26.8 14.1 22.3 16 General and electronic machinery 1179 0.1 0.1 0.1 13.4 7.2 9.7 17 Transport equipment 192 17.2 16.1 5.2 53.1 25.5 46.6 18 Precision machinery 312 2.6 96.0 96.0 100.0 100.0 4.0 4.0 19 Firearms and munitions 25 66.0 96.0 100.0 100.0 4.0 4.0 20 Various manufactured goods 151 60.0 2.0 4.0 4.0 4.0 21 Works of art, antiques, collections 7 14.3 14.3 14.3 14.3											51.0	51.0							2.4
16 General and electronic machinery 1179 0.1 13.4 7.2 9.7 17 Transport equipment 192 17.2 16.1 5.2 53.1 25.5 46.4 18 Precision machinery 312 2.6 2.2 0.0 19 Firearms and munitions 25 96.0 96.0 100.0 100.0 4.0 4.0 20 Various manufactured goods 151 6.0 2.0 4.0 8.6 2.6 6.0 21 Works of art, antiques, collections 7 14.3 14.3 14.3 14.3											- -					C •			
17 Transport equipment 192 17.2 16.1 5.2 53.1 25.5 46.4 18 Precision machinery 312 - - 2.6 2.2 0.0 19 Firearms and munitions 25 96.0 96.0 100.0 100.0 4.0 4.0 20 Various manufactured goods 151 6.0 2.0 4.0 8.6 2.6 6.0 21 Works of art, antiques, collections 7 14.3 14.3 14.3 14.3															0.1	0.1			22.3 9.7
19 Firearms and munitions 25 96.0 96.0 100.0 100.0 4.0 4.0 20 Various manufactured goods 151 6.0 2.0 4.0 8.6 2.6 6.0 21 Works of art, antiques, collections 7 14.3 14.3 14.3	17 Transport equipment	192										16.1					53.1	25.5	46.4
20 Various manufactured goods 151 6.0 2.0 4.0 8.6 2.6 6.0 21 Works of art, antiques, collections 7 14.3 <	18 Precision machinery											010			100 0	100.0	2.6	2.2	0.6
21 Works of art, antiques, collections 7 14.3 14.3														4.0	100.0	100.0			6.6
<u>Total</u> 6770 3.2 0.9 2.3 15.6 14.6 1.4 1.1 1.1 52.0 34.3 32.4	21 Works of art, antiques, collections	7									14.3	14.3							
	Total	6770	3.2	0.9	2.3						15.6	14.6		1.4	1.1	1.1	52.0	34.3	32.4

	-	The type of NTMs														
Sector (HS classification)	Number of tariff lines	1	1-(1)	1-(3)	1-(4) 1-(5)	3	3-(1) 3-(2	4	4-(1)	4-(2)	4-(3)	5	5-(1)	6	6-(1)	6-(3)
Aexico	tariii inico		1 (1)	1 (5)	1(4) 1(5)		5(1) 5(2	-/	4 (I)	4 (2)	+ (J)		5 (1)		0(1)	0 (5)
1 Live animals and animal products	281							53.4	53.4					69.0	69.0	
2 Vegetable products	411							7.5	7.5					84.9	84.9	
3 Aminal and vegetable oils and fats	66							24.2	24.2					30.3	30.3	
4 Products of food industry	310							21.0	21.0					87.7	87.7	
5 Mineral products	191							13.6	13.6					4.2	4.2	
6 Chemicals	2694					0.1	0.1	26.4	26.1	0.4				71.7	71.7	
7 Plastic and plastic materials	514					1.4	1.4	1.6	1.6					14.0	14.0	
8 Leather	89													82.0	82.0	
9 Wood and wood products	123					2.4	2.4							56.1	56.1	
10 Pulp and papers	294													14.6	14.6	
11 Textiles	1204					2.2	2.2	0.1	0.1					97.6	97.6	
12 Footwear	101					5.0	5.0							79.2	79.2	
13 Rock products	291					4.8	4.8	0.3	0.3					20.3	20.3	
14 Precious stones	62													9.7	9.7	
15 Base metals and base metal products						1.6	1.6	0.9	0.9					18.2	18.2	
16 General and electronic machinery	2453							1.4	1.4					17.3	17.3	
17 Transport equipment	353					0.6	0.6	22.9	22.9					13.3	13.3	
18 Precision machinery	458							6.6	6.6					52.0	52.0	
19 Firearms and munitions	29							93.1	93.1					34.5	34.5	
20 Various manufactured goods	230					0.4	0.4	0.4	0.4					66.1	66.1	
21 Works of art, antiques, collections	12													41.7	41.7	
Total	11319					0.7	0.7	10.5	10.5	0.1				48.1	48.1	
0																
Peru 1 Live animals and animal products	271	4.1		4.1				24.7	10.7		14.0			49.1	49.1	
	356	4.1 2.2		2.2				24.7	10.7		0.6			49.1 96.3	49.1 96.3	
 Vegetable products Aminal and vegetable oils and fats 	62	2.2		2.2				2.0	1.4		0.0			35.5	35.5	
4 Products of food industry	267	1.1		1.1				6.4			6.4			35.5 95.9	95.9	
5 Mineral products	186	1.1		1.1				0.4 9.7	2.7		7.0			95.9	93.9	
6 Chemicals	1343							8.9	6.6		2.9			11.9	11.9	
7 Plastic and plastic materials	282							3.5	0.0		2.9			1.8	11.9	
8 Leather	82							5.5	0.7		2.0			29.3	29.3	
9 Wood and wood products	97													91.8	91.8	
10 Pulp and papers	199							11.1	11.1		11.1			85.4	85.4	
11 Textiles	939	0.1			0.1			0.1	11.1		0.1			100.0	100.0	
12 Footwear	57	0.1			0.1			0.1			0.1			100.0	100.0	
13 Rock products	163															
14 Precious stones	56															
15 Base metals and base metal products								4.2	0.8		3.5			0.8	0.8	
16 General and electronic machinery	1167							1.5	1.4		1.3			1.6	1.6	
17 Transport equipment	203							1.0	1.4		1.5			28.6	28.6	
18 Precision machinery	311							0.3	0.3					8.4	8.4	
19 Firearms and munitions	25							56.0	56.0					0.4	0.4	
20 Various manufactured goods	152							1.3	1.3							
21 Works of art, antiques, collections	152							28.6	28.6							
Total	6890	0.3		0.3	0.0			4.7	2.8		2.6			32.6	32.6	
Venezuela																
1 Live animals and animal products	259	19.4		19.4				88.7	32.7		85.5			97.6	97.6	10.5
2 Vegetable products	362	7.2		7.2				87.6	77.5		23.3	0.6	0.6	96.5	96.5	
3 Aminal and vegetable oils and fats	69	54.8		54.8				12.9	9.7		4.8			64.5	64.5	
4 Products of food industry	257	12.9		12.9				24.9	10.8		20.9			96.0	96.0	
5 Mineral products	206							9.3	1.0		9.3	21.1	21.1	2.6	2.6	
6 Chemicals	2855							75.9	12.5		75.1	2.9	2.9	74.3	74.3	
7 Plastic and plastic materials	374							1.5	0.7		1.5					
8 Leather	108							58.8	26.3		46.3			26.3	26.3	
9 Wood and wood products	100							11.3	10.3		1.0			49.5	49.5	
10 Pulp and papers	178															
11 Textiles	943	49.5	49.5					1.2	0.9		0.3			3.8	3.8	
12 Footwear	62							31.6	1.8		31.6			1.8	1.8	
13 Rock products	202															
14 Precious stones	62															
15 Base metals and base metal products								2.4	0.3		2.4					
16 General and electronic machinery	1751							1.0	0.5		0.5					
17 Transport equipment	201							14.1	1.1		14.1					
18 Precision machinery	469							2.6	2.6							
19 Firearms and munitions	18							96.0	96.0		12.0					
20 Various manufactured goods	160							1.3			1.3	1.3	1.3	0.7	0.7	
21 Works of art, antiques, collections	7							12.5			12.5					
Total	6699	8.7	6.6	2.1				26.4	9.4		21.6	1.2	1.2	28.6	28.6	0.

 Total
 6699
 8.7
 6.6
 2.1
 26.4
 9.4
 21.6
 1.2
 1.2
 28.6
 28.6
 0.4

 Data source: Ando (2002), Ando (2004), and Ando and Estevadeordal (2004).
 Notes:

 1-(1) Administrative pricing
 1-(3) Variable charges

 3-(1) Automatic lisence
 3-(2) Import monitoring

 4-(1) Non-automatic licensing
 4-(2) Import quotas

 5-(1) Single channel for imports
 6-(3) Special custom form

3. ISSUES AND IMPEDIMENTS BY COUNTRY : ASIA

3-1 CHINA (PEOPLE'S REPUBLIC OF CHINA)

3-1-1 Basic Information

(1) Basic Statistics on China¹⁶

i) Population: 1,292 million (2003)

ii) Area: 9,600,000 km²

iii) GDP -per capita-: 1,087 USD (2003)

	2001	2002	2003	2004
iv) GDP –real growth rate-	7.5	8.3	9.3	9.5
v) Exports (mil. USD)	266,098	325,596	438,278	593,360
vi) Imports (mil. USD)	243,553	295,170	412,760	561,380
vii) Trade balance (mil. USD)	22,545	30,426	25,518	31,980
viii) FDI inflow (mil. USD)	44,241	49,380	47,077	
ix) Current balance (mil. USD)	17,405	35,421	45,875	

The Chinese economy has been growing at about an annual rate of 9.5 percent since the drastic reforms in 1978. Although there is a severe income inequality across the country, it is still noteworthy that Chinese economic growth has been so rapid that the annual consumption of grain, meat, coal, and steel in China has already exceeded that of the US.

China maintains its strong growth, and real GDP growth was 9.3 percent in 2003. Due to the tightening of economic policies, the Chinese economy weakened in the first half of the year 2004; however, such policies did not have much impact on demand and growth rebounded in the second half of the year, resulting in 9.5 percent of the annual growth in 2004. What is notable in the economic indicators of the year 2004 was that the inflation rate increased from 1.2 percent in 2003 to 4.2 percent, which was attributed to increases in the prices of imports, in particular oil prices. Looking forward, a slowdown in real GDP growth is projected in 2005. However, the growth rate is still expected to be 8.0 percent, much higher than those of other countries in East and Southeast Asia.

¹⁶ Source: JETRO

Total trade volume in 2003 was 851 billion US dollars, a year-on-year increase of 37.1 percent. This was due to the 30-40 percent increases in both exports and imports. In 2004, too, Chinese exports and imports achieved 30-40 percent growth, and the total volume reached 1,155 billion dollars. Among the largest trade partners were Japan, the US, the EU, Hong Kong, Korea, and Taiwan. One of the notable features of Chinese external trade is that more than 50 percent of total trade is attributable to trade by foreign firms located in China.

Chinese exports have been growing at more than 20 percent every year since 2001, reaching approximately 593 billion dollars in 2004. The top five destinations of the exports in 2003 were (1) the US, (2) Hong Kong, (3) the EU, (4) Japan, and (5) Korea, and slightly above one-third of the total exports were in the form of processing trade. Analyzing the transactions by product, more than half of the exports were machinery, electric machinery, and electronics; other major export item were textiles and apparel.

Imports have also been growing at more than 20 percent every year since 2001, reaching 561 billion dollars in 2004. The top five origins of Chinese imports in 2003 were (1) Japan, (2) the EU, (3) Taiwan, (4) Korea, and (5) the US. About 55 percent of the total imports were machinery, electronic machinery, and electronics, including parts and components. Among these, imports of high-value-added items such as microelectronic parts and ICs have been significantly increasing. It can be seen in these figures that more and more production sites for high-tech products have been shifting to China.

If we look at Chinese trade policy from the viewpoint of institutional frameworks, there are mainly three aspects to be noted. One is tariff reduction or tariff removal based on the WTO scheme. Adjusting to the WTO standard, China successfully lowered its average import tariff from 12.0 percent to 11.0 percent in 2003, and to 10.4 percent in 2004. In addition, the Chinese government has been making an effort to establish and reform domestic laws and rules in compliance with the WTO scheme. Countries such as Japan, the US, and EU claim, however, that further efforts to secure the rule of law have yet to be made in China.

Another issue is that China has been increasingly filing antidumping suits since it became a WTO member in 2001. The cases are mainly for chemical products and newly developed items such as optical fiber. In most cases, Japan and the US have been included in the targeted countries, and Korea has been included in about half of the suits.

60

The third aspect is China's increasing pursuit of FTAs with various countries and areas. Already in force (as of March 2005) are three Early Harvest programs agreed in the Framework Agreement on Comprehensive Economic Cooperation signed between China and ASEAN in 2004. Based on the Early Harvest programs, tariffs for certain items have already been reduced or removed between China and Thailand in 2003, and between China and Malaysia and Indonesia in 2004. The Early Harvest program between China and the Philippines, scheduled to start in January 2005, has been postponed. There are also a number of cases where China has agreed to start negotiations in the near future. Such cases include FTAs with Singapore, New Zealand, the Gulf Cooperation Council (GCC), and the Southern Africa Customs Union (SACU). China began FTA negotiations with Chile in January 2005.

Finally, if we look at foreign investments in China, the inflow has not increased rapidly since 2001, and only a slight decline in FDI inflow was observed in 2003. This is mainly due to (1) the negative effect of the SARS outbreak, (2) a rebound from the increase in foreign investment in 2002, (3) the effect of a worldwide downturn in direct investment, and (4) the shift of FDI toward other areas in the world due to the recovery of developed economies. The major sources of FDI in 2003 were (1) Hong Kong, (2) the British Virgin Islands, (3) Japan, (4) Korea, and (5) the US. Most of the investment from the British Virgin Islands, the Cayman Islands, and Samoa seems to be by Taiwanese firms taking advantage of tax havens in these areas. Investment by Japanese and Korean companies has rapidly been increasing as Chinese domestic demand has been dramatically expanding.

3-1-2 Relationship with Latin America

International trade between China and Latin American countries is rapidly increasing and China is becoming a major destination for exports and imports for Latin American countries. For instance, in 2003, China was the third largest export destination for both Brazil and Chile.¹⁷ Similarly, China was ranked the fifth largest import partner for Brazil and the fourth for both Chile and Mexico. In contrast, the scale of FDI between China and Latin America is still negligibly small.

¹⁷ See Tables from 2-1-8 through 2-1-10.

Table 3-1-1 indicates China's major export commodities worldwide and to Brazil, Chile, and Mexico in 2002. The values of China's exports to Brazil, Chile, and Mexico are not small. The values of exports to Brazil, Chile, and Mexico are US\$1.4 billion, US\$947 million, and US\$2.7 billion, respectively. However, the value of China's exports to the world is so large – US\$358.6 billion – that the relative importance of Brazil, Chile, and Mexico in China's exports is very small. The shares of exports to Brazil, Chile, and Mexico in China's overall exports are 0.4 percent, 0.3 percent, and 0.8 percent, respectively. The sum of these three countries amounts to only 1.5 percent of China's exports.

Table 3-1-1. China's Major Export Commodity the World, Brazil, Chile, and Mexico, 2002

	(Th	ausands of US dollars and percent)
	Value	(% of World)
World	358,564,694	100.0
Brazil	1,421,669	0.4
Chile	947,309	0.3
Mexico	2,718,451	0.8
Major export commodity to		
World	Value	(% of total exports to the World)
764-Telecommunications equipment and parts	29,402,096	8.2
752-Automatic data processing machines & units	22,266,420	6.2
751-Office machines	15,483,836	4.3
Brazil	Value	(% of total exports to Brazil)
764-Telecommunications equipment and parts	195,884	13.8
323-Briquettes	116,586	8.2
322-Coal, lignite and peat	105,709	7.4
Chile	Value	(% of total exports to Chile)
851-Footwear	114,653	12.1
842-Outer garments, men's, of textile fabrics	92,378	9.8
845-Outer garments and other articles	79,634	8.4
Mexico	Value	(% of total exports to Mexico)
764-Telecommunications equipment and parts	298,952	11.0
751-Office machines	210,252	7.7
752-Automatic data processing machines & units	134,428	4.9

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004)

China's major export commodity to Brazil and Mexico is telecommunication equipment and

			(Tha	ausands of US dolla	rs and percent)
		Value		(% of World)	
World		63	,603,877		100.0
China		2	,733,946		4.3
Korea			963,656		1.5
Major export commodity to					
World		Value		(% of total exports	to the World)
281-Iron ore and concentrates		3	,263,645		5.1
222-Oil seeds and oleaginous fruit		3	,223,890		5.1
792-Aircraft & associated equipment and parts	5	2	,964,959		4.7
China	<i>(</i>)	Value		(% of total exports	to China)
222-Oil seeds and oleaginous fruit	62		882,878		32.3
281-Iron ore and concentrates			651,450		23.8
423-Fixed vegetable oils,soft,crude			152,128		5.6
Note: Commodity classification is based on SITC-Rev	2.(3-	digit level).		

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004) parts (SITC-764), accounting for 13.8 percent of China's exports to Brazil and 11.0 percent of China's exports to Mexico. China's major export commodities to Chile are footwear (SITC-851), men's outer garments (SITC-842), and other outer garments (SITC-845). The shares of footwear, men's outer garments, and other outer garments are 12.1 percent, 9.8 percent, and

Table 3-1-3.	Chile's Major	Export Commodit	v to the World and	China, 2002

	(Th	ausands of US dollars and percent)
	Value	(% of World)
World	18,428,136	100.0
China	1,351,681	7.3
Korea	751,177	4.1
Major export commodity to		
World	Value	(% of total exports to the World)
682-Copper	4,953,355	26.9
287-Ores and concentrates of base metals, n.e.s.	2,070,596	11.2
057-Fruit & nuts	1,413,890	7.7
China	Value	(% of total exports to China)
682-Copper	667,060	49.4
251-Pulp and waste paper	218,569	16.2
287-Ores and concentrates of base metals, n.e.s.	202,487	15.0

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004)

Table 3-1-4. Mexico's Major Export Commodity to the World and China, 2002

	(Th	ausands of US dollars and percent)
	Value	(% of World)
World	169,649,967	100.0
China	617,048	0.4
Korea	164,978	0.1
Major export commodity to		
World	Value	(% of total exports to the World)
781-Passenger motor cars, for transport of passangers	14,858,033	8.8
333-Petrol.oils & crude oils obt.from bitumin.	13,875,927	8.2
764-Telecommunications equipment and parts	10,239,388	6.0
China	Value	(% of total exports to China)
751-Office machines	357,395	57.9
513-Carboxylic acids, & their anhydrides	34,727	5.6
266-Synthetic fibres suitable for spinning	26,672	4.3

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004)

8.4 percent, respectively.

Tables 3-1-2, 3-1-3, and 3-1-4 present Brazil's, Chile's, and Mexico's major export commodities to Korea and China. In Brazil and Chile, the presence of China is relatively large, accounting for 4.3 percent of Brazil's exports and 7.3 percent of Chile's exports. Brazil's major export commodities to China are oil seeds and oleaginous fruit (SITC-222) and iron ore and

concentrates (SITC-281). Oil seeds and oleaginous fruit account for 32.3 percent of Brazil's exports to China while iron ore and concentrates account for 23.8 percent. The sum of these commodities is 56.1 percent. Chile's major export commodity to China is copper (SITC-682), accounting for 49.4 percent of Chile's exports to China.

For Mexico, the relative importance of China is very small, accounting for 0.4 percent of Mexico's total exports. Mexico's major export commodity to China is office machines (SITC-751). The share of office machines in Mexico's exports to China is 57.9 percent.

3-1-3 Specific Impediments

(1) General Issues

Japan PECC (2002) reported several impediments. Some of them are summarized as follows.

Foreign investment entry-related regulations

There are several regulations governing the entry of foreign firms. Further, some of the regulations are regarded as unfair or unclear. For instance, despite the fact that foreign investments in photosensitive materials and cameras are not allowed, investments from certain countries are exempted.

Regulations concerning domestic production ratios and local procurement ratios

Regulations on domestic production and local procurement ratios have been reported. For instance, textile-processing firms have to use domestically produced cotton. It has also been pointed out that the Chinese state/central government sometimes provides "guidance" on the utilization of domestic parts.

Export obligation

Several export balance obligations have been identified. For instance, foreign firms are required to attain a foreign currency balance from the combination of foreign parts procurement and exports.

Withdrawal regulations

Regulations on withdrawal exist as well. Capital reduction is prohibited. Merger periods must be ten years or longer.

Exchange controls

The Chinese government strictly controls remittances of foreign currency. This results in complex and time-consuming remittance procedures

Taxation

The categorization of value-added tax (VAT) and business tax is not clear. Moreover, to refund VAT on export products, complex documentation and procedures are required. It has also been pointed out that tax rules are different across regions because the Chinese government has not developed a centralized tax system. Tax rates are thus sometimes determined by negotiation.

Employment

In China, it is difficult for workers to move from one region to another. This causes several problems. For instance, foreign firms located in outlying regions find it difficult to hire highly skilled workers. Another problem is related to visa acquisition and extension. The procedures for visa extension, resident certification, and work certification are very complicated. Complex procedures have also been identified in the issue of passports for Chinese employees.

(2) Issues related to Latin America

It is interesting that business people do not identify specific impediments for trade and FDI in China. There are two possible reasons. First, the relationship between Latin America and China is based on trade rather than FDI. Therefore, Latin American firms have not faced the problems of doing business in the domestic Chinese market (such as labor affairs).¹⁸

¹⁸ Indeed, many foreign firms found some impediments to doing business in the Chinese market. For more details, see Japan PECC (2002).

Second, the products traded between China and Latin America are not substitutes but rather complements to each other. The major export products from Latin American to China are agricultural and mining products while the major export products from China to Latin America are manufactured products. For instance, Brazil's major export product to China is "crude materials, inedible, except fuels (SITC-2)."¹⁹ On the other hand, China's major export product to Brazil is "machinery and transport equipment (SITC-7)."²⁰ These complementarities seem to work very well at the moment.

However, some firms in Latin America observe many problems in Chinese export products. For instance, some of the exported products are illegally produced, violating intellectual property rights (IPR). Therefore, a large variety of "made in China" counterfeits are found in Latin American countries. These violations of IPR make it difficult for firms that develop original products to compete with other firms, as innovation itself is quite costly. Moreover, violations of IPR take the incentive away from innovative firms to create new products, which results in setbacks in technological progress.

3-1-4 FTA-related Issues and Suggestions to Deepen the Relationship Between China and Latin America

According to Kishida (2004a, b), China has signed FTA framework agreements with ASEAN, Australia, and New Zealand. China also seeks possible FTAs with India, Japan, Korea, Singapore, and South Africa. It is clear that China still mainly focuses on Asia-Pacific countries, but it is also worth noting that China is now seeking bilateral trade partners outside Asia such as South Africa. Although China has not yet begun considering FTAs with Latin American countries, it may be possible to start FTA negotiations with some of those countries.

In negotiating FTA, it is important to address not only trade-related issues but also investmentrelated issues. Although Latin American countries do not find serious impediments to trade in China, several impediments have been identified by the foreign companies that have already entered into the Chinese market, as we discussed in Section 3-1-3. Indeed, discussion on

¹⁹ See Table 2-1-20. ²⁰ See Table 2-1-18.

investment-related issues is thus essential to deepen the economic relationships between China and other countries, including those in Latin America. One of the next steps is thus to develop more favorable environments for investments, solving the problems proposed by Japan PECC (2002). Also, it is clear that strictly upholding IPR is an important step for Chinese firms in doing business in Latin American countries. Since recent FTA negotiations tend to cover not only trade-related issues but also various issues related to FDI and IPR, FTAs can be catalysts to help deepen relations between these two regions.

Finally, we should note that FTAs are not a tool for excluding non-member countries. In other words, FTAs should be regarded as a step toward global free trade. Membership should not be limited to some countries. If membership is closed, trade wars could break out between trading blocs. We expect a "domino" effect: falling trade barriers in one set of countries trigger a fall in the barriers of other countries, which ultimately results in global free trade.²¹

²¹ For "domino" effect, see Baldwin (1996).

3-2 JAPAN

3-2-1 Basic Information

(1) Basic Statistics on Japan

General Indicators²²

i) Population: 127.33 million (July, 2004 est.)

ii) Area: 377,835 km²

iii) GDP -per capita-: 28,200 USD (2003 est.)

	2001	2002	2003	2004 (Q1)	2004 (project ed)
iv) GDP –real growth rate-	0.4	-0.3	2.5	5.6	3.4
v) Export (mil. USD)	403,247	415,862	469,862		
vi) Import (mil. USD)	349,235	336,832	381,528		
vii) Trade balance (mil. USD)	54,012	79,030	88,334		
viii) FDI inflow (mil. USD)	17,402	17,937	18,722		
ix) Current balance (mil. USD)	87,921	112,490	135,928		

Growth of Japanese economy for the three decades from 1960 was remarkable. The average growth rate of each decade was approximately 10 percent in the 1960's, 5 percent in the 70's, and 4 percent in the 80's. Due to the burst of the bubble economy, however, the economy experienced a deep and long recession during the 90's. It has slowly been recovering since 2003, recording 2.5 percent of annual growth in 2003, and 3.4 percent of projected growth in 2004. Japanese economy is currently the second largest in the world after the US. The recovery of the Japanese economy was first observed in the production side, such as the situation concerning domestic employment, and also started to appear in household consumption.²³ One of the major factors of this recent upturn is growth of Chinese economy.

²² Source: (i)(ii)(iii) CIA, (iv)(v)(vi)(vii)(viii) WTO and IMF, (ix) JETRO

²³Getsurei keizai houkoku (getsuji), Naikakufu, January 2003 – December 2004, (<u>http://www5.cao.go.jp/keizai3/getsurei.html</u>)

An increase in worldwide consumption in digital electronic items, is also mentioned as an important element of the economic upturn in 2003 in Japan²⁴.

Japanese exports increased for three straight years, recording 474 billion dollars in 2003. However, it should be noted that the total volume in 2003 is still below the level in 2000, and the growth rate is not very large. As in Table 3-2-1, the top five destinations of Japanese exports are (1) the United States, (2) China, (3) Korea, (4) Taiwan, and (5) Hong Kong in 2003.

It is clear that China has rapidly been increasing its share, while exports to the US, which still remains the largest, has not increased in volume terms, and has decreased in share terms. The major reason of the increase in exports to China was a surge in automobile production and capital investment in China, which increased the Japanese exports of automobile parts and components, precision instruments, and general machinery. The major factor that decreased the exports to the US was also machinery and equipments. More precisely, exports of automobile and IT-related products declined substantially²⁵.

Other than the increasing exports to China, it could be claimed that the trend of Japanese exports, both in terms of the destination and the volume has not been changed much from 1998 to 2003.

²⁴ JETRO boueki toushi hakusho 2004, JETRO, 2004

²⁵ 2004 JETRO White Paper on International Trade and Foreign Direct Investment (Summary),

^{2004,} JETRO (http://www.jetro.go.jp/en/stats/white_paper/004.pdf)

Table 3-2-1: Major Export Partners of Japan

le 3-2-1: Major Exp			()	Villions of US Dollars a	nd Percent)
19	90	19	995	20	000
Country	Value	Country	Value	Country	Value
World	287,678	World	443,047	World	478,17
1 United States	91,121	1 United States	122,034	1 United States	144,00
2 Germany	17,926	2 Korea	31,292	2 Taiwan	36,05
3 Korea	17,500	3 Taiwan	28,969	3 Korea	30,70
4 Taiwan	15,430	4 Hong Kong	27,780	4 China	30,35
5 Hong Kong	13,106	5 Singapore	23,006	5 Hong Kong	27,18
20	01	20	02	20	03
Country	Value	Country	Value	Country	Value
World	403,383	World	416,632	World	473,91
1 United States	122,701	1 United States	120,798	1 United States	117,38
2 China	30,948	2 China	39,958	2 China	57,48
3 Korea	25,292	3 Taiwan	26,202	3 Korea	34,82
4 Taiwan	24,337	4 Korea	25,292	4 Taiwan	31,17
5 Hong Kong	23,352	5 Hong Kong	23,252	5 Hong Kong	29,91

Source:IMF (2004)

Table 3-2-2. Major Import Partners of Japan

	•		1)	Villions of US Dollars a	ind Percent)
1990		1995		2000	
Country	Value	Country	Value	Country	Value
World	253,307	World	336,027	World	379,53
1 United States	52,842	1 United States	75,880	1 United States	72,51
2 Indonesia	12,774	2 China	35,922	2 China	55,15
3 Australia	12,359	3 Korea	17,330	3 Korea	20,45
4 China	12,057	4 Australia	14,514	4 Taiwan	17,96
5 Korea	11,734	5 Taiwan	14,366	5 Indonesia	16,37
2001		2002		2003	
Country	Value	Country	Value	Country	Value
World	349,056	World	337,149	World	383,02
1 United States	63,713	1 China	61,792	1 China	75,55
2 China	57,780	2 United States	58,589	2 United States	59,89
3 Korea	17,221	3 Korea	15,498	3 Korea	17,93
4 Indonesia	14,883	4 Indonesia	14,174	4 Indonesia	16,35
5 Australia	14,385	5 Australia	13,986	5 Australia	15,00

Source:IMF (2004)

Japanese imports in 2003 were approximately 383 billion dollars, and increased for the first time in three years. The increase could be explained partly by the overall economic upturn in Japan, and partly by the newly developed demand for digital consumer electronics.

The top five origins of imports are (1) China, (2) the United States, (3) Korea, (4) Indonesia, and (5) Australia. Although there has not been a drastic change in the overall trend in the Japanese imports in since the late 90's, both in terms of origin and volume, one notable feature is that China has been increasing its presence, and it became the largest import partner in 2002, overtaking the US. The major items imported from China are machinery and equipment, and in 2003, more than 60 percent of the imports from China in this category were related to IT products.

FTAs in East Asia have been expanding since 2000. Japan has also been making a great effort to establish FTAs with countries in and outside of Asia; however, it seems that some other Asian countries, such as China, Korea, or ASEAN countries, have been more successful in reaching the final or partial agreement with other countries. In general, tariff removal in the Japanese agricultural sector is requested by other parties in negotiations with Japan.

So far, Japan has enacted two EPAs: one with Singapore, and the other with Mexico. Japan and Singapore signed EPA in January 2002, and it went into effect in November 2002. The EPA was realized after a relatively short negotiation period, which was mostly because agricultural products were not the issue between these two counties. As a result, tariffs were removed for more than 98 percent of bilateral trade. Japan and Mexico singed the EPA in September 2004, and it was enforced in April 2005. Japan experienced for the first time an FTA negotiation including agricultural products. In the Japan-Mexico FTA negotiation, liberalization of steel and automobile imports by Mexico was also the central issue, and it took them as many as 16 months to sign the agreement. Although it has not been enforced, Japan and the Philippines reached the agreement for the most part in November 2004.

There are also ongoing FTA or EPA negotiations for Japan with Thailand, Malaysia, ASEAN, and Korea. Negotiation with Korea, which started in December 2003, has not seen much progress so far, mainly due to the issues on Japanese agricultural and fishery products. It is also said that the hard-line stance of the current Korean administration, in terms of foreign policies, and the recent strained Korea-Japan relationship might be part of the factor for the delayed FTA negotiation.

Another possible EPA in the future is the one between Japan and Chile. They have just launched a joint study group in January 2005, and especially the private sectors from both sides have great expectation for the future agreement.

Japan has thus made a great effort to establish FTAs and EPAs; however, when we look at their effects on the Japanese economic relations with other countries, it should be noted that agreements between Latin American countries and other Asian countries than Japan could also affect the performance of the Japanese private sector. Particularly when we examine the activities of the manufacturing sector, it is perfectly possible that the FTA made by other Asian countries, such as China or ASEAN countries, can have larger impacts on the performance of

the Japanese private sector, because they have invested actively and expanded regional production networks in East Asia.

The other form of the Japanese economic relationship with other parts of the world is FDI. Both the stock and the flow of incoming investment are very low compared to other developed countries, and the volume has not been increasing much since 2001, despite the declaration of

ible 5-2-5. T Di nows t	onal a capall by			(Millions of US Dolla	ars and Percent)
199	0	199	95	2000	
Country	Value	Country	Value	Country	Value
World	2,788	World	3,811	World	28,274
1 Netherlands	734	1 United States	1,837	1 Japan	10,326
2 United States	664	2 Netherlands	555	2 United States	9,141
3 Japan	350	3 Japan	241	3 Germany	2,530
4 Germany	259	4 Germany	174	4 Swizerland	1,966
5 Canada, Swizerlan	d 142	5 United Kingdom	118	5 Cayman Islands	1,193
200	1	200)2	200)3
Country	Value	Country	Value	Country	Value
World	17,402	World	17,937	World	18,722
1 Netherlands	6,575	1 United States	4,876	1 Japan	3,181
2 United States	5,139	2 Japan	4,462	2 United States	3,090
3 Japan	2,108	3 Netherlands	3,221	3 Netherlands	2,800
4 United Kingdom	1,164	4 Cayman Islands	1,671	4 Cayman Islands	2,586
5 Canada	394	5 Germany	980	5 Bermuda Islands	1,431

Table 3-2-3: FDI flows toward Japan by Five Major Investors

Notes: 1) Inward investment by "Japan" means the investment by foreign affiliates located in Japan. 2) Inward and outward FDI are notification basis.

Source: JETRO

Japan's intention made by Prime Minister Koizumi in 2003 to double FDI in five years.

If we look at a breakdown of the inflow in 2003, investment in manufacturing sector fell by about 35 percent, while investment in non-manufacturing sector grew by slightly less than 30 percent. Within non-manufacturing, investment in finance and insurance contributed, and trade and commerce mainly contributed to the growth. The top five origin of FDI inflows in 2003 were (1) Japan, (2) the United States, (3) Netherlands, (4) Cayman Islands, and (5) Bermuda Islands. The expansion of the presence of Japan, i.e. the investment by foreign affiliates in Japan, and the emergence of Cayman Islands and Bermuda Islands, serving as tax havens, might reflect the concentration of the investment in financial and insurance sector. With respect to the general causes of the sluggish growth of incoming FDI to Japan, we will come back to the topic later in the section 3-2-3, "Issues and Impediments on Latin American Countries' trade and investment in Japan."

Finally, there is a notable recent trend in production in Japan, although it might not necessarily be a direct example of FDI in Japan Since the 1970's, as is well known, the Japanese manufacturing industries had been shifting their production operation overseas, such as ASEAN countries or China, seeking labor with average to high skills and of lower cost. The trend, however, has begun to change. Now Japan has again come to draw attention as a potential production base for advanced products, and some Japanese manufacturing companies have already launched their production sites in Japan. These plants in Japan are for advanced products which usually require advanced or newly-developed components.

There seem to be at least three major reasons for the comeback of Japan as manufacturing base; (1) its relatively large demand for high-end products, (2) ability of local intermediate good supplier to produce advanced and newly-invented parts and components, and (3) high ability of Japanese manufacturing companies and their employees to improve their technology and production process. When a firm considers these advantages to be substantially large, it could launch its plant in Japan, despite its high labor cost. This phenomenon might also be noteworthy, when we discuss the future trend in determinants and the effects of FDI in Japan.

3-2-2 Features of Latin American Countries' Trade and Investment in Japan

(1) FDI

As was described in the previous section, inward FDI to Japan is relatively small, and the volume has not been increased much since 2001. Regarding FDI flows from Latin American countries, there has been almost no investment in Japan, so far. For the discussion on general impediments to FDI in Japan, please refer to Section 3-2-4 (1).

(2) Trade

The major business activity between Japan and Latin America is through trade; however, the volume is not very large as can be observed in Table 3-2-3 and Table 3-2-4. Table 3-2-3 and Table 3-2-4 describe the volume of exports and imports of Japan with three Latin American countries and top five trade partners in each year from 2002 to 2004.

					(Million	s of US Dollars)
Export	20	02	20	003	20	004
	Country	Value	Country	Value	Country	Value
	World	415,862	World	469,862	World	565,039
Latin	Brazil	1,810	Brazil	1,867	Brazil	2,344
American	Chile	495	Chile	573	Chile	721
Countries	Mexico	3,758	Mexico	3,625	Mexico	5,182
Top 5	1 United States	118,550	1 United States	115,412	1 United States	126,839
Countries	2 China	39,866	2 China	57,219	2 China	73,818
	3 Korea	28,547	3 Korea	34,675	3 Korea	44,200
	4 Taiwan	26,202	4 Taiwan	31,174	4 Taiwan	41,959
	5 Hong Kong	25,377	5 Hong Kong	29,784	5 Hong Kong	35,374

Table 3-2-4: Presence of Latin American Countries in Japanese Exports: Comparison with Major Trade Partners of Japan

Source: JETRO

Table 3-2-5: Presence of Latin American Countries in Japanese Imports: Comparison with Major Trade Partners of Japan

					(Million	s of US Dollars)
Import	20	02	20	003	20)04
-	Country	Value	Country	Value	Country	Value
	World	336,832	World	381,528	World	454,669
Latin	Brazil	2,659	Brazil	1,868	Brazil	3,643
American	Chile	2,139	Chile	2,611	Chile	4,174
Countries	Mexico	1,785	Mexico	1,770	Mexico	2,170
Top 5	1 China	61,692	1 China	75,193	1 United States	94,227
Countries	2 United States	57,634	2 United States	58,658	2 China	62,435
	3 Korea	15,450	3 Korea	17,841	3 Korea	22,027
	4 Indonesia	14,174	4 Indonesia	16,358	4 Taiwan	19,430
	5 Australia	13,987	5 Australia	14,989	5 Hong Kong	18,670

Source: JETRO

The major products exported from Japan to Latin American countries is in the categories of "machinery and transport equipment" based on the SITC classification, and it accounts for around 70 percent of the total exports to these three countries. The products in this category include parts and components for industrial machinery, electronic machinery, and automobile.

The products imported to Japan from these three Latin American countries are mainly in the category of "food and live animals chiefly for food" and "crude materials, inedible, except fuels" for primary goods, and "machinery and transport equipment" for manufacturing goods. Food and crude materials in this case mainly indicate fruits, vegetables, and ferrous or non-ferrous metals.

The following describes several features of trade between Japan and each of the three Latin American countries.

Table 3-2-6: Exports toward Latin American Countries: by Product

Millions of US Dollars and Percent)

	Importers					
	Brazil		Chile		Mexico	
	Volume	Share	Volume	Share	Volume	Share
TOTL-Total - All commodities	2,166	100.0	578	100.0	5,645	100.0
5-Chemicals and related products, n.e.s.	223	10.3	24	4.1	185	3.3
6-Manufactured goods classified chiefly by material	188	8.7	56	9.7	670	11.9
7-Machinery and transport equipment	1,451	67.0	455	78.7	4,153	73.6
71-Power generating machinery and equipment	195	9.0	19	3.3	524	9.3
74-General industrial machinery & equipment,a	263	12.1	31	5.3	309	5.5
75-Office machines & automatic data processin	101	4.7	11	1.9	308	5.5
76-Telecommunications & sound recording appar	87	4.0	19	3.3	558	9.9
77-Electrical machinery, apparatus & appliance	305	14.1	14	2.4	1,288	22.8
78-Road vehicles (incl. air cushion vehicles	350	16.1	346	59.8	957	17.0
8-Miscellaneous manufactured articles	214	9.9	33	5.7	523	9.3

Note: Commodity classification is based on SITC.

Source: Statistics Canada (2004).

Table 3-2-7: Imports from Latin American Countries: by Product

Millions of US Dollars and Percent)

	Exporters					
	Brazil		Chile		Mexico	
	Volume	Share	Volume	Share	Volume	Share
TOTL-Total - All commodities	2,265	100.0	2,015	100.0	614	100.0
0-Food and live animals chiefly for food	578	25.5	785	39.0	88	14.4
1-Beverages and tobacco	72	3.2	30	1.5	15	2.4
2-Crude materials, inedible, except fuels	860	38.0	1,064	52.8	56	9.2
3-Mineral fuels, lubricants and related mate	1	0.0	0	0.0	107	17.5
33-Petroleum, petroleum products and related m	1	0.0	0	0.0	107	17.5
5-Chemicals and related products, n.e.s.	136	6.0	25	1.2	52	8.5
6-Manufactured goods classified chiefly by material	470	20.8	100	4.9	50	8.2
7-Machinery and transport equipment	107	4.7	0	0.0	181	29.5
71-Power generating machinery and equipment	15	0.7	0	0.0	24	3.9
74-General industrial machinery & equipment,a	11	0.5	0	0.0	15	2.4
75-Office machines & automatic data processin	1	0.0	0	0.0	57	9.3
76-Telecommunications & sound recording appar	37	1.6	0	0.0	28	4.6
77-Electrical machinery, apparatus & appliance	35	1.5	0	0.0	28	4.6
78-Road vehicles (incl. air cushion vehicles	5	0.2	0	0.0	24	3.9
8-Miscellaneous manufactured articles	22	1.0	1	0.0	57	9.3

Note: Commodity classification is based on SITC.

Source: Statistics Canada (2004).

Trade with Brazil

There are approximately 1.5 million Brazilians of Japanese ancestry residing in Brazil, and about 0.27 million of Brazilian workers, including Japanese ancestry, reside in Japan. In this sense, it is not that Japan and Brazil are totally foreign to each other historically. However, the economic relations between these two countries have not been very vigorous recently.

As indicated in Table 3-2-4, exports to Brazil have not increased much in these three years. The slight increase in 2004 is mainly due to the recovery of Brazilian economy. Almost 70 percent of the exported products to Brazil are in the category of "machinery and transport equipment" in the SITC classification, and it includes final products and parts of automobile and electronic machinery. The largest item in share is parts and components for automobiles. Another feature is that the most part of the Japanese exports are the items related to operations by the Japanese affiliates located in Brazil.

Regarding the Japanese imports from Brazil, the major items are "crude materials, inedible, except fuels," such as steel, aluminum, and other non-ferrous metals. And if we look at the data for the year 2004, items in "food and live animals chiefly for food" also account for 10 percent of total imports. The most part of this category is the import of chicken, and the volume increased by as much as 115 percent, due to the switch of origin to Brazil from Asia because of the bird flu outbreak in Asian countries.

Finally, it is also noteworthy that official visits by the government ministries to each other country have been increasing recently. The official visit by Prime Minister Koizumi to Brazil in 2004 might also be one of the symbolic phenomena of such relations. In 2004, there also realized visits to Japan by several Brazilian ministers and governors, including the Foreign Minister Amorim, the Finance Minister Palocci, and Agriculture Minister Rodrigues. And another event which should not be overlooked is the official visit by President Lula to Japan planned in the end of May 2005.

With respect to economic issues, the followings are said to be the current major interests of the Japanese and Brazilian government.

What seems to be the central interest of the Japanese government is to jointly finance, with the Brazilian government, large projects related to infrastructure development and natural resources in Brazil. This might not appear to be a dramatic commitment; however, this is an important approach for both parties, in that the Japanese private sector heavily relies on natural resources produced in Brazil. And the importance of the Japanese government in securing the supply from Brazil will certainly be increased in the future, given that the price of iron ore has already been gradually rising, reflecting the increasing worldwide demand for Brazilian iron ore; especially, the recent increase in Chinese demand for Brazilian natural resources is remarkable.

The major interests of the Brazilian government are the future possibility of exporting fuel ethanol and beef to Japan. Currently, Japan is hesitant to import these product for different reasons described below.

First, positions of Japan and Brazil in the issues on ethanol can be explained as follows. Brazil, the world's largest ethanol producer, is seeing Japan as a potential market for fuel ethanol, because using fuel ethanol would help Japan to meet the CO₂ emission target designated in the Kyoto Protocol²⁶. This is because sugarcane, the raw material for ethanol, absorbs as much or more carbon dioxide than what is emitted by ethanol combustion, and under the Kyoto Protocol, greenhouse gases emitted from ethanol are considered to be offset by the cultivation of sugarcane. Especially, after the Japanese government approved of a mix of gasoline and three-percent of ethanol as car fuel in 2003, expectation by the Brazilian government to the Japanese market has been increasing. Although they have not reached any agreement on this issue, this example of ethanol might be a great hint for a new type of business to the Japanese private sector.

Trade with Chile

Although total trade volume between Japan and Chile is not substantial (Table 3-2-4 and 3-2-5), it is safe to claim that these two countries have maintained a friendly economic relationship. Not only that Chile is an important trade partner for Japan, as a supplier of some essential primary products, Japan is also significant trade partner. In fact, Japan was Chile's first export partner in Asia, and was the first country in Asia which invested in Chile.

The effort to promote trade between these two countries can also be seen in the active performance of Comite Empresarial Chile-Japon (Japan-Chile Committee for Enterprises). The private sectors of both countries have been meeting regularly to discuss further promotion of trade, since its establishment in 1977. The possibility of the future Japan-Chile FTA has been one of the central topics in the committee.

Exports to Chile are very small, and almost 80 percent of the total volume is "machinery and transport equipment." The breakdown is, from the largest, automobile, bus and truck, general machinery, and electric machinery.

²⁶ The protocol obliges Japan to reduce its emissions of greenhouse gases by at least 6% from 1990 levels between 2008 and 2012.

Imports from Chile mainly consist of two categories: one is "crude materials, inedible, except fuels," and the other is "food and live animals chiefly for food." The most part of the crude materials are non-ferrous metals, such as copper and molybdenum, and the rest are lumber and wood products. Molybdenum, whose demand form all over the world has rapidly increasing, is mined as a byproduct of copper, an in Japan, the demand for molybdenum as a material of electronic parts has been expanding recently. About two thirds of food imported from Chile is marine products and processed marine products(魚介類の加工食品). The rests are meat and fruit, such as pork, cherry, or grape.

Trade with Mexico

Trade activity between Japan and Mexico has rapidly been expanding, and the EPA was finally enforced in April 2005. Increases both in Japanese exports and imports with Mexico in 2004 are claimed to have been due to the expectation for merits brought by the future EPA between these countries.

There is one particular point to be noted, when we look at the data for trade volumes between Japan and Mexico. The export data in Tables 3-2-4 and 3-2-6 are from different sources and the import data in Tables 3-2-5 and 3-2-7 are also from the same set of different sources, JETRO and Statistics Canada, respectively. It can easily be noted that the Japanese imports form Mexico described in Table 3-2-7 (614 million dollars) is extremely smaller than the ones shown in Table 3-2-5 (1,785 million dollars).

This is because the data in Tables 3-2-4 and 3-2-5 are based on the report at origins of exports, while the data in Table 3-2-6s and 3-2-7 are from the report at the destinations. This large difference between the two ways of measuring trade volume can be explained by the trade pattern between Japan and Mexico, where part of the items are traded via ports in the US. If we only look at the data taken at destinations, as in Tables 3-2-6 and 3-2-7, the goods exported from Japan to Mexico through the US are not captured in the data, and it underestimates the actual volume of goods transferred from Japan to Mexico. Thus, the actual flow of goods can be learned more accurately through the data by origin, although the data by destination is used in Tables 3-2-6 and 3-2-7 because of data availability.

The story mentioned about is related to the feature of the Mexican economy which is closely related to the US economy, through NAFTA scheme and by its geographical closeness to the US. For the detailed description of Mexico's trade in relation to the US, please refer to Chapter 4-3, "Mexico".

Japan's exports to Mexico were approximately 5,182 million dollars in 2004. More than 70 percent is in the category of "Machinery and transport equipment," and automobile, parts and components for electric appliances and parts and components for electronics occupy the most of it. Japan's Imports from Mexico were about 2,170 million dollars in 2004. There are mainly four major categories of products imported to Japan from Mexico: (1) "Machinery and transport equipment," (2) Mineral fuels, lubricant and related materials," (3) "Food and live animals chiefly for food," and (4) "Crude materials, inedible, except fuels." Among these categories are automobiles and parts and components for automobile and electric parts, crude oil, pork, salt, avocado, silver, and molybdenum.

3-2-3 Issues and Impediments Regarding Latin American Countries' Trade and Investment in Japan

(1) FTA-related Issues

The following describes the status of the EPA (or would-be EPA) with each of the three Latin American countries. Of these three countries, Japan has enacted an EPA only with Mexico so far. However, it seems that both the Japanese and Latin American private sectors think that they could be benefited by the agreement, and especially the Japanese private sector worries that Japan has (or would have) stark disadvantages by being left behind with the high tariffs when other countries have (or will) signed for the FTA with these three countries.

Japan-Brazil

According to the survey conducted by the Japanese Chamber of Commerce and Industry in Brazil (Câmara de Comércio e Indústria Japonesa do Brasil) in October 2003, it turned out that 56 percent of the responders think that the future FTAA and the FTA between EU and MERCOCUR would bring the comparative disadvantage to the business activities between Japan and Brazil. And 68 percent voted for the necessity of the future Japan-Brazil FTA, at least to make up for the disadvantage which probably would be caused by the FTAA or the EU-Brazil FTA.

In addition to the issue mentioned above, the Japanese private sector expects that so-called *brazil cost* would be lowered by the EPA. *Brazil cost* includes the problems related to custom clearing process and the delay in visa issuing process by the Brazilian government. The EPA would also be welcome by the Brazilian side, in that it would not only increase the total trade volume between Japan and Brazil, but also would make it easier for Brazil to overcome issues related to quarantine and export more fruits and vegetables to Japan.

However, the current situation is that there has been no particular action by either government to move forward regarding the Japan-Brazil EPA, and some points out that the Brazilian government is too much preoccupied by the effort for the FTAA and the EU-Brazil FTA to focus on another FTA/EPA issue at the moment.

Japan-Chile: Joint Study Group Launched in January 2005

The Japanese and Chilean governments have been making an effort for an EPA, through commencing a joint study group of the government, industry, and academia. The study group has been launched in January 2005, based on the agreement in the top-level meeting held in November 2004. The direct merit for the Japanese side is said to be the removal of the current six-percent tariff on automobile exports to Chile. And the merit for the Chilean side would be a removal of the 6-percent average tariff imposed on Chilean exports and a more stable export of the goods that are currently traded between Japan and Chile.

What would be a difficult issue in the negotiation is the importation of fruits and fish from Chile, due to the Japanese government's hesitation. It is seen by the Chilean government as an excessive protection of the Japanese domestic market, while the Japanese government puts an emphasis on the issues in sanitation and quarantine as the reason for their hesitation. Concerning the Japanese domestic fruits and vegetable producers, some claims that their business would not be affected very much by the importation from Chile. Concerning fish and fishery-related products, the Japanese salmon cultivation industry would strongly be against the importation of Chilean cultivated salmon, while the Chilean government claims that there would

be a clear difference between the market for Chilean cultivated salmon, which would be imported as frozen fish, and the market for fresh salmon in Japan.

Comite Empresarial Chile-Japon (Japan-Chile Committee for Enterprises) has also been contributing to the study on the possibility of the future FTA between Japan and Chile, by conducting surveys and making suggestions to the public and private sectors of both countries. They say, however, there are a number of issues to be solved, and attitude toward the future FTA still varies between and within the public and private sector. Another point to be noted regarding the FTA is that Korea-Chile FTA has already been in force, and that China has begun negotiation with Chile in January 2005. Members of the committee worry about the indirect negative effects to the Japanese business which occur because of the absence of the further delay of signing the FTA with Chile.

Japan-Mexico: Enforced in April 2005

Japan and Mexico signed the EPA in September 2004, and it has been enforced in April 2005. One of the notable features of the EPA is that it includes a bilateral framework where improvement of business environment in these two countries could be consulted. One of the major expectations of the Japanese government is to catch up with the US and the EU countries that had already established the FTAs with Mexico and gained comparative advantages.

Although it is too early to evaluate the effect of the EPA on the Japanese economy, it can be concluded from the data and the interviews that both exports and imports have recently increased in expectation of the future expansion of the business relationship between Japan and Mexico. Especially for the Japanese automobile sectors, for both those export cars from Japan and those produce in Mexico, the EPA has some positive effect. Before the EPA, only the automobile producers that have production sites in Mexico were allowed to import final cars of the amount up to 10 percent of Mexican domestic unit sales with no tariff, and MFN tariffs were imposed upon the amount that exceeded the limit. The MFN tariff for final cars is 50 percent, as of January 2004, and 13 to 23 percent for parts and components. With the enforcement of the EPA, Japanese automobile companies became allowed to import final cars with no tariff to the amount of 5 percent of domestic sales in Mexico, regardless of its

possessing production sites in Mexico, which definitely brought positive effects for the Japanese automobile sector.

Tariff removal through the EPA was also beneficial for the Japanese makers of electric appliances and electronics; both for those export parts to Mexico and those import parts and produce final products in Mexico. It should, at the same time, be noted that some Japanese companies that have production sites in Mexico also import parts from other Asian countries. Therefore it is not always the case that the Japan-Mexico EPA equally brings a benefit to all the Japanese-affiliated maquiladora companies in this sector, through tariff removal. However, the overall positive effects of the EPA, including the effort to improve business environment through the consultation mechanism within this scheme, are substantial.

(2) Issues and Impediments on Trade with Latin American countries

The followings are some of the major impediments these three Latin American countries claim that they face in trade with Japan. All these countries are the members of the WTO, and in this sense, they are following the same rules in trading goods and services to each other. However, there are still a number of points that are claimed to be unfair by one of the parties in their bilateral trade activities. Especially, regarding the three issues included in the following, complexity of the tariff system, complexity of trade rules and regulations, and protection of domestic products, have also been pointed out in a survey report prepared by the WTO. Some factors in the following are applicable to trade with other countries as well. It should also be noted that the factors in the following are not based on the comparison with other countries' trade policy.

Complexity of the Tariff System

Not only these Latin American countries, but also the report by the WTO points out the complexity of the Japanese tariff system. One of the sources of the complication is various kind of differentiation in tariff rates, especially in the agricultural sector.

In the report by the Chilean government, two examples are mentioned; tariffs on refined copper and grape. The tariff for refined copper is 15 yen per kilogram in general, with certain

preferential measures in some cases. However, these measures have a cap for developing countries, and no country could have more than 20 percent of market share. The normal tariff would be imposed for the amount exceeding the cap. With respect to the tariff on grape, the rate is from 17 percent between March 1 and October 31. From November 1 through the end of February, the rate is lowered to 7.8 percent. Approximately 70 percent of the grape importation from Chile, a country of the Southern Hemisphere, is in the period of 17-percent tariff. Chile claims that the tariff rate for grape is not only complicated, but also unfair in terms of the rate differences.

Complexity of Trade Rules and Regulations

Norms and technical regulations are what most of the exporters are faced with, especially in the sectors of agriculture and forestry. And they are oftentimes considered as non-tariff barriers by foreign exporters. Especially, foreign exporters claim that Japan is very conservative in the use of rules related to sanitary and phytosanitary measures, and the quarantine procedure. This is also the point mentioned in the report by the WTO.

The types of regulation vary from product to product. For Chilean exporters, for example, protection during transportation, labeling, and detection of a certain moth for cherry exportation are what they think unnecessarily costly. Also they are concerned about fumigation of fresh fruits, which is strictly stipulated by the Ministry of Agriculture, Forestry, and Fisheries (MAFF) but could cause deterioration of fresh products. After the repeated petition by the Chilean exporters, the MAFF eased the regulation, although the exporters claim that there are still a number of products that would not need fumigation, or the current high level of fumigation.

With respect to the trade with Brazil, importation of beef is one of the big issues of debate. It is currently prohibited to import beef from Brazil, due to the outbreak of foot-and-mouth disease in a certain district. Brazilian government has been requesting the Japanese government to lift the ban on beef import at least from the other areas of Brazil. The argument by the Brazil is based on the fact that the US and the EU have already resumed the import of Brazilian beef from the districts that are thought to be safe.

Japan and Brazil have also been debating over importing other perishables from Brazil. For example, after a long debate over quarantine issues, Prime Minister Koizumi agreed on the lift

of the ban on importation of mango, during his visit to Brazil in 2004. Now that the quarantine problem was cleared about Mango, it can easily be guessed that Brazil and also other Latin American agricultural exporters will address its request on export of other perishable goods, including beef, more strongly than before.

It is not that petitions on deregulation submitted by foreign exporters cannot be accepted by the Japanese government, as the ban on Brazilian mango was lifted in 2004. However, it usually takes the Japanese government quite long to make some changes in their trade policies, if it occurs. It took, for instance, 32 years until it permitted to import Brazilian mango, due to a long debate on quarantine issue.

Another particular example of strict regulations is related to the issuer of certain certificates. For example, importation of chemical products to Japan requires a certificate issued in an OECD country to show where the product was developed, unless there is an FTA between Japan and the exporting country. Thus, if the exporter is not an OECD country, it has to bear an extra cost to obtain a proper certificate.

Trade in Services

Foreign firms which provide professional services in Japan are faced with obstacles of very complicated legal and regulatory barriers. For example, foreigners are required to pass an additional examination particularly made for foreigners to serve as an accountant, and there are also very restrictive regulations on medical and educational services. The Chilean government claims, in a report on the Japanese trade and investment policies, that it concerns these regulations not only limit the possibility of the future business opportunity beneficial to the both parties, but also discourage foreign universities to develop a cooperative relationship with the Japanese academia.

Regarding judicial services, there have been gradual deregulation in the Lawyers Law, through the "Reform of the Judicial System" passed in the ordinary Diet in 2003. One of the major features is the change in the field of association between the Japanese and foreign lawyers, and the new system of "Joint Law Firms" is planned to be implemented in 2005.

Protection of Domestic Production

Latin American exporters, as well as the WTO report, indicate that there is an excessive protection of domestic agricultural products in Japan. Most of the points mentioned above are thought to be protective measures by foreign exporters, and there have also been repeated petitions to lift import quota on agricultural products and processed food.

(3) General Issues and Impediments to FDI in Japan

Although there has been almost no FDI in Japan by Latin American countries, it would certainly be useful to review the current situation of FDI inflow toward Japan. The following part briefly reviews the current situation and claims frequently made by foreign affiliates in Japan, regarding FDI. There have been a number of studies on the reasons for stagnation of the Japanese incoming FDI. In this section, however, I will only mention what seem to be the widely shared view on this issue, and introduce some relevant observations.

Overview of FDI inflows toward Japan in 2003

As was described in Section 3-2-1, FDI inflows are very low in Japan, contrary to the government's intention. Some point out that the Japanese small FDI inflows are due to Japan's post-war domestic policies that promoted some targeted domestic industries, based on the specific national industrial structure goals.

"FDI inflows in 2003 were 18,722 million US dollars, increasing by 4.4 percent from the previous year. The top five origin of FDI inflows in 2003 were (1) Japan, (2) the United States, (3) Netherlands, (4) Cayman Islands, and (5) Bermuda Islands. The expansion of the presence of Japan, i.e. the investment by foreign affiliates in Japan, and the emergence of Cayman Islands and Bermuda Islands, serving as tax havens, reflect the concentration of the investment in financial and insurance sector, and FDI inflows in the form of M&As have been increasing. If we look at the breakdown of the FDI flows to Japan, the volume in the non-manufacturing sector increased by 28.8 percent from the previous year, while that of the manufacturing sector decreased by 36.1 percent. More than 60 percent of the FDI in non-manufacturing sector in 2003 was in financial and insurance sector, and it recorded 69.7 percent growth.

M&A Stigma in the Japanese Society

FDI among developed countries occurs mainly through means of M&A. This is mainly because of its merits of short investment gestation period and low initial costs and risks. For instance, since the mid 1980's, the UK government has committed to a laissez-faire policy in terms of cross-border M&As in the UK, despite strong opposition by the British private sector. As a result of the laissez-faire policy, M&As by foreign capitals, especially in the financial, automobile, and computer sectors, rapidly increased in the UK, and the employment and exports increased.

However, there is a tendency in the Japanese society, both in the public and private sectors, to consider M&A as something undesirable. And generally greenfield investment is thought to be better than M&A, and that mainly greenfield investment should be approved by the government However, there is a tendency in the Japanese society to consider M&A as an undesirable business conduct. Although recently the perception of M&A has been changing and it has gradually becoming accepted in the society, distaste for cross-border M&A still remains, and as far as FDI is concerned, it is sometimes understood that greenfield investment is more beneficial to the Japanese economy compared to M&A, particularly in terms of domestic employment.

One of the reasons for this stereotypical view is that they think, that through cross-border M&As, foreign affiliates acquiring Japanese firms might drastically restructure operations by cutting employment. They fear that the decrease of employment would be more than the results of attrition, bankruptcy, and what the Japanese acquirers would do. Another reason for the M&A stigma is that some believe that only a greenfield investment could yield more employment, because they would, by definition, introduce new plants and new workers.

Foreign investors claim that if the Japanese government has any intention to increase FDI inflow to Japan, promoting M&A is the most natural and effective way to achieve the goal. Observing the current situation, where the Japanese government desires to increase FDI inflows on the one hand and takes almost no action to accommodate cross-border M&As on the other hand, foreign companies are puzzled about the true intention of the Japanese government. They even say that the Japanese government is "not serious," due to the contradiction.

Norms, Regulations, and Legal System

It is difficult for foreign firms to utilize various financial transactions under the current Commercial Law. There are a number of specific problems that the foreign affiliates are faced with, but the bottom line is that the current Japanese Commercial law is only partly applicable to the operation by foreign capitals, and as a result, they are unable to fully participate in business transaction in Japan. Another notable legal problem is the vague demarcation between the Commercial Law and the Securities and Exchange Law. For example, stock swap and IPO are the major transactions that the foreign firms would like to execute and the current Japanese legal system does not allow them to do. This prevents foreign capitals from pursuing M&As in Japan, and thus they strongly request that this point should be amended soon. And they believe that it would facilitate their operations and would increase the Japanese FDI inflow.

What is possible for foreign firms under the current law is to enter the market as a new player. Only in this case, the firm is treated in the same manner as Japanese firms based on the Commercial Law. However, foreign firms are not particularly interested in entering market as a new comer: they are usually in the situation where they have substantial money but do not have strong connections or accumulation of know-how within the Japanese domestic market.

Foreign firms also point out that one of the major factors preventing the laws and regulations from being amended is the *tatewari* (vertical) bureaucratic system. Especially the conflicts in attitudes among the Financial Supervisory Agency (FSA), the Ministry of Finance (MOF), and the Ministry of Justice (MOJ). As long as there is this kind of conflict within bureaucracy, it would be very difficult to pursue the policies made in the legislature.

Immature Capital Market

Some claim that there is no free and reliable capital market in Japan. Price setting is not fully based on market mechanism for various sectors, especially in financial services, and the liquidity is very low. In addition, lack of concept of corporate governance and lack of an information disclosure system make it difficult for foreign firms to participate in business activities in Japan. Foreign firms located in Japan seem to find it rather serious that the Financial Supervisory Agency (FSA) of Japan is not willing to face with the structural problem of the Japanese financial system and conduct a reform to establish a freer market mechanism.

3-2-4 Japanese Government's Effort to Promote Trade and FDI

<u>Trade</u>

With respect to trade in goods, the Japanese government has been making an effort to accommodate transactions, by reacting to each of the petitions submitted by the foreign exporters. A small set of examples is included in Section 3-2-3 (2). Japan's major trade partners claim, however, that these efforts by the Japanese government are not enough.

Regarding trade in services, the Japanese government has been taking measures to improve environments in the field of service trade, too; for example, deregulation of the Lawyers Law. For quite some time, there had been a strong request from foreign lawyers and the relevant private companies in Japan for freedom of association between Japanese lawyers and foreign attorneys. Under the original regulations by the Japan Federation of Bar Association (*Nichibenren*), this kind of association was not possible, except in some special joint enterprise system, where they could work together. Due to these strict regulations and the limits for their activities, the number of foreign lawyers in Japan is extremely small, compared to other countries where international business activities are developed.

Corresponding to the demand, the Koizumi administration launched the Judicial Reform Council (JRC) in 2001, and since then, the Reform of Judicial System has gradually been progressing. And finally in 2005, changes in the Lawyers Law will be implemented, so that foreign and the Japanese lawyers will have more freedom in association. Although foreign firms and lawyers claim that the reform has been very slow and it is not sufficient, this reform should still be appreciated, in that the Lawyers law was revised for the first time in fifty-four years.

<u>FDI</u>

A recent notable event related to the Japanese FDI promotion policy is the Prime Minister Koizumi's announcement in January 2003. He officially declared the government's commitment to double the total stock of Japanese inward FDI in five years, and various promotion measures for inward FDI started to be implemented in March 2005, based on the Japan Investment Council (JIC) Expert Committee Report and the "Program for the Promotion of Foreign Direct Investment into Japan."

More than 70 items, including suggestions, plans, and policies to be implemented, are included

in the "Program for the Promotion of Foreign Direct Investment into Japan, and they are categorized in five core concepts as follows;

- (1) Dissemination of information within Japan and abroad
- (2) Improvements in the business environment
- (3) Reviewing administrative procedures
- (4) Create favorable employment and living environments
- (5) Improve local and national structures and systems

The main issue in the first category is on public relations of opportunities and the importance of FDI in Japan toward people inside and outside Japan, and the second category shows Japan's intention to "examine" the possibility of improvements in legal and taxation systems to facilitate cross-border M&A. This includes "examinations" of the diverse ways of settlement in M&A procedure. This is the only discussion that focuses on cross-border M&A in Japan. The category also emphasizes enhancement of transparency in the capital market system and facilitation of procedure in starting new business, including tax incentives for some particular sectors. The third category promises the future establishment of easier access to information related to investment opportunity and to consultation for the difficulties the company is faced with. The fourth category elaborates how the public sectors could further improve working and living environment for foreign workers in Japan. And finally, the last part suggests the closer relationship between the central and local governments in promoting FDI.

3-2-5 Suggestions to Strengthen Business Activities between Japan and Latin America

(1) Trade

The Japanese government has been making great effort to achieve free trade and to facilitate trade with countries all over the world, based on the WTO rules and through signing FTAs. Further progress in signing EPAs or FTAs is strongly expected, and improvements in bilateral relations with China and Korea is also an important factor for the Japanese economy.

(2) FDI

As was emphasized above, the Japanese government needs to further promote FDI in general. This is not only to meet the target that Prime Minister Koizumi set in his remarks in 2003, but to raise productivity by acquiring know-how of business and technology through FDI. What is typically requested to the Japanese government by the foreign private firms is to accommodate foreign investment, through further deregulation in relation to the commercial law, the effort to reduce the negative image of M&A, and establishment of free capital market.

<u>M&A Stigma in the Japanese Society</u>

Foreigners operating business in Japan claim that the Japanese government should make greater effort to eradicate a negative image of M&A from the Japanese society. Foreign firms also claim that the Japanese government should make a clearer announcement regarding their intention and the way to promote inward FDI. And it should more clearly publicize that the most effective and feasible means of FDI among developed countries is M&A, rather than greenfield investments. They claim that it is also necessary that the Japanese government analyze and explain to the public that M&A does not always mean cutoff of employment. The current situation, where the government has an intention to increase inward FDI but is hesitant to accommodate cross-border M&As, does not do any good to the Japanese economy. And if it prefers to promote more greenfield investment, foreign business people think that the government should explicitly announce their plan to the public, and implement promotion measures particularly for greenfield investment, although it would not be as beneficial to the Japanese economy as investments through M&A.

In addition, the Japanese government should provide more information on the effects of FDI, based on reliable analysis of data. This could contribute to counter existing negative images of M&A in the society. For example, according to the report by the American Chamber of Commerce in Japan (ACCJ), an analysis by JETRO reveals that 599 new businesses were launched by foreign capitals from 1995 to 2000, and the average revenue growth of such foreign companies is higher than that of Japanese companies. And potential foreign acquirers emphasize that the Japanese people should understand that the temporary cutoff of workers after M&As by foreign companies could be a better result, compared to the bankruptcy the company would go through without the takeover.

Some suggested during the interviews that a TV program which vividly describes and advertises cross-border business activities in Japan, including M&As by foreign capitals, might also contribute to eradicate the negative image of M&As that the Japanese people have.

Norms, Regulations, and Legal System

Government should further implement deregulation and privatization measures. Although certain sectors have gradually been deregulated, foreign firms emphasize that deregulation and privatization do not have strong impacts on FDI flows, unless they include so-called "protected" sectors, such as healthcare services, education, and other publicly-operated areas.

Another central request by foreign firms is the further reform of the Commercial Law. As was mentioned in Section 3-2-3, "Issues and Impediments on Latin American Countries' trade and investment in Japan," it is necessary to implement more consistent and comprehensive law, which enables foreign firms to participate in various financial transactions related to M&A. It is also crucial to clarify the demarcation of the Commercial Law and the Securities and Exchange Law. In this way, foreign corporations could for the first time manage their operations in Japan, following and being protected by a proper legal system, which no doubt would increase FDI toward Japan and be beneficial to the Japanese economy. In addition, there are other parts to be deregulated to facilitate consultations by foreign firms regarding their business operations. As mentioned in the section for service trade impediments, further deregulation in certification for lawyers and accountants are among them.

Immature Capital Market

Suggestions for this issue are closely related to the arguments in the above section "Norms, Regulations, and Legal System." Foreign business people in Japan claim that a drastic government reform is necessary for Japan to achieve truly free capital market.

They strongly suggest that the Japanese government conduct careful studies on corporate governance and capital market. For example, capital market in the US has highly been deregulated, and the Securities and Exchange Commission (SEC) is playing an important role in conducting analyses and making suggestions on possibilities of further utilizing the market system. They also point out that what is making it possible for the US SEC to make such contribution is its independence in terms of research, relatively large scale of budget, and the large number of staffs.

What could be a Japanese counterpart of the US SEC is the Business Value Study Group, established by the METI in September 2004, for the purpose of the legal adjustment and modernization to deal with increasing cases of M&A in Japan. However, it is a smaller institution compared to the US SEC with the smaller budget, and what foreigners point out to be the largest caveat is that discussions within the study group are rather defensive against M&A and they do not seem to contribute to the future FDI or M&A in Japan. Thus, improvement of the functions of such institutions as the Business Value Study Group is one thing the Japanese government could do.

However, it is also pointed out that this kind of improvement would hard to be achieved due to Japan's *tatewari* (vertical) bureaucratism. In the above case, for example, nobody could demand that the METI should work on the reform of the Business Value Study Group, because the METI is not responsible for nurturing capital market. Then the question is who is responsible for it: the answer is the FSA. However, discussions on corporate value and corporate governance are not within the territory of the FSA. Thus, one of the most important issues has been put aside so far.

This is another reason why foreign firms in Japan strongly request reform of the government structure. Of course, it is not only government that is responsible for the immaturity of capital market and the concept of corporate governance in Japan. The private sector as well should establish the internal monitoring mechanism for corporate value, such as the position of CFO. This kind of internationalization of corporate system would contribute to its business activities and to facilitation of inward FDI through M&As.

Other Suggestions

Another effort possibly made by the public sector is to make maximum use of such opportunities as official meetings by the top government officials from these two regions, in order to promote economic activities. What has become clearer in the interviews is that the private sector pays close attention to those governmental meetings. Especially in the case of official meetings between Asian and Latin American delegates, it seems that the private firms in both regions pay greater attention to what is discussed and announced in the meetings, mainly because business relationship between these two regions have not sufficiently been developed, and any kind of positive announcement by the governmental delegates could be a sign for the larger commitment to the economic activities by the two governments, which would back up the future activities of the private sectors.

For instance, the official visit to Japan by Brazilian President Lula in May might have been the closest example for the situation described above. Before the President's visit, it was widely presumed that President Lula would probably raise the issue regarding fuel ethanol during his visit to Japan, while the Japanese government had not shown particularly positive attitude in introducing it, for several reasons mentioned in the previous sections. However, in the interviews conducted in this project, the private sectors, whether or not it is related to oil or sugarcane industries, claimed that the Japanese government should at least show the will of their future commitment to business promotion between Japan and Brazil. By the end of the president's visit, various forms of future cooperation in business, tourism, and energy resources, has been confirmed between the two countries, including several financial offers through JBIC (Japan Bank for International Cooperation). Although it is still too early to evaluate the achievement of this meeting, this could be one factor that contributes to avoid further downturn of business relationship between these two countries would be avoided. Thus, it is very important for the public sector to pay attention not only to what they can promise to make commitments in the near future, but also to what kind of announcement they should make to induce further private investments.

Another point emphasized in the interviews that major agencies promoting investment in Japan should pay more attention to business opportunities in local areas, in cooperation with the local governments. Although there would be a number of issues to be solved in the relations between central and local governments, including debates regarding local allocation tax and other political issues, it might still be beneficial to the Japanese economy to strengthen the autonomy and authority of local governments and attract more foreign investment.

Finally, regardless of the possibility and feasibility, foreign business people in Japan also point out that it is necessary to reinforce the Japanese Cabinet, in order for its industrial and judicial policies to actually be implemented. In this way, they suggest, that the ministries would have to solve the conflicts among them and overcome the *tatewari* (vertical) bureaucratic system, which for the first time would enable the Japanese government to establish a consistent legal and institutional environment for foreign firms.

³² Sources: (i)(ii)(iii)(v)(vi)(vii)(viii)(ix) JETRO, (iv) Bank of Korea

3-3 KOREA (REPUBLIC OF KOREA)

3-3-1 Basic Information

(1) Basic Statistics on Korea³²

i) Population: 47.93 million (2003 est.)

ii) Area: 99,585 km²

iii) GDP -per capita-: 12,499 USD (2003)

	2001	2002	2003	2004
iv) GDP –real growth rate-	3.8	7.0	3.1	5.0
v) Export (mil. USD)	150,439	162,471	193,817	
vi) Import (mil. USD)	141,098	152,126	178,827	
vii) Trade balance (mil. USD)	13,488	14,777.4	21,952	
viii) FDI inflow (mil. USD)	11,292	9,111	6,468	
ix) Current balance (mil. USD)	8,032.6	5,393.9	11,949.5	

The GDP growth rate was 5.0 percent in 2004 and is expected to be 4.5 percent in 2005^{33} . The high growth rate in 2004 was mainly due to the growth in exports (21.1 percent) that was largely driven by external demand, mainly by China (including Hong Kong). While strong external demand supports the growth of the Korean economy, domestic consumption has been declining since 2003 due to the household debt overhang. The growth of private consumption was -1.4 percent in 2003 and -0.5 percent in 2004. Maintaining Korea's economic growth in future thus depends on the resiliency of export growth and a rebound in private consumption.

Total exports were 193,817 million dollars in 2003, recording approximately 19.3 percent growth from the previous year. Among the major factors for this large growth are the increase in exports toward China, and the upturn in external demand for IT-related products, whose share is the largest in Korea's total exports (40 percent in 2003). What is notable here is that China has been growing as an export destination for Korea every year; finally in 2003, it overtook the US and became the largest export partner. China's share was 18.1 percent and that of the US, the second largest export partner, was 17.7 percent in 2003.

³³ OECD (2005).

Total imports were 178,827 million dollars in 2003, marking annual growth of approximately 17.6 percent. As in the previous year, the major import products were electrical and electronics equipment. This is mainly due to the increase in the import of parts for the production of IT-related products, whose export share has rapidly been increasing. As is also described in the following section, the volume of trade between Korea and Latin American countries is still very small.

The FTA between Korea and Chile went into force in April 2004, and a positive impact has already been seen in the increase in automobile exports to Chile. In addition to the Korea-Chile FTA, the Korean government confirmed, in the Roadmap for FTA Promotion announced in August 2003, that it would make further efforts to promote FTAs with Singapore, ASEAN, and Mexico in the short term, and with the US, the EU, Japan, and China in the medium to long term. As of March 2005, Korea is in the negotiation stage with Japan, Singapore, ASEAN, and the EFTA, and it is in the pre-negotiation stage with the US. Also in May 2004, Korea agreed with Mexico to establish a joint research group on the FTA between the two countries.

FDI flows into Korea have been declining for four successive years. Among the major factors for the decline is said to be President Roh's laborer-friendly solutions for a number of labormanagement-related issues. MNEs have recently become more cautious in their investment decisions. However, FDI from the EU increased by 84.1 percent in 2003, accounting for approximately 50 percent of the FDI flows into Korea. This increase is mainly due to the M&A activities of certain European companies. FDI from Japan and the US declined in 2003, although they still remain among the top five investors in Korea. As is also mentioned in the following section, there is little direct investment from Latin American countries.

With regard to the outflows, the largest FDI partner for Korea is China. In 2003, FDI toward China was 1,344 million US dollars, which marked a 50.0 percent annual growth.

3-3-2 Relations with Latin America

Table 3-3-1 indicates Korea's major export commodities to the world, Brazil, Chile, and Mexico in 2002. Korea's exports to Brazil, Chile, and Mexico were relatively substantial. The values of

exports to Brazil, Chile, and Mexico were 78 million, 12 million, and 38 million US dollars, respectively while the value of exports to the world was 1.1 billion US dollars. Therefore, the shares of exports to Brazil, Chile, and Mexico in Korea's total exports were 6.8 percent, 1.0 percent, and 3.3 percent, respectively. The sum of these three countries' shares exceeds 10 percent of Korea's exports.

		usands of US dollars and percent)	
	Value		(% of World)
World		1,147,552	100.0
Brazil		78,337	6.8
Chile		11,777	1.0
Mexico		37,561	3.3
Major export commodity to			
World	Value		(% of total exports to the World)
036-Crustaceans and molluscs		235,081	20.5
842-Outer garments, men's, of textile fabrics		90,514	7.9
334-Petroleum products, refined		48,177	4.2
Brazil	Value		(% of total exports to Brazil)
334-Petroleum products, refined		19,814	25.3
764-Telecommunications equipment and parts		18,106	23.1
752-Automatic data processing machines & units		5,297	6.8
Chile	Value		(% of total exports to Chile)
334-Petroleum products, refined		6,821	57.9
678-Tubes, pipes and fittings, of iron or steel		1,208	10.3
583-Polymerization and copolymerization products		1,142	9.7
Mexico	Value		(% of total exports to Mexico)
776-Thermionic, cold & photo-cathode valves		5,854	15.6
764-Telecommunications equipment and parts		4,648	12.4
898-Musical instruments, parts and accessories		3,645	9.7

Table 3-3-1. Korea's Major Export Commodity to the World, Brazil, Chile, and Mexico, 2002

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004)

Korea's major export commodity to Brazil and Chile is refined petroleum products (SITC-334), accounting for 25.3 percent of Korea's exports to Brazil and 57.9 percent of Korea's exports to Chile, respectively. Korea's major export commodities to Mexico are thermionic, cold & photo-cathode valves (SITC-776) and telecommunications equipment and parts (SITC-764). The shares of thermionic, cold & photo-cathode valves total 15.6 percent of Korea's exports to Mexico while those of telecommunications equipment and parts total 12.4 percent.

Tables 3-3-2, 3-3-3, and 3-3-4 present Brazil's, Chile's, and Mexico's major export commodities to Korea and China, respectively. In Brazil and Mexico, the presence of Korea is very small, accounting for only 1.5 percent of Brazil's exports and only 0.1 percent of Mexico's exports.

Brazil's major export commodity to Korea is ingots and other primary forms of iron (SITC-672), accounting for 23.1 percent of total Brazil's exports to Korea. Mexico's major export commodities to Korea are television receivers (SITC-761) and telecommunications equipment and parts (SITC-764). Television receivers account for 18.6 percent of Brazil's exports to Korea, while telecommunications equipment and parts account for 9.3 percent.

 Table 3-3-2. Brazil's Major Export Commodity to the World and Korea, 2002

	(Thausands of US dollars and		
	Value	(% of World)	
World	63,603,877	100.0	
China	2,733,946	4.3	
Korea	963,656	1.5	
Major export commodity to			
World	Value	(% of total exports to the World)	
281-Iron ore and concentrates	3,263,645	5.1	
222-Oil seeds and oleaginous fruit	3,223,890	5.1	
792-Aircraft & associated equipment and parts	2,964,959	4.7	
Korea	Value	(% of total exports to Korea)	
672-Ingots and other primary forms of iron	222,454	23.1	
281-Iron ore and concentrates	193,908	20.1	
081-Feed. stuff for animals	108,012	11.2	

Note: Commodity classification is based on SITC-Rev 2. (3-digit level). Source: Statistics Canada (2004)

	(Thausands of US dollars and pe			
	Value	(% of World)		
World	18,428,136	100.0		
China	1,351,681	7.3		
Korea	751,177	4.1		
Major export commodity to				
World	Value	(% of total exports to the World)		
682-Copper	4,953,355	26.9		
287-Ores and concentrates of base metals, n.e.s.	2,070,596	11.2		
057-Fruit & nuts	1,413,890	7.7		
Korea	Value	(% of total exports to Korea)		
682-Copper	426,460	56.8		
287-Ores and concentrates of base metals, n.e.s.	143,530	19.1		
251-Pulp and waste paper	70,280	9.4		

Table 3-3-3. Chile's Major Export Commodity to the World and Korea, 2002

Note: Commodity classification is based on SITC-Rev 2. (3-digit level).

Source: Statistics Canada (2004)

Table 3-3-4. Mexico's Major Export Commodity to the World and Korea, 2002

	(Thausands of US dollars a		
	Value	(% of World)	
World	169,649,967	100.0	
China	617,048	0.4	
Korea	164,978	0.1	
Major export commodity to			
World	Value	(% of total exports to the World)	
781-Passenger motor cars, for transport of passanger	14,858,033	8.8	
333-Petrol.oils & crude oils obt.from bitumin.	13,875,927	8.2	
764-Telecommunications equipment and parts	10,239,388	6.0	
Korea	Value	(% of total exports to Korea)	
761-Television receivers	30,708	18.6	
764-Telecommunications equipment and parts	15,419	9.3	
784-Parts & accessories	14,387	8.7	

Note: Commodity classification is based on SITC-Rev 2. (3-digit level).

Source: Statistics Canada (2004)

In Chile, on the other hand, the presence of Korea is relatively large, accounting for 4.1 percent of Chile's total exports. The major export commodities of Chile to Korea are copper (SITC-682) and ores and concentrates of base metals (SITC-287). Copper accounts for 56.8 percent of Chile's exports to Korea. Ores and concentrates of base metals account for 19.1 percent. Indeed, these two commodities are 75.9 percent of Chile's exports to Korea.

Some Korean firms are increasing their presence in Latin American countries. In Mexico, Samsung and L.G. are expanding their production as an exporting platform to the United States.

In Chile, Korean automobiles such as Hyundai are becoming popular. In Brazil, FDI from Korea is rapidly increasing in the electric machinery sector.

The expansion of the activity of Korean firms is closely related to the FTA. Mexico was chosen as an exporting platform to the United States because of NAFTA. Similarly, Brazil is regarded as an exporting platform to other Mercado Comun del Sur (MERCOSUR) countries. On the other hand, the rapid increase of Korean automobile exports to Chile is largely attributed to the Korea-Chile FTA.

3-3-3 Specific Impediments

(1) General Issues

Japan PECC (2002) pointed out several impediments in Korea. Some of them are summarized as follows.

Export requirements

Foreign firms are often not allowed to sell products in the domestic market (foreign firms must export the products). For instance, a Japanese fastener firm was obliged to export all goods produced in Korea.

Monetary transfer regulations

If more than half of the equity share of a firm is owned by a Japanese firm, the affiliate is regarded as the same firm as the Japanese parent firm. This thus implies that royalty transfers are not permitted.

Exchange controls and trade financing

There are restrictions on the conversion of foreign currency to/from Korean Won. Moreover, foreign firms are not able to receive export financing for export business.

(2) Issues related to Latin America

For Latin American firms, the Korean market is not a place for investment but a destination for exports. Since only a few Latin American firms have entered the Korean market, the impediments for Latin American firms are concentrated in trade-related aspects.

Many business people believed that there still exist tariff barriers for most agricultural products and some manufacturing products. In addition, business people noted several non-tariff measures that constitute major impediments in Korea. For instance, the enforcement of sanitary conditions is sometimes unclear. Contracts without written documentation by the government are not always kept on file and are sometimes unclear, which makes it difficult for Latin American firms to do business in Korea. Latin American firms sometimes found that legal documents and information on trade and FDI were not always provided in English.

3-3-4 FTA-related Issues and Suggestions to Deepen Relations Between Korea and Latin America

The Roh administration is making a great effort to develop Korea as the hub of logistics and business in North East Asia. For the purpose of promoting further FDI in this area, the Korean government designated three areas – Inchon, Busan/Jinhae, and Gwangyang – as Free Economic Zones in 2003. Foreign companies located in any of these three areas are eligible for various preferential policies, such as tax exemptions (partial or full) and rent waivers (partial or full). There are also facilities such as schools and hospitals particularly designed to accommodate foreigners living in these areas. The Korean government is also planning to build new ports in Busan and Gwangyang by 2011, as the competition to attract large ships has been intensifying in North East Asia.

The results from some interviews in Korea and Latin American countries suggest that, with a small degree of effort, the Korean market could be made a more attractive place for Latin American firms. For instance, providing all legal documentation and information on trade in English is a possible first step. Similarly, Latin American firms might export more easily if the Korean government were to prepare written documentation of contracts more actively.

Latin American firms need some effort to expand their activities in Korea. Latin America is not a familiar region for Korean people since Latin America is far from Korea. Therefore, to make Latin American culture as well as products popular seems to be a necessary step for Latin American firms to expand their business in Korea. For instance, exhibitions of Latin American products in Korean cities would be one possible approach.

The government and government-related agencies can contribute to deeper understanding between the two regions through the Business Council. In other words, the two regions should point out the particular facets that make each attractive to the other.

To establish FTAs is one of the most powerful solutions to deepen the relations between Korea and Latin America, although some sectors such as agriculture are against FTAs. According to Kishida (2004a, b), Korea has completed FTA negotiations with Chile and now is examining the possibility of FTAs with ASEAN, Japan, and Singapore. It is clear that Korea is currently focused on East and Southeast Asian countries, but it is also worth noting that the first country with which Korea completed FTA negotiations was not an East and Southeast Asian country but one of the Latin American countries. Thus, there is some possibility of expanding bilateral Korea FTAs with other Latin American countries.

In negotiating FTAs, it is important to address not only trade-related issues but also other issues such as FDI. As we discussed in Section 3-3-3, several impediments have been identified by the foreign companies that have already entered Korea. Indeed, the discussion on investment-related issues is essential to deepen economic relations between Korea and other countries, including Latin America. One of the next steps is thus to develop more favorable environments for investments, solving the problems proposed by Japan PECC (2002) so that FTAs can be catalysts to help deepen the relations between these two regions.

Finally, we should note that FTAs are not a tool for excluding non-member countries. In other words, FTAs should be regarded as a step toward global free trade. Membership should not be limited only to certain countries. If the membership is closed, trade wars could break out between trading blocs. We expect a "domino" effect: falling trade barriers in one set of countries

will trigger a fall in the barriers of other countries, which ultimately will result in global free trade.³⁴

³⁴ For the "domino" effect, see Baldwin (1996).

3-4 THAILAND (KINGDOM OF THAILAND)

3-4-1 Basic Information

(1) Basic Statistics on Thailand³⁵

i) Population: 63.360 million (2003 est.)

ii) Area: 513,115 km²

iii) GDP -per capita-: 2,230 USD (2003)

	2001	2002	2003	2004
iv) GDP –real growth rate-	2.1	5.4	6.8	6.1
v) Export (mil. USD)	65,235	68,156	80,049	
vi) Import (mil. USD)	61,754	64,243	75,018	
vii) Trade balance (mil. USD)	2,494	2,739	3,759	
viii) FDI inflow (mil. USD)	3,873	1,023	1,882	
ix) Current balance (mil. USD)	6,250	7,080	7,965	

Thailand has a free-enterprise economy and foreign investment has been one of the major drivers of its economic development. The government of Thailand implemented intensive industrial policies during the 1970s to promote foreign investment, and by the 1980s, there was a great amount of FDI flowing into Thailand. Strongly supported by FDI and the upturn in exporting industries, the economy experienced significant growth until it was faced with the Asian financial crisis of 1997. Due to the crisis, the real GDP growth rate hit bottom at -10.4 percent in 1998.

In 1999, the economy started to recover, mainly due to external demand. Since then, domestic consumption has also been recovering and the relatively large growth rate in 2002 has reportedly been boosted both by external and domestic demand. In 2002, private consumption and investment grew by 4.7 and 13.3 percent, respectively. With stronger consumer confidence, an increase in exports, and an expansion of private investment as the main supporting factors for private consumption, real GDP growth in 2003 was 6.8 percent, despite a sluggish world economy. The main factors that boosted private consumption were a low interest rate

³⁵ Source: JETRO

environment and the rise in incomes in the agricultural sector. The decline in GDP growth in 2004 was mainly due to increases in oil prices, a downturn in the agricultural sector, and the avian flu outbreak.

In 2003, both exports and imports increased. Total exports in 2003 were approximately 80 billion US dollars, representing an annual growth of 17.4 percent. Although the increase in exports toward the US, the largest export partner, was modest in 2003, exports to Japan and the EU increased significantly due to the recovery in their economies. It is also noteworthy that there was a positive impact from the tariff reductions stipulated in the FTA with China³⁶ and ASEAN countries; precisely, exports to China increased by 60.1 percent and exports to ASEAN countries increased by 21.9 percent.

As can be seen in Table 3-4-1, the top three export partners of Thailand – the United States, Japan, and Singapore – have not changed since 1990, and their shares have remained essentially the same although the total volume itself has been gradually growing. By 2003, the export volume had become far larger than the pre-crisis level.

 Table 3-4-5 Trade and FDI-related problems and requests raised by Japanese firms in Thailand

Impediments

- 1 A wide range of restrictions on the entry of foreign capital still exist in both the manufacturing and service sectors, despite the government's implementation of deregulation policies
- 2 Complications and delays in port entry procedures
- 3 High tariffs
- 4 Assessment and application of tariffs are sometimes arbitrary.
- 5 Abuse of anti-dumping measures on steel products
- 6 Strict regulation of foreign exchange
- 7 Taxation at the source for international money transfers
- 8 Difficulty of tax returns for corporate tax, value-added tax, and tariffs
- 9 Difficulty in obtaining permission related to labor, including regulations on the foreign-domestic employment ratio, and working permission for foreign employees (especially in the construction sector);
- 10 Inadequate protection of property rights
- 11 Restrictions on land possession
- 12 Insufficient industrial waste facilities despite strict regulations
- 13 Inadequate port and road infrastructure

Source: Kakkoku chiiki no boueki toushi-jo no mondaiten to youbou (Issues and requests relating to foreign trade and investment), Nihon Kikai Yushutsu Kumiai, 2003

³⁶Based on the Framework Agreement on ASEAN-China Comprehensive Economic Cooperation signed in 2002, tariffs on several items have already been removed or reduced, starting from October 2003, as an early harvest.

Table 3-4-2. Major Import Partners of Thailand

U U	1		(Millions of US Do	llars and Percent)	
1	990		1995	2000		
Country	Value	Country	Value	Country	Value	
World	33,408	World	73,692	World	61,924	
1 Japan	10,144	1 Japan	21,625	1 Japan	15,315	
2 United States	3,600	2 United States	8,507	2 United States	7,291	
3 Singapore	2,480	3 Singapore	4,162	3 Singapore	3,416	
4 Germany	1,702	4 Germany	3,748	4 China	3,377	
5 Malaysia	1,125	5 Malaysia	3,235	5 Malaysia	3,344	
2	001		2002		2003	
Country	Value	Country	Value	Country	Value	
World	62,957	World	64,721	World	75,805	
1 Japan	13,881	1 Japan	14,902	1 Japan	18,267	
2 United States	7,198	2 United States	6,197	2 United States	7,185	
3 China	3,711	3 China	4,928	3 China	6,067	
4 Malaysia	3,078	4 Malaysia	3,640	4 Malaysia	4,536	
5 Singapore	2,854	5 Singapore	2,904	5 Singapore	3,269	
Source:IMF (2004)						

Total imports in 2003 were 75 billion dollars, marking an annual growth of 16.8 percent. Thailand's top two import partners – Japan and the United States – have not changed since 1990 (Table 3-4-2). However, their shares have been slightly declining every year. The total volume of imports in 2003 was just about at the pre-crisis level. What is notable concerning the trend of both exports and imports is the steadily increasing share of China.

After Singapore Thailand has established the largest number of FTAs of any ASEAN country. The FTA with Australia has been in force since January 2005, and the one with New Zealand is scheduled to go into effect in July 2005. In addition, FTA negotiations are ongoing with Bahrain, India, Japan, Peru, and the US as of January 2005.

FDI flows into Thailand saw a sharp decline in 2002. This was due to the sluggish economies in Japan and the United States, the two largest investors in Thailand.

3-4-2 Features of Latin American Countries' Trade and Investment in Thailand

(1) FDI

The central focus of Section 3-4-2 is the relationship through trade and investment between Thailand and Latin American countries. There have been, however, little or no FDI flows into Thailand from Latin American countries. For the discussion on general impediments to FDI in Japan, please refer to Section 3-4-3.

(2) Trade

As is shown in Table 3-4-3, the volume of export from Thailand to Latin American countries is small in general, and Latin American countries have never been considered major export destinations for Thailand. Of the three major Latin American destinations – Brazil, Chile, and Mexico – Mexico is Thailand's largest trade partner.

The major commodity exported to these three Latin American countries is machinery and transport equipment, mainly parts and components for electronics, electrical appliances, and automobiles. The exporters include both Thai and foreign companies that directly export parts or components to affiliated production facilities in Latin American countries. It is not the case, however, that there are no manufactured products (final goods) exported from Thailand. Although this is a rare case, a certain number of air conditioners made in Thailand by a Thai company are exported to Brazil. The quality-price balance of these products seems to be suitable for the Brazilian market.

"Crude materials, inedible, except fuels" (Table 3-4-3) in this case is rubber, and a relatively large amount is exported to Brazil and Mexico every year. As a primary product, rice is also exported from Thailand whenever there is a severe shortage in Latin America. This occurred only recently in 2003 in Brazil and Chile, and a total of 63 million dollars of rice was exported

Commodity category (classification: SITC)	Brazil	Chile	Μ	exico
TOTL-Total - All commodities		202	94	839
0-Food and live animals chiefly for food		4	11	8
2-Crude materials, inedible, except fuels		41	0	16
5-Chemicals and related products, n.e.s.		13	2	9
6-Manufactured goods classified chiefly by material		24	19	63
7-Machinery and transport equipment		93	50	657
71-Power generating machinery and equipment		8	0	5
74-General industrial machinery & equipment		9	3	20
75-Office machines & automatic data processing		15	4	188
76-Telecommunications		19	4	218
77-Electrical machinery, apparatus & appliance		39	4	217
78-Road vehicles (incl. air cushion vehicles		3	34	3
8-Miscellaneous manufactured articles		27	12	83

 Table 3-4-3 Major Exports from Thaialnd: by Commodity and by Country (2002)

 (Millions of US Dollars and Percent)

Source: Statistics Canada (2004).

from Thailand.

Next, as is described in Table 3-4-4, the volume of import from Latin America to Thailand is also small in general, and Latin American countries have never become major exporters toward Thailand. Of the three exporters in this table, Brazil is Thailand's largest partner. The major factors that make Brazil the largest exporter to Thailand are iron and steel, soy waste as animal feed, and soybeans. All of them are major export goods for Brazil. In addition, Thailand imports a small amount of agricultural machinery from Brazil.

Thailand's major imports from Chile – salmon, pulp, and copper-related items – are Chile's major export commodities. The total amount of trade between Thailand and Chile, however, is relatively small.

	,		,
Commodity category (classification: SITC)	Brazil	Chile	Mexico
TOTL-Total - All commodities	373	54	47
0-Food and live animals chiefly for food	97	15	0
2-Crude materials, inedible, except fuels	44	28	2
5-Chemicals and related products, n.e.s.	10	1	6
6-Manufactured goods classified chiefly by material	160	6	1
7-Machinery and transport equipment	58	0	36
72-Machinery specialized for particular industry	7	0	0
74-General industrial machinery & equipment	2	0	3
75-Office machines & automatic data processing	0	0	21
77-Electrical machinery, apparatus & appliance	3	0	8
78-Road vehicles (incl. air cushion vehicles	6	0	4
79-Other transport equipment	38	0	0

 Table 3-4-4 Major Imports of Thailand by Commodity and by Country (2002)

 (Millions of US Dollars and Percent)

Source: Statistics Canada (2004).

3-4-3 Issues and Impediments Regarding Latin American Countries' Trade and Investment in Thailand

(1) General Problems: Before Entry

The specific factors that have been preventing the development of a strong business relationship between the Thai and Latin American private sectors are the geographical distance and the language problem. These two factors seem to create two problems for private

companies. One is the cost of overcoming the distance and language barriers, and the other is the lack of knowledge about the other party, including business opportunities and culture in deneral. The former impediment has been discussed more often on various occasions; however, the latter problem also seems to be serious, given the possibility that business opportunities could be overlooked simply because of a lack of information.

(2) General Problems: After Entry

The previous section focused on the problems that make it difficult for Latin American private firms in these regions to enter Thai markets. Table 3-4-5 describes examples of the principal difficulties reported by companies already engaged in trade or investment in Thailand. Note that these are difficulties reported by Japanese firms and compiled by the JMC³⁷ in 2003. Although these are not problems faced only by Latin American companies, it could still be useful to examine them as general information in connection with doing business in Thailand.

As can be observed in Table 3-4-5, there are a number of impediments for foreign firms. The problems are related either to the unfavorable taxation system, high tariffs, infrastructure, and various restrictions on foreign labor and capital. With respect to trade, high tariffs and arbitrary application of tariffs seem to be the central impediments for foreign exporters, and the strict regulations applied to foreign capital and labor are still large impediments for foreign firms pursuing FDI. Insufficient infrastructure, especially in terms of ports, roads, and industrial waste facilities, seems to be a common problem for trade and FDI.

Although there are a number of impediments, it should be noted that some of them (for example, taxation or restrictions on foreign labor and capital) could partly be avoided through careful planning by private firms and applying for the promotion policies implemented by the Thai government, as described in the next section (Section 3-4-4). The JMC website provides further details on various issues in Thailand³⁸.

 ³⁷ JMC: Japan Machinery Center for Trade and Investment.
 ³⁸ http://www.jmcti.org/cgibin/main.cgi?Kind=Country

Table 3-4-5 Trade and FDI-related problems and requests raised by Japanese firms in Thailand

Impediments

- 1 A wide range of restrictions on the entry of foreign capital still exist in both the manufacturing and service sectors, despite the government's implementation of deregulation policies
- 2 Complications and delays in port entry procedures
- 3 High tariffs
- 4 Assessment and application of tariffs are sometimes arbitrary.
- 5 Abuse of anti-dumping measures on steel products
- 6 Strict regulation of foreign exchange
- 7 Taxation at the source for international money transfers
- 8 Difficulty of tax returns for corporate tax, value-added tax, and tariffs
- 9 Difficulty in obtaining permission related to labor, including regulations on the foreign-domestic employment ratio, and working permission for foreign employees (especially in the construction sector);
- 10 Inadequate protection of property rights
- 11 Restrictions on land possession
- 12 Insufficient industrial waste facilities despite strict regulations
- 13 Inadequate port and road infrastructure

Source: Kakkoku chuki no boueki toushi-jo no mondaiten to youbou (Issues and requests relating to foreign trade and investment), Nihon Kikai Yushutsu Kumiai, 2003

(3) FTA-related Issues

The overall impression is that neither Thailand nor Latin American countries are very keen on signing an FTA, at least in the near future. In 2003, Thailand successfully signed a Framework Agreement with Peru, and FTA negotiations are currently in progress. The Thai government has great expectations for the positive impacts of the Thai-Peru FTA, in that it could facilitate access to Latin American markets.

Other than the case of Peru, Thailand does not seem to be very intent on pursuing possible FTAs with Latin American countries. Practically speaking, it would also be difficult to enter negotiations with Latin American countries in the near future because Latin American countries are currently preoccupied with negotiations with the US and the EU and are thus giving less priority to Asian countries.

However, it can be claimed that an FTA with Mexico, for instance, would contribute to the Thai economy in that Mexico is the largest trade partner of the three, and that there would be positive impacts due to the linkage with NAFTA. In particular, private companies in the electronics, electric appliances, and automobile industries that procure parts and components from Thailand and operate production lines in Latin America would possibly benefit from the FTA.

3-4-4 Promotion of Trade and FDI in Thailand

(1) Trade

Export Promotion

The Thai government, especially the Department of Export Promotion within the Ministry of Commerce, is making a great effort to accommodate requests from the private sectors of both regions. There are mainly two kinds of promotion activities: organizing trade missions and conducting market research on behalf of Thai companies.

The Department of Export Promotion (DEP) has three offices in Latin America³⁹ that are in charge of trade promotion for Thai products in Latin American markets. The ministry also organizes various trade missions, including trade missions to Latin American countries, usually involving jewelry, gifts, and decorative items, for groups of Thai exporters to visit Brazilian importers. The latter is ad hoc and less frequent than other trade missions. Another central activity of the DEP is to attend international trade fairs both in Brazil and Thailand to learn about the products and enterprises of both countries. The DEP also conducts market studies for particular products of interest. Auto parts, jewelry, gift and decorative items, rice, and rubber have been central foci so far.

One of the agents from the DEP claims that further systematic effort in promotion from both sides is necessary to develop a stronger business relationship between these two regions. The main argument is that the government agents do feel the significant potential of some tradable products; however, there is currently little or no effective effort to promote specific products with large potential in specific countries. This seems to be what the governments from these two regions need to overcome.

Customs Procedures: EDI

One of the major efforts to facilitate customs clearance taken by the Customs Department of Thailand is Electronic Data Interchange (EDI). The department computerized customs clearing procedures in order for traders to save time and cost by submitting, via an online system, entry

³⁹ The Department of Export Promotion (DEP) offices in Latin America are in Santiago (Chile), Sao Paulo (Brazil), and Mexico City (Mexico).

data for preliminary verification by customs officers. Exporters only need to meet customs officers for final document verification.

(2) FDI

Export Processing Zones

Thailand has several Export Processing Zones (EPZs). These free trade zones were established in 1997 to boost key export-oriented industries such as electronics and automobiles and parts. Private companies located in the EPZs are exempt from import duties and other taxes. Within EPZs, foreign firms are permitted to own land and employ foreign technicians and experts. Other merits of operating in EPZs are their full-fledged infrastructure and good access to transportation.

3-4-5 Future Prospects in FDI in Thailand by Latin American Countries

Finally, the following are two specific examples of possible future investment by Brazil, presented by the Embassy of Brazil in Thailand and a Japanese trading company in Brazil. In particular, the ethanol case implies that the agricultural and industrial network between Asia and Latin America could be further expanded and deepened and might serve as a catalyst for a stronger business relationship between these two regions.

<u>Ethanol</u>

The Brazilian government is now making an effort to market ethanol as a substitute for gasoline in some highly industrialized Asian countries such as Japan and Korea. At the same time, Brazil is showing a great interest in an expansion of the Thai sugarcane industry as a potential ethanol producer in Asia, and Brazil would be willing to offer contributions to the further development of the sugarcane industry in Thailand through technology transfer. The following briefly describes the current situation and the future potential of the sugarcane/ethanol industry through the incentives available for each player: Brazil, Japan, and Thailand. First of all, the incentive for Brazil is obvious: it is profitable for Brazil, the world's largest ethanol producer, to seek potential markets for ethanol. Brazil is the world's largest sugarcane producer, and the sugarcane is utilized mainly for producing sugar and ethanol. In Brazil, ethanol is used as fuel alcohol for automobiles in addition to gasoline. In the 1970s, Brazil's automotive industry started to use fuel alcohol as a means of combating the oil crisis, after which the use of fuel alcohol gradually declined. However, recently it has been increasing again since flex fuel cars were marketed by Volkswagen and General Motors in 2003. Flex fuel cars, or dual fuel cars, run on gasoline, ethanol, or a mix of both.

The major purpose for which Japan might be interested in introducing ethanol as a substitute for gasoline is to meet the CO_2 emission target designated in the Kyoto Protocol⁴⁰. Sugarcane, the raw material for ethanol, absorbs as much or more carbon dioxide as that emitted by ethanol combustion and, under the Kyoto Protocol, greenhouse gases emitted from ethanol are considered to be offset by the cultivation of sugarcane. This is the reason for the effort by the Brazilian government to market fuel alcohol in Japan.

However, there are two key factors that make it difficult to introduce ethanol as a substitute for gasoline in Japan. First of all, it is at least temporarily very costly to introduce flex-fuel or ethanol-fueled cars⁴¹. Secondly, some visible or invisible opposition by the Japanese oil industry is expected. For these reasons, the Japanese government has so far been relatively negative toward the introduction of fuel ethanol. As well as the above difficulties, the Japanese government claims that the supply of ethanol would not be stable because sugarcane producers determine the supplies of sugar and ethanol based on the market prices of these products, and as a result, the supply of ethanol varies from year to year.

This concern regarding the stable supply of ethanol is related to Brazil's strong interest in contributing to the expansion of the Thai sugarcane industry as a complementary producer to Brazil. Brazil claims that the potential demand for ethanol by Japan and/or Korea would further vitalize the sugarcane industry in Thailand, and also that demand in highly industrialized countries in Asia would after all increase ethanol export from Brazil.

⁴⁰ The protocol obliges Japan to reduce its emissions of greenhouse gases by at least 6% from 1990 levels between 2008 and 2012.

⁴¹ Currently, gasoline containing 3% bio-ethanol, "E3", can be used legally in Japan, as the law stipulates that fuel can contain other substances as long as they do not make up more than 3% of the volume.

4. ISSUES AND IMPEDIMENTS BY COUNTRY : LATIN AMERICA

4-1 BRAZIL (FEDERAL REPUBLIC OF BRAZIL)

4-3-1 Basic Information

(1) Basic Statistics on Brazil⁴²

i) Population: 17.687 million (2003)

ii) Area: 8,514,204km²

iii) Per capita GDP: 2,870 USD (2003)

	2001	2002	2003	2004
iv) GDP real growth rate (%)	1.3	1.9	-0.2	5.2
v) Exports (mil. USD)	58,200	60,400	73,100	96,500
vi) Imports (mil. USD)	55,600	47,200	48,300	63,500
vii) Trade balance (mil. USD)	2,600	13,100	24,800	33,000
viii) FDI inflow (mil. USD)	21,042	18,754	10,144	18,166
ix) Current balance (mil. USD)	-23,215	-7,637	4,063	

With a series of domestic and international economic shocks, the growth of the Brazilian economy was slow or even negative from 2001 to 2003: growth rates were 1.3 percent in 2001, 1.9 percent in 2002, and -0.2 percent in 2003. On the other hand, these facts can also be interpreted in such a way that the absorption of these shocks without a financial collapse is a reflection of the positive feedback of the economic program implemented by former President Cardoso and strengthened by current President Lula da Silva. A remarkable fact is that GDP growth in 2004 reached 5.2 percent, which is the highest since the last economic crisis in 1994. The main pillars of the great jump in GDP include the significant improvement in the country's trade balance, the recovery in household consumption, and an expansion of retail sales. The upturn in consumption is also confirmed by the increase, for the first time since 2000, in the sales of electrical appliances.

⁴² Source: (i)(ii) IBGE (Instituto Brasileiro de Geografia e Estatística), (iii) IMF, (iv)(ix) Banco Central do Brasil, (v)(vi)(vii)(viii) JETRO.

The trade surplus in 2004 was 33,000 million U.S. dollars, the largest ever for Brazil. Total exports were 96,500 million U.S. dollars, recording an annual growth rate of more than 30 percent. The major factors behind this remarkable growth in exports include the recovery of the Argentinean economy, which is the second largest destination of Brazilian exports; the increase in exports to China; and the boost in the prices of primary products, which comprise one-third of total Brazilian exports. Due to the rise in the prices of primary goods in addition to the increase in export volume, export values of primary products increased by as much as 42 percent. Commodities contributing to such an increase in exports of primary products were soybeans, iron ore, semi-finished steel products, oil, and pulp. In 2004, Brazil significantly increased its imports as well: total imports were 63,500 million US dollars, marking an approximate annual growth rate of 30 percent. The share of imports from China expanded by more than one percent in 2004.

Another positive aspect of the Brazilian economy in 2004 was the recovery of FDI flows into Brazil. FDI inflows in 2004 were 18,166 million U.S. dollars, which is equivalent to a 79.1 percent growth from the previous year. This was mainly due to the increase in investment in the transport equipment industry (particularly automobiles) in addition to export industries such as iron and steel, pulp, and agriculture. Further FDI, particularly FDI to develop infrastructure, will be indispensable for stable economic growth in Brazil.

There are three more noteworthy positive developments in the economy in 2004. First, the surplus in the primary balance in the public sector (fiscal balance of the government, excluding interest payments) improved; the GDP ratio was 4.61 percent, which is even higher than the figure of 4.25 percent recommended by the IMF. Second, the current account balance continued to be positive. Finally, the country risk indicator successfully fell to 403 points in February 2005 from, for instance, 2,443 points in September 2002.⁴³

(2) Features of East Asian Countries' Trade and Investment in Brazil

⁴³ The country risk here is based on the EMBI indicator provided by JP Morgan.

<u>Trade</u>

East Asian countries, particularly Japan and China, are important trading partners for Brazil: in 2003, East Asian countries accounted for a 16 percent share of total Brazilian exports. As Table 2-1-8 suggests, Japan was one of the five largest trading partners in both exports and imports in the 1990s. Japan has a diminished presence in Brazilian trade these days, but it still remains one of the ten largest trading partners in both exports and imports (Table 4-1-1). On the other hand, China has rapidly become one of the major partners for both Brazilian exports and imports during the last few years, though it did not appear in the list of the five largest trading partners in the 1990s.

The major commodities that Brazil exports to East Asian countries, including China and Japan, are primary products and semi-manufactured products (Table 4-1-2 and Table 4-1-3). Among Brazilian exports to China, exports of soybeans and iron ore in particular have drastically increased, reflecting the large domestic demand for its economic growth; China is the largest importer of soybeans and iron ore from Brazil. In 2004, Chinese imports of soybeans and iron ore exceeded half of the total Chinese imports from Brazil.⁴⁴ In contrast, the major commodities Brazil imports from East Asian countries include various types of machinery parts and components and cokes. Imports of machinery parts and components from East Asia have been on the rise, driven by the expansion of machinery production by Japanese and multinational enterprises (MNEs) in Brazil, particularly in the automobile industry. Cokes are imported for production activities in the iron and steel industry. The Korean presence is not as notable as the Chinese or Japanese, but Korea has been relatively important to Brazil for imports.

⁴⁴ To secure natural resources, a Chinese company in the iron and steel industry, for instance, made a long-term contract in 2003 to purchase iron ore from 2006 to 2016 with one of the largest Brazilian companies in the mining industry.

Table 4-1-1 Major countries for recent Brazilian trade

		2001			2002			2003			2004	
	No.	Values	%									
(a) Exports												
United States	1	14,378	24.7	1	15,354	25.4	1	16,692	22.8	1	20,038	20.8
Argentina	2	5,002	8.6	5	2,342	3.9	2	4,561	6.2	2	7,373	7.6
Netherlands	3	2,863	4.9	2	3,182	5.3	4	4,246	5.8	3	5,917	6.1
China	5	1,902	3.3	3	2,520	4.2	3	4,533	6.2	4	5,440	5.6
Germany	4	2,502	4.3	4	2,537	4.2	5	3,136	4.3	5	4,036	4.2
Mexico	7	1,868	3.2	6	2,342	3.9	6	2,741	3.8	6	3,948	4.1
Italy	9	1,809	3.1	9	1,817	3.0	7	2,208	3.0	7	2,904	3.0
Japan	6	1,986	3.4	7	2,098	3.5	8	2,311	3.2	8	2,768	2.9
Chile		1,352	2.3		1,461	2.4	10	1,880	2.6	9	2,546	2.0
France		1,648	2.8		1,525	2.5		1,715	2.3	10	2,190	2.
U.K.	10	1,705	2.9	10	1,769	2.9	9	1,899	2.6		2,117	2.2
Berge & Luxemburg	8	1,812	3.1	8	1,892	3.1		1,795	2.5		-	
Total		58,223	100.0		60,363	100.0		73,084	100.0		96,475	100.
(b) Imports												
United States	1	13,043	23.5	1	10,286	21.8	1	9,566	19.8	1	11,337	18.
Argentina	2	6,206	11.2	2	4,843	10.3	2	4,672	9.7	2	5,572	8.9
Germany	3	4,812	8.7	3	4,419	9.4	3	4,206	8.7	3	5,072	8.
China	9	1,328	2.4	7	1,554	3.3	5	2,148	4.5	4	3,710	5.9
Nigeria	8	1,376	2.5	9	1,095	2.3	8	1,517	3.1	5	3,499	5.0
Japan	4	3,064	5.5	4	2,348	5.0	4	2,520	5.2	6	2,868	4.0
France	6	2,084	3.8	5	1,777	3.8	6	1,768	3.7	7	2,287	3.0
Italy	5	2,184	3.9	6	1,762	3.7	7	1,736	3.6	8	2,053	3.
Algeria		1,098	2.0		999	2.1	10	1,115	2.3	9	1,935	3.
Korea	7	1,574	2.8	10	1,067	2.3		1,079	2.2	10	1,730	2.
U.K.	10	1,235	2.2	8	1,345	2.8	9	1,205	2.5		1,355	2.
Total		55,572	100.0		47,240	100.0		48,260	100.0		62,782	100.0

Note: "No." indicates top 10 major trading partners.

Table 4-1-2 Major commodities of Brazilian trade with China

							(Million	is of US d	lollars)
	2003		2004			2003		2004	
(a) Exports	Values	%	Values	%	(b) Imports	Values	%	Values	%
Soybeans	1,313	29.0	1,621	29.8	Transceiver parts	200	9.3	347	9.4
Iron ore	765	16.9	1,115	20.5	Cokes	214	9.9	339	9.1
Soybean oil	256	5.6	423	7.8	Liquid crystal display	82	3.8	159	4.3
Pulp	266	5.9	266	4.9	Integrated circuit	81	3.8	157	4.2
Rolling steel plate	460	10.1	217	4.0	Fiber and cloth	83	3.9	134	3.6
Crude oil	22	0.5	210	3.9	Automatic-data-processing machines	65	3.0	120	3.2
Leather	116	2.6	195	3.6	Automatic-data-processing machines parts	60	2.8	119	3.2
Steel semimanufactured goods	258	5.7	147	2.7	Motor, dynamo, transformer, and the parts	63	2.9	99	2.7
Wood	111	2.4	126	2.3	Compound cyclic compound and sulfone amid	75	3.5	95	2.6
Cigarette leaf	56	1.2	102	1.9	Battery	33	1.5	71	1.9
Others	909	20.1	1,016	18.7	Others	1,191	55.5	2,068	55.7
Total	4,533	100.0	5,440	100.0	Total	2,148	100.0	3,710	100.0

Data source: MDIC/SECEX.

Table 4-1-3 Major commodities of Brazilian trade with Japan

			r				(Millior	ns of US de	ollars)
	2003		2004			2003		2004	
(a) Exports	Values	%	Values	%	(b) Imports	Values	%	Values	%
Iron ore	457	10.1	516	9.5	Automobile parts	201	9.4	288	7.8
Poultry (frozen & chilled)	237	5.2	509	9.4	Bearing and the parts	126	5.9	164	4.4
Aluminium	383	8.4	374	6.9	Integrated circuit	139	6.5	138	3.7
Coffee beans	115	2.5	133	2.4	Automobile engines and the parts	97	4.5	120	3.2
Alloy	116	2.6	121	2.2	Automobiles	64	3.0	86	2.3
Pulp	116	2.6	109	2.0	Automatic-data-processing machines parts	67	3.1	81	2.2
Soybeans	140	3.1	97	1.8	Cokes	38	1.8	79	2.1
Nickel	35	0.8	87	1.6	Measuring instruments and the parts	69	3.2	79	2.1
Orange juice	76	1.7	68	1.3	Transceiver parts	69	3.2	77	2.1
Cigarette leaf	49	1.1	58	1.1	Compound cyclic compound and sulfone amid	53	2.5	26	0.7
Others	586	12.9	696	12.8	Others	1,597	74.4	1,681	45.3
Total	2,311	51.0	2,768	50.9	Total	2,520	117.3	2,868	77.3

Data source: MDIC/SECEX.

Investment

The major FDI partners for Brazil have been European countries, the United States, and Japan (Table 2-1-9 and Table 4-1-4). As clearly indicated by Table 4-1-4 and Table 4-1-5, however, the Japanese presence has declined particularly since the mid-1990s; Japanese FDI in Brazil accounted for a 6.4 percent share in 1995 and a 2.4 percent share in 2000. While FDI in Brazil by European countries and the United States has been significantly increasing since the mid-1990s, Japanese FDI in Brazil has stagnated: accumulated FDI flows in the period 1996-2001 are 68.766 billion U.S. dollars for EU countries, 29.067 billion U.S. dollars for the United States, and 2.296 billion U.S. dollars for Japan, and Japan's shares of total FDI inflows were 1.4 percent in 1996-2000, 3.9 percent in 2001, 2.7 percent in 2002, 10.6 percent in 2003, and 1.2 percent in 2004.⁴⁵ Japanese FDI in Brazil seems to have rebounded since 2001, reflecting the

⁴⁵ In 2003, there was a large amount of investment in the mining industry by a certain Japanese company.

economic stability in Brazil with the depreciation of the local currency, mainly in automobilerelated industries.

					(%)
	1970-1975	1976-1980	1981-1985	1986-1990	1996-2000
United States	34.2	3.6	35.1	30.1	23.7
European countries	37.7	48.8	48.5	45.0	56.1
Japan	19.8	10.7	8.8	17.0	1.4

Table 4-1-4 FDI flows to Brazil from 1970 to 2000: shares by region/country

Data source: JETRO Sao Paulo.

(original sources: Banco Central Do Brazil for 1970-1990 and JETRO Sao Paulo for 1996-2000)

	2								(million	s of U.S. do	ollars)
_		FDI sto	ock		FDI inflows							
	1995		2000		2001		2002		2003		2004	
	Values	%	Values	%	Values	%	Values	%	Values	%	Values	%
Japan	2658.5	6.4	2468.2	2.4	826.6	3.9	504.5	2.7	1368.4	10.6	243.0	1.2
Korea	3.8	0.0	179.6	0.2	25.0	0.1	4.1	0.0	12.2	0.1		
Singapore	0.0	0.0	137.7	0.1	15.9	0.1	20.5	0.1	91.1	0.7	1.0	0.0
Australia	64.6	0.2	77.9	0.1	10.7	0.1	3.9	0.0	43.9	0.3		
China	27.9	0.1	37.7	0.0	28.1	0.1	9.7	0.1	15.5	0.1		
Hong Kong	12.5	0.0	18.6	0.0	33.0	0.2	12.4	0.1	10.6	0.1		
Malaysia	0.0	0.0	9.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0		
New Zealand	0.8	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0		
Thailand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Philippines	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0		
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.0		
United States	10852.2	26.0	24500.1	23.8	4464.9	21.2	2614.6	13.9	2382.8	18.5	4017.0	19.8
Others	28075.4	67.3	75582.0	73.4	15631.8	74.3	15608.3	83.1	8977.5	69.6	16004.0	79.0
Total	41695.6	100.0	103014.5	100.0	21041.7	100.0	18778.3	100.0	12902.4	100.0	20265.0	100.0

Table 4-1-5 FDI by East Asian countries: stock and flows in Brazil

Note: FDI by EU countries accounts for a large portion of FDI for others.

Data source: Banco Central Do Brazil.

Table 4-1-6 Japanese and U.S. manufacturing affiliates in Latin America

(a) Japanese affiliates in Latin America, 2000F/Y

	Tota	al	Total excl. E Mexi		Brazil and	Mexico	Share of Brazil and
Sector	Value	Share in total (%)	Value	Share in total (%)	Value	Share in total (%)	and Mexico (%)
(i) Sales (million JPY)							
Manufacturing total	1,774,501	46.8	251,753	19.7	1,522,748	60.7	85.8
Machinery total (290-320)	1,274,789	33.6	199,764	15.6	1,075,025	42.8	84.3
290: general machinery	53,596	1.4	1,258	0.1	52,338	2.1	97.7
300: electronic machinery	287,584	7.6	30,054	2.3	257,530	10.3	89.5
310: transport equipment	920,179	24.3	168,452	13.2	751,727	30.0	81.7
320: precision machinery	13,430	0.4	0	0.0	13,430	0.5	100.0
Total	3,789,197	100.0	1,279,716	100.0	2,509,481	100.0	66.2
(ii) Purchases (million JPY)							
Manufacturing total	581,965	39.8	151,956	24.2	430,009	51.5	73.9
Machinery total (290-320)	465,667	31.8	148,900	23.8	316,767	37.9	68.0
290: general machinery	16,820	1.2	806	0.1	16,014	1.9	95.2
300: electronic machinery	177,349	12.1	21,477	3.4	155,872	18.7	87.9
310: transport equipment	265,962	18.2	126,617	20.2	139,345	16.7	52.4
320: precision machinery	5,536	0.4	0	0.0	5,536	0.7	100.0
Total	1,462,568	100.0	626,870	100.0	835,698	100.0	57.1

(b) U.S. affiliates in Latin America, 1999F/Y

(b) 0.5. annates in Latin America, 19991	Tota	1	Total excl. E Mexi		Brazil and I	Mexico	Brazil and
	Value	Share in total (%)	Value	Share in total (%)	Value	Share in total (%)	Mexico
(i) Sales (million US\$)							
Manufacturing	130,977	53.3	35,156	31.7	95,821	71.2	73
Non-machinery sectors	73,155	29.8	29,152	26.3	44,003	32.7	60
Machinery sectors	57,822	23.5	6,004	5.4	51,818	38.5	90
Machinery	7,342	3.0	285	0.3	7,057	5.2	96
Computer and electronic products	14,382	5.9	1,456	1.3	12,926	9.6	90
Electrical equipment, appliances, et	2,747	1.1	234	0.2	2,513	1.9	91
Transport equipments	33,351	13.6	4,029	3.6	29,322	21.8	88
Total	245,569	100.0	110,995	100.0	134,574	100.0	55
(ii) Gross products (million US\$)							
Manufacturing	33,833	57.0	9,120	34.9	24,713	74.3	73
Non-machinery manufacturing	23,164	39.0	8,080	30.9	15,084	45.4	65
Machinery sectors	10,669	18.0	1,040	4.0	9,629	29.0	90
Machinery	2,220	3.7	71	0.3	2,149	6.5	97
Computer and electronic products	1,069	1.8	232	0.9	837	2.5	78
Electrical equipment, appliances, et	805	1.4	59	0.2	746	2.2	93
Transport equipments	6,575	11.1	678	2.6	5,897	17.7	90
Total	59,361	100.0	26,120	100.0	33,241	100.0	56

Data source: Kimura and Ando (2005a) for Japanese affiliates and Kimura and Ando (2005b) for U.S. affiliates.

Japanese FDI in Brazil can be observed in various industries such as transport equipment, mining, iron and steel, electronic machinery, food processing, and services, but the major ones are the transport equipment and mining (including iron and steel) industries. Brazil is one of the most important countries for manufacturing FDI in Latin America; in the case of Japanese FDI (or U.S. FDI) in machinery industries, for instance, approximately 80 to 90 percent of the production activities of Japanese (U.S.) affiliates in Latin America are conducted by those in Brazil and Mexico in 2000 (1999) (Table 4-1-6). The purposes of current FDI by Japanese firms investing in Brazil are 1) to get access to natural resources and 2) to produce final goods mainly for the domestic market and partially for exports to countries in Latin America and other regions.⁴⁶

The presence of other East Asian countries is much smaller than that of Japan, but investment by East Asian countries such as Korea, China, and Taiwan in the electronic machinery industry has been on an uptrend.

4-1-2 Issues in Major Industries Connected with FDI by East Asian Countries

(1) Features of East Asian Firms' Operation in Brazil and Sectoral Issues

Transport Equipment Industry

The transport equipment industry is one of the most important industries for Japanese FDI in Brazil. In particular, the last few years have witnessed large investments by major Japanese automobile producers to expand their production capacity and/or to produce new models. In accordance with the expansion of their operations in existing plants or newly established plants, Japanese investment through their suppliers of parts and components has also been increasing.

In the past, some Japanese automobile producers came to Brazil to sell their products

⁴⁶ Japanese FDI in Brazil in the period from 1951 to 1963 witnessed investment mainly in the textile, iron and steel, machinery, and shipbuilding industries, in response to Brazil's industrial promotion policies and import substitution policies. FDI in the period 1964-1979 was partially for "national projects" conducted by the Brazilian and Japanese governments such as "Usiminas" (iron and steel), " Cenibura (paper manufacturing)", "Serrado development (agriculture development)" and partially for access to natural resources. In addition, as discussed below, some firms invested in Brazil for domestic sales, in light of trade measures such as high import tariffs and/or import prohibition.

domestically, given the high import tariffs and/or import prohibitions. MFN (Most Favored Nation) tariffs imposed on imports of automobile-related products are still high: import tariffs (common tariffs for non-MERCOSUR member countries) are 35 percent for automobiles and 16-18 percent for their parts and components. Due to other taxes imposed on imports besides import tariffs that will be explained in the next subsection, the prices of imported cars are very high.

The current operations of Japanese automobile producers (and MNEs with other nationalities) in Brazil are aimed at production not only for domestic sales but also for exports, with global strategies to allocate production sites around the world in view of their target markets. Exports to other Latin American countries, of course, account for a large portion of Brazilian automobile exports; Mexico, for instance, is now the largest importer of Brazilian automobiles, followed by the United States, due to the increase in imports with the preferential treatment under the "Automobile Treaty between Brazil and Mexico" that went into force in September 2002.⁴⁷ Argentina and other MERCOSUR member countries are also increasing their automobile imports from Brazil under MERCOSUR. Importantly, exports to non-Latin American countries are increasing simultaneously.⁴⁸ U.S. and European automobile producers, in particular, have a stronger tendency to aggressively utilize their production sites in Brazil as a base for their global supply (exports).⁴⁹

In Brazil, industrial clusters have not been sufficiently developed, unlike in East Asian countries. In other words, suppliers of parts and components are not located in close proximity to each other. Thus, it is difficult to have parts and components ready on time. To overcome this

⁴⁷ Under the automobile treaty between Brazil and Mexico, tariffs imposed on Mexican automobile imports from Brazil were 1.1 percent in 2003 for imports within the quota in 2003, i.e., 140 million automobiles, and zero percent in 2004 for imports within the quota in 2004, i.e., 165 million automobiles (an MFN tariff, 20 or 50 percent, is applied for imports beyond the quota). The no-tariff quota is supposed to be removed by 2007 to allow free trade in automobiles without restriction between the two countries.
⁴⁸ One of the reasons why Brazil was able to increase automobile exports is that the quality of Brazilian

⁴⁸ One of the reasons why Brazil was able to increase automobile exports is that the quality of Brazilian automobiles went up sufficiently for export in a rather unusual situation. By 1997, when inflation stopped and domestic purchasing power started to increase, most automobile producers in Brazil already had (still have) production capacity exceeding domestic demand. As the Brazilian economy got worse, however, Brazilian purchasing power again decreased. Therefore, automobile producers, including local indigenous suppliers, had no choice but to improve the quality of their products in Brazil so that they could export them. As a result, Brazil was able to succeed in improving quality and increase their automobile exports.

⁴⁹ If we look at the Big 4 makers (GM, VW, FIAT, FORD), for example, their destinations have rapidly changed over a short period: while the share of non-South American countries was 21 percent of total exports in 1997, the share became 74 percent in 2003. Note that Mexico is included in the countries not in South America.

problem, TOYOTA, for instance, has introduced an interesting system of logistics (please see the end of this section).

Mining and Iron and Steel Industries

Mining, iron and steel, and petroleum are the major industries among Brazil's natural resourcerelated industries. Although most firms in these industries were state-owned firms, privatization has been pursued since the 1990s. Japan has long been involved in these industries since the 1950s in accordance with Brazil's industry promotion policies and import substitution policies, "national projects" by the Brazilian and Japanese governments, and others; some Brazilian firms in the iron and steel industry, for instance, were established through technology transfers by Japanese firms. Recent commitments in these industries by Japanese firms include significant participation through stock purchases in the largest Brazilian company in the mining industry, international bidding, and the operation of firms with long relationships and relatively new firms in Brazil. Commitments by Korea and China are greater than ever. Large Korean and Chinese companies in the iron and steel industry have expressed interest in expanding their operations in Brazil by establishing new iron mills in the future.

Brazil seems to have adopted trade policies in the mining and iron and steel industries aimed at protecting and developing the downstream flow in the domestic iron and steel industry. While Brazil was imposing high tariffs on iron and steel products (and other manufacturing products), it was implementing a price control system for iron ore until around 1994: the domestic price of iron ore had been kept lower than the international price (export price) by about 30 percent. The current import tariffs on iron and steel products are about 12 to 14 percent, except some high value-added products such as hot-rolled coil whose tariffs have been significantly reduced very recently, and the tariffs on iron-manufacturing machine are about 14 to 16 percent.

One of the recent issues regarding the price of iron ore is the sudden rise of that price. In line with expanding demand for iron and steel products, particularly by China, the prices of iron ore and coking coal have been rapidly increasing: the f.o.b. price of iron ore (for export to Japan) in 2004 and 2005, for instance, rose by 18 percent and 72 percent, respectively. The major destinations of iron ore and slabs are the United States and East Asia, with the shares of East

124

Asia, particularly of China, rapidly rising.⁵⁰ Concerns about exports of iron ore and slabs include the safeguard issue and, particularly for the U.S. market, the high transport cost for East Asia, which derives from the physical distance with low value added.⁵¹

Electronic Machinery Industry

Recent investment by East Asian countries other than Japan has been observed mainly in the electronic machinery industry: cellular phones, PC-related products, air conditioning, and so on. Firms have invested (and continue to invest) to expand their production sites located in the Magnus Free Trade Zone or to establish new plants in the Magnus Free Trade Zone and others.

(2) General Problems in Operating in Brazil

According to the results of an annual survey of Japanese MNEs conducted by the Japan Bank for International Cooperation (JBIC), Brazil is regarded as a key potential destination for Japanese FDI: Brazil was in 13th place in FY 2001 and 10th in FY 2002 for the choices in the short run, and Brazil came in higher, at 7th place, in both FY 2001 and FY 2002 due to its market potential, not far behind major East Asian countries (Table 4-1-7 and Table 4-1-8). Despite the relatively desirable evaluation toward investment in Brazil, actual investment by Japanese firms has not accelerated as has investment by MNEs from Europe or the U.S. What sorts of problems exist for private enterprises, particularly for East Asian MNEs, in starting and/or operating businesses in Brazil? The lower part of Table 4-1-8 presents the concerns that Japanese manufacturing firms have in investing their FDI funds in each prospective destination, including Brazil. As suggested by Table 4-1-8, insufficient information on Brazil is one of the reasons; 40 percent of firms that chose Brazil as a prospective destination for their FDI selected "insufficient information on the host country" as one of the weak points of Brazil. In addition, there exist various difficulties in starting and operating businesses in Brazil, referred to as the "Brazil cost". The concerns that many potential investors selected include "instability of local currency (47 percent)", "political and social environment (40 percent)", "high import tariffs (33

⁵⁰ The quality of slabs made in Brazil is high enough to supply them to the Big 3 automobile makers, though it is not high enough to satisfy the conditions of Japanese automobile makers such as Toyota and Honda.
⁵¹ The value added to these products is low vis-à-vis the transport cost: the transport cost between Japan

⁵¹ The value added to these products is low vis-à-vis the transport cost: the transport cost between Japan and Latin America, for instance, is three times the cost between Japan and Australia.

percent)", "insufficient infrastructure (20 percent)", "complicated taxation system (20 percent)", and "non-transparency in the implementation of taxation system (20 percent)".

Table 4-1-7 Prospective destination countries for Japanese FDI

	2001 F/Y					2002 F/Y		
	Country	Number of firms		-		Country	Number of firms	
(a) Short ru	in (incoming 3 years)							
		401	100%	_			418	100%
1	China	327	82%	_	1	China	373	89%
2	United States	127	32%		2	Thailand	118	28%
3	Thailand	99	25%		3	United States	108	26%
4	Indonesia	56	14%		4	Indonesia	63	15%
5	India	52	13%		5	Vietnam	62	15%
6	Vietnam	48	12%		6	India	54	13%
7	Taiwan	44	11%		7	Korea	34	8%
8	Korea	33	8%		7	Taiwan	34	8%
9	Malaysia	32	8%		9	Malaysia	33	8%
10	Singapore	24	6%		10	Brazil	19	5%
11	The Philippines	22	5%		11	Singapore	18	4%
12	Germany	19	5%		12	The Philippines	17	4%
13	Brazil	18	4%		13	Germany	16	4%
13	Mexico	18	4%		14	Mexico	15	4%
15	France	17	4%		15	Czech	13	3%
16	Czech	15	4%		16	United Kingdom	11	3%
17	United Kingdom	14	3%		16	Russia	11	3%
18	Hungary	12	3%		18	Poland	10	2%
19	Poland	11	3%		19	Hong Kong	9	2%
20	Hong Kong	8	2%		19	Hungary	9	2%

(b) Long run (incoming 10 years)

		318	100%			344	100%
1	China	274	86%	1	China	306	89%
2	India	88	28%	2	United States	92	27%
3	United States	80	25%	3	India	89	26%
4	Thailand	59	19%	4	Vietnam	70	20%
5	Vietnam	46	14%	5	Thailand	56	16%
6	Indonesia	43	14%	6	Indonesia	49	14%
7	Brazil	25	8%	7	Brazil	28	8%
8	Taiwan	22	7%	8	Russia	27	8%
9	Malaysia	20	6%	9	Malaysia	20	6%
10	Korea	17	5%	10	Korea	15	4%
10	The Philippines	17	5%	10	Germany	15	4%
12	Russia	14	4%	12	Taiwan	14	4%
13	Singapore	12	4%	13	Singapore	11	3%
14	United Kingdom	11	3%	13	The Philippines	11	3%
15	Mexico	10	3%	15	Mexico	10	3%
15	Germany	10	3%	15	Czech	10	3%
17	Hungary	9	3%	17	Myanmar	7	2%
18	Myanmar	7	2%	17	United Kingdom	7	2%
18	France	7	2%	19	Italy	6	2%
20	Australia	6	2%	19	Poland	6	2%
				19	Hungary	6	2%

Drawn from Kimura and Ando (2005b).

(Original data sources: Kaburagi, et al. (2002) for the 2001 F/Y survey and Marugami, et al. (2003) for the 2002 F/Y surve Notes:

This JBIC questionnaire survey was conducted for Japanese firms with three or more foreign affiliates including at least one manufacturing foreign affiliate at the end of October 2000 (2000 F/Y survey)/ November 2001 (2001 F/Y survey), in which 501/ 508 firms out of 792 / 812 returned effective answers.

"Prospective destination country" means that the firm would consider FDI to the country in the short or long run. Multiple listings of destination countries are allowed.

Table 4-1-8 Prospective destination co	untries for Iananese manufacturir	ng FDI: their strong and weak points

Ranking Country	1 China	2 Thailand	3 U.S.	4 Indonesia	5 Vietnam	6 India	7 Korea	7 Taiwan	9 Malaysia	10 Brazil
(a) Strong points	272	110	100	(1	54	50	22	22	20	10
Number of firms ¹⁾ Market potential	373 86.3	112 54.5	108 39.8	61 47.5	54 55.6	50 84.0	32 53.1	32 53.1	30 33.3	19 73.7
Inexpensive labor	68.9	48.2	0.9	73.8	70.4	60.0	12.5	15.6	40.0	26.3
To supply intermediate goods for assemblers	28.7	33.0	26.9	21.3	9.3	16.0	25.0	37.5	23.3	26.3
Present market size	17.2	9.8	62.0	9.8	1.9	14.0	28.1	43.8	10.0	10.5
To export to the third countries	25.2	32.1	2.8	36.1	24.1	16.0	6.3	21.9	30.0	5.3
Inexpensive parts and components / raw materials	30.0	9.8	2.8	16.4	11.1	16.0	12.5	9.4	10.0	15.8
To export to Japan	26.8	21.4	_	24.6	7.4	16.0	15.6	12.5	13.3	-
Human capital	11.0	8.0	16.7	-	33.3	6.0	25.0	25.0	10.0	-
R&D for the local market	9.9	6.3	27.8	4.9	5.6	30.0	6.3	9.4	3.3	15.8
Development of infrastructure	5.6	7.1	9.3	1.6	3.7	10.0	9.4	18.8	13.3	-
Investment incentives / deregulation measures	7.2	11.6	-	1.6	3.7	6.0	3.1	9.4	13.3	5.3
Investment hy other firms in the same industry	9.1	7.1	4.6	4.9	3.7	-	3.1	9.4	10.0	-
Advancement of regional integration	1.3	5.4	-	6.6	-	4.0	5.1	-	13.3	10.5
Advancement of regional integration	1.5	5.4		0.0		4.0			15.5	10.5
(b) Weak points Number of firms ²⁾	356	89	73	60	43	43	28	31	28	15
Insufficient infrastructure	24.4	12.4	-	26.7	41.9	44.2	-	-	14.3	20.0
Underdevelopment of legal system	46.3	4.5	-	8.3	46.5	32.6		-	7.1	-
Nontransparency in the legal system	55.6	10.1	-	23.3	27.9	20.9	-	6.2	3.6	6.7
Frequent and sudden changes in institutional arrangements	51.7	4.5	-	10.0	11.6	7.0	3.6	3.2	7.1	6.7
Complicated taxation system	17.7	5.6	6.8	10.0	11.6	9.3	3.6	-	3.6	20.0
Nontransparency in the implementation of taxation system	37.4	10.1	-	10.0	9.3	16.3	3.6	-	-	20.0
Frequent and sudden changes in taxation system	36.5	3.4	-	3.3	11.6	2.3	3.6	3.2	-	13.3
High import tariffs	19.9	13.5	2.7	8.3	11.6	9.3	3.6	-	-	33.3
Insufficient deregulation for foreign capital	27.5	11.2	-	5.0	20.9	11.6	14.3	-	25.0	13.3
Complicated administrative procedure	41.0	7.9	1.4	13.3	16.3	11.6	3.6	3.2	3.6	6.7
Political and social environment	27.8	11.2	2.7	81.7	32.6	55.8	3.6	12.9	28.6	40.0
Instability of local currency	8.7	46.1	9.6	58.3	27.9	20.9	17.9	16.1	17.9	46.7
Difficulty in purchasing raw materials and parts and components in local market	20.5	20.2	5.5	18.3	25.6	18.6	10.7	6.5	7.1	6.7
Underdevelopment of indigenous supporting industries	10.1	7.9	-	15.0	20.9	9.3	-	3.2	10.7	6.7
Difficulty in local financing	15.4	10.1	8.2	13.3	11.6	14.0	14.3	3.2	7.1	-
Harsh competition with other firms in the local market	27.5	25.8	68.5	23.3	9.3	18.6	64.3	54.8	25.0	6.7
Insufficient human capital for managerial positions	25.8	30.3	24.7	30.0	16.3	16.3	17.9	16.1	25.0	6.7
Low level of local labor	12.9	9.0	9.6	11.7	2.3	11.6	3.6	6.5	3.6	13.3
Rising labor costs in host country	16.0	25.8	20.5	20.0	4.7	4.7	21.4	32.3	21.4	6.7
Local labor problems	11.8	7.9	16.4	25.0	7.0	14.0	25.0	-	7.1	13.3
Insufficient information on the host country	9.6	5.6	-	5.0	18.6	32.6	3.6	3.2	7.1	40.0

Drawn from Kimura and Ando (2005b). (Original data source: Marugami, et al. (2003).)

Notes:

Number of Japanese manufacturing firms who answered the question on strong points among those who chose the country as a prospective destination for their FI
 Number of Japanese manufacturing firms who answered the question on weak points among those who chose the country as a prospective destination for their FD
 This JBIC 2002 F/Y questionnaire survey was conducted for Japanese manufacturing firms with three or more foreign affiliates including at least one manufacturing foreign affiliate at the end of November 2001, in which 508 firms out of 812 returned effective answers.
 Multiple listings of destination countries are allowed.

Table 4-1-9 Trade and FDI-related problems and requests raised by Japanese firms in Brazil Brazil

- 1 No allowance of the establishment of representative office, obligation of obtaining permanent visa by foreign representatives and minimum capital requirement
- 2 Non-transparency in local contents requirements, co-existence of domestic contents requirements and intra-regional contents requirements
- 3 High tariffs, large tariff differentials between intra-MERCOSUR trade and others.
- 4 Sudden changes in tariffs, import regulations and customs procedure, inefficiency in customs procedure, complexity, delays, and high cost.
- 5 Heavy taxes, complicated and frequently changed tax system.
- 6 Difficulties in funding in local currency due to underdeveloped capital market
- 7 Regulations on foreign remittances, restrictions on dividend payments, restrictions on credit amount.
- 8 Wage determination preferential to labor, employment customs, social security system, difficulty and delay in obtaining visa.
- 9 Residence requirement for board members.
- 10 Large fluctuation in currency valuation and the existence of exchange rate risk.
- 11 Complicated procedure in obtaining government permission regarding technology transfer, registration to central bank, difficulties in renewing the payment of royalty
- 12 Insufficient infrastructure, lack of human capital, lack of supporting industry, worsening security problems

MERCOSUR

- 1 Losing competitiveness of Japanese products due to high common tariffs for non-member countries.
- 2 Existence of both intra-regional and individual countries' contents requirements, nontransparency in local contents requirements.
- 3 Large risk due to intra-regional exchange rate fluctuation.
- 4 Inconsistency in emission controls and fuel consumption standard among member countries

Data source: BCFTI (2003).

Table 4-1-9 also presents major claims and complaints raised by Japanese firms on trade and FDI-related policies in Brazil and MERCOSUR as compiled by a Japanese business association, the Business Council on Facilitation of Trade and Investment (BCFTI). The problems/impediments include the restricted forms of foreign entry as well as visa-related issues, the non-transparency of various regulations, the complicated and frequently changing legal system, heavy taxes and high tariffs, difficulties in local funding and the existence of exchange rate risk, insufficient infrastructure, worsening security problems, and so on. Although the website of BCFTI provides details on various issues in Brazil, the information on

Brazil is unfortunately available only in Japanese from the website.⁵² Thus, in the following, we discuss the details of general issues based on the information collected during interviews in Brazil as well as the results of the BCFTI survey.

Heavy Taxes Imposed on Imports53

In Brazil, various duties besides import tariffs (common duties for non-MERCOSUR member countries) are imposed on imports: these include IPI (industrial products duty), ICMS (goods and services distribution duty), PIS (social integration fund), and COFINS (social insurance loan charge). IPI is imposed when industrial products are imported and also when industrial products are shipped out from production sites.⁵⁴ ICMS (State duty), a sort of value added tax, is imposed by each State on distribution, transportation, and telecommunication services.⁵⁵ PIS and COFINS have been introduced since May 2004. In addition to these taxes, AFRMM (merchant vessel duty), which is 25 percent of freight, is generally imposed in addition to other port-related duties. In practice, these duties are cumulatively calculated. Therefore, when some industrial product is imported with an import tariff rate of 14 percent, for example, total duties are equivalent to approximately 67 percent of the c.i.f. price and 71 percent of the f.o.b. price.⁵⁶

There exist special legal schemes that reduce duties for specific products such as capital goods that are not domestically produced, IT-related products, automobile parts and components, and aircraft parts and components as well as a duty drawback system and a free trade zone with import tariff exemptions in Manaus. These duties, however, no doubt significantly increase the prices of imported goods in the domestic market, and some MNEs with imported parts and components and components face difficulties in price competition.

Another serious consequence is that these heavy taxes have accelerated product pirating, illegal imports, and smuggling in the Brazilian market.

 ⁵² Questions and requests relating to foreign trade and investment in other countries can be submitted in English at the BCFTI website (http://www.jmcti.org/mondai/top_e.html).
 ⁵³ See "Features of East Asian firms' operation in Mexico and sectoral issues" for sectoral information on

⁵³ See "Features of East Asian firms' operation in Mexico and sectoral issues" for sectoral information on tariffs.

 ⁵⁴ IPI is exempted when Brazilian ships are used. This is a discriminatory measure toward foreign ships.
 ⁵⁵ Examples of ICMS are as follows: 18 percent to 25 percent for inter-state transactions in Sao Paulo, Rio de Janeiro, and Minas Gerais, 12 percent for intra-state transactions inSao Paulo, Rio de Janeiro, and Minas Gerais, Rio Grande do Sul, Santa Catarina, and Parana, and seven percent for other states (BCFTI, 2003).

⁵⁶ The information here is based on the JETRO file, available at http://www3.jetro.go.jp/jetro-file/country.do

Complicated Legal Regulations and Frequent Changes

There are various legal regulations in Brazil: there exist around 50 kinds of taxes, including a range of commission taxes. In addition, they are too often changed – reportedly more than 10 times a year – without enough notification in advance. Furthermore, the interpretation of legal regulations and laws often depends on government officials. Uncertainties and inconsistencies in the legal regulations and laws cause additional costs for firms operating in Brazil. Simplification of and greater transparency in the legal system are important.

Tax incentives are different among States. Surprisingly, tax incentives are provided for firms that own farms; there are some Japanese firms that do not belong to the agriculture industry but own farms to utilize these tax incentives.

The co-existence of MERCOSUR local contents requirements and domestic contents requirements in some industries is also problematic.

Restricted Form of Foreign Entry and Difficulties in Obtaining Brazilian Visas

The establishment of representative offices is prohibited. In addition, it is quite difficult for foreign firms to get permission to establish branches. In other words, the form of foreign entry in practice is restricted to the establishment of affiliates. Moreover, there is a residence requirement for board members: board members (head representatives) of foreign affiliates in Brazil must be Brazilian or foreign representatives with permanent residence visas. Above all, Brazilians must account for more than two-thirds of total workers (except board members) and total wages. These restrictions related to foreign entry clearly prevent foreign firms, including East Asian MNEs, from entering the Brazilian market through investment.

Obtaining a permanent visa basically obliges foreign representatives to work at their affiliates in Brazil. There exist regulatory problems in obtaining Brazilian visas. First, to have foreign representatives and to obtain permanent visas for them, there are minimum capital requirements: more than 200 million Brazilian reals of capital (foreign investment) registered with the central bank is required to have one foreign representative and to obtain his/her permanent residence visa, and an additional 200 million reals of capital is required per additional foreign representative. Thus, to have two foreign representatives and to obtain their

131

permanent residence visas, for instance, more than 400 million reals of capital is required. Second, it takes time to obtain a permanent residence visa: roughly speaking, it takes about a year. Due to such a heavy capital requirement, small and medium-size enterprises (SMEs) face difficulties in entering the Brazilian market to operate businesses.

There are also problems regarding temporary visas for engineers and other experts and shorttime business visas. Temporary visas are restricted to two years, and may only be renewed once: the maximum stay for those with this visa is four years. About 10 days and an expensive consular fee (close to 100 USD for Japanese) are required to get short-time business visas. The time required to obtain a visa is a particularly serious matter hen firms need to urgently send engineers for technical support. In addition, the short-time business visa is a single-entry type (not multiple-entry type), valid for three months for Japanese. Thus, some *foreigners are forced to re-apply for each urgent visit, generating additional costs*.

Labor-Related Issues

The Labor Act in Brazil was written in favor of labors. For instance, wage rates cannot be lowered. In addition, lawsuits are always decided in favor of laborers. Furthermore, under the Labor Act, registration in labor unions by industry and occupation is obligatory for laborers. Revisions of wage rates and working conditions are determined by each labor union.⁵⁷ Therefore, firms face complaints among laborers about the inconsistent revision of wage rates and working conditions.

On the other hand, there is also good news for Japanese firms. Since there is a large community of Japanese-Brazilians, Japanese firms can more easily employ Japanese-Brazilians speaking both Japanese and Portuguese who can facilitate their operations in Brazil.⁵⁸

Insufficient Infrastructure and Logistics

Infrastructure such as roads, ports, and power plants in Brazil is underdeveloped. As exports increase, the problem of insufficient infrastructure is becoming more serious. Therefore, Private

⁵⁷ Labor unions in the metal, machinery, and banking industries are relatively strong while those in the trade and commerce industry are relatively weak.

⁵⁸ See the column on Toyota for a discussion of workers' education.

Public Partnership (PPP) projects to improve the development of infrastructure are on the rise at present.⁵⁹

The Manaus free trade zone offers tax incentives. There are, however, difficulties in logistics. For instance, lead-time is very long partially because parts and components come from Sao Paulo, and the roads from Sao Paulo to Manaus are not sufficiently maintained.⁶⁰ Other problems related to infrastructure include the poor condition of telephone lines, sudden power failures, stock management in a moist environment, and insufficient human capital. Even if there are tax incentives, these conditions cause additional costs for firms or lower their competitiveness. Given that tax incentives are being reduced, the enticements for locating in the Magnus free trade zone are being lost.

Lack of Supporting Industries

Due to the lack of supporting industries, foreign firms need to import a certain portion of parts and components. Since the prices of imported goods significantly rise with accumulated high import tariffs, IPI, ICMS and so on, some of them face difficulties in price competition. It seems, however, that the quality of goods produced by local indigenous firms has been improving particularly in the last few years.⁶¹

Worsening Security

Security in large cities such as Sao Paulo and Rio de Janeiro, where the operations of East Asian MNEs are concentrated, has been worsening.

Inefficient Custom Procedures

The morale and attitude of customs officers are extremely poor. Moreover, customs procedures are inefficient and take a long time; for instance, invoices for parts and components must be prepared by item and must also be prepared in Portuguese (English is not allowed).

In the Magnus free trade zone, the destinations of products must be determined at the time of

⁵⁹ Brazil is now developing a road from the grain belt in the Amazon to Peru. The distance between Brazil and Asia would be shortened with this road.

⁶⁰ Manaus is the center of the Amazon rainforest, almost 4,000 km from Sao Paulo.

⁶¹ See the column on Toyota for a discussion on its technical support of local indigenous firms.

custom clearance and cannot be changed later.

Local Fund Raising and Exchange Rate Risk

Local fund raising is very difficult in the country's underdeveloped capital market. In addition, interest rates are very high. For fund raising in foreign currencies, however, there exists exchange rate risk since currency valuation largely fluctuates.

Regulations on Foreign Remittances

There exist regulations on foreign remittances. For instance, it is quite difficult for firms to obtain permission for foreign remittances of royalties. In addition, foreign remittances for the payments of claims other than purchases are basically prohibited. Due to such restrictions and complicated and time-consuming procedures, there are difficulties in the collection of receivables.

(3) FTA/EPA-Related Issues (Including Future Prospects)

Japan-Brazil (MERCOSUR) FTA/EPA

Regarding FTAs/EPAs, Brazil (MERCOSUR) has given priority to North America (FTAA: Free Trade Area of the Americas) and Europe. According to a survey conducted by Camara de Comercio e Industria Japonesa do Brazil regarding the effects of FTAA and/or EU-MERCOSURE FTA on the operation of Japanese firms in Brazil, 56 percent of the firms that returned the questionnaire answered that the conclusion of these agreements would disadvantage their operations (JETRO 2004). Since the major origins of their purchases were local companies (59 percent of total purchases) and Japan (22 percent), purchases of high value-added parts and components from Japan with high tariffs would definitely weaken the competitiveness of Japanese manufacturing firms in Brazil vis-à-vis U.S. or European MNEs in Brazil. The lack of an FTA between Japan and the high-tariff MERCOSUR might also result in the reduction of capital goods purchased (imported) from Japan.⁶²

⁶² The tariffs on iron-manufacturing machinery, for instance, are around 14 to 16 percent.

The Korean and Chinese governments have made more aggressive attempts than the Japanese government to conclude FTAs with Brazil (MERCOSUR). Korea already has a study group for an FTA between Korea and MERCOSUR.

Possibility of Ethanol Business

Brazil is the largest producer of sugarcane alcohol: the production was 12.645 billion liters in 2002/2003 (JETRO Sao Paulo). In Japan, mixing ethanol with gasoline has been allowed, up to a maximum of three percent, since August 2003. Considering the potential new demand for fuel alcohol in Japan, expectations are high of exports of fuel ethanol (biomass fuel) from Brazil to Japan. A potential concern might be that Brazilian procedures would allocate more sugarcane to produce sugars when the prices of sugars increase rather than producing alcohol. It is, however, important for Japan to use biomass fuel so that Japan can satisfy the carbon-dioxide emission standards assigned to developed countries in the Kyoto Protocol.

Column on Toyota's Operations in Brazil

In Brazil, industrial clusters have not been effectively developed, and the suppliers of parts and components are not necessarily located nearby. To overcome this situation, Toyota in Brazil has introduced an efficient system (called Milk Run) to ensure "just-in-time" production by outsourcing local logistics to other firms located next to Toyota's factory. Its 102 suppliers are spread out across seven areas of Brazil, and the firm taking care of local logistics picks up their parts and components several times a day using 79 trucks: the Bandeirantes road area (20 suppliers and 46 pick-ups per day), the Sorocaba city area (eight suppliers and 15 pick-ups per day), the Sao Paulo city area (42 suppliers and 86 pick-ups per day), the local area with direct delivery (four suppliers) within a radius of 100km and Rio Grande do Sul State (1220km, three suppliers, and three pick-ups), Parana State (450km, four suppliers, and eight pick-ups), the Dutra road area (10 suppliers and 24 pick-ups), and Minas Gerais State (11 suppliers and 26 pick-ups) out to a radius of 100km. With such an effective outsourcing system, Toyota's operations have been running smoothly.

Given that there are insufficient supporting industries that can supply parts and components of satisfactory quality, Toyota has provided local suppliers with technical support by directly sending engineers to their suppliers for half a year or so. Although some local suppliers expressed confusion about such close involvement at the beginning, they noticed that the technical support did help improve the quality of their products sold not only to Toyota but also to other major car producers. Now other major car producers regard suppliers dealing with Toyota as able to supply products with satisfactory quality.

The attitude of Brazilian workers is serious, though education of workers is necessary and important to raise their awareness: a good example is that the safety index showing the frequency of injuries has drastically improved within a short period as workers become more educated. A comparison with other Toyota's factories worldwide also indicates a high level of production in Brazil: one index shows the quality of finished cars made in the factory in Brazil is the second best among Toyota's factories globally, following the factory in Turkey.

4-2 CHILE (REPUBLIC OF CHILE)

4-2-1 Basic Information

(1) Basic Statistics on Chile⁶³

i) Population: 15.96 million (June 2004)

ii) Area: 756,626km²

iii) GDP -per capita-: 4,557USD (2003)

	2001	2002	2003
iv) GDP –real growth rate (%)-	3.1	2.1	3.3
v) Export (mil. USD)	18,554	18,285	21,464
vi) Import (mil. USD)	17,830	17,014	19,413
vii) Trade balance (mil. USD)	724	1,271	2,051
viii) FDI inflow (mil. USD)	4,200	1,888	2,982
ix) Current balance (mil. USD)	-1,100	-885	594

GDP per capita in 2003 was 4,557 US dollars, approximately one-sixth that of Japan. The Chilean economy was stably and rapidly growing for more than 15 years until 1998, when the economic growth slightly slowed down; the annual average rate of real GDP growth in the period from 1991 to 1997 was eight percent, and the growth rate fell to half of that level in 1998. By the end of 1999, the economy began to recover, and the growth rate rebounded to more than four percent in 2000. Although the GDP growth rate again slightly fell down to three percent in 2001 and two percent in 2002, due to slowdown of the world economy and decline in the price of primary products, it went up to three percent in 2003. Such a rapid recovery by the Chilean economy mainly resulted from the recovery of domestic consumption. Another reason for the rapid economic recovery is an increase in equipment investment, in line with expectations of the positive effects of the FTA with the US agreed upon between the Chilean and U.S. governments in 2002, and the temporary application of the FTA with the EU in February 2003.

Total exports in 2003 were approximately 21.5 billion US dollars, marking an annual growth of 17.4 percent, and total imports were 19.4 billion dollars for an annual growth of 14.1 percent. The increase both in exports and imports in 2003 was partially due to the recovery of domestic

⁶³ Sources: (i)(ii) INE, (iii)(v)(vi)(vii) IMF, (iv)(ix) Banco Central de Chile, (viii) UNCTAD.

consumption and equipment investment and partially due to the rise in the international market prices of copper and pulp. The major export commodities include fishery and fishery processing products and non-ferrous metals such as copper, nickel, and molybdenum. In 2003, Chile became the largest exporter of molybdenum in the world, followed by China and the U.S. Chilean exports of molybdenum will possibly continue to increase in the future, considering the facts that U.S. and Chinese exports are already close to their limits, and that molybdenum is now used not only for the production of stainless steel but also for the production of electronic machinery goods and automobiles.

Another noteworthy phenomenon related to international trade is the recent enforcement of FTAs between Chile and Korea (April 2004) and between Chile and the U.S. (January 2004). The enactment of an FTA between Chile and Korea, for instance, seems to have had a significant impact on the market share of Korean products in Chile.

(2) Features of East Asian Countries' Trade and Investment in Chile

Trade

Chile has an abundance of natural resources. As Table 4-2-1 indicates, East Asian countries are important partners for Chilean trade: trade with China, Japan, and Korea accounts for more than 20 percent of Chilean total exports and more than 10 percent of total imports in terms of value. While Japan has long been the second largest partner for Chilean exports following the United States, other East Asian countries such as China and Korea also have become more important destinations than before (Table 2-1-9). For Chilean imports, Japan was one of the major partners in the 1990s, but China has become a larger exporter to Chile than Japan since 2000.⁶⁴ In other words, the Chinese presence as a trading partner, in terms of both exports and imports, has rapidly become larger in Chile.

If we look at bilateral trade between Chile and Japan, for instance, the major commodities exported to Japan include non-ferrous metals such as copper, molybdenum, fishery products (particularly salmon), and wood chips (Table 4-2-2).⁶⁵ Half of Japanese copper imports during the last decade have been from Chile. Although Canada, Australia, and Indonesia had been the major exporters of copper to Japan until 10 years ago, Chile has been the largest exporter

⁶⁴ Chinese products such as apparel, clothes, stationery goods, and toys account for a significant portion of the Chilean market.

⁶⁵ More than half of Japan's molybdenum imports are from Chile.

during the last decade with Japanese FDI in this industry. Concerning wood chips, the growth of eucalyptus is faster in Chile (around nine years) than in other places such as Australia (about 20 years). Since the establishment of pulp mill factories requires a huge amount of investment, Japan imports wood chips from Chile and carries out paper manufacturing processes at pulp mill factories in Japan, rather than importing paper as a final product.⁶⁶ On the other hand, machinery goods, particularly automobiles, are the major commodities in Chilean imports from Japan; more than half of Chilean imports from Japan in 2003 were automobiles.

Investment

The major FDI partners for Chile are United States, Canada, and some European countries: the share of accumulated FDI from 1974 to 2003 by the United States and Canada is close to half of the total accumulated FDI in Chile (Table 4-2-3). The Japanese share in total accumulated FDI is relatively large (3.2 percent), but the presence of East Asian countries is small in terms of the values of FDI inflows (Table 2-1-9). Some typical FDI in Chile by East Asian firms, mainly by Japanese firms, can be observed in industries such as iron and steel, fishery, and transport equipment. The main purpose of FDI in mining and fishery industries is to get access to natural resources. Unlike in Brazil and Mexico, production sites of MNEs, including Japanese MNEs, in the transport equipment industry are rarely observed in Chile since the Chilean market is not large enough to establish production sites that are profitable. Thus, the purpose of FDI in the automobile industry is mainly to establish affiliates to import finished cars from abroad, to distribute them in the Chilean market, and to sometimes provide users with after-sales services.

Table 4-2-1	Major	countries	for recent	Chilean trade
-------------	-------	-----------	------------	---------------

(Millions of U.S. dollars)

	2001		2002		2003			2001		2002		2003	
(a) Exports	Value	%	Value	%	Value	%	(b) Imports	Value	%	Value	%	Value	%
United States	3,421	18.6	3,703	20.1	3,661	17.2	Argentina	3,064	17.2	3,064	17.8	3,777	19.5
Japan	2,136	11.6	1,950	10.6	2,268	10.7	United States	2,871	16.1	2,560	14.9	2,562	13.3
China	1,070	5.8	1,270	6.9	1,941	9.1	Brazil	1,498	8.4	1,618	9.4	2,028	10.5
Korea	551	3.0	713	3.9	1,021	4.8	China	1,053	5.9	1,172	6.8	1,367	7.1
Italy	800	4.3	863	4.7	922	4.3	Germany	689	3.9	723	4.2	705	3.6
Mexico	825	4.5	911	4.9	910	4.3	Japan	552	3.1	543	3.2	634	3.3
Netherland	828	4.5	538	2.9	808	3.8	France	575	3.2	623	3.6	596	3.1
Brazil	830	4.5	678	3.7	806	3.8	Korea	540	3.0	438	2.6	540	2.8
Total	18,394	100.0	18,436	100.0	21,255	100.0	Total	17,784	100.0	17,180	100.0	19,326	100.0

Note: countries included in the tables are the top 10 countries in 2003.

Data source: JETRO (2004). (Original data source: Central Bank, Chile.)

⁶⁶ The number of containers for transporting wood chips tends to be insufficient.

Table 4-2-2 Major commodities of Chilean trade with Japan

	(Millions of US dollars)						
	2002		2003				
	Values	%	Values	%			
(a) Exports							
Fishery and the processing products	572	29.3	562				
- Salmon and trout	396	20.3	419	18.5			
-Fish meal	67	3.4	60	2.6			
-Sea urchins	72	3.7	47	2.1			
Agriculture and the processing products	132	6.8	150	6.6			
-Pork	71	3.6	92	4.1			
Wood and the processing products	198	10.2	232	10.2			
-Wood tips	115	5.9	125	5.5			
-Lumber	53	2.7	72	3.2			
-Pulp	25	1.3	29	1.3			
Mineral and metal products	848	43.5	1,105	48.7			
-Copper	716	36.7	956	42.1			
-Molybdenum	63	3.2	74	3.3			
Others	199	10.2	219	9.6			
Total	1,950	100.0	2,268	100.0			
(b) Imports							
General machinery goods	48	8.8	41	6.4			
Electronic machinery goods	10	1.8	21	3.3			
Transport equipment	265	48.9	343	54.1			
-Automobiles	260	47.9	338	53.4			
-Automobile parts	6	1.0	5	0.8			
Presition machinery goods	4	0.7	6	1.0			
Lubber products	34	6.3	42	6.6			
Others	182	33.5	181	28.5			
Total	543	100.0	634	100.0			

Data source: JETRO (2004). (Original data source: Central Bank, Chile.)

Table 4-2-3 Major FDI countries in Chil	e
---	---

(millions of U.S. dollars)									
			Accumulated FDI inflows						
	2001		2002	002 2003			1974-2	2003	
	Values	Values % Values % Values		%	Values	%			
United States	1,776	37.1	594	17.6	480	37.6	15,891	29.7	
Canada	207	4.3	506	15.0	19	1.5	8,027	15.0	
U.K	390	8.2	1,504	44.5	130	10.2	5,213	9.8	
Spain	351	7.3	248	7.3	122	9.6	9,678	18.1	
International Organization	31	0.6	7	0.2	64	5.0	308	0.6	
Sweden	79	1.7	29	0.9	56	4.4	224	0.4	
Panama	2	0.0	2	0.1	51	4.0	252	0.5	
France	39	0.8	41	1.2	41	3.2	1,342	2.5	
Australia	461	9.6	102	3.0	39	3.1	1,917	3.6	
Japan	126	2.6	54	1.6	29	2.3	1,729	3.2	
Others	1,318	27.6	289	8.6	78	6.1	8,867	16.6	
Total	4,781	100.0	3,376	100.0	1,276	100.0	53,449	100.0	

Note: data are based on the actual investment.

Data source: CIE, Chile.

4-2-2 Issues in Major Industries for FDI by East Asian Countries

(1) Features of East Asian Firms' Operations in Chile and Sectoral Issues

<u>Mining Industry</u>

The major Japanese investors in this industry are Japanese trading companies and metal companies. Japan has a good reputation with the Chilean government, one of the reasons being that Japan (JOGMEC⁶⁷) has taken measures to alleviate pollution. Another reason is that JOGMEC has worked on human development and technology education in this industry in Chile. In 1994, when the JOCMEC office was established in Santiago, most projects were conducted in the form of technological cooperation with Chilean public corporations. These days, technological cooperation is being conducted more frequently with private companies from various countries, including Chile, Canada, and the UK.⁶⁸

With a strong domestic demand for natural resources, China's investment in the non-ferrous metal industry in Chile has been rapidly increasing. For instance, a Chinese company is pursuing M&A with a major Canadian company in the non-ferrous metal industry so that it can obtain mining rights. The concern about the Chinese investment is that Chinese companies have basically given little consideration to environmental issues.

On the other hand, Korean companies have no investment in the iron and steel industry in Chile at this moment, but they purchase iron ores from Chile and demonstrate concern for the environment.

Fishery Industry

The main purpose of FDI in the fishery industry is to get access to natural resources. Since the domestic market is not very large, the major destinations of products from Japanese MNEs in Chile are Europe and Japan; the major commodities exported to Japan are salmon, fish meal, fish oil, and so on.

The promotion of the salmon-related industry is one Chilean national strategy to increase

⁶⁷ The major tasks of JOGMEC (Japan Oil, Gas Metals National Corporation) in Chile are 1) to provide information on the Chilean government's industrial policy, including environmental regulations, and 2) to conduct geological surveys and provide the results to Japanese companies. When Japanese firms need to contact the Chilean government regarding business, they generally contact JOGMEC first.

to contact the Chilean government regarding business, they generally contact JOGMEC first. ⁶⁸ In such cases, mining rights for newly discovered deposits are divided among these parties according to their shares of capital. The rights allocated to JOGMEC are then transferred to a Japanese firm that actually mines.

employment. The Chilean government implements an employment subsidy for fishery processing. At the same time, Chile regulates investment in fishing vessels, aiming to increase domestic employment: investment in vessels (in terms of the assessed value of vessels) must be accompanied by at least the same amount of investment in land in the southern area below 44'30". In other words, firms that would like to invest in vessels need twice the amount of the vessel investment. In addition, their land operations are limited to the southern part of Chile, which is far from the capital Santiago. It seems guite difficult for small and medium-sized enterprises (SMEs) to enter and operate in the fishery industry in Chile.

To avoid over-fishing, new licenses for Chilean flag vessels have not been issued since 1991.⁶⁹ Fishing quotas for each type of fish for each firm, depending on fish hauls in the past, have also been in place since December 2002. These regulations apparently prevent new entry by firms and limit the operations of existing firms. Such a limited number of vessels, on the other hand, allows the Chilean government to easily control them. As a result, fishery management in Chile is more rational, planned, and clean than that in other countries, including Japan.⁷⁰

Automobile Industry

In Chile, more than 30 automobile producers in the world have entered the domestic market, and the Chilean automobile market is very competitive. In Chile, Japanese automobiles have a certain portion of market share. In addition, the market share of Korean automobiles such as Hyundai has been rapidly increasing during the last 10 to 15 years, partially due to their better quality and relatively low prices and partially due to the lifting of tariffs under the Chile-Korea FTA. Although Chinese automobiles are not yet on the Chilean market, motorcycles made in China, which are copies of Honda or Yamaha motorcycles at one-third to one-half their regular prices, now account for 60 percent of the motorcycle market in Chile.

The main purpose of FDI in the automobile industry by Japanese MNEs, for instance, is to establish affiliates to import finished cars from abroad to sell them in the Chilean market and other Latin American countries. While most of the major Japanese automobile producers conduct their business in Chile together with one of the major Japanese trading companies, some have their own affiliates in Chile that focus on providing users with after-sales services in addition to their import-sales activities.

⁶⁹ There is an example of a Spanish vessel purchased with Chilean capital. Although it is possible to get national flag registration through M&A, the size of the vessel must be limited to the size of the original Chilean capital. ⁷⁰ For instance, there are too many vessels in Argentina, and it is difficult for the Argentina government to

control them.

Chile has introduced Euro 3 emission controls as its environmental standard. In connection with this, some Japanese automobile producers have aggressively tried to sell cars with hybrid engines in Chile. It is, however, still difficult for them to increase their market shares because those eco-friendly cars are more expensive than others. Some promotion policies to produce or sell such eco-friendly cars would be helpful to increase their market shares, and as a result, to reduce emissions in Chile.

Tax policies in Chile deserve some discussion. Chile has applied uniform tariffs since trade liberalization started in the late 1980s. The import tariff rates have been reduced by one percent per year, and the import tariff rate in 2005 is six percent for basically all commodities, including automobile products. There exist, however, domestic taxes that apparently increase the prices of some imported commodities. Chile imposes luxury taxes on imported luxury cars with prices higher than a certain threshold; the minimum threshold c.i.f. price was 15,834.65 U.S. dollars in 2003, and a luxury tax of 85 percent is imposed on the price differential between the minimum threshold c.i.f. price and the actual c.i.f price of those luxury cars.⁷¹

(2) General Problems in Doing Business in Chile

Security in Chile is much better than in other Latin American countries. In addition, government officials are cooperative and administration procedures, including custom procedures, are clear, transparent, and speedy. Moreover, unlike other Latin American countries, there exists no problem in collecting receivables in Chile. Thus, operating a business in Chile is relatively easy. For private enterprises, particularly for East Asian MNEs, however, there are several difficulties in operating businesses in Chile beyond the sectoral regulations discussed above. Table 4-2-4 presents some examples of claims and complaints raised by Japanese firms on trade and FDIrelated policies in Chile (BCFTI, 2003).⁷² Let us explain some general difficulties that were identified during the interviews in Chile.⁷³

⁷¹ The luxury tax rates are supposed to be gradually reduced, and at the same time the minimum threshold c.i.f. prices are to be gradually raised as follows: 63.75 percent and 18,334.65 U.S. dollars in 2004, 42.50 percent and 20,834.65 U.S. dollars in 2005, 21.25 percent and 23,334.65 U.S. dollars, and zero percent in 2007.

See the Appendix for details of the claims compiled by BCFTI.

⁷³ See "Features of East Asian firms' operation in Chile and their sectoral issues" for a discussion on sectoral regulations.

Table 4-2-4 Trade and FDI-related problems and requests raised by Japanese firms in Chile

- 1 Expansion of tariff differences between countries with RTAs and those without.
- 2 Lack of tax treaty and investment treaty with Japan.
- ³ High value added tax and delay in tax rebate.
- 4 Insufficient infrastructure and high cost in port services.

Data source: BCFTI (2003).

Issues Related to Legal Systems

Due to the lack of a tax treaty and an investment treaty between Chile and Japan, there are problems of double taxation on income and high taxation (35 percent) on dividends sent back to Japan. In the fishery industry, for instance, Japanese crews can be out of Japan at sea up to 300 days a year, which is regulated by the union in Japan. Since the exemption of income tax in Japan is limited to those who are out of Japan for more than one year, they are forced to pay double income taxes. This is partially a problem of the Japanese side since Japan puts a priority on tax treaties and/or investment treaties with other countries.

Inadequate Infrastructure

The number of containers is insufficient. In addition, the fee to use ports for exports is high, around two times the fee in Japan or Korea.⁷⁴ Furthermore, roads leading to the export ports are not sufficiently developed. The development of port-related infrastructure is highly desired.

(3) FTA/EPA-Related Issues (Including Future Prospects)

Effects of Korea-Chile FTA and Japanese MNEs

Tariff removal under the Korea-Chile FTA has partially contributed to the drastic increase in Korean automobiles such as Hyundai, in addition to relatively low prices with better quality. Since the Chilean automobile market is very competitive, the difference between no tariffs and tariffs of even six percent has quite an impact on the sales of automobiles of non-FTA member countries such as Japan. Moreover, some Japanese MNEs in Chile are considering the possibility of increasing capital goods made in Korea in the future, given the lowered prices resulting from tariff removal under the Korea-Chile FTA.

⁷⁴ The information here is based on BCFTI (2003).

The brand image of Korean home appliances such as Samsung and LG has been rapidly improving in Chile. In light of the enforcement of the FTA between Korea and Chile, the LG group invested in the electronic industry in 2003, the first Korean investment in five years since the last Korean investment in 1998 (JETRO, 2004).

Japan-Chile FTA/EPA

Chile already has FTAs or agreements with most developed countries. Japan's competitiveness in the Chilean market is apparently dropping due to the lack of an FTA with Chile. Besides the direct effects in the commercial market, the lack of an FTA with Chile also affects the results of international bidding by Japanese firms such as bidding for power plants. Although Japan can participate in such international bidding, Japanese firms face difficulties in being bidders, due to the constraints of additional costs derived from tariffs that will be imposed on imports for the project.

Cultivated salmon imported from Chile is one of the controversial commodities (for the Japanese side) in considering a potential Japan-Chile FTA. Since Chilean cultivated salmon is imported as frozen fish, however, the markets for fresh salmon in Japan and frozen salmon imported from Chile would be different enough. In addition, as Table 4-2-5 suggests, the tariff rate imposed by Japan on imports of salmon, which account for more than 30 percent (10 percent) of agriculture and fishery-related imports from Chile (total imports from Chile), is already as low as 3.5 percent, though tariff rates imposed on imports of prepared or preserved salmon and smoked salmon are higher.

Regarding copper, Japan imports ores from Chile and refines them in Japan at the moment. With a Japan-Chile FTA, there would be a possibility of shifting the locations for the refinement process from Japan to Chile, utilizing the relatively cheaper labor resources of Chile. This seems to be a concern for the Japanese side.

A Japan-Chile FTA would enlarge the range of consumption in Japan, particularly for agriculture and fishery products.

Table 4-2-5 Japanese imports of agriculture and fishery products from Chile and their tariff rates in Japan: 2000

Total Japanese imports from Chile: 306.4 billion yen Japanese imports of agriculture and fishery products from Chile: 109.3 billion yen (share in total imports: 35.7%)

	Import shar	re (%)	Tariff rate				
Commodity	in agri.&fishery	(in total)	General	WTO	Preferential	Temporary	
Salmon	31.67	(11.26)					
Salmon	30.88	(10.98)	5%	3.5%			
Smoked salmon	0.02	(0.008)	15%	10%			
Prepared or preserved salmon	0.76	(0.27)	9.6%	9.6%			
Trout	14.12	(5.02)	5%	3.5%			
Frozen fillet (others)	10.68	(3.80)	5%	3.5%			
Flours, meals, and pellets of fish	8.17	(2.90)	0%	0%			
Wine	8.12	(2.89)					
Sparkling wine	0.01	(0.003)	201.6yen/L	182yen/L	145.6yen/L		
Other wine	2.82	(1.002)	*	**			
Sea urchins	6.55	(5.02)					
sea urchins	5.32	(1.89)	10%	7%	7%		
prepared or preserved sea urchins	1.23	(0.44)	12%	10%	8%		
Pork	4.03	(1.43)					
Pork (frozen) 1)		(1.43)		(4.3%)		4.3%	
Prepared or preserved pork (others)	0.001	(0.00)	25%	20%			
Mero	3.73	(1.33)	5%	3.5%			
Brewing or distilling dregs and waste	1.72	(0.61)	0%	0%			
Grape	1.44	(0.51)					
Grape (fresh) 2)	1.41	(0.50)	20%	17%			
3)			13%	7.8%			
Grape (dried)	0.03	(0.01)	2%	1.2%			
Agar-agar	1.13	(0.40)	160yen/kg	112yen/kg			

Notes

1) if a value for custom duty per kilogram is more than the gate price of partial pork (524yen).

2) if imported during the period from 1st March to 31th October.

3) if imported during the period from 1st November to the end of February.

* lower one of either 21.3% or 156.8yen/L, subject to a minimun custom duty of 93yen/L.

** lower one of either 15% or 125yen/L, subject to a minimun custom duty of 67yen/L.

Drawn from Kimura and Ando (2002).

China-Related Factors

Roughly speaking, wage rates are as follows: China=1; Chile=4; the U.S.=20-22; Japan=20; Argentina=5. Therefore, some Japanese MNEs in Chile are increasing the portion of food processing within bonded areas in the coastal regions of China for re-export to Japan.

Around 60 percent of home appliances in Chile are sold through three major department stores, and the rest are Chinese-made with their own department store brand names.

Chile is attempting to be a gateway for IT centers, and Chile's relationships with China and India through IT might be strengthened in the future. Also, Chile is pursuing PTA/FTAs with India and China.

(4) Policies Adopted by the Government to Promote Foreign Investment⁷⁵

Chile has provided a stable and transparent legal framework for foreign investment, characterized by clear, non-discriminatory, and non-discretionary rules. These principles are embodied both in the 1980 Political Constitution and in all laws, including the Foreign Investment Statute, known as Decree Law 600 (D.L. 600).

All the rights guaranteed by Chile's legal framework are also protected by Bilateral Investment Treaties (BITs). As of February 2005, Chile had signed 52 BITs, 38 of which were in force. In addition, Chile's FTAs with Canada, Mexico, South Korea, and the United States include specific chapters on investment-related issues, including dispute-settlement mechanisms that are similar to those used in BITs. Moreover, Chile has double-taxation treaties in force, as of March 2005, with Argentina, Canada, Mexico, Brazil, Ecuador, Peru, Norway, South Korea, Poland, Spain, the United Kingdom, Denmark, and Croatia.

Worth mentioning above all is the approach recently taken by the Chilean government to introduce a new law allowing Chile to serve as an investment platform. In November 2002, the Chilean Government launched an Investment Platform Initiative, as a part of a Pro-Growth Agenda, to encourage foreign investors to make more use of the country as a platform for investing in other Latin American countries and world markets. In line with Chile's rules-based

⁷⁵ This part is based on the information available from the website of the Foreign Investment Committee, Chile (available at http://www.foreigninvestment.cl).

approach to economic management, the new law offers investors the guarantee of even greater clarity and fairness in the treatment of their investments.

While offering new incentives for the use of Chile as an investment platform, the initiative does so without endangering its low country-risk level or exposing it to use as a tax haven. Similarly, the initiative includes safeguards to prevent loss of tax revenue and its use as a tax loophole. The principal provisions of the initiative are summarized as follows:

- -- A company that is set up exclusively as a platform for investments abroad and in Chile is exempt from Chilean earnings tax on the profits that overseas shareholders derive from its investments outside Chile. These platform companies can be either publicly or privatelyheld but, in the latter case, must submit to the same regulation as public companies;
- -- Up to 75 percent of the platform company's shareholders may be resident in Chile; non-resident shareholders may not reside in tax havens;
- -- Shareholders in the platform company can contribute capital either in the form of shares or equity in other companies, as well as in foreign currency;
- -- In regards to taxes on local shareholders and on investments in Chile, a platform company is treated as a foreign company. Thus, if it invests in Chilean assets, it must pay tax on profits derived from these investments;
- -- Similarly, the earnings of the platform company paid to Chilean shareholders are liable for the same tax and have the same right to tax credits (as an investment abroad that repatriates profits to Chile);
- -- Platform companies that invest in Chile must distribute earnings in the order in which they were obtained, starting with the oldest. As a result, separate accounting is required for earnings from investments abroad and on assets in Chile;
- -- There are no restrictions on domestic borrowing by a platform company, but its overseas debt cannot exceed the value of the capital contributed by overseas shareholders;
- -- The platform company cannot invest in tax havens⁷⁶; and

⁷⁶ See the website of the Foreign Investment Committee, Chile for a detailed explanation of exceptions for countries that may be classified as tax havens.

-- Platform companies are not entitled to bank secrecy.

By exempting platform companies from Chilean tax on overseas earnings, the initiative addresses the problem of three-way taxation and provides foreign investors with additional incentive to invest in Chile. This initiative is expected to foster regional joint ventures between foreign investors and Chilean partners. Also, in order to facilitate the entry of foreign capital into Chile, the initiative allows companies that are already established in the region to move their operation centers to Chile without incurring the transaction costs involved in selling and rebuying assets.

4-3 MEXICO (UNITED MEXICAN STATES)

4-3-1 Basic Information

(1) Basic Statistics on Mexico⁷⁷

i) Population: 104.21 million (2003)

ii) Area: 1.96 million km²

iii) GDP -per capita-: 6,112USD (2003)

	2001	2002	2003	2004		
				(Q1)	(Q2)	(Q3)
iv) GDP –real growth rate	-0.1	0.7	1.3	1.35	1.19	0.64
(%)-						
v) Export (mil. USD)	158,443	160,763	164,922			
vi) Import (mil. USD)	185,236	185,547	187,600			
vii) Trade balance (mil. USD)	-27,793	-24,884	-22,678			
viii) FDI inflow (mil. USD)	26,776	14,745	10,783			
ix) Current balance (mil.	-18,195	-14,082	-9,298			
USD)						

GDP per capita in 2003 was 6,112 US dollars, which is approximately one-fourth of Japan's GDP per capita. In Mexico, income distribution remains highly unequal.

Real GDP growth rate remained relatively low until 2003, reflecting the slowdown of the U.S. economy: -0.3 percent in 2001, 0.7 percent in 2002, and 1.3 percent in 2003. The Mexican economy has, however, started to gradually recover since 2004. In the manufacturing sector, production increased in 2004 after three successive years of negative growth, supported by strong external demand, especially from the U.S. economy. The production growth rates were 2.8 percent in Q1, 4.0 percent in Q2, and 5.0 percent in Q3 of 2004. Note that, in the manufacturing sector, the increasing competitiveness and presence of Chinese products in the Mexican market has recently become as influential on the Mexican economy as fluctuations of the U.S. economy.

⁷⁷ Sources: (i) CONAPO, (ii)(iv)(ix) INEGI, (v)(vi)(vii) IMF, (viii) JETRO

While total exports in 2003 were approximately 165 billion US dollars, recording an annual growth of 2.9 percent, total imports were 188 billion dollars, reaching an annual growth of 1.1 percent. It should be noted that oil-related exports substantially contributed to the decrease in the overall trade deficit. If we focus on trade of only non-petroleum commodities, the trade deficit went up. Mexico experienced a decrease in exports of industrial products in 2003, which account for more than 80 percent of total Mexican exports. This is largely due to the decline in exports of Maquiladora products, which make up more than half of industrial exports. One of the major reasons for such a decrease in exports of Maquiladora products would be the reduction in Maquiladora incentives accompanying a switchover to the PROSEC system.⁷⁸ Another reason would be the explosive increase in exports from China to the U.S. market.

Total FDI flows into Mexico in 2003 were the smallest in the last five years. FDI flows from some East Asian countries such as Korea and Taiwan, however, increased mainly in the electronic machinery industry.

(2) Features of East Asian Countries' Trade and Investment in Mexico

Trade

The most important trading partner for Mexico has been no doubt the United States. East Asian countries, however, are becoming more important as trading partners. Japan has been one of Mexico's major trading partners, particularly for Mexican imports. In addition, as discussed in Section 2, the Chinese position has suddenly changed very recently; China became the second largest importer of Mexican products in 2003, following the United States, while it did not appear among the five largest importers in the 1990s. The major commodities imported from East Asian countries are machinery goods and machinery parts and components, particularly in the electronic machinery industry. In the case of Mexican imports from Japan, for instance, the shares of electronic machinery and total machinery (including electronic machinery) industries are 41 percent and 77 percent in 2003, respectively (Table 4-3-1).

To highlight some features of Mexican trade and multinational enterprises' (MNEs') operations, let us provide an example of Mexican trade with Japan. Table 4-3-2 presents trade between Mexico and Japan in 2003. The table clearly shows two important points about Japanese

⁷⁸ See the part on the electronic machinery industry in "Features of East Asian firms' operation in Mexico and sectoral issues" for further discussion on Maquiladora incentives and the PROSEC regime.

	2002		2003	
	Values	%	Values	%
Agriculture, fishery, and mini	57.3	0.6	25.8	0.3
Metal products	665	7.1	641	8.4
Iron and steel	537	5.7	490	6.5
Machinery products	7211	77.1	5812	76.5
Electronic machinery	4356	46.6	3100	40.8
Integrated circuit	1019	10.9	565	7.4
General machinery	1666	17.8	1393	18.3
Transport equipment	859	9.2	921	12.1
Automobiles	287	3.1	488	6.4
Automobile parts	381	4.1	291	3.8
Precision machinery	305	3.3	377	5.0
Others	1415	15.1	1116	14.7
Total	9349	100.0	7595	100.0

Table 4-3-1 Major commodities of Mexican imports from East Asia: the case of Japan (Millions of U.S. dollars)

Note: imports are the f.o.b values.

Data source: Secretaria de Economia.

Table 4-3-2 Trade between Mexico and Japan: 2003

-	(millions of U.S.	dollars)	
	Values	%	
(i) Mexican imports from Japan (total)	7,623	100.0	
direct imports from Japan	3,625	47.6	
imports through the U.S.	3,998	52.4	
(ii) Japanese imports from Mexico (total)	1,776	100.0	
direct imports from Mexico	606	34.1	
imports through the U.S.	1,170	65.9	

Note: values of imports through the U.S. are estimated as "Mexican (Japanese) imports from Japan (Mexico) - Japanese (Mexican) exports to Mexico (Japan).

Data source: JETRO Mexico.

manufacturing MNEs' operations in Mexico. First, a certain portion of trade between Mexico and Japan goes through the United States. In 2003, more than half of Mexican imports from Japan went through the United Sates. When Japanese manufacturing firms (and other MNEs) operating in Tijuana and other western parts of the U.S.-Mexico border area import parts and components from abroad, for instance, they often import the goods to the United States at Long Beach, L.A., and then transport them to their factories in Mexico. This kind of operation is partially the result of insufficient port capacity in Mexico.

Second, a large portion of imports from Japan is for U.S. sales operations in Mexico, utilizing the Maquiladora or PITEX systems (Table 4-3-3). In 2003, the Japanese domestic sales ratio in Mexico, i.e., the domestic sales ratio in total Japanese exports to Mexico, was approximately 39 percent. In other words, over 60 percent of imports from Japan are used by Japanese MNEs in Mexico to produce final goods that are exported to the United States and other countries. The domestic sales ratios are even lower for imports from Korea (34 percent), Thailand (25 percent), and Malaysia (19 percent), while they are higher for imports from China (40 percent) and Taiwan (39 percent). As Table 4-3-2 indicates, the top 10 importer countries under the Maquiladora scheme in 2003 are all East Asian countries except the United States and Malta.

		_						(Millio	ns of U.	S. dollars)
Country	No	Total imports	%	No	Imports under Maquila	%	No	Imports under PITEX (temporary)	%	Domesti c sales ratio (%)
World		170,956	100.0		59,058	100.0		26,885	100.0	49.7
United States	: 1	105,686	61.8	1	40,782	69.1	1	18,297	68.1	44.1
China	2	9,401	5.5	2	4,896	8.3	5	747	2.8	40.0
Taiwan	9	2,509	1.5	6	1,221	2.1	9	304	1.1	39.2
Japan	3	7,623	4.5	3	3,844	6.5	4	808	3.0	39.0
Korea	6	4,113	2.4	4	2,372	4.0	7	351	1.3	33.8
Thailand	16	987	0.6	8	677	1.1	24	60	0.2	25.3
Malaysia	8	2,761	1.6	5	1,914	3.2	8	311	1.2	19.4
Singapore	13	1,338	0.8	7	753	1.3	15	189	0.7	29.6
Philippines	20	784	0.5	9	455	0.8	14	213	0.8	14.8

Table 4-3-3 Imports and export-oriented operation in Mexico: 2003

Note: "No." indicates the ranking of each coutnry.

Data source: JETRO Mexico (original source: BANCOMEXT, CD-ROM).

Investment

The largest FDI partner for Mexico has been the United States (Table 2-1-9). East Asian countries have a small share in total inward FDI in Mexico, and most FDI by Asia-Pacific countries is Japanese FDI (Table 4-3-4). The presence of other East Asian countries, particularly that of Korean MNEs, however, has been increasing in some industries.⁷⁹

The major industries for East Asian FDI in Mexico are the electronic machinery and transport equipment (automobile) industries, in addition to the wholesale industry. As discussed in Section 4.1, Mexico is one of the more important countries for manufacturing FDI in Latin

⁷⁹ Although the amount of Korean investment in Mexico is by far smaller than the amount of Japanese investment, the number of Korean affiliates in Mexico is larger than that of Japanese affiliates. According to the information provided by the Secretaria de Economia (http://www.economia.gob.mx), the number of Korean affiliates in Mexico as of September 2004 was 904 (309 for Japanese affiliates in Mexico), 60 percent of which are involved in the wholesale sector, with the fabric and apparel sectors being the next largest areas of activity. The number of Chinese affiliates in Mexico was 307, and again 60 percent of them are in the wholesale sector, with the apparel and restaurant sectors constituting the next most important sectors. Looking at Thai FDI, we find only three affiliates in Mexico.

(Millions of U.S. dolla								
	1999	2000	2001	2002	2003	2004	Accumulation : 1999-2004	0/2
Total	13,196,460	16,763,754	27,549,601	15,043,008	11,039,909	12,976,202	96,568,934	100.0
Asia-pacific	1,376,923	561,740	592,608	283,970	202,742	165,448	3,183,431	3.3
Japan	1,232,714	416,889	179,416	150,270	113,090	105,479	2,197,858	2.3
Singapore	66,066	80,949	320,904	49,843	18,287	30,754	566,803	0.6
Korea	46,180	29,925	44,083	30,159	34,872	11,309	196,528	0.2
Taiwan	19,832	11,494	40,888	14,006	18,562	5,684	110,465	0.1
New Zealand	39	25	1,655	43,126	5,719	19	50,582	0.1
China	4,984	10,771	2,389	-2,232	5,733	6,666	28,311	0.0
Australia	7,912	7,470	4,292	-2,095	4,279	4,129	25,987	0.0
Hong Kong	2,349	4,009	-1,049	-110	2,114	1,400	8,714	0.0
Indonesia	0	0	0	550	0	0	550	0.0
Malaysia	5	84	13	426	7	0	536	0.0
Thailand	25	10	-78	0	81	5	43	0.0
Philippines	-3,218	113	95	25	0	5	-2,981	0.0

Table 4-3-4 Recent trend of inward FDI in Mexico by East Asian countries

Notes: data are on the notification basis. Data for 2004 is the one from January to September, 2004. Data source: Secretaria de Economia.

America; in the case of Japanese FDI (or U.S. FDI) in machinery industries, for instance, around 80-90 percent of production activities by Japanese (U.S.) affiliates in Latin America are conducted by those in Brazil and Mexico (Table 4-1-6). The purposes of FDI by East Asian manufacturing firms investing in Mexico are/were 1) to produce final goods mainly for the U.S. market or for the domestic market (including some countries in Latin America) with lower tariff incentives or 2) to produce products locally to maintain sales in the domestic market, in light of trade restrictions such as import prohibitions or import quotas.

4-3-2 Issues in Major Industries for FDI by East Asian Countries

(1) Features of East Asian Firms' Operation in Mexico and Sectoral Issues

Electronic Machinery Industry

East Asian MNEs operating in Mexico in the electronic machinery industry produce their products either for export mainly to the United States or for domestic sales, depending on the products, but the majority of their business is production for the U.S. market^{80 81}. In addition to

⁸⁰ In the case of televisions, for example, CRT (cathode-ray tube) TVs are produced for the domestic

such operations for U.S. sales, MNEs located in the western areas along the U.S.-Mexico border often import parts and components into the United States at Long Beach, Los Angeles, and then transport these goods to their factories in Mexico. Thus, let us examine the case of tariffs on TVs both in Mexico and the United States: tariff rates on TVs are 20 percent for final goods (23 percent until December 2004) in Mexico and five percent for final goods and 2.9 percent for parts and components in the United States. MNEs in Tijuana, for instance, have utilized Maquiladora incentives and North American Free Trade Agreement (NAFTA) regimes; under the bond system in the Maquiladora scheme, they can receive back tariffs imposed on their imported raw materials, parts and components, and machinery equipment to produce exported goods in Mexico. They can also export their final goods to the U.S without tariffs under NAFTA with a certificate of NAFTA origin. Table 4-3-2 clearly indicates how large a portion of products are imported under Maquiladora or PITEX schemes by East Asian MNEs in Mexico.

However, Maquiladola-incentives have been significantly reduced since 2001; the application of bonded import measures was abolished in 2001 for exports to North America in accordance with NAFTA Article 303, and tariffs were imposed on imported raw materials and parts and components for export to the United States and Canada.⁸² Instead, as a replacement for the Maquiladora-system, the PROSEC system (Los Programas de Promocion Sectorial) was introduced in 2001. Under this system, PROSEC tariff rates, which are lower than MFN tariffs, are applied to those products included in the PROSEC commodity list for 22 manufacturing sectors, and MFN tariffs (for imports from non-FTA member countries such as East Asian countries) are applied to the rest.⁸³

The serious problem for Japanese or other East Asian MNEs in Mexico in the electronic machinery sector is/has been that many raw materials and parts and components important for their production were excluded from the PROSEC commodity list. Since supporting industries have not been well developed in Mexico, they have been forced to import those products with much higher MFN tariffs. Although the Mexican government returned some electronic parts and

market, and LCD TVs, plasma screen TVs, and rear projection TVs (PTV) are produced mainly for the U.S. market.

⁸¹ There are three approaches to sales in the U.S. market: one is direct export from China or other countries in Asia, another one is production and sales in the U.S., and the third is production in Mexico and export to the U.S. Some Korean MNEs such as Samsung and LG have been successfully gaining market share in the U.S for home appliances, TVs, and so on through production in Mexico, an improved brand image and development technology.

 ⁸² The application of bonded import measures was also abolished in January 2003 for exports to the EU in compliance with the FTA between the EU and Mexico.
 ⁸³ Among commodities included in the PROSEC commodity list in 2001, tariffs were zero percent for those

⁸³ Among commodities included in the PROSEC commodity list in 2001, tariffs were zero percent for those products not produced in Mexico and five percent for those products produced in Mexico.

components and other machinery goods to the PROSEC commodity list after it received a number of claims from Maquiladora MNEs, chemical products such as resins and adhesives and some steel products, which are used to produce electronic machinery goods, have been still excluded from the PROSEC commodity list. Due to such disadvantages, particularly for non-FTA members, in addition to the increasing competitiveness of manufacturing in China, the number of Japanese affiliates and other MNEs in Mexico has drastically fallen since 2000.⁸⁴

The current presence of MNEs in Maquiladora in terms of employment is roughly speaking as follows: one-third are Japanese firms, around 20 percent are Korean and Taiwanese firms, 20-30 percent are U.S. firms, and the rest are local indigenous firms (based on the interview). The presence of East Asian MNEs in Maquiladora is indeed large. Although the Japan-Mexico EPA has been in force since April 2005, Japanese affiliates in Mexico in the electronic machinery sector import parts and components not only from Japan but also from other East Asian countries such as Malaysia, Thailand, and China (sometimes through Hong Kong or Singapore). As discussed above, domestic sales ratios in total imports from East Asian countries are low: 19 percent for Malaysia, 25 percent for Thailand, 34 percent for Korea, 39 percent for Japan and Taiwan, and 40 percent for China (Table 4-3-2). These figures indicate how significant imports from East Asian countries are for business operations in the electronic machinery industry in Mexico. Even at the level of trade measures, there seems to be plenty of room to improve business environments in Mexico to strengthen economic relations between East Asian countries and Mexico.

Automobile Industry

The Mexican government has attempted to make this industry a basic industry for manufacturing in Mexico and has implemented various regulations to protect the domestic auto industry. Until the end of 2003, the Mexican automobile industry was heavily protected by "the Automobile Act" for around four decades; in the mid-1960s, the import of final cars was prohibited. At that time, Japanese and other automobile producers started production in Mexico to maintain sales in the domestic market. Then the Mexican government raised the local content requirement from 50 percent to 60 percent in order to protect and develop the domestic auto industry. It also implemented regulations covering exports of parts and components in the 1980s and introduced a trade balance requirement, i.e., a requirement that the values of

⁸⁴ In the electronic machinery industry, the number of firms in the Maquiladora area and their work forces decreased by 123 and 120 million respectively during the period January 2001 - September 2003 (JETRO 2004). Some Japanese firms in the electronic machinery industry also shifted their operations from Mexico to Asian countries such as China and Malaysia during the same period.

imported finished cars should be equal to the values of exported finished cars, in the 1990s. In other words, those who have no production site in Mexico cannot import finished cars.

From June 2003, automobile producers can import finished cars up to a maximum of one-tenth of their production in Mexico with no tariff and have to pay a 50 percent MFN tariff for those exceeding the non-tariff quota (the MFN tariff was 20 - 30 percent before January 2004).⁸⁵ Although automobile producers with no production site in Mexico have been allowed to import finished cars since the abolishment of the Automobile Act in January 2004, the 50 percent MFN tariff imposed on finished cars (13 to 23 percent MFN tariffs on the parts and components) is too high for them to import finished cars to Mexico.

Now most of the world's major automobile producers have production sites in Mexico.⁸⁶ As discussed above, some of them came to Mexico to maintain domestic sales in the face of the import prohibition introduced in the mid-1960s. The current operations of Japanese (and other) automobile producers in Mexico naturally include production for domestic sales, but they tend to have global strategies for allocating production sites for different types of automobiles in line with their markets.

(2) General Problems in Operating in Mexico

Now we shall focus on problems confronting private enterprises, particularly East Asian MNEs, in operating businesses in Mexico. Table 4-3-5 presents some examples of claims and complaints raised by Japanese firms on trade and FD-related policies in Mexico (BCFTI, 2002).⁸⁷ Let us explain the details of problems, difficulties, and impediments beyond trade measures collected during the interview in Mexico.⁸⁸

⁸⁵ The no-tariff import quota for finished cars can be adjusted through negotiations. Also, the total no-tariff import quota with no tariff can be transferred to other automobile producers in the same auto group. Therefore, even though a certain automobile producer may have no production site, it could import finished cars tariff-free within the amount of its group quota if other producers in the same group produce finished cars in Mexico.
⁸⁶ Mexico is a successful case in the sense that the automobile sector has been developed in the domestic

³⁶ Mexico is a successful case in the sense that the automobile sector has been developed in the domestic market with foreign capital. Peru was not able to develop the automobile sector though it implemented protection policies similar to those of Mexico; Peru allowed imports of used cars. Since purchasing power in Peru was much smaller than in Mexico, a market for new finished cars sufficient to support the production within the country was naturally not developed.

⁸⁷ See the Appendix for details of the claims complied by BCFTI.

⁸⁸ See "Features of East Asian firms' operation in Mexico and their sectoral issues" for a discussion of trade measures, including import tariff-related issues and trade promotion measures.

Table 4-3-5 Trade and FDI-related problems and requests raised by Japanese firms in Mexico

- 1 Restriction on foreign ownership ratios, industries with foreign entry ban.
- 2 Leftover of local contents requirements, trade balance requirements.
- ³ Sudden changes and instability in PROSEC-applied products as a substitution of Maquiladora system.
- 4 Uncertainty of policies on transitions from Maquiladora related to permanent establishments, value added taxes, and others.
- 5 Continual tariff increases, high tariffs.
- 6 Expansion of tariff differences between countries with RTAs and those without,
- ^o participation in international bidding by only those with FTAs.
- 7 Excessive preferential arrangements for labor such as profit sharing and wage/retirement payment system, cost elevation due to wage increases, difficulty in meeting labor demand.
- 8 Delay and complexity due to peculiar NOMS standard system and its annual changes
- 9 Insufficient capability of supporting industry, lack of supporting industry promotion policy.
- 10 Worsening security problem.

Data source: BCFTI (2003).

Complicated Legal Regulations and Frequent Changes

There are a wide variety of legal regulations. In addition, they are frequently changed without enough notification in advance. Uncertainties, inconsistencies, and grey zones in the Mexican legal systems and other laws cause additional costs for firms operating in Mexico. Simplifying regulations and making their application more transparent are important.

Since legal regulations and laws are often changed, and their interpretation depends on government officials, negotiations with governments – and even lawsuits – are sometimes required, entailing additional costs for firms. Thus, it seems to be quite difficult for small and medium-sized enterprises (SMEs) to enter the Mexican market to engage in business in Mexico.

The influence of the U.S. lobby is large in implementing commercial policies. In general, tariffs imposed on intermediate goods are lower than those on final goods. To protect the glass industry in the U.S., for instance, cathode-ray tubes are regarded as a final TV product in Mexico when the image simply comes up on the panel, reflecting the power of the U.S. lobby. This kind of interpretation and implementation of Mexican commercial policies is to protect domestic industries in the U.S.

Another invisible barrier for MNEs is that Mexican commercial policies favor FTA-member countries in many circumstances beyond tariff removal. See the discussion on government procurement below.

Worsening Security

Security has been worsening, particularly in Tijuana and Mexico City, where the operations of East Asian MNEs are concentrated,. For security reasons, for example, Japanese staff belonging to factories in Tijuana lives in San Diego (in the United States), commute to their factories in Tijuana, Mexico from their San Diego offices by company bus, and return to San Diego by bus through time-consuming immigration processes every day. Facilitating the movement of laborers between the U.S. and Mexico is desired, at least for those who have to cross the border every day due to their operations in Maquiladora and security problems.

Trucks are robbed of their loads – parts, components, or final products – more frequently than before. Worsening security hinders the smooth business operations of companies and requires additional costs for production in Mexico.

Labor-Related Issues

The Labor Act in Mexico favors laborers. For instance, wage rates cannot be lowered; a guideline for raising wages is issued every year. In the Tijuana area, wage rates have been raised by three to four percent per year during the last few years. In addition, the employment of temporary workers is severely restricted by the Labor Act to three-month contracts up to a maximum of one year. Thus, it is very difficult for firms to adjust the number of workers according to changes in production/demand, though sales in the peak season are around three to four times sales in the low season in the electronic machinery industry. Furthermore, there is no retirement age, and thus firms have to provide workers with substantial compensation to have workers leave their jobs. Other example in favor of laborers is that lawsuits are always decided in favor of laborers.

Turnover ratios are high. One of the reasons is job-hopping. Another reason is that some workers do not come back to work after long holidays. Many workers are from outside the city where the factory is located. Thus, they go back to their hometowns for the Christmas holidays, etc., to stay with their families and relatives, and some of them decide not to come back to work.

Insufficient Infrastructure and Logistics

The capacity of some ports in Mexico is insufficient. Although there is a port at Ensenada near Tijuana, for instance, it is too shallow for large vessels to enter and it has insufficient docks. Therefore, when Japanese firms (and other MNEs) operating at Tijuana import parts and components from abroad, they often use the U.S. port at Long Beach in Los Angeles and then

transport the imported parts and components to their factories in Mexico by truck. Another issue in this type of operation exists. The port at Long Beach is sometimes much too crowded, and thus it takes a long time to have parts and components transported to the factories even after they are on board; in the worst cases, factories have to wait for two weeks. Considering the serious situation of purchasing parts and components in terms of logistics and timing, Japanese firms are sometimes forced to use air shipments with much higher costs.

In the electronic machinery industry, all of the logistics on the U.S. side are done by the U.S. logistics firms, including cases when final products are distributed by firms located in Mexico (strictly speaking, from the U.S. side of the U.S.-Mexico border) to major department stores and other retailers in the U.S. Even for logistics on the U.S. side, there are difficulties in securing the needed number of trailers, headers, and drivers in the peak season.

Roads on the Mexican side have not been well developed or maintained, a particularly serious problem when transporting precision machinery parts and components.

The supply of electricity power has become stable. The prices, however, go up when the consumption of electricity goes up. Therefore, costs rise in the peak season of production in the electronic machinery sector.

Lack of Supporting Industries

Due to the lack of supporting industries in the electronic machinery industry, a large portion of parts and components are imported from East Asian countries. The quality of goods produced by local indigenous firms has improved. However, when a firm attempts to introduce new environmentally friendly standards for their parts and components, for instance, the local indigenous suppliers cannot necessarily adopt them.

Inefficient Custom Procedures

Customs procedures are said to be inefficient. In many export processing zones in developing East Asian countries, customs clearance can be done when containers depart from factories. In Mexico, this sort of system has rarely been introduced in bonded areas. Such a system would partially but significantly facilitate customs procedures.

Problems Regarding Intellectual Property Rights

Pirated software and various other illegal goods produced in China or Mexico can be found in

the Mexican market, and they are sold at much lower prices than the genuine goods.

Collection System for Receivables

There are difficulties in collecting receivables, and thus a collection system for receivables must be established.

(3) FTA/EPA-Related Issues (Including Future Prospects)

Government Procurement

Government procurement in Mexico is basically supposed to be domestic procurement. International bidding, however, is allowed among FTA/EPA member countries under certain constraints.⁸⁹ In other words, international bidding by non-FTA member countries is extremely difficult or impossible. So far, East Asian countries have rarely been able to participate in international bidding limited to FTA-member countries. The implementation of the Japan-Mexico EPA in April 2005 has at least provided Japanese firms with the right to participate in such international bidding in Mexico.

Japan-Mexico EPA

With the enforcement of the Japan-Mexico EPA, Japanese affiliates in Mexico can purchase parts and components or capital goods from Japan with lowered/no import tariffs. Japanese firms in Mexico, particularly in the electronic machinery sector, however, purchase their parts and components not only from Japan but also from other East Asian countries such as Malaysia, Thailand, and China (partially through Hong Kong). In addition, there are cases where parts and components originally made in Asia are used in products they purchase even from other Japanese affiliates in Mexico. Therefore, the Japan-Mexico EPA might not bring a significant benefit, in terms of additional costs due to trade measures, for those firms using a large amount of imports of parts and components from Asian countries other than Japan.

What is a very important outcome of the Japan-Mexico EPA beyond tariff removal is that it includes a chapter referring to the improvement of the business environment. Japan and Mexico have confirmed their commitment to creating a more favorable business environment to promote trade and investment activities by their private enterprises and from time to time

⁸⁹ Mexico has 12 FTA/EPAs with 43 economies.

holding consultations on the business environment between Japan and Mexico. At the same time, they have agreed to establish a committee for the improvement of the business environment that includes private companies; the Japan External Trade Organization (JETRO), Camara Japonesa de Comercio e Industria de Mexico. A.C., and the Japanese Maquiladora Association (JMA) have participated in the committee as representatives of private parties to improve the business environment in Mexico.

In the automobile sector, as discussed above, there is a non-tariff import quota for finished cars dependent on the production of automobiles in Mexico that can be transferred to other automobile producers in the same auto group. Since the enforcement of the EPA with Mexico, Japan has obtained a non-tariff quota that is equivalent to five percent of the domestic sales of automobiles in Mexico per year. In addition, the tariff on automobiles, which was 50 percent until March 2005, is supposed to be gradually reduced and removed within six years from the enforcement of the EPA. One of the possible effects is that Japanese automobile producers with production sites in Mexico, who could utilize some of the non-tariff quota under the Japan-Mexico EPA as well, will transfer their own non-tariff quota of finished cars to Korean automobile producers and others in the same auto group.

Another important effect is an increase in investment by Japanese automobile producers without production sites in Mexico. For instance, Isuzu has just established an affiliate in Mexico, jointly with a Japanese trading company, to distribute automobiles imported from Japan not only in the Mexican market but also in the North American market, considering the reduced tariffs on finished cars under the Japan-Mexico EPA. It will start exporting small-sized trucks from Japan to its affiliate in October 2005 and might also start local production in Mexico in the future with the cooperation of GM, the largest shareholder of Isuzu.

Korea- and China-Related Issues

Korea has already started a study group to examine an FTA with Mexico, while China has already established high-level dialogue with Mexico to identify potential business opportunities and to address Sanitary and Phytosanitary (SPS) measures and illegal trade; the aim is to strengthen economic relations between the two countries rather than to conclude an FTA between them.

Regarding TV production, China has a domestic demand of 20 million but has a production capacity of 40 million TVs with a cheap labor force (one-fourth or less the wages in Mexico). China has been exporting its TVs to the US and other countries since 2000. Chinese TVs are

cheaper by 20-30 percent, and the United States has imposed anti-dumping (AD) duties on TVs imported from China.

Apparel made in China is sometimes treated as "NAFTA origin" (for instance, apparel produced by U.S. affiliates in China), and accounts for more than 60% of the market.

In the automobile sector, Chinese automobile producers will not get a significant market share for at least the next decade or so. In China, there exist only joint ventures with Chinese firms (foreign capital shares of less than 50%).

(4) Policies Adapted by The Government to Deal with Issues/Impediments

In Mexico, the necessity of strengthening international competitiveness has been often addressed these days. In order to improve competitiveness, the Mexican government has made various efforts, including those that directly and indirectly influence trade and investment patterns. As one such effort, for instance, the Ministry of Economy (Secretaria de Economia) presented "Concrete actions to increase competitiveness (Acciones concretas para incrementar la competitivedad)" in October 2004. Aiming at clarifying government policies and realizing them, this action plan classifies 74 policies/measures that were and will be individually planned and implemented during 2001-2006 into four categories – i) trade policies (politica commercial) (14 policies), ii) sectoral policies (policies sectorial) (49 policies), iii) development of domestic markets (desarrollo del mercado interno) (seven policies), and iv) innovation and development of high value-added technology and services (innovation, desarrollo tecnologico y servicios de alto valor agregado) (four policies) – and summarizes information on the instrument of implementation, the date of implementation, preparations, and the expected effects of each policy.⁹⁰

One of the main purposes of i) trade policies is to lower MFN tariffs on raw materials and machines/equipment. MFN tariffs are at first to be reduced to pre-1998 levels when those on 10,000 items (85 percent of total tariff lines) were raised by three percent or 10 percent, and are to be further reduced in future so that they will be close to the lowered preferential tariffs applied to the U.S. Other important purposes of i) trade policies include the simplification and computerization of administrative procedures. As an important part of logistics, for example,

⁹⁰ The detailed contents of "Acciones concretas para incrementar la competitivedad" can be downloaded at the following website: <u>http://www.economia.gob.mx/?P=2025</u>.

cases that require prior permission for imports will be limited to the lowest levels to improve the temporal and physical costs of customs procedures.⁹¹

The purposes of policies categorized as ii) sectoral policies include lowering tariffs on raw materials in the textile, leather, footwear and other industries by utilizing PROSEC, lowering tariffs in the automobile, iron/steel and other industries, hosting FDI, and developing a loan system. Lowering tariffs in general/by sector is aimed at not only decreasing the cost of production, using imported raw materials and machinery, but also reducing smuggling.

The policies for iii) development of domestic markets include those aimed at modernization of domestic markets, improvement of logistics, and further utilization of government procurement. The policies for iv) innovation and development of high value-added technology and services aim at producing high value-added products rather than products produced with cheap labor; the major goals include attracting production sites for the next-generation models of home electronics and cellular phones, and attracting the semiconductor industry to the northern part of Mexico.

Another approach taken by the Mexican government worth mentioning is the implementation of an "administrative procedure moratorium," which prohibits the establishment of new administrative procedures by the central government and government agencies. The "agenda of competitiveness (agenda de competitividad)" adopted by the Fox administration has five themes – i) logistics, ii) business environment, iii) energy, iv) finance, and v) innovation and human capital development – and this moratorium is one of the more important policies for improving the ii) business environment. The moratorium originally targeted the period from May 13, 2004 to April 29, 2005, but the period was extended until the end of November 2006, reflecting the success achieved in simplifying administrative procedures.

Efforts by both government and private parties to improve the business environment have also been made within the framework of FTAs/EPAs such as the Japan and Mexico EPA (as discussed above). In addition, a Competitiveness Committee has been established in the Mexican Senate.

⁹¹ In Mexico, only those who have registrations are permitted to import. Furthermore, registration to import sensitive products for the domestic economy is distinct from registration to import general products; the former is called "Padron Sectorial" and the latter "Padron de importadores".

5. CONCLUDING REMARKS:

Some Suggestions for the Promotion of Trade and FDI between East Asia and Latin America

Trade and FDI between East Asia and Latin America remain significantly small in spite of recent increases in trade and FDI involving rapidly growing China. In addition, the establishment of free trade agreements involving countries across the Pacific has contributed to an increase in trade and FDI between the partner countries. Specifically, the Chile-Korea FTA resulted in an increase in exports of Korean cars to Chile, while it contributed to the expansion of Chilean wine sales in Korea. The enactment of the Japan-Mexico FTA has reportedly resulted in an increase in FDI by Japanese automobile companies in Mexico. In light of the difficulties in promoting multilateral trade negotiations (Doha Development Agenda, or DDA) under the WTO because of differing views on DDA among the WTO members, FTAs involving countries on both sides of the Pacific can be an effective policy option for promoting trans-Pacific trade and FDI.

Our study examined trade and FDI barriers for selected East Asian and Latin American countries. For identifying trade barriers we examined tariff and non-tariff barriers or non-tariff measures (NTMs). Our examination revealed that, for all the countries under study, tariff barriers have come down significantly in recent years, although there still remains room for further reduction for many countries excluding Singapore, whose tariff rates for many products are already zero. Between East Asian and Latin American countries, the average tariff rates in East Asian countries are lower than those in Latin America. However, it is important to note that the coverage of tariff binding is greater for Latin American than for East Asia. These observations point to room for further trade liberalization. An investigation of NTMs by using information collected by UNCTAD and the Inter-American Development Bank as well as the information obtained from our interviews with business people, government officials, and academic researchers reveals various NTMs. An examination of UNCTAD and Inter-American Development Bank databases on NTMs indicates that both East Asian and Latin American countries use a wide variety of NTMs such as price controls, automatic licensing measures, quantity controls, monopolistic measures, and technical measures. It was found that the types of NTMs used by East Asian and Latin American countries differ; East Asian countries tend to use quantity control measures while Latin American countries tend to depend on technical measures.

To examine FDI impediments we relied on mainly two types of information. One was the results of surveys conducted by business associations and others. The other source of information

was our interviews. We found a variety of FDI impediments, including restrictions on market access (entry barriers), restrictions on foreign exchange transactions, performance requirements such as export requirements, and others. We also found that the degree of seriousness of the impediments vary among countries, although it is difficult to make an overall assessment of FDI impediments for the countries studied because of a lack of numerical indicators such as tariffs in the case of foreign trade.

There exist a variety of trade and FDI impediments. However, the governments of the countries under study have adopted various policies and measures to promote trade and FDI, as they recognize the important roles that trade and FDI could play in achieving economic growth. Some of these measures include simplification of administrative procedures for trade and FDI and provision of FDI incentives such as tax relief.

Although we recognize the efforts of the governments in promoting trade and FDI by various measures, we would like to make several policy recommendations that would contribute to expanding trade and FDI. One important factor for promoting trade and FDI between East Asia and Latin America is to increase and deepen mutual understanding between countries of their respective markets, people, and societies. Without knowing each other, East Asia and Latin America cannot find business opportunities that would give rise to trade and FDI. Specifically, interpersonal exchanges between the two regions at all levels, ranging from top leaders to students, should be enhanced by establishing a variety of exchange programs. To supplement face-to-face communications through personal exchange, communications via TV conferences and other telecommunications channels should be strongly pursued.

We would also propose that governments establish FTAs both bilaterally and multilaterally. FTAs should be comprehensive in that they contain not only trade and FDI liberalization but also trade and FDI facilitation. Inclusion of facilitation is important because many impediments involve systems and procedures, which can be dealt with by facilitation but not by liberalization. Moreover, FTAs should also include economic cooperation programs that would contribute to implementing facilitation measures. For example, introduction and enforcement of intellectual property rights protection in developing countries, which would promote FDI, requires not only a legal framework but also capable personnel to run the system effectively. Development of such human resources may be realized with economic cooperation from developed countries. Indeed, the governments may find it advisable to establish a comprehensive FTA, economic partnership agreement (EPA), or comprehensive economic partnership agreement (CEPA) in order to establish a comprehensive framework for promoting trade and FDI, which in turn would contribute to economic growth.

We do hope this report will be of use for policy makers, who are responsible for formulating and implementing trade and FDI policies, as well as for a number of business people who are daily engaged in the development of new relationships in these regions. Since there are a variety of trade and FDI impediments, we could not identify or examine all of them. We hope further investigation of trade and FDI impediments will continue so that we may achieve freer trade and a more favorable FDI environment, which would promote economic growth by increasing trade and FDI.

6. **References**

The American Chamber of Commerce in Japan (ACCJ). *From Goals to Reality: FDI Policy in Japan.* Tokyo: The American Chamber of Commerce in Japan, 2003.

Ando, Mitsuyo. "The Pervasiveness of Non Tariff Measures in APEC Countries." COE Discussion Paper 0201. Tokyo: Keio University, 2002

Ando, Mitsuyo, and Antoni Estevadeordal. "Trade Policy Formation in Latin America and Asia-Pacific: A Comparative Analysis." *COE Discussion Paper* 2004-27. Tokyo: Keio University, 2004. The previous version was presented at LAEBA panel at 11th FIEALC (Federacion Internacional de Estudios sobre America Latina y el Caribe) 2003 Osaka "Globalization in Asia and Latin America: Trade, Investment, and Finance."

Ando, Mitsuyo. "Estimating Tariff Equivalents of Non-tariff Measures in APEC Member Economies." In Philippa Dee and Michael Ferrantino eds. *Quantitative Methods for Assessing the Effects of Non-Tariff Measures and Trade Facilitation*. World Scientific, 2005

Ando, Mitsuyo. "Fragmentation and Vertical Intra-industry Trade in East Asia." Forthcoming in *North American Journal of Economics and Finance* (after final review). The previous version was appeared in *COE discussion paper* 2004-25. Tokyo: Keio University, 2005

Ando, Mitsuyo, and Fukunari Kimura. "The Formation of International Production and Distribution Networks in East Asia." In Takatoshi Ito and Andrew Rose, eds. *International Trade (NBER-East Asia Seminar on Economics 14*), Chicago: The University of Chicago Press, 2005. The former version was appeared in *NBER Working Paper* 10167.

Baldwin, R. "A Domino Theory of Regionalism." in R. Baldwin, P. Haaparanta, and J. Kiander eds. *Expanding Membership of the EU*. Cambridge, UK: Cambridge University Press, 1996.

Benes, Nicholas E. "Kin-yu kaikaku puroguramu kakushin wo kiku 2: 'yusei' furezu kakuron D hyouka." *Nikkei Kin-yu Shimbun*, 1 February 2005, p.1.

Brown, Lester. "Chuugoku don-yoku na shigen shouhi." Yomiuri Shimbun, 2 May 2005, p.1.

Japan External Trade Organization (JETRO). 2004 JETRO White Paper on International Trade and Foreign Direct Investment (Summary). Tokyo: JETRO, 2004. http://www.jetro.go.jp/en/stats/white_paper/004.pdf 27 March 2005.

Japan External Trade Organization (JETRO). *JETRO boueki toushi hakusho 2004.* Tokyo: JETRO, 2004.

Japan External Trade Organization (JETRO). *Shinten suru chuunanbei ikinai sabisu kyoten to gurobaru shigen syokuryou seisan no shuuseki (chili)*. Tokyo: JETRO, 2005. http://www.jetro.go.jp/biz/world/cs_america/cl/reports/05000921?print=1 27 March 2005.

Japan External Trade Organization (JETRO). *Nihon no makuro keizai doukou (2005-nen 3-gatsu)*. Tokyo: JETRO, 2005. <u>http://www.jetro.go.jp/jpn/reports/05000916?print=1</u> 27 March2005.

Japan External Trade Organization (JETRO). *Sekai to nihon no shuyou na FTA ichiran*. Tokyo: JETRO, 2005. <u>http://www.jetro.go.jp/jpn/reports/05000906?print=1</u> 27 March 2005.

Japan Machinery Center for Trade and Investment. *Issues and Requests relating to Foreign Trade and Investment in 2004.* Tokyo: Japan Machinery Center for Trade and Investment, 2005. <u>http://www.jmcti.org/mondai/top_e.html</u> 27 March 2005.

Japan PECC. An Assessment of Impediments to Foreign Direct Investment in APEC Member Economies. Tokyo: Japan PECC, 2002.

Kimura, Fukunari, and Mitsuyo Ando. "Fragmentation and Agglomeration Matter: Japanese Multinationals in Latin America and East Asia." *North American Journal of Economics and Finance* 14, no.3 (2003), 287-317.

Kimura, Fukunari, and Mitsuyo Ando. "Two-dimensional Fragmentation in East Asia: Conceptual Framework and Empirics". *International Review of Economics and Finance* 14 (2005a), 317-348.

Kimura, Fukunari, and Mitsuyo Ando. "The Economic Analysis of International Production/Distribution Networks in East Asia and Latin America: The Implication of Regional Trade Arrangements" *Business and Politics* 7, no.1 (2005b), Article 1.

Kimura, Fukunari and Mitsuyo Ando. "Jiyuu boueki kyoutei to nougyou mondai (Free Trade Agreements and Controversy about Agricultural Protection)." *Mita Gakkai Zasshi* (Mita Journal of Economics) 95, no. 1 (2002), 111-137.

Kishida, Hideki. "FTA in ASEAN." *Economic Research* 04-003. Tokyo: Nomura Securities (In Japanese), 2004a.

Kishida, Hideki. "FTA in ASEAN." *Economic Research* 04-011. Tokyo: Nomura Securities (In Japanese), 2004b.

Ministerio de Economia, Gobierno de Chile. *Quinto Catastro Nacional Sobre Barreras Externas al Comercio: 2004.* Santiago de Chile: Ministerio de Economia, Gobierno de Chile, 2004.

The Ministry of Economy Trade and Industry. *Japan's Policy on FTAs/EPAs*. Tokyo: The Ministry of Economy Trade and Industry, 2005. <u>http://www.meti.go.jp/english/information/downloadfiles/FTAprogress200503.pdf</u> 27 March 2005.

Naikakufu (The Cabinet Office). *Getsurei keizai houkoku (getsuji)*. Tokyo: Naikakufu (Cabinet Office), January 2003 – December 2004. <u>http://www5.cao.go.jp/keizai3/getsurei.html</u> 27 March 2005.

Organization for Economic Co-operation and Development (OECD). *OECD Economic Outlook* 76, no. 2, Paris: OECD, 2005.

Pangestu, Mari. "Industrial Policy and Developing Countries" in Bernard Hoekman, Philip English and, Aaditya Matto eds. *Development, Trade, and the WTO: A Handbook*. Washington D.C.: World Bank, 2003.