Analysis of the Performance of U.S. Investment Abroad and Its Implications for Developing Countries and Japan

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Foreword

This report on the research project, *Analysis of the Performance of U.S. Investment Abroad and Its Implications for Developing Countries and Japan*, is produced by the Institute for International Monetary Affairs (IIMA). The project, commission by the Japanese Ministry of Finance, started in August 2005 and completed in February 2006. This report brings together the findings and analysis of the research.

The U.S. maintains a positive return in its income account of the Balance of Payments despite its accumulating large net foreign liabilities since 1986 when U.S. net international investment position plunged into negative zone. It could be considered that the U.S., in effect, keeps net foreign assets position in that it still renders a net return on its international investment position. The key contributing factor enabling a positive return on its negative net international investment position is that the return on U.S.-owned assets abroad has consistently exceeded the return on foreign-owned assets in the U.S. Indeed, the rate of return on the former has been outperforming by far that on the latter. Would this situation remain unchanged for years to come? If it would, the U.S. could be deemed it remains, in effect, in a positive net international position, with continuing positive return in its investment income account, thus conceivably having positive implications for the sustainability of the U.S. current account deficit. If not, its investment income account would deteriorate to show eventually negative figures, thus causing not only the U.S. current account deficit to increase but also to topple the U.S. into a negative net international investment position both in nominal and effective terms, which, as contrasted with the earlier case, would have negative implications for the sustainability issue. It is on this account that the prospects of the future rate of return gap between U.S. outward and inward direct investments will have a significant bearing on the implications of the sustainability of the current account deficit.

The project, motivated by such observation, focused mainly on finding answers to the question why the return on U.S. foreign direct investment abroad has consistently outperformed that on foreign direct investment in the U.S. Chapters 1 and 2 of the report devoted to the analysis in this regard. Capitalizing on such analysis, Chapter 3 then discussed the prospects of the gap of the rate of return between U.S. outward and inward direct investments. The IIMA also conducted head-on-head interviews with a small number of leading U.S. corporations as well as industry analysts of major U.S. investment banks to supplement macro-data-based analysis. Chapter 4 simulated multiple scenarios using Vector Autoregressive (VAR) model to analyze the level of the income account that would be considered to secure the sustainability of the U.S. current account. Finally, Chapter 5 examined US investment abroad in conjunction with its role for economic development in developing countries.

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Chapter 1 Overview of Current Trends of U.S. Direct Investment Abroad and Foreign Direct Investment in the U.S.

Before we examine rate of return on U.S. investment in the subsequent chapters, we overview below U.S. international assets and liabilities position, U.S. income account structure and U.S. outward and inward direct investment compositions by industry and area.

1. International Assets and Liabilities Position of the U.S. and its Income Account

U.S. international investment position as of 2004-end stood at a net liabilities position of US2,484.2 billion, with U.S.-owned assets of US9,052.7 billion and foreign-owned assets of US11,537.0 billion on a current-cost basis¹. The net liabilities position is equivalent to 21.2% of U.S. GDP (Table 1-1).

U.S. international investment position plunged into negative zone on a net basis in 1986. Ever since then, the net liabilities position has been increasing every year except in 1990, 1993, and 1999. Despite its increasing cumulative international net liabilities position, however, the return on the U.S.-owned assets abroad, i.e., receipts by the U.S., exceeds every year that on the foreign-owned assets in the U.S., i.e. payments by the U.S. The U.S., with its net return on the international investment position, could be deemed, as a country that holds in effect net foreign assets, rather than a country in net foreign liability position.

								(US	S\$ billion)
	U.S.	assets abroad	Foreign	assets in the	e U.S.	U.S. net international position			as % of
	FDI	Other Total	FDI	Other	Total	FDI	Other	Total	GDP
1983	355.6	855.3 1,211.0	193.7	719.0	912.7	161.9	136.4	298.3	8.4%
1984	348.3	856.6 1,204.9	223.5	820.7	1,044.2	124.8	35.9	160.7	4.1%
1985	371.0	916.4 1,287.4	247.2	985.8	1,233.1	123.8	-69.5	54.3	1.3%
1986	404.8	1,064.6 1,469.4	284.7	1,220.9	1,505.6	120.1	-156.3	-36.2	-0.8%
1987	478.1	1,168.5 1,646.5	334.6	1,392.0	1,726.5	143.5	-223.5	-80.0	-1.7%
1988	513.8	1,315.9 1,829.7	401.8	1,606.4	2,008.1	112.0	-290.5	-178.5	-3.5%
1989	553.1	1,517.8 2,070.9	467.9	1,862.5	2,330.4	85.2	-344.7	-259.5	-4.7%
1990	616.7	1,562.3 2,179.0	505.3	1,919.0	2,424.3	111.3	-356.7	-245.3	-4.2%
1991	643.4	1,643.1 2,286.5	533.4	2,062.3	2,595.7	110.0	-419.2	-309.3	-5.2%
1992	663.8	1,667.9 2,331.7	540.3	2,222.6	2,762.9	123.6	-554.8	-431.2	-6.8%
1993	723.5	2,030.1 2,753.6	593.3	2,467.3	3,060.6	130.2	-437.2	-307.0	-4.6%
1994	786.6	2,200.6 2,987.1	618.0	2,692.5	3,310.5	168.6	-492.0	-323.4	-4.6%
1995	885.5	2,600.8 3,486.3	680.0	3,264.7	3,944.7	205.4	-663.9	-458.5	-6.2%
1996	989.8	3,042.5 4,032.3	745.6	3,781.7	4,527.4	244.2	-739.2	-495.1	-6.3%
1997	1,068.1	3,499.8 4,567.9	824.1	4,564.5	5,388.6	243.9	-1,064.6	-820.7	-9.9%
1998	1,196.0	3,899.5 5,095.5	920.0	5,070.9	5,990.9	276.0	-1,171.3	-895.4	-10.2%
1999	1,414.4	4,560.0 5,974.4	1,101.7	5,638.9	6,740.6	312.6	-1,078.9	-767.2	-8.3%
2000	1,531.6	4,707.2 6,238.8	1,421.0	6,199.0	7,620.0	110.6	-1,491.8	-1,381.2	-14.1%
2001	1,693.1	4,615.6 6,308.7	1,518.5	6,709.6	8,228.1	174.7	-2,094.1	-1,919.4	-19.0%
2002	1,860.4	4,785.3 6,645.7	1,517.4	7,235.5	8,752.9	343.0	-2,450.3	-2,107.3	-20.1%
2003	2,062.6	5,578.4 7,641.0	1,585.9	8,211.8	9,797.7	476.7	-2,633.4	-2,156.7	-19.7%
2004	2,367.4	6,685.4 9,052.8	1,708.9	9,828.1	11,537.0	658.5	-3,142.7	-2,484.2	-21.2%

Table1-1 U.S. International Assets and Liabilities Position (1983-2004)

FDI: Foreign Direct Investment

(Source:Department of Commerce)

Table 1-2 presents US income receipts/payments in two categories, namely (i) U.S. outward and inward foreign direct investment and (ii) U.S. outward and inward foreign investment excluding direct investment (hereinafter referred to as "other investment" in this section). The data indicate U.S. net receipts of foreign direct investment has consistently more than offset U.S. net payments of other

¹ Please refer to Box 1 (pp. 8), "Valuation Methods of Direct Investment Balance", for definition of current-cost basis, etc.

investment.

Table 1-2 US Income Receipts/Payment of Foreign Investment (1983-2004)

								(U	S\$ billion)
	Investmen	nt income (re	eceipts)	Investment	income (pa	ayments)	Net inv	vestment in	come
	FDI	Other	Total	FDI	Other	Total	FDI	Other	Total
1983	31.8	58.3	90.0	-4.1	-49.5	-53.6	27.6	8.8	36.4
1984	35.3	73.5	108.8	-8.4	-65.3	-73.8	26.9	8.2	35.1
1985	35.4	63.1	98.5	-6.9	-65.9	-72.8	28.5	-2.7	25.7
1986	36.9	59.2	96.2	-6.9	-72.0	-78.9	30.1	-12.8	17.3
1987	46.3	60.9	107.2	-7.7	-83.9	-91.6	36.6	-23.0	13.6
1988	58.4	77.3	135.7	-12.2	-104.0	-116.2	46.3	-26.8	19.5
1989	62.0	98.3	160.3	-7.0	-132.1	-139.2	54.9	-33.8	21.1
1990	66.0	104.6	170.6	-3.5	-136.3	-139.7	62.5	-31.7	30.8
1991	58.7	89.2	147.9	2.3	-123.3	-121.1	61.0	-34.1	26.9
1992	57.5	74.3	132.0	-2.2	-102.6	-104.8	55.3	-28.2	27.2
1993	67.2	67	134.2	-7.9	-97.7	-105.6	59.3	-30.7	28.6
1994	77.3	87.2	164.6	-22.2	-121.3	-143.4	55.2	-34.0	21.2
1995	95.3	112.8	208.1	-30.3	-152.8	-183.1	64.9	-40.0	25.0
1996	102.5	121.4	223.9	-33.1	-164.4	-197.5	69.4	-43.0	26.4
1997	115.3	139.2	254.5	-43.0	-194.6	-237.5	72.3	-55.4	17.0
1998	104.0	155.4	259.4	-38.4	-212.1	-250.6	65.5	-56.7	8.8
1999	131.6	159.6	291.2	-53.4	-218.6	-272.1	78.2	-59.1	19.1
2000	151.8	196.2	348.1	-56.9	-265.4	-322.3	94.9	-69.2	25.7
2001	128.7	156.7	285.4	-12.8	-242.3	-255.0	115.9	-85.5	30.3
2002	145.6	122.3	267.8	-45.8	-206.6	-252.4	99.8	-84.3	15.5
2003	193.3	113.6	306.9	-71.4	-183.6	-255.0	121.8	-70.0	51.8
2004	233.1	143.4	379.5	-105.1	-235.1	-340.3	127.9	-91.7	36.2

FDI: Foreign Direct Investment

(Source:Department of Commerce)

Given the accumulated U.S. external debt and continuing current account deficit, U.S. net payments of other investment should increase due to increasing flow of foreign funds to the U.S. This implies whether the U.S. would maintain its net assets position in effect (i.e. maintaining net surplus in its investment income account) or would become a country in net liabilities position both in nominal and effective terms (i.e., running net deficit in its investment income account) is dependent on whether the U.S. can earn sufficient level of net receipts of foreign direct investment to offset U.S. net payments of other investment. In the event that the U.S. should record annual deficit in its income account, it would be the first time since 1911.

The U.S.'s consistent sizable net receipts in foreign direct investment income account is due mainly to the rate of return gap between U.S. outward and inward direct investment (the former outperforms the latter) while it is due, to a lesser extent, to U.S. net assets position, i.e. U.S.-owned assets abroad exceeding foreign-owned assets in the U.S.

In order to confirm the above argument, we conducted below a factor analysis based on the data in Tables 1-1 and 1-2 on the U.S. income receipts/payments of foreign investment in 2004. The income receipts/payments consist of those of direct investment and those of other investment. Rate of return gap factor and investment position difference factor are analyzed in respect of each investment category by factor analysis (see Table 1-3). Please refer to the note to the table for our methodology.

We can point out the following from the analysis:

- Net surplus US\$36.2 billion of income receipts of foreign investment consists of net surplus US\$127.9 billion for foreign direct investment and net deficit US\$91.7 billion for other investment;
- The above US\$127.9 billion net surplus income receipt of foreign direct investment consists of US\$80.0 billion attributable to the rate of return gap factor (namely, 10.5% return on U.S. direct investment abroad *versus* 6.4% return on foreign direct investment in the U.S.) and US\$48.0 billion attributable to the investment position difference factor (namely, US\$2,215.0

billion U.S. direct investment abroad *versus* US\$1,647.4 billion foreign direct investment in the U.S.). This indicates the rate of return gap is the major factor for the net surplus of income receipts of U.S. direct investment; and

Net deficit US\$91.7 billion of income payments of other investment consist of US\$20.3 billion attributable to the rate of return gap factor (namely, 2.3% return on U.S. other investment abroad versus 2.6% return on foreign other investment in the U.S. and US\$71.4 billion attributable to the investment position difference factor (namely, US\$6,131.9 billion of U.S. other investment abroad *versus* US\$9,020.0 billion of foreign other investment in the U.S. This indicates the investment position difference is the major factor for the net deficit of income payments of U.S. foreign other investment.

Table 1-3 Factor Analysis of Net Income Receipts/Payments of Foreign Investment in 2004

		(US\$ billion)
	Net investment income	30.4
	Net income from direct investment	128.0
X1	of which: attributable to difference in rate of return	80.0
Y1	attributable to difference in investment position	48.0
	Income from other investment	-97.4
X2	of which: attributable to gap of rate of return	-23.9
Y2	attributable to difference of investment position	-73.5

Minus (-) denotes amount paid exceeds amount received

	Data for factor analysis	
A1	Position of U.S. direct investment abroad (US\$ billion)	2,215.0
a1	Rate of return on U.S. direct investment abroad (%)	10.5
B1	Position of foreign direct investment in the U.S. (US\$ billion)	1,647.4
b1	Rate of return on foreign direct investment in the U.S. (%)	6.4
A2	Position of U.S. "other investment" abroad (US\$ billion)	6,131.9
a2	Rate of return on U.S. "other investment" abroad (%)	2.4
B2	Position of foreign "other investment" in the U.S. (US\$ billion)	9,020.0
b2	Rate of return on foreign "other investment" in the U.S. (%)	2.7

Each position is an arithmetic mean of year-end balance of 2003 and 2004. Rate of return: income divided by investment position

(Note) Factor analysis has been conducted as below. As a first step, net investment income can be described by the following formula: a1*A1-b1*B1

> The above can be transformed to the following identical equation. a1*A1-b1*B1=(a1-b1)*(A1+B1)+(a1+b1)*(A1-B1)-(a1*A1-b1*B1)

The above can be re-arranged as below. a1*A1-b1*B1=(a1-b1)*(A1+B1)/2+(A1-B1)*(a1+b1)/2

The first term of the right-hand side of the above equation indicates the difference between the rate of return on U.S. direct investment abroad and that of foreign direct investment in the U.S. In other words, the term represents the factor attributable to the difference of rate of return.

The second term of the right-hand side of the above equation can be regarded as the difference of position between U.S. outward and inward direct investment. In other words, the term represents the factor attributable to the difference of position. We follow the same steps regarding "other investment", and obtain the following equation. a2*A2-b2*B2=(a2-b2)*(A2+B2)/2+(A2-B2)*(a2+b2)/2

The first term of the right-hand side of the above equation represents the factor attributable to the differnce of rate of return, and the second term the factor attributable to the differnce of position.

The above indicates whether the U.S. would maintain its net assets position in effect by maintaining net surplus in its investment income account or would become a country in net liabilities position both in nominal and effective terms (i.e., running net deficit in its investment income account) is dependent, aside from the issue of fast growing income payments of U.S. external debts, on the level of the rate of return gap between U.S. outward and inward direct investment.

2. Recent Trend of U.S. Direct Investment Abroad

We overview in the sections below recent trend of U.S. direct investment abroad (hereinafter referred to as "USDIA") and foreign direct investment in the U.S. (hereinafter referred to as "FDIUS") by industry and area.

Table 1-4 presents USDIA position by industry since 1999 on a historical-cost basis. Please refer to Box 1 for the definition of the evaluation of investment position.

				(US	5\$ billion, '	% (share))
	1999	2000	2001	2002	2003	2004
All Industries	1,216.0	1,316.2	1,460.3	1,616.5	1,791.9	2,064.0
All Industries	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Mining	72.5	72.1	79.4	81.8	87.7	101.5
Ivining	6.0%	5.5%	5.4%	5.1%	4.9%	4.9%
Utilities	22.5	22.0	25.5	26.4	21.8	19.0
oundes	1.8%	1.7%	1.7%	1.6%	1.2%	0.90%
Manufacturing	327.3	343.9	328.0	337.7	375.3	428.2
ivianuraeturing	26.9%	26.1%	22.5%	20.9%	20.9%	20.7%
Food	23.3	23.5	21.3	19.2	23.9	26.0
1000	1.9%	1.8%	1.5%	1.2%	1.3%	1.3%
Chemicals	81.7	75.8	79.2	82.5	96.3	107.9
Chemicais	6.7%	5.8%	5.4%	5.1%	5.4%	5.2%
Matals	21.6	21.6	21.8	20.8	22.1	26.3
Wietais	1.8%	1.6%	1.5%	1.3%	1.2%	1.3%
Machinery	21.5	22.2	17.7	18.3	21.1	24.5
	1.8%	1.7%	1.2%	1.1%	1.2%	1.2%
Computers, etc.	46.8	59.9	58.7	49.6	51.1	58.6
	3.8%	4.6%	4.0%	3.1%	2.9%	2.8%
Electric products	8.2	10.0	9.6	9.7	11.0	12.4
Electric products	0.7%	0.8%	0.7%	0,6%	0.6%	0.6%
Transportation	43.3	49.9	40.5	45.3	47.5	48.4
equipment	3.6%	3.8%	2.8%	2.8%	2.7%	2.3%
Wholesale trade	86.3	93.9	112.9	111.2	122.0	136.9
wholesale trade	7.1%	7.1%	7.7%	6.9%	6.8%	6.6%
Information	50.1	52.3	43.0	41.7	49.1	56.4
Information	4.1%	4.0%	2.9%	2.6%	2.7%	2.7%
Depository institutions	40.9	40.2	44.6	54.7	62.6	68.1
Depository institutions	3.4%	3.1%	3.8%	3.4%	3.5%	3.3%
Finance (excluding	198 7	217.1	240 3	285.2	328.9	371.0
depository institutions) and	170.7	217.1	210.5	200.2	520.7	571.0
insurance	16.3%	16.5%	16.5%	17.6%	18.4%	18.0%
Professional, technical	30.0	32.9	34.3	31.1	35.3	42.1
services	2.5%	2.5%	2.3%	1.9%	2.0%	2.0%
Other industries	387.7	441.9	541.3	646.7	709.3	840.8
Other industries	31.9%	33.6%	37.1%	40.0%	39.6%	40.7%

Table 1-4 USDIA Position by Industry (1999-2004)

➤ Total investment position increased from US\$1,216.0 billion in 1999 to US\$2,064 billion in 2004, with an average increase of 11.2% annually.

- All industries increased investment position in absolute terms during the period. The growth rate, however, differs substantially for each industry. The shares of each industry segment changed accordingly.
- ➤ The industry segment which underwent the most noticeable change is "other industries." Its share already as high as at 31.9% in 1999 reached 40.7% in 2004.
- ➢ Industry segment whose share increased along with "other industries" during the period is "finance (except depository institutions) and insurance" only, with its share at 16.3% in 1999 and 18.0% in 2004. All other industry segments decreased their shares during the period.
- ➤ As a result, combined shares of the two industry segments, namely "other industries" and "finance (except depository institutions) and insurance" accounted for nearly 60% of total USDIA in 2004.
- ➤ Meanwhile, the manufacturing sector substantially decreased its share during the period from 26.9% to 20.7%.
- "Other industries" segment that increased its share substantially during the period include a wide variety of industries. More specific industry segment showing substantial increase in its share is "holding companies, except bank holding companies," that belongs to Code No.5412 of U.S. Industry Classifications. The investment position of "holding companies, except bank holding companies" as at 2004-end stood at US\$705.4 billion, accounting for 85% of US\$840.8 billion of "other industries", or 34% of US\$2,064.0 billion of all USDIA. Please note that "bank holding companies" are classified as "depository institutions" in Table 1-3. Section 5 of Chapter 2 discusses "holding companies" in more detail.

Table 1-5 presents USDIA position by area since 1999 on a historical-cost basis.

Table 1-5 USDIA Position by Area (1999-2004)

				(U	S\$ billion,	% (share))
	1999	2000	2001	2002	2003	2004
A 11	1,215,960	1,316,247	1,460,352	1,616,548	1,791,891	2,063,998
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Canada	119,590	132,472	152,601	166,473	189,754	216,571
Callada	9.8%	10.1%	10.4%	10.3%	10.6%	10.5%
Furope	627,754	687,320	771,936	859,378	982,737	1,089,941
Europe	51.6%	52.2%	52.9%	53.2%	54.8%	52.8%
Germany	53,399	55,608	63,396	61,073	68,358	79,579
Germany	4.4%	4.2%	4.3%	3.8%	3.8%	3.9%
Ireland	25,157	35,903	39,541	51,598	62,547	73,153
licialiti	2.1%	2.7%	2.7%	3.2%	3.5%	3.5%
Luxembourg	22,148	27,849	50,771	62,181	70,025	74,902
Euxembourg	1.8%	2.1%	3.5%	3.8%	3.9%	3.6%
Netherlands	121,315	115,429	147,687	158,415	186,102	201,918
retienands	10.0%	8.8%	10.1%	9.8%	10.4%	9.8%
Switzerland	40,532	55,377	63,768	74,229	88,940	100,727
Switzerland	3.3%	4.2%	4.4%	4.6%	5.0%	4.9%
United Kingdom	216,638	230,762	228,230	247,952	278,745	302,523
Clinted Kingdolii	17.8%	17.5%	15.6%	15.3%	15.6%	14.7%
Latin America and	253,928	266,576	279,611	289,413	300,690	325,891
Other Western Hemisphere	20.9%	20.3%	19.1%	17.9%	16.8%	15.8%
Mexico	37,151	39,352	52,544	56,303	59,070	66,554
WIEXIEG	3.1%	3.0%	3.6%	3.4%	3.3%	3.2%
Bermuda	50,847	60,114	84,969	89,473	85,077	91,266
Definidua	4.2%	4.6%	5.8%	5.5%	4.7%	4.4%
Africa	13,118	11,891	15,574	16,040	18,978	22,259
Annea	1.1%	0.9%	1.1%	1.0%	1.1%	1.1%
Middle Fast	10,950	10,863	13,212	15,158	17,363	19,235
Middle East	0.9%	0.8%	0.9%	0.9%	1.0%	0.9%
Asia and Pacific	190,621	207,125	227,418	270,086	282,370	390,101
Asia and I active	15.7%	15.7%	15.6%	16.7%	15.8%	18.9%
Ianan	55,120	57,091	55,651	66,468	68,097	80,246
Japan	4.5%	4.3%	3.8%	4.1%	3.8%	3.9%
Singapore	20,665	24,133	40,764	50,955	50,343	56,900
Singapore	1.7%	1.8%	2.8%	3.2%	2.8%	2.8%

- Latin America decreased its share during the period while Canada, Europe, and Asia and Pacific increased respective share. Africa and Middle East maintained respective share.
- > The U.K. and Germany decreased respective share whereas Europe as a whole increased its share. The U.K., however, remained as by far the largest destination of USDIA.
- Of the European countries, Ireland, Luxembourg, and Switzerland increased respective share. Ireland has increased its importance in USDIA as manufacturing cite in Europe. Luxembourg and Switzerland have increased their relative importance as locations for holding companies for mega M&A deals, compared with the Netherlands and the U.K.
- Japan's share was on a decreasing trend during the period while Asia and Pacific increased their share as a whole. The data also shows a sharp increase in share of Asia and Pacific in 2004. This appears to be due to mega M&A deals in Australia. The relevant detailed numbers are, however, specified as (D) in the U.S. Department of Commerce data, indicating not disclosed,

3. Recent Trend of Foreign Direct Investment in the U.S.

Table 1-6 presents FDIUS position by industry since 1999 on a historical-cost basis.

			-	(US\$ billion	, % (share))
	1999	2000	2001	2002	2003	2004
All industries	955.7	1,256.90	1,344.00	1,344.70	1,410.70	1,526.30
All illuusules	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Manufacturing	406.4	480.6	476.5	469.8	492.0	519.4
wianuracturnig	42.5%	38.2%	35.5%	34.9%	34.9%	34.0%
Food	15.0	18.1	18.6	19.8	19.5	21.1
1000	1.6%	1.4%	1.4%	1.5%	1.4%	1.4%
Chemicals	96.6	120.4	128.6	123.3	136.5	148.0
Chemicais	10.1%	9.6%	9.6%	9.2%	9.7%	9.7%
Metals	18.8	21.2	20.0	18.5	17.7	18.9
Metals	2.0%	1.9%	1.5%	1.4%	1.3%	1.2%
Machinery	30.5	32.3	43.3	47.8	48.1	49.5
	3.2%	2.6%	3.2%	3.6%	3.4%	3.3%
Computers, etc	62.6	92.8	54.7	42.4	44.0	41.9
	6.6%	7.4%	4.1%	3.2%	3.1%	2.7%
Electrical	13.4	43.1	53.6	45.8	12.6	13.6
equipment	1.4%	3.4%	4.0%	3.4%	0.9%	0.9%
Transportation	52.8	55.8	62.3	61.5	66.5	70.0
equipment	5.5%	4.4%	4.6%	4.6%	4.7%	4.6%
Wholesale trade	106.7	174.0	184.7	197.6	180.8	201.1
wholesale trade	11.2%	13.8%	13.8%	14.7%	12.8%	13.2%
Retail trade	22.4	26.7	22.6	20.8	22.7	26.1
Retail trade	2.3%	2.1%	1.7%	1.6%	1.7%	1.7%
Information	78.0	146.9	146.9	116.1	124.7	117.2
mormation	8.2%	11.7%	10.9%	8.7%	8.8%	7.7%
Depository institutions	62.0	64.2	67.2	75.5	87.5	123.3
Depository institutions	6.5%	5.1%	5.0%	5.6%	6.2%	8.1%
Finance (except	132.2	167.0	173.8	169.2	190.2	206.5
depository institutions)	13.8%	13.3%	12.9%	12.6%	13.5%	13.5%
Real estate and rental	47.8	50.0	44.3	47.3	44.5	47.6
and leasing	5.0%	4.0%	3.3%	3.5%	3.2%	3.1%
Professional, scientific,	11.7	30.5	31.5	27.0	34.5	38.8
and technical services	1.2%	2.4%	2.3%	2.0%	2.5%	2.5%
Other industries	88.5	117.0	196.4	221.4	232.9	246.3
Other modules	9.3%	9.3%	14.6%	16.5%	16.5%	16.1%

Table 1-6 FDIUS Position by Industry (1999-2004)

(Compiled from the Department of Commerce data)

➤ Total investment position increased from US\$955.7 billion in 1999 to US\$1,526.3 billion in 2004, with an average increase of 9.8% annually.

- The industry sectors whose investment position at 2004-end decreased from 1999-end are computers and electric products segment (whose share decreased to less than half to 2.7% from 6.6% during the period due to the IT bubble burst), and real estate and rental and leasing segment (decreased to 3.1% from 5.0%).
- Information segment doubled its investment position in 2000 and 2001 from 1999, to increase its share to 12%. It, however, decreased to 7.7% at 2004-end due to the withdrawal from the U.S. telecommunication market after the IT bubble burst.
- ➢ Growth rate of industry whose investment position increased in absolute terms during the period varies significantly by industry: "other industries" sector increased from 9.3% to 16.1%, depository institution sector from 6.5% to 8.1%, and wholesale sector form 11.2% to 13.2%. Other industry segments decreased their shares in general.
- > Total share of manufacturing sector decreased from 42.5% to 34.0%.
- Like USDIA's "other industries" sector, FDIUS' "other industries" sector also increased its share during the period. However, the latter is not so concentrated on holding companies as the former. As of 2004-end, while holding companies of USDIA accounted for 85% of "other industries" segment, that of FDIUS accounted for only 34% (US\$84.1 billion) of "other industries" sector (US\$246.3 billion) of FDIUS. This represented only 5.5% of total FDIUS, which is significantly smaller than 34% for USDIA.

		•		J)	JS\$ billion,	% (share))
	1999	2000	2001	2002	2003	2004
A 11	955,726	1,256,867	1,343,987	1,344,697	1,410,672	1,526,306
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Canada	90,599	114,309	92,420	95,344	101,568	133,761
Callada	9.5%	9.1%	6.9%	7.1%	7.2%	8.8%
Furope	639,923	887,014	999,069	980,036	1,021,349	1,078,287
europe	67.0%	70.1%	74.3%	72.9%	72.4%	70.8%
France	89,945	125,740	154,984	141,588	139,265	148,242
Trance	9.4%	10.0%	11.5%	10.5%	9.9%	9.7%
Germany	112,126	122,412	162,314	139,247	156,290	163,372
Germany	11.7%	9.7%	12.1%	10.4%	11.1%	10.7%
Netherlands	125,010	138,894	145,554	150,263	152,708	167,280
	13.1%	11.1%	10.8%	11.2%	10.8%	11.0%
Switzerland	52,973	64,719	129,478	123,867	129,032	122,944
Switzenand	5.5%	5.1%	9.6%	9.2%	9.1%	8.1%
United Kingdom	153,797	277,613	197,651	215,531	219,735	251,562
	16.1%	22.1%	14.7%	16.0%	15.6%	16.5%
Latin America and	40,771	53,691	64,842	74,561	81,768	85,864
Other Western Hemisphere	4.3%	4.3%	4.8%	5.5%	5.8%	5.6%
Africa	1,361	2,700	2,346	2,242	2,179	1,611
7 milea	0.1%	0.2%	0.2%	0.2%	0.2%	0.1%
Middle Fast	4,362	6,506	6,082	7,319	7,641	8,200
Wildele East	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Asia and Pacific	178,749	192,647	179,228	185,196	196,167	218,583
	18.7%	15.3%	13.3%	13.8%	13.9%	14.3%
Ianan	153,815	159,690	149,859	151,333	160,452	176,906
Japan	16.1%	12.7%	11.2%	11.3%	11.4%	11.6%

- Europe significantly increased its share in recent years due to growing number of mega M&A deals by European companies actively having acquired U.S. corporations. It is of note that Europe's share has exceeded 70% since 2000. It is also of note that the U.K., the Netherlands, and Germany hold respective share greater than 10%.
- ➤ A sharp drop of the U.K.'s share in 2001 and a sharp increase of Switzerland's share in the same year were due mainly to changing the lender of U.S. affiliates of U.K. company from U.K. parent to Swiss affiliate of the relevant U.K. company.
- > While Europe's share was on an increasing trend during the period, Japan's was on a decreasing

trend for the same period. Japan, however, is still the second largest investor after the U.K.

4. Trend of Rate of Return of USDIA and FDIUS

Box 1: Valuation Methods of Direct Investment Balance

This section overviews the trend of rate of return of USDIA and FDIUS. Rate of return of foreign direct investment can be calculated with slightly different results depending on which investment position base is used as denominator. The Department of Commerce releases data on foreign direct investment in accordance with the following three bases:

- Based on historical-cost
- Based on current-cost method
- Based on market-value method

Please refer to Box 1 for each of valuation base of investment position. It should be noted that current cost method and market-value method capture statistics only on all areas and all industries basis. Data by area and industry are available only on a historical-cost basis.

The Department of Commerce releases direct investment position in accordance with the three methods, namely historical-cost method, current-cost method, and market-value method. The following is the excerpt from the relevant article of the <i>Survey of Current Business</i> by the Department of Commerce.
Historical-cost base: All balance sheet items are recorded at historical cost (Table A).
Current-cost base: Only tangible assets—inventories and property, plant, and equipment (PP&E) —are revaluated at current cost. Financial assets (current and noncurrent) are recorded at historical cost. Owners' equity is revalued to reflect the adjustment in the value of the tangible assets. Liabilities are not subject to revaluation (Table B).
Market-value base: Owners' equity is revalued to reflect yearend stock market prices. Liabilities

Market-value base: Owners' equity is revalued to reflect yearend stock market prices. Liabilities are not subject to revaluation. Assets side is revalued to reflect the adjustment in the value of owners' equity (Table C).

Assets		Liabilities and owners' equity			
Current:		Liabilities			
Inventories	\$103,803	Current liabilities and	\$504,956		
Other	\$407,341	long-term debt			
Total	\$511,144	Other liabilities	\$107,942		
		Total	\$612,898		
Noncurrent					
PP&E	\$420,720	Owners' equity			
Less accumulated	-\$187,149	Owners' equity	\$387,102		
depriciation					
Net PP&E	\$233,571	Total	\$387,102		
Other	\$255,286				
Total	\$488,856				
Addenda: Net tangible asse	\$337,374				
Total assets	\$1,000,000	Total liabilities and	\$1,000,000		
	<i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	owners' equity	φ1,000,000		

Table A: Balance Sheet at Historical Cost

In table B, using the current-cost method revalues only tangible assets (PP&E) on the left side of the balance sheet. Net PP&E is revalued from US\$233,571 at historical cost to US\$359,092 at current cost, and inventories are revalued from US\$103,803 at historical cost to US\$117,318 at current cost.

Thus, the value of the tangible assets is US\$139,036 greater at current cost than at historical cost. Financial assets are not subject to revaluation, as the historical costs of these assets are assumed to equal or approximate their current-period prices. On the right side of the balance sheet, owners' equity is revalued from US\$387,102 to US\$526,139 to reflect the adjustment in the value of the tangible assets on the left side.

Table B: Ba	lance Sheet U	sing Current-Cost Method			
Assets		Liabilities and owners' equity			
Current assets		Liabilities			
Inventories	\$117,318	Current liabilities and	\$504,956		
Other	\$407,341	long-term debt			
Total	\$524,659	Other liabilities	\$107,942		
		Total	\$612,898		
Noncurrent					
PP&E	\$646,816	Owners' equity			
Less accumulated depriciation	-\$287,723	Owners' equity	\$526,139		
Net PP&E	\$359,092	Total	\$526,139		
Other	\$255,286				
Total	\$614,378				
Addenda: Net tangible asse	\$476,410				
Total assets	\$1,139,037	Total liabilities and	\$1,139,037		

In table C, using the market-value method revalues owners' equity on the right side of the balance sheet, to reflect year-end stock market prices. Owners' equity is revalued from US\$\$387,102 (at historical cost) to U\$793,559 (at market value). Liabilities are not subject to revaluation, as they are assumed to be approximately at current-period prices. The counter-entry on the left side of the balance sheet is assumed to be in good will, which is included under "other" noncurrent assets.

Table C: Balance Sheet Using Market-Value Method

Assets		Liabilities and owners' equity			
Current assets		Liabilities			
Inventories	\$103,803	Current liabilities and	\$504,956		
Other	\$407,341	long-term debt			
Total	\$511,144	Other	\$107,942		
		Total	\$612,898		
Noncurrent					
PP&E	\$420,720	Owners' equity			
Less accumulated depriciation	-\$187,149	Owners' equity	\$793,559		
Net PP&E	\$233,571	Total	\$793,559		
Other	\$661,742				
(of which, goodwill)	(\$406,457)				
Total	\$895,314				
Addenda: Net tangible asse	\$337,374				
Total assets	\$1,406,457	Total liabilities and owners' equity	\$1,406,457		

Table 1-8 presents the trend of rate of return of USDIA and FDIUS since 1983 on each of the three bases. Net profits used as numerators to calculate ratios are prorated in accordance with the shares of the relevant equity providers of USDIA and FDIUS.

	Histo	rical-cost b	asis	Curi	rent-cost bas	sis	Market-value basis			
	USDIA	FDIUS	Gap	USDIA	FDIUS	Gap	USDIA	FDIUS	Gap	
1983	13.0%	4.0%	9.0%	8.7%	2.2%	6.5%	12.7%	2.9%	9.8%	
1984	14.3%	6.3%	8.0%	10.0%	4.1%	6.0%	13.0%	5.2%	7.8%	
1985	12.8%	4.3%	8.5%	9.8%	3.0%	6.9%	10.8%	3.5%	7.2%	
1986	12.3%	3.7%	8.6%	9.5%	2.6%	6.9%	8.1%	2.8%	5.3%	
1987	13.4%	3.6%	9.8%	10.5%	2.5%	8.0%	8.3%	2.6%	5.7%	
1988	15.5%	4.4%	11.1%	11.8%	3.3%	8.5%	9.1%	3.4%	5.7%	
1989	14.8%	2.2%	12.6%	11.6%	1.6%	10.0%	8.1%	1.5%	6.6%	
1990	14.3%	0.8%	13.5%	11.3%	0.7%	10.6%	8.4%	0.6%	7.8%	
1991	11.6%	-0.7%	12.3%	9.3%	-0.4%	9.7%	7.5%	-0.4%	7.9%	
1992	10.4%	0.3%	10.1%	8.8%	0.4%	8.4%	7.1%	0.3%	6.8%	
1993	11.1%	1.6%	9.5%	9.7%	1.4%	8.3%	7.2%	1.1%	6.2%	
1994	11.7%	4.4%	7.3%	10.2%	3.7%	6.6%	7.1%	2.9%	4.2%	
1995	13.3%	6.1%	7.2%	11.4%	4.7%	6.7%	7.7%	3.4%	4.2%	
1996	12.5%	5.4%	7.2%	10.9%	4.6%	6.3%	6.9%	3.0%	3.9%	
1997	12.6%	6.2%	6.3%	11.2%	5.5%	5.7%	6.6%	3.0%	3.6%	
1998	9.7%	4.4%	5.2%	9.2%	4.4%	4.8%	5.0%	2.0%	3.0%	
1999	10.3%	5.4%	5.0%	10.1%	5.3%	4.8%	5.1%	2.1%	3.0%	
2000	10.6%	4.3%	6.2%	10.3%	4.5%	5.8%	5.5%	2.0%	3.4%	
2001	7.9%	0.3%	7.6%	8.0%	0.9%	7.1%	5.1%	0.5%	4.7%	
2002	8.1%	2.6%	5.5%	8.2%	3.0%	5.2%	6.7%	2.0%	4.7%	
2003	10.1%	4.3%	5.8%	9.9%	4.6%	5.2%	8.2%	3.2%	5.0%	
2004	10.9%	6.3%	4.4%	10.5%	6.4%	4.1%	7.8%	4.1%	3.7%	

Table 1-8 Trends of Investment Return Ratio of USDIA and FDIUS (1983-2004)

As Table 1-8 indicates, rate of return of USDIA has consistently exceeded that of FDIUS on any of the basis of the three calculation methods. At the same time, the table also reveals that there are substantial discrepancies of rate gaps among the three calculations. Which one of the three methods is the most appropriate one to gauge the profitability of the operations of foreign direct investment? Given the objectives of the calculation are to compute the rate of return on investment position for certain period and to analyze the trends over years, the following points should be noted:

- Historical-cost method calculates rate of return by dividing net profit of a given period by a denominator that is equal to the simple aggregation of the amounts invested in the past and those subsequently invested, without giving consideration to time factor. A major drawback of this method is calculating rate of return higher for seasoned investment while lower for younger investment. Given the fact that USDIA operations were already full-fledged in the 1950s whereas full-scale FDIUS operations started only in the late 1970s, rate of return on USDIA obviously tends to be calculated higher than that on FDIUS. If we look at the rate gap between USDIA and FDIUS from 1983 to 1992 in Table 1-8, we will notice the rate gaps calculated on a historical-cost basis are consistently higher than those on a current-cost basis by 2-3% points.
- Market-value method is revaluating owners' equity (investment position) in accordance with year-end stock price, which means the denominator is based on the present value of the expected future cash flow. Such denominator would not be considered appropriate to calculate rate of return on USDIA/FDIUS for a given period and analyze the trend.
- Calculating rate of return using current-cost method means revaluating invested position in accordance with adjustment reflecting price changes in tangible assets. We consider this method, among the three, is the most appropriate to gauge rate of return for a given period. However, the data on a current-cost basis are available only for all industries and all areas. Data by industry or by area are available only on a historical-cost basis. It should be noted, however, that the rate gap between historical-cost and current-cost methods in Table 1-8 has narrowed significantly since 1998. Therefore, the drawback of using historical-cost method is considered not material for recent years. Two factors conceivably contributed to the narrowed rate gap. One: nearly thirty years have passed since FDIUS gathered its momentum in the late 1970s, resulting in less

difference in age effect. Two: the prices stayed stable in the late 1990s compared with the 1980s and early 1990s. The data on a historical-cost basis, therefore, can be considered less biased by age effect recently. For this reason, we use in the following sections historical-cost method for rate of return analysis for recent years without reservation.

We occasionally come across a misunderstanding that rate of return of USDIA (FDIUS) is distorted due to fluctuation of exchange rate of US dollar (foreign currency), citing net profit reflects current exchange rate whereas investment position does not, thus rate of return of USDIA would be calculated higher (lower) with weaker (stronger) US dollar, and that of FDIUS would be calculated lower (higher) with weaker (stronger) US dollar. The above is based on a misunderstanding that "investment position does not reflect current exchange rate." As is footnoted in the relevant data of the Department of Commerce (i.e., composition of changes in US-owned assets abroad with direct investment at current cost, composition of changes in US-owned abroad with direct investment at market value, composition of changes in foreign-owned assets in the United States with direct investment at current cost, and composition of changes in foreign direct investment at market value), "price change" and "exchange rate change" are specified as factors for valuation adjustment. The footnote to "exchange rate change" reads as follows: "Represents gains or losses on foreign-currency denominated assets and liabilities due to this revaluation at current exchange rate." The above indicates exchange rate factor is reflected both in numerator (i.e., net profit) and denominator (i.e., investment position) for current-cost and market-value methods, and that the exchange factor does not distort the level of rate of return of USDIA and FDIUS.

If we look at the trend of the rate of return of USDIA and FDIUS on a current-cost basis for the period from 1983 to 2004 in Table 1-8, the following should be pointed out:

- ➢ Rates of return of USDIA for the above period were within 8-11% range, averaging at 10%. The average for 2000-2004 was 9.4%.
- Rate of return of FDIUS for the period fluctuated with a wide range from -4% (1991) to 6.4% (2004). The average for 1983-2004 was 3.1% while that for 2000-2004 was 3.9%.
- ➢ Reflecting the above, rate gap between USDIA and FDIUS ranged form 10.6% (1990) to 4.1% (2004), with an average 6.9% for 1983-2004 and 5.5% for 2000-2004.

In contrast to direct investment, the gap between rate of return of income receipts on U.S. other investment abroad and that of income payments on foreign other investment in the U.S. has been extremely small in the range from -1.0% to 0.1% with an average of 0.4%, as shown in Table 1-9.

	U.S.	U.S.	Con		U.S.	U.S.	Con
	receipts	payments	Gap		receipts	payments	Gap
1983	7.3%	7.5%	-0.2%	1994	4.1%	4.7%	-0.6%
1984	8.6%	8.5%	0.1%	1995	4.7%	5.1%	-0.4%
1985	7.1%	7.3%	-0.2%	1996	4.3%	4.7%	-0.4%
1986	6.0%	6.5%	0.6%	1997	4.3%	4.7%	-0.4%
1987	5.5%	6.4%	1.0%	1998	4.2%	4.4%	-0.2%
1988	6.2%	6.9%	0.7%	1999	3.8%	4.1%	-0.3%
1989	6.9%	7.6%	0.7%	2000	4.2%	4.5%	-0.3%
1990	6.8%	7.2%	0.4%	2001	3.4%	3.8%	-0.4%
1991	5.6%	6.2%	0.6%	2002	2.6%	3.0%	-0.4%
1992	4.5%	4.8%	0.3%	2003	2.2%	2.4%	-0.2%
1993	3.6%	4.2%	0.5%	2004	2.3%	2.6%	-0.3%

Table 1-9 Rate of Return of Other Investment on a Current-Cost Basis (1983-2004)

Chapter 2 The Background to the Rate of Return Gap between USDIA and FDIUS

This chapter discusses the background why rate of return of USDIA has been consistently higher than that of FDIUS. The chapter consists of the following. Section 1 examines an argument that rate of return of USDIA (operations in foreign countries) should be higher than that of FDIUS as the former should reflect additional country risk premium that should be added on top of rate of return of FDIUS. Section 2, shedding light from a different angle, examines another argument that rate gap between USDIA and FDIUS reflects the difference of the investment motivations between the two. Following the examinations of these fundamental aspects, Section 3 analyzes cost factors that are presumably impacting rate of return of USDIA and FDIUS. Section 4 overviews key ratios of USDIA including rate of return by industry. Section 5 examines holding company that plays key role in USDIA. Section 6 discusses whether or not FDIUS's low rate of return is attributable to their under-reporting profit to reduce U.S. corporate tax.

1. Country Risk and Rate of Return Gap between USDIA and FDIUS

As shown in Table 1-8, rate of return of USDIA has consistently exceeded that of FDIUS. On reconsidering the matter, however, it appears very logical that the former is higher than the latter. The reason is that, given other conditions be equal, the rate of return expected of USDIA (operations in foreign countries) should be determined at a higher level than that of FDIUS (operations in the U.S.), as the former should include risk premium that would compensate the difference of the country risk between the U.S. (supposed to be the safest country in terms of country risk) and other locations. We analyze below in this section such risk premium, i.e., a margin spread that should be included in USDIA rate of return in addition to return on investment in the U.S.

It would be conceivable that risk premium associated with USDIA can be estimated by using, for example, the data on theoretical default probabilities that are provided as proprietary products by major rating agencies to their clients.

As an example of using such data, a report produced in technical paper series of Congressional Budget Office (CBO) entitled "Return on Cross-Boarder Investment: Why Does U.S. Investment Do Better?" by Juannh H. Hung and Angelo Mascaro (December 2004) and its summary version dated November 30, 2005 estimated weighted risk factor based on the country ratings by Standard & Poor's. According to the CBO papers, they first convert letter ratings to number ratings by assigning the D rating (in default) the value zero, adding 1 to each ascending letter rating, and ending with assigning the value 21 to the highest rating, AAA. Then they apply a non-linear relationship between Standard & Poor's sovereign ratings and default probabilities to the sovereign risk rating of each host country to derive a numerical estimate of the riskiness of direct investment in the country. The CBO papers, however, disclose no key data such as non-linear relationship between Standard & Poor's sovereign ratings and default probabilities. The overall sovereign risk of outward direct investment is then the foreign direct investment weighted average of those numerical estimates of (default-probability-adjusted) riskiness of host countries. That average is converted back to the implied numerical equivalent of sovereign rating, and then to the implied letter rating. The CBO papers show that the sovereign risk rating of the risk of outward direct investment calculated as such is 14 (equivalent to BBB+). In calculating the risk, the papers indicate that share of U.S. direct investment position by each region and the average rating assigned to each region are as follows: Canada (11%, "AAA"); Latin America and other Western Hemisphere (17%, "BB+"); Europe (54 %, "AA+"); Asia and Pacific (16%, "A-"); Africa (1%, "BBB-"); Middle East (1%, "BBB+").

We herein below estimate the level of risk factor based on similar conceptual framework but using information available in public data source so that we can disclose computation process. More specifically, we calculated below risk factor by using the exposure fee of the Export-Import Bank of the United States (USEXIM) that is applicable to export insurance or export credit.

> Outlines of USEXIM'S exposure fee applicable to medium and long-term loan

• The country category is determined by the OECD guidelines. Countries are classified between 1 and 7, with Category 1 being at the lowest risk and Category 7 at the highest risk. Exposure fee applicable to countries classified in Category 1 is set at the lowest level and Category 7 at the highest level.

- Applicable exposure fee levels are set in compliance with the minimum standard by the OECD guidelines.
- Applicable exposure fees are offered for a model case with disbursement period of 12 months or less, grace period of six moths, and semi-annual installments.
- Applicable exposure fee increases in accordance with the period until the final maturity.
- Applicable exposure fee is set on the condition that it is fully paid at upfront. Should the borrower desire such exposure fee is to be financed and to pay the fee in arrear (e.g. to pay exposure fee on top of loan interest on outstanding loan balance), the exposure fee is re-calculated at a level of percent per annum of which present value is equivalent to the fee amount to be paid at upfront.
- Percent of cover is up to 100%.
- Non-sovereign risk (transaction risk) is also covered with additional fee. Such risk increment is five-staged, reflecting financial conditions of the applicant corporations.
- Risk premium of USDIA to be calculated hereunder covers sovereign risk only. Other risks such as commercial risk associated with operating business by U.S. companies in foreign countries including those risks inherent to foreign markets (e.g. port strike, stability of power supply) are excluded
- ➢ In calculating applicable USEXIM exposure fee, the following conditions are assumed for a standard hypothetical medium-term loan.
 - Loan disbursement period: 12 months
 - Semi-annual installments over 7 years after 6 month-grace period, hence the weighted average life of the loan should be calculated as 4 years.
 - Percent of coverage: 100%
- Exposure fee applicable to each country category based on the above assumptions should be calculated as follows (flat fee on an upfront basis).
 - Category 1 (1.18%), Category 2 (2.21%), Category 3 (3.72%), Category 4 (5.62%), Category 5 (7.97%), Category 6 (10.45%), and Category 7 (13.50%)
- ➤ The above exposure fees on an upfront basis shall be converted into fees payable semi-annually in arrear on outstanding credit balance as follows.
 - Category 1 (0.32% p.a.), Category 2 (0.61% p.a.), Category 3 (1.04% p.a.), Category 4 (1.61% p.a.), Category 5 (2.34% p.a.), Category 6 (3.16% p.a.), and Category 7 (4.22% p.a.)

Weighted risk premium of USDIA shall be calculated below by multiplying the above risk premium by USDIA position by area as of 2004 end (Table 2-1).

Δrea	USDIA	USEXIM	Risk exposure fee	Weighted risk
Alca	(US\$ million)	country category	Risk exposure ree	premium
Canada	216.571	1	0.32%	699.74
Austria	5,278	1	0.32%	17.05
Belgium	27,761	1	0.32%	89.7
Czech Republic	2,188	2	0.61%	13.38
Denmark	6,618	1	0.32%	21.38
Finland	2,071	1	0.32%	6.69
France	58,927	1	0.32%	190.39
Germany	79,579	1	0.32%	257.12
Greece	1,255	1	0.32%	4.05
Hungary	3,285	2	0.61%	20.09
Ireland	73,153	1	0.32%	236.36
Italy	33,378	1	0.32%	107.84
Luxembourg	74,902	1	0.32%	242.01
The Netherlands	201,918	1	0.32%	652.40
Norway	9,104	1	0.32%	29.42
Poland	6,059	2	0.61%	37.06
Portugal	3,151	1	0.32%	10.18
Russia	2,231	4	1.61%	35.95
Spain	45,251	1	0.32%	146.21
Sweden	36,399	1	0.32%	117.61
Switzerland	100,727	1	0.32%	325.45
Turkey	2,225	5	2.34%	52.15
The U.K	302,523	1	0.32%	977.45
Argentina	11,629	7	4.22%	491.15
Brazil	33,267	5	2.34%	779.65
Chile	10,196	2	0.61%	62.36
Colombia	2,987	5	2.34%	70.00
Ecuador	814	7	4.22%	491.15
Peru	3,934	4	1.61%	779.65
Venezuela	8,493	6	3.16%	62.36
Costa Rica	1,093	3	1.04%	11.48
Honduras	339	7	4.22%	14.32
Mexico	66,554	2	0.62%	407.04
Panama	5,886	4	1.61%	94.56
Barbados	1,369	3	1.04%	14.31
Bermuda	91,265	1	0.32%	294.88
Dominican Republic	1,041	6	3.16%	32.87
United Kingdom	63.066	n.a.	n.a.	n.a.
Islands	4.040	4	1 (10)	(0.22
Egypt	4,240	4	1.61%	68.33
Nigeria	955	1	4.22%	40.33
South Africa	4,966	3	1.04%	51.92
Israel	6,790	3	1.04%	/1.00
Saudi Arabia	3,833	3	1.04%	40.10
UAE	2,368	<u> </u>	0.61%	14.48
Australia	(D)	1	0.32%	n.a.
China Users Kana	15,430	2	0.61%	94.37
Holig Kolig	43,743	2	0.01%	207.33
India	0,203	5	1.04%	04.80
Indonesia	(D)	1	2.34%	250.27
Japan Koroo Dopublic of	17 222	1	0.32%	56.00
Moleucie	17,552	2	0.52%	52.10
Ividiaysia New Zeolond	0,090 4 401	∠ 1	0.01%	35.10
Philippings	4,481	5	0.32%	14.48
singapore	54 000	J 1	2.34%	140.34
Taiwan	30,.900	1	0.32%	165.84
Taiwall Thailand	(D) דאד ד	2	0.32%	11.a. 91.00
Total excl. (D)	1 801 204	3	1.04%	01.00 8 127 15
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Table 2-1 USDIA Position by Area, Country Category, and Applicable Risk Premium

The weighted risk premium that has been calculated in accordance with the above steps based on USDIA position as of 2004-end is 0.47%. In other words, applicable risk premium, (additional risk on top of business risk associated with operations in the U.S.) that should be included in rate of return on USDIA has been calculated at 0.47%. However, the following should be noted regarding the number calculated as above:

- ➤ The 0.47% is a theoretical premium applicable to risk assets of USEXIM as a debt provider, not as an equity provider. Given the fact that foreign direct investment, being equity contribution, should be in the most subordinated position in all claims to the relevant USDIA affiliate, the risk premium to be expected by equity providers should be higher than that by debt providers.
- > The number calculated as above is based on a hypothetical medium-term loan (with disbursement period of one year, semi-annual installments over seven years, and average loan life of four years) within the framework of the USEXIM's official program of credit enhancement that is offered in compliance with the OECD guidelines on minimum benchmark fees. Accordingly, country risk perception held by private sector should be higher than the level of above exposure fee. In this sense, the number calculated as above should be treated as a minimum country risk premium for risk assets.
- The calculated number covers only country risk like political risk, and excludes any other additional commercial risks inherent to foreign countries such as port strike and instability of power supply. It should be noted, however, commercial risk is basically not compatible with unified quantitative approach, as such risks differ by industry.
- Substantial part of USDIA positions are those of holding companies in the Netherlands, Luxembourg, Switzerland, Bermudas, etc. that are classified as Category 1 countries. Given that such holding companies make investment in countries classified as Category 2 or below, the number calculated as above should be understated.

The CBO paper mentioned earlier, based on the analysis that the weighted rating of USDIA is equivalent to BBB+, discusses further in its paper as follows. The benchmark spread of long-term corporate bonds rated BBB, one notch lower than BBB+ versus those rated AAA averaged 136 basis points over the past 5 years (1999-2003). Such difference should be included in the rate gap between USDIA (AAA) return and FDISU (BBB+) return. The CBO summery paper dated November 30, 2005, based on the data for 10 years rather than the 5 years above, calculates such spread at approximately 0.8%. We note, however, that, CBO paper simply applies the spread between corporate bonds (being senior debt) to foreign direct investment (being most subordinated claim) without caveat. The paper might as well have made certain reservation in this regard.

The numbers 0.47% and 0.8% are theoretically expected risk premiums, which mean that such risk premiums should not be necessarily detected ex post facto. In fact, the rate of return of USDIA in Japan and Canada, the country classification being at Category 1 for both, stood at as high as 11.1% and 15.3% respectively in 2004 while that of Argentina (Category 7) and Brazil (Category 5) stood at 9.1% and 8.6% respectively in the same year.

2. Rate of Return Gap between USDIA and FDIUS and Their Motivations for Investment

There are considerable differences, as we discuss below, between USDIA (the aggregate consisting of foreign affiliates of U.S. companies) and FDIUS (the aggregate consisting of U.S. affiliates of foreign companies) with respect to each of their motivations to make investment in international market.

The typical motivation of USDIA to make investment abroad should be as follows. An U.S. that delivers its goods or services to certain foreign market compares which operation would be more profitable (i) to deliver its goods or services to the market from the U.S. head office or (ii) to deliver such goods or services through foreign affiliate. In the event that the operation (ii) is determined to be more profitable than the operation (i), the U.S. company should choose to cover the foreign market by its affiliate abroad². Furthermore, the U.S. company should select the location of such

 $^{^2}$ Typical cases are such sectors as manufacturing and wholesale. In the case of retail sector like Wal-Mart Shop, Inc., their business models are quite different from those of typical USDIA cases in that the targeted market needs to be

affiliate after it has carefully analyzed various conditions (resources endowments, transportation cost, incentive programs, infrastructure, taxes, technology levels, market size, economic growth, etc.) of potential host countries. USDIA is deemed as the aggregate of the operations in foreign countries that have been selected after these careful screenings³.

What is the likely process in the case of the motivation of FDIUS? Admittedly, there are FDIUS cases in which foreign companies decided to cover the U.S. market from their foreign affiliates for profitability consideration and selected the U.S. as a location of such foreign affiliates to cover the U.S. market after they carefully analyzed various conditions of potential host countries in the same way as the typical case of USDIA. However, there are a number of FDIUS cases in which foreign companies decided to cover the U.S. market from their U.S. affiliates with such motivations as counter-responses to trade frictions. There are also many FDIUS cases motivated by foreign companies' business judgment that they need to have direct presence in the U.S. market, the world largest economy in the world, to keep up with industry trends including market directions and new technologies. In most of these FDIUS cases, profitability of the operation has not been the top priority matter, at least in the short run. There are also many cases in which foreign companies, from the outset, had no intention to select other locations than the U.S. for obvious reason. The difference of the motivation between USDIA and FDIUS in making investment abroad as discussed above should be reflected in investment return ratio gap between the two.⁴

3. Cost Factor Comparison among USDIA, U.S. Parent Companies of USDIA, and FDIUS

This section examines cost factors that affect rate of return of USDIA, U.S. parent companies of USDIA and FDIUS.

Table 2-2 compares the ordinary profit to sales ratio in respect of USDIA, U.S. parent company of USDIA, and FDIUS.⁵ Ordinary profit is herein defined as the profit before corporate tax minus (or plus) capital gain (or capital loss) to neutralize the difference of the tax rates in the U.S. and foreign countries as well as non-recurrent factors⁶. With regard to the ordinary profit of U.S. parent company of USDIA, receipts of dividends from USDIA affiliates are subtracted.

covered only by franchise located in that targeted market except those operated by catalogue shopping. Accordingly, the operations of USDIA of retail sector are not necessarily more profitable than those in the U.S. market. In the case of Wal-Mar Shop Inc., the ratio of earnings before interest and taxes (EBIT) to sales for fiscal January 2005 is 5.3% as against 6.7% of U.S. operations. The ratios for fiscal January 2004 are 6.7% and 5.0% respectively.

USDIA position of retail sector stood at US\$35.1 billion on a historical-cost basis as of 2004-end (classified in "other industries" sector in Table 1-4), which represents 2.0% of total USDIA position of US\$2,064 billion.

³ Some U.S. companies choose to continue concentrating their manufacturing and R&D activities in the U.S. while their foreign affiliates are engaged mainly in marketing, sales, engineering, maintenance services, and other customer support services. In the case of Applied Materials, Inc., the world largest supplier of manufacturing systems of semiconductor, its sales of overseas markets represents 79% of the company's total sales while 82% of its total fixed assets such as equipment, factories, warehouses, R&D facilities are located in the U.S.

⁴ This view was also expressed by an executive officer at a global industry company we interviewed. He indicated that: (i) the U.S. market is generally considered to be the most severe business environment with most demanding shareholders, strict legal system, highest transparency requirement, and fierce competition; (ii) as such, it is generally expected that USDIA operations in less severe environment generate higher return than those in the U.S. market; and (iii) in contrast to USDIA operations in overseas markets, it is not an easy job for FDIUS operations to generate the same level of return in the tough U.S. market as U.S. companies do in their own market.

⁵ Table 2-2 does not include data of depository institutions, but includes those of other financial institutions.

⁶ Numbers in the table are for entire affiliate, without being prorated in accordance with equity holding.

					(U)	S\$ billion)
		1999	2000	2001	2002	2003
	Sales	2,218.9	2,507.4	2,524.5	2,515.6	2,905.9
USDIA	Ordinary profit (OP)	203.4	253.5	243.6	286.0	405.4
	OP to sales ratio	9.2%	10.1%	9.7%	11.4%	14.0%
Parent	Sales	5,975.5	6,695.2	6,800.8	6,337.8	6,606.7
companies	Ordinary profit (OP)	408.6	445.6	271.9	306.7	412.8
of USDIA	OP to sales ratio	6.8%	6.7%	4.0%	4.8%	6.3%
FDIUS	Sales	2,044.4	2,334.7	2,327.1	2,031.0	2,136.6
	Ordinary profit (OP)	43.5	46.7	-2.0	22.0	49.5
	OP to sales ratio	2.1%	2.0%	0.0%	1.1%	2.3%

Table 2-2 Ordinary Profit to Sales Ratio
USDIA, U.S. Parent Companies of USDIA, and FDIUS (1999-2003

The above table clearly indicates the ordinary profit to sales ratio of USDIA has consistently far exceeded that of U.S. parent companies of USDIA. It also indicates rate of return of FDIUS have been not only by far lower than that of USDIA, but also substantially lower than that of U.S. parent companies of USDIA. The following sections examine cost factors that are presumably impacting profitability of each operation of USDIA, parent companies of USDIA and FDIUS.

(1) Comparison of Labor Cost to Sales Ratio

Table 2-3 compares the labor cost to sales ratio of USDIA, U.S. parent company of USDIA, and FDIUS. The data does not include depository institutions.

 Table 2-3 Labor Cost to Sales Ratio of USDIA, U.S. Parent Companies of USDIA, and FDIUS (1999-2003)

					(U:	5\$ billion)
		1999	2000	2001	2002	2003
	Sales	2,611.8	2,905.5	2,945.9	2,945.7	3,383.0
USDIA	Labor cost (LC)	295.3	310.8	309.7	311.4	343.0
	LC to sales ratio	11.3%	10.7%	10.5%	10.6%	10.1%
Parent	Sales	5,975.5	6,695.2	6,800.8	6,337.8	6,606.7
companies	Labor cost (LC)	1,103.9	1,176.3	1,151.4	1,140.9	1,177.4
of USDIA	LC to sales ratio	18.5%	17.6%	16.9%	18.0%	17.8%
FDIUS	Sales	2,044.4	2,334.7	2,327.1	2,216.5	2,340.2
	Labor cost (LC)	292.7	332.2	344.7	341.9	344.6
	LC to sales ratio	14.3%	14.2%	14.8%%	15.4%	14.7%

(Compiled from the Department of Commerce data)

- ➤ The ratio of U.S. parent companies of USDIA during the period averages at 17.8% where as that of USDIA at 10.6%, and that of FDIUS at 14.7%.
- The ratio of USDIA at 10.6% reflects labor cost at host countries of USDIA which should be at a substantially lower level than the U.S.
- Although the ratio of FDIUS has been slightly lower than that of U.S. parent companies of USDIA, it has been substantially higher than that of the USDIA, reflecting the level of labor cost in the U.S.
- ➤ The difference of the ratios between USDIA and FDIUS averages at 4.1% points during the period. This obviously affects rate of return of USDIA and FDIUS.

(2) Comparison of Debt to Total Assets Ratio

Table 2-4 compares debt to total assets ratio of USDIA, U.S. parent companies of USDIA, and FDIUS for the period from 1999 to 2003. The data exclude the numbers of depository institutions.

					(U	<u>S\$ billion)</u>
		1999	2000	2001	2002	2003
	Total assets	4,056.4	4,745.3	5,254.5	6,126.2	7,468.7
USDIA	Debt	2,608.9	2,932.0	3,179.6	3,634.3	4,354.8
	Debt ratio	64.3%	61.8%	60.5%	59.3%	58.3%
Parent	Total assets	11,688.4	13,086.4	13,946.6	14,713.0	15,911.1
companies	Debt	8,772.9	9,729.9	10,389.3	11,336.4	12,080.7
of USDIA	Debt ratio	75.1%	74.4%	74.5%	77.1%	75.9%
	Total assets	3,637.3	4,216.3	4,760.6	4,573.1	5,093.5
FDIUS	Debt	3,011.5	3,427.2	3,878.7	3,693.1	4,104.7
	Debt ratio	82.8%	81.3%	81.5%	80.8%	80.6%

Table 2-4 Debt to Total Assets Ratio of USDIA, U.S. Parent Companies of USDIA, and FDIUS (1999-2003)

- The debt to total assets ratio of USDIA has been substantially lower than those of U.S. parent companies of USDIA, and FDIUS. USDIA is by far in a better position in terms of financial cost with its stronger balance sheet compared with U.S. parent companies and FDIUS. The ratio of USDIA is in an improving trend.
- The ratio of FDIUS has been exceeding the level of U.S. parent of USDIA by approximately 5% points, which disadvantages FDIUS in terms of financial cost compared with U.S. companies. Although the ratio of FDIUS is also in an improving trend, its pace is slower than USDIA, and gap between the two is widening.

We have examined in the above that the debt to total assets ratio of USDIA has been substantially lower than not only that of FDIUS but also that of U.S. parent companies of USDIA, thus advantaging USDIA in terms of financial cost with its strong balance sheet position. What, then, enabled USDIA to have such strong balance sheet? Or, what, then, put FDIUS in such poor financial position compared to USDIA? We will address this question in the following sections.

All affiliates, irrespective of foreign affiliates of USDIA or U.S. affiliates of FDIUS, are subject to corporate tax of its host country in respect of its profit for a reporting period. After-tax profit (net profit) is then available for (i) distribution of dividend to parent company or payment of interest to group companies, or (ii) retaining profit for reinvestment by the affiliate. Tax payment and dividend /interest payment are cash-out from the relevant affiliate while the remaining net profit is retained as cost-free funds for the relevant affiliate. The following two sections examine any difference between USDIA and FDIUS in respect of cash-out situation. We examine first the difference of tax payment between the two. We then examine how USDIA or FDIUS disposes its after-tax profit.

(3) Comparison of Corporate Tax for USDIA and FDIUS by Host Country

Table 2-5 presents the corporate tax amount paid by USDIA and FDIUS (both excluding depository institutions) to respective tax jurisdiction and the net profit amount (including capital gain/loss). The data are on a basis of entire affiliate (i.e., not prorated in accordance with equity holding). The tax amount is net of any refund. Net profit is net of net loss.

				(US\$ million for (1) and (2))				
		USDIA			FDIUS			
	(1) Corporate	(2)	(2)/(1)	(1) Corporate	(2)	(2)/(1)		
	tax paid	Net profit	(2)/(1)	tax paid	Net profit	(2)/(1)		
1983	30,122	30,600	1.02	6,600	5,584	0.84		
1984	33,587	36,747	1.09	8,670	9,605	1.11		
1985	33,105	36,634	1.11	8,295	11,234	1.35		
1986	24,454	40,779	1.67	7,434	2,458	0.33		
1987	27,928	52,246	1.87	9,793	7,820	0.8		
1988	30,842	66,399	2.15	10,625	12,049	1.13		
1989	33,291	72,142	2.17	9,958	9,286	0.93		
1990	31,693	73,254	2.31	10,352	-4,535	-0.43		
1991	26,877	65,990	2.46	9,240	-11,018	-1.19		
1992	26,686	62,948	2.36	8,271	-21,331	-2.58		
1993	24,316	66,570	2.74	8,697	-4,354	-0.5		
1994	29,277	81,095	2.77	14,984	8,132	0.54		
1995	38,801	108,862	2.81	18,052	15,493	0.86		
1996	45,192	118,918	2.63	24,284	24,379	1		
1997	47,580	140,512	2.95	25,873	40,924	1.62		
1998	40,536	134,531	3.31	26,325	33,312	1.27		
1999	45,068	162,759	3.61	27,655	26,576	0.96		
2000	59,801	199,864	3.34	34,800	34,593	0.99		
2001	55,214	177,317	3.21	18,911	-44,894	-2.37		
2002	50,916	212,564	4.17	18,166	-54,973	-3.03		
2003	60,708	336,153	5.54	26,131	30,580	1.17		
Total	795,994	2,276,884	Average 2.63 (not weighted)	333,116	130,920	Average 0.22 (not weighted)		

Table 2-5 Corporate Tax Paid by USDIA and FDIUS, and After-Tax Profit of USDIA and FDIUS (1983-2003)

- In the early 1980s, both USDIA and FDIUS recorded net profit of approximately 1 after paying corporate tax of 1 respectively.
- However, USDIA started recording net profit exceeding 2 after paying corporate tax of 1 from the late 1980s. Such net profit to corporate tax ratio of USDIA increased to 2.5-3.0 in the mid 1990s, and exceeded 5 in 2003.
- ➤ In contrast to USDIA, the comparable ratio of FDIUS has changed little since in the 1980s with the ratio at around 1.
- > The higher the ratio, the more tax effective (more tax saving). The ratio of USDIA started increasing from the late 1980s, and accelerated its increment in the 1990s, which is exactly the same timing that setting up holding companies started to proliferate.
- If we look at the numbers on an accumulated basis for the period from 1983 to 2003, USDIA paid to host countries for a total amount of corporate tax of US\$796.0 billion while it recorded a total amount of net profit of US\$2,276.9 billion. The comparable numbers of FDIUS are a total amount of corporate tax of US\$333.1 billion paid to U.S. tax authorities and a total amount of net profit of US\$130.9 billion (on the basis of net profit and net loss being netted out) and US\$267.7 billion (on the basis of net loss being excluded).
- The above indicates that the portion of cash-out in the form of corporate tax of USDIA is small in relation to USDIA's pre-tax profit with an accumulated net profit to corporate tax ratio of 2.9. In contrast to USDIA, the portion of cash-out in the form of corporate tax of FDIUS is extremely large in relation to FDIUS's pre-tax profit. In fact, FDIUS's net profit amount did not reach the amount paid for corporate tax. In FDIUS, as we discuss later in the section on profitability by industry, performance of business operations vary greatly among industries, with good performers (e.g. motor vehicle by Japanese manufacturers in the U.S.) paying a large amount of corporate tax while poor performers (e.g. communication industry) causing to squeezing the aggregate amount of FDIUS's net profit, thus reducing FDIUS's net profit to corporate tax ratio.

Notwithstanding the above, the reason for the marked difference of the ratio between USDIA and FDIUS is unusual smallness of corporate tax amount paid in the tax jurisdictions where holding companies are located. We will discuss USDIA holding companies in more detail.

(4) Comparison of Disposition of Profit

Table 2-6 presents the breakdown of the disposition of profit of USDIA and FDIUS for the period from 1992-2003. The profit hereunder is defined as follows: profit = distributed dividends + reinvested earnings + paid-out interest (net). Therefore, the profit here is totally different form the net profit referred to in section (3) above. Also please note that the data in this section are on a prorated basis, and include depository institutions.

									(US	\$ million)
	USDIA					FDIUS				
	Profit	Distributed	Reinvestee	1 earnings ⁷	Interest	Profit	Distributed	Reinvested	Reinvested earnings 8	
		dividend	Reinvested	of which	Paid		dividend	Reinvested	of which	Paid
			earnings	revaluation	(Net)			earnings	revaluation	(Net)
1992	51,912	34,441	16,287	-7	1,184	317	6,930	-13,389	-1,286	6,775
1993	61,579	28,390	31,492	1,252	1,697	5,250	8,478	-9,317	631	6,090
1994	67,702	31,065	34,718	1,672	1,919	22,621	7,394	7,594	-618	7,633
1995	88,882	31,955	54,470	2,103	2,457	31,418	9,825	13,290	-612	8,303
1996	98,890	37,629	57,885	2,252	3,377	32,132	12,024	12,187	-1,873	7,921
1997	109,407	42,726	64,310	7,307	2,371	45,674	13,606	22,524	2,701	9,545
1998	102,846	41,419	58,651	11,185	2,775	43,441	19,638	12,789	4,415	11,015
1999	118,802	45,492	69,640	12,390	3,670	56,098	17,390	23,155	4,364	15,555
2000	149,240	45,984	99,691	13,180	3,566	68,009	24,744	23,651	6,539	19,614
2001	125,996	42,253	79,668	13,863	4,076	23,401	20,405	-19,697	6,361	22,694
2002	142,933	43,453	94,152	18,095	5,328	49,458	19,575	6,755	9,603	23,128
2003	187,522	40,363	141,106	21,914	6,053	68,657	38,265	12,048	10,118	18,345
Total	1,305,711	465,170	802,070	105,206	38,473	446,476	198,274	91,590	40,343	156,618
Share	100.0%	35.6%	61.4%	8.1%	2.9%	100.0%	44.4%	20.5%	9.0%	35.0%

 Table 2-6 Comparison of Disposition of Profit of USDIA and FDIUS (1992-2003)

(Compiled from the U.S. Department of Commerce data)

- USDIA allocated US\$802.1 billion (61.4%) to reinvestment out of its total cumulative profit of US\$1,350.7 billion while it allocated US\$465.2 billion (35.6%) to dividend distribution and US\$38.5 billion (2.9%) to interest payment. The cash-out from USDIA during the period amounts to 38.5% of cumulative profit.
- In contrast to USDIA, FDIUS allocated US\$198.3 billion (44.4%) to dividend distribution and US\$156.2 billion (35.0%) to interest payment out of its total cumulative profit of FDIUS while it allocated US\$91.6 billion (20.5%) to reinvestment. The cash-out from FDIUS during the period amounts to 79.5% of cumulative profit.
- Cumulative reinvestment amount of US\$802.1 billion up to 2003 consists of US\$105.3 billion attributable to revaluation profit and remaining US\$696.8 billion. The latter portion is deemed as cost-free funds for USDIA as it is retained with USDIA on cash value basis. If we assume the marginal funding cost of US dollar at 5-6% p.a., the opportunity gain for USDIA would be calculated around US\$35-40 billion, which should be equal to 1.75% -2% p.a. on USDIA position of US\$2 trillion as of 2003-end.

Active reinvestment by USDIA foreign affiliates has been induced mainly by the U.S. tax law which allows tax deferral on certain foreign income. Under the law, income from USDIA generally is not subject to tax until the income is repatriated. As long as the income is retained with USDIA and reinvested abroad, U.S. tax is not applicable.

⁷ Retained invested earnings are prorated retained earnings of the relevant affiliate in accordance with the percentage of equity holding

⁸ In the event that an affiliate recorded net loss for a reporting period or distributed dividends in excess of net profit for a reporting period, such net loss or excess portion shall be recorded as negative reinvestment.

The American Jobs Creation Act enacted in October 2004 contains a provision to allow a temporary tax holiday for dividend repatriation. U.S. firms may elect a one-year window in 2004 or 2005 during which they may deduct 85% of extraordinary cash dividends received from controlled foreign corporations. This effectively taxes those dividends at 5.25%, or 35% of 15%. Depending on the magnitude of the repatriation, it would negatively impact USDIA foreign affiliates' financial cost. While the size of the repatriation has yet to be known, it needs to be closely followed up.

4. Ratio Comparison by Industry

USDIA generally performs better than FDIUS on all industries basis. However, as we discuss later, the performance of each industry segment varies significantly. We overview the data for all industries first, followed by each major industry segment. Depository institutions are examined at the end of this section as the data base is different from other industry segments.

			F H	,	(/	(US\$ million)
	ROA	Equity to total asset ratio	Profit to sales ratio	Labor cost to sales ratio	Net profit	Total assets
USDIA	4.50%	41.70%	11.60%	10.20%	336,153	7,468,713
Parent companies of USDIA	2.70%	24.10%	6.50%	17.80%	432,407	15,911,129
FDIUS	0.60%	19.40%	1.40%	14.90%	30,580	5,093,531

Table 2-7 Major Ratios Comparison (All Industries) (2003)

(Compiled from the Department of Commerce data)

Operation size of USDIA in terms of total assets is almost one half of U.S. parent companies of USDIA.

Operation size of FDIUS in terms of total assets is nearly 70% of USDIA. However, net profit of FDIUS is less than one tenth of USDIA. Ordinary profit⁹ of FDIUS for US\$49.5 billion is also one tenth of USDIA's US\$405.4 billion.

							(05\$ 1111101)
		ROA	Equity to total asset ratio	Profit to sales ratio	Labor cost to sales ratio	Net profit	Total assets
Mining	USDIA	7.5%	41.8%	20.1%	5.3%	23,073	309,421
	Parent companies of USDIA	3.2%	45.5%	10.9%	20.5%	6,257	193,645
	FDIUS	1.0%	32.9%	3.0%	23.7%	554	56,816
Utilities	USDIA	2.3%	30.7%	6.0%	5.2%	2,290	98,234
	Parent companies of USDIA	-0.3%	21.1%	-0.7%	11.4%	-1792	706,655
	FDIUS	0.8%	33.6%	2.0%	7.1%	741	89,932

Table 2-8 Major Ratios Comparison (Mining and Utilities) (2003)

- Reflecting the U.S.'s unparalleled overseas operation scale in natural resources development area, USDIA (mining) overwhelms U.S. parent companies and FDIUS by total assets.
- ➢ Operation size of USDIA and FDIUS of utilities segment is small compared with that of U.S. parent companies of USDIA.
- FDIUS (utilities), mainly consisting of electric power generation by the U.K. and Canada, has been outperformed by USDIA, but it has been performing steadily compared with U.S. parent companies of USDIA. The ROA and net profit to sales ratio of USDIA, though the level themselves are quite low because of the nature of the industry, are much better than those of FDIUS.
- ▶ USDIA (mining) recorded ordinary profit of US\$41,884 million while FDIUS US\$778 million.

⁹ Ordinary profit is defined as the profit before corporate tax minus (or plus) capital gain (or capital loss) to neutralize the difference of the tax rates in the U.S. and foreign countries as well as non-recurrent factors. With regard to the ordinary profit of U.S. parent company of USDIA, receipts of dividends from USDIA affiliates are subtracted.

Ordinary profit to sales ratio of USDIA (mining) is 36.5% while that of FDIUS (mining) is 4.2%. The gap between the two is more conspicuous in the ratio. USDIA (utilities) recorded ordinary profit of US\$3,759 million while FDIUS (utilities) US\$1,704 million. Ordinary profit to sales ratio of USDIA (utilities) is 9.8% and that of FDIUS (utilities) 4.6%.

						(US\$ million)
	BOA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
	KOA	asset ratio	ratio	sales ratio	Thet piont	Total assets
USDIA	5.3%	45.2%	5.1%	10.5%	69,213	1,301,666
Parent companies of USDIA	3.9%	32.5%	5.9%	17.6%	177,395	4,602,585
FDIUS	0.6%	28.6%	0.7%	17.7%	6,046	1,035,133

Table 2-9 Comparison of Major Ratios (All Manufacturing) (2003)

(Compiled from the Department of Commerce data)

> The ratios are more or less the same as "all industries", as "all manufacturing" covers a wide variety of industry segments.

➤ USDIA recorded ordinary profit of US\$85,201 million while FDIUS US\$15,301 million. Ordinary profit to sales ratio of USDIA is 6.3% and that of FDIUS 1.8%.

We examine below manufacturing sector by each industry segment.

Table 2-10 Comparison	of Major Ratios	(Food and Beverages &	Tobacco) (2003)	
			(1100)	 ~

							(US\$ million)
		ROA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
		ROA	asset ratio	ratio	sales ratio	Net piont	1 otal assets
	USDIA	6.5%	45.0%	5.3%	9.7%	5,441	83,966
Food	Parent companies	6 5 %	24 704	6 704	12 0%	17 214	265 122
1000	of USDIA	0.370	54.770	0.770	13.9%	17,214	205,425
	FDIUS	-0.2%	19.6%	-0.2%	13.7%	-98	46,672
Davara gas	USDIA	11.8%	55.2%	13.1%	7.0%	6,532	55,210
Beverages	Parent companies	10.50/	21.10/	10.00/	16.20/	17 594	167.940
a Tobacco	of USDIA	10.5%	51.1%	18.8%	10.3%	17,584	107,840
Tobacco	FDIUS	-4.5%	21.1%	-5.5%	14.3%	-1,236	27,426

(Compiled from the Department of Commerce data)

- There is no significant gap between USDIA and FDIUS in terms of the size of total assets for both food and beverages & tobacco industries. However, USDIA recorded substantial amount of net profit for the both industry segments while FDIUS recorded net loss for the both segments.
- > The above ratios straightly reflect the established strength of U.S. companies represented by Coca Cola, etc. in this segment both in domestic and international markets.
- ➤ USDIA (food) recorded ordinary profit of US\$7,293 million while FDIUS (food) US\$87 million. Ordinary profit to sales ratio of USDIA (food) is 7.1% and that of FDIUS (food) 0.2%.
- ➢ USDIA (beverages & tobacco) recorded ordinary profit of US\$7,991 million while FDIUS (beverage & tobacco) US\$330 million. Ordinary profit to sales ratio of USDIA (beverage & tobacco) is 16.0% and that of FDIUS (beverage and tobacco) 1.5%.

							(US\$ million)
		ROA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
		asset ratio		ratio	sales ratio	Net prom	10tal assets
	USDIA	7.6%	50.6%	10.9%	11.0%	28,011	369,757
Chemicals	Parent companies of USDIA	5.9%	40.3%	9.6%	19.5%	39,117	664,700
	FDIUS	2.9%	36.9%	4.3%	19.6%	6,899	235,676
	USDIA	10.8%	53.5%	18.1%	11.2%	19,263	178,750
of which Pharmaceuticals	Parent companies of USDIA	8.3%	47.2%	14.7%	20.4%	27,986	335,650
	FDIUS	2.6%	36.1%	3.9%	24.7%	2,937	112,631
	USDIA	9.5%	36.2%	9.7%	11.9%	3,196	33,539
Soap, cleaning compounds, etc	Parent companies of USDIA	9.9%	44.0%	13.1%	16.2%	7,178	72,890
-	FDIUS	10.1%	45.0%	25.2%	15.7%	4,568	45,057

Table 2-11 Comparison of Major Ratios (Chemicals) (2003)

- ➢ USDIA and U.S. parent companies of USDIA maintain higher profitability in this segment compared with other manufacturing sectors.
- Profitability of USDIA and U.S. parent companies of pharmaceuticals and medicines segment is extremely high. USDIA excels and achieves better ratios including profitability than U.S. parent companies.
- Profitability of FDIUS of soap, cleaning, and toilet preparations exceeds USDIA and U.S. parent companies with higher ROA and net profit to sales ratio. It is due partly to capital gain of US\$2,608 million being included in FDIUS, but, as is touched upon later, ordinary profit to sales ratio of FDIUS of this segment is higher than that of USDIA. Major investors in this segment are France and Germany. This is one of the few industry segments along with motor vehicles in which FDIUS exceeds USDIA performance.
- ➢ USDIA (chemicals) recorded ordinary profit of US\$31,846 million while FDIUS (chemicals) US\$7,220 million. Ordinary profit to sales ratio of FDIUS (chemicals) is 12.4% and that of FDIUS (chemicals) 4.5%.
- USDIA (pharmaceuticals and medicines) recorded ordinary profit of US\$21,718 million while FDIUS (pharmaceuticals and medicines) US\$5,639 million. Ordinary profit to sales ratio of USDIA is 20.4%, and that of FDIUS 7.5%. It is of note that labor cost to sales ratio of USDIA is less than half of that of FDIUS while the latter exceeds that of U.S. parent companies of USDIA. This is a typical case in which foreign companies that are required to maintain their presence in the U.S. market in this segment are paying higher cost.
- USDIA (soap, cleaning, and toilet preparations) recorded ordinary profit of US\$3,562 million while FDIUS (soap, cleaning, and toilet preparations) US\$2,203 million. Ordinary profit to sales ratio of USDIA is 10.8% and that of FDIUS 12.1%.

Table 2-12 C	Comparison	of Major Ratios	(Primary and	Fabricated Metals) (2	.003)
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						(US\$ million)
	ROA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
	KOA	asset ratio	ratio	sales ratio	Net profit	10tal assets
USDIA	3.7%	49.6%	5.5%	17.0%	8,036	70,165
Parent companies	2.9%	34.3%	3.2%	23.1%	4 464	153 861
of USDIA	2.970	54.570	5.270	25.170		155,001
FDIUS	-1.4%	26.8%	-1.3%	19.9%	-609	44,551

> While FDIUS has been suffering from poor performance since 2000, USDIA is in a steady trend.

➢ USDIA recorded ordinary profit of US\$3,132 million while FDIUS recorded US\$389 million. Ordinary profit to sales ratio of USDIA is 2.1% and that of FDIUS 0.8%.

Table 2-13 Comparison of Major Ratios (Machinery and Transportation equipment) (2003)

							(US\$ million)
		ROA	Equity to total asset ratio	Profit to sales ratio	Labor cost to sales ratio	Net profit	Total assets
	USDIA	5.0%	49.5%	4.9%	16.9%	3,305	66,266
Machinery	Parent companies of USDIA	3.1%	25.7%	8.3%	20.4%	20,216	651,491
	FDIUS	-0.3%	38.4%	-0.4%	26.0%	-278	99,454
	USDIA	1.4%	29.1%	1.0%	10.9%	2,730	192,194
Motor vehicles, parts	Parent companies of USDIA	0.9%	9.5%	1.6%	12.6%	8,468	983,600
	FDIUS	1.6%	18.7%	1.8%	11.4%	3,251	205,620

- While FDIUS (machinery) has suffered from weak business recently, USDIA (machinery) has been performing strongly.
- The ratios indicate FDIUS (motor vehicles) size and its strong performance, with total assets and net profit being 20% and 38% respectively of U.S. parent companies of USDIA. FDIUS (motor vehicles) exceeds USDIA in terms of total assets and net profit. This is one the few segments along with aforementioned soap, cleaning, and toilet preparations in which FDIUS outperforms USDIA.

The ratios of USDIA (motor vehicles) and U.A. parent companies are not in good shape. Their ROA and net profit to sales ratio are lower than those of FDIUS (motor vehicles).

- The strong performance of FDIUS (motor vehicles) is due primarily to U.S. affiliates of Japanese companies, whose net profits amounts to US\$2,014 million, representing 62% of total net profit of FDIUS (motor vehicle) of US\$3,251 million. ROA of Japanese companies is not available as the size of their total assets is not disclosed. Net profit to sales ratio of Japanese FDIUS (motor vehicle) is calculated at 3.1% based on the sales of US\$64,346 million, being 44% of the sales of USDIA (motor vehicles) of US\$146,384 million, which compares advantageously to USDIA's 1.0% and U.S. parent companies' 1.6%. If Japanese portion is subtracted from FDIUS (motor vehicle), the ratio drops to 1.5%, which is slightly lower than U.S. parent companies.
- USDIA (machinery) recorded ordinary profit of US\$3,914 million while FDIUS net loss of US\$144 million. USDIA (motor vehicles & parts) recorded ordinary profit of US\$3,077 million while FDIUS (motor vehicles & parts) US\$3,588 million. Ordinary profit to sales ratio of USDIA (motor vehicles and parts) is 1.1% and that of FDIUS (motor vehicles and parts) 2.0%.
- It is noted that equity to total assets ratio of U.S. parent companies (motor vehicles & parts) is unusually low. The ratio which stood at an ordinary level of 25.1% in 1985 declined to 15.1% (1995), 14.2% (2000), 10.9% (2001), and 6.8% (2002). It stood at 9.5% in 2003.

						(US\$ million)
	ROA	Equity to total asset ratio	Profit to sales ratio	Labor cost to sales ratio	Net profit	Total assets
USDIA	4.8%	45.7%	3.8%	7.8%	7,888	165,132
Parent companies of USDIA	1.2%	57.0%	2.0%	23.6%	6,121	501,432
FDIUS	-4.6%	26.7%	-4.6%	19.8%	-4,221	92,661

 Table 2-14 Comparison of Major Ratios (Computers and electric products) (2003)

(Compiled from the Department of Commerce data)

- FDIUS has suffered from weak business in 2001-2003 due to IT bubble burst. The recovery started in 2004 in this segment.
- > There are significant gap among USDIA, U.S. parent companies and FDIUS in their profitability. It is of note that the gap between USDIA and U.S. parent companies detected in labor cost to sales ratio. Relocation of manufacturing plants to strategic cites (e.g., Ireland) should be one of the factors supporting USDIA's strong profitability.

		Ĩ	5	`	, , , ,	(US\$ million)
	ROA	Equity to total asset ratio	Profit to sales ratio	Labor cost to sales ratio	Net profit	Total assets
USDIA	6.8%	39.5%	4.6%	5.5%	33,706	499,072
Parent companies of USDIA	5.0%	36.9%	3.4%	8.1%	21,029	418,287
FDIUS	3.7%	33.5%	2.6%	5.8%	16,711	453,529

Table 2-15 Comparison of Major Ratios (Wholesale trade) (2003)

(Compiled from the Department of Commerce data)

While the ratios of USDIA, U.S. parent companies and FDIUS vary within a relatively narrow range compared with other industry sectors, FDIUS still lags behind USDIA in ROA and net profit to sales ratio. The background to this difference is due to FDIUS's weak profitability in other goods than petroleum and petroleum products (e.g. professional and commercial equipment and supplies, motor vehicles, other durable goods, electrical goods, other nondurable goods). Major ratios of USDIA and FDIUS in the sectors other than petroleum and petroleum products are as follows. The comparative data on U.S. companies are not available.

(US\$ million)

	ROA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
USDIA	7.1%	41.0%	5.3%	sales ratio 6.6%	31,990	450,470
FDIUS	2.7%	32.2%	1.9%	7.5%	8,354	305,054
			19			

(Compiled from the Department of Commerce data)

➤ USDIA recorded ordinary profit of US\$35,452 million while FDIUS US\$17,691 million. Ordinary profit to sales ratio of USDIA is 4.8% and that of FDIUS 2.8%.

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								(US\$ million)
Information USDIA 1.0% 27.6% 1.6% 15.6% 1,575 156,52 Parent companies of USDIA 5.0% 45.0% 12.8% 22.1% 69,176 1,384,250 FDIUS -1.5% 39.2% -5.0% 21.5% -4,076 265,833 of which Broadcasting & telecommunication s USDIA -5.6% 6.0% -12.8% 11.8% -4,086 72,384 S FDIUS -6.2% 33.3% -18.9% 13.4% 20.5% 46,606 939,673 Others USDIA 6.7% 46.2% 8.4% 17.4% 5,661 84,134 Others Parent companies of USDIA 5.0% 51.6% 11.7% 24.7% 22,570 444,57 FDIUS -0.2% 40.9% -0.7% 23.9% -408 206.51			ROA	Equity to total	Profit to sales	Labor cost to	Net profit	Total assets
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		USDIA	1.0%	27.6%	1.6%	15.6%	1,575	156,522
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Information	Parent companies of USDIA	5.0%	45.0%	12.8%	22.1%	69,176	1,384,250
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		FDIUS	-1.5%	39.2%	-5.0%	21.5%	-4,076	265,832
Broadcasting & telecommunication Parent companies of USDIA 5.0% 41.8% 13.4% 20.5% 46,606 939,67 s FDIUS -6.2% 33.3% -18.9% 13.9% -3,668 59,317 Others USDIA 6.7% 46.2% 8.4% 17.4% 5,661 84,134 Others Parent companies of USDIA 5.0% 51.6% 11.7% 24.7% 22,570 444,577 FDIUS -0.2% 40.9% -0.7% 23.9% -408 206.511	of which	USDIA	-5.6%	6.0%	-12.8%	11.8%	-4,086	72,388
s FDIUS -6.2% 33.3% -18.9% 13.9% -3,668 59,31 USDIA 6.7% 46.2% 8.4% 17.4% 5,661 84,13 Others Parent companies of USDIA 5.0% 51.6% 11.7% 24.7% 22,570 444,57 FDIUS -0.2% 40.9% -0.7% 23.9% -408 206.51	Broadcasting & telecommunication	Parent companies of USDIA	5.0%	41.8%	13.4%	20.5%	46,606	939,673
USDIA 6.7% 46.2% 8.4% 17.4% 5,661 84,13 Parent companies of USDIA 5.0% 51.6% 11.7% 24.7% 22,570 444,57' FDIUS -0.2% 40.9% -0.7% 23.9% -408 206.51'	s	FDIUS	-6.2%	33.3%	-18.9%	13.9%	-3,668	59,317
Others Parent companies of USDIA 5.0% 51.6% 11.7% 24.7% 22,570 444,57 FDIUS -0.2% 40.9% -0.7% 23.9% -408 206.51		USDIA	6.7%	46.2%	8.4%	17.4%	5,661	84,134
FDILIS -0.2% 40.9% -0.7% 23.9% -408 206.51	Others	Parent companies of USDIA	5.0%	51.6%	11.7%	24.7%	22,570	444,577
		FDIUS	-0.2%	40.9%	-0.7%	23.9%	-408	206,515

Table 2-16	Comparison	of Major Ratios (Information	(2003)
14010 2 10	Comparison	or major manos	mormanon	(2005)

(Compiled from the Department of Commerce data)

- Information sector includes telecommunication (telephone, internet, etc.), broadcasting, publishing (software publishers), motion pictures, sound recording, etc. The performance of telecommunication and broadcasting sector varies greatly from other sectors.
- ROA and net profit to sales ratio of USDIA (information) are substantially lower than those of U.S. parent companies due to huge loss incurred by telecommunication sector in overseas market. Equity to total assets ratio of USDIA is unusually low.
- In contrast to telecommunication sector, other segments of USDIA (information) are performing strongly.
- FDIUS (information) recorded losses not only in communication sector but also in other sectors with total net loss of US\$4.1 billion.
- USDIA (information) recorded ordinary profit of US\$4.9 billion while FDIUS (information) recorded loss of US\$323 million. Ordinary profit to sales ratio of USDIA (information) is 5.0% and that of FDIUS (information) –0.4%. USDIA (communication and broadcasting) recorded ordinary profit of –US\$2,959 million while FDIUS (communication and broadcasting) –US\$2,235 million. USDIA (other information) recorded ordinary profit of US\$7,865 million while FDIUS (other information) US\$1,912 million. Ordinary profit to sales ratio of USDIA (other information) 3.3%.

 Table 2-17 Comparison of Major Ratios (Finance except Depository Institutions and Insurance)

 (2003)

			· · · ·			
						(US\$ million)
	POA	Equity to total	Profit to sales	Labor cost to	Net profit	Total accets
	KOA	asset ratio	ratio	sales ratio	Net piont	1 Otal assets
USDIA	1.4%	21.2%	17.5%	10.5%	40,141	2,813,684
Parent companies	1.2%	10.9%	10.6%	15.4%	90.038	7 311 031
of USDIA	1.270	10.970	10.070	13.470	90,038	7,511,051
FDIUS	0.2%	6.3%	3.9%	19.0%	6,328	2,710,029
			(Com	niled from the I	Department of ('ommerce data)

- Finance (except depository institutions) and insurance sector includes securities, nondepository credit intermediation, funds, trust, insurance carriers and related activities.
- ROA level of this sector is lower than that of other industry sectors as this sector is basically asset based business.
- ▶ USDIA and FDIUS are almost the same on total assets. However, the size of owners' equity

(though not shown in the table) differs greatly with USDIA being US\$597.2 billion and FDIUS being US\$171.7 billion.

➤ USDIA recorded ordinary profit of US\$37,025 million while FDIUS US\$6,262 million. Ordinary profit to sales ratio of USDIA is 16.1% and that of FDIUS 3.9%.

						(US\$ million)
	POA	Equity to total	Profit to sales	Labor cost to	Net profit	Total accete
	KOA	asset ratio	ratio	sales ratio	Net piont	10tal assets
USDIA	4.3%	34.3%	7.3%	28.8%	6,613	152,724
Parent companies	8 8%	46.6%	11.6%	37 /1%	22 505	255 720
of USDIA	0.070	40.0%	11.0%	37.470	22,303	255,720
FDIUS	1.0%	44.9%	1.2%	26.7%	609	62,246
			(0	111C 41 T		1

 Table 2-18 Comparison of Major Ratio (Professional, Scientific and Technical Services) (2003)

(Compiled from the Department of Commerce data)

- Professional, scientific and technical services include computer systems design and engineering, consulting, advertising, legal services, accounting tax services, typical business segments that are most developed in the U.S. market.
- ➢ With this background, profitability of U.S. parent companies far exceeds those of USDIA and FDIUS.
- Net profit to sales ratio of FDIUS is far below that of USDIA or U.S. parent companies. USDIA recorded ordinary profit of US\$7,160 million and FDIU US\$3,607 million. Ordinary profit to sales ratio of USDIA is 7.9% and that of FDIUS 7.1%, indicating FDIUS net profit being reduced by relatively large amount of U.S. corporate tax paid by FDIUS.

						(US\$ million)
	POA	Equity to total	Profit to sales	Labor cost to	Net profit	Total accets
	KOA	asset ratio	ratio	sales ratio	Net piont	Total assets
USDIA	7.5%	69.0%	63.1%	16.0%	159,543	2,137,370
Parent companies	1 60/	20.40/	4 20/	21.50/	17 791	1 029 055
of USDIA	4.0%	59.4%	4.5%	21.3%	47,701	1,058,955
FDIUS	0.9%	45.0%	1.4%	21.9%	3,668	420,015
			(Com	nilad from the T) an antmant of C	ommarca data)

Table 2-19 Comparison of Major Ratios (Other Industries) (2003)

(Compiled from the Department of Commerce data)

- "Other industries" included in USDIA and U.S. parent companies data are slightly different from those included in FDIUS data. The former includes agriculture, forestry, construction, retail trade, transportation, real estate, rental, leasing, hotel, restaurant, management of nonblank companies (e.g. holding company), etc. The latter does not includes retail trade, rental and leasing which the former includes. On the contrary, the latter includes mining and utilities which the former does not.
- FDIUS data in Table 2-19 is reformatted to the same base as "other industries" defined for USDIA and U.S. parent companies.
- > The reason why USDIA shows aberrant levels in all ratios compared with U.S. parent companies and FDIUS is that "other industries" include holding companies abroad the main function of which is to channel investment to other entities abroad. As we discuss in the following section, USDIA (holding company) profit as percentage of total is substantial.

As mentioned at the outset of this section, data on depository institutions are unavailable on the base described above. In order to compare profitability of USDIA and FDIUS by industry including depository institutions, we examine below profit (net of withholding tax) to investment position (on a historical basis) ratio for the period from 2001 to 2004.

General trend of profitability of industries other than depository institutions is more or less the same as what we examined using the ratios such as ROA in the section above. However, there are some industry sectors in which the gap of rate of return between USDIA and FDIUS changed in 2004. This will be addressed in Chapter 3. The section below discusses mainly on depository institutions segment that was excluded from earlier analysis.

		2001	2002	2003	2004	Average
All Industries	USDIA	7.9%	8.1%	10.1%	10.9%	9.3%
	FDIUS	0.3%	2.6%	4.3%	6.3%	3.4%
Mining	USDIA	12.2%	11.1%	13.3%	17.9%	13.6%
	FDIUS	0.1%	0.3%	4.5%	9.4%	3.6%
Utilities	USDIA	8.7%	8.1%	8.5%	10.2%	8.9%
	FDIUS	3.3%	3.2%	4.7%	3.4%	3.7%
Manufacturing	USDIA	8.2%	7.9%	10.1%	12.0%	9.6%
	FDIUS	0.9%	4.0%	4.6%	7.3%	4.2%
of which Food	USDIA	11.6%	12.8%	14.6%	12.9%	13.0%
	FDIUS	3.3%	4.9%	0.0%	9.7%	4.5%
Chemicals	USDIA	9.2%	10.7%	12.1%	13.5%	11.4%
	FDIUS	1.6%	6.4%	6.6%	6.3%	5.2%
Metals	USDIA	6.5%	5.4%	8.0%	10.6%	7.6%
Wetais	FDIUS	-1.2%	0.0%	2.9%	12.8%	3.6%
Machinery	USDIA	6.6%	10.7%	11.3%	12.6%	10.3%
Machinery	FDIUS	-2.6%	1.2%	-1.2%	2.9%	0.1%
Computers etc.	USDIA	7.3%	2.8%	9.2%	10.9%	7.6%
Computers, etc.	FDIUS	-7.6%	-5.4%	-0.6%	5.6%	-2.0%
Electric products	USDIA	6.8%	5.3%	5.7%	11.5%	7.3%
Electric products	FDIUS	5.0%	9.6%	-0.2%	5.9%	5.1%
Transportation equipment	USDIA	4.8%	2.3%	5.0%	9.4%	5.4%
	FDIUS	3.2%	6.6%	7.3%	8.0%	6.3%
of which	USDIA	2.3%	-3.2%	-1.2%	7.3%	1.3%
Motor vehicles and parts	FDIUS	3.9%	7.4%	8.7%	10.8%	7.7%
Wholessle trade	USDIA	13.3%	11.9%	16.1%	18.7%	15.0%
wholesale trade	FDIUS	5.3%	6.3%	8.7%	11.3%	7.9%
T C	USDIA	-6.5%	3.1%	13.7%	17.2%	6.9%
Information	FDIUS	-9.1%	-2.7%	2.1%	4.9%	-1.2%
	USDIA	4.9%	2.4%	4.3%	5.0%	4.2%
Depository institutions	FDIUS	3.0%	2.8%	2.6%	4.4%	3.2%
Finance (excluding depository institutions)	USDIA	4.0%	5.6%	7.0%	7.8%	4.7%
and insurance	FDIUS	-0.8%	-2.0%	4.3%	4.4%	1.5%
	USDIA	5.2%	6.8%	11.3%	14.9%	9.6%
Professional, technical services	FDIUS	-0.8%	-0.7%	-0.1%	7.1%	1.4%
	USDIA	9.6%	9.2%	10.2%	9.4%	9.6%
Other industries	FDIUS	1.6%	2.2%	2.2%	3.2%	2.3%
of which Management companies	USDIA	10.3%	9.8%	10.7%	9.2%	10.1%
including holding companies	FDILIS	-3.6%	-1 5%	0.0%	_0.7%	_1 3%
including notating companies	1.0102	-5.0%	-1.570	0.0%	-0.270	-1.3%

Table 2-20 Comparison of Profitability by Industry (2001-2004)

- Profitability of USDIA and FDIUS in depository institutions segment has been consistently low compared with other industry sectors. Banking business is not profitable for both USDIA and FDIUS.
- The net profit in absolute terms is not large. USDIA (depository institutions) net profit of US\$3,247 million is only 1.6% of total USDIA while FDIUS (depository institutions) net profit of US\$4,619 million is 5.0% of total FDIUS.
- The rate of return gap between USDIA and FDIUS in depository institutions sector is relatively small compared with other industry sectors. USDIA and FDIUS are nearly equal in terms of profitability.

5. Holding Companies Abroad

This section examines USDIA's holding companies whose presence has been increasing in recent years.

(1) **Proliferation of Holding Companies in USDIA**

Holding companies that have been classified under "other industries" since 1999 had been classified under "finance (except depository institutions) and insurance and real estate" up until 1998. The latter sector includes as its core part such highly growing investment areas as securities and insurance. This implies a sharp increase of investment position in "finance (except depository institutions) and insurance and real estate" does not necessarily mean a sharp increase of holding companies. As the data on investment position by industry are not available for the years up to 1998, we will use other parameters, i.e., total assets, owners' equity and net profit. Table 2-21 presents those data together with holding companies' share in majority-owned non-bank foreign affiliates of US companies for the period from 1983 to 2003.

								(U	S\$ billion)	
	ma non-ban	ijority-own k foreign a	ed ffiliates	of which	of which Holding companies			Share of Holding companies		
	Total assets	Owner's equity	Net profit	Total assets	Owner's equity	Net profit	Total assets	Owner's equity	Net profit	
1983	585.2	233.1	30.6	29.8	23.6	(D)	5.1%	10.1%	(D)	
1984	597.4	244.0	36.7	32.2	26.2	3.0	5.4%	10.7%	8.2%	
1985	655.6	264.3	36.6	38.8	30.8	3.5	5.9%	11.7%	9.6%	
1986	728.1	296.9	40.8	46.5	36.0	4.5	6.4%	13.6%	11.0%	
1987	860.8	353.4	54.2	51.3	41.1	6.3	6.0%	11.6%	11.6%	
1988	950.6	368.4	66.4	59.6	48.6	10.3	6.3%	13.2%	15.5%	
1989	1,080.2	407.1	72.1	81.9	64.1	10.6	7.6%	15.7%	14.7%	
1990	1,275.0	465.2	73.3	103.0	76.4	11.3	8.1%	16.4%	15.4%	
1991	1,375.8	507.0	66.0	110.8	83.9	10.3	8.1%	16.5%	15.6%	
1992	1,474.1	539.9	62.9	123.7	94.9	12.0	8.4%	17.6%	19.1%	
1993	1,738.0	589.5	66.6	143.8	111.5	11.0	8.3%	18.9%	16.5%	
1994	2,022.7	682.7	81.1	164.8	128.1	15.3	8.1%	18.8%	18.9%	
1995	2,420.1	795.8	108.7	186.9	143.4	19.0	7.7%	18.0%	17.5%	
1996	2,657.8	920.1	118.9	232.2	176.4	21.9	8.7%	19.2%	18.4%	
1997	2,952.0	1,025.4	140.5	270.2	205.7	28.2	9.2%	20.1%	20.1%	
1998	3,389.8	1,192.6	134.5	363.2	260.5	37.0	10.7%	21.8%	27.5%	
1999	4,056.4	1,447.5	162.8	564.9	382.1	45.4	13.9%	26.4%	27.9%	
2000	4,745.3	1,813.3	199.9	815.4	587.0	51.5	17.2%	32.4%	25.8%	
2001	5,254.5	2,065.9	177.3	1,026.8	762.4	79.0	19.5%	36.9%	44.6%	
2002	6,126.2	2,491.9	212.6	1,396.9	1,044.4	103.9	22.8%	41.9%	48.9%	
2003	7,468.7	3,113.9	336.2	1,837.1	1,364.0	151.3	24.6%	43.8%	45.0%	

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(Compiled from the Department of Commerce data)

- Holding companies' presence in total USDIA started increasing gradually in the late 1980s and has been accelerating its rising trend since 1998-1999.
- Holding companies' share of owners' equity in total USDIA as of 2003 reached 43.8%. USDIA owners' equity excluding that of holding companies increased from US\$209.5 billion in 1983 to US\$1,749.9 billion in 2003, with annual growth rate of 10.6%, while owners' equity of holding companies increased from US\$23.6 billion in 1983 to US\$1,364.0 billion in 2003, with annual growth rate of as high as 21.3%.
- ➢ Holding companies' share of net profit in total USDIA is also high at 45.0% in 2003. It was as high as 48.9% in 2002.
- Reflecting the business character of holding companies, their share of total assets in USDIA has not been as high as that of net profit or owners' equity. However, it increased from 7-8% level in early 1990s to nearly 25% in recent years.

Unlike ordinary operating company that owns assets and sells goods or services, majority of holding company's balance sheet is consist of owners' equity and corresponding investment to other group affiliates.

(2) Major Ratios of Holding Companies

This section examines key ratios of USDIA (holding companies) and USDIA (other industry sectors). Table 2-22 presents comparison of ROA between the two.

				× ·) (T	JS\$ billion)
		1999	2000	2001	2002	2003
USDIA	Total assets	567.9	835.2	1051.3	1444.4	1859.6
Holding	Net profit	48.1	53.4	80.6	107.4	154.0
companies	ROA	8.5%	6.4%	7.7%	7.4%	8.3%
USDIA,	Total assets	4,063.9	4,514.9	4,833.1	5,358.0	6,334.6
excluding	Net profit	133.8	168.7	112.0	121.3	278.4
Holding	ROA	3.3%	3.7%	2.3%	2.3%	4.4%

Table 2-22 ROA of Holding Companies (1999-2003)

(Compiled from the Department of Commerce data)

Average ROA of holding companies for the period is 7.7%, which is extremely high. This is due to the fact that the majority of assets held by holding companies are investment in other group affiliates, and that, unlike ordinary operating companies, they do not own tangible assets such as factories, equipment, inventories. ROA, therefore, should be at a level equal to ROE.

Table 2-23 presents comparison of equity to total assets ratio between USDIA (holding companies) and USDIA (other industries).

Table 2-23 Equity to Total Assets Ratio of Holding Companies (1999-2003)

					J)	JS\$ billion)
		1999	2000	2001	2002	2003
USDIA	Total assets	564.9	815.4	1,026.8	1,396.9	1,837.1
Holding	Net profit	382.1	587.0	762.4	1044.4	1364.0
companies	ROA	67.6%	72.0%	74.3%	74.8%	74.3%
USDIA,	Total assets	3,491.5	3,929.9	4,227.7	4,729.3	5,631.6
excluding	Net profit	1,065.3	1,226.3	1,303.4	1,447.4	1,749.9
Holding	ROA	30.5%	31.2%	30.8%	30.6%	31.1%

(Compiled from the Department of Commerce data)

Holding company's equity to total assets is high because of its business nature. The table above indicates that holding companies re-invest equity contribution from parent companies to other group affiliates and that the reinvestment balance constitutes their major assets. Average growth rate of owners' equity for the period at 37.5% exceeds total assets growth for the period at 34.3%.

Table 2-24 presents USDIA net profit (net of withholding tax) by industry for the period from 2001 to 2004.

			(US	S\$ million)
	2001	2002	2003	2004
All Industries	110,029	124,940	171,229	209,338
Mining	9,262	8,915	11,274	16,905
Utilities	2,068	2,095	2,054	2,086
Manufacturing	27,603	26,411	35,981	48,328
of which Food	2,597	2,604	3,137	3,227
Chemicals	7,161	8,632	10,857	13,792
Metals	1,422	1,158	1,718	2,578
Machinery	1,313	1,926	2,221	2,873
Computers, etc.	4,335	1,519	4,623	5,985
Electric products	669	509	591	1,348
Transportation equipment	2,148	1,190	2,335	4,523
of which	501	~ 00	240	1 410
Motor vehicles and parts	531	-388	-240	1,419
Wholesale trade	13,706	13,382	18,759	24,145
Information	-3,084	1,320	6,224	9,078
Depository institutions	2,343	1,347	2,528	3,247
Finance (excluding depository institutions)	0.224	14505	01.256	27.220
and insurance	9,224	14,585	21,356	27,329
Professional, technical services	1,741	2,219	3,730	5,775
Other industries	47,166	54,666	69,322	72,447
Holding companies	41,483	48,277	60,795	61,473
19			0.0	1)

Table 2-24 Net Profit by Industry (2001-2004)

Holding companies' share of net profit in total USDIA net profit averages 34% during the period, which far exceeds all manufacturing's 22%.

(3) Major Locations of Holding Companies

Holding company acts as a strategic buffer between parent company and its group's subsidiaries to minimize effective tax rates for the group as a whole as well as to maximize efficiency of intra-group financial operations, etc. Holding companies have significantly increased their presence since in the late 1990s. One major background to the proliferation of holding companies is increasing use of such organizational structure in mega M&A deals in recent years.

Table 2-25 presents investment position by host country of USDIA (holding countries) as of 2004-end (on a historical-cost basis).

Table 2-25 Investment Positions b	y Host Country	of USDIA	Holding Companies	(2004)
			$(\mathbf{U} \mathbf{C} \mathbf{C} \mathbf{b}; \mathbf{H}; \mathbf{c} \mathbf{m})$	

(05¢ 011101)										
	All ind	ustries	of which	Holding co	mpanies					
	Investment	Share in	Investment	Share in	Share in					
	position	all areas	position	all areas	each area					
All	2,064.0	100.0%	711.8	100.0%	100.0%					
Canada	216.6	10.5%	29.6	4.2%	13.7%					
Europe	1,089.9	52.8%	429.5	60.3%	39.4%					
Luxembourg	74.9	3.6%	63.9	9.0%	85.3%					
Netherlands	201.9	9.8%	127.9	18.0%	63.3%					
Spain	45.2	2.2%	21.9	3.1%	48.5%					
Sweden	36.4	1.8%	27.2	3.8%	74.7%					
Switzerland	100.7	4.9%	67.9	9.5%	22.4%					
United Kingdom	302.5	14.7%	68.7	9.7%	22.7%					
Latin America	325.9	15.8%	113.0	15.9%	34.7%					
Bermuda	91.3	4.4%	34.1	4.8%	37.3%					
U.K. Caribbean	63.1	3.1%	45.4	6.4%	71.9%					
Africa	22.2	1.1%	2.5	0.4%	11.3%					
Middle East	19.2	0.9%	3.6	0.5%	19.0%					
Asia and Pacific	390.1	18.9%	133.6	18.8%	34.3%					
Hong Kong	43.7	2.1%	12.6	1.8%	28.8%					
Singapore	56.9	2.8%	(D)	(D)	(D)					

(D):denotes data not-disclosed (Compiled from the Department of Commerce data)

- ➢ Holding companies are mainly located in European countries such as the Netherlands, Luxembourg, Switzerland, the U.K., representing 60% of total USDIA (holding companies).
- USDIA (holding companies) investment position as percentage of total USDIA in each host country is as follows: Luxembourg (85%); the Netherlands (63%); Sweden (75%); United Kingdom Islands; and Caribbean (72%).
- The presence of Asia and Pacific as host countries of USDIA (holding companies) has increased recently and surpassed the share of Latin America, the traditional location of holding companies. One major factor behind this is recent mega M&A deals in Australia using holding company structure, though the relevant numbers are not disclosed in the Department of Commerce data.

(4) USDIA Position and Income by Industry of Affiliate and by Industry of U.S. Parent

The data on USDIA by the Department of Commerce are traditionally compiled on the basis of industry by affiliate. As an example, an acquisition of a consumer loan firm by an U.S. electronics manufacturing company itself is classified as USDIA in "finance (except depository institutions) and insurance." Should the consumer loan firm be acquired through a holding company of the U.S. electronic manufacturing company, the investment is classified as USDIA in "other industries." With the proliferation of using holding company structure by USDIA in diversifying U.S. companies' international operations, the data on a traditional basis do not provide sufficient information as to which U.S. industry segment are ultimate investor into which USDIA industry sector.

In order to supplement data on a traditional basis, the Department of Commerce added data series based on industry by parent. Table 2-26 compares USDIA position as of 2004 end on a historical basis by industry of affiliate to that by industry of parent. In Table 2-26, holding company is classified in the left side of the table as "other industries" while it is classified in accordance with industry classification of parent company in the right side.

(03\$ 011101)								
	Industry b	y affiliate	Industry	by parent				
	Position	Share	Position	Share				
	2,064.0	100.0%	2,064.0	100.0%				
	101.5	4.9%	52.9	2.6%				
	19.0	0.9%	42.0	2.0%				
Manufacturing		20.7%	1,228.8	59.5%				
Food	26.0	1.3%	59.5	2.9%				
Chemicals	107.9	5.2%	307.0	14.9%				
Metals	26.3	1.3%	43.5	2.1%				
Machinery	24.5	1.2%	143.2	6.9%				
Computer, etc.	58.6	2.8%	154.8	7.5%				
Electric products	12.4	0.6%	16.2	0.8%				
Transportation equipment	48.4	2.3%	155.5	7.5%				
	136.9	6.6%	62.9	3.0%				
	56.4	2.7%	82.4	4.0%				
ns	68.1	3.3%	73.5	3.6%				
ository institutions) and insurance	371.0	18.0%	287.1	13.9%				
cal services	42.1	2.0%	76.1	3.7%				
	840.8	40.7%	158.3	7.7%				
	Food Chemicals Metals Machinery Computer, etc. Electric products Transportation equipment ns ository institutions) and insurance al services	Industry bPosition2,064.0101.5101.519.0428.2Food26.0Chemicals107.9Metals26.3Machinery24.5Computer, etc.58.6Electric products12.4Transportation equipment48.4136.956.4nssitory institutions) and insurance371.0al services440.8	Industry by affiliate Position Share 2,064.0 100.0% 101.5 4.9% 101.5 4.9% 19.0 0.9% 428.2 20.7% Food 26.0 1.3% Chemicals 107.9 5.2% Metals 26.3 1.3% Computer, etc. 58.6 2.8% Electric products 12.4 0.6% Transportation equipment 48.4 2.3% stiory institutions) and insurance 371.0 18.0% al services 42.1 2.0%	$\begin{tabular}{ c c c c c c } \hline Industry & Ifiliate & Industry & Position & Share & Position & $$2,064.0$ & $$100.0\%$ & $$2,064.0$ & $$101.5$ & $$4.9\%$ & $$52.9$ & $$101.5$ & $$4.9\%$ & $$52.9$ & $$101.5$ & $$4.9\%$ & $$52.9$ & $$19.0$ & $$0.9\%$ & $$42.0$ & $$428.2$ & $$20.7\%$ & $$1,228.8$ & $$19.0$ & $$132\%$ & $$26.3$ & $$1.3\%$ & $$43.5$ & $$Chemicals & $$107.9$ & $$5.2\%$ & $$307.0$ & $$Machinery & $$24.5$ & $$1.2\%$ & $$143.2$ & $$Computer, etc. & $$58.6$ & $$2.8\%$ & $$154.8$ & $$Electric products & $$12.4$ & $$0.6\%$ & $$16.2$ & $$Transportation equipment & $$48.4$ & $$2.3\%$ & $$155.5$ & $$136.9$ & $$6.6\%$ & $$62.9$ & $$56.4$ & $$2.7\%$ & $$82.4$ & $$ns$ & $$68.1$ & $$3.3\%$ & $$73.5$ & $$sitory institutions) and insurance & $$$371.0$ & $$18.0\%$ & $$287.1$ & $$at services & $$$42.1$ & $$2.0\%$ & $$76.1$ & $$$840.8$ & $$40.7\%$ & $$158.3$ & $$$$				

Table 2-26 USDIA Position by Industry of Parent Company (2004)

(Compiled from the Department of Commerce data)

(LICE hillion)

- While investment position of other industries is US\$840.8 billion (40.7% of total USDIA) by industry of affiliate (in which holding companies are classified as other industries), it is only US\$158.3 billion (7.7% of total USDIA) by industry of parent.
- ➤ While investment position of wholesale trade is US\$136.9 billion (6.6% of total USDIA) by industry of affiliate, it is only US\$62.9 billion (3.0% of total USDIA) by industry of parent.
- ➤ While investment position of "finance (except depository institutions) and insurance" is US\$371.0 billion (18.0% of total USDIA) by industry of affiliate, it is only US\$287.1 billion (13.9% of total USDIA) by industry of parent.

- While investment position of manufacturing sector is US\$428.2 billion (20.7% of total USDIA) by industry of affiliate, it is as large as US\$1,228.8 billion (59.5% of total USDIA) by industry of parent. This indicates as follows:
 - Manufacturing sector actively use holding company structure in its international operations.
 - Investment in sales/distribution affiliate abroad by U.S. manufacturing company is classified as "wholesale trade" by industry of affiliate. It is classified as "manufacturing" by industry of parent. The most conspicuous sector is transportation equipment. Its investment position increases from US\$48.4 billion (2.3% of total USDIA) by industry of affiliate to US\$155.5 billion (7.5% of total USDIA) by industry of parent.
 - Manufacturing sector's investment in other industry sector (e.g. investment in financial sector by industry of affiliate) is also conspicuous.
 - Investment position of depository institution on the basis of industry of affiliate is US\$68.1 billion while that on the basis of industry of parent is US\$73.5 billion. The difference reflects investment by depository institutions in "finance (except depository institutions) and insurance" sector exceeds investment by other industry sectors in depository institutions sector.

Likewise, Table 2-27 compares income and rate of return of USDIA by industry of affiliate and by industry of parent.

						(US\$	million)
		Inc	lustry by affilia	ate	In	dustry by pare	nt
				Investment			Investment
		Income	Share	Return	Income	Share	Return
				ratio			ratio
All industries		209,338	100.0%	10.9%	209,338	100.0%	10.9%
Mining		16,905	8.1%	17.9%	7,471	3.6%	15.2%
Utilities		2,086	1.0%	10.2%	3,903	1.9%	9.0%
Manufacturing		48,328	23.1%	12.0%	129,059	61.7%	11.2%
of which	Food	3,227	1.5%	12.9%	5,858	2.8%	10.4%
	Chemicals	13,792	6.6%	13.5%	32,961	15.8%	11.5%
	Metals	2,578	1.2%	10.6%	3,873	1.9%	10.0%
	Machinery	2,873	1.4%	12.6%	10,921	5.2%	8.5%
	Computer, etc.	5,985	2.9%	10.9%	15,324	7.3%	10.5%
	Electric products	1,348	0.6%	11.5%	1,383	0.7%	8.9%
	Transportation equipment	4,523	2.2%	9.4%	11,655	5.6%	7.8%
Wholesale trade		24,145	11.5%	18.7%	8,056	3.9%	13.9%
Information		9,078	4.3%	17.2%	11,856	5.7%	15.1%
Depository institution	ns	3,247	1.6%	5.0%	5,880	2.8%	8.7%
Finance (except depo and insurance	ository institutions)	27,329	13.1%	7.8%	19,081	9.1%	7.2%
Professional, technica	al services	5,775	2.8%	14.9%	9,614	4.6%	13.9%
Other industries		72,447	34.6%	9.4%	14,419	6.9%	9.8%
Hol	lding company	60,665	29.0%	9.4%	n.a.	n.a.	n.a.

Table 2-27 USDIA Income by Industry of Parent (2004)

- ➤ As holding companies by industry of affiliate are classified in the right side of the table in accordance with industry by parent, the share of other industries sector decreases from 34.6% by industry of affiliate to 6.9% by industry of parent. The levels of rate of return are almost equal.
- The share of total manufacturing increases from 23.1% by industry of affiliate to 61.7% by industry of parent. All manufacturing segments increase their shares. Most remarkable segments are: Chemicals (from 6.6% to 15.8%); machinery (from 1.4% to 5.2%); computers and electric products (from 2.9% to 7.3%); and transportation equipment (from 2.2% to 5.6%).
- Income share of "finance (except depository institutions) and insurance" sector in which other industry sectors invest actively decreases from 13.1% by industry of affiliate to 9.1% by industry of parent.
- A remarkable change in rate of return is seen in machinery segment in which the rate decreases

from 12.6% by industry of affiliate to 8.5% by industry of parent. The reason appears to be that investment by machinery sector in low profitability areas (e.g. finance sector) that is classified as other industries sector in the left side of the table is re-classified as machinery sector in the right side of the table.

> While rate of return of depository institutions sector is 5.0%, the lowest in all industries, in the left side of the table, it is 8.7% in the right side of the table, exceeding the level of "finance (except depository institutions) and insurance" sector at 7.2%. This indicates that the investment by former sector in the latter sector is performing relatively well. This is consistent with the fact that the latter sector's rate of return decreases from 7.8% in the left side of the table to 7.2% in the right side of the table.

(5) Net Profit to Corporate Tax Ratio of Holding Companies

As we discussed earlier in section 3.(3) "Comparison of Corporate Tax for USDIA and FDIUS by Host Country", net profit to corporate tax ratio of USDIA exceeded 5 in 2003. We examine this aspect further in this section in connection with holding companies. Table 2-24 presents the corporate tax amount paid by USDIA to major USDIA host countries and net profit amount in each of the major host countries together with the ratio between the two amounts for the period from 1999 to 2003. The data are not prorated in accordance with equity holding share, but on the basis of entire affiliate. The data do not include depository institutions.

									(US\$ m	illion, %)
	19	90	19	95	20	00	20	02	20	03
	Corporate	Net	Corporate	Net	Corporate	Net	Corporate	Net	Corporate	Net
	tax	profit	tax	profit	tax	profit	tax	profit	tax	profit
A 11	31,693	73,254	38,801	108,662	59,801	199,864	50,916	215,564	60,708	336,153
All	2.3	31	2.	80	3.	34	4.2	23	5.:	53
Canada	2,811	5,350	4,123	7,743	8,081	17,727	5,128	14,040	6,726	21,669
Callaua	1.9) 0	1.	88	2.	19	2.3	73	3.	22
Furone	14,578	43,714	18,062	60,019	27,946	108,136	22,867	123,126	25,691	200,396
Europe	3.0	00	3.	32	3.	87	5.3	38	7.	80
Ireland	167	3,778	620	6,545	1,347	13,339	2,075	27,125	2,012	31,766
incland	22.	60	10	.56	9.	90	13.	.07	15	.79
Luvombourg	57	209	80	1,907	103	3,444	258	17,879	-400	22,603
Luxembourg	Luxellibourg 3.6		23	.84	33	.43	69.	.30	-56	.50
N. d	1,224	7,082	1,721	10,207	1,935	17,251	2,012	19,568	2,463	46,402
Netherlands	5.7	79	5.	93	8.	91	9.1	73	18	.84
Questin	827	1,975	684	1,460	679	2,583	562	3,865	620	5,323
Spain	2.3	39	2.	13	3.	80	6.8	88	8.:	59
Gi (1 1	595	5,186	623	7,238	799	12,142	709	15,294	904	19,330
Switzerland	8.1	72	11	.62	15	.20	21.	.57	21	.4
United Vinedom	3,027	9,781	4,336	15,424	9,199	27,278	6,028	13,203	6,782	25,400
United Kingdom	3.2	23	3.	56	3.	00	2.1	19	3.	75
Lotin Amonios	878	9,593	3,938	17,469	5,831	32,851	5,946	36,338	7,640	62,434
Latin America	10.	93	4.	43	5.	63	6.	11	8.	17
D 1.	59	2,524	117	4,030	428	11,127	458	26,068	524	34,782
Bermuda	42.	78	34	.44	26	.00	56.	.91	66	.38
	8	651	34	1,298	279	5,204	142	3,727	143	10,481
U.K. Caribbian	81.	38	38	.18	18	.65	26.	.24	73	.29
	2,787	990	1,616	1,683	3,750	3,981	3,410	2,821	4,608	4,812
Africa	0.	36	1.	04	1.	06	0.8	83	1.	04
	1.000	926	989	1.250	1.776	2.529	1.743	2.070	1.811	2.674
Middle East	0.9	93	1.	26	1.	42	1.	19	1.4	48
	6.388	11.533	10.049	19.809	12.418	34.641	11.822	34.168	14.231	44.167
Asia and Pacific	0.8	32	1.	97	2.	79	2.8	89	2.	89
	182	1 519	430	2 539	562	4 871	472	4 638	590	6 009
Hong Kong	8	35		90	8	4,071	9.9	83	10	18
	2 324	2 088	1 258	1 286	0. 1 977	6 404	4 552	7 095	5 653	9 524
Japan	2,324	9 2,000	-+,2,30	01		29 29	-,552	7,075 56	3,033	58
	192	1 092	1. /50	4 022	1. 561		1 850	6 370	. ۱ ۶۶۹	8 057
Singapore	105	1,902	430	9/	1/	59		12	13	0,957
	10.	05	0.	77	14		/	T	1.3	. –

 Table 2-28 Net Profit to Corporate Tax Ratio of USDIA Holding Companies (1990-2003)

The ultimate reason why net profit to corporate tax ratio of all areas in Table 2-28 has been rising since 1990 through 2003 is rapidly increasing share of net profit of USDIA in such areas as Ireland, Luxembourg, the Netherlands, Spain, Switzerland, Bermuda, the United Kingdom Islands, Hong Kong, Singapore in which USDIA holding companies are located. Assuming for the sake of simplicity that USDIA before-tax profit is aggregate amount of net profit and corporate tax, before-tax profit rose 6.9-fold from US\$28.2 billion in 1990 to US\$193.2 billion in 2003. In contrast to such nine areas, before-tax profit in other areas rose only 3.8-fold from US\$104.7 billion to US\$394.9 billion for the same period. The weighted net profit to corporate tax ratio in the nine areas in 2003 was as high as 24.67 while the comparable ratio of other areas was only 2.83.

Table 2-29 presents net profit to corporate tax ratio by industry since 1999 through 2003 for which period data on holding companies are available. The data do not include depository institutions.

	(US\$ million exce							
			1999			2003		
		(1)	(2)		(1)	(2)		
		Corporate	Net	(2)/(1)	Corporate	Net	(2)/(1)	
		tax	profit		tax	profit		
All industries		45,068	162,759	3.61	60,708	336,153	5.54	
Mining		6,983	10,646	1.52	18,317	23,073	1.26	
Utilities		849	3,201	3.77	1,353	2,290	1.69	
Manufacturing		20,372	54,246	2.66	18,203	69,213	3.80	
of which	Food	1,575	3,378	2.14	2,321	5,441	2.34	
	Chemicals	6,020	18,957	3.15	6,016	28,011	4.66	
	Metals	774	1,815	2.34	765	2,595	3.39	
	Machinery	1,142	2,656	2.33	1,152	3,305	2.87	
	Computers, etc.	2,833	8,788	3.10	1,489	7,888	5.30	
	Electric products	439	1,099	2.50	326	871	2.67	
	Transportation equipment	2,593	6,233	2.40	42	3,303	78.64	
Wholesale trade		5,711	19,045	3.33	6,995	33,706	4.82	
Information		1,002	1,420	1.42	1,815	1,575	0.87	
Finance (except depository institutions) and insurance		5,102	19,245	3.77	7,920	40,141	5.07	
Professional, technica	l services	2,084	3,812	1.83	1,668	6,613	3.96	
Other industries		2,966	51,145	17.24	4,437	159,543	35.96	
of which I	Holding companies	543	45,425	83.66	1,032	151,275	146.58	

Table 2-29 Net Profit to Corporate Tax Ratio by Industry 2003

(Compiled from the Department of Commerce data)

Net profit to corporate tax ratio in 1999 and 2003 was as high as 83.66 and 146.58 respectively. If holding companies are excluded, the ratio drops as low as to 2.64 and 3.10 respectively. The ratio in year 2003 indicates that USDIA recorded net profit exceeding 100 after paying 1 for corporate tax. The data also indicate that holding companies, while recording net profit of US\$151.3 billion (45% of total USDIA profit), paid only US\$1.0 billion (1.7% of total USDIA) of corporate tax in 2003. The above illustrates how effectively USDIA uses holding company structure in optimizing tax strategy, minimizing cash-out from the group, and strengthening its financial position.

It should be noted that difference of corporate tax imposed on USDIA and FDISU by respective tax authorities not only affect financial position of USDIA and FDIUS, thus indirectly impacting rate of return of USDIA and FDIUS as discussed above, but also directly impact rate of return of USDIA and FDIUS. As shown in Table 2-28, USDIA paid corporate tax of US\$60.7 billion in 2003 while recording net profit of US\$336.2 billion. Accordingly, effective corporate tax rate for USDIA is calculated at 15.3% thanks to low level of corporate tax of the countries where holding companies are located. Applicable corporate tax to FDIUS is 35%, the U.S. statutory corporate tax. The profit that was used in calculating rate of return of USDIA and FDIUS in Table 1-8 is after-tax profit. Therefore, the USDIA's rate of return of 9.9% in 2003 and the FDIUS's 4.6% should be calculated at 11.7% and 7.1% on a before-corporate tax basis respectively. The rate gap between USDIA and

FDIUS, therefore, drops from 5.2% to 4.6%. If the same levels of corporate taxes are applied to 2004 data, the comparable rates are as follows: the USDIA's rate of return of 10.5% (net profit basis) and 12.4% (before-corporate tax basis); and FDIUS's 6.4% (net profit basis) and 9.8% (before-corporate tax basis). Rate gap between the two should, therefore, narrow from 4.1% to 2.6%. In other words, rate of return of USDIA is not only shored up by strong cash flow of foreign affiliates thanks to smallness of corporate tax amount paid by foreign affiliates, but also is calculated higher, as USDIA before-tax profit is less negatively affected than FDIUS thank to low level of applicable corporate tax rate.

(6) Possible Tax Evasion by FDIUS

This section examines whether or not tax evasion by U.S. affiliates of foreign companies through manipulations such as transfer price could be a factor of low profitability of FDIUS

A group company could shift its profit to other group companies by transfer price. An affiliate located in a country of higher corporate tax could sell its products at a low price (even at a price below cost) to another group company in a country of lower tax rate, or the former could purchase products from the latter at a high price. Likewise, a group company located in a country of higher corporate tax could grant a license in respect of certain technology it had researched and developed at a level below a fair price to another group company located in a country of lower corporate tax. Through these measure, taxable income of a group company located in a country of higher corporate tax could be effectively reduced while that of another group company located in a country of lower corporate tax could be boosted.

Tax evasion issue has been a matter of keen interest for tax authorities of each country, and has been studied extensively by them. One of such research paper¹⁰ by the U.S. Treasury Department examines whether FDIUS is shifting profit or not, using two hypotheses. The first hypothesis is that the larger profit a foreign company earns in the U.S. the stronger becomes its incentive and ability to minimize their profit. Conversely, should an U.S. affiliate of foreign company record loss in the U.S., other affiliates in foreign tax jurisdictions should have an incentive to shift profit to the U.S. affiliate to minimize the group's overall taxes. The second hypothesis is that foreign affiliates in the U.S. with higher percentage of U.S. shareholders should have less opportunities to shift profit to foreign countries than otherwise would be, as income shifting would be more difficult when other shareholders are involved..

Should the first hypothesis hold good, income shifting would work in both ways, thus causing the ratio of taxable income to assets distribution of foreign controlled companies to concentrate near zero zone with U.S. companies. According to the research paper, the ratio distribution of foreign controlled companies displayed a very clear concentration near zero (Table 2-30), supporting the first hypothesis. As to the second hypothesis, the paper examined whether or not companies with foreign ownership between 25 and 50 percent have lower profit shifting than 100% foreign-owned companies. The examination found that the former has low profitability similar to the latter, implying that the second hypothesis does not hold good.

It should be noted, however, that some observe¹¹ (i) the study above used data from a time before 1999 when U.S. statutory corporate tax rate was lower than OECD member countries weighted corporate tax rate, (ii) that foreign controlled companies in the U.S. had relatively little incentives to shift income to foreign countries, and (iii) that any incentives they had would be stronger after 1999. As the rate of return of FDIUS has been in an improving trend since 2000 (Table 1-8), we have yet to see FDIUS's active profit shifting. However, this needs to be closely followed up.

¹⁰ Grubert (1997).

¹¹ Congressional Budget Office paper dated December 2004 referred to in section 2

Taxable income to total assets ratio	All firms		Manufa	acturing	Wholesale trade		
Category	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	
Less than -0.15	0.0282	0.0247	0.0279	0.0252	0.0274	0.0180	
-0.15 to 0.10	0.0336	0.0227	0.0418	0.0203	0.0219	0.0080	
-0.10 to -0.075	0.0302	0.0207	0.0265	0.0211	0.0192	0.0180	
-0.075 to -0.05	0.0625	0.0369	0.0516	0.0349	0.0604	0.0220	
-0.05 to -0.025	0.0998	0.0538	0.0907	0.0544	0.0631	0.0261	
-0.025 to 0	0.1687	0.1059	0.1466	0.0878	0.1648	0.1024	
0 to 0.025	0.2104	0.1541	0.2108	0.1224	0.2500	0.2208	
0.025 to 0.05	0.1284	0.1514	0.1187	0.1272	0.1538	0.1706	
0.05 to 0.075	0.0880	0.1283	0.0977	0.1228	0.1126	0.1566	
0.075 to 0.1	0.0457	0.0857	0.0530	0.0947	0.0412	0.0722	
0.1 to 0.15	0.0544	0.1126	0.0642	0.1447	0.0521	0.1004	
0.15 to 0.2	0.0269	0.0547	0.0418	0.0736	0.0082	0.0401	
0.2 to 0.25	0.0121	0.0231	0.0139	0.0321	0.0109	0.0281	
Greater than 0.25	0.0114	0.0247	0.0139	0.0382	0.0137	0.0160	

Table 2-30 Distribution of Taxable Income

(Source: Research paper by the U.S. Treasury Department)

(7) Summary of Chapter 2

Factors affecting rate of return of USDIA and FDIUS are summarized as follows:

- *i.* USDIA rate of return should include additional risk premium (e.g. country risk of host country) on top of FDIUS rate of return. It should be noted, however, that theoretically calculated risk premium should not necessarily be detected ex post facto.
- *ii.* The U.S. market is considered to be the most severe business environment with most demanding shareholders, strict legal system, highest transparency requirement, and fierce competition. Generating higher rate of return in less severe environment abroad would not be very difficult for U.S. corporations. Conversely, it would not be easy for FDIUS to generate the same level of rate of return as U.S. companies in the tough U.S. market, let alone the level of USDIA.
- *iii.* Net profit to corporate tax ratio of USDIA has been far exceeding that of FDIUS. USDIA has been aggressive in tax minimization strategy by using holding companies.
- *iv.* USDIA has strategically retained most of its huge after-tax profit within affiliate by reinvesting and limiting cash-out while FDIUS has allocated most of its after-tax profit to dividend distribution and interest payments to parent company. Cumulative effect of USDIA's strategy on reinvested earnings has substantially strengthened financial position of USDIA while FDIUS has far lagged behind USDIA in this regard, resulting in financial cost gap between the two.
- v. Rate of return of USDIA (net profit base) is calculated higher than that of FDIUS as USDIA before-tax profit is less negatively affected than FDIS due to substantially low corporate tax rate applicable to USDIA (approximately 15%) compared with the rate applicable to FDIUS (35%).
- *vi.* There is no evidence that tax evasion by foreign-owned companies in the U.S has caused low level of rate of return of FDIUS.

Chapter 3 Prospect of Rate of Return Gap between USDIA and FDIUS

This chapter examines prospect of rate of return gap between USDIA and FDIUS. We will analyze the prospect rate of return of FDIUS and USDIA first. Then we will consider the outlook of the rate gap.

	USDIA	FDIUS	Gap		USDIA	FDIUS	Gap
1983	8.7%	2.2%	6.5%	1994	10.2%	3.7%	6.6%
1984	10.0%	4.1%	6.0%	1995	11.4%	4.7%	6.7%
1985	9.8%	3.0%	6.9%	1996	10.9%	4.6%	6.3%
1986	9.5%	2.6%	6.9%	1997	11.2%	5.5%	5.7%
1987	10.5%	2.5%	8.0%	1998	9.2%	4.4%	4.8%
1988	11.8%	3.3%	8.5%	1999	10.1%	5.3%	4.8%
1989	11.6%	1.6%	10.0%	2000	10.3%	4.5%	5.8%
1990	11.3%	0.7%	10.6%	2001	8.0%	0.9%	7.1%
1991	9.3%	-0.4%	9.7%	2002	8.2%	3.0%	5.2%
1992	8.8%	0.4%	8.4%	2003	9.9%	4.6%	5.2%
1993	9.7%	1.4%	8.3%	2004	10.5%	6.4%	4.1%

Table 3-1 Investment Return of USDIA and FDIUS on a Current Cost Basis (1983-2004)

(Compiled from the Department of Commerce data)

1. Prospect of Rate of Return of FDIUS

If we take an overview of the direction of basic trend of rate of return of FDIUS for the 22 years in Table 3-1, excepting two periods, namely (1) the years from 1989 to 1993 featuring torrent-like foreign investment to the U.S. and following U.S. economic recession and (2) the years from 2001 to 2002 featuring increased mega deals acquiring U.S. assets and following IT bubble burst, the data broadly indicate that rate of return of FDIUS moved in 2-3% range in 1980s, rose to 4-5% in the middle of 1990s, and was reaching 5-6% range in recent years. Rate of return that deteriorated from 1989 to 2003 was due to the surge of inward investment in the late 1980s by foreign companies particularly by Japanese investors targeting at U.S. corporations and real estates. A couple of analyses were already conducted in this regard. The following are pointed out as the background to the deteriorated rate of return of FDIUS¹³.

- > High startup and restructuring costs related to acquisition.
- > Acquired foreign-owned companies tended to be those that had low or negative rates of return.
- ➢ Foreign owners were willing to accept a below average rate of return by acquiring U.S. companies with home country funds at a time when the purchasing power of the U.S. dollar was weak.
- > Aggressive investment in equipment and spending in advertisement after acquisition.
- ▶ U.S. economic recession in the wake of the surge in FDIUS.

The burden of high startup costs is likely to tail off over time. There are some cases in which foreign owner subsequently decided to withdraw from the market in host country after having performed poorly. There are other cases in which foreign affiliates have successfully penetrated the market over time. All combined, rate of return on foreign investment is expected to gradually improve as time goes by ("age effects")¹⁴. Indeed, the rate of return of FDIUS started improving from the level of 0.4% in 1992 to 3.7% in 1994 and over 4% in and after 1995, up to 2000.

¹³ "An Examination of the Low Rates of Return of Foreign-Owned U.S. Companies", Survey of Current Business (March 2000)

¹⁴ Although this is an USDIA case, the "age effects" are evidently confirmed with the following financial data of Wal-Mart Stores, Inc.'s operations. Earnings before interest and taxes (EBIT) to sales ratio of the stores in foreign countries for the period from 2001 to 2005 compares to that of stores in the U.S. as follows. Stores in foreign countries: 2001 (3.3%); 2002 (3.2%); 2003 (4.9%); 2004 (5.0%); and 2005 (5.3%). Stores in the U.S.: 2001 (6.6%); 2002 (6.8%); 2003 (6.8%); 2004 (6.7%); and 2005 (6.7%). While USDIA operations in full scale had already started for manufacturing sector as early as in the 1960s or 1970s, Wal-Marl, bay far the largest retailer in the U.S. started FDIUS as late as in 1991 and its investment aboard in full scale was after the late 1990s. The company is still "in the process of moving up the leaning curve" (an U.S. investment banker's analyst interviewed by IIMA), in that it has yet to establish sufficient level of store network in each market.

Notwithstanding the above, FDIUS flow started picking up again in about 1998 with a surge of mega M&A deals, and reached its record high at US\$321.3 billion in 2000. FDIUS's profitability worsened sharply with increasing startup costs and U.S. economy recession in the wake of IT bubble burst, thus FDIUS rate of return plunged as low as to 0.9% in 2001. The rate of return has been in a gradually recovering trend thereafter. Table 3-2 presents net profit and rate of return of FDIUS by industry since 2001 (on a historical cost basis).

	(US\$ million)										
	20	01	20	2002		03	20	04			
All industries	3,919	0.3%	35,256	2.6%	59,130	4.3%	92,766	6.3%			
Manufacturing	4,261	0.9%	22,928	4.0%	22,116	4.6%	36,640	7.3%			
Food	597	3.3%	932	4.9%	-5	-0.0%	1,959	9.7%			
Chemicals	2,005	1.6%	8,022	6.4%	8,595	6.6%	8,966	6.3%			
Metals	-265	-1.2%	-8	-0.0%	518	2.9%	2,344	12.8%			
Machinery	-982	-2.6%	545	1.2%	-563	-1.2%	1,390	2.9%			
Computers etc.	-5,609	-7.6%	-2,603	-5.4%	-276	-0.6%	2,383	5.6%			
Electric products	2,413	5.0%	4,790	9.6%	-70	-0.2%	766	5.9%			
Transportation equipment	1,891	3.2%	4,066	6.6%	4,651	7.3%	5,422	8.0%			
Wholesale trade	9,566	5.3%	12,048	6.3%	16,391	8.7%	21,616	11.3%			
Retail trade	1,335	5.4%	1,486	6.8%	1,711	7.7%	2,201	8.8%			
Information	-13,392	-9.1%	-3,577	-2.7%	2,575	2.1%	5,924	4.9%			
Depository institutions	1,991	3.0%	1,096	2.8%	2,131	2.6%	4,619	4.4%			
Finance (except depository institutions) and insurance	-1,443	-0.8%	-3,355	-2.0%	7,742	4.3%	8,753	4.4%			
Real estate, rental and leasing	1,570	3.3%	1,839	4.0%	919	2.0%	2,175	4.7%			
Professional, technical services	-239	-0.8%	-214	-0.7%	-23	-0.1%	2,611	7.1%			
Other industries	270	0.2%	2,106	1.0%	5,568	2.5%	8,227	3.4%			

Table 3-2 Investment Return Ratio of FDIUS by Industry (2001-2004)

(Compiled from the Department of Commerce data)

According to the data of the Department of Commerce, FDIUS inflow, after hitting its record high of US\$321.3 billion in 2000, plummeted to US\$167.0 billion in 2001, and further plunged to US\$80.8 billion in 2002 and US\$67.1 billion in 2003, before it recovered to US\$106.8 billion in 2004 which is almost the same level of the years before 1997. Looking ahead, rate of return of FDIUS is likely to maintain its improving trend as the "age effects" mentioned above will support the trend with reduced startup costs and improved market penetration coupled with reduced poor FDIUS performers after their withdrawal from the U.S. market. The rate of return of chemical industry, the single largest industry segment in terms of the size of the net profit in manufacturing sector, was 6.3% in 2004. Given that chemical segment's rate of returns averaged at 7.3% for the years from 1994 to 1998 that were in between the two periods of torrential investment boom in the late 1980s and late 1990s, it would not be unrealistic to expect a rate of return higher than the current level. The rate of return of information industry segment (data by industry for information segment are not available before 1999 as the segment was among other manufacturing sector) is likely to improve as its business environment should be more promising than in 2004 or before. All in all, the rate of return of FDIUS is unlikely to drop from the level of 2004, as there are no particular negative factors foreseen in the near future.

2. Prospect of Rate of Return of USDIA

In analyzing the prospect of the rate of return of USDIA in coming years, major determining factors should be the future direction of i, ii, iii, iv and v in the summery section of Chapter 2. Those are the elements that have been deemed as shoring up rate of return of USDIA. As for element i (country risk factor) and element ii (motivation of oversea investment), we do not foresee any changes of these fundamental frameworks. Prominent use of holding company structure in USDIA to minimize cash-out by corporate tax from foreign affiliates (element iii) is likely to continue. As for the high percentage of reinvested earnings of USDIA (element iv), it should be negatively impacted to some extent by the magnitude of the repatriation of retained earnings abroad under the American Job Creation Act 2004. The retained earnings (excluding the portion arising from revaluation) as of the

end of 2004 is estimated at US\$850.6 billion, i.e. total amount of US\$696.8 billion (retained earnings as of the end of 2003) and US\$153.8 billion (reinvested earning in 2004). If we assume the repatriated amount under the above-mentioned Act is somewhere around US\$200 billion, the remaining retained earning balance is estimated at approximately US\$650 billion. By applying interest rate of 5-6% p.a. as U.S. dollar marginal funding cost to US\$650 billion retained earnings, the opportunity gain for the foreign affiliates of USDIA should be calculated at US\$32.5-39.0 billion. This represents 1.4-1.7% on US\$2,300 billion (USDIA position as of the end of 2004). This is lower by 0.3% than the estimated 1.75-2.0% in accordance with Table 2-6, which indicate the negative impact would not be significant if the repatriation is within the magnitude above. As to element v (the difference between the effective corporate tax for USDIA and U.S. statutory corporate tax for FDIUS), the basic framework is unlikely to change. The above indicates there will be no macro elements that will negatively affect the rate of return of USDIA.

We examine below the investment return ratio by industry. Table 3-3 presents the trends of income and rate of return of USDIA (on a historical cost basis) by industry for the years 2001-2004.

	20	01	20	02	20	03	2004	
All industries	110,029	7.9%	124,940	8.1%	171,229	10.1%	209,339	10.9%
Mining	9,262	12.2%	8,915	11.1%	11,274	13.3%	16,905	17.9%
Utilities	2,068	8.7%	2,095	8.1%	2,054	8.5%	2,086	10.2%
Manufacturing	27,603	8.2%	26,411	7.9%	35,981	10.1%	48,328	12.0%
Food	2,597	11.6%	2,604	12.8%	3,137	14.6%	3,227	12.9%
Chemicals	7,161	9.2%	8,632	10.7%	10,857	12.1%	13,792	13.5%
Metals	1,422	6.5%	1,158	5.4%	1,718	8.0%	2,578	10.6%
Machinery	1,313	6.6%	1,926	10.7%	2,221,	11.3%	2,873	12.6%
Computers, etc.	4,335	7.3%	1,519	2.8%	4,623	9.2%	5,985	10.9%
Electrical products	669	6.8%	509	5.3%	591	5.7%	1,348	11.5%
Transportation equipment	2,148	4.8%	1,190	2.3%	2,335	5.0%	4,523	9.4%
of which Mortar vehicle	531	2.3%	-588	-3.2%	-240	-1.2%	1,419	7.3%
Wholesale trade	13,706	13.3%	13,382	11.9%	18,759	16.1%	24,145	18.7%
Information	-3,084	-6.5%	1,320	3.1%	6,224	13.7%	9,078	17.2%
Depository institutions	2,335	4.9%	1,270	2.4%	2,403	4.3%	3,098	5.0%
Finance (excluding depository institutions) and insurance	9,224	4.0%	14,585	5.6%	21,356	7.0%	27,329	7.8%
Professional, technical services	1,741	5.2%	2,219	6.8%	3,730	11.3%	5,775	14.9%
Other industries	47,166	9.6%	54,666	9.2%	69,322	10.2%	72,447	9.4%
of which Holding companies	41,483	10.3%	48,277	9.8%	60,795	10.7%	61,473	9.4%

Table 3-3 Income and Rate of Return of USDIA (2001-2004)

(Compiled from the Department Commerce data)

(US\$ million)

Combined income of two major sectors (manufacturing and "other industries") accounts for 60% of total. According to the data for the period, the rate of return of all industries tends to turn out to be at the level of weighting the rate of return of manufacturing sector by 40% and that of "other industries" by 60%, except in 2001 when information sector (communication) suffered from exceptionally huge losses due to IT bubble burst and the rate of return turned out to be slightly lower than the rend. As indicated by the trend of rate of return of USDIA in Table 1-8, the medium-term trend of rate of return of USDIA has steadily exceeded 10% level except in 2001 and 2002 when the rate was deteriorated by IT bubble burst. The rate of return of "other industries" that include a wide variety of industry segments through holding company structure remains in a steady range of 9.5% while that of manufacturing sector has been hovering recently in a 10-12% range. As far as we see from the trends of the above-mentioned sectors, we detect no particular negative factors. As such, USDIA rate of return is basically likely to maintain its medium-term trend of 10% range.

3. Summary of Chapter 3 (Prospect of Rate of return Gap between USDIA and FDIUS)

The analysis indicates that USDIA return ratio is likely maintain the current level without any particular negative elements while rate of return of FDIUS is to continue its improving trend.

Accordingly, the gap between the two rates of return is likely to show a basic trend of gradual decline from the recent 4-5% range. If we use the data of income account up to September 2005 (provisional and seasonally adjusted) to estimate the rate of return of USDIA and that of FDIUS on a current-cost basis, they are calculated as 10.1% for USDIA (10.5% in 2004) and 6.9% for FDIUS (6.4% in 2004), thus the gap between the two at 3.2% (4.1% in 2004). It should be noted, however, that these data are provisional and the denominators used in calculation are USDIA and FDIUS positions as at 2004-end instead of the estimated nine months average, hence the above rates need to be treated as only estimates with such limitations. Nonetheless, these numbers are generally in line with the prospect discussed as above.

						(US\$ million)
	Ion Mor	A	Lal Cant	JanSept.	Investment	Rate of
	JanMar. AprJun.		JulSept.	(total)	position	Return % p.a.
USDIA (receipts)	58,180	59,635	61,787	179,602	2,367,386	10.10%
FDIUS (payments)	29,803	31,145	27,078	88,026	1,708,877	6.90%

Table 3-4 Income Receipts and Payments of Direct Investment, January-September (2005)

(Compiled from the Department of Commerce data)

As we have discussed above, the gap between the two is in a gradually narrowing trend. Then, the next question is how narrow can it be? We examined in Chapter 2 that there has been a significant difference between USDIA and FDIUS in their cumulative reinvested earnings, and that rates of return of the two reflect the difference of such financial position. We estimated that the rate difference attributable to such factor is around 1.4-1.7% p.a. even after the estimated amounts of dividends are repatriated under the American Job Creation Act 2004. Such rate difference will not easily disappear. Furthermore, the tax situation will not change: USDIA pays lower corporate tax thanks to active utilization of oversea holding company structure while FDIUS pays higher corporate tax at U.S. statutory tax rate. Accordingly, on the basis of net profit, rate of return of USDIA should tend to be calculated higher than FDIUS. This situation will not change in a foreseeable future. As for FDIUS, its rate of return should improve due to the "age effects" as years go by. Should it happen, however, there may a possibility of increasing incentive for income shifting as pointed out in section 6 of Chapter 2. All in all, it may be unlikely that things will evolve in such a way that the rate of return gap (USDIA rate minus FDIUS rate) will be narrowed less than 2-3% consistently.

Box 2: Operations of U.S. and Foreign Multinational Companies and the U.S. Current Account

Some argue: "U.S. companies tend to choose to have their foreign affiliates manufacture and/or sell their products, or have other foreign companies manufacture and/or sell their products through granting licenses to do so, rather than manufacture their products in the U.S. and export them from the U.S. to international markets." Their argument goes on: "As a result, the U.S. companies tend to receive the proceeds of their products in the form of receipts of royalties or licensing fees (i.e., U.S. receipts in the U.S. services account), or in the form of net profits of their foreign affiliates (i.e., U.S. income receipts on foreign direct investment)." It further goes on: "This must be the background to the U.S. persistent huge trade account deficit as against the surpluses on its services account and income account. This could also be the background to high rate of return of USDIA." We hereunder examine the validity of such argument using the relevant data of the Department of Commerce.

The balance of payments records transactions between residents and non-residents. Since multinational companies' residency is determined in accordance with their location, the balance of payments does not explicitly specify their activities. In order re-capture international transactions from the point of activities by multinational companies, the Department of Commerce releases additional data titled "an ownership-based framework of the U.S. current account." The data

reclassify the relevant international transactions in accordance with the ownership of the entities instead of physical location. The table below outlines the framework. The numbers in parentheses refer to the numbered items in the table below.

1. The U.S. current account and foreign affiliates of U.S. companies

Overseas sales of U.S. companies including their foreign affiliates are recorded in item 3 (exports of goods and services), or item 6 (sales by foreign affiliates).

If we examine from the viewpoint of U.S. receipts from non-residents, we have to subtract item 7 (foreign affiliates' purchases of goods and services directly from the United States), item 8 (costs and profits accruing to foreign persons), and item 9 (sales by foreign affiliates to other foreign affiliates of the same parent), from item 6, the result of which equals to income receipt on foreign direct investment. Accordingly, any receipt by U.S. resident from non-resident is necessarily recorded as item 3 (exports of goods and services), or item 4 (income receipts on foreign direct investment).

On the other hand, U.S. sales of foreign companies including their U.S. affiliates are recorded in item 14 (imports of goods and services), or item 17 (sales by U.S. affiliates).

If we examine form the viewpoint of U.S. payments to non-residents, we have to subtract item 18 (U.S. affiliates' purchases of goods and services), item 19 (costs and profits accruing to U.S. persons), and item 20 (sales by U.S. affiliates to other affiliates of the same parent), from item 17, the result of which equals to income payments on foreign direct investment. Accordingly, any payment by U.S. resident to non-resident is recorded necessarily as item 14 (imports of goods and services), or item 15 (income payments on foreign direct investment).

The above ownership-based framework reveals more clearly the relationship between the operations of multinational companies and the U.S. current account. It also confirms that operations of multinational companies do not affect the current account statistics in any way.

2. Total sales of foreign affiliates of U.S. companies exceed by 2.4 times the U.S. total exports

Total sales of foreign affiliates of U.S. companies reached US\$2.480.7 billion (on the basis of adjusting double counting by subtracting items 6 and 7 from item 6) in 2003 whereas U.S. total exports of goods and services reached US\$1.022.6 billion in the same year. The former exceeded 2.4 times the latter. The comparables figures for import side are US\$1,942.5 billion for total sales of U.S. affiliates of foreign companies, and US\$1,517.4 billion for U.S. total imports, being the comparable ratio at 1.3.

This indicates that U.S. companies tend to choose to deliver goods through foreign affiliates to international markets rather than to export them from the U.S. This appears to support the above-mentioned argument regarding the background to the U.S. persistent huge trade account deficit as against the surpluses on its services account and income account.

Looking at the trends of item 4 (U.S. income receipts on foreign direct investment) and item 6 (sales by foreign affiliates of U.S. companies) in 1993 and 2003, we see substantial increases in both items. If the sales by foreign affiliates had been boosted due to shift from U.S. exports, it would have caused U.S. current account deficit to increase. If the sales by foreign affiliates had been boosted independently without shift from U.S. exports, it would have caused U.S. current account deficit to decrease with increased income receipts on U.S. foreign direct investment.

As to the argument that "the tendency for U.S. companies to choose to grant licenses to foreign companies rather than to export goods from the U.S. to international markets has formed the

background to the deficits in current account (25a) and the surpluses in services account (25b)", it appears to hold good, as the receipts of royalties and licensing fees far exceed the payments thereof.

3. Increase in sales by foreign affiliates of U.S. companies and rate of return of USDIA

Looking at the trends of item 4 (U.S. income receipts on foreign direct investment) and item 6 (sales by foreign affiliates of U.S. companies) in 1993 and 2003, we see substantial increases in both items. However, given that USDIA investment position increased substantially at the same time, it is difficult to argue that the rate of return has been shored up with the increased sales by foreign affiliates of U.S. affiliates. In fact, the rate of return remained stable during the period (refer to Table 1-8).

		1993	1998	2003	2004
1	Exports of goods and services and income receipts	778.9	1,195.3	1,332.4	1,531.0
2	Receipts resulting from exports of goods and services or sales by foreign affiliates	710.1	1,037.5	1,215.9	1,384.5
3	Exports of goods and services, total	642.9	933.5	1,022.6	1,151.4
3a	Goods, balance-of-payments basis	456.9	670.4	713.4	807.5
3b	Services	185.9	263.1	309.1	343.9
4	Net receipts by U.S. parents of direct investment income resulting from sales by their foreign affiliates	67.2	104.0	193.3	233.1
5	Nonbank affiliates	63.5	103.2	190.8	229.8
6	Sales by foreign affiliates	1,570.6	2,370.0	3,383.0	n.a.
7	Less: Foreign affiliates' purchases of goods and services directly from the United States	157.6	248.9	245.6	n.a.
8	Less: Costs and profits accruing to foreign persons	1,089.1	1,601.2	2,289.9	n.a.
9	Less: Sales by foreign affiliates to other foreign affiliates of the same parent	260.4	416.6	656.7	n.a.
10	Bank affiliates	3.7	0.7	2.5	3.2
11	Other income receipts	68.8	157.9	116.5	146.5
12	Imports of goods and services and income payments	823.9	1,356.1	1,780.9	2,118.1
13	Payments resulting from imports of goods and services or sales by U.S. affiliates	721.1	1,136.9	1,588.8	1,874.2
14	Imports of goods and services, total	713.2	1,098.5	1,517.4	1,769.0
14a	Goods, balance-of-payments basis	589.4	917.1	1,260.7	1,472.9
14b	Services	123.8	181.4	256.7	296.1
15	Net payments to foreign parents of direct investment income resulting from sales by their U.S. affiliates	7.9	38.4	71.4	105.1
16	Nonbank affiliates	7.5	35.8	69.3	100.5
17	Sales by U.S. affiliates	1,329.4	1,875.5	2,340.2	n.a.
18	Less: U.S. affiliates' purchases of goods and services directly from abroad	208.7	307.8	397.7	n.a.
19	Less: Costs and profits accruing to U.S. persons	1,113.3	1,531.8	1,873.1	n.a.
20	Less: Sales by U.S. affiliates to other U.S. affiliates of the same parent	n.a.	n.a.	n.a.	n.a.
21	Bank affiliates	0.5	2.6	2.1	4.6
22	Other income payments	102.8	219.1	192.1	243.9
23	Unilateral current transfers, net	-39.8	-53.3	-71.2	-80.9
24=2-13	Balance on goods, services, and net receipts from sales by affiliates	-11.0	-99.5	-373.0	-489.7
25=3-14	Balance on goods and services	-70.3	-165.0	-494.8	-617.6
25a=3a-14a	Trade account	-132.5	-246.7	-547.3	-665.4
25b=3b-14b	Services account	62.1	81.7	52.5	47.8
26=4-15	Balance on income account of direct investment	59.3	65.6	121.9	128.0
27=11-22	Income account (excluding income resulting from direct investment)	-34.0	-61.2	-75.6	-97.4
28=1-12+23	Current account	-84.8	-214.1	-519.7	-668.1
	GDP	6,657.4	8,747.0	10,971.2	11,734.3
Note: Rela	tionships among major items are as follows				
1=2-	+11, 2=3+4, 2=13+22, 13=14+15, 5=6-7-8-9, 16=17-18-19-20				
	(Source: Survey of Current Business, Jan	uary 2006) C	Current Bus	siness, Janu	ary 2006)

Table Ownership-Based Framework of the U.S. Current Account

(US\$ billion)

Box 3: Internet Shopping and Balance of Payments

Against the backdrop of growing number of internet transactions in recent years, a question may arise as to how these deals are captured in the statistics of the balance of payments. This obviously has implications to the data including those on U.S. exports of goods and services, and sales by foreign affiliates of U.S. companies. Explained below are the relevant present statistical treatments in the U.S. and Japan.

In the U.S., all cross boarder transactions to be recorded in the balance of payments are required in principle to be reported directly by entities in question, irrespective of internet and traditional transactions.

Internet sales by U.S. book sellers to nonresidents are recorded as exports of U.S. goods. The transactions are captured at the time of customs clearance unless the amount involved is less than US\$2,500.

If a nonresident downloads certain software through internet and pays its price to an U.S. software sales company, the transaction shall be recorded as export of service. Exports of services are reported through such surveys as BE-20, B-22, etc., though the scope of the surveys is only for corporations.

If an U.S. individual downloads personally certain software from non-U.S. software company, the transaction is not recorded as import of service. It is true that, if the relevant payment is made with credit card, the transaction could be captured because subsequent cross-boarder funds settlement is made between banks. However, the U.S. authorities are not currently making any attempt to reflect the data on cross-boarder credit card settlement in data on exports /imports of goods and services.

Under the Japanese reporting system, meanwhile, cross-boarder payments by Japanese individuals (or non-Japanese individuals) with their credit cards are recorded as payments (or receipts) under "travel", a sub-item of service account. Accordingly, purchasing software with credit cards is recorded in travel balance even though the transaction has no relevance to travel.

This kind of electronic transactions that are not captured or that are recorded as different types of transactions appear to be relatively small at present. Given the possibility that further increase of internet transactions in particular those by individuals may cause distortion in the relevant statistics in the future, this issue needs further examination.

Chapter 4 Simulation of the Sustainability of the U.S. Current Account Deficit

In this chapter, we examine the trend of the U.S. current account including the simulation of the current account in the near future using VAR model¹⁵. First, we simulate future trend of the U.S. current account under several assumed scenarios including the one that is considered a realistic case. We then examine the conditions that could secure the sustainability of the U.S. current account.

Under our simulation based on a VAR model, we did not explicitly take account of such factors as mechanism of investment-saving balance and ripple process mechanism in which the U.S. cumulative current account deficit is to cause the U.S. external debt balance to increase, which then is to cause the U.S. income account to deteriorate, which in turn is to cause the U.S. current account deficit to grow further. Therefore, we would like to emphasize that the observation hereunder should be interpreted as simulated result by one approach out of possible various simulations.

1. Framework of Analysis

In this chapter, we examine the sustainability of the U.S. current account by using a VAR (Vector Autoregressive) model to simulate several cases¹⁶. The sustainability of current account (which means current account is sustainable) is defined as the stationary state (i.e., convergence to a fixed number) of current account series derived from the simulation. In other words, the sustainability is defined as a state in which the current account is managed to stay at certain level that will neither increase nor decrease in the future. Defining the sustainability of current account as such does not give any information as to the level of the current account. The current account even in a negative number is considered sustainable as long as the negative level is maintained and managed. The simulation hereunder therefore includes examination as to the conditions in which the U.S. current account is to show any improvement in the future.

In this chapter, we make analysis focusing on the future trend of the rate of return of U.S. outward and inward investments. While the current account deficit of the U.S. has reached approximately 5% of its GDP, its income account has maintained positive figures or at least above zero. If the U.S income account had shown a deficit on top of the deficit of the U.S. trade and services account, the U.S. would have recorded larger deficit in its current account. The main reason for the U.S. income account keeps positive level is that the rate of return of the U.S. investment abroad exceeds that of foreign investment in the U.S. In our analysis, we assumed several scenarios, and simulated the future trend of current account for each scenario. The analysis should also give us some clue as to the level of income account that would enable the U.S. to secure the sustainability of its current account.

Our analysis uses the following VAR model, with 2 variables and 4 quarter lags.

$$T\tau = \mu 01 + \sum_{i=1}^{4} \alpha 11(i)Tt - i + \sum_{i=1}^{4} \alpha 12(i)It - i + eTt$$
$$It = \mu 02 + \sum_{i=1}^{4} \alpha 21(i)Tt - i + \sum_{i=1}^{4} \alpha 22(i)It - i + eIt$$

Where: T, I, μ, a, e represent respectively trade and services account (as percent of GDP), income account (as percent of GDP), estimated constant, estimated coefficient, and estimated residual error. In a VAR model, we can simulate by estimating parameters μ, a . The merit of using VAR model is that we can treat all variables endogenously. Each variable is estimated by taking account of time series in the past and relative movements between relevant variables, thereby reducing the risk of the variables being determined endogenously or exogenously in an arbitrary way. However, VAR model approach has a weak point in that it has little grounding of economic theory, which needs to be noted. Nonetheless, we believe the simulation results of the VAR model are reliable to some extent, as the ex-post forecast using the model is able to demonstrate a certain amount of explanation to the actual serial trend.

¹⁵ On the analysis of current account, see Ogawa and Kudo (2004).

¹⁶ Data in this section are from website of the Bureau of Economic Analysis (http://www.bea.doc.gov/).

2. Baseline Scenario

We assumed here as a baseline for the analysis a simple extrapolation for the above-mentioned VAR model. Simulated U.S. current account series based on simple extrapolation showed an unsteady trend, diverging to larger deficit (Figures 4-1 to 4-3). This indicates that, should the U.S. trade and services account and income account maintain respective current trend, the both accounts are likely to diverge to larger deficits, resulting in a more growing current account deficit than it is now. The simulated result under this scenario therefore suggests that it would make sense if we approach this issue with several other possible scenarios as to future trend of the U.S. income account.





Figure 4-2 Income Account under Baseline Scenario



Figure 4-3 Current Account under Baseline Scenario



3. Alternative Scenarios

(1) Pessimistic Scenario

The U.S. income account shows surplus mainly because the rate of return of the U.S. outward investment exceeds that of foreign investment in the U.S.¹⁷. However, there is a possibility that the U.S. advantage in this regard may diminish in the future. This is obviously an undesirable scenario for the U.S., but it cannot yet be ruled out as an unrealistically pessimistic scenario if we look at the current trend of the rate of return of the U.S. outward and inward investments.

The average rate of return of the U.S. outward investment for the period from 1993 to 2003 is 4.43% while that of foreign investment to the U.S. is 3.42% (investment positions for the calculation are on a current price basis). The latter basically has remained unchanged for the period while the former has been in a slightly declining trend. Based on these trends, we assumed here a scenario in which the rate of return of U.S. outward investment is to decline annually by approximately 0.34%, to converge in 2007 to 3.42%, the same level as the rate of return of foreign investment to the U.S., and to stay at the level beyond 2007. We are aware, however, that the above assumption on the trend of rate of return is not sufficient, as the positions of U.S. outward investment and foreign investment in the U.S. are evidently in increasing trend at present. We take account of this point as well in our simulation. More specifically, we conducted serial forecast based on the tend for the both investment positions together with the assumed trend of rate of return, and finally forecasted the current account with the VAR model we initially estimated.

Simulation result is more or less the same as the baseline scenario (Figures 4-4, 4-5 and 4-6). This indicates the baseline scenario reflects realistic movements of income account. In other words, economic developments assumed in the pessimistic scenario have been captured to some extent in the movements of each series assumed in the VAR model.

Should the above realistic scenario come out in reality, the U.S. current account could not be considered sustainable. This begs a new question. Is there any possible scenario for the income account to secure the sustainability of the U.S. current account?



Figure 4-4 Trade and Services Account under Pessimistic Scenario

¹⁷ Hung and Macaro (2004) conducted an analysis on the background to the difference of such rate of returns.





Figure 4-6 Current Account under Pessimistic Scenario



(2) Scenario to Secure the Sustainability of the U.S. Current Account

This section examines the level of the U.S. income account that can secure the sustainability of the current account. We will conduct simulation in accordance with the following three scenarios.

- *i*. The income account is to improve from a deficit of 0.01% of GDP in 2005 IIQ (actual base) by 0.036% of GDP quarterly to a surplus of 0.25% of GDP in 2007 IQ and to stabilize at this level thereafter.
- *ii.* Likewise, the income account is to improve by 0.071% quarterly to a surplus of 0.5% of GDP in 2007 IQ and to stabilize at this level thereafter.
- *iii*. Likewise, the income account is to improve by 0.143% quarterly to a surplus of 1.0% of GDP in 2007 IQ and to stabilize at this level thereafter.

Simulation results of each scenario are shown in Figures 4-7, 4-8, 4-9, 4-10, 4-11, 4-12, 4-13, 4-14 and 4-15. Simulated current account trend for each scenario is shown in Figures 4-9, 4-12 and 4-15. Under scenario *i*, the current account is to diverge to a larger deficit (Figure 4-9). This indicates that the income account surplus is not sufficient to secure the sustainability of the current account. Under scenario *ii*, the current account is to stabilize with horizontal time series data (Figure 4-12). Under scenario *iii*, the current account is to converge to a smaller deficit (Figure 4-15). The simulation indicates that, provided that there continues to exist time-serial relationship between trade and services account and income account, the sustainability of the U.S. current account is secured if the income account surplus is to stabilize at a level of 0.5% of GDP. Furthermore, the simulation indicates that the U.S. current account deficit is to decrease if the income account surplus is maintained steadily at a level exceeding 0.5% of GDP.





Figure 4-8 Income Account under Scenario i



Figure 4-9 Current Account under Scenario i







Figure 4-11 Income Account under Scenario ii



Figure 4-12 Current Account under Scenario ii







4. Summary of Chapter 4

Summarized below are the conclusions of the analyses in this chapter.

- (1) Should the current trend of the trade and services account and income account continue, the sustainability of the current account would not be secured, and the deficit thereof would widen.
- (2) Should the income account be maintained at a level of 0.5% of GDP or higher in the near future, the sustainability of current account would be secured.

Is scenario *ii* considered realistic? According to the income account data of 2004, the receipts is US379,527 million (3.2% of GDP) while the payments US349,088 million (3.0% of GDP), hence the income account surplus being 0.2% of GDP. Given the level of the surplus at present, scenario *ii* can be considered realistically possible.

Admittedly, the analysis of this chapter is not sufficient, as it focuses only on future trend of income account. Moreover, the framework of the analysis is far from perfect in that it does not include explicitly the mechanism between U.S. cumulative current account deficit and its resultant external debt balance. Given that the U.S. trade and services account is the ultimate cause of its current account deficit, future trend of the former account should definitely affect the actual events and the above simulation on the latter account might turn out to be irrelevant. Nonetheless, we believe the result obtained from the simulation focusing on the future trend of the income account provides us with a certain degree of perspective, even if it uses the past trend of the trade and services account.

The following points should be noted in this chapter.

(1) There are a variety of methods for simulation. We employed here a VAR model.

(2) There are various factors of which we have not explicitly taken account in our VAR model. For example, those factors such as investment-saving balance mechanism and the ripple process mechanism in which the U.S. cumulative current account deficit is to cause the U.S. external debt balance to increase, which then is to cause the U.S. income balance to deteriorate, which in turn is to cause the U.S. current account deficit to grow further, have not been explicitly taken into account in the present study.

(3) Therefore, we would like to emphasize that the observations herein should be interpreted as simulated result by one approach out of possible various simulations.

Chapter 5 U.S. Investment in Developing Countries

1. Theories and Strategies for Economic Development

Developing countries (low to middle income countries as defined by the World Bank or countries other than developed countries according to the IMF) had embarked on economic development after the World War II. Since then, they have achieved higher economic growth than high income countries (Table 5-1). Their economic development strategies have evolved from import-substitution industrialization led by governments in earlier stage to export-oriented industrialization with emphasis on the use of market mechanism in later stage.

	1965-73	1973-80	1980-89	1990-98	1997-2006
Low and middle income countries	6.5%	4.7%	3.8%	3.5%	n.a.
Low income countries	5.3%	4.5%	6.2%	7.4%	n.a.
excluding China and India				3.7%	n.a.
Middle income countries	7.0%	4.7%	2.9%	2.2%	n.a.
Heavily indebted countries	6.4%	5.2%	1.9%	n.a.	n.a.
Sub-Sahara Africa	4.8%	3.2%	2.1%	2.3%	4.1%
East Asia	8.1%	6.6%	7.9%	7.9%	6.7%
South Asia	3.6%	4.2%	5.1%	5.7%	n.a.
Europe, Middle East, North Africa*	7.7%	3.9%	2.9%	-2.9%	3.7%
Middle East, North Africa	n.a.	n.a.	n.a.	3.0%	5.0%
Latin America	6.5%	5.0%	1.6%	3.6%	2.8%
High income countries	4.8%	3.1%	3.0%	2.3%	2.7%
OECD member countries	4.7%	3.0%	3.0%	n.a.	n.a.
World total	5.0%	3.3%	3.1%	2.3%	n.a.

* Europe only in and after 1990

(Compiled from the data of WDR, WDI and WEO)

(1) Import-Substitution Industrialization

Economic development policy widely adopted initially by developing countries dependent heavily on primary commodities was import-substitution industrialization. The strategy was supported by "structurism." The structurism advocated providing developing countries with multilateral aid by the World Bank and other organizations and bilateral assistance by developed countries led by the U.S. It encouraged the governments of the developing countries with small domestic markets to play active role in allocating limited resources to targeted sectors for economic development. They adopted policies to substitute imported products with domestically manufactured products. They put great effort into improving infrastructure (electric power, transportation, communication, etc) while they provided domestic infant industries with protective measures such as import restrictions and high customs duties on industrial products. They also supported domestic industries with subsidies, preferential tax treatments and government-sponsored financing. They often found it necessary to borrow money from foreign sources due to limited domestic capital resources.

Excessive government intervention, however, resulted in inefficient state-owned enterprises, and rampant rent-seeking and corruption, which led to inefficiency of national economy as a whole. In many cases of import-substitution industrialization in heavy and chemical industries, needed know-how did not build up as had been expected. Protective measures often prolonged than they should have. Amid of the social and political instability due to impoverishment of rural communities, coupled with mass-migration to cities, it became more difficult for the government to continue industrialization policies, and fiscal deficit ballooned. As the Latin American countries financed their growing fiscal deficits with external borrowing, they faced the debt crisis in the 1980s. These countries also faced difficulties in repaying existing external debts which they had borrowed to promote import-substitution industrialization, as they failed to transform such import-substitution industries.

(2) Export-Oriented Industrialization

After experiencing failures of government-led industrial policies, new theory emerged in the late 1960s and early 1970s. It advocated developing countries should avoid government intervention as possible, put more emphasis on market mechanism, and pursue export-oriented industrialization instead of import-substitution industrialization. International organizations gave support to the theory. Developing countries lifted restrictions, liberalized transactions, rationalized and privatized government-owned enterprises, pursued export-oriented industrialization, and exposed domestic industries to international competition. As the World Bank pointed out in the *World Development Report 1982*, many developing countries that had been successful in achieving sustainable economic growth were those countries that effectively promoted high level of investment with sufficient domestic saving and active intake of foreign capital. These successful countries, as a result, became capable of producing export goods or import-substitution goods at internationally competitive price, and started earning foreign exchange, which further improved investment efficiency.

(3) From Market-Mechanism-Oriented Approach to Market -Friendly Approach

In the 1980s, neo-classical approach became the theoretical backbone for the IMF and the World Bank in economic development. Neo-classical approach emphasized the role of market mechanism instead of that of government. This approach was adopted by the IMF and the World Bank in addressing the debt crisis in 1982, in particular asking debt ridden developing countries to implement adjustment policies including radical structural reforms. However, structural adjustment policy came into question in the late 1980s in respect of adverse effects particularly to poverty group. Since then, poverty alleviation, along with economic growth, became the objective of economic development, hence emerged a new approach--market-friendly approach. International aid organizations broadly endorsed the new approach in which the governments of developing countries were encouraged to pro-actively intervene in several selected areas such as basic infrastructures, educational systems, healthcare programs, environment and other institutional frameworks for which market alone could not be expected to play significant role. The World Bank concluded in the *World Development Report 1997* that the past experiences indicated that no successful economic developments had ever been achieved neither by government-led strategy nor absence of effective government.

Asian developing countries adopted export-oriented industrialization approach from relatively early stage. while their governments actively intervened in economies. In South Korea and Taiwan, for example, export-oriented industrialization was promoted in the 1960s with U.S. aid¹⁸ and aggressive foreign capital import. Two countries successfully expanded their exports commensurate with changing structure of international market demand. Following such success, foreign direct investment in the region increased in the 1970s. In the 1980s, foreign direct investment played greater role in the ASEAN countries and China where the governments promoted export-oriented industrialization and foreign capital import. In the 1990s, the Asian NIES even started outward direct investment in neighboring countries, thus contributing mutually stimulating and overlapping economic development in the region.

In contrast to the Asian region, many Latin American countries adopted import-substitution industrialization together with protective measures. As such, they were slow in exporting industrial products. In the 1970s, they started to accept large amount of foreign capital, but some of the countries faced debt crisis in the 1980s. Their economies stagnated due to debt crisis and reduced investment induced by saturated domestic market. In the 1990s, however, Latin American countries started attracting more foreign direct investment with progressing structural reforms including privatization program following debt crisis and with the development of the MERCOSEUR and the NAFTA. Brazil, Mexico and Chile have been increasingly integrated themselves into the global economy.

With the accelerated development of the globalized economy in the 1990s and thereafter, developing countries (including transitional economies) became to have no other choice than integrating themselves into the global economy. Increasing number of developing countries have

¹⁸ According to Cook (1991-1992), U.S. aid financed 70% of South Korea's imports and 85% of Taiwan's current account deficit.

been aggressively taking foreign capital to promote their economic development. However, the success of such approach hinges on whether or not they can carry out domestic policies conducive to foreign capital, particularly direct investment, and promote exports.

2. Capital Flows to Developing Countries

Major part of the capital flows to developing countries in the post-war period was official money provided by the DAC (the Development Assistance Committee of the OECD) member countries and the IBRD group. In the early 1960s, such official money accounted for 66% of net inflow to developing countries¹⁹. As for private sector, foreign direct investment accounted for 20% while bank lending and export credits accounted for 7% each. In the early 1980s, medium- to long-term private lending increased its share sharply. As of 1982, the share of debt owed to private sector as percent to the total medium- to long-term debt of developing countries was estimated to reach 60% (more than 70% if short-term debt was included²⁰). The following factors are cited as the background to the above-mentioned sharp increase: (i) active borrowing by developing countries at relatively low interest rate due to recycled oil money in the 1970s; and (ii) foreign direct investments by multinational corporations were restricted or their foreign operations were nationalized by many developing countries for the reason that such investments represented exploitation by foreign countries, and their equity contributions were eventually switched to lending by multinational corporations. Dominant part of the private flows was attracted to middle income developing countries. Low income countries continued to rely mostly on official flows (mainly multinational aid). However, in the wake of the debt crisis in the 1980s in Latin American middle income countries triggered by the two oil shocks, bank lending to developing countries decreased substantially.

With the development of financial deregulation and globalization, international capital movements have increased sharply since the 1980s. The globalization has been accelerated in the 1990s by the end of the Cold War regime and the emergence of China's market economy under socialism. In response to the expanding global economy, big corporations reviewed their organization structures and activated cross boarder businesses including establishing new distribution channels or production sites. While developed countries accounted for 80-90% of the total foreign direct investment, developing countries that had undergone debt crisis came to place more importance on foreign direct investment as stable source of capital flows, and pursued open policy to foreign capital, thus having attracted increased foreign direct investment. The share of direct investment as percent to total capital inflows to developing countries increased from 11% in 1978-81 to 20% in the 1990s. Foreign direct investment by multinational companies, etc. not only accelerates the world economic growth, but also promotes globalization through exports and imports. According to the recent IMF data, foreign direct investment accounted for 41% of total capital inflows to developing countries in 1994-1997. It reached 85% in 1998-2003 as lending to the developing countries was repaid after the Asian financial crisis.

While the sharp increase of foreign direct investment in the 1990s was due mainly to privatization deals in Latin American countries and transitional economies as well as M&A transactions of banks and companies in Asian countries in the wake of the currency crisis in the region, it should also be noted that, in contrast to the traditional type of industries such as oil and gas extraction and labor-intensive manufacturing, investment in new types industries in particular service industry segment has been increasing with the development of regional economic integration. In the early 1990s, Asian countries such as China accounted for more than 50% of total direct investment in developing countries while Latin American countries 30%. In the late 1990s after the Asian financial crisis, the region slightly reduced its share while Latin American countries and former Eastern European countries increased their shares. More recently, reflecting strengthening economic ties among Asian countries and the development of regional integrations such as MERCOSEUR, Asian NIES, Brazil and Chile have been increasing their presence as investors.

¹⁹ World Bank, WDR (1982)

²⁰ World Bank, WDR (1983)

	(US\$ billion per year)						
	1978-81	1982-89	1990-95	1994-97	1998-2003	2003	
Direct investment	11%	16%	20%	41%	85%	52%	
Portfolio investment	9%	2%	44%	30%	27%	29%	
Bank lending, etc.	80%	55%	36%	29%	-6%	25%	
Flows to LDC (A)	n.a.	n.a.	n.a.	348	256	339	
Flows to all areas (B)	n.a.	n.a.	n.a.	1,798	2,858	3,217	
A/B	n.a.	n.a.	n.a.	19%	9%	11%	

Table 5-2 Make-up of Capital Flows to Developing Countries

(Compiled from the data of Bosworth & Collins and IMF Balance of Payments)

Figure 5-1 U.S. Direct Investment Destination



3. U.S. Investment in Developing Countries

Up until the 1970s, the U.S. capital outflows centered on direct investment, majority of which was destined to European countries. Asia and Africa were the major borrower of U.S. official money while Europe was repaying the debt. For the period from the late 1970s to the late 1980s, U.S. bank lending increased sharply. The background to this sharp increase was the need for international banks particularly U.S. banks to recycle the accumulated huge oil money of oil producing countries in the wake of the first and second oil shocks to non-oil-producing developing countries and communist countries that were in need of foreign currency for oil import and economic development. The Euro dollar market accelerated such trend. The dominant borrowers from U.S. banks were Latin American countries for the period from 1972 to 1983 with net amount of lending to the region for US\$200 billion, representing twice the amount to Europe (including developed countries), 100 times the amount to East European countries or five times the amount to Asia and Africa. However, U.S. bank lending dropped sharply in the 1980s due to Latin American debt crisis. U.S. bank lending to Latin America recovered slightly towards the end of the 1980s before dropping again in the beginning of the 1990s. In the late 1990s, bank lending to Latin America showed relatively strong increase, but dominant borrower was Europe. Direct investment increased strongly in the 1990s, in particular for the period from the late 1990s to 2004 with growing number of M&A deals in Europe. U.S. has accounted for 20-30% of the world total direct investment since the 1990s.

The destinations of U.S. direct investment center on developed countries with a share of 70% of total balance. Developing countries' share is only 30%. As for U.S. direct investment outflows into developing countries, Latin America has accounted for more than 50% for most of the period because of the geographical proximity. It is of note, however, that investment in Asia has increased markedly since the late 1980s. In terms of investment balance, the share of Latin America dropped from 69% in the mid-1960s to 50% in 2003 while that of Asia increased from 9% to 34% for the same period. In the 1960s, Venezuela ranked top for the destination among developing countries. In the 1970s, Brazil and Mexico were preferred to Venezuela for destination. After NAFTA was formed in 1994, investment in Mexico increased sharply.

As for portfolio investment by the U.S. before the mid-1970s, majority part was investment in Japan, Canada and international organizations. However, Euro has accounted for more than 50% since the mid -1970s. In the 1990s and onward, Latin America has increased its share.



Figure 5-2 U.S. Capital Flows

(Compiled from the Department of Commerce data)



Figure 5-3 U.S. Direct Investment Abroad

⁽Compiled from the Department of Commerce data)



Figure 5-4 U.S. Direct Investment Abroad

Figure 5-5 U.S. Direct Investment Position in Latin America



(Compiled from the Department of Commerce data)

4. Contribution of U.S. Capital Flows

After the World War II, the U.S. provided unprecedented scale of financial support to the world, in particular to Europe with the Marshall Plan, which facilitated a great deal the growth of the world economy. The U.S. also initiated creating multinational framework of international monetary system, international trade, and financial aid for reconstruction and economic development. The U.S. became the largest equity contributor to the international organizations such as the IMF and the World Bank. In the 1960s, the U.S. actively involved in the international arrangements for developing countries, including President Kennedy's initiative in the "United Nations Decade of Development." Up until the 1970s, the U.S., as a guardian of the principle of liberal democracy, kept its market open to developing countries. The U.S. basically adhered to the principle of market mechanism, though some developed countries showed an increasing tendency to protectionism in the 1970s while developing countries intensified claims for economic sovereignty over natural resources or for nationalizing enterprises set up by foreign companies. The U.S. at the time was still unrivalled world leader, ready to listen to the voices of developing countries. In the 1980s, a series of protectionist trade bills were proposed amid of growing calls for correcting U.S. dollar appreciation and U.S. current account deficit. The Reagan's administration and its successors upheld the principle of fair trade instead of free trade, in pursuing a new order, and demanded Japan and Europe to open up their markets and accelerate structural reforms.

U.S. capital flows to developing countries accounted for 0.7% of GDP for the period from the 1960s through the 1990s, though they dropped temporarily to 0.5% in the 1980s. The level, however, has declined to 0.23-0.38% in 2000-2004. Nonetheless, the U.S. has been the largest contributor of capital flows to developing countries, with a 21% share in the world total.

	(US\$ million)					
	1960-69	1970-79	1980-89	1990-97	2000-04	
Total capital flows	51,298	108,738	189,762	361,021	158,423	
ODA	34,637	40,103	83,814	78,038	70,969	
of which Asia	-59%	-56%	-33%	-28%	n.a.	
Private	15,070	54,040	86,143	258,320	58,315	
of which Latin America	n.a.	-73%	-67%	-58%	n.a.	
Direct investment	9,811	32,864	45,385	150,783	n.a.	
Portfolio, lending	5,259	18,806	31,174	98,259	n.a.	

Figure 5-3 U.S. Capital Flows to Developing Countries

(Compiled from the data of Survey of Current Business and DAC)

In the 1960s, U.S. official flows (e.g. ODA) accounted for more than 70% of the total. Private flows gradually increased their share²¹ to reach more than 90% in 1997. The destination of the U.S. capital flows was strongly influenced by U.S. foreign policies and world economic developments. ODA flows went primarily to Asia in the 1960s and 1970s for strategic purposes²². ODA flows to Latin America depressed in the 1970s, but rebounded in the 1980s and 1990s with the new U.S. initiatives to developing countries of the Western Hemisphere. In the 1980s and 1990s, Israel and Egypt were among the major recipients of U.S. ODA. For private flows, Latin America accounted for major portion, but Asia increased its share recently. One predominant feature of geographical distribution of foreign affiliates of U.S. multinational corporations is that U.S. foreign affiliates are located in diversified areas around the word compared with the counterpart of France, Germany or Japan²³.

In addition to capital flows, the U.S. has been the leader in respect of transfer of technology. The U.S. led the world after the World War II in innovating technologies. U.S companies, with their active R&D in many advanced industrial sectors such as computers, plastics, pharmaceuticals,

²¹ Policy initiatives under the Nixon administration: from bilateralism to multi-nationalism and initiative by private sector

²² Bureau of Economics Analysis, Survey of Current Business (2000)

²³ UNCTAD (2005)

semi-conductors and aero space products, were successful in inventing new products and manufacturing processes and transforming them into businesses. Such new technologies also had great impact on industrial and trade structures of host countries through U.S. direct investment abroad.

The U.S., as we have reviewed in the preceding sections, had in the past taken initiative in liberalizing international trade and investment, and had played a central role in providing capital to developing countries. However, after the U.S. started running the world largest current account deficit and became a country of the world largest net foreign liabilities, the U.S. strategy has been changed. As stated in the external economic policy by the U.S. State Department (2000), it puts higher priority on increasing U.S. export opportunities by opening up foreign markets and liberalizing flows of goods, services and capital, thus facilitating to promote economic growth around the world including developing countries and transitional economies and to stabilize the global situation.

5. Implications of International Investment for Developing Countries

The U.S. used to play a central role in providing capitals and promoting free flow of trades and capitals. Free flow of capital is considered to have merits in reducing investors' risks through diversified investments, disseminating globally best practices such as corporate governance, accounting standards and legal systems, and checking inappropriate policy measures by governments. In addition, foreign direct investment has further merits for host countries in creating job opportunities, transferring technologies through procurement of parts, disseminating management know-how and factory administration skills through M&A, accelerating competition through new entries to markets, and increasing corporate tax receipts by host countries (unless preferential tax rate is applicable)²⁴.

According to a study by Bosworth and Collins (1999) on the effect of capital inflows on domestic investment for 58 developing countries in Asia and Latin America during 1978-1995, they found that an increase of 1.0 in capital inflows was associated with an increase in domestic investment of about 0.5. If we look at the ratio by type of inflow, foreign direct investment is at about 0.8 (0.9 for 18 emerging markets) while bank loan at 0.4-0.5 and portfolio investment at 01. They concluded that the benefits of free capital flows for foreign direct investment would be sufficient to offset any adverse effects of free flow of capitals.

As discussed above, capital inflows into developing countries are generally considered to contribute to investment and economic growth. However, some argue that all capitals are not necessarily beneficial, citing that stable flows like foreign direct investment are deemed as "good cholesterol" whereas short-tem funds motivated by interest rate differential or exchange rate fluctuation are "bad cholesterol."²⁵ Other argue that, the extent to which capital flows into developing countries contribute to economic growth of such countries is variable, depending on the level of improvement of domestic policies, speed of deregulation of capital controls, types of capital inflows, etc.²⁶ Furthermore, the cause-and-effect relationship between direct investment and economic growth has not been confirmed. (Does direct investment cause economic growth, or does economic growth attract capital inflows?) It should also be noted that a recent study points out that many developing countries with higher foreign direct investment ratio as percent to total capital inflows tend to be higher risk countries with less developed domestic capital and financial markets, and that such countries should make every effort to improve investment environment and develop domestic markets²⁷. Whatever the case, foreign direct investment is not panacea at all. On the contrary, there are observations that point to risks associated with foreign direct investment such as sudden reversal of hot money through inter-group financial transactions, misguided investment in improper industries, transfer of controlling right at fire sale price amid of financial crisis in host countries, and crowding-out of domestic investment.

In conclusion, in order for developing countries to promote economic growth, it is utmost

²⁴ Feldstein (2000)

²⁵ Hausmann and Fernandez-Arias (2000)

²⁶ World Bank, Global Development Finance (2001)

²⁷ Hausmann and Fernandez-Arias (2000)

important that they have to integrate their economies into the global market by adopting open-door polices in trade and investment. In the process of industrialization, it is also important for developing countries: (1) to strengthen export competitiveness and promote gradual transition to higher-value-added export structure; (2) to balance economic development in agricultural and non-agricultural sectors lest balance of payments constraint due to increased food imports should hinder industrial development; and (3) to improve investment environment, to avoid growing debt accumulation, and to mobilize domestic resources including fostering domestic savings.

6. Summary of Chapter 5

Developing countries initially adopted government-led import-substitution industrialization policy. It, however, bred such problems as inefficient government-owned enterprises, and rampant corruption and rent-seeking. It was subsequently replaced by a new approach in which developing countries were encouraged to avoid government intervention in economy as possible and give greater importance to market mechanism. More developing countries pursued policies to lift various restrictions, liberalize transactions, rationalize and privatize government-owned enterprises, and promoted export-oriented industrialization. In the late 1980s, however, market-friendly approach emerged. The approach emphasized the balance of the roles between government and market. A number of Latin American countries that had adopted import-substitution industrialization faced debt crisis in the 1980s while several Eastern Asian countries that had adopted export-oriented industrialization succeeded in performing high economic growth.

In the early 1960s, U.S. official money accounted for most of the part of the U.S. capital flows to developing countries. The official flows, however, decreased gradually while private flows increased. The majority part of private capital flow has been direct investment, though bank lending to Latin America sharply increased temporarily in the late 1970s and 1980s.

U.S. capital flows to developing countries, particularly direct investment played significant role to support export-oriented industrialization and economic development. Direct investment is generally considered to have potentially offered host countries such merits as creating job opportunities, transferring technologies through procurement of parts, disseminating management know-how and factory administration skills through M&A, accelerating competition through new entries to markets and increasing corporate tax receipts by host countries (unless preferential tax rate is applicable). A study indicates direct investment have induced more domestic investment in developing countries than other capital flows. It is important that developing countries pursue balanced economic development by making most of the above-mentioned potential merits of direct investment while at the same time they implement such policy measures as opening up their markets for trades and investments, improving investment environment, and mobilizing domestic resources including domestic savings.

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US Department of Commerce, Bureau of Economic Analysis http://www.bea.gov/beahome.html