IMPLICATIONS OF TRENDS IN LONG-TERM CAPITAL FLOWS

Grace Materon

Preface by Charles Wolf, Jr.

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PREFACE

by Charles Wolf, Jr.

This paper, on long-term capital flows, was prepared by Grace Materon, a Woodrow Wilson Foundation Summer Intern, during the eight weeks of her internship at RAND in June and July 1996. It is being distributed because the data Ms. Materon collected and analyzed may be of use and interest to others. Ms. Materon's work follows that done in the preceding summer by another Woodrow Wilson Foundation Summer Intern, Cristina Rueda. Ms. Rueda's work covered the data from 1985 through 1983. Ms. Materon has updated, revised, and expanded the data through 1995.

The problem I had posed to Ms. Materon was to extend and update the earlier data on long-term capital flows, and to consider the particular question of capital outflows from some developing countries that are themselves recipients of public capital inflows in the form of Official Development Assistance.

IMPLICATIONS OF TRENDS IN LONG-TERM CAPITAL FLOWS

by

Grace Materon

What are the recent trends in amounts, types, and destinations of long-term capital flows? What implications do these trends have for policies concerned with external finance for developing countries?

Types of Long-Term Capital

Long-term capital can be categorized into two broad groups: private capital and public capital. Private capital flows are determined by business decisions based on profit and market considerations. Private flows consist of foreign direct investment, portfolio equity, and long-term private non-guaranteed debt. Public capital, on the other hand, is disbursed by national governments and international institutions with policy objectives. Public capital consists of public and publicly-guaranteed debt and grants.[1]

Competitive Long-Term Capital Markets

Table 1 shows the annual growth rates of long-term capital, from 1985 through 1995, in percentages.[2] [3]

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[1] Source: Wolf, Charles. (1996). "The Global Competition for Long-Term Capital: Who Will Win?". p. 7-8.

[2] In all tables in this paper, calculations are based on dat recorded in millions of current US dollars. Therefore, inflation is not accounted for and the listed growth rates probably overestimate real growth rates.

[3] In all tables in this paper, figures for 1995 are after the exceptional $11 billion rescue package disbursed to Mexico is subtracted.

Table 1

Growth Rates of Long-Term Capital: Net Flows, 1985-1995
(millions of current US dollars and percentages)

Year	Net Flows	Change ($)	Growth Rate (%)
1985	60016	NA	NA
1986	64199	4183	7
1987	68340	4141	6.5
1988	75087	6747	9.9
1989	80469	5382	7.2
1990	101881	21412	26.6
1991	126793	24912	24.5
1992	155148	28355	22.4
1993	207317	52169	33.6
1994	207403	86	0.04
1995	220437	13034	6.3

Sources: World Bank World Debt Tables, OECD Geographical Distribution of Financial Flows to Developing Countries, IMF Balance of Payments Yearbook, and UN World Investment Report.
Note: 1) Net flows to East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia, and Sub-Saharan Africa.

Between 1990 and 1993, growth rates were robust and ranged from 22.4% to 33.6%. Growth rates declined substantially to 0.04% in 1994 and 6.3% in 1995. Long-term capital markets became increasingly competitive.

Growth Rates of Private Capital

Table 2 shows the annual growth rates of private capital, from 1985 through 1995, in percentages.

Table 2

Growth Rates of Private Capital: Net Flows, 1985-1995
(millions of current US dollars and percentages)

Year	Net Flows	Change ($)	Growth Rate (%)
1985	9970	NA	NA
1986	8990	NA	NA
1987	12728	3738	41.6
1988	18073	5345	42
1989	27755	9682	53.6
1990	38017	10262	37
1991	50858	12841	33.8
1992	80956	30098	59.2
1993	131246	50290	62.1
1994	139811	8565	6.5
1995	145737	5926	4.2

Sources: World Bank World Debt Tables, OECD Geographical Distribution of Financial Flows to Developing Countries, IMF Balance of Payments Yearbook, and UN World Investment Report.
Note: 1) Net flows to East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia, and Sub-Saharan Africa.

Growth rates in the late 1980's and early and 1990's were robust, ranging from 33.8% to 62.1%. Foreign direct investment, which consistently accounted for the largest share of private capital flows by far, surged during this period. A factor driving this surge was the efforts of multinational corporations to secure and maintain foreign consumer markets and to gain access to markets for factors of production.

Explanations for the sharp slowdown in growth rates - 6.5% in 1994 and 4.2% in 1995 - are still unclear. Analysts at the World Bank speculate that previous surges in private capital flows were due to low global interest rates and suggest that private capital flows to developing countries sharply decreased because global interest rates recovered. Another probable factor is that investors' interest in developing countries waned as risk-adjusted returns declined in 1994 and 1995 because the Mexican peso crisis eroded confidence in emerging markets.[1]

[1] Source: World Bank. (1996). World Debt Tables, p. 19-20.

Growth Rates of Public Capital

Table 3 shows the annual growth rates of public capital flows, from 1985 through 1995, in percentages.

Table 3

Growth Rates of Public Capital: Net Flows, 1985-1995
(millions of current US dollars and percentages)

Year	Net Flows	Change ($)	Growth Rate (%)
1985	50046	NA	NA
1986	55209	5163	10.3
1987	55612	403	0.7
1988	57014	816	2.5
1989	52714	-4300	-7.5
1990	63864	11150	21.15
1991	75935	12071	18.9
1992	74192	-1743	-2.3
1993	76071	1879	2.5
1994	67592	-8479	-11.1
1995	74700	3918	5.8

Sources: World Bank World Debt Tables, OECD Geographical Distribution of Financial Flows to Developing Countries, IMF Balance of Payments Yearbook, and UN World Investment Report.
Note: 1) Net flows to East Asia and the Pacific, Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, South Asia, and Sub-Saharan Africa.

Growth rates for public capital are generally lower than those for private capital. In 1994 and 1995, the volatility of previous years continued, with growth rates of -11.1% and 5.8%, respectively. Several factors probably contribute to this volatility. Many donor countries are reducing their foreign aid budgets as part of budget austerity measures. Also, the poor economic performance of many recipient countries - many of them in Sub-Saharan Africa - has provoked doubt about the effectiveness of aid.[1]

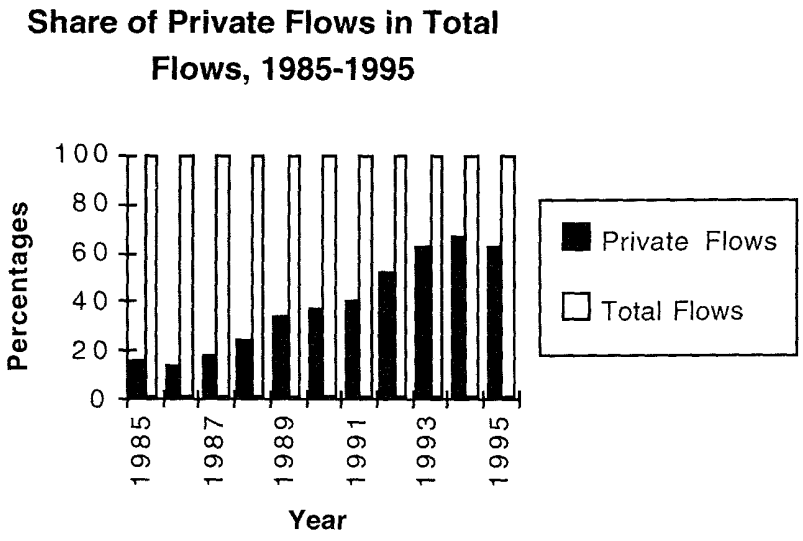
[1] World Bank. (1996). World Debt Tables, p. 25-28.

Share of Private Capital Flows in Total Capital Flows

The robust growth rates of private capital and the volatile growth rates of public capital flows, as shown in Tables 2 and 3, resulted in an increasing share of private capital flows in total capital flows.

Chart 1 shows the increasing share of private capital flows in total capital flows.

Chart 1



Private capital's share rose to a record high of 67.4% in 1994 and declined slightly to 63% in 1995.

The ratio of private capital to public capital affects the regional distribution of total long-term capital because private investors consider the differences in investment climate among regions. Some of the factors that businesses are likely to weigh when considering foreign investments are prior long-term capital flows into, expected economic growth of, and economic-political-legal-security environment of a region.[1]

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[1] Wolf, Charles. (1996). "The Global Competition for Long-Term Capital: Who Will Win?", p. 12-14.

Regional Distribution of Private Capital Flows

Charts 2 and 3 show the regional distribution of private capital flows in 1980 and 1995, respectively.

Chart 2

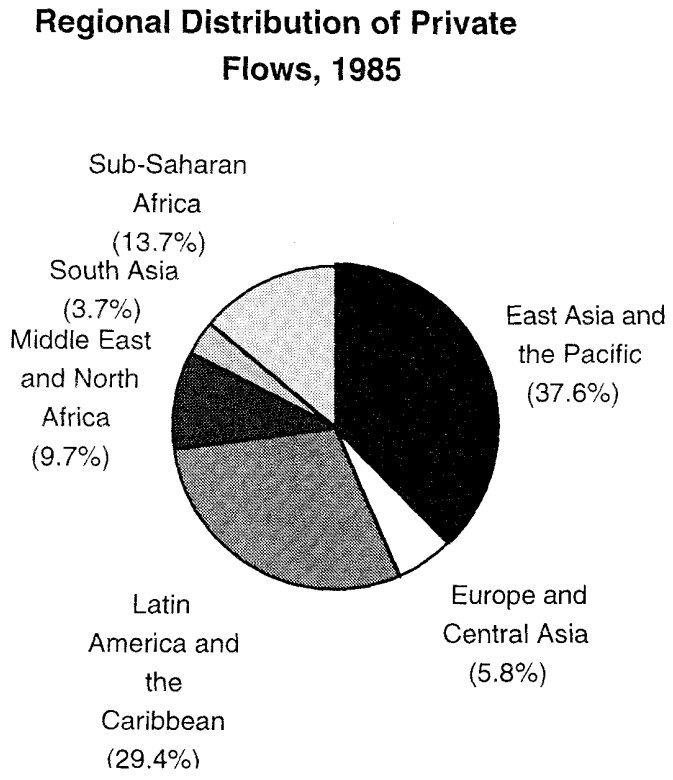
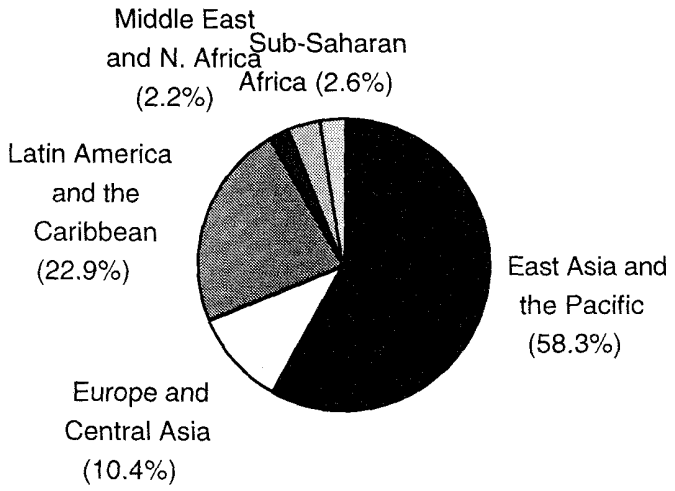


Chart 3

Regional Distribution of Private Flows, 1995



In 1985, Latin America and the Caribbean (29%), Sub-Saharan Africa (14%), and East Asia and the Pacific (37%) received the largest shares of private capital flows. Latin America and the Caribbean's share had decreased to 22.9% by 1995. By 1995, Sub-Saharan Africa's share had dwindled to 2.6% and East Asia and the Pacific's share had expanded to 58.3%.[1]

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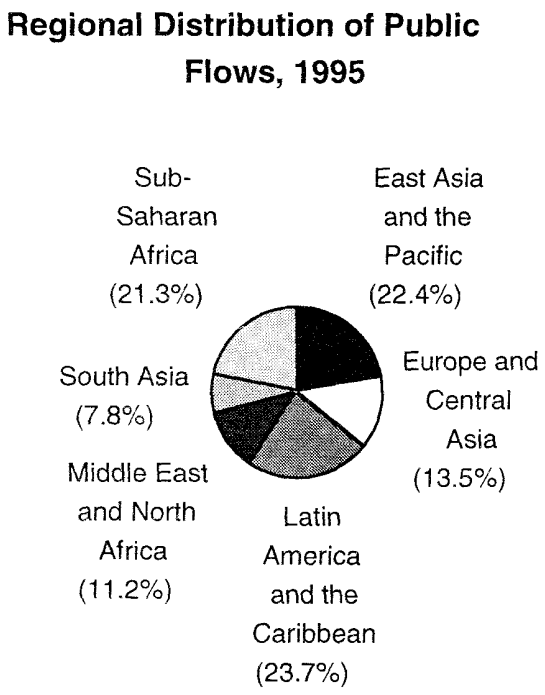
[1] See World Debt Tables for the individual countries belonging to each regional grouping.

Regional Distribution of Public Capital Flows

Chart 4 shows the regional distribution of public capital flows in 1995.

Chart 4



Public capital was more evenly distributed across the six regions than was private capital. East Asia and the Pacific (22.4%) and Sub-Saharan Africa (21.3%) each received approximately equal shares of the public-capital-flows pie.

However, because East Asia and the Pacific so successfully attracted private capital - as is shown in Charts 2 and 3, the total amount of long-term capital that it received was=s far greater than that whichSub-Saharan Africa received.

Distributing the Public Capital Pie

After considering the trends of slowing growth rates of total long term capital and the increasing regional concentration of capital flows - with East Asia and the Pacific as the "winner" - questions arise about policies concerned with disbursing public capital. Could some countries

in the region afford to pay for more of their own development projects and receive less public capital? Related questions are: Are the current account surpluses of these countries transitory and what are the import and export growth rates for these countries? How much does each country hold in foreign reserves and could these reserves be mobilized to finance development projects? How much capital is flowing out of these coutntries.

I examined 1991 balance-of-statements data for China as a preliminary application of these questions to the issue of policies for distributing public capital. The balance-of-payments must always equal zero.

Prior to disbursements of public capital.

Current Account	**Capital Account**	[1]
13083[2]	Capital Account:	189
	Financial Account:	8032
	Reserves:	-14537
Net 13083	**Net**	**-6316**

Net errors and omissions: -6767.

13083 + (-6316) + (-6767) = 0.

[1] In millions of US dollars.
[2] Source: IMF Balance-of-Payments Yearbook 1995.

After public capital is disbursed.

Current Account	Capital Account	
13083	**Public Capital:**	**1253**[1]
	Capital Account:	189
	Financial Account:	8032
	Reserves:	-14537
Net 13083	**Net**	**-5063**

13083 + (-5063) + (-6767) = 1253.

The capital account deficit must increase by 1253 to return to -6316. This could occur in two ways: First, China could export capital. In 1991, China did transmit $900 million in outward foreign direct investment.[2] The other alternative is for China to increase its reserves.

Or, less public capital could be disbursed to China and shifted towards other countries.

For future research, it would be useful to examine the balance-of-payments data for China and other countries in East Asia and the Pacific in recent years and to see what changes might be made to improve policy for distributing public capital.

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[1]. Source: OECD Geographical Distribution of Financial Flows to Developing Countries 1989/93.

[2] Source: IMF Balance-of-Payments Yearbook 1995.

Long-Term Capital: Net Flows, 1985-1995						
(millions of current dollars)						
Year	FDI	Portfolio Equity	LT Private Non-Guaranteed Debt	LT Public and Publicly-Guaranteed Debt	Grants	Total
1985	10963	NA	-993	38059	11987	60016
1986	10140	223	-1373	39188	16021	64199
1987	14577	562	-2411	38699	16913	68340
1988	20254	962	-3143	38601	18413	75087
1989	23935	3296	524	33211	19503	80469
1990	25009	3707	9301	34487	29377	101881
1991	34978	7300	8580	38396	37539	126793
1992	46610	13920	20426	42274	31918	155148
1993	68261	45616	17369	46682	29389	207317
1994	80120	34895	24796	35122	32470	207403
1995	90346	22000	33391	52843	21857	220437

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: Figures for 1985 portfolio equity flows are not available in any issues of the World Debt Tables.

Note: Portfolio equity flows data for 1985 is not available in any editions of the World Debt Tables.

Growth Rates of Long-Term Capital: Net Flows, 1985-1995			
(millions of current US dollars and percentages)			
Year	Net Flows	Change ($)	Growth Rate (%)
1985	60016	NA	NA
1986	64199	4183	7
1987	68340	4141	6.5
1988	75087	6747	9.9
1989	80469	5382	7.2
1990	101881	21412	26.6
1991	126793	24912	24.5
1992	155148	28355	22.4
1993	207317	52169	33.6
1994	207403	86	0.04
1995	220437	13034	6.3

Note: Source: World Debt Tables 1992-93, 1993-94, 1994-95, 1996.

Note: Figures after the exceptional $11 billion disbursement to Mexico is subtracted.

Foreign Direct Investment: Net Flows, 1985-1995								
(millions of current US dollars)								
Year		East Asia and P	Europe and Ce	Latin America a	Middle East an	South Asia	Sub-Saharan A	Total
1985		3183	465	4345	1495	157	1318	10963
1986		3546	844	3553	1253	260	684	10140
1987		4509	1302	5791	1160	410	1405	14577
1988		7611	1339	7949	1883	326	1146	20254
1989		9096	1744	8138	1966	487	2504	23935
1990		10968	2102	7842	2757	464	876	25009
1991		13890	4390	12602	1825	456	1815	34978
1992		21668	6270	14469	2081	624	1498	46610
1993		37872	8337	15701	3757	841	1753	68261
1994		43037	8362	20811	3681	1242	2987	80120
1995		53703	12482	17799	2129	2046	2187	90346

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: 1995 figures are preliminary.

Portfolio Equity: Net Flows, 1985-1995								
(millions of current US dollars)								
Year		East Asia and	Europe and Ce	Latin America	Middle East an	South Asia	Sub-Saharan A	Total
1986		31	0	0	0	192	0	223
1987		405	79	78	0	0	0	562
1988		730	0	176	0	56	0	962
1989		2623	71	434	0	168	0	3296
1990		2268	235	1099	0	105	0	3707
1991		1049	0	6228	0	23	0	7300
1992		5102	65	8229	0	380	144	13920
1993		18107	191	25149	0	2025	144	45616
1994		12613	1934	13160	106	6222	860	34895
1995		12230	1590	6200	85	1430	465	22000

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: A positive figure indicates that a region is a net importer of portfolio equity.

Note: Data for 1985 not available from any issues of the World Debt Tables.

Note: Figures for 1995 are preliminary.

Long-Term Private Non-Guaranteed Debt, Net Flows, 1985-1995								
(millions of current US dollars)								
Year		East Asia and	Europe and Ce	Latin America	Middle East an	South Asia	Sub-Saharan A	Total
1985		470	-231	-2082	239	186	425	-993
1986		-160	74	-1877	168	-149	571	-1373
1987		-201	10	-2307	71	76	-60	-2411
1988		678	46	-3949	42	-72	112	-3143
1989		2796	329	-2730	-60	-39	228	524
1990		6512	265	2504	-38	-107	165	9301
1991		6677	-692	2703	-175	29	38	8580
1992		8499	1679	10484	-301	-49	114	20426
1993		237	3510	13080	-43	563	22	17369
1994		11032	1529	10512	1301	-12	434	24796
1995		23203	1103	4420	1202	2271	1192	33391

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: Negative numbers indicate that principal repayments exceeded disbursements.

Note: 1995 figures are preliminary.

Long-Term Public and Publicly-Guaranteed Debt, Net Flows, 1985-1995								
(millions of current US dollars)								
Year		East Asia and	Europe and Ce	Latin America	Middle East an	South Asia	Sub-Saharan A	Total
1985		10457	4958	8971	6566	3816	3291	38059
1986		7072	4952	7989	9140	5714	4321	39188
1987		13	8692	8186	8358	7309	6141	38699
1988		3705	3872	9724	7601	9275	4424	38601
1989		6194	6723	444	6144	7660	6046	33211
1990		6781	10750	7503	-960	6495	3918	34487
1991		10817	9424	4409	3329	6991	3426	38396
1992		15766	17103	-1535	1818	5797	3325	42274
1993		14672	16088	7248	2795	4427	1452	46682
1994		15625	6646	3869	1012	3807	4163	35122
1995		16207	3862	17842	5454	3895	5583	52843

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: Negative numbers indicate that principal repayments exceeded disbursements.

Note: 1995 figures are preliminary.

Grants, Net Flows, 1985-1995								
(millions of current US dollars)								
Year		East Asia and t	Europe and Ce	Latin America a	Middle East an	South Asia	Sub-Saharan A	Total
1985		1828	219	1260	2540	1581	4559	11987
1986		1736	546	1735	3087	2586	6331	16021
1987		1992	151	2146	2964	2580	7080	16913
1988		2227	179	2352	1804	2969	8882	18413
1989		2373	232	2565	1632	3217	9484	19503
1990		2326	1707	2581	8176	2425	12162	29377
1991		2116	10073	4354	6564	3422	11010	37539
1992		2394	9097	2746	3926	2513	11242	31918
1993		2314	9077	3028	2617	2209	10144	29389
1994		2959	8306	2776	4196	2541	11692	32470
1995		2998	7685	2507	4165	2799	12703	32857

Note: Excluding technical cooperation grants.

Note: A positive figure indicates that a region is a net importer of grants.

Note: 1995 figures are preliminary.

Growth Rates of Private Capital: Net Flows, 1985-1995			
(millions of current US dollars and percentages)			
Year	Net Flows	Change ($)	Growth Rate (%)
1985	9970	NA	NA
1986	8990	NA	NA
1987	12728	3738	41.6
1988	18073	5345	42
1989	27755	9682	53.6
1990	38017	10262	37
1991	50858	12841	33.8
1992	80956	30098	59.2
1993	131246	50290	62.1
1994	139811	8565	6.5
1995	145737	5926	4.2

Note: 1985-1986 is not calculated because portfolio equity flow data for 1985 are not availbable in any issues of the World Debt Tables.

Growth Rates of Public Capital: Net Flows, 1985-1995			
(millions of current US dollars and percentages)			
Year	Net Flows	Change ($)	Growth Rate (%)
1985	50046	NA	NA
1986	55209	5163	10.3
1987	55612	403	0.7
1988	57014	816	2.5
1989	52714	-4300	-7.5
1990	63864	11150	21.15
1991	75935	12071	18.9
1992	74192	-1743	-2.3
1993	76071	1879	2.5
1994	67592	-8479	-11.1
1995	74700	3918	5.8

Table - Growth Rate - Public

Note: Calculated from absolute values.

Share of Private Flows in Total Flows			
(percentages)			
Year	Total Private	Total Flows	%
1985	9970	60016	16.6
1986	8990	64199	14
1987	12728	68340	18.6
1988	18073	75087	24.1
1989	27755	80469	34.5
1990	38017	101881	37.3
1991	50858	126793	40.1
1992	80956	155148	52.2
1993	131246	207317	63.3
1994	139811	207403	67.4
1995	145737	220437	66.1

Note: 1995 figures are preliminary.

Regional Distribution of Private Flows						
(percentages)						
Year	East Asia and the Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and N. Africa	South Asia	Sub-Saharan Africa
1985	37.6	5.8	29.4	9.7	3.7	13.7
1986	43.7	6.6	31.2	8.5	4.2	5.9
1987	42.4	9.2	29.5	6.3	3.4	9.2
1988	45.6	6.6	32.2	7.2	2.1	6.3
1989	47.8	7.7	29.1	5.3	2.4	7.8
1990	51.5	8.6	28.8	6.1	1.7	3.2
1991	43.8	8.8	39.2	3.1	1.3	3.8
1992	43.7	10.1	40.3	2.2	1.4	2.3
1993	42.8	8.5	42.1	2.5	2.5	1.5
1994	46.9	8.8	33.3	3.2	4.8	3
1995	58.3	10.4	22.9	2.2	3.6	2.6

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: Calculations based on data from Tables #1-5.

Regional Distribution of Public Flows						
(percentages)						
Year	East Asia and the Pacific	Europe and Central Asia	Latin America and the Caribbean	Middle East and N. Africa	South Asia	Sub-Saharan Africa
1985	24.5	10.3	20.4	18.2	10.8	15.7
1986	16	10	17.6	22.1	15	19.3
1987	3.6	15.9	18.6	20.4	17.8	23.8
1988	10.4	7.1	21.2	16.5	21.5	23.3
1989	16.3	13.2	5.7	14.8	20.6	29.5
1990	14.3	19.5	15.8	11.3	14	25.2
1991	17	25.7	11.5	13	13.7	19
1992	24.5	35.3	1.6	7.7	11.2	19.6
1993	22.3	33.1	13.5	7.1	8.7	15.2
1994	27.5	22.1	9.8	7.7	9.4	23.5
1995	22.4	13.5	23.7	11.2	7.8	21.3

Note: Source: World Bank World Debt Tables 1992-93, 1993-94, 1994-95, and 1996. OECD Geographical Distribution of Financial Flows to Developing Countries. IMF Balance of Payments Yearbook. UN World Investment Report.

Note: Calculations based on data from tables #1-5.

BIBLIOGRAPHY

Export-Import Bank of Japan. (1995). "International Capital Flow in Recent Years: Characteristics and Background" in "EXIM Review".

International Monetary Fund. (1995). Balance of Payments Statistics Yearbook.

Krugman, Paul R. and Maurice Obstfeld. (1994). International Economics: Theory and Policy.

Organization for Economic Co-Operation and Development. Development Assistance Committee Report 1995: Development Co-Operation.

Organization for Economic Co-Operation and Development. (1995). International Direct Investment Statistics Yearbook 1995.

Organization for Economic Co-Operation and Development. (1995). Geographical Distribution of Financial Flows to Aid Recipients: 1989-1993.

Organization for Economic Co-Operation and Development. (1994). Geographical Distribution of Financial Flows to Developing Countries: 1989/1992.

Rueda, Cristina. (1995). "International Capital Flows: 1985-93".

United Nations. (1995). World Investment Report 1995: Transnational Corporations and Competitiveness.

United States Department of Commerce. (1993). "World Trends in Foreign Direct Investment" in Foreign Direct Investment in the United States: An Update.

Wolf, Charles. (1996). "The Global Competition for Long-Term Capital: Who Will Win?"

Wolf, Charles. (1995). "Private Money Gaining as Chief Economic Fuel".

World Bank. (1993). World Debt Tables 1992-93: External Finance for Developing Countries.

World Bank. (1994). World Debt Tables 1993-94: External Finance for Developing Countries.

World Bank. (1995). World Debt Tables 1994-95: External Finance for Developing Countries.

World Bank. (1996). World Debt Tables 1996: External Finance for Developing Countries.