

**REPORT TO THE IMF EXECUTIVE BOARD OF THE
QUOTA FORMULA REVIEW GROUP**

STATISTICAL APPENDIX – PART A

May 1, 2000

Contents	Page
I. Existing and Alternative Data Sets for Use in Quota Formulas	3
A. Introduction	3
B. Eleventh Review of Quotas	3
C. Measures of Output and Population	3
D. Measures of Reserves and Current Account Data	4
E. Variability Measures, Capital Flows, and Debt	4
F. Qualitative and Dummy Variables	5
II. Estimation Results of Statistical Quota Formulas	55
A. List of Regression Equations	56
III. Chow and Wald Tests for the Stability of Coefficient Estimates	71
A. Chow Tests	72
B. Wald Tests: Tests of Structural Change with Unequal Variances	74
IV. Nested Formulas with Vulnerability and Strength Variables	77
A. Davidson-MacKinnon J Test	78
B. Nested Models With Vulnerability and Strength Variables	81
V. Hypothetical Quota Calculations for Past Quota Reviews According to the Relative Size of the Equiproportional and Selective Elements	83
 Tables	
I.1 Eleventh Review Quotas	6
I.2 Measures of Output	12
I.3 Measures of Output and Population	18
I.4 Measures of Reserves	24
I.5 Current Account Data	30
I.6 Variability Measures	36
I.7 Capital Flows and Debt	42

I.8	Qualitative Variables	48
I.9	Correlation of Variables.....	54
II.1	Summary Statistics on Equations Fitted to Actual Quotas	59
II.2	Relative Contribution of Variables to Calculated Quotas	63
II.3	Estimated Quota Shares by WEO Classification	67
III.1.1	Chow Tests (Rolling).....	73
III.1.2	Chow Tests (Cumulative)	73
III.2.1	Tests for Equality of Variances of Error Terms (F-test)	76
III.2.2	Wald Test.....	76
III.2.3	Chow Tests.....	76
IV.	Comparison of Coefficients from Nested Models and Ordinary Least Squares to Estimate the Relative Weights of Strength and Vulnerability Variables.....	82
V.1	Summary of Simulated Quota Shares from Sixth Through Eleventh Reviews	84

SECTION I. EXISTING AND ALTERNATIVE DATA SETS FOR USE IN QUOTA FORMULAS

A. Introduction

1. This statistical appendix presents the data used in the estimation and analysis of alternative quota formulas suggested by the QFRG. Annual data up to 1994 have been compiled for 183 countries who participated in the Eleventh Quota Review to form the statistical database used in the estimation of alternative quota formulas. The IMF *International Financial Statistics*, and *Balance of Payments* databases comprise the major sources of data, supplemented by the IMF *World Economic Outlook* and IMF staff estimates. All data have been converted, where applicable, into millions of SDRs. A general description of the data, organized by major economic concepts, is presented below. This is followed by statistical data tables showing data for individual countries, sorted by actual (proposed) Eleventh Review quotas in descending order, along with a correlation matrix of certain variables.

B. Eleventh Review of Quotas

2. The dependent variable (Q) used in all quota formula estimations is the proposed or actual quota from the Eleventh Quota Review. Please refer to *Financial Organization and Operations of the IMF*, Pamphlet Series No. 45, Fifth Edition, pages 24–27, for an overview of the methodology used in the determination of quotas. The then-existing quota (QL) would be, in most cases, the proposed or actual quota from the Ninth Review. The calculated quota (CQ) is derived as the higher of the results of: (1) the reduced Bretton Woods formula and (2) the average of the lowest two results of four other formulas containing the same variables but with larger weights for external trade and variability of exports.

C. Measures of Output and Population

3. Five different measures of GDP/GNP were considered in the estimation of quota formulas. The “standard” GDP measure used in the Eleventh Quota Review is 1994 GDP (Y) measured at market exchange rates. Alternative national output measures include:

- Five-year (1990–94) average of GDP (YAVG),
- GDP valued at purchasing power parities (PPP) in a recent year (1994),
- Five-year (1990–94) average of GDP using a centered, five-year moving average of annual exchange rates as a conversion factor (YM5X), and
- GNP converted using the World Bank Atlas Method (YATL).

4. The major source for GDP and exchange rate data is the IMF *International Financial Statistics* database. The data source for PPP-based GDP is the IMF *World Economic Outlook* database, and the World Bank's *Global Development Indicators* database is the source for 1994 GNP converted using the World Bank Atlas Method. In cases where there is a lack of reliable alternative measures of GDP, the 1994 GDP (Y) measure is usually substituted. Population (POP) is a country's 1994 population measured in millions of persons.

D. Measures of Reserves and Current Account Data

5. The standard reserves variable (R) used in the Eleventh Quota Review is a twelve-month average of gold (valued at SDR 35 per fine ounce) and foreign exchange reserves, including SDR holdings, reserve positions in the Fund, and ECUs for 1994. An alternative measure used is reserves with gold measured at market prices (RESM). This is computed as a twelve-month average of gold (valued at market prices in 1994, with monthly prices ranging from SDR 261.02 per fine ounce to SDR 273.82 per fine ounce) and foreign exchange reserves, including holdings, reserve position in the Fund and ECUs for 1994.

6. Current Receipts (C) is the 1990–94 average of the sum of goods (exports f.o.b.), services (credit), income (credit), and private current transfers (credit) divided by the average SDR value for the same years. Current Payments (P) is the 1990–94 average of the sum of goods (imports, f.o.b.), services (debit), income (debit), and private current transfers (debit); divided by the average SDR value for the same years. Trade (TRADE) is measured as the average of current receipts and current payments.

E. Variability Measures, Capital Flows, and Debt

7. Several measures of variability were considered in the estimation of alternative quota formulas. The standard variability measure in the Eleventh Review uses the variability of current receipts (VC) which is defined as one standard deviation of current receipts from its five-year moving average centered on the third year, for the period 1982–94. Another measure captures the variability of both current receipts and capital and financial account credits (VCK), also defined as one standard deviation from its five-year moving average centered on the third year, for the period 1982–94. The variability of real effective exchange rates (VREC) (Source: IMF Information Notice System) is defined in terms of the deviation of the real effective exchange rate from a normal level, represented by a five-year moving average centered on the middle year.

8. Normal net capital flow is proxied by a four-year average of net private capital flows and includes errors and omissions for the period 1991–94.

9. Total external debt (DEBT) is defined as debt owed to non-residents repayable in foreign currency, goods, and services. Short-term external debt (STDEBT) for most developing countries was obtained from the BIS-IMF-OECD-World Bank (BIOW) database.

The World Bank's *Global Development Finance* (GDF) database was used for developing countries for which data were not available from the BIOW. For the industrial countries, the Bank for International Settlements database was used.

F. Qualitative and Dummy Variables

10. A capital market accessibility (KMACC) classification was used to derive an Openness Index. This classification (KMACC) ranks each country's ability to access capital markets on a 1 to 4 scale, with a 1 given to countries with the easiest access, and a 4 given to those with the least access. The Openness Index (OPEN) has the reverse scale (computed as $1 + (5 - \text{KMACC})$).

11. Some dummy variables were not used directly as explanatory variables but were created in order to select sub-samples for estimation. NOTBW is a 0–1 dummy variable, which equals 1 if a country's calculated quota is based on a variant of the Bretton Woods Formula. Similarly, MEM20 equals 1 if the member joined the Fund in the past twenty years. Also, DDEV is a 0–1 dummy variable, which equals 1 if a country is classified as either a developing country or a transitional economy.

12. According to the WEO country classifications, advanced economies include the industrial countries of North America and Europe, Japan, and two newly industrialized Asian economies (Korea and Singapore). The countries in transition include the 15 members that were formerly part of the Soviet Union, the successor countries to the former Yugoslavia and Czechoslovakia, Albania, Hungary, Poland, Romania, and Mongolia. The rest of the members are classified as developing countries. Furthermore, San Marino, Palau, and the Marshall Islands are not currently classified by the WEO. We have classified San Marino as an industrial country, and Palau and Marshall Islands as developing countries.

13. The next section presents statistical data tables for the 183 countries that participated in the Eleventh Review of Quotas, organized along the same economic concepts presented above.

Table I.1. Eleventh Review Quotas

Regression Variable Name	Actual (Proposed) Quotas		Then- Existing Quotas		Calculated Quotas Based on Existing 5-Formula System	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Q		QL		QC	
United States	37,149.3	17.521	26,526.8	18.141	94,099.0	17.251
Japan	13,312.8	6.279	8,241.5	5.636	55,658.4	10.204
Germany	13,008.2	6.135	8,241.5	5.636	49,132.1	9.007
France	10,738.5	5.065	7,414.6	5.071	30,435.0	5.580
United Kingdom	10,738.5	5.065	7,414.6	5.071	27,227.4	4.992
Italy	7,055.5	3.328	4,590.7	3.139	22,804.1	4.181
Saudi Arabia	6,985.5	3.295	5,130.6	3.509	7,159.1	1.312
Canada	6,369.2	3.004	4,320.3	2.955	17,830.8	3.269
Russia	5,945.4	2.804	4,313.1	2.950	10,052.3	1.843
Netherlands	5,162.4	2.435	3,444.2	2.355	15,442.1	2.831
China	4,687.2	2.211	3,385.2	2.315	9,042.6	1.658
Belgium	4,605.2	2.172	3,102.3	2.122	13,248.5	2.429
India	4,158.2	1.961	3,055.5	2.090	4,156.0	0.762
Switzerland	3,458.5	1.631	2,470.4	1.689	8,697.2	1.594
Australia	3,236.4	1.526	2,333.2	1.596	6,554.6	1.202
Spain	3,048.9	1.438	1,935.4	1.324	11,343.3	2.080
Brazil	3,036.1	1.432	2,170.8	1.485	7,479.9	1.371
Venezuela	2,659.1	1.254	1,951.3	1.334	2,853.6	0.523
Mexico	2,585.8	1.220	1,753.3	1.199	7,246.7	1.329
Sweden	2,395.5	1.130	1,614.0	1.104	6,886.0	1.262
Argentina	2,117.1	0.998	1,537.1	1.051	3,487.7	0.639
Indonesia	2,079.3	0.981	1,497.6	1.024	4,318.0	0.792
Austria	1,872.3	0.883	1,188.3	0.813	6,972.5	1.278
South Africa	1,868.5	0.881	1,365.4	0.934	2,429.2	0.445
Nigeria	1,753.2	0.827	1,281.6	0.876	2,246.8	0.412
Norway	1,671.7	0.788	1,104.6	0.755	5,209.6	0.955
Denmark	1,642.8	0.775	1,069.9	0.732	5,450.0	0.999
Korea	1,633.6	0.770	799.6	0.547	9,049.7	1.659
Iran	1,497.2	0.706	1,078.5	0.738	3,095.9	0.568
Malaysia	1,486.6	0.701	832.7	0.569	5,608.4	1.028
Kuwait	1,381.1	0.651	995.2	0.681	2,832.9	0.519
Ukraine	1,372.0	0.647	997.3	0.682	2,172.1	0.398
Poland	1,369.0	0.646	988.5	0.676	2,657.1	0.487
Finland	1,263.8	0.596	861.8	0.589	3,463.0	0.635
Algeria	1,254.7	0.592	914.4	0.625	1,811.0	0.332

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	Q		QL		QC	
Iraq	1,188.4	0.560	864.8	0.591	1,810.1	0.332
Libya	1,123.7	0.530	817.6	0.559	1,720.9	0.315
Thailand	1,081.9	0.510	573.9	0.392	4,701.3	0.862
Hungary	1,038.4	0.490	754.8	0.516	1,644.2	0.301
Pakistan	1,033.7	0.488	758.2	0.519	1,131.9	0.208
Romania	1,030.2	0.486	754.1	0.516	1,243.8	0.228
Turkey	964.0	0.455	642.0	0.439	2,905.9	0.533
Egypt	943.7	0.445	678.4	0.464	2,054.5	0.377
Israel	928.2	0.438	666.2	0.456	2,101.2	0.385
New Zealand	894.6	0.422	650.1	0.445	1,429.0	0.262
Philippines	879.9	0.415	633.4	0.433	1,852.2	0.340
Portugal	867.4	0.409	557.6	0.381	3,046.1	0.558
Singapore	862.5	0.407	357.6	0.245	8,339.7	1.529
Chile	856.1	0.404	621.7	0.425	1,398.3	0.256
Ireland	838.4	0.395	525.0	0.359	3,320.4	0.609
Greece	823.0	0.388	587.6	0.402	2,091.0	0.383
Czech Republic	819.3	0.386	589.6	0.403	1,736.0	0.318
Colombia	774.0	0.365	561.3	0.384	1,324.3	0.243
Bulgaria	640.2	0.302	464.9	0.318	1,046.6	0.192
Peru	638.4	0.301	466.1	0.319	858.3	0.157
United Arab Emirates	611.7	0.288	392.1	0.268	2,176.5	0.399
Morocco	588.2	0.277	427.7	0.292	919.4	0.169
Bangladesh	533.3	0.252	392.5	0.268	484.4	0.089
Congo, Dem. Republic of	533.0	0.251	394.8	0.270	301.1	0.055
Zambia	489.1	0.231	363.5	0.249	183.3	0.034
FRY (Serbia/Montenegro)	467.7	0.221	335.4	0.229	1,076.3	0.197
Sri Lanka	413.4	0.195	303.6	0.208	426.6	0.078
Belarus	386.4	0.182	280.4	0.192	648.9	0.119
Ghana	369.0	0.174	274.0	0.187	155.5	0.029
Kazakstan	365.7	0.172	247.5	0.169	1,032.1	0.189
Croatia	365.1	0.172	261.6	0.179	860.9	0.158
Slovak Republic	357.5	0.169	257.4	0.176	748.1	0.137
Zimbabwe	353.4	0.167	261.3	0.179	234.1	0.043
Trinidad and Tobago	335.6	0.158	246.8	0.169	320.4	0.059
Vietnam	329.1	0.155	241.6	0.165	345.7	0.063

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	<i>SDRs</i>	<i>of total</i>	<i>SDRs</i>	<i>of total</i>	<i>SDRs</i>	<i>of total</i>
	Q		QL		QC	
Cote d'Ivoire	325.2	0.153	238.2	0.163	379.0	0.069
Sudan	315.1	0.149	233.1	0.159	198.5	0.036
Uruguay	306.5	0.145	225.3	0.154	302.7	0.055
Ecuador	302.3	0.143	219.2	0.150	517.2	0.095
Syrian Arab Republic	293.6	0.138	209.9	0.144	723.7	0.133
Tunisia	286.5	0.135	206.0	0.141	621.4	0.114
Angola	286.3	0.135	207.3	0.142	516.1	0.095
Luxembourg	279.1	0.132	135.5	0.093	1,587.8	0.291
Uzbekistan	275.6	0.130	199.5	0.136	495.4	0.091
Jamaica	273.5	0.129	200.9	0.137	280.5	0.051
Kenya	271.4	0.128	199.4	0.136	273.7	0.050
Qatar	263.8	0.124	190.5	0.130	509.2	0.093
Myanmar	258.4	0.122	184.9	0.126	628.4	0.115
Yemen, Republic of	243.5	0.115	176.5	0.121	421.6	0.077
Slovenia	231.7	0.109	150.5	0.103	776.9	0.142
Dominican Republic	218.9	0.103	158.8	0.109	370.0	0.068
Brunei Darussalam	215.2	0.101	150.0	0.103	553.7	0.102
Guatemala	210.2	0.099	153.8	0.105	259.9	0.048
Panama	206.6	0.097	149.6	0.102	372.0	0.068
Lebanon	203.0	0.096	146.0	0.100	436.0	0.080
Tanzania	198.9	0.094	146.9	0.100	142.8	0.026
Oman	194.0	0.091	119.4	0.082	833.6	0.153
Cameroon	185.7	0.088	135.1	0.092	285.3	0.052
Uganda	180.5	0.085	133.9	0.092	86.5	0.016
Bolivia	171.5	0.081	126.2	0.086	155.4	0.028
El Salvador	171.3	0.081	125.6	0.086	192.5	0.035
Jordan	170.5	0.080	121.7	0.083	434.1	0.080
Bosnia-Herzegovina	169.1	0.080	121.2	0.083	392.5	0.072
Costa Rica	164.1	0.077	119.0	0.081	282.4	0.052
Afghanistan, Islamic State of	161.9	0.076	120.4	0.082	54.2	0.010
Senegal	161.8	0.076	118.9	0.081	158.8	0.029
Azerbaijan	160.9	0.076	117.0	0.080	251.2	0.046
Gabon	154.3	0.073	110.3	0.075	383.3	0.070
Georgia	150.3	0.071	111.0	0.076	108.4	0.020
Lithuania	144.2	0.068	103.5	0.071	326.3	0.060

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	Q		QL		QC	
Cyprus	139.6	0.066	100.0	0.068	330.5	0.061
Namibia	136.5	0.064	99.6	0.068	190.9	0.035
Bahrain	135.0	0.064	82.8	0.057	589.0	0.108
Ethiopia	133.7	0.063	98.3	0.067	131.9	0.024
Papua New Guinea	131.6	0.062	95.3	0.065	232.4	0.043
Bahamas, The	130.3	0.061	94.9	0.065	190.5	0.035
Nicaragua	130.0	0.061	96.1	0.066	85.1	0.016
Honduras	129.5	0.061	95.0	0.065	138.7	0.025
Liberia	129.2	0.061	96.2	0.066	33.8	0.006
Latvia	126.8	0.060	91.5	0.063	253.1	0.046
Moldova	123.2	0.058	90.0	0.062	163.5	0.030
Madagascar	122.2	0.058	90.4	0.062	75.4	0.014
Iceland	117.6	0.055	85.3	0.058	197.3	0.036
Mozambique	113.6	0.054	84.0	0.057	76.9	0.014
Guinea	107.1	0.051	78.7	0.054	104.8	0.019
Sierra Leone	103.7	0.049	77.2	0.053	27.8	0.005
Malta	102.0	0.048	67.5	0.046	315.3	0.058
Mauritius	101.6	0.048	73.3	0.050	199.2	0.037
Paraguay	99.9	0.047	72.1	0.049	197.0	0.036
Mali	93.3	0.044	68.9	0.047	69.8	0.013
Suriname	92.1	0.043	67.6	0.046	97.8	0.018
Armenia	92.0	0.043	67.5	0.046	101.8	0.019
Guyana	90.9	0.043	67.2	0.046	61.1	0.011
Kyrgyz Republic	88.8	0.042	64.5	0.044	143.3	0.026
Cambodia	87.5	0.041	65.0	0.044	34.9	0.006
Tajikistan	87.0	0.041	60.0	0.041	225.4	0.041
Congo, Republic of	84.6	0.040	57.9	0.040	228.0	0.042
Haiti	81.9	0.039	60.7	0.042	42.8	0.008
Somalia	81.7	0.039	60.9	0.042	17.3	0.003
Rwanda	80.1	0.038	59.5	0.041	31.4	0.006
Burundi	77.0	0.036	57.2	0.039	30.5	0.006
Turkmenistan	75.2	0.035	48.0	0.033	272.1	0.050
Togo	73.4	0.035	54.3	0.037	47.4	0.009
Nepal	71.3	0.034	52.0	0.036	100.5	0.018
Fiji	70.3	0.033	51.1	0.035	109.7	0.020

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	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Q		QL		QC	
Malawi	69.4	0.033	50.9	0.035	74.3	0.014
Macedonia, FYR	68.9	0.032	49.6	0.034	144.4	0.026
Barbados	67.5	0.032	48.9	0.033	120.1	0.022
Niger	65.8	0.031	48.3	0.033	67.3	0.012
Estonia	65.2	0.031	46.5	0.032	167.1	0.031
Mauritania	64.4	0.030	47.5	0.032	52.9	0.010
Botswana	63.0	0.030	36.6	0.025	358.4	0.066
Benin	61.9	0.029	45.3	0.031	73.3	0.013
Burkina Faso	60.2	0.028	44.2	0.030	64.3	0.012
Chad	56.0	0.026	41.3	0.028	42.2	0.008
Central African Republic	55.7	0.026	41.2	0.028	35.6	0.007
Lao, People's Dem. Republic	52.9	0.025	39.1	0.027	34.8	0.006
Mongolia	51.1	0.024	37.1	0.025	85.8	0.016
Swaziland	50.7	0.024	36.5	0.025	108.7	0.020
Albania	48.7	0.023	35.3	0.024	86.4	0.016
Lesotho	34.9	0.016	23.9	0.016	93.8	0.017
Equatorial Guinea	32.6	0.015	24.3	0.017	8.2	0.001
Gambia, The	31.1	0.015	22.9	0.016	29.2	0.005
Belize	18.8	0.009	13.5	0.009	39.9	0.007
San Marino	17.0	0.008	10.0	0.007	90.8	0.017
Vanuatu	17.0	0.008	12.5	0.009	16.2	0.003
Djibouti	15.9	0.007	11.5	0.008	29.1	0.005
Eritrea	15.9	0.007	11.5	0.008	30.6	0.006
St. Lucia	15.3	0.007	11.0	0.008	33.3	0.006
Guinea-Bissau	14.2	0.007	10.5	0.007	9.9	0.002
Antigua and Barbuda	13.5	0.006	8.5	0.006	51.9	0.010
Grenada	11.7	0.006	8.5	0.006	16.6	0.003
Samoa	11.6	0.005	8.5	0.006	11.6	0.002
Solomon Islands	10.4	0.005	7.5	0.005	19.9	0.004
Cape Verde	9.6	0.005	7.0	0.005	15.5	0.003
Comoros	8.9	0.004	6.5	0.004	10.4	0.002
St. Kitts and Nevis	8.9	0.004	6.5	0.004	12.8	0.002
Seychelles	8.8	0.004	6.0	0.004	24.6	0.005
St. Vincent and the Grenadines	8.3	0.004	6.0	0.004	16.2	0.003
Dominica	8.2	0.004	6.0	0.004	11.2	0.002

Table I.1. Eleventh Review Quotas

Regression Variable Name	Actual (Proposed) Quotas		Then- Existing Quotas		Calculated Quotas Based on Existing 5-Formula System	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Q		QL		QC	
Maldives	8.2	0.004	5.5	0.004	23.9	0.004
Sao Tome and Principe	7.4	0.003	5.5	0.004	3.2	0.001
Tonga	6.9	0.003	5.0	0.003	10.0	0.002
Bhutan	6.3	0.003	4.5	0.003	14.4	0.003
Kiribati	5.6	0.003	4.0	0.003	13.6	0.002
Micronesia, Fed. States of	5.1	0.002	3.5	0.002	13.1	0.002
Marshall Islands	3.5	0.002	2.5	0.002	7.8	0.001
Palau, Republic of	3.1	0.001	2.3	0.002	5.7	0.001
Total	212,029.0	100.0	146,226.1	100.0	545,459.1	100.0
By WEO Classification						
Advanced Economies	133,990.9	63.2	90,248.6	61.7	411,706.7	75.5
Major Industrial Countries	98,372.0	46.4	66,750.0	45.6	297,186.9	54.5
Other Advanced Economies	35,618.9	16.8	23,498.6	16.1	114,519.8	21.0
Developing Countries	61,922.5	29.2	44,340.2	30.3	104,840.4	19.2
Net Creditors	10,775.0	5.1	7,795.4	5.3	15,785.9	2.9
Net Debtors	51,147.5	24.1	36,544.8	25.0	89,054.5	16.3
of which HIPC or least developed countries	7,567.4	3.6	5,555.7	3.8	7,210.5	1.3
Transition Economies	16,115.6	7.6	11,637.3	8.0	28,912.1	5.3
Total	212,029.0	100.0	146,226.1	100.0	545,459.1	100.0

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
United States	4,844,380.8	27.089	4,649,857.6	21.261	4,508,151.1	25.778
Japan	3,275,179.3	18.314	1,807,018.3	8.262	2,730,703.6	15.614
Germany	1,429,097.5	7.991	1,067,722.7	4.882	1,311,822.4	7.501
France	929,655.0	5.198	803,080.6	3.672	904,473.6	5.172
United Kingdom	715,191.1	3.999	754,269.4	3.449	720,529.1	4.120
Italy	709,828.2	3.969	740,475.3	3.386	785,670.8	4.493
Saudi Arabia	83,933.0	0.469	142,901.3	0.653	83,941.9	0.480
Canada	382,194.1	2.137	424,877.1	1.943	411,966.6	2.356
Russia	194,803.3	1.089	482,218.4	2.205	333,739.6	1.908
Netherlands	233,497.0	1.306	202,492.2	0.926	221,257.9	1.265
China	377,831.1	2.113	2,159,738.0	9.875	343,617.0	1.965
Belgium	160,295.5	0.896	132,381.2	0.605	153,850.8	0.880
India	204,306.9	1.142	876,514.5	4.008	210,827.9	1.206
Switzerland	182,431.6	1.020	113,113.5	0.517	172,676.3	0.987
Australia	226,698.5	1.268	239,522.8	1.095	223,896.1	1.280
Spain	337,346.1	1.886	372,321.4	1.702	367,960.6	2.104
Brazil	394,324.3	2.205	673,390.6	3.079	322,697.2	1.845
Venezuela	40,600.9	0.227	127,938.5	0.585	40,320.8	0.231
Mexico	293,897.8	1.643	535,174.9	2.447	252,858.4	1.446
Sweden	138,599.3	0.775	112,212.3	0.513	158,341.8	0.905
Argentina	196,916.0	1.101	170,886.0	0.781	150,996.8	0.863
Indonesia	123,553.8	0.691	502,201.2	2.296	102,701.5	0.587
Austria	138,382.5	0.774	108,813.7	0.498	127,999.5	0.732
South Africa	84,921.0	0.475	115,277.4	0.527	82,872.9	0.474
Nigeria	29,034.2	0.162	99,719.1	0.456	28,846.0	0.165
Norway	85,860.4	0.480	61,958.4	0.283	85,972.4	0.492
Denmark	101,646.3	0.568	71,549.7	0.327	101,241.7	0.579
Korea	265,993.0	1.487	333,588.6	1.525	224,995.7	1.287
Iran	74,231.6	0.415	214,075.2	0.979	352,644.3	2.016
Malaysia	50,648.5	0.283	129,865.9	0.594	40,944.0	0.234
Kuwait	17,363.5	0.097	31,968.3	0.146	14,058.5	0.080
Ukraine	25,672.1	0.144	117,279.8	0.536	133,060.6	0.761
Poland	64,676.6	0.362	170,381.6	0.779	57,104.8	0.327
Finland	68,185.3	0.381	58,517.9	0.268	79,845.3	0.457
Algeria	29,314.7	0.164	105,916.2	0.484	35,610.9	0.204

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
Iraq	24,332.8	0.136	n.a.	n.a.	122,874.0 ^{2/}	0.703
Libya	26,773.5	0.150	37,041.9	0.169	24,200.4	0.138
Thailand	99,994.4	0.559	294,834.1	1.348	80,943.4	0.463
Hungary	28,990.8	0.162	43,508.8	0.199	26,376.1	0.151
Pakistan	35,938.8	0.201	196,322.3	0.898	33,020.3	0.189
Romania	21,002.8	0.117	53,109.6	0.243	20,612.0	0.118
Turkey	91,508.1	0.512	219,598.4	1.004	113,764.5	0.651
Egypt	36,108.6	0.202	162,779.9	0.744	34,208.5	0.196
Israel	51,771.9	0.289	60,153.8	0.275	45,601.2	0.261
New Zealand	35,565.0	0.199	39,237.7	0.179	31,562.3	0.180
Philippines	44,761.2	0.250	126,656.4	0.579	37,433.8	0.214
Portugal	61,013.2	0.341	74,908.8	0.343	59,364.1	0.339
Singapore	49,617.3	0.277	43,113.6	0.197	37,225.1	0.213
Chile	36,434.6	0.204	92,353.0	0.422	28,966.0	0.166
Ireland	36,399.2	0.204	35,454.7	0.162	34,771.0	0.199
Greece	68,394.6	0.382	62,440.5	0.285	66,235.1	0.379
Czech Republic	26,316.4	0.147	60,559.8	0.277	26,999.7	0.154
Colombia	47,937.0	0.268	153,542.8	0.702	35,106.3	0.201
Bulgaria	6,781.0	0.038	31,524.9	0.144	8,300.3	0.047
Peru	35,083.3	0.196	63,540.8	0.291	30,083.4	0.172
United Arab Emirates	25,611.8	0.143	32,671.0	0.149	25,158.0	0.144
Morocco	21,199.9	0.119	68,222.8	0.312	20,015.5	0.114
Bangladesh	17,897.2	0.100	116,829.1	0.534	16,794.5	0.096
Congo, Dem. Republic of	4,071.0	0.023	8,376.7	0.038	6,214.5	0.036
Zambia	2,212.4	0.012	5,138.8	0.023	2,451.5	0.014
FRY (Serbia/Montenegro)	10,458.9	0.058	n.a.	n.a.	71,750.7	0.410
Sri Lanka ^{3/}	8,186.1	0.046	40,729.0	0.186	6,995.4	0.040
Belarus	3,393.7	0.019	40,093.0	0.183	19,481.5	0.111
Ghana	3,614.1	0.020	23,947.8	0.109	4,326.9	0.025
Kazakstan	8,323.2	0.047	39,989.9	0.183	9,928.8	0.057
Croatia	9,936.2	0.056	17,499.5	0.080	21,230.5	0.121
Slovak Republic	9,618.9	0.054	23,547.2	0.108	16,460.0	0.094
Zimbabwe	4,063.7	0.023	12,177.2	0.056	5,331.8	0.030
Trinidad and Tobago	3,368.2	0.019	7,942.9	0.036	3,642.1	0.021
Vietnam	10,848.3	0.061	8,617.0	0.039	7,479.8	0.043

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
Cote d'Ivoire	5,203.5	0.029	28,050.1	0.128	7,270.2	0.042
Sudan	5,706.9	0.032	28,050.1	0.128	9,762.1	0.056
Uruguay	11,350.3	0.063	18,958.6	0.087	8,641.2	0.049
Ecuador	11,598.5	0.065	37,717.0	0.172	9,459.0	0.054
Syrian Arab Republic	31,258.3	0.175	56,650.4	0.259	23,860.7	0.136
Tunisia	10,914.6	0.061	34,218.6	0.156	10,193.9	0.058
Angola	2,998.2	0.017	10,409.0	0.048	8,050.5	0.046
Luxembourg	11,436.4	0.064	9,467.8	0.043	9,071.2	0.052
Uzbekistan	3,975.0	0.022	37,434.7	0.171	15,918.3	0.091
Jamaica	2,964.0	0.017	6,406.7	0.029	2,757.0	0.016
Kenya	4,993.6	0.028	26,016.4	0.119	5,424.1	0.031
Qatar	5,150.8	0.029	5,373.2	0.025	5,232.3	0.030
Myanmar	55,267.5	0.309	21,028.5	0.096	25,005.6	0.143
Yemen, Republic of	15,754.8	0.088	17,851.6	0.082	11,245.4	0.064
Slovenia	10,009.1	0.056	16,157.8	0.074	34,531.1	0.197
Dominican Republic	7,229.1	0.040	20,205.8	0.092	6,241.7	0.036
Brunei Darussalam	3,057.6	0.017	n.a.	n.a.	2,857.1	0.016
Guatemala	9,068.4	0.051	26,122.6	0.119	7,431.9	0.042
Panama	5,401.9	0.030	11,735.4	0.054	4,699.6	0.027
Lebanon	6,362.9	0.036	6,314.5	0.029	4,208.6	0.024
Tanzania	3,150.7	0.018	12,500.7	0.057	3,245.8	0.019
Oman	9,023.4	0.050	13,446.9	0.061	8,573.3	0.049
Cameroon	4,308.3	0.024	20,348.2	0.093	7,668.6	0.044
Uganda	3,688.1	0.021	15,880.2	0.073	2,675.2	0.015
Bolivia	4,172.7	0.023	12,019.3	0.055	3,957.0	0.023
El Salvador	5,661.3	0.032	10,650.4	0.049	4,534.3	0.026
Jordan	4,199.5	0.023	14,796.2	0.068	3,564.4	0.020
Bosnia-Herzegovina	1,487.1	0.008	n.a.	n.a.	1,487.1 ^{2/}	0.009
Costa Rica	5,806.8	0.032	14,230.8	0.065	4,861.4	0.028
Afghanistan, Islamic State of	1,651.0	0.009	11,754.3	0.054	53,562.8	0.306
Senegal	2,702.0	0.015	9,996.0	0.046	3,816.9	0.022
Azerbaijan	1,287.4	0.007	8,054.6	0.037	6,382.6	0.036
Gabon	2,927.1	0.016	2,803.8	0.013	3,743.4	0.021
Georgia	870.4	0.005	5,763.4	0.026	7,917.9	0.045
Lithuania	3,877.9	0.022	7,365.8	0.034	8,043.4	0.046

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
Cyprus	5,178.2	0.029	6,203.3	0.028	4,623.6	0.026
Namibia	2,044.5	0.011	2,049.0	0.009	1,972.6	0.011
Bahrain	3,394.6	0.019	5,335.8	0.024	3,410.8	0.020
Ethiopia	3,624.0	0.020	15,917.5	0.073	5,095.5	0.029
Papua New Guinea	3,736.8	0.021	6,958.2	0.032	3,122.6	0.018
Bahamas, The	2,392.3	0.013	2,945.2	0.013	2,112.3	0.012
Nicaragua	1,293.0	0.007	6,458.6	0.030	2,690.5	0.015
Honduras	2,397.4	0.013	8,088.6	0.037	2,365.2	0.014
Liberia	528.3	0.003	1,626.0	0.007	1,254.1	0.007
Latvia	2,547.7	0.014	8,850.9	0.040	6,031.5	0.034
Moldova	987.1	0.006	5,884.0	0.027	5,862.0	0.034
Madagascar	2,079.3	0.012	6,607.5	0.030	2,170.4	0.012
Iceland	4,344.6	0.024	3,480.9	0.016	4,627.1	0.026
Mozambique	1,000.8	0.006	8,172.8	0.037	1,000.8 ^{3/}	0.006
Guinea	2,371.2	0.013	3,069.0	0.014	2,296.8	0.013
Sierra Leone	647.2	0.004	1,998.3	0.009	529.2	0.003
Malta	1,883.5	0.011	3,302.9	0.015	1,827.6	0.010
Mauritius	2,447.0	0.014	10,387.9	0.047	2,205.7	0.013
Paraguay	5,466.4	0.031	12,474.2	0.057	4,682.8	0.027
Mali	1,212.5	0.007	3,546.9	0.016	1,710.5	0.010
Suriname	272.3	0.002	1,757.5	0.008	1,905.9	0.011
Armenia	453.6	0.003	5,399.0	0.025	453.6 ^{3/}	0.003
Guyana	377.8	0.002	1,301.9	0.006	305.4	0.002
Kyrgyz Republic	778.3	0.004	6,116.7	0.028	4,088.4	0.023
Cambodia	1,682.5	0.009	2,849.4	0.013	1,252.6	0.007
Tajikistan,	357.7	0.002	4,785.3	0.022	2,498.0	0.014
Congo, Republic of	1,235.8	0.007	4,617.6	0.021	1,858.7	0.011
Haiti	1,286.1	0.007	4,949.8	0.023	1,677.4	0.010
Somalia	343.4	0.002	5,480.1	0.025	826.1	0.005
Rwanda	524.2	0.003	1,878.2	0.009	1,335.5	0.008
Burundi	746.5	0.004	2,800.9	0.013	783.6	0.004
Turkmenistan	5,130.0	0.029	6,751.7	0.031	3,864.7	0.022
Togo	672.8	0.004	3,343.6	0.015	999.6	0.006
Nepal	2,816.9	0.016	17,574.0	0.080	2,557.2	0.015
Fiji	1,265.2	0.007	3,298.6	0.015	1,115.2	0.006

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
Malawi	896.2	0.005	4,753.5	0.022	1,309.7	0.007
Macedonia, FYR	1,998.8	0.011	3,300.3	0.015	30,771.7	0.176
Barbados	1,207.9	0.007	1,615.2	0.007	1,206.6	0.007
Niger	1,091.7	0.006	4,659.1	0.021	1,565.3	0.009
Estonia	1,613.3	0.009	6,705.6	0.031	1,120.9	0.006
Mauritania	706.1	0.004	2,481.1	0.011	748.6	0.004
Botswana	2,891.8	0.016	5,638.2	0.025	2,739.9	0.016
Benin	1,063.8	0.006	6,119.6	0.028	1,362.8	0.008
Burkina Faso	1,295.0	0.007	5,284.7	0.024	1,901.5	0.011
Chad	579.8	0.003	3,126.6	0.014	825.3	0.005
Central African Republic	597.4	0.003	2,295.0	0.010	916.3	0.005
Lao, People's Dem. Republic	1,077.4	0.006	7,248.6	0.033	851.2	0.005
Mongolia	479.4	0.003	1,846.8	0.008	955.1	0.005
Swaziland	741.7	0.004	2,583.7	0.012	682.6	0.004
Albania	1,376.2	0.008	1,187.2	0.005	1,030.3	0.006
Lesotho	543.7	0.003	2,361.8	0.011	531.4	0.003
Equatorial Guinea	83.8	0.000	130.9	0.001	103.5	0.001
Gambia, The	210.5	0.001	23,947.8	0.109	216.6	0.001
Belize	385.1	0.002	354.6	0.002	344.9	0.002
San Marino	424.1	0.002	n.a.	n.a.	401.3	0.002
Vanuatu	149.8	0.001	242.2	0.001	134.1	0.001
Djibouti	340.4	0.002	432.0	0.002	330.5	0.002
Eritrea	382.7	0.002	n.a.	n.a.	408.7	0.002
St. Lucia	355.8	0.002	354.0	0.002	340.3	0.002
Guinea-Bissau	164.6	0.001	538.0	0.002	724.2	0.004
Antigua and Barbuda	347.9	0.002	333.6	0.002	313.1	0.002
Grenada	181.7	0.001	293.5	0.001	176.0	0.001
Samoa	95.9	0.001	225.5	0.001	115.1	0.001
Solomon Islands	206.4	0.001	558.4	0.003	160.6	0.001
Cape Verde	242.6	0.001	401.9	0.002	242.3	0.001
Comoros	129.7	0.001	443.6	0.002	174.4	0.001
St. Kitts and Nevis	155.8	0.001	139.5	0.001	132.7	0.001
Seychelles	340.6	0.002	304.9	0.001	305.3	0.002
St. Vincent and the Grenadines	166.9	0.001	164.4	0.001	161.0	0.001
Dominica	151.2	0.001	138.3	0.001	136.9	0.001

Table I.2. Measures of Output

Regression Variable Name	GDP at Market Exchange Rates (1994)		PPP-based GDP ^{1/} (1994)		Five-year Average of GDP (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	Y		PPP		YAVG	
Maldives	168.2	0.001	156.7	0.001	135.3	0.001
Sao Tomé and Príncipe	34.6	0.000	44.0	0.000	37.0	0.000
Tonga	113.6	0.001	96.9	0.000	104.5	0.001
Bhutan	181.5	0.001	395.7	0.002	183.8	0.001
Kiribati	28.1	0.000	26.6	0.000	24.8	0.000
Micronesia, Fed. States of	143.5	0.001	n.a.	n.a.	127.4	0.001
Marshall Islands	65.0	0.000	n.a.	n.a.	67.8 ^{4/}	0.000
Palau, Republic of	62.1	0.000	n.a.	n.a.	46.7	0.000
Total	17,883,525	100	21,870,655	100	17,488,284	100
By WEO Classification						
Advanced Economies	14,543,427.8	81.3	12,382,030.6	56.6	13,580,213.7	77.7
Major Industrial Countries	12,285,526.1	68.7	10,247,301.0	46.9	11,373,317.1	65.0
Other Advanced Economies	2,257,901.6	12.6	2,134,729.6	9.8	2,206,896.6	12.6
Developing Countries	2,892,895.0	16.2	8,283,308.0	37.9	3,032,069.3	17.3
Net Creditors	170,913.7	1.0	263,402.6	1.2	164,021.3	0.9
Net Debtors	2,721,981.2	15.2	8,019,905.3	36.7	2,868,048.0	16.4
of which HIPC or least developing countries	185,859.0	1.0	548,606.5	2.5	224,994.4	1.3
Transition Economies	447,202.8	2.5	1,205,316.3	5.5	876,001.1	5.0
Total	17,883,526	100	21,870,655	100.0	17,488,284	100

1/ Source: IMF World Economic Outlook data base.

2/ Average of 1990-93 GDP.

3/ 1994 GDP.

4/ 1995 data.

Table L3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YMSX		YATL		POP	
United States	4,874,255.0	26.658	4,772,390.9	26.683	257.6	4.689
Japan	3,042,381.4	16.639	3,084,996.2	17.249	124.5	2.267
Germany	1,469,926.0	8.039	1,449,192.6	8.103	81.2	1.478
France	964,103.6	5.273	948,156.7	5.301	57.7	1.050
United Kingdom	765,511.9	4.187	748,537.4	4.185	57.9	1.054
Italy	779,541.2	4.263	764,268.4	4.273	57.1	1.039
Saudi Arabia	88,742.8	0.485	90,337.4	0.505	17.1	0.312
Canada	410,479.7	2.245	401,220.4	2.243	28.8	0.523
Russia	194,803.3 ^{2/}	1.065	239,491.2	1.339	148.7	2.707
Netherlands	240,895.9	1.317	240,946.8	1.347	15.3	0.279
China	454,418.6	2.485	449,923.4	2.516	1,196.4	21.779
Belgium	167,039.8	0.914	165,258.1	0.924	10.1	0.183
India	241,022.8	1.318	187,802.8	1.050	901.5	16.410
Switzerland	185,000.2	1.012	185,613.7	1.038	6.9	0.126
Australia	240,425.0	1.315	226,859.3	1.268	17.7	0.321
Spain	374,177.0	2.046	365,407.3	2.043	39.1	0.712
Brazil	394,324.3 ^{2/}	2.157	335,508.8	1.876	159.2	2.898
Venezuela	53,724.7	0.294	41,089.8	0.230	20.7	0.377
Mexico	263,262.0	1.440	287,195.9	1.606	91.2	1.660
Sweden	155,749.6	0.852	146,320.7	0.818	8.8	0.159
Argentina	185,772.1	1.016	194,728.9	1.089	33.8	0.615
Indonesia	121,092.3	0.662	117,864.1	0.659	189.1	3.443
Austria	140,514.1	0.768	138,618.9	0.775	8.0	0.145
South Africa	79,111.1	0.433	87,175.9	0.487	39.7	0.722
Nigeria	54,054.3	0.296	16,575.4	0.093	105.3	1.916
Norway	92,815.2	0.508	90,309.6	0.505	4.3	0.078
Denmark	110,181.3	0.603	106,866.5	0.598	5.2	0.094
Korea	282,571.7	1.545	262,494.5	1.468	44.1	0.802
Iran	74,231.6 ^{2/}	0.406	74,231.6 ^{2/}	0.415	64.2	1.168
Malaysia	51,664.0	0.283	48,487.1	0.271	19.3	0.350
Kuwait	17,716.3	0.097	21,569.2	0.121	1.4	0.026
Ukraine	25,672.1 ^{2/}	0.140	47,583.7	0.266	52.2	0.951
Poland	79,325.8	0.434	65,417.2	0.366	38.5	0.700
Finland	77,819.5	0.426	67,829.2	0.379	5.1	0.092
Algeria	35,913.7	0.196	31,926.3	0.179	26.7	0.486

Table L3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YM5X		YATL		POP	
Iraq	24,332.8 ^{2/}	0.133	24,332.8 ^{2/}	0.136	19.5	0.354
Libya	27,308.5	0.149	26,773.5 ^{2/}	0.150	4.7	0.086
Thailand	99,343.7	0.543	97,585.1	0.546	58.6	1.066
Hungary	29,318.2	0.160	27,830.6	0.156	10.3	0.187
Pakistan	37,419.4	0.205	38,202.9	0.214	122.8	2.235
Romania	21,002.8 ^{2/}	0.115	19,689.3	0.110	22.8	0.415
Turkey	91,508.1 ^{2/}	0.500	110,359.9	0.617	60.2	1.096
Egypt	39,688.9	0.217	34,397.4	0.192	56.5	1.028
Israel	55,054.4	0.301	52,154.2	0.292	5.3	0.096
New Zealand	36,302.1	0.199	32,214.9	0.180	3.5	0.063
Philippines	44,756.9	0.245	43,853.2	0.245	65.7	1.195
Portugal	66,305.2	0.363	64,469.0	0.360	9.9	0.179
Singapore	48,209.4	0.264	47,645.0	0.266	2.9	0.052
Chile	38,301.6	0.209	32,950.7	0.184	13.8	0.251
Ireland	41,163.5	0.225	34,775.6	0.194	3.6	0.065
Greece	74,508.5	0.407	71,454.7	0.400	10.4	0.188
Czech Republic	32,898.4	0.180	23,826.1	0.133	10.3	0.188
Colombia	47,049.6	0.257	42,730.2	0.239	34.0	0.618
Bulgaria	6,781.0 ^{2/}	0.037	7,357.8	0.041	9.1	0.166
Peru	35,083.3 ^{2/}	0.192	34,274.1	0.192	22.5	0.409
United Arab Emirates	27,029.6	0.148	27,837.8	0.156	2.1	0.038
Morocco	21,601.5	0.118	21,277.0	0.119	26.1	0.475
Bangladesh	18,697.1	0.102	25,514.4	0.143	115.2	2.097
Congo, Dem. Republic of	4,071.0 ^{2/}	0.022	4,891.8	0.027	41.2	0.751
Zambia	2,212.4 ^{2/}	0.012	2,193.2	0.012	8.9	0.163
FRY (Serbia/Montenegro)	10,458.9 ^{2/}	0.057	10,458.9 ^{2/}	0.058	10.5	0.191
Sri Lanka	8,245.7	0.045	7,991.6	0.045	17.6	0.321
Belarus	3,393.7 ^{2/}	0.019	16,082.2	0.090	10.3	0.188
Ghana	4,573.7	0.025	4,329.1	0.024	16.5	0.299
Kazakstan	8,323.2 ^{2/}	0.046	15,331.0	0.086	16.9	0.308
Croatia	9,936.2 ^{2/}	0.054	8,708.1	0.049	4.8	0.088
Slovak Republic	9,618.9 ^{2/}	0.053	9,125.2	0.051	5.3	0.097
Zimbabwe	5,400.8	0.030	4,895.9	0.027	10.7	0.196
Trinidad and Tobago	3,710.8	0.020	3,415.5	0.019	1.3	0.023
Vietnam	12,032.4	0.066	9,811.7	0.055	70.8	1.289

Table I.3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YMSX		YATL		POP	
Cote d'Ivoire	7,139.9	0.039	6,193.7	0.035	13.3	0.242
Sudan	5,706.9 ^{2/}	0.031	5,007.4	0.028	28.1	0.512
Uruguay	12,597.6	0.069	10,335.2	0.058	3.2	0.057
Ecuador	12,124.6	0.066	10,004.5	0.056	11.0	0.200
Syrian Arab Republic	31,764.4	0.174	10,101.5	0.056	13.3	0.242
Tunisia	11,521.6	0.063	10,741.1	0.060	8.6	0.156
Angola	2,998.2 ^{2/}	0.016	1,640.2	0.009	10.3	0.187
Luxembourg	10,460.0	0.057	11,083.3	0.062	0.4	0.007
Uzbekistan	3,975.0 ^{2/}	0.022	14,734.7	0.082	21.5	0.392
Jamaica	3,837.3	0.021	2,548.4	0.014	2.4	0.044
Kenya	5,973.8	0.033	4,735.0	0.026	28.1	0.512
Qatar	5,537.3	0.030	5,251.3	0.029	0.6	0.010
Myanmar	57,653.4	0.315	55,267.5 ^{2/}	0.309	44.6	0.812
Yemen, Republic of	12,726.6	0.070	3,039.0	0.017	12.3	0.224
Slovenia	10,009.1 ^{2/}	0.055	10,082.6	0.056	2.0	0.036
Dominican Republic	7,709.8	0.042	6,988.0	0.039	7.6	0.139
Brunei Darussalam	3,180.2	0.017	3,057.6 ^{2/}	0.017	0.3	0.005
Guatemala	9,258.7	0.051	8,612.5	0.048	10.0	0.183
Panama	5,296.4	0.029	5,159.7	0.029	2.6	0.047
Lebanon	7,168.8	0.039	5,826.2	0.033	2.8	0.051
Tanzania	3,835.4	0.021	3,302.9	0.018	28.0	0.510
Oman	9,328.1	0.051	7,234.2	0.040	2.0	0.036
Cameroon	6,498.1	0.036	6,540.6	0.037	12.5	0.228
Uganda	3,640.6	0.020	2,530.7	0.014	19.9	0.363
Bolivia	4,494.4	0.025	4,206.8	0.024	8.1	0.147
El Salvador	5,809.9	0.032	5,297.9	0.030	5.5	0.100
Jordan	4,876.1	0.027	4,170.4	0.023	4.9	0.090
Bosnia-Herzegovina	1,487.1 ^{2/}	0.008	1,487.1 ^{2/}	0.008	4.5	0.081
Costa Rica	5,829.6	0.032	5,639.4	0.032	3.2	0.058
Afghanistan, Islamic State of	64,620.1	0.353	1,651.0 ^{2/}	0.009	17.7	0.322
Senegal	3,455.1	0.019	2,704.7	0.015	7.9	0.144
Azerbaijan	1,287.4 ^{2/}	0.007	2,745.5	0.015	7.3	0.133
Gabon	3,716.1	0.020	3,034.0	0.017	1.1	0.019
Georgia	870.4 ^{2/}	0.005	1,999.1	0.011	5.4	0.098
Lithuania	3,877.9 ^{2/}	0.021	4,615.6	0.026	3.8	0.069

Table I.3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YMSX		YATL		POP	
Cyprus	5,344.2	0.029	5,204.4	0.029	0.7	0.013
Namibia	2,144.2	0.012	2,230.1	0.012	1.5	0.027
Bahrain	3,860.5	0.021	3,201.5	0.018	0.5	0.010
Ethiopia	4,685.7	0.026	4,110.5	0.023	56.9	1.036
Papua New Guinea	3,470.2	0.019	3,624.2	0.020	3.9	0.071
Bahamas, The	2,080.4	0.011	2,242.7	0.013	0.3	0.005
Nicaragua	1,293.0 ^{2/}	0.007	960.7	0.005	4.3	0.078
Honduras	2,691.5	0.015	2,485.1	0.014	5.6	0.102
Liberia	1,487.4	0.008	528.3 ^{2/}	0.003	2.6	0.048
Latvia	2,547.7 ^{2/}	0.014	3,936.4	0.022	2.7	0.049
Moldova	987.1 ^{2/}	0.005	1,790.6	0.010	4.4	0.080
Madagascar	2,452.9	0.013	2,150.8	0.012	13.9	0.252
Iceland	4,695.2	0.026	4,594.9	0.026	0.3	0.005
Mozambique	1,000.8 ^{2/}	0.005	1,184.9	0.007	17.2	0.312
Guinea	2,782.7	0.015	2,493.8	0.014	6.3	0.115
Sierra Leone	689.4	0.004	513.6	0.003	4.3	0.078
Malta	2,031.4	0.011	2,003.3	0.011	0.4	0.007
Mauritius	2,518.0	0.014	2,474.9	0.014	1.1	0.020
Paraguay	5,637.0	0.031	5,102.1	0.029	4.6	0.084
Mali	1,671.8	0.009	1,673.5	0.009	10.1	0.184
Suriname	272.3 ^{2/}	0.001	226.8	0.001	0.4	0.007
Armenia	453.6 ^{2/}	0.002	1,188.1	0.007	3.7	0.067
Guyana	411.5	0.002	300.3	0.002	0.8	0.015
Kyrgyz Republic	778.3 ^{2/}	0.004	1,743.6	0.010	4.5	0.083
Cambodia	1,682.5 ^{2/}	0.009	1,653.8	0.009	9.3	0.169
Tajikistan	357.7 ^{2/}	0.002	1,521.9	0.009	5.7	0.104
Congo, Republic of	1,681.7	0.009	1,268.4	0.007	2.4	0.044
Haiti	1,740.7	0.010	1,293.8	0.007	6.9	0.126
Somalia	1,054.7	0.006	343.4 ^{2/}	0.002	9.0	0.163
Rwanda	1,114.3	0.006	634.6	0.004	7.6	0.137
Burundi	742.3	0.004	680.6	0.004	6.0	0.108
Turkmenistan	5,130.0 ^{2/}	0.028	3,273.0	0.018	3.9	0.071
Togo	947.1	0.005	885.3	0.005	3.9	0.071
Nepal	2,845.5	0.016	2,912.3	0.016	20.8	0.379
Fiji	1,271.5	0.007	1,228.5	0.007	0.8	0.014

Table I.3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YM5X		YATL		POP	
Malawi	1,465.3	0.008	1,064.9	0.006	9.1	0.166
Macedonia, FYR	1,998.8 ^{2/}	0.011	1,307.9	0.007	2.1	0.039
Barbados	1,242.6	0.007	1,190.7	0.007	0.3	0.005
Niger	1,284.7	0.007	1,289.9	0.007	8.4	0.152
Estonia	1,613.3 ^{2/}	0.009	2,806.1	0.016	1.5	0.028
Mauritania	742.6	0.004	748.0	0.004	2.2	0.039
Botswana	2,924.9	0.016	2,906.7	0.016	1.4	0.026
Benin	1,420.4	0.008	1,251.3	0.007	5.2	0.095
Burkina Faso	1,803.0	0.010	1,416.6	0.008	9.7	0.176
Chad	757.3	0.004	1,057.2	0.006	6.1	0.111
Central African Republic	806.8	0.004	819.4	0.005	3.2	0.058
Lao, People's Dem. Republic	1,022.5	0.006	1,028.0	0.006	4.5	0.082
Mongolia	479.4 ^{2/}	0.003	479.4 ^{2/}	0.003	2.3	0.042
Swaziland	773.2	0.004	742.8	0.004	0.8	0.015
Albania	1,376.2 ^{2/}	0.008	905.2	0.005	3.4	0.062
Lesotho	612.1	0.003	842.1	0.005	1.9	0.035
Equatorial Guinea	120.3	0.001	99.4	0.001	0.4	0.007
Gambia, The	216.5	0.001	259.1	0.001	1.0	0.019
Belize	387.3	0.002	370.3	0.002	0.2	0.004
San Marino	424.1 ^{2/}	0.002	424.1 ^{2/}	0.002	0.0	0.000
Vanuatu	151.7	0.001	126.1	0.001	0.2	0.003
Djibouti	338.1	0.002	340.4 ^{2/}	0.002	0.6	0.010
Eritrea	563.6	0.003	448.2	0.003	3.0	0.055
St. Lucia	368.9	0.002	342.8	0.002	0.1	0.003
Guinea-Bissau	164.6 ^{2/}	0.001	162.8	0.001	1.0	0.019
Antigua and Barbuda	339.7	0.002	316.6	0.002	0.1	0.001
Grenada	182.4	0.001	179.8	0.001	0.1	0.002
Samoa	127.5	0.001	111.1	0.001	0.2	0.003
Solomon Islands	203.0	0.001	201.7	0.001	0.4	0.006
Cape Verde	258.1	0.001	256.6	0.001	0.4	0.007
Comoros	158.8	0.001	163.8	0.001	0.6	0.011
St. Kitts and Nevis	151.5	0.001	145.1	0.001	0.04	0.001
Seychelles	333.3	0.002	332.5	0.002	0.1	0.001
St. Vincent and the Grenadines	175.6	0.001	161.8	0.001	0.1	0.002
Dominica	149.9	0.001	141.2	0.001	0.1	0.001

Table I.3. Measures of Output and Population

Regression Variable Name	Five-year Average of GDP (using centered, five-year moving averages of annual exchange rates as conversion factors) (1990-94)		GNP Converted using the World Bank Atlas Method ^{1/} (1994)		Population (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of persons</i>	<i>In percent of total</i>
	YM5X		YATL		POP	
Maldives	170.2	0.001	152.4	0.001	0.2	0.004
Sao Tome and Principe	34.6 ^{2/}	0.000	31.3	0.000	0.1	0.002
Tonga	97.5	0.001	112.1	0.001	0.1	0.002
Bhutan	201.5	0.001	171.2	0.001	1.6	0.029
Kiribati	28.8	0.000	46.9	0.000	0.1	0.001
Micronesia, Fed. States of	138.7	0.001	141.2	0.001	0.5	0.008
Marshall Islands	67.7	0.000	65.0 ^{2/}	0.000	0.1	0.001
Palau, Republic of	57.8	0.000	62.1 ^{2/}	0.000	0.02 ^{3/}	0.000
Total	18,284,637.3	100.0	17,885,388.0	100.0	5,493.4	100.0
By WEO Classification						
Advanced Economies	14,710,510.6	80.5	14,484,103.2	81.0	865.2	15.7
Major Industrial Countries	12,306,198.9	67.3	12,168,762.8	68.0	664.7	12.1
Other Advanced Economies	2,404,311.6	13.1	2,315,340.5	12.9	200.5	3.6
Developing Countries	3,105,365.3	17.0	2,855,767.2	16.0	4,209.7	76.6
Net Creditors	178,842.9	1.0	182,061.1	1.0	28.2	0.5
Net Debtors	2,926,522.4	16.0	2,673,706.1	14.9	4,181.5	76.1
of which HIPC or least developed countries	266,317.5	1.5	184,180.5	1.0	729.6	13.3
Transition Economies	468,761.5	2.6	545,517.9	3.1	418.5	7.6
Total	18,284,637.4	100.0	17,885,388.3	100.0	5,493.4	100.0

1/ Source: 1999 World Bank Development Indicators data base.

2/ 1994 GDP.

3/ 1995 data.

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/}		Reserves with Gold Valued at Market Prices ^{2/}	
	(1994)		(1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
United States	54,138.1	7.045	115,122.9	11.773
Japan	80,136.1	10.428	85,780.5	8.773
Germany	60,449.6	7.866	82,623.6	8.450
France	20,170.4	2.625	39,239.6	4.013
United Kingdom	28,267.2	3.678	32,563.9	3.330
Italy	25,116.3	3.268	40,648.7	4.157
Saudi Arabia	5,040.7	0.656	6,111.5	0.625
Canada	9,128.1	1.188	10,271.0	1.050
Russia	3,903.6	0.508	5,974.5	0.611
Netherlands	24,627.0	3.205	32,727.8	3.347
China	26,166.1	3.405	29,124.8	2.979
Belgium	10,395.6	1.353	16,229.8	1.660
India	12,133.0	1.579	14,869.0	1.521
Switzerland	24,880.0	3.237	44,281.0	4.529
Australia	8,365.3	1.089	10,206.0	1.044
Spain	28,803.5	3.748	33,189.5	3.394
Brazil	27,137.4	3.531	27,934.1	2.857
Venezuela	5,471.5	0.712	8,141.4	0.833
Mexico	12,871.6	1.675	12,975.0	1.327
Sweden	15,226.8	1.981	16,640.6	1.702
Argentina	9,477.1	1.233	10,495.9	1.073
Indonesia	8,012.0	1.043	8,734.5	0.893
Austria	12,492.5	1.626	16,788.1	1.717
South Africa	773.9	0.101	1,756.5	0.180
Nigeria	682.4	0.089	842.5	0.086
Norway	13,847.6	1.802	14,123.4	1.444
Denmark	6,540.9	0.851	6,922.1	0.708
Korea	15,381.8	2.002	15,457.4	1.581
Iran	2,486.8	0.324	3,592.1	0.367
Malaysia	22,040.6	2.868	22,597.4	2.311
Kuwait	2,666.7	0.347	3,258.1	0.333
Ukraine	109.0	0.014	115.4	0.012
Poland	3,637.5	0.473	3,747.7	0.383
Finland	6,471.8	0.842	6,938.4	0.710
Algeria	1,635.8	0.213	2,937.7	0.300

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/}		Reserves with Gold Valued at Market Prices ^{2/}	
	(1994)		(1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
Iraq	660.0	0.086	660.0 ^{4/}	0.067
Libya	2,875.0	0.374	2,875.0 ^{4/}	0.294
Thailand	19,019.8	2.475	19,596.2	2.004
Hungary	4,675.1	0.608	4,645.8	0.475
Pakistan	1,603.8	0.209	2,081.0	0.213
Romania	1,124.5	0.146	1,712.2	0.175
Turkey	3,870.8	0.504	4,792.2	0.490
Egypt	9,312.3	1.212	9,878.9	1.010
Israel	4,367.6	0.568	4,369.6	0.447
New Zealand	2,719.1	0.354	2,719.1	0.278
Philippines	4,269.5	0.556	4,954.4	0.507
Portugal	11,408.3	1.484	15,150.8	1.549
Singapore	37,424.2	4.870	37,424.2	3.827
Chile	7,662.0	0.997	8,096.5	0.828
Ireland	4,380.5	0.570	4,464.4	0.457
Greece	7,227.9	0.941	8,030.4	0.821
Czech Republic	3,612.7	0.470	4,086.9	0.418
Colombia	5,348.6	0.696	5,414.7	0.554
Bulgaria	589.2	0.077	828.3	0.085
Peru	3,794.8	0.494	4,081.5	0.417
United Arab Emirates	4,612.0	0.600	4,797.3	0.491
Morocco	2,806.7	0.365	2,970.7	0.304
Bangladesh	1,985.1	0.258	2,006.9	0.205
Congo, Dem. Republic of	102.1	0.013	108.6	0.011
Zambia	152.0	0.020	182.5	0.019
FRY (Serbia/Montenegro)	209.5	0.027	209.5 ^{4/}	0.021
Sri Lanka	1,357.1	0.177	1,371.7	0.140
Belarus	58.0	0.008	69.2	0.007
Ghana	338.0	0.044	402.0	0.041
Kazakstan	476.7	0.062	645.4	0.066
Croatia	685.0	0.089	683.3	0.070
Slovak Republic	655.9	0.085	956.4	0.098
Zimbabwe	400.7	0.052	519.3	0.053
Trinidad and Tobago	110.4	0.014	122.9	0.013
Vietnam	560.2	0.073	384.0	0.039

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/}		Reserves with Gold Valued at Market Prices ^{2/}	
	(1994)		(1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
Cote d'Ivoire	20.9	0.003	31.3	0.003
Sudan	32.1	0.004	32.1	0.003
Uruguay	646.1	0.084	1,042.8	0.107
Ecuador	1,032.5	0.134	1,128.9	0.115
Syrian Arab Republic	811.6	0.106	1,005.7 ^{3/}	0.103
Tunisia	760.7	0.099	810.9	0.083
Angola	148.0	0.019	148.0 ^{4/}	0.015
Luxembourg	62.4	0.008	133.5	0.014
Uzbekistan	1,126.6	0.147	1,126.6 ^{4/}	0.115
Jamaica	387.5	0.050	387.5	0.040
Kenya	453.7	0.059	472.3	0.048
Qatar	502.5	0.065	695.2	0.071
Myanmar	259.3	0.034	317.8	0.033
Yemen, Republic of	152.9	0.020	164.6	0.017
Slovenia	522.2	0.068	754.1	0.077
Dominican Republic	249.6	0.032	253.8	0.026
Brunei Darussalam	292.1	0.038	292.1 ^{4/}	0.030
Guatemala	610.7	0.079	659.5	0.067
Panama	453.2	0.059	453.2	0.046
Lebanon	2,774.9	0.361	4,923.4	0.504
Tanzania	209.9	0.027	209.9	0.021
Oman	711.4	0.093	778.7	0.080
Cameroon	2.5	0.000	9.5	0.001
Uganda	168.8	0.022	168.8	0.017
Bolivia	262.3	0.034	470.5	0.048
El Salvador	431.5	0.056	540.8	0.055
Jordan	1,067.9	0.139	1,252.6	0.128
Bosnia-Herzegovina	58.9	0.008	58.9 ^{4/}	0.006
Costa Rica	640.5	0.083	648.5	0.066
Afghanistan, Islamic State of	112.0	0.015	0.8	0.000
Senegal	38.0	0.005	44.8	0.005
Azerbaijan	2.0	0.000	2.3	0.000
Gabon	83.6	0.011	86.6	0.009
Georgia	3.0	0.000	3.0 ^{4/}	0.000
Lithuania	310.3	0.040	356.2	0.036

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/}		Reserves with Gold Valued at Market Prices ^{2/}	
	(1994)		(1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
Cyprus	941.3	0.122	1,048.2	0.107
Namibia	137.9	0.018	96.0	0.010
Bahrain	860.1	0.112	895.0	0.092
Ethiopia	359.5	0.047	385.8	0.039
Papua New Guinea	73.0	0.009	87.7	0.009
Bahamas, The	152.6	0.020	152.6	0.016
Nicaragua	79.3	0.010	61.8	0.006
Honduras	177.5	0.023	56.6	0.006
Liberia	0.8	0.000	4.4	0.000
Latvia	349.6	0.045	389.6	0.040
Moldova	80.8	0.011	70.5	0.007
Madagascar	48.8	0.006	48.8	0.005
Iceland	288.4	0.038	299.8	0.031
Mozambique	142.9	0.019	108.3	0.011
Guinea	66.5	0.009	64.6	0.007
Sierra Leone	25.1	0.003	25.1	0.003
Malta	1,163.2	0.151	1,187.4	0.121
Mauritius	522.1	0.068	536.4	0.055
Paraguay	590.3	0.077	598.5	0.061
Mali	180.0	0.023	184.3	0.019
Suriname	19.8	0.003	32.4	0.003
Armenia	8.2	0.001	6.4	0.001
Guyana	175.4	0.023	164.7	0.017
Kyrgyz Republic	31.9	0.004	17.2	0.002
Cambodia	61.0	0.008	60.6	0.006
Tajikistan	0.0	0.000	0.0 ^{4/}	0.000
Congo, Republic of	13.4	0.002	16.0	0.002
Haiti	21.6	0.003	25.8	0.003
Somalia	13.9	0.002	13.9 ^{4/}	0.001
Rwanda	23.1	0.003	22.5	0.002
Burundi	125.1	0.016	129.1	0.013
Turkmenistan	576.9	0.075	576.9 ^{4/}	0.059
Togo	72.3	0.009	75.2	0.008
Nepal	482.7	0.063	518.3	0.053
Fiji	178.0	0.023	178.2	0.018

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/} (1994)		Reserves with Gold Valued at Market Prices ^{2/} (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
Malawi	27.7	0.004	30.7	0.003
Macedonia, FYR	92.9	0.012	98.7	0.010
Barbados	127.3	0.017	127.3	0.013
Niger	85.8	0.011	88.4	0.009
Estonia	288.9	0.038	290.7	0.030
Mauritania	30.3	0.004	32.7	0.003
Botswana	3,077.3	0.400	3,077.3	0.315
Benin	105.0	0.014	107.6	0.011
Burkina Faso	172.8	0.022	175.4	0.018
Chad	67.1	0.009	69.7	0.007
Central African Republic	126.4	0.016	129.0	0.013
Lao, People's Dem. Republic	44.9	0.006	44.9	0.005
Mongolia	56.0	0.007	59.8	0.006
Swaziland	191.7	0.025	191.7	0.020
Albania	120.2	0.016	131.7	0.013
Lesotho	224.9	0.029	224.9	0.023
Equatorial Guinea	0.2	0.000	0.2	0.000
Gambia, The	72.0	0.009	72.0	0.007
Belize	26.2	0.003	26.2	0.003
San Marino	120.8	0.016	120.8 ^{4/}	0.012
Vanuatu	32.6	0.004	32.6	0.003
Djibouti	53.7	0.007	53.7	0.005
Eritrea	108.2	0.014	108.2 ^{4/}	0.011
St. Lucia	38.8	0.005	38.8	0.004
Guinea-Bissau	4.7	0.001	12.8	0.001
Antigua and Barbuda	29.1	0.004	29.1	0.003
Grenada	20.3	0.003	20.3	0.002
Samoa	35.6	0.005	35.6	0.004
Solomon Islands	15.7	0.002	15.7	0.002
Cape Verde	35.8	0.005	35.8	0.004
Comoros	29.0	0.004	28.9	0.003
St. Kitts and Nevis	21.9	0.003	21.9	0.002
Seychelles	19.5	0.003	19.5	0.002
St. Vincent and the Grenadines	22.1	0.003	22.1	0.002
Dominica	11.1	0.001	11.1	0.001

Table I.4. Measures of Reserves

Regression Variable Name	Reserves ^{1/} (1994)		Reserves with Gold Valued at Market Prices ^{2/} (1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	R		RM	
Maldives	20.4	0.003	22.6	0.002
Sao Tome and Principe	5.3	0.001	5.3 ^{4/}	0.001
Tonga	23.1	0.003	23.1	0.002
Bhutan	74.3	0.010	74.3	0.008
Kiribati	190.3	0.025	190.3 ^{4/}	0.019
Micronesia, Fed. States of	35.1	0.005	35.1 ^{4/}	0.004
Marshall Islands	9.0	0.001	9.0 ^{4/}	0.001
Palau, Republic of	16.7	0.002	16.7 ^{4/}	0.002
Total	768,495.2	100.0	977,819.9	100.0
By WEO Classification				
Advanced Economies	512,437.7	66.681	692,466.9	70.8
Major Industrial Countries	277,405.8	36.097	406,250.2	41.5
Other Advanced Economies	235,031.9	30.583	286,216.7	29.3
Developing Countries	232,692.3	30.279	257,735.9	26.4
Net Creditors	16,700.4	2.173	18,807.9	1.9
Net Debtors	215,992.0	28.106	238,928.0	24.4
of which HIPC or least developed countries	11,598.6	1.509	11,680.6	1.2
Transition Economies	23,365.2	3.040	27,617.1	2.8
Total	768,495.2	100.0	977,820.0	100.0

1/ Source: International Financial Statistics; twelve-month average of gold (valued at SDR 35 per fine ounce) and foreign exchange reserves, including SDR holdings, reserve positions in the Fund, and ECUs for 1994.

2/ Source: International Financial Statistics; twelve-month average of gold (valued at market prices in 1994, with monthly prices ranging from SDR 261.02 per fine ounce to SDR 273.82 per fine ounce) and foreign exchange reserves, including SDR holdings, reserve position in the Fund and ECUs, for 1994.

3/ Reserves are calculated by subtracting gold reserves times \$35 and adding gold reserves times the average market price (in SDRs) for 1994 to the reserves data shown in the first column.

4/ Same as reserves shown in first column.

Table I.5. Current Account Data

Regression Variable Name	Current Receipts ^{1/} (1990-94)		Current Payments ^{2/} (1990-94)		Average of Current Receipts and Current Payments (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P		TRADE	
United States	537,492.8	14.672	583,039.9	15.757	560,266.3	15.217
Japan	341,088.9	9.311	268,259.3	7.250	304,674.1	8.275
Germany	398,394.9	10.875	383,642.1	10.368	391,018.5	10.620
France	250,108.9	6.827	245,578.1	6.637	247,843.5	6.732
United Kingdom	222,245.6	6.067	229,428.8	6.200	225,837.2	6.134
Italy	179,451.1	4.898	182,032.0	4.920	180,741.5	4.909
Saudi Arabia	40,129.2	1.095	49,287.9	1.332	44,708.5	1.214
Canada	124,213.5	3.391	138,012.6	3.730	131,113.0	3.561
Russia	54,084.1	1.476	50,121.5	1.355	52,102.8	1.415
Netherlands	134,236.8	3.664	123,819.9	3.346	129,028.4	3.504
China	62,088.9	1.695	58,254.6	1.574	60,171.8	1.634
Belgium	107,978.3	2.947	104,945.3	2.836	106,461.8	2.892
India	20,639.2	0.563	24,557.2	0.664	22,598.2	0.614
Switzerland	75,508.4	2.061	65,732.1	1.776	70,620.2	1.918
Australia	42,145.1	1.150	51,212.4	1.384	46,678.8	1.268
Spain	81,303.2	2.219	88,682.1	2.397	84,992.7	2.308
Brazil	31,262.4	0.853	31,332.6	0.847	31,297.5	0.850
Venezuela	13,882.7	0.379	12,855.1	0.347	13,368.9	0.363
Mexico	35,729.6	0.975	49,934.9	1.350	42,832.3	1.163
Sweden	54,392.1	1.485	56,492.7	1.527	55,442.4	1.506
Argentina	13,318.7	0.364	15,939.4	0.431	14,629.0	0.397
Indonesia	27,235.7	0.743	29,541.4	0.798	28,388.5	0.771
Austria	56,863.9	1.552	56,817.3	1.536	56,840.6	1.544
South Africa	20,647.6	0.564	19,611.3	0.530	20,129.4	0.547
Nigeria	9,157.4	0.250	8,552.8	0.231	8,855.1	0.241
Norway	36,394.0	0.993	32,974.0	0.891	34,684.0	0.942
Denmark	48,389.8	1.321	45,678.1	1.234	47,034.0	1.277
Korea	68,655.9	1.874	70,997.8	1.919	69,826.8	1.897
Iran	15,664.7	0.428	17,832.3	0.482	16,748.5	0.455
Malaysia	35,035.4	0.956	37,176.3	1.005	36,105.8	0.981
Kuwait	10,219.4	0.279	8,676.8	0.234	9,448.1	0.257
Ukraine	11,259.9	0.307	11,540.0	0.312	11,399.9	0.310
Poland	18,477.0	0.504	19,600.5	0.530	19,038.8	0.517
Finland	23,389.2	0.638	25,709.1	0.695	24,549.1	0.667
Algeria	9,263.0	0.253	8,649.2	0.234	8,956.1	0.243

Table I.5. Current Account Data

Regression Variable Name	Current Receipts ^{1/}		Current Payments ^{2/}		Average of Current Receipts and Current Payments	
	(1990-94)		(1990-94)		(1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P		TRADE	
Iraq	4,438.3	0.121	5,409.7	0.146	4,924.0	0.134
Libya	4,006.5	0.109	7,296.5	0.197	5,651.5	0.153
Thailand	32,147.2	0.878	37,319.7	1.009	34,733.4	0.943
Hungary	10,600.6	0.289	10,801.4	0.292	10,701.0	0.291
Pakistan	7,605.3	0.208	9,279.7	0.251	8,442.5	0.229
Romania	4,355.8	0.119	5,493.1	0.148	4,924.5	0.134
Turkey	20,494.3	0.559	22,321.7	0.603	21,408.0	0.581
Egypt	12,150.0	0.332	11,936.6	0.323	12,043.3	0.327
Israel	14,599.8	0.399	18,435.9	0.498	16,517.9	0.449
New Zealand	9,749.6	0.266	10,764.5	0.291	10,257.1	0.279
Philippines	13,057.2	0.356	14,685.4	0.397	13,871.3	0.377
Portugal	21,250.0	0.580	23,101.6	0.624	22,175.8	0.602
Singapore	50,173.9	1.370	45,785.4	1.237	47,979.7	1.303
Chile	8,982.1	0.245	9,740.3	0.263	9,361.2	0.254
Ireland	26,519.0	0.724	26,278.3	0.710	26,398.7	0.717
Greece	12,148.1	0.332	16,111.2	0.435	14,129.6	0.384
Czech Republic	9,825.3	0.268	9,771.9	0.264	9,798.6	0.266
Colombia	8,414.4	0.230	8,593.1	0.232	8,503.7	0.231
Bulgaria	3,993.2	0.109	4,681.6	0.127	4,337.4	0.118
Peru	3,708.5	0.101	5,209.0	0.141	4,458.8	0.121
United Arab Emirates	13,931.4	0.380	8,787.3	0.237	11,359.4	0.309
Morocco	6,696.6	0.183	7,143.5	0.193	6,920.0	0.188
Bangladesh	2,747.7	0.075	3,258.1	0.088	3,002.9	0.082
Congo, Dem. Republic of	1,248.9	0.034	1,803.3	0.049	1,526.1	0.041
Zambia	845.5	0.023	1,196.6	0.032	1,021.1	0.028
FRY (Serbia/Montenegro)	3,368.7	0.092	3,680.5	0.099	3,524.6	0.096
Sri Lanka	2,628.5	0.072	3,112.4	0.084	2,870.5	0.078
Belarus	3,231.4	0.088	3,167.5	0.086	3,199.4	0.087
Ghana	1,013.1	0.028	1,407.7	0.038	1,210.4	0.033
Kazakistan	4,668.2	0.127	6,264.3	0.169	5,466.3	0.148
Croatia	4,493.8	0.123	4,583.8	0.124	4,538.8	0.123
Slovak Republic	4,310.2	0.118	4,311.7	0.117	4,311.0	0.117
Zimbabwe	1,541.5	0.042	1,880.3	0.051	1,710.9	0.046
Trinidad and Tobago	1,605.1	0.044	1,414.3	0.038	1,509.7	0.041
Vietnam	2,421.2	0.066	2,722.6	0.074	2,571.9	0.070

Table L5. Current Account Data

Regression Variable Name	Current Receipts ^{1/}		Current Payments ^{2/}		Average of Current Receipts and Current Payments	
	(1990-94)		(1990-94)		(1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P	TRADE		
Cote d'Ivoire	2,509.9	0.069	3,320.4	0.090	2,915.1	0.079
Sudan	428.5	0.012	921.4	0.025	674.9	0.018
Uruguay	2,051.5	0.056	2,130.7	0.058	2,091.1	0.057
Ecuador	2,704.8	0.074	3,158.4	0.085	2,931.6	0.080
Syrian Arab Republic	3,867.6	0.106	3,794.4	0.103	3,831.0	0.104
Tunisia	4,658.9	0.127	5,305.7	0.143	4,982.3	0.135
Angola	2,625.7	0.072	3,093.5	0.084	2,859.6	0.078
Luxembourg	12,375.4	0.338	11,138.6	0.301	11,757.0	0.319
Uzbekistan	2,299.4	0.063	2,400.0	0.065	2,349.7	0.064
Jamaica	1,972.0	0.054	2,129.2	0.058	2,050.6	0.056
Kenya	1,802.7	0.049	2,034.7	0.055	1,918.7	0.052
Qatar	2,488.3	0.068	2,395.0	0.065	2,441.7	0.066
Myanmar	739.4	0.020	946.0	0.026	842.7	0.023
Yemen, Republic of	1,897.2	0.052	2,296.0	0.062	2,096.6	0.057
Slovenia	5,113.2	0.140	4,675.4	0.126	4,894.3	0.133
Dominican Republic	2,483.8	0.068	2,619.6	0.071	2,551.7	0.069
Brunei Darussalam	3,279.3	0.090	1,367.0	0.037	2,323.1	0.063
Guatemala	1,628.1	0.044	1,987.2	0.054	1,807.6	0.049
Panama	2,174.2	0.059	2,381.9	0.064	2,278.0	0.062
Lebanon	1,206.6	0.033	3,246.9	0.088	2,226.7	0.060
Tanzania	532.0	0.015	1,365.7	0.037	948.9	0.026
Oman	4,158.8	0.114	4,395.5	0.119	4,277.1	0.116
Cameroon	1,607.1	0.044	1,939.2	0.052	1,773.2	0.048
Uganda	292.6	0.008	608.0	0.016	450.3	0.012
Bolivia	715.3	0.020	1,095.5	0.030	905.4	0.025
El Salvador	1,253.5	0.034	1,485.8	0.040	1,369.6	0.037
Jordan	2,584.7	0.071	3,247.4	0.088	2,916.1	0.079
Bosnia-Herzegovina	2,255.5	0.062	2,212.0	0.060	2,233.8	0.061
Costa Rica	2,003.3	0.055	2,311.2	0.062	2,157.2	0.059
Afghanistan, Islamic State of	188.6	0.005	381.2	0.010	284.9	0.008
Senegal	1,082.0	0.030	1,440.4	0.039	1,261.2	0.034
Azerbaijan	1,265.5	0.035	1,189.4	0.032	1,227.5	0.033
Gabon	1,906.7	0.052	1,872.4	0.051	1,889.6	0.051
Georgia	481.6	0.013	749.0	0.020	615.3	0.017
Lithuania	1,695.1	0.046	1,590.5	0.043	1,642.8	0.045

Table L5. Current Account Data

Regression Variable Name	Current Receipts ^{1/}		Current Payments ^{2/}		Average of Current Receipts and Current Payments	
	(1990-94)		(1990-94)		(1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P		TRADE	
Cyprus	2,279.4	0.062	2,453.0	0.066	2,366.2	0.064
Namibia	1,474.5	0.040	1,395.8	0.038	1,435.2	0.039
Bahrain	2,809.0	0.077	3,898.4	0.105	3,353.7	0.091
Ethiopia	585.7	0.016	870.3	0.024	728.0	0.020
Papua New Guinea	1,685.2	0.046	1,698.4	0.046	1,691.8	0.046
Bahamas, The	1,272.3	0.035	1,357.9	0.037	1,315.1	0.036
Nicaragua	315.4	0.009	889.9	0.024	602.6	0.016
Honduras	884.6	0.024	1,150.6	0.031	1,017.6	0.028
Liberia	207.5	0.006	236.3	0.006	221.9	0.006
Latvia	1,266.3	0.035	1,230.3	0.033	1,248.3	0.034
Moldova	792.0	0.022	801.7	0.022	796.9	0.022
Madagascar	447.4	0.012	685.8	0.019	566.6	0.015
Iceland	1,581.7	0.043	1,658.5	0.045	1,620.1	0.044
Mozambique	259.5	0.007	874.3	0.024	566.9	0.015
Guinea	591.8	0.016	840.0	0.023	715.9	0.019
Sierra Leone	150.6	0.004	191.0	0.005	170.8	0.005
Malta	1,879.6	0.051	1,940.4	0.052	1,910.0	0.052
Mauritius	1,459.8	0.040	1,531.0	0.041	1,495.4	0.041
Paraguay	1,214.7	0.033	1,296.8	0.035	1,255.8	0.034
Mali	382.0	0.010	641.2	0.017	511.6	0.014
Suriname	417.1	0.011	446.8	0.012	431.9	0.012
Armenia	434.4	0.012	661.3	0.018	547.9	0.015
Guyana	335.0	0.009	383.5	0.010	359.3	0.010
Kyrgyz Republic	670.9	0.018	854.3	0.023	762.6	0.021
Cambodia	102.1	0.003	199.8	0.005	151.0	0.004
Tajikistan	709.2	0.019	976.8	0.026	843.0	0.023
Congo, Republic of	898.7	0.025	1,283.4	0.035	1,091.1	0.030
Haiti	168.9	0.005	275.1	0.007	222.0	0.006
Somalia	42.8	0.001	206.7	0.006	124.8	0.003
Rwanda	106.5	0.003	301.2	0.008	203.8	0.006
Burundi	88.8	0.002	236.8	0.006	162.8	0.004
Turkmenistan	1,404.5	0.038	1,248.6	0.034	1,326.5	0.036
Togo	277.7	0.008	383.4	0.010	330.5	0.009
Nepal	536.8	0.015	780.5	0.021	658.6	0.018
Fiji	678.4	0.019	746.5	0.020	712.5	0.019

Table I.5. Current Account Data

Regression Variable Name	Current Receipts ^{1/}		Current Payments ^{2/}		Average of Current Receipts and Current Payments	
	(1990-94)		(1990-94)		(1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P	TRADE		
Malawi	362.8	0.010	592.7	0.016	477.7	0.013
Macedonia, FYR	972.0	0.027	1,087.5	0.029	1,029.8	0.028
Barbados	687.7	0.019	642.1	0.017	664.9	0.018
Niger	301.7	0.008	490.4	0.013	396.1	0.011
Estonia	801.3	0.022	847.8	0.023	824.5	0.022
Mauritania	336.4	0.009	464.5	0.013	400.5	0.011
Botswana	1,782.1	0.049	1,702.8	0.046	1,742.5	0.047
Benin	394.3	0.011	480.7	0.013	437.5	0.012
Burkina Faso	355.7	0.010	546.8	0.015	451.3	0.012
Chad	177.9	0.005	366.3	0.010	272.1	0.007
Central African Republic	141.8	0.004	272.1	0.007	207.0	0.006
Lao, People's Dem. Republic	168.7	0.005	275.7	0.007	222.2	0.006
Mongolia	297.7	0.008	437.8	0.012	367.8	0.010
Swaziland	658.6	0.018	754.2	0.020	706.4	0.019
Albania	253.4	0.007	439.1	0.012	346.2	0.009
Lesotho	435.1	0.012	661.3	0.018	548.2	0.015
Equatorial Guinea	36.9	0.001	80.8	0.002	58.9	0.002
Gambia, The	168.6	0.005	184.7	0.005	176.6	0.005
Belize	210.6	0.006	238.1	0.006	224.4	0.006
San Marino	549.0	0.015	502.7	0.014	525.9	0.014
Vanuatu	84.4	0.002	103.6	0.003	94.0	0.003
Djibouti	141.0	0.004	220.5	0.006	180.7	0.005
Eritrea	163.8	0.004	169.9	0.005	166.9	0.005
St. Lucia	236.4	0.006	276.8	0.007	256.6	0.007
Guinea-Bissau	31.9	0.001	76.2	0.002	54.0	0.001
Antigua and Barbuda	353.2	0.010	381.9	0.010	367.6	0.010
Grenada	98.6	0.003	114.0	0.003	106.3	0.003
Samoa	61.1	0.002	85.5	0.002	73.3	0.002
Solomon Islands	110.5	0.003	151.2	0.004	130.9	0.004
Cape Verde	93.4	0.003	136.4	0.004	114.9	0.003
Comoros	61.8	0.002	76.1	0.002	68.9	0.002
St. Kitts and Nevis	88.8	0.002	109.0	0.003	98.9	0.003
Seychelles	181.7	0.005	208.9	0.006	195.3	0.005
St. Vincent and the Grenadines	99.0	0.003	123.5	0.003	111.3	0.003
Dominica	77.3	0.002	101.0	0.003	89.2	0.002

Table I.5. Current Account Data

Regression Variable Name	Current Receipts ^{1/} (1990-94)		Current Payments ^{2/} (1990-94)		Average of Current Receipts and Current Payments (1990-94)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	C		P		TRADE	
Maldives	155.6	0.004	178.8	0.005	167.2	0.005
Sao Tome and Principe	8.4	0.000	34.1	0.001	21.2	0.001
Tonga	55.9	0.002	66.7	0.002	61.3	0.002
Bhutan	67.5	0.002	98.4	0.003	82.9	0.002
Kiribati	24.3	0.001	34.6	0.001	29.5	0.001
Micronesia, Fed. States of	55.6	0.002	131.3	0.004	93.5	0.003
Marshall Islands	34.2	0.001	70.8	0.002	52.5	0.001
Palau, Republic of	23.8	0.001	37.9	0.001	30.9	0.001
Total	3,663,458.2	100.0	3,700,175.2	100.0	3,681,816.7	100.0
By WEO Classification						
Advanced Economies	2,931,199.1	80.0	2,906,830.5	78.6	2,919,014.8	79.3
Major Industrial Countries	2,052,995.7	56.0	2,029,992.8	54.9	2,041,494.3	55.4
Other Advanced Economies	878,203.4	24.0	876,837.7	23.7	877,520.5	23.8
Developing Countries	578,879.0	15.8	637,925.2	17.2	608,402.1	16.5
Net Creditors	78,212.9	2.1	82,205.9	2.2	80,209.4	2.2
Net Debtors	500,666.1	13.7	555,719.3	15.0	528,192.7	14.3
of which HIPC or least developed countries	34,581.0	0.9	47,574.5	1.3	41,077.7	1.1
Transition Economies	153,380.1	4.2	155,419.5	4.2	154,399.8	4.2
Total	3,663,458.2	100.0	3,700,175.2	100.0	3,681,816.7	100.0

1/ Source: Balance of Payments database; 1990-94 average of the sum of goods(exports f.o.b.), services(credit), income(credit), and private current transfers(credit) divided by the average SDR value for the same years.

2/ Source: Balance of Payments database; 1990-94 average of the sum of goods(imports f.o.b.), services(debit), income(debit), and private current transfers(debit); divided by the average SDR value for the same years.

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>(Index)</i>
	VC		VCK		VREC
United States	25,272.4	14.589	32,940.6	10.240	1.040
Japan	9,844.2	5.683	28,314.2	8.802	1.059
Germany	13,981.5	8.071	18,698.9	5.813	1.022
France	8,361.5	4.827	26,683.6	8.295	1.018
United Kingdom	6,337.4	3.658	32,560.2	10.122	1.029
Italy	6,039.5	3.486	12,008.8	3.733	1.032
Saudi Arabia	3,827.4	2.209	3,808.5	1.184	1.053
Canada	7,084.9	4.090	8,931.0	2.776	1.036
Russia	7,762.8	4.481	8,053.1 ^{4/}	2.503	1.000
Netherlands	2,915.2	1.683	5,699.8	1.772	1.018
China	1,850.6	1.068	4,072.1	1.266	1.079
Belgium	3,541.1	2.044	25,897.6	8.051	1.016
India	880.6	0.508	1,253.0	0.390	1.038
Switzerland	1,837.9	1.061	2,760.0	0.858	1.028
Australia	2,154.4	1.244	3,362.6	1.045	1.066
Spain	2,692.2	1.554	6,159.2	1.915	1.031
Brazil	3,260.7	1.882	4,232.4	1.316	1.113
Venezuela	2,213.1	1.278	2,447.3	0.761	1.064
Mexico	3,091.8	1.785	4,790.4	1.489	1.076
Sweden	1,555.1	0.898	8,969.5	2.788	1.040
Argentina	1,158.5	0.669	2,273.3	0.707	1.095
Indonesia	1,918.9	1.108	1,527.3	0.475	1.054
Austria	1,778.7	1.027	1,948.7	0.606	1.010
South Africa	461.0	0.266	1,360.1	0.423	1.079
Nigeria	2,211.5	1.277	2,100.2	0.653	1.319
Norway	2,117.5	1.222	2,022.9	0.629	1.012
Denmark	1,003.4	0.579	2,831.0	0.880	1.018
Korea	2,504.9	1.446	3,457.5	1.075	1.054
Iran	2,140.4	1.236	1,995.7	0.620	1.269
Malaysia	1,752.5	1.012	1,892.6	0.588	1.045
Kuwait	2,771.3	1.600	2,818.2	0.876	1.000
Ukraine	1,616.2	0.933	1,713.8 ^{4/}	0.533	1.000
Poland	976.9	0.564	1,043.0	0.324	1.107
Finland	1,249.5	0.721	3,093.7	0.962	1.037
Algeria	1,422.7	0.821	1,482.9	0.461	1.084

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>(Index)</i>
	VC		VCK		VREC
Iraq	2,181.0	1.259	2,110.0 ^{5/7/}	0.656	1.000
Libya	1,737.3	1.003	1,770.3	0.550	1.000
Thailand	949.7	0.548	1,865.3	0.580	1.039
Hungary	675.5	0.390	816.8	0.254	1.030
Pakistan	310.9	0.179	438.3	0.136	1.041
Romania	1,162.7	0.671	774.4	0.241	1.102
Turkey	966.3	0.558	1,913.9	0.595	1.041
Egypt	906.2	0.523	983.3	0.306	1.134
Israel	396.8	0.229	682.6	0.212	1.025
New Zealand	472.9	0.273	1,374.5	0.427	1.051
Philippines	520.0	0.300	673.9	0.209	1.036
Portugal	753.1	0.435	1,539.9	0.479	1.027
Singapore	1,869.6	1.079	3,226.6	1.003	1.033
Chile	327.5	0.189	828.1	0.257	1.052
Ireland	586.4	0.339	1,222.9	0.380	1.024
Greece	463.1	0.267	648.1	0.201	1.017
Czech Republic	1,033.1	0.596	1,608.4	0.500	1.000
Colombia	368.1	0.213	389.8	0.121	1.064
Bulgaria	868.8	0.502	899.3	0.280	1.000
Peru	308.1	0.178	657.7	0.204	1.105
United Arab Emirates	1,497.3	0.864	1,470.2	0.457	1.000
Morocco	225.5	0.130	436.4	0.136	1.018
Bangladesh	124.8	0.072	90.9	0.028	1.040
Congo, Dem. Republic of	225.8	0.130	261.4	0.081	1.235
Zambia	113.9	0.066	526.7	0.164	1.155
FRY (Serbia/Montenegro)	1,172.4	0.677	1,171.5	0.364	1.000
Sri Lanka	144.3	0.083	150.5	0.047	1.046
Belarus	463.8	0.268	473.1 ^{4/}	0.147	1.000
Ghana	28.3	0.016	44.5	0.014	1.331
Kazakhstan	670.0	0.387	687.9 ^{4/}	0.214	1.000
Croatia	602.1	0.348	642.9	0.200	1.000
Slovak Republic	463.4	0.268	595.3	0.185	1.000
Zimbabwe	84.5	0.049	101.4	0.032	1.044
Trinidad and Tobago	264.5	0.153	285.4	0.089	1.086
Vietnam	102.7	0.059	128.0	0.040	1.000

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>(Index)</i>
	VC		VCK		VREC
Cote d'Ivoire	162.8	0.094	169.1	0.053	1.053
Sudan	205.2	0.118	278.7	0.087	1.667
Uruguay	88.8	0.051	207.4	0.064	1.052
Ecuador	298.9	0.173	201.1	0.063	1.070
Syrian Arab Republic	499.8	0.289	451.5	0.140	1.307
Tunisia	184.8	0.107	188.8	0.059	1.033
Angola	334.4	0.193	387.6	0.120	1.000
Luxembourg	394.2	0.228	853.3	0.265	1.005
Uzbekistan	330.0	0.191	341.5 ^{4/}	0.106	1.000
Jamaica	99.6	0.057	186.2	0.058	1.085
Kenya	105.5	0.061	126.4	0.039	1.032
Qatar	390.0	0.225	388.3	0.121	1.000
Myanmar	60.1	0.035	103.6	0.032	1.055
Yemen, Republic of	322.0	0.186	333.2	0.104	1.000
Slovenia	421.5	0.243	433.9	0.135	1.000
Dominican Republic	167.3	0.097	240.3	0.075	1.090
Brunei Darussalam	454.1	0.262	449.5	0.140	1.000
Guatemala	66.2	0.038	128.8	0.040	1.090
Panama	200.7	0.116	249.6	0.078	1.016
Lebanon	177.6	0.103	224.1	0.070	1.000
Tanzania	58.3	0.034	87.8	0.027	1.175
Oman	593.4	0.343	529.5	0.165	1.000
Cameroon	164.7	0.095	253.8	0.079	1.050
Uganda	38.0	0.022	68.0	0.021	1.177
Bolivia	80.5	0.046	88.7	0.028	1.255
El Salvador	58.7	0.034	82.4	0.026	1.068
Jordan	165.4	0.095	301.9	0.094	1.042
Bosnia-Herzegovina	127.6	0.074	1,969.3	0.612	1.000
Costa Rica	81.2	0.047	85.2	0.026	1.036
Afghanistan, Islamic State of	29.9	0.017	38.3 ^{7/}	0.012	1.000
Senegal	58.8	0.034	40.4	0.013	1.047
Azerbaijan	181.6	0.105	184.4 ^{4/}	0.057	1.000
Gabon	277.7	0.160	239.3	0.074	1.066
Georgia	69.1	0.040	70.8 ^{4/}	0.022	1.000
Lithuania	243.3	0.140	252.7 ^{4/}	0.079	1.000

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	(Index)
	VC		VCK		VREC
Cyprus	107.5	0.062	140.1	0.044	1.011
Namibia	75.6	0.044	63.8	0.020	1.044
Bahrain	316.1	0.182	290.3	0.090	1.048
Ethiopia	69.4	0.040	54.4	0.017	1.142
Papua New Guinea	102.5	0.059	230.0	0.072	1.029
Bahamas, The	89.1	0.051	2,126.8	0.661	1.015
Nicaragua	36.7	0.021	140.3	0.044	1.228
Honduras	52.8	0.030	99.1	0.031	1.108
Liberia	17.6	0.010	33.3 ^{6/ 8/}	0.010	1.000
Latvia	181.8	0.105	188.2 ^{4/}	0.058	1.000
Moldova	113.7	0.066	121.4 ^{4/}	0.038	1.000
Madagascar	25.2	0.015	37.0	0.011	1.078
Iceland	48.6	0.028	85.2	0.026	1.039
Mozambique	16.6	0.010	206.1	0.064	1.430
Guinea	45.2	0.026	53.0	0.016	1.000
Sierra Leone	15.1	0.009	49.8	0.015	1.159
Malta	56.7	0.033	84.5	0.026	1.009
Mauritius	47.1	0.027	56.1	0.017	1.020
Paraguay	83.8	0.048	134.8	0.042	1.058
Mali	19.3	0.011	30.2	0.009	1.049
Suriname	57.4	0.033	49.4	0.015	1.112
Armenia	62.3	0.036	63.0 ^{4/}	0.020	1.000
Guyana	22.2	0.013	50.0	0.016	1.230
Kyrgyz Republic	96.3	0.056	97.4 ^{4/}	0.030	1.000
Cambodia	20.3	0.012	23.9	0.007	1.000
Tajikistan	101.8	0.059	103.9 ^{4/}	0.032	1.000
Congo, Republic of	166.0	0.096	128.1	0.040	1.025
Haiti	29.3	0.017	39.4	0.012	1.039
Somalia	5.6	0.003	21.9 ^{8/}	0.007	1.000
Rwanda	15.3	0.009	23.5	0.007	1.060
Burundi	13.6	0.008	23.1	0.007	1.039
Turkmenistan	201.6	0.116	207.9 ^{4/}	0.065	1.000
Togo	19.7	0.011	30.0	0.009	1.041
Nepal	22.8	0.013	43.3	0.013	1.018
Fiji	51.3	0.030	83.4	0.026	1.044

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>(Index)</i>
	VC		VCK		VREC
Malawi	39.6	0.023	58.0	0.018	1.034
Macedonia, FYR	64.8	0.037	74.3	0.023	1.000
Barbados	74.8	0.043	83.7	0.026	1.027
Niger	37.0	0.021	47.5	0.015	1.020
Estonia	115.0	0.066	129.8 ^{4/}	0.040	1.000
Mauritania	20.9	0.012	55.3	0.017	1.034
Botswana	117.6	0.068	145.0	0.045	1.026
Benin	40.0	0.023	46.8	0.015	1.000
Burkina Faso	20.8	0.012	73.7	0.023	1.026
Chad	19.5	0.011	24.4	0.008	1.062
Central African Republic	15.4	0.009	25.0	0.008	1.047
Lao, People's Dem. Republic	14.4	0.008	23.0	0.007	1.000
Mongolia	65.1	0.038	222.0	0.069	1.000
Swaziland	33.5	0.019	39.5	0.012	1.038
Albania	76.5	0.044	144.5	0.045	1.000
Lesotho	35.1	0.020	34.0	0.011	1.027
Equatorial Guinea	3.4	0.002	8.0	0.003	1.000
Gambia, The	13.5	0.008	15.4	0.005	1.054
Belize	24.1	0.014	26.5	0.008	1.028
San Marino	31.6	0.018	39.4	0.012	1.000
Vanuatu	8.4	0.005	45.2	0.014	1.045
Djibouti	14.0	0.008	19.6	0.006	1.000
Eritrea	16.3	0.009	18.4	0.006	1.000
St. Lucia	7.3	0.004	9.1	0.003	1.022
Guinea-Bissau	6.4	0.004	15.7	0.005	1.000
Antigua and Barbuda	10.8	0.006	23.2	0.007	1.020
Grenada	8.3	0.005	14.0	0.004	1.037
Samoa	4.3	0.003	3.7	0.001	1.026
Solomon Islands	10.1	0.006	8.9	0.003	1.044
Cape Verde	4.6	0.003	7.3	0.002	1.030
Comoros	4.1	0.002	5.1	0.002	1.000
St. Kitts and Nevis	2.6	0.002	8.0	0.003	1.021
Seychelles	7.5	0.004	9.8	0.003	1.015
St. Vincent and the Grenadines	7.3	0.004	4.7	0.001	1.018
Dominica	2.5	0.001	3.5	0.001	1.028

Table I.6. Variability Measures

Regression Variable Name	Variability of Current Receipts ^{1/} (1982-94)		Variability of External Receipts ^{2/} (1982-94)		Variability of Real Effective Exchange Rates ^{3/} (1982-94)
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	(Index)
	VC		VCK		VREC
Maldives	5.6	0.003	9.0	0.003	1.000
Sao Tome and Principe	1.4	0.001	2.9	0.001	1.000
Tonga	4.7	0.003	3.3	0.001	1.031
Bhutan	5.3	0.003	7.0	0.002	1.000
Kiribati	2.2	0.001	2.0	0.001	1.065
Micronesia, Fed. States of	2.6	0.001	3.3	0.001	1.000
Marshall Islands	3.1	0.002	3.6	0.001	1.000
Palau, Republic of	3.0	0.002	3.6	0.001	1.000
Total	173,231.4	100.0	321,688.9	100.0	
By WEO Classification					
Advanced Economies	105,287.6	60.8	236,012.2	73.4	
Major Industrial Countries	76,921.4	44.4	160,137.3	49.8	
Other Advanced Economies	28,366.2	16.4	75,875.0	23.6	
Developing Countries	48,024.1	27.7	62,592.1	19.5	
Net Creditors	11,271.0	6.5	11,234.6	3.5	
Net Debtors	36,753.2	21.2	51,357.6	16.0	
of which HIPC or least developed countries	3,272.1	1.9	4,796.0	1.5	
Transition Economies	19,919.6	11.5	23,084.5	7.2	
Total	173,231.4	100.0	321,688.9	100.0	

1/ Defined as one standard deviation of current receipts from its five-year moving average centered on the third year, for the period 1982-94.

2/ Variability of current receipts plus capital and financial account credit; defined as one standard deviation from the five-year moving average centered on the third year, for the period 1982-94.

3/ Source: IMF Information Notice System (1982-94). Defined in terms of the deviation of the real effective exchange rate from a normal level, represented by a five-year moving average centered on the middle year. It is calculated as one standard deviation of the data from the normal level thus defined. The index shown is equal to $1 + V/A$ where V=variability and A=average value of the real effective exchange rate over 1982-94. The index is 1.0 for countries that do not have real effective exchange rate data.

4/ The variability of capital account receipts for each of the former Soviet Union Republics is calculated as a share of the total variability for the group of the 15 republics, with weights being the ratio of each republic's capital and financial account.

5/ Simple standard deviation of estimated capital account receipts based on the average ratio of capital and financial account debit to current account payments for the group of net debtor countries with diversified financing.

6/ Simple standard deviation of estimated capital account receipts based on the average ratio of capital and financial account debit to current account payments for the group of net debtor countries with official financing.

7/ The average covariance between current and capital account receipts for the countries with available data in the Net Debtor developing country group with diversified financing is applied to the formula for the variance of current and capital account receipts to obtain the variability of external receipts.

8/ The average covariance between current and capital account receipts for the countries with available data in the Net Debtor developing country group with official financing is applied to the formula for the variance of current and capital account receipts to obtain the variability of external receipts.

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
United States	114,202.1	30.566	-	-	8,887.2	1.776
Japan	-73,783.0	-19.748	-	-	32.2	0.006
Germany	44,103.4	11.804	-	-	2,805.8	0.561
France	986.8	0.264	-	-	2,664.0	0.532
United Kingdom	18,753.4	5.019	-	-	15,458.4	3.088
Italy	19,993.5	5.351	-	-	1,653.6	0.330
Saudi Arabia	12,312.4	3.295	-	-	7,513.1	1.501
Canada	26,400.0	7.066	-	-	469.2	0.094
Russia	362.3	0.097	84,848.5	6.475	12,888.3	2.575
Netherlands	-5,782.5	-1.548	-	-	4,478.5	0.895
China	5,868.9	1.571	70,166.2	5.355	15,940.0	3.185
Belgium	42,882.2	11.477	-	-	614.4	0.123
India	2,439.0	0.653	71,581.1	5.463	5,790.3	1.157
Switzerland	-15,425.5	-4.129	-	-	48.6	0.010
Australia	8,814.1	2.359	-	-	28,535.1	5.701
Spain	20,418.6	5.465	-	-	7.5	0.002
Brazil	4,938.4	1.322	105,615.1	8.060	20,781.6	4.152
Venezuela	681.4	0.182	25,740.4	1.964	3,402.4	0.680
Mexico	22,270.7	5.961	97,787.2	7.463	28,312.5	5.656
Sweden	14,852.6	3.975	-	-	6,306.8	1.260
Argentina	9,121.3	2.441	56,113.4	4.282	15,309.8	3.059
Indonesia	3,434.2	0.919	75,311.8	5.747	16,219.5	3.240
Austria	1,932.3	0.517	-	-	780.9	0.156
South Africa	-18.9	-0.005	15,136.6	1.155	6,806.2	1.360
Nigeria	-1,605.7	-0.430	23,114.0	1.764	1,220.0	0.244
Norway	-1,151.4	-0.308	-	-	28.8	0.006
Denmark	246.1	0.066	-	-	575.4	0.115
Korea	3,469.2	0.929	65,683.0	5.013	30,197.6	6.033
Iran	5,167.2	1.383	15,808.0	1.206	3,995.6	0.798
Malaysia	4,576.9	1.225	21,188.7	1.617	5,157.4	1.030
Kuwait	4,840.0	1.295	-	-	3,758.6	0.751
Ukraine	749.9	0.201	3,909.2	0.298	198.0	0.040
Poland	3,668.4	0.982	29,721.9	2.268	1,628.2	0.325
Finland	7,793.9	2.086	-	-	1,165.9	0.233
Algeria	1,148.3	0.307	20,935.4	1.598	4,738.8	0.947

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
Iraq	409.2	0.110	-	-	1,641.9	0.328
Libya	1,038.0	0.278	-	-	142.5	0.028
Thailand	7,571.0	2.026	45,817.1	3.497	22,254.3	4.446
Hungary	2,747.4	0.735	19,672.8	1.501	2,438.6	0.487
Pakistan	2,633.7	0.705	19,109.5	1.458	1,665.2	0.333
Romania	1,048.2	0.281	3,864.3	0.295	559.0	0.112
Turkey	1,730.1	0.463	46,277.3	3.532	6,976.7	1.394
Egypt	1,456.9	0.390	22,570.0	1.722	1,805.0	0.361
Israel	2,421.7	0.648	-	-	1,859.8	0.372
New Zealand	650.7	0.174	-	-	3,584.6	0.716
Philippines	3,081.7	0.825	27,527.8	2.101	2,832.5	0.566
Portugal	337.5	0.090	-	-	10,555.9	2.109
Singapore	2,107.9	0.564	-	-	114,222.7	22.820
Chile	1,987.5	0.532	17,272.1	1.318	4,860.1	0.971
Ireland	-251.5	-0.067	-	-	122.6	0.024
Greece	3,926.5	1.051	-	-	7,275.4	1.454
Czech Republic	1,412.0	0.378	7,469.3	0.570	1,278.9	0.256
Colombia	704.5	0.189	15,324.2	1.169	3,779.8	0.755
Bulgaria	744.9	0.199	6,845.8	0.522	529.5	0.106
Peru	2,716.3	0.727	18,527.1	1.414	1,691.3	0.338
United Arab Emirates	1,363.5	0.365	-	-	2,422.2	0.484
Morocco	831.2	0.222	15,476.6	1.181	1,404.3	0.281
Bangladesh	714.1	0.191	11,355.7	0.867	604.2	0.121
Congo, Dem. Republic of	141.8	0.038	8,606.7	0.657	145.2	0.029
Zambia	149.4	0.040	4,598.2	0.351	111.0	0.022
FRY (Serbia/Montenegro)	-174.9	-0.047	-	-	1,152.1 ^{4/}	0.230
Sri Lanka	940.5	0.252	5,509.4	0.420	452.1	0.090
Belarus	165.4	0.044	888.8	0.068	41.8	0.008
Ghana	316.4	0.085	3,813.0	0.291	68.5	0.014
Kazakhstan	88.9	0.024	1,948.5	0.149	104.1	0.021
Croatia	99.8	0.027	1,434.8	0.109	154.1	0.031
Slovak Republic	319.0	0.085	3,240.4	0.247	289.1	0.058
Zimbabwe	522.2	0.140	3,168.7	0.242	475.4	0.095
Trinidad and Tobago	-130.3	-0.035	1,742.5	0.133	317.8	0.063
Vietnam	408.7	0.109	17,322.2	1.322	326.1	0.065

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
Cote d'Ivoire	1,222.5	0.327	12,150.0	0.927	1,267.9	0.253
Sudan	821.1	0.220	11,816.7	0.902	404.8	0.081
Uruguay	298.7	0.080	3,546.3	0.271	1,694.0	0.338
Ecuador	142.6	0.038	10,529.5	0.804	1,437.1	0.287
Syrian Arab Republic	304.0	0.081	14,359.2	1.096	2,752.2 ^{4/}	0.550
Tunisia	988.6	0.265	6,711.9	0.512	594.6	0.119
Angola	759.1	0.203	7,890.0	0.602	696.0	0.139
Luxembourg	310.8	0.083	-	-	2,381.1	0.476
Uzbekistan	74.4	0.020	868.8	0.066	130.8	0.026
Jamaica	129.6	0.035	3,013.7	0.230	287.7	0.057
Kenya	236.9	0.063	5,006.8	0.382	172.6	0.034
Qatar	339.5	0.091	-	-	887.8	0.177
Myanmar	195.0	0.052	4,578.6	0.349	28.1	0.006
Yemen, Republic of	361.5	0.097	4,278.2	0.326	173.3	0.035
Slovenia	-97.6	-0.026	-	-	351.4	0.070
Dominican Republic	242.6	0.065	2,985.9	0.228	238.4	0.048
Brunei Darussalam	220.2	0.059	-	-	180.2	0.036
Guatemala	446.5	0.119	2,396.0	0.183	345.2	0.069
Panama	1,122.0	0.300	4,979.3	0.380	2,099.7 ^{4/}	0.419
Lebanon	62.5	0.017	1,479.5	0.113	917.9 ^{4/}	0.183
Tanzania	1,023.6	0.274	5,077.7	0.388	71.2	0.014
Oman	405.2	0.108	2,156.2	0.165	652.1	0.130
Cameroon	746.2	0.200	5,815.5	0.444	476.8	0.095
Uganda	300.6	0.080	2,355.0	0.180	34.3	0.007
Bolivia	374.2	0.100	3,406.2	0.260	204.8	0.041
El Salvador	124.3	0.033	1,543.5	0.118	132.2	0.026
Jordan	760.1	0.203	5,384.0	0.411	545.3	0.109
Bosnia-Herzegovina	5.2	0.001	-	-	26.4 ^{4/}	0.005
Costa Rica	267.5	0.072	2,728.2	0.208	1,767.3	0.353
Afghanistan, Islamic State of	13.5	0.004	-	-	6.2	0.001
Senegal	595.6	0.159	2,555.1	0.195	162.3	0.032
Azerbaijan	23.2	0.006	78.8	0.006	4.8	0.001
Gabon	86.5	0.023	2,913.5	0.222	103.4	0.021
Georgia	0.6	0.000	985.3	0.075	327.4	0.065
Lithuania	108.4	0.029	344.8	0.026	26.7	0.005

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
Cyprus	415.1	0.111	-	-	1,362.5	0.272
Namibia	25.9	0.007	-	-	13.0	0.003
Bahrain	114.1	0.031	-	-	3,461.3	0.692
Ethiopia	279.8	0.075	7,031.2	0.537	15.1	0.003
Papua New Guinea	-258.0	-0.069	1,950.3	0.149	150.7	0.030
Bahamas, The	23.4	0.006	-	-	12,193.7	2.436
Nicaragua	777.2	0.208	8,454.4	0.645	157.6	0.031
Honduras	330.1	0.088	3,098.5	0.236	204.1	0.041
Liberia	28.6	0.008	1,436.1	0.110	403.6 ^{4/}	0.081
Latvia	-54.6	-0.015	261.1	0.020	8.9	0.002
Moldova	74.4	0.020	348.3	0.027	0.7	0.000
Madagascar	347.9	0.093	2,861.3	0.218	43.2	0.009
Iceland	132.8	0.036	-	-	587.0	0.117
Mozambique	545.8	0.146	3,926.9	0.300	22.6	0.005
Guinea	179.0	0.048	2,172.1	0.166	353.5	0.071
Sierra Leone	60.1	0.016	1,042.5	0.080	65.8	0.013
Malta	149.0	0.040	566.1	0.043	527.5	0.105
Mauritius	79.9	0.021	965.5	0.074	204.1	0.041
Paraguay	371.6	0.099	1,385.6	0.106	424.7	0.085
Mali	372.4	0.100	1,881.5	0.144	13.0	0.003
Suriname	-4.0	-0.001	-	-	12.3	0.002
Armenia	29.7	0.008	149.7	0.011	0.8 ^{4/}	0.000
Guyana	133.6	0.036	1,423.4	0.109	8.9	0.002
Kyrgyz Republic	67.4	0.018	311.6	0.024	8.8 ^{4/}	0.002
Cambodia	91.9	0.025	1,337.5	0.102	-	-
Tajikistan	6.2	0.002	405.3	0.031	12.5 ^{4/}	0.003
Congo, Republic of	533.0	0.143	3,781.2	0.289	306.2	0.061
Haiti	47.4	0.013	500.7	0.038	15.1	0.003
Somalia	0.2	0.000	1,827.3	0.139	4.8	0.001
Rwanda	95.8	0.026	664.7	0.051	12.3	0.002
Burundi	85.6	0.023	784.5	0.060	32.2	0.006
Turkmenistan	43.3	0.012	301.0	0.023	54.8	0.011
Togo	105.4	0.028	1,008.8	0.077	45.9	0.009
Nepal	397.6	0.106	1,625.7	0.124	50.7	0.010
Fiji	125.5	0.034	198.3	0.015	11.0	0.002

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
Malawi	255.3	0.068	1,414.3	0.108	24.0	0.005
Macedonia, FYR	27.2	0.007	770.8	0.059	107.1 ^{4/}	0.021
Barbados	-46.8	-0.013	429.3	0.033	130.4 ^{4/}	0.026
Niger	167.7	0.045	1,065.4	0.081	16.4	0.003
Estonia	53.5	0.014	129.9	0.010	9.6	0.002
Mauritania	79.7	0.021	1,552.9	0.119	54.1	0.011
Botswana	78.1	0.021	481.0	0.037	108.2	0.022
Benin	125.6	0.034	1,110.1	0.085	20.6	0.004
Burkina Faso	131.6	0.035	788.3	0.060	24.7	0.005
Chad	105.7	0.028	578.4	0.044	5.5	0.001
Central African Republic	103.5	0.028	620.2	0.047	15.1	0.003
Lao, People's Dem. Republic	93.4	0.025	1,452.9	0.111	7.5	0.002
Mongolia	18.3	0.005	312.4	0.024	8.9	0.002
Swaziland	-14.4	-0.004	153.4	0.012	21.2	0.004
Albania	145.3	0.039	594.5	0.045	256.9	0.051
Lesotho	5.0	0.001	432.7	0.033	428.1	0.086
Equatorial Guinea	16.9	0.005	200.9	0.015	7.5	0.002
Gambia, The	20.1	0.005	296.6	0.023	245.9	0.049
Belize	26.7	0.007	140.2	0.011	15.1	0.003
San Marino	9.2	0.002	-	-	-	-
Vanuatu	31.0	0.008	32.5	0.002	3.4 ^{4/}	0.001
Djibouti	40.0	0.011	183.8	0.014	7.5	0.002
Eritrea	18.6	0.005	20.3	0.002	-	-
St. Lucia	53.0	0.014	78.2	0.006	7.5	0.002
Guinea-Bissau	107.1	0.029	595.2	0.045	34.3	0.007
Antigua and Barbuda	16.2	0.004	-	-	2.7	0.001
Grenada	37.8	0.010	80.7	0.006	6.9	0.001
Samoa	30.1	0.008	109.6	0.008	-	-
Solomon Islands	3.5	0.001	108.2	0.008	1.4	0.000
Cape Verde	33.7	0.009	125.5	0.010	4.1	0.001
Comoros	18.5	0.005	134.3	0.010	0.7	0.000
St. Kitts and Nevis	24.7	0.007	40.6	0.003	2.1	0.000
Seychelles	32.6	0.009	119.4	0.009	15.8	0.003
St. Vincent and the Grenadines	40.9	0.011	98.4	0.008	42.5	0.008
Dominica	29.7	0.008	67.8	0.005	4.8	0.001

Table I.7. Capital Flows and Debt

Regression Variable Name	Normal Net Capital Flows including Errors and Omissions ^{1/} (1991-94)		Total External Debt ^{2/} (1994)		Short Term Debt ^{3/} (End 1994)	
	<i>In-millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>	<i>In millions of SDRs</i>	<i>In percent of total</i>
	NCF		DEBT		STDEBT	
Maldives	26.9	0.007	86.3	0.007	8.9	0.002
Sao Tome and Principe	0.5	0.000	159.4	0.012	4.1	0.001
Tonga	2.3	0.001	45.0	0.003	0.7	0.000
Bhutan	8.6	0.002	61.0	0.005	1.4	0.000
Kiribati	-2.3	-0.001	-	-	1.4	0.000
Micronesia, Fed. States of	6.7	0.002	-	-	-	-
Marshall Islands	4.2	0.001	-	-	-	-
Palau, Republic of	3.7	0.001	-	-	-	-
Total	373,628.0	100.0	1,310,348.4	100.0	500,542.2	100.0
By WEO Classification						
Advanced Economies	238,351.4	63.8	65,683.0	5.0	245,299.2	49.0
Major Industrial Countries	150,656.2	40.3	-	-	31,970.4	6.4
Other Advanced Economies	87,695.2	23.5	65,683.0	5.0	213,328.8	42.6
Developing Countries	123,520.2	33.1	1,074,959.0	82.0	232,644.9	46.5
Net Creditors	20,518.9	5.5	2,156.2	0.2	15,556.4	3.1
Net Debtors	103,001.4	27.6	1,072,802.8	81.9	217,088.5	43.4
of which HIPC or least developed countries	14,271.6	3.8	167,073.3	12.8	7,732.4	1.5
Transition Economies	11,756.3	3.1	169,706.4	13.0	22,598.1	4.5
Total	373,628.0	100.0	1,310,348.4	100.0	500,542.2	100.0

1/ Proxied by a four-year average of net private capital flows and including errors and omissions for the period 1991-94.

2/ Source: 1996 World Bank World Development Indicators; defined as debt owed to non-residents repayable in foreign currency, goods, and services. It is the sum of public, publicly guaranteed, and private non-guaranteed debt, use of IMF credit, and short-term debt.

3/ Sources: For Industrial Countries, the Bank of International Settlement database; for Developing countries, the Joint BIS-IMF-OECD-World Bank Statistics on External Debt, except where noted.

4/ Source: World Bank Global Development Finance database.

Table I.8. Qualitative Variables

Regression Variable Name	Classification of Capital Market Accessibility	Openness Index = 1 + (5 - KMACC)	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
United States	1	5	0	0	0
Japan	1	5	0	0	0
Germany	1	5	1	0	0
France	1	5	0	0	0
United Kingdom	1	5	0	0	0
Italy	1	5	0	0	0
Saudi Arabia	3	3	1	0	1
Canada	1	5	1	0	0
Russia	3	3	1	1	1
Netherlands	2	4	0	0	0
China	3	3	0	0	1
Belgium	2	4	0	0	0
India	3	3	0	0	1
Switzerland	2	4	0	1	0
Australia	2	4	0	0	0
Spain	2	4	0	0	0
Brazil	3	3	0	0	1
Venezuela	3	3	1	0	1
Mexico	3	3	0	0	1
Sweden	2	4	0	0	0
Argentina	3	3	0	0	1
Indonesia	3	3	1	0	1
Austria	2	4	0	0	0
South Africa	3	3	0	0	1
Nigeria	4	2	1	0	1
Norway	2	4	1	0	0
Denmark	2	4	0	0	0
Korea	2	4	1	0	0
Iran	3	3	1	0	1
Malaysia	3	3	0	0	1
Kuwait	3	3	1	0	1
Ukraine	3	3	1	1	1
Poland	3	3	1	1	1
Finland	2	4	1	0	0
Algeria	3	3	1	0	1

Table I.8. Qualitative Variables

Regression Variable Name	Classification of Capital Market Accessibility	Openness Index = $1 + (5 - \text{KMACC})$	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
Iraq	3	3	1	0	1
Libya	3	3	1	0	1
Thailand	3	3	0	0	1
Hungary	3	3	1	1	1
Pakistan	4	2	1	0	1
Romania	3	3	1	0	1
Turkey	3	3	1	0	1
Egypt	3	3	1	0	1
Israel	2	4	0	0	0
New Zealand	2	4	1	0	0
Philippines	3	3	1	0	1
Portugal	2	4	1	0	0
Singapore	2	4	0	0	0
Chile	3	3	1	0	1
Ireland	2	4	0	0	0
Greece	2	4	0	0	0
Czech Republic	3	3	1	1	1
Colombia	3	3	0	0	1
Bulgaria	3	3	1	1	1
Peru	3	3	0	0	1
United Arab Emirates	3	3	1	0	1
Morocco	4	2	1	0	1
Bangladesh	4	2	0	0	1
Congo, Dem. Republic of	4	2	1	0	1
Zambia	4	2	1	0	1
FRY (Serbia/Montenegro)	3	3	1	0	1
Sri Lanka	3	3	1	0	1
Belarus	3	3	1	1	1
Ghana	3	3	0	0	1
Kazakstan	3	3	1	1	1
Croatia	3	3	1	1	1
Slovak Republic	3	3	1	1	1
Zimbabwe	4	2	1	1	1
Trinidad and Tobago	3	3	1	0	1
Vietnam	4	2	1	0	1

Table I.8. Qualitative Variables

Regression Variable Name	Classification of Capital Market Accessibility	Openness Index = 1 + (5 - KMACC)	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
Cote d'Ivoire	3	3	1	0	1
Sudan	4	2	1	0	1
Uruguay	3	3	0	0	1
Ecuador	3	3	1	0	1
Syrian Arab Republic	3	3	1	0	1
Tunisia	3	3	0	0	1
Angola	3	3	1	1	1
Luxembourg	2	4	0	0	0
Uzbekistan	3	3	1	1	1
Jamaica	3	3	0	0	1
Kenya	4	2	1	0	1
Qatar	3	3	1	0	1
Myanmar	3	3	0	0	1
Yemen, Republic of	3	3	1	1	1
Slovenia	3	3	1	1	1
Dominican Republic	3	3	1	0	1
Brunei Darussalam	3	3	1	1	1
Guatemala	3	3	0	0	1
Panama	3	3	1	0	1
Lebanon	3	3	1	0	1
Tanzania	4	2	1	0	1
Oman	3	3	1	0	1
Cameroon	4	2	1	0	1
Uganda	4	2	0	0	1
Bolivia	4	2	1	0	1
El Salvador	4	2	1	0	1
Jordan	4	2	0	0	1
Bosnia-Herzegovina	3	3	0	1	1
Costa Rica	3	3	1	0	1
Afghanistan, Islamic State of	3	3	1	0	1
Senegal	4	2	0	0	1
Azerbaijan	3	3	1	1	1
Gabon	4	2	1	0	1
Georgia	3	3	1	1	1
Lithuania	3	3	1	1	1

Table I.8. Qualitative Variables

Regression Variable Name	Classification of Capital Market Accessibility	Openness Index = 1 + (5 - KMACC)	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
Cyprus	3	3	1	0	1
Namibia	4	2	0	1	1
Bahrain	3	3	0	0	1
Ethiopia	4	2	1	0	1
Papua New Guinea	3	3	1	0	1
Bahamas, The	3	3	1	0	1
Nicaragua	4	2	1	0	1
Honduras	4	2	1	0	1
Liberia	4	2	1	0	1
Latvia	3	3	1	1	1
Moldova	3	3	1	1	1
Madagascar	4	2	0	0	1
Iceland	2	4	0	0	0
Mozambique	4	2	0	1	1
Guinea	3	3	1	0	1
Sierra Leone	3	3	1	0	1
Malta	3	3	0	0	1
Mauritius	3	3	0	0	1
Paraguay	4	2	1	0	1
Mali	3	3	0	0	1
Suriname	3	3	0	0	1
Armenia	3	3	0	1	1
Guyana	4	2	0	0	1
Kyrgyz Republic	3	3	1	1	1
Cambodia	4	2	0	0	1
Tajikistan	3	3	0	1	1
Congo, Republic of	4	2	1	0	1
Haiti	4	2	1	0	1
Somalia	4	2	0	0	1
Rwanda	4	2	1	0	1
Burundi	4	2	1	0	1
Turkmenistan	3	3	1	1	1
Togo	3	3	1	0	1
Nepal	4	2	0	0	1
Fiji	3	3	1	0	1

Table I.8. Qualitative Variables

Regression Variable Name	Classification of Capital Market Accessibility	Openness Index = 1 + (5 - KMACC)	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
Malawi	4	2	1	0	1
Macedonia, FYR	3	3	1	1	1
Barbados	3	3	1	0	1
Niger	4	2	1	0	1
Estonia	3	3	1	1	1
Mauritania	4	2	0	0	1
Botswana	3	3	1	0	1
Benin	4	2	1	0	1
Burkina Faso	4	2	1	0	1
Chad	4	2	1	0	1
Central African Republic	4	2	1	0	1
Lao, People's Dem. Republic	4	2	1	0	1
Mongolia	3	3	1	1	1
Swaziland	3	3	1	0	1
Albania	3	3	1	1	1
Lesotho	4	2	0	0	1
Equatorial Guinea	4	2	0	0	1
Gambia, The	4	2	0	0	1
Belize	4	2	1	1	1
San Marino	2	4	0	1	0
Vanuatu	4	2	1	1	1
Djibouti	4	2	1	0	1
Eritrea	3	3	1	1	1
St. Lucia	3	3	0	1	1
Guinea-Bissau	4	2	1	0	1
Antigua and Barbuda	3	3	0	1	1
Grenada	3	3	1	0	1
Samoa	4	2	0	0	1
Solomon Islands	4	2	1	0	1
Cape Verde	4	2	0	0	1
Comoros	4	2	1	0	1
St. Kitts and Nevis	3	3	0	1	1
Seychelles	3	3	0	0	1
St. Vincent and the Grenadines	3	3	1	1	1
Dominica	4	2	0	0	1

Table I.8. Qualitative Variables

	Classification of Capital Market Accessibility	Openness Index = 1 + (5 - KMACC)	Equals 1 if Member's Calculated Quota is Based on Variants of the BW Formula	Equals 1 if Member Joined in the Past Twenty Years ^{2/}	Equals 1 if Member is a Developing Country or a Transitional Economy
Regression Variable Name	(KMACC) ^{1/}	OPEN	NOTBW	MEM20	DDEV
Maldives	4	2	0	0	1
Sao Tome and Principe	4	2	1	0	1
Tonga	4	2	1	1	1
Bhutan	4	2	1	1	1
Kiribati	4	2	0	1	1
Micronesia, Fed. States of	4	2	0	1	1
Marshall Islands	4	2	0	1	1
Palau, Republic of	4	2	1	1	1

1/ Source: World Economic Outlook; based on WEO classifications where countries with the most access to capital markets are classified as "1" while those with the least access are classified as "4". This suggested classification corresponds approximately with those used in EB/CQuota/94/2, except to reflect recent (since the early 1990s) changes in some countries' abilities to access the market; and a reclassification of Canada and Italy to class "1". The variable was used to compute the openness index shown in the next column.

2/ Source: IMF Secretary's Department, Records Division, *Membership of the International Monetary Fund* (Date of entry into force: December 27, 1945), December 16, 1997.

Table I. 9. Correlation of Variables (all members)

	GDP	Variability of Current Receipts	Reserves	Current Payments	Current Receipts	Normal Capital Flows	Variability of Current and Capital Account Receipts	Population
GDP	1.0000							
Variability of Current Receipts	0.8944	1.0000						
Reserves	0.7814	0.7697	1.0000					
Current Payments	0.8994	0.9583	0.8290	1.0000				
Current Receipts	0.9041	0.9454	0.8623	0.9940	1.0000			
Normal Capital Flows	0.4226	0.6097	0.2201	0.5775	0.4935	1.0000		
Variability of Current and Capital Account Receipts	0.7766	0.8390	0.7588	0.8884	0.8982	0.4236	1.0000	
Population	0.2400	0.2282	0.3168	0.2201	0.2176	0.1343	0.1819	1.0000

SECTION II. ESTIMATION RESULTS OF STATISTICAL QUOTA FORMULAS

This section presents the results of regressions requested by QFRG and analyzed in Chapter V of the report. Detailed results of the regression equations and the resulting quota distributions for members are presented in Statistical Appendix, Part B, Section I.

A. List of Regression Equations

1. Re-estimated Bretton Woods Formula for the Whole Membership.
2. Re-estimated Bretton Woods Formula Using PPP-based GDP Instead of GDP at Market Exchange Rates.
3. Linear Bretton Woods Formula With PPP-based GDP Replacing GDP at Market Exchange Rates.
4. Re-estimated Bretton Woods Formula With a Multiplicative Term, Which Includes a Dummy Variable Distinguishing Between Industrial and Developing Countries.
5. Re-estimated Bretton Woods (BW) Formula for Members with Calculated Quotas Based on the Variants of the BW Formula.
6. Re-estimated Bretton Woods Formula for Members Representing Developing Countries.
7. Re-estimated Bretton Woods Formula for Members with Actual Quota Shares Equal to or Less Than 1 Percent.
8. Re-estimated Bretton Woods Formula for Members Who Joined in the Past Twenty Years.
9. Linear Bretton Woods Formula Without the Multiplicative Factor.
10. Linear Bretton Woods Formula With Current Receipts.
11. Linear Bretton Woods Formula with an Openness Index.
12. Nonlinear Bretton Woods Formula with an Openness Index.
13. Nonlinear Bretton Woods Formula Without the Reserves Variable.
14. Nonlinear Bretton Woods Formula With Gold Reserves Valued at Market Prices.
15. Nonlinear Bretton Woods Formula With a Five Year Average of GDP Replacing the Existing One-year GDP.
16. Nonlinear Bretton Woods Formula With Population.
17. Nonlinear Bretton Woods Formula with Short Term Debt.
18. Nonlinear Bretton Woods Formula With the Variability of External Receipts Replacing the Variability of Current Receipts.

A. List of Regression Equations

19. Nonlinear Bretton Woods Formula With the Then-Existing Quota As a Multiplicative Explanatory Variable.
20. Nonlinear Bretton Woods Formula with the Then-Existing Quota As an Additive Explanatory Variable.
21. Regression of Actual Quotas on Variables Indicative of Ability to Contribute Financial Resources to the Fund.
22. Nonlinear Bretton Woods Formula with a Five-Year Average of GDP, where the Conversion Factors are Centered Five-Year Moving Averages of the Annual Exchange Rates, Replacing the Existing One-Year GDP.
23. Nonlinear Bretton Woods Formula with GNP Converted with the World Bank Atlas Method.
24. Linear Formula with the Then-Existing Quota, Short-Term Debt, Population, and Trade added, and Reserves and Current Payments dropped.
25. Nonlinear Bretton Woods Formula with the Then-Existing Quota As an Additive Explanatory Variable for Countries with Calculated Quotas Based on the Variants of the Bretton Woods Formula.
26. Nested Model Where a Regression of Vulnerability Variables (Represented by the Variability of Current Receipts and Population) is Estimated First.
27. Nested Model Where a Regression of Strength Variables is Estimated First.
28. Linear Estimation of Both Strength and Vulnerability Variables.
29. Re-estimated Bretton Woods Formula With Normal Net Capital Flows as an Additional Variable.
30. Re-estimated Bretton Woods Formula With Real Effective Exchange Rate Variability Times Current Receipts as an Additional Variable.
31. Re-estimated Bretton Woods Formula With Debt as an Additional Variable.
32. Members with Quota Shares of Equal to or Less Than 1.0 Percent.
Re-estimated Bretton Woods Formula With Normal Net Capital Flows as an Additional Variable.
33. Members with Quota Shares of Equal to or Less Than 1.0 Percent.
Re-estimated Bretton Woods Formula With Real Effective Exchange Rate Variability Times Current Receipts as an Additional Variable.

A. List of Regression Equations

34. Members with Quota Shares of Equal to or Less Than 1.0 Percent.
Re-estimated Bretton Woods Formula With Financial Market Accessibility Times Current Payments as an Additional Variable.
35. Members with Quota Shares of Equal to or Less Than 1.0 Percent.
Re-estimated Bretton Woods Formula With Debt as an Additional Variable.
36. Re-estimated Bretton Woods Formula With Financial Market Accessibility Times Current Payments as an Additional Variable.
37. Bretton Woods Formula for Schedule A Members Using 1934-43 Data.

Table II.1. Summary Statistics of Equations Fitted to Actual Quotas
(T-ratios in parentheses)

		Adjusted R-squared	S.E. of Reg.	Memo item: Reg. No. 1/
I. Non-linear Equations				
<i>Benchmark Equation:</i>				
Equation using only the traditional variables	$Q = (0.003 Y - 0.034 R + 0.009 P + 0.529 VC) \times (1 + C/Y)$ (14.29) (-5.60) (3.82) (10.17)	0.96	670.5	1
With PPP-based GDP	$Q = (0.002 YPPP - 0.035 R + 0.012 P + 0.555 VC) \times (1 + C/YPPP)$ (12.18) (-5.10) (4.15) (7.93)	0.95	757.8	2
Multiplicative term with a dummy variable distinguishing between industrial and developing countries	$Q = (0.003 Y - 0.042 R + 0.020 P + 0.200 VC) \times (1 + C/Y + DDEV)$ (18.59) (-9.26) (11.78) (6.90)	0.97	605.1	4
With an openness index	$Q = (0.000 Y - 0.004 R + 0.000 P + 0.227 VC) \times (1 + OPEN)$ (4.60) (-1.56) (0.23) (9.48)	0.95	776.4	12
Without the reserves variable	$Q = (0.003 Y + 0.003 P + 0.551 VC) \times (1 + C/Y)$ (13.13) (1.45) (9.48)	0.96	724.6	13
With gold reserves valued at market prices	$Q = (0.003 Y - 0.022 RM + 0.008 P + 0.540 VC) \times (1 + C/Y)$ (13.77) (-3.26) (3.10) (9.86)	0.96	706.0	14
With five year average GDP replacing the existing one-year GDP	$Q = (0.004 YAVG - 0.028 R + 0.009 P + 0.462 VC) \times (1 + C/YAVG)$ (14.86) (-4.73) (3.71) (8.89)	0.96	656.2	15
With population	$Q = (0.003 Y - 0.044 R + 0.012 P + 0.488 VC + 2.632 POP) \times (1 + C/Y)$ (15.94) (-8.05) (5.42) (10.69) (7.63)	0.97	583.5	16
With short term debt	$Q = (0.003 Y - 0.047 R + 0.011 P + 0.499 VC + 0.009 STDEBT) \times (1 + C/Y)$ (14.62) (-5.90) (4.42) (9.47) (2.44)	0.96	661.2	17
With the variability of external receipts replacing the variability of current receipts	$Q = (0.003 Y - 0.039 R + 0.027 P + 0.004 VCK) \times (1 + C/Y)$ (13.25) (-5.10) (10.41) (0.23)	0.94	841.9	18
With the then-existing quota as a multiplicative explanatory variable	$Q = (0.002 Y - 0.003 R - 0.001 P + 0.028 VC + 0.976 QL) \times (1 + C/Y)$ (31.94) (-2.15) (-2.21) (2.15) (65.16)	1.0	134.8	19
With the then-existing quota as an additive explanatory variable	$Q = (0.000 Y + 0.004 R + 0.003 P + 0.036 VC) \times (1 + C/Y) + 1.210 QL$ (20.38) (7.32) (14.19) (7.59) (177.03)	1.0	50.5	20
With a five-year average of GDP, where the conversion factors are centered five-year moving averages of the annual exchange rates, replacing the existing one-year GDP	$Q = (0.003 YM5X - 0.032 R + 0.007 P + 0.518 VC) \times (1 + C/YM5X)$ (15.42) (-5.36) (3.14) (10.36)	0.97	642.7	22

Table II.1. Summary Statistics of Equations Fitted to Actual Quotas
(T-ratios in parentheses)

		Adjusted R-squared	S.E. of Reg.	Memo item: Reg. No. 1/
With GNP converted with the World Bank Atlas method	$Q = (0.003 \text{ YATL} - 0.032 \text{ R} + 0.008 \text{ P} + 0.519 \text{ VC}) \times (1 + \text{C/YATL})$ (14.74) (-5.38) (3.34) (10.13)	0.96	659.0	23
With net private capital flows as an additional variable	$Q = (0.003 \text{ Y} - 0.020 \text{ R} + 0.005 \text{ P} + 0.462 \text{ VC} + 0.024 \text{ NCF}) \times (1 + \text{C/Y})$ (15.82) (-2.99) (2.21) (9.03) (4.7)	0.97	633.9	29
With real effective exchange rate variability times current receipts as an additional variable	$Q = (0.004 \text{ Y} - 0.003 \text{ R} + 0.064 \text{ P} + 0.432 \text{ VC} - 0.057 \text{ VREC}) \times (1 + \text{C/Y})$ (19.32) (-0.42) (10.09) (9.73) (-9.1)	0.97	555.3	30
With debt as an additional variable	$Q = (0.003 \text{ Y} - 0.045 \text{ R} + 0.014 \text{ P} + 0.417 \text{ VC} + 0.011 \text{ DEBT}) \times (1 + \text{C/Y})$ (15.45) (-7.07) (5.46) (7.44) (4.33)	0.97	639.3	31
With financial market accessibility times current payments as an additional variable	$Q = (0.00380 \text{ Y} - 0.06305 \text{ R} - 0.00033 \text{ P} + 0.36828 \text{ VC} + 0.01303 \text{ FMP}) \times (1 + \text{C/Y})$ (18.47) (-9.94) (-0.14) (7.54) (8.09)	0.97	574.8	36
Bretton Woods Formula for Schedule A Members Using 1934-43 Data	$Q = (0.030941 \text{ Y} - 0.003025 \text{ R} + 0.046770 \text{ M} + 0.174646 \text{ V}) \times (1 + \text{X/Y})$ (20.11) (-0.51) (4.11) (4.34)	1.00	22.4	37
II. Linear Equations				
With PPP-based GDP	$Q = 0.002 \text{ YPPP} - 0.034 \text{ R} + 0.023 \text{ P} + 0.610 \text{ VC}$ (8.64) (-4.13) (7.48) (8.43)	0.96	656.3	3
Without a multiplicative factor	$Q = 0.002 \text{ Y} - 0.036 \text{ R} + 0.017 \text{ P} + 0.684 \text{ VC}$ (8.76) (-4.46) (5.37) (10.33)	0.97	644.6	9
With current receipts	$Q = 0.003 \text{ Y} + 0.003 \text{ R} + 0.072 \text{ P} + 0.564 \text{ VC} - 0.059 \text{ C}$ (11.52) (0.3) (9.04) (9.36) (7.41)	0.97	565.2	10
With an openness index	$Q = 0.002 \text{ Y} - 0.045 \text{ R} + 0.017 \text{ P} + 0.628 \text{ VC} + 85.571 \text{ OPEN}$ (9.32) (-5.42) (5.65) (9.22) (2.75)	0.97	633.1	11
With variables indicative of ability to contribute financial resources to the fund (including gold reserves valued at market prices and normal net capital flows as an additional variable).	$Q = 0.003 \text{ Y} + 0.007 \text{ RM} + 0.022 \text{ C} + 0.064 \text{ NCF}$ (11.33) (0.54) (6.82) (11.16)	0.95	778.8	21
With the then-existing quota, short-term debt, population, and trade added, and reserves and current payments dropped	$Q = 0.000 \text{ Y} + 0.045 \text{ VC} + 1.192 \text{ QL} + 0.001 \text{ STDEBT} + 0.178 \text{ POP} + 0.006 \text{ TRADE}$ (11.42) (6.03) (152.32) (2.55) (4.43) (24.20)	1.00	56.5	24

Table II.1. Summary Statistics of Equations Fitted to Actual Quotas
(T-ratios in parentheses)

		Adjusted R-squared	S.E. of Reg.	Memo item: Reg. No. 1/
Nested model where a regression of vulnerability variables (represented by the variability of current receipts and population) is estimated first	$Q = (1 - 0.54491) \times (0.00557 Y - 0.01145 RM + 0.01276 C + 0.07334 NCF) + (0.544491) \times (1.25141 VC + 2.33175 POP)$ (11.55) (8.59) (-0.57) (2.23) (7.53) (11.55) (53.90) (4.36)	0.97	590.3	26
Nested model where a regression of strength variables (represented by GDP, reserves -- with gold reserves valued at market prices, current receipts, and net private capital flows).	$Q = (1 - 0.42833) \times (0.00337 Y + 0.00650 RM + 0.02226 C + 0.06419 NCF) + (0.42833) \times (1.27204 VC + 5.18170 POP)$ (9.30) (11.33) (0.54) (6.82) (11.16) (9.30) (31.73) (4.87)	0.97	598.9	27
With both strength and vulnerability variables	$Q = 0.00259 Y - 0.01378 RM + 0.00907 C + 0.03483 NCF + 0.61967 VC + 2.40788 POP$ (11.14) (-1.47) (3.01) (6.92) (10.06) (5.97)	0.97	578.2	28
III. Subsample Versions				
For members with calculated quotas based on the variants of the BW formula	$Q = (-0.008 Y + 0.008 R + 0.037 P + 0.529 VC) \times (1 + C/Y)$ (-4.92) (0.65) (5.56) (15.14)	0.95	366.2	5
For members representing developing countries	$Q = (0.006 Y - 0.066 R + 0.047 P + 0.314 VC) \times (1 + C/Y)$ (6.41) (-5.67) (7.33) (5.65)	0.849	380.4	6
For members with actual quota shares less than 1 percent	$Q = (0.007 Y - 0.010 R - 0.003 P + 0.388 VC) \times (1 + C/Y)$ (8.36) (-2.31) (-0.83) (12.7)	0.82	226.0	7
For members who joined in the past twenty years	$Q = (0.009 Y - 0.008 R + 0.005 P + 0.335 VC) \times (1 + C/Y)$ (5.59) (-0.53) (0.72) (8.85)	0.99	87.5	8
With the then-existing quota as an additive explanatory variable for countries with calculated quotas based on the variants of the Bretton Woods formula	$Q = 1.28515 QL + (0.00033 Y + 0.00220 R + 0.00290 P + 0.01280 VC) \times (1 + C/Y)$ (201.05) (3.39) (3.44) (7.65) (4.08)	1.0	18.8	25
Members with quota shares of equal to or less than 1.0 percent -- with normal net capital flows as an additional variable	$Q = (0.006 Y - 0.015 R + 0.000 P + 0.363 VC + 0.038 NCF) \times (1 + C/Y)$ (6.36) (-3.19) (0.03) (11.74) (3.01)	0.8	220.5	32
Members with quota shares of equal to or less than 1.0 percent -- with real effective exchange rate variability times current receipts as additional variable	$Q = (0.007 Y - 0.008 R + 0.033 P + 0.408 VC - 0.035 VREC) \times (1 + C/Y)$ (7.56) (-1.91) (2.68) (13.4) (-3.03)	0.82	220.4	33
Members with quota shares of equal to or less than 1.0 percent -- with financial market accessibility times current payments as an additional variable	$Q = (0.006 Y - 0.014 R - 0.031 P + 0.304 VC + 0.016 FMP) \times (1 + C/Y)$ (8.01) (-3.61) (-6.48) (10.7) (7.63)	0.86	193.8	34

**Table II.1. Summary Statistics of Equations Fitted to Actual Quotas
(T-ratios in parentheses)**

		Adjusted R-squared of	S.E. Reg.	Memo Item: Reg. No. 1/
Members with quota shares of equal to or less than 1.0 percent -- with debt as an additional variable	$Q = (0.005 Y - 0.013 R + 0.002 P + 0.374 VC + 0.006 DEBT) \times (1 + C/Y)$ <p align="center">(4.25) (-3.00) (0.52) (12.57) (3.55)</p>	0.83	218.2	35

Note: The variables in the equations are defined as follows:

Q = estimated quota, in millions of SDRs

Y = GDP at market exchange rates in 1994

R = average monthly reserves in 1994

P = annual average current payments over the 1991–1994 (five years) period

C = annual average current receipts over the 1991–1994 (five years) period

VC = variability of current receipts, defined as one standard deviation from a five-year moving average over the 1982–1994 (13 years) period

VREC = real effective exchange rate variability times current receipts

POP = population in 1994

DDEV = dummy variable distinguishing between industrial and developing countries. It is equal to 1 if a country is a developing or a transitional economy

NCF = normal capital flow proxied by a four-year moving average of actual net private capital flows (inclusive of errors and omissions)

DEBT = total external debt owed to non-residents repayable in foreign currency, goods and services. It is the sum of the public, publicly guaranteed and private non-guaranteed debt, use of IMF credit, and short-term debt

YM5X = is the five-year average of GDP from 1990 to 1994 where the conversion factor is a centered five-year moving average of the annual exchange rate

STDEBT = short term debt at the end of 1994

OPEN = openness index defined as $1 + (5 - KMACC)$; KMACC = capital market accessibility, which is based on the WEO classification

RM = average monthly reserves with gold valued at market rates in 1994

NNKFL = four-year moving average of net private capital flows

YPPP = PPP-based GDP in 1994

YAVG = five year averages of GDP from 1990-94

VCK = variability of external receipts (the sum of current receipts and capital and financial account credits), defined as one standard deviation from a five-year moving average over the 1982–1994 (13 years) period

YATL = 1994 GNP converted using the World Bank Atlas Method

QL = the then-existing quota

FMP = financial market accessibility times current payments; financial market accessibility is proxied by a variable which takes values of 4 for developing countries with limited access to private financial markets, 3 for the rest of developing countries, 2 for industrial countries with easy access to borrowing, and 1 for France, Germany, Japan, the United Kingdom, and the United States

TRADE = average of current payments and receipts over a recent five year period (1991-94)

1/ As numbered in the List of Regression Equations of this section.

Table II.2. Relative Contributions of Variables to Calculated Quotas 1/
(In percent)

	GDP	Reserves	Current Payments	Current Receipts	Var. of Curr. Receipt	Ratio of Current Receipts to GDP	New variable	New variable	New variable	New variable	Memo item: Regress. no. 2/
I. Non-linear Equations											
<i>Benchmark Equation:</i>											
Equation using only the traditional variables	27.5	-13.7	17.8	--	47.6	20.8	--	--	--	--	1
Memo: Existing five formulas	28.9	3.9	33.3	4.4	13.4	16.1					
With PPP-based GDP	28.1	-13.0	21.2	--	45.7	18.0	--	--	--	--	2
Multiplicative term with a dummy variable distinguishing between industrial and developing countries	29.3	-16.0	37.5	--	17.2	32 3/	--	--	--	--	4
With an openness index	3.1	-1.6	0.5	--	22.6	--	75.5	--	--	--	12
Without the reserves variable	25.8	--	6.2	--	46.8	21.2	--	--	--	--	13
With gold reserves valued at market prices	27.4	-11.1	15.4	--	47.3	21.0	--	--	--	--	14
With five year average GDP replacing the existing one-year GDP	32.4	-11.3	16.8	--	41.3	20.8	--	--	--	--	15
With population	25.8	-17.0	21.4	--	42.2	20.4	7.2	--	--	--	16
With short-term debt	29.0	-18.9	21.4	--	45.2	20.9	2.3	--	--	--	17
With the variability of external receipts replacing the variability of current receipts	36.6	-18.0	60.6	--	0.8	19.9	--	--	--	--	18
With the then-existing quota as a multiplicative explanatory variable	12.7	-1.0	-2.0	--	2.3	20.9	67.1	--	--	--	19
With the then-existing quota as an additive explanatory variable	3.7	1.4	4.6	--	3.0	3.4	83.9	--	--	--	20

Table II.2. Relative Contributions of Variables to Calculated Quotas 1/
(In percent)

	GDP	Reserves	Current Payments	Current Receipts	Var. of Curr. Receipt	Ratio of Current Receipts to GDP	New variable	New variable	New variable	New variable	Memo item: Regress. no. 2/
With a five-year average of GDP, where the conversion factors are centered five-year moving averages of the annual exchange rates, replacing the existing one-year GDP	31.0	-12.6	14.3	--	46.6	20.7	--	--	--	--	22
With GNP converted with the World Bank Atlas method	29.9	-13.0	15.5	--	46.8	20.8	--	--	--	--	23
With net private capital flows as an additional variable	30.5	-7.9	10.4	--	41.7	20.7	4.6	--	--	--	29
With real effective exchange rate variability times current receipts as an additional variable	32.3	-1.0	120.6	--	38.2	20.6	-110.8	--	--	--	30
With debt as an additional variable	27.6	-17.1	25.8	--	36.1	20.4	7.3	--	--	--	31
With financial market Accessibility times current payments as an additional variable	32.8	-23.4	-0.6	--	30.8	21.1	39.2	--	--	--	36
Bretton Woods Formula for Schedule A Members Using 1934-43 Data	72.3	-1.1	8.8	--	11.9	8.1	--	--	--	--	37
II. Linear Equations											
With PPP-based GDP	19.6	-12.9	42.1	--	51.1	--	--	--	--	--	3
Without a multiplicative factor	20.2	-14.6	32.1	--	62.3	--	--	--	--	--	9
With current receipts	23.5	1.1	137.0	-111.6	50.1	--	--	--	--	--	10
With an openness index	20.5	-16.6	30.3	--	52.0	--	13.8	--	--	--	11
With variables indicative of ability to contribute financial resources to the fund (including gold reserves valued at market prices and net private capital flows as an additional variable).	35.0	3.7	--	47.4	--	--	13.9	--	--	--	21

Table II.2. Relative Contributions of Variables to Calculated Quotas 1/
(In percent)

	GDP	Reserves	Current Payments	Current Receipts	Var. of Curr. Receipt	Ratio of Current Receipts to GDP	New variable	New variable	New variable	New variable	Memo item: Regress. no. 2/
With the then-existing quota, short-term debt, population, and trade added, and reserves and current payments dropped	2.4	—	—	—	3.7	—	83.1	0.3	0.5	10.1	24
Nested model where a regression of vulnerability variables (represented by the variability of current receipts and population) is estimated first	22.8	-2.6	—	10.7	59.3	—	6.3	3.5	—	—	26
Nested model where a regression of strength variables (represented by GDP, reserves -- with gold reserves valued at market prices, current receipts, and net private capital flows) is estimated first	16.8	1.8	—	22.7	46.1	—	6.7	5.9	—	—	27
With both strength and vulnerability variables	23.2	-6.8	—	16.6	53.8	—	6.5	6.6	—	—	28
III. Subsample Versions											
For members with calculated quotas based on the variants of the BW formula	-41.9	2.5	56.6	—	56.9	26	—	—	—	—	5
For members representing developing countries	27.6	-26.4	51.2	—	25.8	21.7	—	—	—	—	6
For members with actual quota shares less than 1 percent	39.4	-5.9	-5.3	—	45.7	26.2	—	—	—	—	7
For members who joined in the past twenty years	30.5	-1.9	6.3	—	36.2	28.9	—	—	—	—	8
With the then-existing quota as an additive explanatory variable for countries with calculated quotas based on the variants of the Bretton Woods formula	1.6	0.7	4.4	—	1.3	2.6	89.5	—	—	—	25
Members with quota shares of equal to or less than 1.0 percent -- with normal net capital flows as an additional variable	31.9	-8.2	0.2	—	41.9	26.2	8.1	—	—	—	32

Table II.2. Relative Contributions of Variables to Calculated Quotas 1/
(In percent)

	GDP	Current Reserves	Current Payments	Current Receipts	Var. of Curr. Receipt	Ratio of Current Receipts to GDP	New variable	New variable	New variable	New variable	Memo Item: Regress. no. 2/
Members with quota shares of equal to or less than 1.0 percent -- with real effective exchange rate variability times current receipts as additional variable	34.7	-4.7	58.1	--	46.6	26.1	-60.7	--	--	--	33
Members with quota shares of equal to or less than 1.0 percent -- with financial market accessibility times current payments as an additional variable	30.5	-7.4	-51.4	--	33.0	26.3	69.0	--	--	--	34
Members with quota shares of equal to or less than 1.0 percent -- with debt as an additional variable	24.6	-7.3	3.3	--	42.5	26.2	10.7	--	--	--	35

Note: The variables in the equations are defined in Table II.1.

1/ The relative contribution of a variable to the calculated quota is the ratio between the variable times its coefficient and the members' calculated quota. The contribution of the ratio of current receipts to GDP is the contribution of the nonlinear element to the calculated quotas, i.e., the extent to which the calculated quota is revised by the application of the multiplier (unity plus the ratio of current receipts to GDP).

2/ As numbered in the List of Regression Equations in the beginning of this section.

3/ It includes the contribution of the dummy variable.

**Table II.3. Estimated Quota Shares by WEO Classification 1/
(In percent)**

	<u>Adjusted Est. Quota Shares</u>			Memo Item: Regression No. 2/
	Advanced Economies	Developing Countries	Transition Economies	
I. Non-linear Equations				
Benchmark Equation:				
Equation using only the traditional variables	69.54	21.43	9.03	1
Memo: Existing five formulas,	75.48	19.22	5.3	
Existing quotas	63.20	29.21	7.6	
With PPP-based GDP	65.01	26.27	7.74	2
Multiplicative term with a dummy variable distinguishing between industrial and developing countries	65.64	25.28	9.08	4
With an openness index	73.80	18.28	7.93	12
Without the reserves variable	67.73	23.54	8.74	13
With gold reserves valued at market prices	68.67	22.35	8.98	14
With five year average GDP replacing the existing one-year GDP	69.31	21.30	9.40	15
With population	65.80	25.22	8.98	16
With short-term debt	70.11	21.05	8.85	17

**Table II.3. Estimated Quota Shares by WEO Classification 1/
(In percent)**

	<u>Adjusted Est. Quota Shares</u>			Memo Item:
	Advanced Economies	Developing Countries	Transition Economies	Regression No. 2/
With the variability of external receipts replacing the variability of current receipts	81.91	13.93	4.16	18
With the then-existing quota as a multiplicative explanatory variable	63.28	28.62	8.10	19
With the then-existing quota as an additive explanatory variable	63.58	28.81	7.61	20
With a five-year average of GDP, where the conversion factors are centered five-year moving averages of the annual exchange rates, replacing the existing one-year GDP	69.43	21.71	8.86	22
With GNP converted with the World Bank Atlas method	69.55	21.32	9.13	23
With normal net capital flows as an additional variable	69.43	22.38	8.19	29
With real effective exchange rate variability times current receipts as an additional variable	68.70	23.36	7.94	30
With debt as an additional variable	66.24	24.99	8.78	31

**Table II.3. Estimated Quota Shares by WEO Classification 1/
(In percent)**

	<u>Adjusted Est. Quota Shares</u>			Memo Item:
	Advanced Economies	Developing Countries	Transition Economies	Regression No. 2/
With financial market accessibility times current payments as an additional variable	66.16	24.67	9.16	36
Bretton Woods Formula for Schedule A Members Using 1934-43 Data				
II. Linear Equations				
With PPP-based GDP	65.95	25.20	7.86	3
Without a multiplicative factor	69.78	21.65	8.57	9
With current receipts	68.55	23.99	7.46	10
With an openness index	64.59	25.86	9.55	11
With variables indicative of ability to contribute financial resources to the fund (including gold reserves valued at market prices and normal net capital flows as an additional variable).	77.87	18.73	3.40	21
With the then-existing quota, short-term debt, population, and trade added, and reserves and current payments dropped	63.67	28.76	7.57	24

Table II.3. Estimated Quota Shares by WEO Classification 1/
(In percent)

	<u>Adjusted Est. Quota Shares</u>			Memo Item:
	Advanced Economies	Developing Countries	Transition Economies	Regression No. 2/
Nested model where a regression of vulnerability variables (represented by the variability of current receipts and population) is estimated first	65.87	25.90	8.23	26
Nested model where a regression of vulnerability variables (represented by GDP, reserves -- with gold reserves valued at market prices, current receipts, and net private capital flows) is estimated first	66.30	26.31	7.38	27
With both strength and vulnerability variables	65.28	26.74	7.98	28

1/ According to the WEO country classifications, advanced economies include the industrial countries of North America and Europe, Japan, and two newly industrialized Asian economies (Korea and Singapore). The countries in transition include the 15 members that were formerly part of the Soviet Union, the successor countries to the former Yugoslavia and Czechoslovakia, Albania, Hungary, Poland, Romania, and Mongolia. The rest of the members are classified as developing countries.

2/ As numbered in the List of Regression Equations in the beginning of this section.

SECTION III. CHOW AND WALD TESTS FOR THE STABILITY OF COEFFICIENT ESTIMATES

This section presents the results of Wald and Chow tests for the stability of the estimated coefficients of the Bretton Woods formula, using data from the Sixth to the Eleventh Reviews, including explanatory notes.

Part A presents the Chow test results on the stability of the coefficient estimates of the Bretton Woods formula, using data from the Sixth to the Eleventh Reviews, including the methodology used in performing the Chow tests.

The results of these statistical tests suggest instability in the coefficients of the Bretton Woods formula. The best result seems to come from the pair-wise test of the Seventh and Eighth Reviews, which could perhaps be attributed to two factors: (1) the short time period in between these reviews because the Eighth Review was accelerated; and (2) the relatively large selective element of the Eighth Review, which allows the underlying economic variables to have a somewhat greater influence on the outcome of the Eighth Review.

Part B presents the results of tests for the stability of the coefficient estimates of the Bretton Woods formula, using data from the Sixth to the Eleventh Reviews, while taking into account the systematic tendency of actual quotas to fall over time in relation to GDP or external trade.

The significance of the tendency of actual quotas to fall in relation to GDP or external trade over the Sixth to the Eleventh Reviews is examined by pair-wise testing (F -tests) of whether the variances of the error terms from the estimated Bretton Woods formula over these reviews are equal. If the error variance is the same over a pair of reviews, then the Chow test remains an appropriate test. If not, we need to use other statistics, like the Wald test.

The formal tests for the equality of variances between reviews show that the error variances for the rolling (or pair-wise comparisons of) Sixth and Seventh, Seventh and Eighth, Ninth and Tenth, and Tenth and Eleventh Reviews are statistically different. This implies that the Chow test for these pairs is inappropriate. Nonetheless, the alternative Wald test indicates that the coefficients generated by the Bretton Woods formula are not stable for these pair-wise comparisons of quota review periods. For the pair of the Eighth and Ninth Reviews, however, the results of the Chow test in Part A are valid.

In sum, regardless of whether we can use the Chow test or have to use the Wald test, the statistical tests suggest instability of the coefficient estimates of the Bretton Woods formula. A detailed list of the regressions performed is presented in Statistical Appendix, Part B, Section II.

A. Chow Tests

1. To test the stability of coefficients in the reduced Bretton Woods formula over the Sixth to Eleventh Reviews, we used the Chow test for (1) rolling consecutive pairs of reviews, starting with the Sixth Review (Table III.1.1), and (2) cumulative reviews, starting with the Sixth Review (Table III.1.2).

2. To perform the Chow tests, we used a constant-membership sample of 121 members participating in the Sixth Review plus China. To test, for example, the stability of the coefficient estimates under the Sixth and Seventh Reviews, we run the following regressions:

$$Q = (a^1 Y + b^1 R + c^1 P + d^1 VC) \times (1 + C/Y) \quad \text{for the Sixth Review}$$

$$Q = (a^2 Y + b^2 R + c^2 P + d^2 VC) \times (1 + C/Y) \quad \text{for the Seventh Review}$$

If $a^1 = a^2$ $b^1 = b^2$ $c^1 = c^2$ $d^1 = d^2$, then we can estimate a common relationship for the entire (pooled) data, i.e.

$$Q = (aY + bR + cP + dVC) \times (1 + C/Y) \quad \text{for the Sixth and Seventh Reviews}$$

These four linear restrictions on a , b , c , and d can be tested using the F test. The F test is

$$F = \frac{(SSR_p - SSR_s) / (4 + 1)}{SSR_s / (122 + 122 - 2 \times 4 - 2)}$$

where

$$\begin{aligned} SSR &= \text{Sum of squared residuals} \\ SSR_p &= \text{SSR of the pooled data} = SSR_{6thR \text{ and } 7thR} \\ SSR_s &= SSR_{6thR} + SSR_{7thR} \end{aligned}$$

which has an F distribution with degrees of freedom $(4 + 1)$, $(122 + 122 - 2 \times 4 - 2)$.

3. If the F value is less than the critical value of 2.25 from the F tables at the 5 percent significance level, i.e., the calculated F value is not significant at the 5 percent level, we do not reject the null hypothesis that the relationship is stable (see Madala, G. S., *Econometrics*, 1977, McGraw-Hill, pp. 198–199).

4. The results shown in Tables III.1.1 and III.1.2 indicate, at the 5 percent significance level, rejection of the hypothesis that the coefficients of the Bretton Woods formula are stable over time.

Table III.1.1 : Chow Tests (Rolling)

	F-Statistic
Sixth and Seventh Reviews	14.22 *
Seventh and Eighth Reviews	3.67 *
Eighth and Ninth Reviews	20.65 *
Ninth and Tenth Reviews	40.27 *
Tenth and Eleventh Reviews	12.35 *

Note: The asterisk indicates significance of the 5% significance level.

Table III.1.2 : Chow Tests (Cumulative)

	F-Statistic
Sixth and Seventh Reviews	14.22 *
Seventh and Eighth Reviews	22.92 *
Eighth and Ninth Reviews	76.60 *
Ninth and Tenth Reviews	188.47 *
Tenth and Eleventh Reviews	127.58 *

Note: The asterisk indicates significance of the 5% significance level.

B. Wald Tests: Tests of Structural Change with Unequal Variances

In using the Chow test, an important assumption made is that the error variance is the same in all regressions. If this is not true, the error variance for one quota review period is σ_1^2 , while that for the next review period is σ_2^2 , and so on, in the restricted (two-reviews combined) model. The restricted model is, therefore, heteroscedastic, and the results from applying the non-linear Bretton Woods formula to such a model present problems of statistical inference.¹ In this case, it has been argued that it is likely that we overestimate the significance level of our test statistic.² In other words, the calculated F statistic is biased upward and indicates greater instability in the coefficient estimates than in fact exists.

To deal with this problem, we estimate all separate regressions and examine the estimates of the error variances. To test for significant differences, we use pairwise F -tests.³ Without any significant difference, we proceed with Chow tests. If, however, there is evidence to suggest that the variances are actually different, we may explicitly estimate the model, accounting for the heteroscedasticity. However, if the sample is reasonably large, we may use the Wald test that is valid whether or not the error variances are the same. To set up this test, we suppose

that $\hat{\theta}_1$ and $\hat{\theta}_2$ are two normally distributed estimators of a parameter based on independent samples,⁴ with variance matrices V_1 and V_2 . Then, under the null hypothesis that the two estimates have the same expected value, i.e., there is no structural change between the two quota reviews,

$$\hat{\theta}_1 - \hat{\theta}_2 \text{ has mean } 0 \text{ and variance } V_1 + V_2$$

¹ In particular, heteroscedasticity exists whenever the variance of the error term changes across different segments of the population, which are determined by the different values of the explanatory variables (Wooldridge, Jeffrey, M., 2000, *Introductory Econometrics: A Modern Approach*, South-Western College Publishing, Thomson Learning, United States, p. 248). In the case of the estimated Bretton Woods formula, heteroscedasticity is present if the variance of the error term increases with the factors affecting actual quotas, i.e., GDP, trade, reserves, and variability.

² Toyoda, Toshihisa, 1974, "Use of the Chow Test Under Heteroscedasticity," *Econometrica*, Vol. 42, No. 3, May, pp. 601-8; and Schmidt, Peter and Robin Sickles, 1977, "Some Further Evidence on the Use of the Chow Test Under Heteroscedasticity," *Econometrica*, Vol. 45, No. 5, July, pp. 1293-98.

³ The F -test is used for variance equality tests with two subgroups ($G = 2$). We compute the variance for each subgroup and denote the subgroup with the larger variance as L and the subgroup with the smaller variance as S . Then the F -statistic is given by $F = s_L^2 / s_S^2$ where s_g^2 is the variance in subgroup $g=L, S$. This F -statistic has an F -distribution with $n_L - 1$ numerator degrees of freedom and $n_S - 1$ denominator degrees of freedom under the null hypothesis of equal variance and independent normal samples.

⁴ Without independence, this test fails.

and the Wald statistic,

$$W = (\hat{\theta}_1 - \hat{\theta}_2)' (V_1 + V_2)^{-1} (\hat{\theta}_1 - \hat{\theta}_2),$$

has a chi-squared distribution with K degrees of freedom. A test that the difference between the parameters is zero can be based on this statistic. It is straightforward to apply this to our test of common parameter vectors in our regressions. Large values of the statistic lead us to reject the hypothesis of no difference (or of stability in the coefficients). Note that we base such a test on estimates of V_1 and V_2 . The test is valid in large samples, so we may use our least squares estimates of the two covariance matrices to compute W .⁵

As shown in the attached tables, the F -test results indicate that the null hypothesis (that the error variance from the estimated Bretton Woods formula is equal over rolling pairs of reviews, from the Sixth through the Eleventh Reviews) is rejected for the Sixth and Seventh, Seventh and Eighth, Ninth and Tenth, and Tenth and Eleventh Reviews (Table III.2.1). Therefore, Chow tests are not appropriate for testing the stability of coefficients of the Bretton Woods formula over these review periods. Nonetheless, application of the Wald test suggests that the coefficient estimates of the Bretton Woods formula are not stable over these reviews (Wald test values exceed the critical χ^2 value (4 restrictions) of 9.49, at the 5 percent significance level, for all such pairs of reviews—Table III.2.2). However, the pair-wise comparison of the Eighth and Ninth Reviews suggests that the corresponding error variances are equal, and therefore the Chow test results are valid (Table III.2.3).

⁵ See Greene, William, H., 1993, *Econometric Analysis*, 2d edition, Prentice Hall, Englewood Cliffs, N. J., pp. 215–6.

Table III.2.1 : Test for Equality of Variances of Error Terms (F-test)

	F-Statistic
Sixth and Seventh Reviews	3.85 *
Seventh and Eighth Reviews	1.58 *
Eighth and Ninth Reviews	1.16 *
Ninth and Tenth Reviews	1.59 *
Tenth and Eleventh Reviews	2.77 *

Note: An asterisk indicates significance at the 5% level. The critical values of the F-statistic (120.120) are 1.53, 1.35, and 1.26 at the 1% level, 5%, and 10% significance levels, respectively.

Table III.2.2 : Wald Test

	Chi-square Statistic
Sixth and Seventh Reviews	97.73 *
Seventh and Eighth Reviews	20.35 *
Ninth and Tenth Reviews	216.02 *
Tenth and Eleventh Reviews	59.26 *

Note: An asterisk indicates significance at the 5% level. The critical values of the Chi-square statistic for 4 restrictions are 13.28, 9.49, and 7.78 at the 1%, 5%, and 10% significance levels, respectively.

Table III.2.3 : Chow Tests

	F-Statistic
Eighth and Ninth Reviews	20.65 *

Note: An asterisk indicates significance at the 5% level. The critical values of the F-statistic (5.200) are 3.11, 2.66, and 1.88 for the 1%, 5%, and 10% significance levels, respectively.

SECTION IV. NESTED FORMULAS WITH VULNERABILITY AND STRENGTH VARIABLES

This section presents the methodology and statistical results from applying the nested model to certain vulnerability and strength variables.

Part A presents the Davidson-MacKinnon J test used in estimating the relative weights of strength and vulnerability variables in a two-equation formula system.

Part B presents a summary table and regression results from nested models used to estimate the relative weights of strength and vulnerability variables in the determination of actual quotas.

The regression results for the nested model where the vulnerability model is estimated first (Regression No. 53) indicate that the relative weight for the vulnerability variables (α) is 0.54, while that for the nested model where the strength model is estimated first (Regression No. 54) indicate that the relative weight for the vulnerability variables (α) is 0.43. Since the t statistics for the relative weights in both regressions are statistically significant, neither regression can be rejected. The relative contributions of variables in these regressions, based on the weighted coefficients, indicate that the relative contribution of Y is around 20 percent on average, and that of VC is over 50 percent on average.

The regression equations and resulting quota distributions for members from the nested formulas is presented in Statistical Appendix, Part B, Section III.

A. Davidson-MacKinnon J Test

To estimate the relative weights of strength and vulnerability variables in a two-equation formula system, we used the Davidson-MacKinnon J test. The J test proceeds as follows:

1. Assume the following two models explain actual quotas:

Model A with vulnerability variables: $Y = Z\gamma + v$

where Y = actual quotas, Z = vulnerability variables, γ = coefficients of Z , and v = error term

Model B with strength variables: $Y = X\beta + u$

where X = strength variables, β = coefficients of X , and u = error term.

Models A and B are nonnested if one cannot be derived as a special case of the other. To test whether the models are nonnested, we estimate the artificially nested model C, and then test one or both of the original models against it:

Model C, nesting or encompassing models A and B:

$$Y = (1 - \alpha) X\beta + \alpha Z\gamma + w$$

where α = relative weight of vulnerability variables, with $0 \leq \alpha \leq 1$, and w = error term.

2. Davidson-MacKinnon J test. Since model C is not estimable, because the parameters α , β , and γ are not separately identifiable, Davidson and MacKinnon¹ suggested that model C be replaced by one in which the unknown parameters of the model that is not being tested are replaced by consistent estimates of those parameters. The idea is that if one model is the correct model, then the fitted values from the other model should not have further explanatory power when estimating that model. Thus, the J testing procedure follows the steps:

(a) Estimate (by OLS) model A and obtain the estimated (fitted) Y values, \hat{Y}^A .

(b) Add \hat{Y}^A of step 1 as an additional regressor to model B and estimate (by OLS) the following model D:

Model D: $Y = X\delta + \alpha \hat{Y}^A + w_1$

¹ Davidson, R. and J.G. MacKinnon, 1981, "Several Tests for Model Specifications in the Presence of Alternative Hypotheses," *Econometrica*, Vol. 49, pp. 781-93.

where δ = coefficients of X , with $\delta = \beta(1-\alpha)$, and w_1 = error term.

In this step, we obtain the estimate of α , i.e., the relative weight of the vulnerability variables.

(c) Using the t test, test the hypothesis that $\alpha = 0$.

(d) If the hypothesis that $\alpha = 0$ is not rejected, (i.e., the t statistic on the α is not statistically significant), we can accept (i.e., not reject) model B as the true model because \hat{Y}^A included in model D, which represents the influence of vulnerability variables not included in model B, has no additional explanatory power beyond that contributed by model B. In other words, model B encompasses model A in the sense that the latter model does not contain any additional information that will improve the performance of model B. By the same token, if the null hypothesis is rejected, model B cannot be the true model.

(e) Then, we reverse the order of estimation of models A and B. We now estimate model B first, use the estimated Y values from this model as regressor in model D, repeat step (d), and decide whether to accept model A over model B. More specifically, we estimate the following model E:

Model E:
$$Y = Zk + \theta \hat{Y}^B + w_2$$

where \hat{Y}^B = the estimated Y values from model B, θ = coefficients of \hat{Y}^B , with $\theta \equiv (1 - \alpha)$, i.e., the relative weight of the strength variables, k = coefficients of Z , with $k = \alpha^*\gamma$, and w_2 = error term.

In this step, we obtain the estimate of $(1 - \alpha)$, i.e., the relative weight of the strength variables.

We now test the hypothesis that $\theta = 0$. If this hypothesis is not rejected, we choose model A over B. If the hypothesis that $\theta = 0$ is rejected, choose B over A, as the latter does not improve over the performance of B.

When one does a pair of nonnested tests, there are four possible outcomes, since each of model A and B may or may not be rejected. Furthermore, although it is intuitively appealing, the J test will not be able to provide a clear answer if it leads to the acceptance or rejection of both models. In case both models are rejected, neither model helps to explain the behavior of Y . Similarly, if both models are accepted, as Kmenta notes, the data are apparently not rich enough to discriminate between the two hypotheses [models].² Or, as Davidson and MacKinnon note, "when neither model is rejected, we must conclude that both models apparently fit the data about equally well and that neither

² Kmenta, Jan, 1986, *Elements of Econometrics*, Macmillan, 2d ed., New York, p. 597.

provides evidence that the other is misspecified. Presumably, either the two models are very similar, or the data set is not very informative."³

3. Applying the J test to data for the Eleventh Review, we find that neither model A nor B can be rejected,⁴ and as noted by Davidson and MacKinnon, a possible interpretation is that the traditional data set does not capture all available information. An important missing element could be the political agreements at the time of the Bretton Woods conference, whose influence has survived through the equiproportional element in subsequent quota increases.

³ Davidson, Russell and James G. MacKinnon, 1993, Estimation and Inference in Econometrics, Oxford University Press, New York and Oxford, p. 383.

⁴ See Part B of this note.

B. Nested Models With Vulnerability and Strength Variables

The model with the vulnerability variables includes two variables: the variability of current receipts, VC, defined as one standard deviation from a five-year monthly average over a 13-year period (1982–94), and population, POP, in 1994. The model with the strength variables includes four variables: GDP, Y, in 1994; the average monthly reserves with gold valued at market prices, RM, in 1994; the annual average of current receipts over a five-year period (1990–94), C; and the four-year moving average of net private capital flows (1991–94), NNKFL.

The attached table summarizes the regression results of two nested models and a linear equation used to estimate the relative weights of strength and vulnerability variables. The first nested model is estimated using fitted values for the vulnerability model (Regression No. 53), while the second nested model is estimated using fitted values for the strength model (Regression No. 54). The coefficient estimates of the linear equation of actual quotas on both strength and vulnerability variables (Regression No. 55) are OLS estimates. The coefficients shown in this table are weighted coefficients, equal to the product of the estimated coefficients from the respective regressions times their corresponding weights (α) and $(1-\alpha)$.

Table IV.1. Comparison of Coefficients from Nested Models and Ordinary Least Squares to Estimate the Relative Weights of Strength and Vulnerability Variables

Dependent Variable: Q	Strength Variables				Vulnerability Variables	
	Y	RM	C	NNKFL	VC	POP
Nested model where a regression of a vulnerability variable is estimated first 1/	0.00253	-0.00510	0.00578	0.03311	0.68187	1.27053
Nested model where a regression of strength variables is estimated first 1/	0.00192	0.00381	0.01271	0.03638	0.54445	2.22456
Ordinary Least Squares	0.00258	-0.01370	0.00905	0.03458	0.61920	2.41307

Q is the actual quota; Y is GDP in a recent year (1994); RM is average monthly reserves with gold valued at market prices in a recent year (1994); C is the annual average current receipts over a recent five-year period (1990-94); NNKFL is the four-year moving average of net private capital flows (1991-94). VC is the variability of current receipts, defined as one standard deviation from a five-year moving average over a recent 13-year period (1982-1994); POP is population in 1994.

1/ Coefficients shown have been multiplied by the estimated relative weights, for the strength and vulnerability variables, i.e., they represent the "net" effect of the variable on the estimated quota.

**SECTION V. HYPOTHETICAL QUOTA CALCULATIONS FOR PAST QUOTA REVIEWS
ACCORDING TO THE RELATIVE SIZE OF THE EQUIPROPORTIONAL
AND SELECTIVE ELEMENTS**

This section presents a summary table on simulated quota shares from the Sixth through the Eleventh Quota Reviews had the distribution of quota increases been consistently either fully equiproportional, fully selective, or evenly divided between the equiproportional and selective elements.

For this exercise, we use a constant sample of countries participating in the Sixth Review (121 members) plus China for the Seventh through the Eleventh Reviews, and take as given the size of the overall quota increases that were agreed. The simulation calculations are structured as follows: For the Seventh (initial) Review, in the fully equiproportional distribution scheme, the overall quota increase for the Seventh Review (50.9 percent) is applied to each member's actual (proposed) quotas under the Sixth Review to obtain the "fully equiproportional" quotas. In the fully selective distribution scheme, the overall percentage quota increase (50.9 percent) is first applied to the sum of the actual (proposed) quotas of the Sixth Review for the 122 members in the sample, and then distributed according to each member's calculated quota share in the total (Seventh Review) sample to obtain the "fully selective" quotas. The outcome of the evenly divided distribution scheme is generated as the average of the thus resulting "fully equiproportional" and "fully selective" quotas. For the Eighth through the Eleventh Reviews, the overall percentage increase in quotas for each review is applied in the same manner as described for the Seventh Review, except that calculations are based on quotas generated from the simulation of the previous review, instead of actual (proposed) quotas from the previous review.

The results indicate that if the distribution of past quota increases had been (1) fully equiproportional, the United States, the United Kingdom, India, and China would have ended up with higher quota shares under the Eleventh Review, while Japan, Germany, France, Italy, and Saudi Arabia would have ended up with lower quota shares; (2) fully selective, the reverse would have held true, except for the United States and the United Kingdom, which are marginally affected, and Saudi Arabia, which gains; and (3) evenly divided between the equiproportional and selective elements, the simulated quota shares under the Eleventh Review for the United States and the United Kingdom would be higher, while those for Saudi Arabia and Japan would be lower and for Germany would be unchanged, compared with the actual quota shares under the Eleventh Review.

Table V.1. Summary of Simulated Quota Shares
from Sixth Through Eleventh Reviews
(In percent of total)

Country	Initial (Actual) Quota from Sixth Review	Simulated Quota Eleventh Review			Actual Quota from Eleventh Review	Difference Between Actual and			Calculated Quota Shares fr Eleventh Review	Ratio of Simulated Quota Shares to Eleventh Review Calculated Quota Shares		
		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided
Algeria	0.725	0.725	0.561	0.643	0.655	-0.07	0.09	0.01	0.357	2.03	1.57	1.80
Argentina	1.361	1.361	0.812	1.087	1.105	-0.26	0.29	0.02	0.688	1.98	1.18	1.58
Australia	2.010	2.010	1.446	1.728	1.689	-0.32	0.24	-0.04	1.294	1.55	1.12	1.34
Austria	0.840	0.840	1.100	0.970	0.977	0.14	-0.12	0.01	1.376	0.61	0.80	0.70
Bahamas, The	0.084	0.084	0.052	0.068	0.068	-0.02	0.02	0.00	0.038	2.23	1.38	1.80
Bahrain	0.051	0.051	0.091	0.071	0.070	0.02	-0.02	0.00	0.116	0.44	0.78	0.61
Bangladesh	0.387	0.387	0.160	0.273	0.278	-0.11	0.12	0.00	0.096	4.05	1.67	2.86
Barbados	0.043	0.043	0.027	0.035	0.035	-0.01	0.01	0.00	0.024	1.82	1.15	1.49
Belgium & Luxembourg	2.344	2.344	2.697	2.520	2.548	0.20	-0.15	0.03	2.929	0.80	0.92	0.86
Benin	0.041	0.041	0.023	0.032	0.032	-0.01	0.01	0.00	0.014	2.81	1.56	2.19
Bolivia	0.115	0.115	0.060	0.087	0.089	-0.03	0.03	0.00	0.031	3.73	1.97	2.85
Botswana	0.023	0.023	0.044	0.034	0.033	0.01	-0.01	0.00	0.071	0.32	0.63	0.48
Brazil	1.692	1.692	1.590	1.641	1.584	-0.11	-0.01	-0.06	1.476	1.15	1.08	1.11
Burkina Faso	0.041	0.041	0.020	0.031	0.031	-0.01	0.01	0.00	0.013	3.21	1.61	2.41
Burundi	0.059	0.059	0.018	0.038	0.040	-0.02	0.02	0.00	0.006	9.71	3.04	6.38
Cameroon	0.115	0.115	0.078	0.096	0.097	-0.02	0.02	0.00	0.056	2.03	1.38	1.71
Canada	3.453	3.453	3.387	3.420	3.323	-0.13	-0.06	-0.10	3.520	0.98	0.96	0.97
Central African Republic	0.041	0.041	0.015	0.028	0.029	-0.01	0.01	0.00	0.007	5.80	2.17	3.98
Chad	0.041	0.041	0.016	0.028	0.029	-0.01	0.01	0.00	0.008	4.89	1.91	3.40
Chile	0.552	0.552	0.342	0.447	0.447	-0.11	0.11	0.00	0.276	2.00	1.24	1.62
China	3.053	3.053	1.918	2.486	2.445	-0.61	0.53	-0.04	1.785	1.71	1.07	1.39
Colombia	0.491	0.491	0.314	0.402	0.404	-0.09	0.09	0.00	0.261	1.88	1.20	1.54
Congo, Dem. Republic of	0.387	0.387	0.157	0.272	0.278	-0.11	0.12	0.01	0.059	6.51	2.64	4.57
Congo, Republic of	0.043	0.043	0.045	0.044	0.044	0.00	0.00	0.00	0.045	0.96	1.00	0.98
Costa Rica	0.104	0.104	0.067	0.086	0.086	-0.02	0.02	0.00	0.056	1.87	1.20	1.53
Cote d'Ivoire	0.193	0.193	0.133	0.163	0.170	-0.02	0.04	0.01	0.075	2.58	1.78	2.18
Cyprus	0.087	0.087	0.063	0.075	0.073	-0.01	0.01	0.00	0.065	1.33	0.96	1.14
Denmark	0.789	0.789	0.920	0.854	0.857	0.07	-0.06	0.00	1.076	0.73	0.85	0.79
Dominican Republic	0.140	0.140	0.089	0.114	0.114	-0.03	0.03	0.00	0.073	1.92	1.22	1.57
Ecuador	0.178	0.178	0.137	0.158	0.158	-0.02	0.02	0.00	0.102	1.74	1.34	1.54
Egypt	0.580	0.580	0.422	0.501	0.492	-0.09	0.07	-0.01	0.406	1.43	1.04	1.24
El Salvador	0.109	0.109	0.064	0.087	0.089	-0.02	0.03	0.00	0.038	2.88	1.68	2.28
Equatorial Guinea	0.025	0.025	0.007	0.016	0.017	-0.01	0.01	0.00	0.002	15.82	4.52	10.17
Ethiopia	0.092	0.092	0.046	0.069	0.070	-0.02	0.02	0.00	0.026	3.52	1.78	2.65
Fiji	0.046	0.046	0.027	0.037	0.037	-0.01	0.01	0.00	0.022	2.11	1.26	1.69
Finland	0.667	0.667	0.659	0.663	0.659	-0.01	0.00	0.00	0.684	0.98	0.96	0.97
France	4.883	4.883	5.594	5.238	5.603	0.72	0.01	0.36	6.008	0.81	0.93	0.87
Gabon	0.076	0.076	0.086	0.081	0.081	0.00	-0.01	0.00	0.076	1.01	1.13	1.07
Gambia, The	0.023	0.023	0.009	0.016	0.016	-0.01	0.01	0.00	0.006	3.98	1.55	2.77
Germany	5.486	5.486	8.069	6.778	6.787	1.30	-1.28	0.01	9.698	0.57	0.83	0.70
Ghana	0.270	0.270	0.100	0.185	0.193	-0.08	0.09	0.01	0.031	8.79	3.27	6.03
Greece	0.471	0.471	0.419	0.445	0.429	-0.04	0.01	-0.02	0.413	1.14	1.01	1.08
Grenada	0.008	0.008	0.004	0.006	0.006	0.00	0.00	0.00	0.003	2.33	1.15	1.74
Guatemala	0.130	0.130	0.084	0.107	0.110	-0.02	0.03	0.00	0.051	2.53	1.64	2.08
Guinea	0.076	0.076	0.033	0.055	0.056	-0.02	0.02	0.00	0.021	3.69	1.58	2.64

Table V.1. Summary of Simulated Quota Shares
from Sixth Through Eleventh Reviews
(In percent of total)

Country	Initial (Actual) Quota from Sixth Review	Simulated Quota- Eleventh Review			Actual Quota from Eleventh Review	Difference Between Actual and			Calculated Quota Shares fr Eleventh Review	Ratio of Simulated Quota Shares to Eleventh Review Calculated Quota Shares		
		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided
Guyana	0.064	0.064	0.029	0.046	0.047	-0.02	0.02	0.00	0.012	5.27	2.43	3.85
Haiti	0.059	0.059	0.023	0.041	0.043	-0.02	0.02	0.00	0.008	6.93	2.77	4.85
Honduras	0.087	0.087	0.045	0.066	0.068	-0.02	0.02	0.00	0.027	3.16	1.65	2.40
Iceland	0.074	0.074	0.049	0.062	0.061	-0.01	0.01	0.00	0.039	1.89	1.26	1.58
India	2.913	2.913	1.333	2.123	2.169	-0.74	0.84	0.05	0.820	3.55	1.62	2.59
Indonesia	1.221	1.221	0.982	1.102	1.085	-0.14	0.10	-0.02	0.852	1.43	1.15	1.29
Iran	1.679	1.679	1.393	1.536	0.781	-0.90	-0.61	-0.76	0.611	2.75	2.28	2.51
Iraq	0.359	0.359	0.740	0.549	0.620	0.26	-0.12	0.07	0.357	1.00	2.07	1.54
Ireland	0.394	0.394	0.480	0.437	0.437	0.04	-0.04	0.00	0.655	0.60	0.73	0.67
Israel	0.522	0.522	0.461	0.492	0.484	-0.04	0.02	-0.01	0.415	1.26	1.11	1.19
Italy	3.155	3.155	3.903	3.529	3.681	0.53	-0.22	0.15	4.501	0.70	0.87	0.78
Jamaica	0.188	0.188	0.095	0.142	0.143	-0.05	0.05	0.00	0.055	3.40	1.72	2.56
Japan	4.221	4.221	8.051	6.136	6.946	2.72	-1.11	0.81	10.987	0.38	0.73	0.56
Jordan	0.076	0.076	0.100	0.088	0.089	0.01	-0.01	0.00	0.086	0.89	1.16	1.03
Kenya	0.176	0.176	0.098	0.137	0.142	-0.03	0.04	0.00	0.054	3.25	1.81	2.53
Korea	0.407	0.407	1.101	0.754	0.852	0.45	-0.25	0.10	1.786	0.23	0.62	0.42
Kuwait	0.598	0.598	0.773	0.685	0.721	0.12	-0.05	0.04	0.559	1.07	1.38	1.23
Lao, People's Dem. Repub	0.041	0.041	0.013	0.027	0.028	-0.01	0.01	0.00	0.007	5.93	1.89	3.91
Lebanon	0.031	0.031	0.162	0.096	0.106	0.08	-0.06	0.01	0.086	0.35	1.89	1.12
Lesotho	0.018	0.018	0.018	0.018	0.018	0.00	0.00	0.00	0.019	0.96	0.98	0.97
Liberia	0.094	0.094	0.034	0.064	0.067	-0.03	0.03	0.00	0.007	14.12	5.14	9.63
Libya	0.471	0.471	0.620	0.545	0.586	0.12	-0.03	0.04	0.340	1.39	1.82	1.60
Madagascar	0.087	0.087	0.036	0.061	0.064	-0.02	0.03	0.00	0.015	5.81	2.42	4.12
Malawi	0.048	0.048	0.023	0.035	0.036	-0.01	0.01	0.00	0.015	3.30	1.54	2.42
Malaysia	0.644	0.644	0.766	0.705	0.776	0.13	0.01	0.07	1.107	0.58	0.69	0.64
Mali	0.069	0.069	0.026	0.047	0.049	-0.02	0.02	0.00	0.014	4.99	1.87	3.43
Malta	0.051	0.051	0.054	0.053	0.053	0.00	0.00	0.00	0.062	0.82	0.87	0.84
Mauritania	0.043	0.043	0.022	0.033	0.034	-0.01	0.01	0.00	0.010	4.14	2.09	3.12
Mauritius	0.069	0.069	0.040	0.054	0.053	-0.02	0.01	0.00	0.039	1.75	1.02	1.38
Mexico	1.361	1.361	1.310	1.336	1.349	-0.01	0.04	0.01	1.430	0.95	0.92	0.93
Morocco	0.382	0.382	0.234	0.308	0.307	-0.07	0.07	0.00	0.181	2.10	1.29	1.70
Myanmar	0.186	0.186	0.096	0.141	0.135	-0.05	0.04	-0.01	0.124	1.50	0.78	1.14
Nepal	0.048	0.048	0.026	0.037	0.037	-0.01	0.01	0.00	0.020	2.44	1.30	1.87
Netherlands	2.412	2.412	2.937	2.674	2.693	0.28	-0.24	0.02	3.048	0.79	0.96	0.88
New Zealand	0.590	0.590	0.352	0.471	0.467	-0.12	0.11	0.00	0.282	2.09	1.25	1.67
Nicaragua	0.087	0.087	0.044	0.065	0.068	-0.02	0.02	0.00	0.017	5.15	2.63	3.89
Niger	0.041	0.041	0.025	0.033	0.034	-0.01	0.01	0.00	0.013	3.06	1.85	2.45
Nigeria	0.916	0.916	0.856	0.886	0.915	0.00	0.06	0.03	0.443	2.07	1.93	2.00
Norway	0.751	0.751	0.969	0.860	0.872	0.12	-0.10	0.01	1.028	0.73	0.94	0.84
Oman	0.051	0.051	0.151	0.101	0.101	0.05	-0.05	0.00	0.165	0.31	0.92	0.61

**Table V.1. Summary of Simulated Quota Shares
from Sixth Through Eleventh Reviews
(In percent of total)**

Country	Initial (Actual) Quota from Sixth Review	Simulated Quota Eleventh Review			Actual Quota from Eleventh Review	Difference Between Actual and			Calculated Quota Shares fr Eleventh Review	Ratio of Simulated Quota Shares to Eleventh Review Calculated Quota Shares		
		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided		Equi- proportional	Fully Selective	Evenly Divided
Pakistan	0.725	0.725	0.337	0.531	0.539	-0.19	0.20	0.01	0.223	3.25	1.51	2.38
Panama	0.115	0.115	0.095	0.105	0.108	-0.01	0.01	0.00	0.073	1.56	1.30	1.43
Paraguay	0.059	0.059	0.045	0.052	0.052	-0.01	0.01	0.00	0.039	1.50	1.17	1.34
Peru	0.417	0.417	0.242	0.330	0.333	-0.08	0.09	0.00	0.169	2.46	1.43	1.95
Philippines	0.534	0.534	0.402	0.468	0.459	-0.08	0.06	-0.01	0.366	1.46	1.10	1.28
Portugal	0.438	0.438	0.469	0.453	0.453	0.01	-0.02	0.00	0.601	0.73	0.78	0.75
Qatar	0.102	0.102	0.161	0.131	0.138	0.04	-0.02	0.01	0.101	1.01	1.60	1.31
Romania	0.623	0.623	0.426	0.525	0.537	-0.09	0.11	0.01	0.246	2.54	1.74	2.14
Rwanda	0.059	0.059	0.021	0.040	0.042	-0.02	0.02	0.00	0.006	9.44	3.35	6.40
Samoa	0.008	0.008	0.004	0.006	0.006	0.00	0.00	0.00	0.002	3.32	1.54	2.43
Saudi Arabia	1.527	1.527	2.996	2.261	3.645	2.12	0.65	1.38	1.413	1.08	2.12	1.60
Senegal	0.107	0.107	0.058	0.082	0.084	-0.02	0.03	0.00	0.031	3.41	1.85	2.63
Sierra Leone	0.079	0.079	0.025	0.052	0.054	-0.02	0.03	0.00	0.005	14.36	4.50	9.43
Singapore	0.280	0.280	1.065	0.672	0.450	0.17	-0.61	-0.22	1.646	0.17	0.65	0.41
Somalia	0.059	0.059	0.022	0.040	0.043	-0.02	0.02	0.00	0.003	17.13	6.34	11.73
South Africa	1.079	1.079	0.839	0.959	0.975	-0.10	0.14	0.02	0.480	2.25	1.75	2.00
Spain	1.417	1.417	1.754	1.585	1.591	0.17	-0.16	0.01	2.239	0.63	0.78	0.71
Sri Lanka	0.303	0.303	0.122	0.213	0.216	-0.09	0.09	0.00	0.084	3.60	1.45	2.52
Sudan	0.224	0.224	0.094	0.159	0.164	-0.06	0.07	0.01	0.039	5.71	2.39	4.05
Swaziland	0.031	0.031	0.024	0.027	0.026	0.00	0.00	0.00	0.021	1.42	1.11	1.27
Sweden	1.145	1.145	1.356	1.250	1.250	0.10	-0.11	0.00	1.359	0.84	1.00	0.92
Syrian Arab Republic	0.160	0.160	0.153	0.157	0.153	-0.01	0.00	0.00	0.143	1.12	1.07	1.10
Tanzania	0.140	0.140	0.061	0.101	0.104	-0.04	0.04	0.00	0.028	4.97	2.18	3.57
Thailand	0.461	0.461	0.567	0.514	0.564	0.10	0.00	0.05	0.928	0.50	0.61	0.55
Togo	0.048	0.048	0.026	0.037	0.038	-0.01	0.01	0.00	0.009	5.17	2.73	3.95
Trinidad and Tobago	0.209	0.209	0.149	0.179	0.175	-0.03	0.03	0.00	0.063	3.30	2.36	2.83
Tunisia	0.160	0.160	0.143	0.152	0.149	-0.01	0.01	0.00	0.123	1.31	1.16	1.24
Turkey	0.509	0.509	0.510	0.509	0.503	-0.01	-0.01	-0.01	0.574	0.89	0.89	0.89
Uganda	0.127	0.127	0.050	0.089	0.094	-0.03	0.04	0.01	0.017	7.45	2.96	5.20
United Arab Emirates	0.305	0.305	0.568	0.437	0.319	0.01	-0.25	-0.12	0.430	0.71	1.32	1.02
United Kingdom	7.443	7.443	5.784	6.613	5.603	-1.84	-0.18	-1.01	5.375	1.38	1.08	1.23
United States	21.387	21.387	19.453	20.420	19.382	-2.00	-0.07	-1.04	18.575	1.15	1.05	1.10
Uruguay	0.214	0.214	0.098	0.156	0.160	-0.05	0.06	0.00	0.060	3.58	1.65	2.61
Venezuela	1.679	1.679	1.046	1.363	1.387	-0.29	0.34	0.02	0.563	2.98	1.86	2.42
Vietnam	0.229	0.229	0.111	0.170	0.172	-0.06	0.06	0.00	0.068	3.36	1.62	2.49
Yemen, Republic of	0.137	0.137	0.109	0.123	0.127	-0.01	0.02	0.00	0.083	1.65	1.31	1.48
Zambia	0.359	0.359	0.140	0.250	0.255	-0.10	0.11	0.01	0.036	9.92	3.88	6.90
Total	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	100.0			