INTERNATIONAL MONETARY FUND

Quota Formula Review—Initial Considerations
Supplement

Prepared by the Finance Department
(In consultation with other departments)

Approved by Andrew Tweedie

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APPENDIX I: CLASSIFICATION OF COUNTRIES

1.   **It is customary in quota papers to present illustrative calculations for major country groups, as well as for individual members.** This is intended to help facilitate quota discussions though it can lead to a tendency to put heavy emphasis on the results for particular groups. Indeed, the recent discussions have focused heavily on the share of Emerging Market and Developing Countries (EMDCs) as a group, at times seemingly taking on as much importance as the impact on individual countries.

2.   **The classification used in recent quota papers is based on that used in the WEO, but has not been updated for changes in the latter.** The WEO classifies countries into two major groupings—advanced economies (AEs) and emerging market and developing countries (EMDCs), which have evolved over time. These groups are not based on strict economic criteria—countries are reclassified as AEs "with the objective of having a reasonably meaningful organization of data." All quota papers published after the completion of the 11th Review have used identical country groupings derived from the earlier WEO classifications.[1] Since then, seven countries have been reclassified in the WEO as advanced economies,[2] and the WEO regional sub-groupings have also been revised, including by dropping the category of transition economies (see Table).

3.   **An argument can clearly be made for moving now to the current WEO classification.** This would bring the country classification used in quota discussions fully into line with current global economic realities. It would raise the 14th Review quota share of advanced economies to 61.2 percent compared to 57.7 percent under the current quota classification, and as noted would also have implications for regional quota shares.

4.   **Against this, there could be a case also for maintaining the current classification through the 15th Review.** This would provide continuity in the discussions, which may be helpful to the extent that the next review is seen as part of a process on reform that was initiated with the 2008 reform (as suggested for example by the statement of G-20 Leaders at the Seoul Summit).

5.   **For now, the calculations presented in this paper maintain the existing country classification.** This could be modified if Directors' wish to move to the current WEO classification, and in any event, it would seem desirable to update it at the latest following the 15th Review. This discussion also highlights the importance of not giving excessive weight to the results for particular country groups. Among other reasons, one would expect these country classifications to become less meaningful over time as more members move from the EMDC to advanced economy categories.

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[1] See also Annex II of *Quota Formula Review—Data Update and Issues (8/17/2011).*

[2] These seven countries were reclassified as AEs at different times: Estonia (September 2011), Czech Republic and Slovak Republic (April 2009), Malta (April 2008), Slovenia (April 2007), and Korea and Singapore (May 1997).

Current Classification and WEO Classification--Number of Countries and Changes

	Current Classification	WEO Classification	Compared to the current classification	
			WEO does include	WEO does not include
Advanced Economies	26	33		
Major Advanced Economies	7	7		
Other Advanced Economies	19	26	Czech Republic, Estonia, Korea, Malta, Singapore, Slovak Republic, and Slovenia	
EMDCs 1/	161	154		
Africa/Sub Saharan Africa	51	45		Algeria, Djibouti, Mautitania, Morocco, Sudan and Tunisia
Asia/Asia	32	30		Korea and Singapore
Middle East, Malta & Turkey/ Middle East and North Africa	16	20	Algeria, Djibouti, Mautitania, Morocco, Sudan and Tunisia	Malta and Turkey
Western Hemisphere/Latin America and the Caribbean	32	32		
Transition Economies/CIS and Central and Eastern Europe	30	27	Turkey	Czech Republic, Estonia, Slovak Republic, and Slovenia
Total	187	187		

1/ A/B refers to the subgroup for the current classification (A) and the WEO classification (B).

APPENDIX II. VARIABILITY

A. Introduction

1.   **Variability of current receipts and net capital flows is intended to capture members' vulnerability to external shocks and the potential need for Fund resources**. This Annex undertakes empirical analysis of the current and alternative measures of variability and explores links between these measures and the demand for Fund financing. Results suggest that, while a wide variety of such measures can be constructed, none of them is a particularly good predictor of the likelihood of using Fund resources.

B. Evolution of Variability in the Quota Formula

2.   **A measure of variability has been part of the quota formula since the Fund's early days**. In the original Bretton Woods version of the formula, variability was constructed as the maximum fluctuation in exports, defined as the difference between the highest and the lowest value of exports over a five-year period. Over time it became increasingly evident that this definition of variability was unrepresentative of what the variable was intended to measure as it often reflected trends rather than fluctuations. A major revision of the quota formula was undertaken in 1962-63.The concept of variability which was considered more appropriate to include in the formula was the one proposed for the compensatory financing facility (CFF) that was being discussed at the same time.[1] The new measure was based on deviations from a five-year moving average centered on the middle year as a statistical definition of "normal" exports.

3.   **Responding to concerns expressed during the Eleventh Review, an external group of experts (QFRG) was established to assess the adequacy of the quota formula**.[2] One of the recommendations of the QFRG related to variability was to add to current receipts some measure of capital flows. Work done in the context of the 2008 Reform stressed the need for modernizing the definition of variability in view of the capital account crises of the last two decades. In addition, it was noted that the deviation from a three-year moving average (rather than five years as in the compensatory financing measure) might be preferable to capture shorter term trends in capital flows while still smoothing out temporary fluctuations.

4.   **Despite the improvements in the definition, dissatisfaction with variability persisted**. Concerns were raised that the share of advanced economies was relatively high and some asked for further work to make the variable more reflective of members' likely need to draw on the Fund resources. Staff examined a range of options and concluded that

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[1] CFF was designed to help members with specific balance of payments needs resulting from a temporary decline in exports driven by factors beyond the member's control (see *Analysis and Reweighting of the Bretton Woods Formula* (4/8/63)).

[2] *External Review of the Quota Formulas*, April 28, 2000.

the results pointed to the continued need for a measure that is related to economic size.[3] The following alternatives were considered: (i) scaling variability to GDP or the average of current receipts and net capital flows; (ii) downside variability; (iii) extreme variability; (iv) variability of current receipts plus variability of net capital flows; (v) volatility based measures, such as volatility of GDP growth, volatility of consumption growth and measures of risk sharing.[4]

C. Empirical Analysis

5.   **A key issue is whether variability captures what it is meant to capture in the formula; in particular, whether its inclusion in the formula contributes positively to the calculated quota shares of members that are more likely to use Fund resources over time**. Estimating the conditional probability of approval of a Fund arrangement based on the variability measure only, however, would be misleading due to bias in the estimates resulting from omitting other relevant variables. To minimize the bias, variability is included in a larger model along with other variables which are believed to have a bearing on the demand for Fund financing. The existing literature provides some guidance in identifying these variables.

6.   **A number of empirical studies have focused on the circumstances under which a country would have an arrangement with the IMF, with some of them also attempting to predict the amount of lending involved**. Some more recent examples include Bal Gündüz (2009), Bird and Rowlands (2009), Cerutti (2007) and Gosh et al. (2007). Based on these studies and the review of the literature therein, the following explanatory variables have been identified as potential determinants of negotiating a Fund arrangement:

- *Real GDP growth*. Countries with low or negative real GDP growth are more likely to resort to Fund financing to alleviate policy adjustment.

- *CPI inflation*. A positive relationship is expected since an increase in inflation can be a sign of erosion of external price competitiveness and deterioration of economic performance.

- *Reserves.* The level of reserves measured in months of imports is considered as a measure of a country's capacity to absorb balance of payments shocks and therefore, the higher the reserve coverage, the lower the probability of a Fund program.

- *Current account balance (as a ratio to GDP)*. While a negative sign for the coefficient on the current account is expected, a number of studies do not find this variable statistically significant.

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[3] *Quota and Voice Reform —Stocktaking and Further Considerations* (SM/07/252, 7/11/07).

[4] See Annex of SM/07/252 for more detail.

- *Public external debt (as a ratio to GDP).* High levels of public external debt signal vulnerability and increase the likelihood of a Fund arrangement.

- *Percentage change in the real effective exchange rate.* The expected impact of this variable is ambiguous. A negative relationship could be explained with the deterioration of competitiveness associated with a real effective exchange rate appreciation; often, however, balance of payments crises are preceded by episodes of substantial currency devaluation which could manifest in a positive sign on this variable.

7.   **In addition to the country-specific variables listed above,** *world real GDP growth* **is included in the model.** With growing trade and financial interconnectedness, global economic factors become increasingly important for domestic economic conditions. Lower world GDP growth could mean reduced external demand, lower exports and balance of payments difficulties. Among the non-economic factors, the *existence of previous Fund arrangements* is the most frequently used indicator that is typically found to be positive and significant. Here the existence of a previous arrangement is captured by a dummy variable which takes the value of 1 if a country had a Fund program in the previous two years.

8.   **The empirical analysis is based on a binary variable "approval of a Fund arrangement" which indicates whether a Fund program was approved in a given year or not**.[5] The binary variable is constructed using data on IMF arrangements in the period 1990 - 2009 covering all facilities (both GRA and PRGT), including precautionary arrangements.[6] While a case can be made for considering separately GRA programs and PRGT-funded programs due to the supposedly different factors driving the demand for Fund financing in medium- and low-income countries, in the current framework such an approach does not seem appropriate given that the main question of interest is to examine the relationship between variability and potential need for the entire membership.

9.   **In the construction of the variability series, the FIN quota database is used for the period 1986 -2009 and for earlier years IFS data are gap-filled based on the WEO and following the established practices for quota calculations**. WEO has also been the primary source for some of the alternative measures of variability and the macroeconomic variables included in the analysis.

10.   **As a first step, correlation coefficients between the binary variable for approval of a Fund arrangement and variability are calculated**.[7] The correlation coefficient for the

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[5] For country *i* in year *t*, the variable takes the value of 1 if an IMF arrangement was approved in this particular year and 0 otherwise.

[6] Disbursements under the emergency financing facilities (ENDA and EPCA) are excluded due to the specific type of balance of payments need they address.

[7] Since the one of the variables is binary and the other one is continuous, the appropriate measure of association is the point biserial correlation coefficient (see Anderson, J. *Point biserial correlation*, STATA Technical Bulletin STB-17, January 1994).

entire sample is negative (-0.08) and so are the correlation coefficients for the individual years which range between -0.13 and -0.04 and are not statistically significant. Some of the alternative measures of variability considered previously are also examined to determine if they perform better as potential predictors of a Fund program. The results from the correlation analysis suggest that unscaled variability measures and volatility of GDP growth scaled up by GDP exhibit close to zero but still negative correlations with the binary variable for approval of a Fund arrangement. The point biserial correlation coefficients for the two scaled measures (scaled variability and volatility of GDP growth) for the whole sample are positive but very close to zero (0.03 and 0.01, respectively) and statistically insignificant.

11.   **While it seems counterintuitive that countries with higher shares in variability are less likely to have a Fund arrangement, it should be emphasized that this result is likely to be largely driven by the definition of variability in the quota formula which is essentially a measure of size**. To correct for the size effect which may be masking the true variability component, the unscaled variability measures are transformed by taking the difference between the original variability indicator (expressed as the country's share in total variability) and the country's share in GDP. Taking the difference rather than the ratio to GDP has a certain advantage as it still retains some notion of size.

12.   **The correlation analysis based on the differenced variability indicators does not present evidence of relationship between these variables and the approval of a Fund arrangement** (Figure A2.1). The correlations calculated over the entire sample are very close to zero (in the order of 0.02) and as a rule not statistically significant, except for the differenced volatility of real GDP growth (scaled by GDP) for which the correlation coefficient is still very low at 0.046 but significant at the 1 percent level.

13.   **A Probit model in which variability is included as an explanatory variable along with the macroeconomic indicators discussed earlier, largely confirms the findings based on correlations**.[8] The Probit estimation results indicate that most of the country-specific variables included in the model as well as global GDP growth significantly affect the probability that a country negotiates a Fund arrangement with the expected signs (Table A2.1). Overall, the fit is rather weak and is generally worse than the results reported in other studies. This is not surprising given that these studies focused on relatively homogeneous groups of countries, whereas here the model is estimated for the entire membership. For most measures of variability, including the one currently used, the estimated marginal effects (calculated at sample means) are not statistically significant. Only the differenced volatility of real GDP growth has a positive marginal effect on the probability of a Fund arrangement

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[8] The pooled probit model is estimated with cluster robust standard errors, allowing for the possibility that observations for the same country may not be independent. The same model specification was estimated using a population-averaged probit model which is a pooled estimation with country-specific effects assumed to be random and averaged out, and again by means of a random effects probit model with an accurate nonadaptive quadrature approximation. The results from all three models are very similar. Moreover, the relative importance of intra-group unobserved effects in the random effects probit estimation is significantly zero, which suggests that the panel estimator is not different from the pooled estimator. Therefore, we report results only from the pooled probit estimation with cluster robust standard errors.

that is significantly different from zero but this result is strongly influenced by a few observations in the initial years (particularly by the high correlation in 1995 as can be seen on Figure A2.1) and is not robust to changes in the sample. Re-estimating the model using data after 2000 yields a coefficient for volatility of GDP growth that is statistically insignificant.

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Elekdağ, Selim. "How Does the Global Economic Environment Influence the Demand for IMF Resources?" *IMF Working Paper No. 06/239*. October 2006.

Ghosh, Atish, Manuela Goretti, Bikas Joshi, Alun Thomas, and Juan Zalduendo. "Modeling Aggregate Use of Fund Resources - Analytical Approaches and Medium-Term Projections." *IMF Working Paper No. 07/70*. March 2007.

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Figure A2.1. Correlation Coefficients between Differenced Variability Measures and a Binary Variable for Approval of a Fund Arrangement
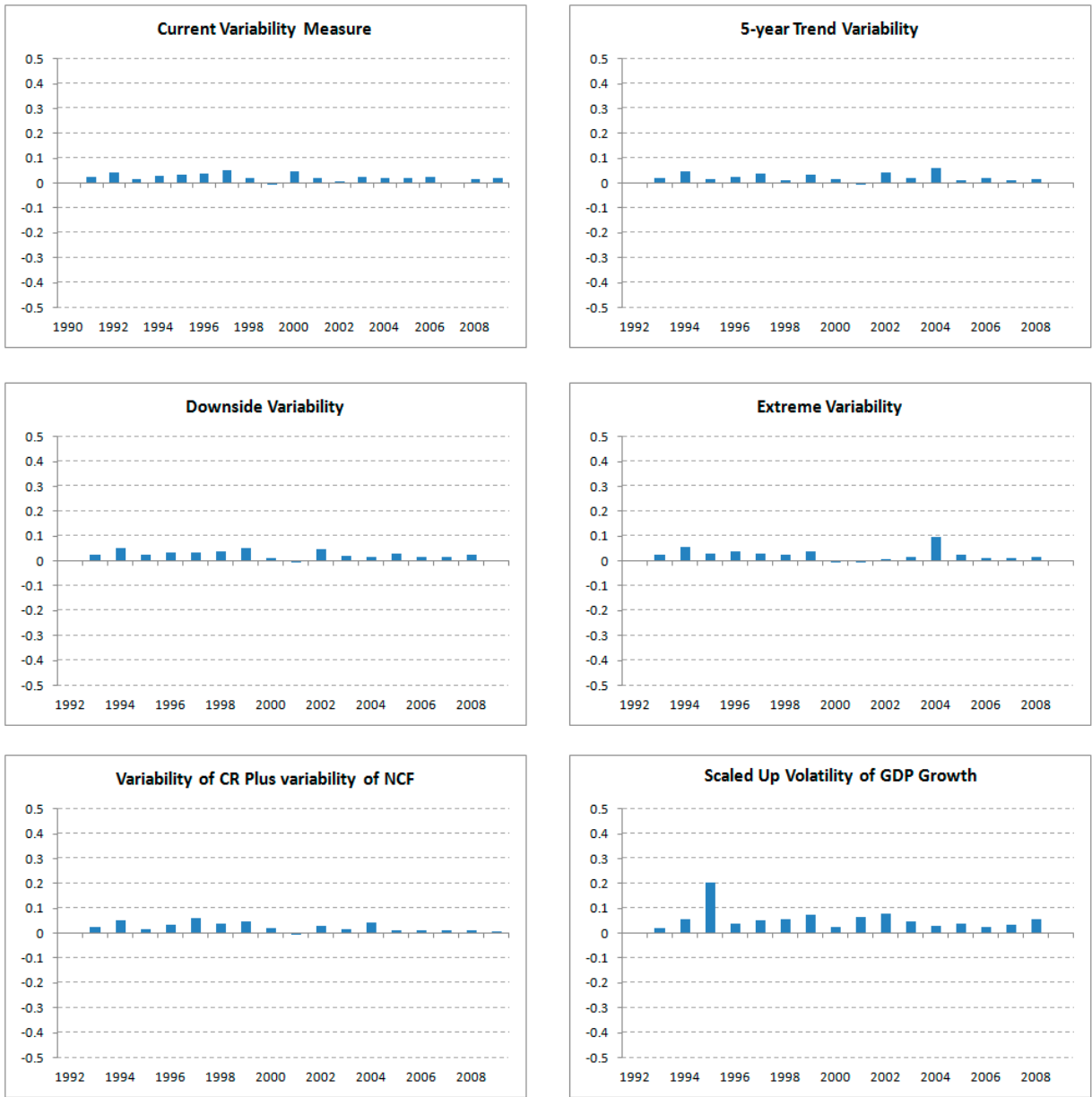
Source: Finance Department.

Table A2.1. Probit Estimation Results for Alternative Variability Measures

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
Country's Real GDP Growth	-0. 0034*	-0. 0024	-0. 0035*	-0. 0035*	-0. 0035*	-0. 0035*
	(-2. 15)	(-1. 59)	(-2. 17)	(-2. 17)	(-2. 17)	(-2. 23)
CPI Inflation	0. 0002*	0. 0001	0. 0002*	0. 0002*	0. 0002*	0. 0001*
	(2. 56)	(0. 87)	(2. 54)	(2. 53)	(2. 56)	(2. 25)
Reserve Covers (in months of Imports)	-0. 0050*	-0. 0041	-0. 0051*	-0. 0050*	-0. 0051*	-0. 0064*
	(-2. 00)	(-1. 74)	(-2. 01)	(-1. 99)	(-2. 01)	(-2. 40)
Current Account Balance (in percent of GDP)	0. 0000	0. 0000	0. 0000	0. 0000	0. 0000	0. 0000
	(0. 00)	(0. 00)	(0. 00)	(0. 00)	(0. 00)	(0. 00)
Public External Debt (in percent of GDP)	0. 0160	0. 0187	0. 0159	0. 0160	0. 0158	0. 0172
	(1. 47)	(1. 76)	(1. 47)	(1. 46)	(1. 44)	(1. 59)
Real Effective Exchange Rate (percentage change)	0. 0006	0. 0004	0. 0006	0. 0006	0. 0006	0. 0006
	(1. 27)	(0. 66)	(1. 28)	(1. 28)	(1. 29)	(1. 31)
Real Global GDP Growth	-0. 0137*	-0. 0146*	-0. 0136*	-0. 0137*	-0. 0137*	-0. 0131*
	(-2. 33)	(-2. 52)	(-2. 33)	(-2. 34)	(-2. 34)	(-2. 25)
Program in the last 2 years	0. 1245**	0. 1215**	0. 1244**	0. 1248**	0. 1244**	0. 1195**
	(8. 38)	(8. 21)	(8. 37)	(8. 40)	(8. 39)	(8. 02)
Variability	0. 0082	-	-	-	-	-
	(1. 47)					
Varibility using 5-year Trend	-	0. 0050	-	-	-	-
		(0. 96)				
Downside Variability	-	-	0. 0078	-	-	-
			(1. 56)			
Extreme Variability	-	-	-	0. 0040	-	-
				(0. 93)		
Variability of Current Receipts + Variability of Net Capital Flows	-	-	-	-	0. 0068	-
					(1. 30)	
Volatility of Real GDP growth	-	-	-	-	-	0. 0344**
						(2. 66)
Number of Observations	2480	2450	2480	2480	2480	2480
Pseudo-R^2	0.085	0.070	0.085	0.085	0.085	0.088
Log-Likelihood	-866	-847	-866	-866	-866	-863

Note: ** significant at 1 percent; * significant at 5 percent. Z-statistics reported in parentheses.

Source: Finance Department.

Table A3.1. Contribution of Quota Variables to Calculated Quota Share -- by Member
(In percent)

| | 14th Review Proposed Quotas | Calculated Quota Share | Impact of Incrementally Dropping | | | Total impact of dropping reserves, openness and variability | Compressed GDP Blend Share |
| | | | Reserves | Variability | Openness | | |
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
United States	17.407	16.061	0.745	0.784	3.262	4.792	20.853
Japan	6.464	6.259	-0.341	0.142	1.081	0.882	7.142
China	6.394	8.628	-0.945	0.646	0.886	0.586	9.215
Germany	5.586	5.783	0.255	0.106	-1.042	-0.682	5.101
France	4.227	3.787	0.165	0.227	-0.198	0.194	3.981
United Kingdom	4.227	4.297	0.184	0.082	-0.690	-0.424	3.872
Italy	3.161	3.229	0.132	-0.013	-0.056	0.064	3.293
India	2.751	2.447	-0.052	0.194	0.651	0.792	3.239
Russian Federation	2.706	2.663	-0.132	-0.082	0.294	0.080	2.743
Brazil	2.316	2.106	-0.036	0.035	0.644	0.643	2.748
Canada	2.312	2.231	0.079	0.111	-0.157	0.033	2.264
Saudi Arabia	2.096	1.470	-0.210	-0.329	-0.110	-0.648	0.821
Spain	2.000	2.330	0.107	0.026	-0.069	0.064	2.393
Mexico	1.869	1.708	0.025	0.089	0.148	0.261	1.970
Netherlands	1.832	2.076	0.094	-0.129	-0.746	-0.781	1.295
Korea, Republic of	1.800	1.963	-0.063	0.088	-0.180	-0.155	1.808
Australia	1.379	1.431	0.046	-0.027	0.115	0.134	1.566
Belgium	1.345	1.418	0.063	-0.117	-0.587	-0.642	0.776
Switzerland	1.210	1.143	0.006	0.027	-0.446	-0.412	0.730
Turkey	0.977	1.113	0.007	-0.003	0.155	0.159	1.272
Indonesia	0.975	0.905	0.005	0.050	0.144	0.198	1.103
Sweden	0.929	1.064	0.029	-0.133	-0.238	-0.342	0.722
Poland	0.859	0.989	0.001	-0.024	-0.041	-0.065	0.924
Austria	0.825	0.827	0.036	0.008	-0.225	-0.181	0.646
Singapore	0.816	1.214	-0.063	-0.130	-0.644	-0.837	0.377
Norway	0.788	0.784	0.005	-0.048	-0.125	-0.168	0.616
Venezuela, R.B. de	0.781	0.512	0.011	-0.041	0.068	0.038	0.550
Malaysia	0.762	0.728	-0.030	-0.019	-0.205	-0.254	0.474
Iran, Islamic Republic of	0.748	0.656	-0.026	0.074	0.157	0.205	0.861
Ireland	0.724	0.984	0.049	-0.188	-0.439	-0.579	0.405
Denmark	0.721	0.739	-0.007	-0.050	-0.186	-0.243	0.497
Thailand	0.674	0.840	-0.046	-0.038	-0.119	-0.203	0.637
Argentina	0.669	0.576	-0.005	0.001	0.120	0.117	0.693
South Africa	0.640	0.551	0.004	0.043	0.039	0.085	0.636
Nigeria	0.515	0.451	-0.011	-0.030	0.004	-0.038	0.413

Table A3.1. Contribution of Quota Variables to Calculated Quota Share—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Impact of Incrementally Dropping			Total impact of dropping reserves, openness and variability	Compressed GDP Blend Share
			Reserves	Variability	Openness		
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
Greece	0.509	0.570	0.028	-0.033	0.016	0.012	0.581
Finland	0.506	0.530	0.021	-0.048	-0.092	-0.118	0.412
United Arab Emirates	0.485	0.734	0.011	-0.154	-0.219	-0.362	0.372
Czech Republic	0.457	0.566	0.000	-0.034	-0.141	-0.175	0.391
Portugal	0.432	0.484	0.023	-0.019	-0.055	-0.052	0.432
Colombia	0.429	0.386	0.002	0.026	0.102	0.130	0.515
Philippines	0.428	0.395	-0.007	0.001	-0.001	-0.007	0.388
Egypt	0.427	0.423	-0.002	-0.006	0.072	0.064	0.487
Pakistan	0.426	0.333	0.009	0.028	0.091	0.128	0.461
Ukraine	0.422	0.452	0.003	-0.075	-0.002	-0.074	0.378
Algeria	0.411	0.473	-0.084	-0.069	0.007	-0.147	0.326
Hungary	0.407	0.481	-0.005	-0.045	-0.139	-0.188	0.292
Kuwait	0.406	0.305	0.001	-0.029	-0.044	-0.072	0.233
Israel	0.403	0.448	-0.016	-0.040	-0.040	-0.096	0.352
Romania	0.380	0.421	-0.007	-0.038	0.001	-0.045	0.376
Chile	0.366	0.397	0.002	-0.027	-0.021	-0.046	0.351
Iraq	0.349	0.269	-0.020	-0.055	-0.025	-0.099	0.170
Libya	0.330	0.251	-0.062	-0.015	-0.019	-0.096	0.155
Peru	0.280	0.266	-0.010	0.003	0.042	0.035	0.300
Luxembourg	0.277	0.610	0.030	-0.108	-0.437	-0.515	0.095
New Zealand	0.263	0.245	0.002	-0.008	-0.010	-0.017	0.229
Kazakhstan	0.243	0.334	0.003	-0.064	-0.020	-0.081	0.254
Vietnam	0.242	0.304	0.000	-0.007	-0.034	-0.041	0.263
Syrian Arab Republic	0.233	0.208	-0.003	0.020	0.075	0.092	0.300
Bangladesh	0.224	0.178	0.003	0.025	0.046	0.074	0.251
Congo, Democratic Republic of the	0.224	0.040	0.001	-0.007	-0.004	-0.009	0.030
Slovak Republic	0.210	0.273	0.013	-0.035	-0.069	-0.091	0.182
Zambia	0.205	0.036	0.001	-0.005	-0.001	-0.006	0.030
Bulgaria	0.188	0.181	-0.003	-0.035	-0.022	-0.060	0.121
Morocco	0.188	0.199	-0.007	0.004	-0.002	-0.004	0.195
Angola	0.155	0.248	0.002	-0.066	-0.026	-0.090	0.158
Ghana	0.155	0.049	0.001	0.001	-0.005	-0.003	0.045
Qatar	0.154	0.216	-0.001	-0.007	-0.016	-0.023	0.192
Croatia	0.150	0.159	-0.002	-0.009	-0.014	-0.026	0.133
Zimbabwe	0.148	0.014	0.001	0.000	-0.003	-0.003	0.011

Table A3.1. Contribution of Quota Variables to Calculated Quota Share—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Impact of Incrementally Dropping			Total impact of dropping reserves, openness and variability	Compressed GDP Blend Share
			Reserves	Variability	Openness		
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
Ecuador	0.146	0.140	0.005	-0.018	0.010	-0.003	0.137
Belarus	0.143	0.159	0.006	-0.013	-0.009	-0.017	0.143
Serbia	0.137	0.116	-0.004	-0.004	0.000	-0.008	0.108
Côte d'Ivoire	0.136	0.055	0.001	0.003	-0.004	0.000	0.055
Lebanon	0.133	0.158	-0.012	-0.038	-0.034	-0.084	0.074
Sudan	0.132	0.097	0.004	0.009	0.021	0.035	0.132
Slovenia	0.123	0.145	0.007	-0.015	-0.034	-0.042	0.103
Sri Lanka	0.121	0.089	0.002	0.007	0.013	0.022	0.111
Uzbekistan	0.116	0.082	-0.005	-0.003	0.011	0.004	0.086
Tunisia	0.114	0.127	-0.001	-0.007	-0.007	-0.015	0.112
Oman	0.114	0.138	-0.002	-0.007	-0.019	-0.029	0.109
Kenya	0.114	0.073	0.001	-0.001	0.008	0.008	0.081
Myanmar	0.108	0.062	-0.001	0.004	0.017	0.020	0.082
Yemen, Republic of	0.102	0.087	-0.001	-0.015	0.005	-0.011	0.076
Dominican Republic	0.100	0.097	0.003	0.004	0.004	0.011	0.108
Trinidad and Tobago	0.099	0.072	-0.004	-0.012	-0.010	-0.026	0.046
Lithuania	0.093	0.132	0.002	-0.020	-0.020	-0.038	0.094
Uruguay	0.090	0.077	-0.002	-0.014	0.006	-0.010	0.067
Guatemala	0.090	0.085	0.000	0.004	0.003	0.008	0.093
Tanzania	0.083	0.050	0.000	0.003	0.007	0.011	0.061
Bahrain	0.083	0.092	0.001	-0.014	-0.033	-0.046	0.046
Azerbaijan	0.082	0.107	0.001	-0.002	0.000	-0.001	0.106
Jamaica	0.080	0.048	0.001	-0.008	-0.006	-0.013	0.035
Panama	0.079	0.077	0.002	-0.006	-0.017	-0.020	0.056
Costa Rica	0.077	0.076	0.001	0.000	-0.006	-0.005	0.070
Uganda	0.076	0.051	0.000	-0.011	0.007	-0.004	0.047
Jordan	0.072	0.075	-0.005	-0.004	-0.017	-0.025	0.049
Latvia	0.070	0.084	0.000	-0.008	-0.012	-0.020	0.064
Afghanistan, Islamic Republic of	0.068	0.042	-0.001	0.000	-0.007	-0.009	0.033
Senegal	0.068	0.033	0.000	0.000	-0.001	0.000	0.033
Iceland	0.067	0.083	0.001	-0.041	-0.011	-0.051	0.031
Cyprus	0.064	0.074	0.003	-0.012	-0.018	-0.027	0.047
Brunei Darussalam	0.063	0.045	0.001	-0.012	-0.004	-0.014	0.031
Ethiopia	0.063	0.062	0.002	0.005	0.017	0.024	0.086
El Salvador	0.060	0.059	0.001	-0.001	0.000	-0.001	0.058

Table A3.1. Contribution of Quota Variables to Calculated Quota Share—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Impact of Incrementally Dropping			Total impact of dropping reserves, openness and variability	Compressed GDP Blend Share
			Reserves	Variability	Openness		
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
Cameroon	0.058	0.053	0.000	-0.001	0.006	0.005	0.058
Bosnia and Herzegovina	0.056	0.058	-0.001	-0.005	-0.005	-0.011	0.047
Papua New Guinea	0.055	0.028	0.000	-0.003	-0.005	-0.008	0.020
Nicaragua	0.055	0.025	0.000	-0.002	-0.003	-0.004	0.021
Liberia	0.054	0.014	0.000	-0.008	-0.004	-0.012	0.003
Honduras	0.052	0.050	0.000	-0.002	-0.008	-0.009	0.041
Madagascar	0.051	0.031	0.001	-0.008	0.002	-0.005	0.026
Estonia	0.051	0.077	0.001	-0.009	-0.022	-0.030	0.047
Bolivia	0.050	0.052	-0.003	-0.001	0.005	0.000	0.052
Turkmenistan	0.050	0.061	-0.012	0.000	-0.001	-0.012	0.049
Mozambique	0.048	0.030	0.000	-0.003	0.000	-0.003	0.026
Gabon	0.045	0.040	0.000	-0.007	0.000	-0.007	0.033
Guinea	0.045	0.021	0.001	-0.009	0.001	-0.007	0.014
Georgia	0.044	0.031	0.000	0.000	0.000	0.000	0.031
Sierra Leone	0.044	0.006	0.000	-0.001	0.001	0.000	0.006
Paraguay	0.042	0.045	0.000	-0.003	-0.002	-0.005	0.040
Botswana	0.041	0.046	-0.005	-0.003	-0.002	-0.010	0.036
Namibia	0.040	0.023	0.000	0.002	-0.002	-0.001	0.023
Mali	0.039	0.029	0.000	-0.008	0.001	-0.006	0.023
Bahamas, The	0.038	0.021	0.000	0.000	-0.003	-0.003	0.017
Guyana	0.038	0.007	0.000	0.000	-0.002	-0.001	0.006
Kyrgyz Republic	0.037	0.018	0.000	-0.001	-0.002	-0.003	0.015
Cambodia	0.037	0.036	0.000	0.001	-0.003	-0.002	0.034
Tajikistan	0.036	0.018	0.001	-0.001	-0.002	-0.002	0.016
Moldova	0.036	0.024	0.000	-0.005	-0.004	-0.009	0.015
Malta	0.035	0.035	0.001	-0.002	-0.016	-0.016	0.018
Haiti	0.034	0.017	0.000	0.000	0.001	0.001	0.018
Somalia	0.034	0.001	0.000	0.000	0.000	0.000	0.002
Congo, Republic of	0.034	0.041	-0.001	-0.008	-0.008	-0.017	0.024
Rwanda	0.034	0.012	0.000	0.000	0.002	0.003	0.014
Equatorial Guinea	0.033	0.054	0.000	-0.011	-0.011	-0.023	0.031
Nepal	0.033	0.034	-0.001	0.001	0.006	0.006	0.040
Burundi	0.032	0.005	0.000	-0.001	0.001	0.000	0.004
Togo	0.031	0.010	0.000	0.000	-0.001	-0.001	0.009
Mauritius	0.030	0.029	0.000	-0.001	-0.004	-0.005	0.024

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Table A3.1. Contribution of Quota Variables to Calculated Quota Share—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Impact of Incrementally Dropping			Total impact of dropping reserves, openness and variability	Compressed GDP Blend Share
			Reserves	Variability	Openness		
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
Macedonia, Former Yugoslav Republic of	0.029	0.032	0.000	-0.003	-0.003	-0.006	0.026
Chad	0.029	0.029	0.001	-0.005	-0.003	-0.007	0.022
Albania	0.029	0.034	0.000	-0.001	-0.001	-0.002	0.032
Malawi	0.029	0.024	0.001	-0.013	0.001	-0.010	0.014
Niger	0.028	0.013	0.000	0.000	0.002	0.002	0.014
Suriname	0.027	0.011	0.000	-0.002	-0.002	-0.003	0.007
Armenia	0.027	0.025	0.000	0.001	0.001	0.002	0.026
Mauritania	0.027	0.013	0.000	-0.003	-0.001	-0.003	0.009
Benin	0.026	0.021	0.000	-0.004	0.003	-0.002	0.019
Burkina Faso	0.025	0.018	0.000	0.002	0.004	0.006	0.024
Central African Republic	0.023	0.005	0.000	-0.001	0.001	0.000	0.005
Lao People's Dem. Republic	0.022	0.013	0.000	0.001	0.003	0.004	0.017
Fiji	0.021	0.010	0.000	0.000	-0.002	-0.002	0.008
Barbados	0.020	0.013	0.000	0.000	-0.002	-0.003	0.011
Kosovo	0.017	0.016	0.000	-0.003	-0.002	-0.005	0.010
Swaziland	0.016	0.015	0.000	-0.002	-0.003	-0.006	0.009
Mongolia	0.015	0.018	0.000	-0.004	-0.002	-0.005	0.013
Lesotho	0.015	0.009	-0.001	-0.001	-0.003	-0.004	0.005
Gambia, The	0.013	0.004	0.000	0.000	0.000	0.000	0.004
Montenegro	0.013	0.015	0.000	-0.003	-0.002	-0.004	0.011
San Marino	0.010	0.013	0.000	-0.002	-0.006	-0.008	0.004
Eritrea	0.008	0.005	0.000	-0.001	0.001	0.000	0.005
Djibouti	0.007	0.004	0.000	0.000	0.000	-0.001	0.003
Guinea-Bissau	0.006	0.003	0.000	-0.001	0.000	0.000	0.003
Belize	0.006	0.005	0.000	-0.001	-0.001	-0.001	0.004
Timor Leste	0.005	0.007	0.000	-0.003	-0.002	-0.004	0.003
Vanuatu	0.005	0.002	0.000	0.000	0.000	0.000	0.002
Cape Verde	0.005	0.005	0.000	0.000	-0.001	-0.002	0.004
Seychelles	0.005	0.005	0.000	0.000	-0.002	-0.002	0.003
St. Lucia	0.004	0.004	0.000	0.000	-0.001	-0.001	0.003
Maldives	0.004	0.005	0.000	0.000	-0.002	-0.002	0.003
Solomon Islands	0.004	0.002	0.000	0.000	0.000	0.000	0.002
Bhutan	0.004	0.005	0.000	0.000	0.000	0.000	0.004
Antigua and Barbuda	0.004	0.004	0.000	0.000	-0.001	-0.001	0.003
Comoros	0.004	0.001	0.000	0.000	0.000	0.000	0.001

Table A3.1. Contribution of Quota Variables to Calculated Quota Share -- by Member (concluded)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Impact of Incrementally Dropping			Total impact of dropping reserves, openness and variability	Compressed GDP Blend Share
			Reserves	Variability	Openness		
		(1)	(2)	(3)	(4)	(2)+(3)+(4)	(1)+(2)+(3)+(4)
Grenada	0.00344	0.00258	0.00003	-0.00035	-0.00031	-0.00062	0.00196
Samoa	0.00340	0.00257	0.00001	-0.00058	-0.00027	-0.00083	0.00173
São Tomé and Príncipe	0.00310	0.00156	0.00003	-0.00100	-0.00005	-0.00102	0.00053
Tonga	0.00289	0.00138	-0.00001	-0.00009	-0.00013	-0.00023	0.00115
St. Kitts and Nevis	0.00262	0.00261	-0.00002	-0.00069	-0.00042	-0.00113	0.00148
St. Vincent and the Grenadines	0.00245	0.00262	0.00005	-0.00054	-0.00031	-0.00080	0.00182
Dominica	0.00241	0.00161	0.00002	-0.00017	-0.00023	-0.00039	0.00122
Kiribati	0.00235	0.00161	-0.00040	-0.00036	-0.00010	-0.00085	0.00076
Micronesia, Federated States of	0.00151	0.00136	0.00002	-0.00010	-0.00020	-0.00027	0.00109
Marshall Islands	0.00103	0.00082	0.00004	-0.00005	-0.00013	-0.00014	0.00068
Palau	0.00103	0.00093	0.00004	-0.00004	-0.00030	-0.00029	0.00064
Tuvalu	0.00052	0.00042	0.00000	-0.00026	-0.00008	-0.00034	0.00009

Source: Finance Department.

1/ Includes China, P.R., Hong Kong SAR, and Macao SAR.

Table A3.2. Illustrative Calculations -- Simplifying the Formula -- by Member
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Without Variability		GDP and Openness		GDP and Reserves		GDP Only (60/40)
			Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	
United States	17.407	16.061	16.666	15.913	17.591	17.376	19.127	15.649	20.853
Japan	6.464	6.259	6.454	6.693	6.060	5.989	7.650	8.683	7.142
China 1/	6.394	8.628	9.402	10.119	8.329	8.271	10.793	13.958	9.215
Germany	5.586	5.783	5.837	5.657	6.143	6.212	4.716	3.943	5.101
France	4.227	3.787	3.971	3.833	4.179	4.192	3.676	3.062	3.981
United Kingdom	4.227	4.297	4.340	4.208	4.562	4.608	3.588	3.017	3.872
Italy	3.161	3.229	3.193	3.086	3.349	3.352	3.056	2.579	3.293
India	2.751	2.447	2.639	2.652	2.589	2.546	3.257	3.297	3.239
Russian Federation	2.706	2.663	2.610	2.712	2.449	2.430	2.965	3.414	2.743
Brazil	2.316	2.106	2.146	2.153	2.105	2.062	2.752	2.765	2.748
Canada	2.312	2.231	2.321	2.257	2.421	2.432	2.123	1.840	2.264
Saudi Arabia	2.096	1.470	1.202	1.392	0.931	0.938	1.253	2.105	0.821
Spain	2.000	2.330	2.335	2.248	2.463	2.468	2.201	1.813	2.393
Mexico	1.869	1.708	1.787	1.758	1.822	1.813	1.902	1.767	1.970
Netherlands	1.832	2.076	1.938	1.890	2.041	2.090	1.200	1.010	1.295
Korea, Republic of	1.800	1.963	2.057	2.111	1.988	2.000	1.933	2.187	1.808
Australia	1.379	1.431	1.398	1.358	1.451	1.443	1.473	1.289	1.566
Belgium	1.345	1.418	1.296	1.268	1.363	1.402	0.724	0.618	0.776
Switzerland	1.210	1.143	1.167	1.175	1.176	1.205	0.758	0.814	0.730
Turkey	0.977	1.113	1.109	1.098	1.117	1.107	1.245	1.193	1.272
Indonesia	0.975	0.905	0.950	0.940	0.959	0.950	1.076	1.024	1.103
Sweden	0.929	1.064	0.933	0.922	0.960	0.975	0.702	0.663	0.722
Poland	0.859	0.989	0.965	0.967	0.965	0.968	0.928	0.938	0.924
Austria	0.825	0.827	0.828	0.805	0.871	0.886	0.599	0.505	0.646
Singapore	0.816	1.214	1.103	1.182	1.020	1.062	0.572	0.957	0.377
Norway	0.788	0.784	0.739	0.741	0.742	0.750	0.623	0.639	0.616
Venezuela, R.B. de	0.781	0.512	0.472	0.462	0.482	0.477	0.528	0.484	0.550
Malaysia	0.762	0.728	0.716	0.748	0.679	0.693	0.551	0.706	0.474
Iran, Islamic Republic of	0.748	0.656	0.730	0.743	0.704	0.694	0.886	0.939	0.861
Ireland	0.724	0.984	0.798	0.779	0.844	0.873	0.371	0.303	0.405
Denmark	0.721	0.739	0.694	0.707	0.683	0.695	0.531	0.601	0.497
Thailand	0.674	0.840	0.813	0.856	0.756	0.764	0.737	0.937	0.637
Argentina	0.669	0.576	0.579	0.578	0.573	0.565	0.691	0.686	0.693
South Africa	0.640	0.551	0.590	0.584	0.597	0.594	0.622	0.595	0.636
Nigeria	0.515	0.451	0.425	0.435	0.409	0.409	0.436	0.484	0.413

Table A3.2. Illustrative Calculations -- Simplifying the Formula—by Member (continued)
(In percent)

	14th Review	Calculated	Without Variability		GDP and Openness		GDP and Reserves		GDP Only
	Proposed Quotas	Quota Share	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	(60/40)
Greece	0.509	0.570	0.534	0.512	0.565	0.564	0.532	0.431	0.581
Finland	0.506	0.530	0.482	0.469	0.503	0.509	0.386	0.335	0.412
United Arab Emirates	0.485	0.734	0.586	0.591	0.591	0.605	0.386	0.414	0.372
Czech Republic	0.457	0.566	0.534	0.540	0.532	0.541	0.407	0.440	0.391
Portugal	0.432	0.484	0.462	0.446	0.488	0.492	0.397	0.327	0.432
Colombia	0.429	0.386	0.410	0.405	0.414	0.407	0.501	0.472	0.515
Philippines	0.428	0.395	0.398	0.404	0.389	0.389	0.402	0.429	0.388
Egypt	0.427	0.423	0.418	0.418	0.416	0.411	0.485	0.480	0.487
Pakistan	0.426	0.333	0.357	0.346	0.370	0.364	0.433	0.378	0.461
Ukraine	0.422	0.452	0.381	0.382	0.380	0.380	0.380	0.384	0.378
Algeria	0.411	0.473	0.424	0.496	0.320	0.319	0.487	0.805	0.326
Hungary	0.407	0.481	0.440	0.450	0.431	0.440	0.319	0.374	0.292
Kuwait	0.406	0.305	0.277	0.279	0.277	0.280	0.238	0.248	0.233
Israel	0.403	0.448	0.413	0.429	0.392	0.394	0.389	0.465	0.352
Romania	0.380	0.421	0.386	0.394	0.376	0.375	0.393	0.428	0.376
Chile	0.366	0.397	0.372	0.372	0.372	0.374	0.352	0.355	0.351
Iraq	0.349	0.269	0.221	0.241	0.195	0.196	0.214	0.302	0.170
Libya	0.330	0.251	0.248	0.300	0.174	0.175	0.273	0.503	0.155
Peru	0.280	0.266	0.270	0.277	0.258	0.255	0.315	0.344	0.300
Luxembourg	0.277	0.610	0.502	0.496	0.532	0.560	0.088	0.072	0.095
New Zealand	0.263	0.245	0.237	0.236	0.239	0.240	0.226	0.222	0.229
Kazakhstan	0.243	0.334	0.274	0.274	0.273	0.275	0.256	0.260	0.254
Vietnam	0.242	0.304	0.297	0.298	0.297	0.299	0.266	0.274	0.263
Syrian Arab Republic	0.233	0.208	0.228	0.227	0.226	0.221	0.296	0.289	0.300
Bangladesh	0.224	0.178	0.201	0.196	0.206	0.203	0.240	0.216	0.251
Congo, Democratic Republic of the	0.224	0.040	0.033	0.032	0.034	0.034	0.029	0.026	0.030
Slovak Republic	0.210	0.273	0.237	0.230	0.251	0.255	0.166	0.135	0.182
Zambia	0.205	0.036	0.030	0.030	0.031	0.031	0.029	0.028	0.030
Bulgaria	0.188	0.181	0.149	0.154	0.143	0.144	0.133	0.156	0.121
Morocco	0.188	0.199	0.205	0.210	0.196	0.196	0.208	0.234	0.195
Angola	0.155	0.248	0.186	0.188	0.184	0.186	0.163	0.174	0.158
Ghana	0.155	0.049	0.049	0.049	0.050	0.050	0.044	0.043	0.045
Qatar	0.154	0.216	0.210	0.211	0.208	0.210	0.195	0.202	0.192
Croatia	0.150	0.159	0.151	0.153	0.148	0.149	0.139	0.152	0.133
Zimbabwe	0.148	0.014	0.013	0.013	0.014	0.014	0.010	0.009	0.011

Table A3.2. Illustrative Calculations -- Simplifying the Formula—by Member (continued)
(In percent)

	14th Review	Calculated	Without Variability		GDP and Openness		GDP and Reserves		GDP Only
	Proposed Quotas	Quota Share	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	(60/40)
Ecuador	0.146	0.140	0.122	0.119	0.127	0.126	0.129	0.113	0.137
Belarus	0.143	0.159	0.146	0.142	0.152	0.152	0.135	0.118	0.143
Serbia	0.137	0.116	0.112	0.116	0.107	0.107	0.116	0.131	0.108
Côte d'Ivoire	0.136	0.055	0.058	0.057	0.059	0.059	0.053	0.051	0.055
Lebanon	0.133	0.158	0.125	0.137	0.108	0.110	0.103	0.161	0.074
Sudan	0.132	0.097	0.106	0.101	0.111	0.110	0.122	0.101	0.132
Slovenia	0.123	0.145	0.130	0.126	0.137	0.139	0.095	0.079	0.103
Sri Lanka	0.121	0.089	0.096	0.093	0.099	0.098	0.105	0.094	0.111
Uzbekistan	0.116	0.082	0.080	0.084	0.075	0.074	0.094	0.109	0.086
Tunisia	0.114	0.127	0.120	0.122	0.118	0.119	0.115	0.123	0.112
Oman	0.114	0.138	0.132	0.134	0.128	0.130	0.116	0.130	0.109
Kenya	0.114	0.073	0.072	0.071	0.073	0.072	0.079	0.074	0.081
Myanmar	0.108	0.062	0.066	0.066	0.066	0.064	0.082	0.082	0.082
Yemen, Republic of	0.102	0.087	0.074	0.076	0.071	0.071	0.080	0.087	0.076
Dominican Republic	0.100	0.097	0.101	0.098	0.105	0.104	0.102	0.089	0.108
Trinidad and Tobago	0.099	0.072	0.061	0.065	0.056	0.057	0.056	0.075	0.046
Lithuania	0.093	0.132	0.113	0.113	0.114	0.115	0.094	0.095	0.094
Uruguay	0.090	0.077	0.064	0.066	0.061	0.060	0.071	0.081	0.067
Guatemala	0.090	0.085	0.089	0.088	0.090	0.089	0.091	0.089	0.093
Tanzania	0.083	0.050	0.054	0.053	0.054	0.053	0.060	0.058	0.061
Bahrain	0.083	0.092	0.078	0.079	0.079	0.081	0.048	0.051	0.046
Azerbaijan	0.082	0.107	0.104	0.104	0.105	0.105	0.104	0.101	0.106
Jamaica	0.080	0.048	0.041	0.040	0.041	0.041	0.035	0.034	0.035
Panama	0.079	0.077	0.071	0.071	0.073	0.074	0.055	0.053	0.056
Costa Rica	0.077	0.076	0.075	0.075	0.076	0.076	0.070	0.069	0.070
Uganda	0.076	0.051	0.041	0.041	0.041	0.040	0.047	0.047	0.047
Jordan	0.072	0.075	0.072	0.076	0.066	0.067	0.060	0.081	0.049
Latvia	0.070	0.084	0.076	0.077	0.076	0.076	0.066	0.070	0.064
Afghanistan, Islamic Republic of	0.068	0.042	0.042	0.043	0.040	0.041	0.036	0.042	0.033
Senegal	0.068	0.033	0.033	0.033	0.033	0.033	0.032	0.032	0.033
Iceland	0.067	0.083	0.043	0.044	0.043	0.043	0.033	0.038	0.031
Cyprus	0.064	0.074	0.062	0.060	0.065	0.066	0.044	0.037	0.047
Brunei Darussalam	0.063	0.045	0.034	0.033	0.035	0.035	0.030	0.027	0.031
Ethiopia	0.063	0.062	0.066	0.064	0.069	0.067	0.080	0.069	0.086
El Salvador	0.060	0.059	0.058	0.057	0.059	0.059	0.057	0.054	0.058

Table A3.2. Illustrative Calculations -- Simplifying the Formula—by Member (continued)
(In percent)

	14th Review	Calculated	Without Variability		GDP and Openness		GDP and Reserves		GDP Only
	Proposed Quotas	Quota Share	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	(60/40)
Cameroon	0.058	0.053	0.052	0.052	0.052	0.052	0.058	0.058	0.058
Bosnia and Herzegovina	0.056	0.058	0.053	0.054	0.052	0.052	0.049	0.053	0.047
Papua New Guinea	0.055	0.028	0.026	0.026	0.025	0.025	0.022	0.025	0.020
Nicaragua	0.055	0.025	0.023	0.023	0.023	0.024	0.021	0.021	0.021
Liberia	0.054	0.014	0.006	0.007	0.007	0.007	0.003	0.003	0.003
Honduras	0.052	0.050	0.049	0.049	0.049	0.049	0.042	0.042	0.041
Madagascar	0.051	0.031	0.023	0.023	0.024	0.024	0.025	0.023	0.026
Estonia	0.051	0.077	0.068	0.069	0.069	0.070	0.048	0.051	0.047
Bolivia	0.050	0.052	0.051	0.054	0.047	0.046	0.058	0.070	0.052
Turkmenistan	0.050	0.061	0.064	0.073	0.050	0.050	0.071	0.113	0.049
Mozambique	0.048	0.030	0.027	0.027	0.027	0.027	0.027	0.027	0.026
Gabon	0.045	0.040	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Guinea	0.045	0.021	0.013	0.012	0.013	0.013	0.013	0.011	0.014
Georgia	0.044	0.031	0.031	0.031	0.031	0.031	0.030	0.030	0.031
Sierra Leone	0.044	0.006	0.005	0.005	0.005	0.005	0.006	0.006	0.006
Paraguay	0.042	0.045	0.042	0.043	0.042	0.042	0.041	0.044	0.040
Botswana	0.041	0.046	0.044	0.048	0.038	0.038	0.045	0.064	0.036
Namibia	0.040	0.023	0.025	0.025	0.025	0.025	0.023	0.025	0.023
Mali	0.039	0.029	0.022	0.021	0.021	0.021	0.023	0.022	0.023
Bahamas, The	0.038	0.021	0.020	0.020	0.021	0.021	0.017	0.016	0.017
Guyana	0.038	0.007	0.007	0.007	0.007	0.007	0.006	0.007	0.006
Kyrgyz Republic	0.037	0.018	0.018	0.018	0.017	0.017	0.016	0.017	0.015
Cambodia	0.037	0.036	0.037	0.038	0.037	0.037	0.035	0.037	0.034
Tajikistan	0.036	0.018	0.017	0.017	0.018	0.018	0.015	0.012	0.016
Moldova	0.036	0.024	0.019	0.020	0.019	0.020	0.016	0.017	0.015
Malta	0.035	0.035	0.033	0.032	0.034	0.035	0.018	0.016	0.018
Haiti	0.034	0.017	0.016	0.016	0.017	0.017	0.017	0.016	0.018
Somalia	0.034	0.001	0.001	0.001	0.002	0.002	0.001	0.001	0.002
Congo, Republic of	0.034	0.041	0.034	0.035	0.032	0.033	0.028	0.035	0.024
Rwanda	0.034	0.012	0.012	0.012	0.012	0.012	0.014	0.014	0.014
Equatorial Guinea	0.033	0.054	0.043	0.045	0.042	0.043	0.034	0.040	0.031
Nepal	0.033	0.034	0.035	0.036	0.035	0.034	0.041	0.042	0.040
Burundi	0.032	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Togo	0.031	0.010	0.009	0.010	0.009	0.009	0.009	0.009	0.009
Mauritius	0.030	0.029	0.028	0.028	0.028	0.028	0.024	0.026	0.024

Table A3.2. Illustrative Calculations -- Simplifying the Formula—by Member (continued)
(In percent)

	14th Review	Calculated	Without Variability		GDP and Openness		GDP and Reserves		GDP Only
	Proposed Quotas	Quota Share	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	(60/40)
Macedonia, Former Yugoslav Republic of	0.029	0.032	0.029	0.030	0.029	0.030	0.026	0.027	0.026
Chad	0.029	0.029	0.025	0.024	0.025	0.025	0.022	0.020	0.022
Albania	0.029	0.034	0.033	0.034	0.033	0.033	0.032	0.034	0.032
Malawi	0.029	0.024	0.012	0.012	0.013	0.013	0.013	0.011	0.014
Niger	0.028	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.014
Suriname	0.027	0.011	0.009	0.009	0.009	0.009	0.008	0.008	0.007
Armenia	0.027	0.025	0.025	0.026	0.025	0.025	0.026	0.027	0.026
Mauritania	0.027	0.013	0.010	0.010	0.011	0.011	0.009	0.008	0.009
Benin	0.026	0.021	0.017	0.017	0.016	0.016	0.019	0.019	0.019
Burkina Faso	0.025	0.018	0.020	0.020	0.020	0.020	0.024	0.023	0.024
Central African Republic	0.023	0.005	0.004	0.004	0.004	0.004	0.005	0.005	0.005
Lao People's Dem. Republic	0.022	0.013	0.014	0.014	0.014	0.014	0.016	0.016	0.017
Fiji	0.021	0.010	0.010	0.010	0.010	0.010	0.008	0.008	0.008
Barbados	0.020	0.013	0.013	0.013	0.013	0.013	0.011	0.012	0.011
Kosovo	0.017	0.016	0.013	0.013	0.013	0.013	0.011	0.012	0.010
Swaziland	0.016	0.015	0.013	0.013	0.013	0.013	0.010	0.011	0.009
Mongolia	0.015	0.018	0.015	0.015	0.015	0.015	0.013	0.013	0.013
Lesotho	0.015	0.009	0.008	0.009	0.007	0.008	0.006	0.009	0.005
Gambia, The	0.013	0.004	0.003	0.003	0.003	0.003	0.004	0.004	0.004
Montenegro	0.013	0.015	0.012	0.012	0.013	0.013	0.011	0.010	0.011
San Marino	0.010	0.013	0.011	0.011	0.011	0.011	0.005	0.007	0.004
Eritrea	0.008	0.005	0.004	0.004	0.005	0.005	0.005	0.004	0.005
Djibouti	0.007	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Guinea-Bissau	0.006	0.003	0.002	0.002	0.002	0.002	0.003	0.003	0.003
Belize	0.006	0.005	0.005	0.005	0.005	0.005	0.004	0.004	0.004
Timor Leste	0.005	0.007	0.005	0.005	0.005	0.005	0.003	0.003	0.003
Vanuatu	0.005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Cape Verde	0.005	0.005	0.005	0.005	0.005	0.005	0.004	0.005	0.004
Seychelles	0.005	0.005	0.004	0.004	0.005	0.005	0.003	0.003	0.003
St. Lucia	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003
Maldives	0.004	0.005	0.005	0.005	0.005	0.005	0.003	0.004	0.003
Solomon Islands	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Bhutan	0.004	0.005	0.004	0.004	0.005	0.005	0.004	0.003	0.004
Antigua and Barbuda	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003
Comoros	0.004	0.001	0.002	0.002	0.001	0.001	0.002	0.002	0.001

Table A3.2. Illustrative Calculations -- Simplifying the Formula -- by Member (concluded)
(In percent)

	14th Review	Calculated	Without Variability		GDP and Openness		GDP and Reserves		GDP Only
	Proposed Quotas	Quota Share	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly	(60/40)
Grenada	0.00344	0.00258	0.00225	0.00225	0.00227	0.00229	0.00196	0.00197	0.00196
Samoa	0.00340	0.00257	0.00202	0.00204	0.00200	0.00202	0.00179	0.00190	0.00173
São Tomé and Príncipe	0.00310	0.00156	0.00061	0.00063	0.00058	0.00059	0.00058	0.00066	0.00053
Tonga	0.00289	0.00138	0.00130	0.00132	0.00128	0.00129	0.00119	0.00128	0.00115
St. Kitts and Nevis	0.00262	0.00261	0.00196	0.00203	0.00190	0.00192	0.00163	0.00192	0.00148
St. Vincent and the Grenadines	0.00245	0.00262	0.00210	0.00209	0.00213	0.00215	0.00181	0.00178	0.00182
Dominica	0.00241	0.00161	0.00144	0.00145	0.00145	0.00147	0.00123	0.00125	0.00122
Kiribati	0.00235	0.00161	0.00135	0.00169	0.00085	0.00086	0.00153	0.00305	0.00076
Micronesia, Federated States of	0.00151	0.00136	0.00126	0.00125	0.00128	0.00130	0.00107	0.00105	0.00109
Marshall Islands	0.00103	0.00082	0.00077	0.00074	0.00081	0.00082	0.00062	0.00051	0.00068
Palau	0.00103	0.00093	0.00088	0.00086	0.00093	0.00095	0.00059	0.00049	0.00064
Tuvalu	0.00052	0.00042	0.00018	0.00020	0.00016	0.00017	0.00013	0.00021	0.00009

Source: Finance Department.

1/ Includes China, P.R., Hong Kong SAR, and Macao SAR.

Table A3.3. Illustrative Calculations --Formula Including Investment Income -- by Member
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
United States	17.407	16.061	16.780	17.515	16.753	18.496	18.341
Japan	6.464	6.259	6.181	6.361	6.602	5.962	5.884
China 2/	6.394	8.628	8.382	9.114	9.837	8.020	7.942
Germany	5.586	5.783	5.679	5.715	5.535	6.016	6.077
France	4.227	3.787	3.940	4.152	4.012	4.372	4.398
United Kingdom	4.227	4.297	5.053	5.233	5.093	5.510	5.618
Italy	3.161	3.229	3.151	3.101	2.995	3.252	3.250
India	2.751	2.447	2.329	2.500	2.515	2.441	2.388
Russian Federation	2.706	2.663	2.619	2.557	2.661	2.393	2.370
Brazil	2.316	2.106	2.082	2.118	2.125	2.075	2.030
Canada	2.312	2.231	2.160	2.238	2.174	2.334	2.339
Saudi Arabia	2.096	1.470	1.387	1.102	1.295	0.823	0.823
Spain	2.000	2.330	2.323	2.328	2.240	2.455	2.460
Mexico	1.869	1.708	1.581	1.637	1.609	1.663	1.643
Netherlands	1.832	2.076	2.136	2.008	1.959	2.116	2.170
Korea, Republic of	1.800	1.963	1.754	1.811	1.868	1.726	1.721
Australia	1.379	1.431	1.458	1.429	1.388	1.484	1.479
Belgium	1.345	1.418	1.420	1.299	1.271	1.367	1.405
Switzerland	1.210	1.143	1.266	1.313	1.320	1.331	1.371
Turkey	0.977	1.113	1.050	1.034	1.024	1.038	1.022
Indonesia	0.975	0.905	0.860	0.899	0.888	0.904	0.891
Sweden	0.929	1.064	1.097	0.972	0.961	1.002	1.020
Poland	0.859	0.989	0.916	0.879	0.881	0.874	0.870
Austria	0.825	0.827	0.813	0.812	0.790	0.854	0.868
Singapore	0.816	1.214	1.162	1.041	1.120	0.954	0.991
Norway	0.788	0.784	0.796	0.752	0.754	0.756	0.766
Venezuela, R.B. de	0.781	0.512	0.498	0.455	0.445	0.464	0.458
Malaysia	0.762	0.728	0.653	0.627	0.660	0.584	0.591
Iran, Islamic Republic of	0.748	0.656	0.612	0.679	0.693	0.650	0.636
Ireland	0.724	0.984	1.206	1.061	1.041	1.124	1.171
Denmark	0.721	0.739	0.730	0.682	0.696	0.671	0.682
Thailand	0.674	0.840	0.764	0.723	0.767	0.660	0.662
Argentina	0.669	0.576	0.569	0.570	0.570	0.564	0.556
South Africa	0.640	0.551	0.522	0.556	0.551	0.561	0.556
Nigeria	0.515	0.451	0.427	0.397	0.408	0.380	0.377

Table A3.3. Illustrative Calculations --Formula Including Investment Income—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
Greece	0.509	0.570	0.552	0.513	0.491	0.543	0.541
Finland	0.506	0.530	0.527	0.478	0.466	0.500	0.506
United Arab Emirates	0.485	0.734	0.634	0.467	0.472	0.463	0.470
Czech Republic	0.457	0.566	0.517	0.475	0.482	0.470	0.475
Portugal	0.432	0.484	0.489	0.468	0.452	0.494	0.498
Colombia	0.429	0.386	0.380	0.404	0.398	0.407	0.400
Philippines	0.428	0.395	0.365	0.362	0.368	0.351	0.348
Egypt	0.427	0.423	0.399	0.389	0.389	0.385	0.378
Pakistan	0.426	0.333	0.320	0.342	0.330	0.353	0.346
Ukraine	0.422	0.452	0.420	0.343	0.344	0.339	0.337
Algeria	0.411	0.473	0.458	0.406	0.479	0.300	0.299
Hungary	0.407	0.481	0.460	0.415	0.426	0.405	0.412
Kuwait	0.406	0.305	0.294	0.265	0.267	0.264	0.266
Israel	0.403	0.448	0.423	0.384	0.401	0.361	0.362
Romania	0.380	0.421	0.394	0.354	0.362	0.341	0.339
Chile	0.366	0.397	0.398	0.373	0.373	0.374	0.375
Iraq	0.349	0.269	0.255	0.204	0.224	0.177	0.177
Libya	0.330	0.251	0.240	0.235	0.287	0.159	0.160
Peru	0.280	0.266	0.265	0.269	0.276	0.258	0.255
Luxembourg	0.277	0.610	1.050	1.025	1.014	1.086	1.149
New Zealand	0.263	0.245	0.247	0.239	0.238	0.241	0.242
Kazakhstan	0.243	0.334	0.331	0.269	0.270	0.269	0.270
Vietnam	0.242	0.304	0.272	0.259	0.261	0.256	0.256
Syrian Arab Republic	0.233	0.208	0.201	0.220	0.219	0.217	0.212
Bangladesh	0.224	0.178	0.166	0.187	0.182	0.191	0.187
Congo, Democratic Republic of the	0.224	0.040	0.037	0.029	0.029	0.030	0.030
Slovak Republic	0.210	0.273	0.242	0.201	0.194	0.212	0.215
Zambia	0.205	0.036	0.035	0.029	0.029	0.030	0.030
Bulgaria	0.188	0.181	0.168	0.133	0.138	0.126	0.127
Morocco	0.188	0.199	0.181	0.184	0.190	0.174	0.173
Angola	0.155	0.248	0.239	0.174	0.176	0.172	0.173
Ghana	0.155	0.049	0.043	0.042	0.042	0.042	0.042
Qatar	0.154	0.216	0.191	0.180	0.182	0.177	0.177
Croatia	0.150	0.159	0.147	0.137	0.140	0.133	0.133
Zimbabwe	0.148	0.014	0.012	0.012	0.011	0.012	0.012

Table A3.3. Illustrative Calculations --Formula Including Investment Income—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
Ecuador	0.146	0.140	0.132	0.113	0.109	0.117	0.115
Belarus	0.143	0.159	0.142	0.125	0.122	0.130	0.129
Serbia	0.137	0.116	0.107	0.102	0.105	0.096	0.095
Côte d'Ivoire	0.136	0.055	0.049	0.051	0.051	0.052	0.052
Lebanon	0.133	0.158	0.146	0.110	0.123	0.092	0.093
Sudan	0.132	0.097	0.094	0.102	0.097	0.107	0.105
Slovenia	0.123	0.145	0.129	0.110	0.107	0.116	0.117
Sri Lanka	0.121	0.089	0.082	0.088	0.085	0.090	0.089
Uzbekistan	0.116	0.082	0.078	0.075	0.079	0.069	0.068
Tunisia	0.114	0.127	0.117	0.109	0.110	0.106	0.106
Oman	0.114	0.138	0.128	0.120	0.123	0.116	0.117
Kenya	0.114	0.073	0.067	0.065	0.064	0.066	0.064
Myanmar	0.108	0.062	0.061	0.065	0.065	0.064	0.063
Yemen, Republic of	0.102	0.087	0.084	0.070	0.072	0.067	0.067
Dominican Republic	0.100	0.097	0.092	0.094	0.092	0.098	0.097
Trinidad and Tobago	0.099	0.072	0.067	0.055	0.060	0.050	0.050
Lithuania	0.093	0.132	0.119	0.098	0.098	0.098	0.098
Uruguay	0.090	0.077	0.075	0.062	0.065	0.059	0.058
Guatemala	0.090	0.085	0.079	0.082	0.081	0.082	0.081
Tanzania	0.083	0.050	0.047	0.049	0.049	0.049	0.048
Bahrain	0.083	0.092	0.106	0.095	0.095	0.097	0.100
Azerbaijan	0.082	0.107	0.104	0.101	0.100	0.102	0.101
Jamaica	0.080	0.048	0.045	0.037	0.037	0.037	0.037
Panama	0.079	0.077	0.075	0.069	0.068	0.071	0.071
Costa Rica	0.077	0.076	0.070	0.069	0.069	0.069	0.069
Uganda	0.076	0.051	0.049	0.038	0.038	0.038	0.037
Jordan	0.072	0.075	0.066	0.062	0.067	0.056	0.056
Latvia	0.070	0.084	0.078	0.069	0.070	0.068	0.068
Afghanistan, Islamic Republic of	0.068	0.042	0.036	0.035	0.036	0.033	0.033
Senegal	0.068	0.033	0.029	0.029	0.029	0.029	0.029
Iceland	0.067	0.083	0.088	0.050	0.050	0.049	0.051
Cyprus	0.064	0.074	0.078	0.067	0.065	0.070	0.072
Brunei Darussalam	0.063	0.045	0.041	0.030	0.029	0.030	0.030
Ethiopia	0.063	0.062	0.058	0.061	0.059	0.063	0.062
El Salvador	0.060	0.059	0.055	0.052	0.052	0.053	0.052

Table A3.3. Illustrative Calculations --Formula Including Investment Income—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
Cameroon	0.058	0.053	0.050	0.048	0.048	0.047	0.047
Bosnia and Herzegovina	0.056	0.058	0.052	0.046	0.047	0.045	0.044
Papua New Guinea	0.055	0.028	0.026	0.023	0.024	0.022	0.022
Nicaragua	0.055	0.025	0.022	0.020	0.020	0.020	0.020
Liberia	0.054	0.014	0.013	0.005	0.005	0.005	0.005
Honduras	0.052	0.050	0.045	0.042	0.042	0.042	0.042
Madagascar	0.051	0.031	0.029	0.021	0.021	0.021	0.021
Estonia	0.051	0.077	0.072	0.062	0.062	0.062	0.063
Bolivia	0.050	0.052	0.049	0.048	0.051	0.044	0.044
Turkmenistan	0.050	0.061	0.058	0.060	0.069	0.046	0.045
Mozambique	0.048	0.030	0.028	0.025	0.025	0.025	0.025
Gabon	0.045	0.040	0.037	0.029	0.029	0.029	0.029
Guinea	0.045	0.021	0.020	0.011	0.011	0.012	0.012
Georgia	0.044	0.031	0.028	0.028	0.028	0.028	0.027
Sierra Leone	0.044	0.006	0.006	0.005	0.005	0.005	0.005
Paraguay	0.042	0.045	0.042	0.038	0.039	0.037	0.037
Botswana	0.041	0.046	0.045	0.042	0.046	0.036	0.036
Namibia	0.040	0.023	0.022	0.023	0.023	0.023	0.023
Mali	0.039	0.029	0.028	0.020	0.020	0.020	0.020
Bahamas, The	0.038	0.021	0.018	0.017	0.017	0.018	0.018
Guyana	0.038	0.007	0.006	0.006	0.006	0.006	0.006
Kyrgyz Republic	0.037	0.018	0.016	0.015	0.016	0.015	0.015
Cambodia	0.037	0.036	0.033	0.033	0.033	0.032	0.032
Tajikistan	0.036	0.018	0.016	0.014	0.014	0.015	0.015
Moldova	0.036	0.024	0.022	0.016	0.017	0.016	0.016
Malta	0.035	0.035	0.039	0.037	0.036	0.039	0.040
Haiti	0.034	0.017	0.015	0.015	0.014	0.015	0.015
Somalia	0.034	0.001	0.001	0.001	0.001	0.001	0.001
Congo, Republic of	0.034	0.041	0.040	0.033	0.034	0.031	0.031
Rwanda	0.034	0.012	0.011	0.011	0.011	0.011	0.011
Equatorial Guinea	0.033	0.054	0.058	0.048	0.049	0.047	0.049
Nepal	0.033	0.034	0.032	0.032	0.033	0.032	0.031
Burundi	0.032	0.005	0.004	0.003	0.003	0.003	0.003
Togo	0.031	0.010	0.009	0.008	0.008	0.008	0.008
Mauritius	0.030	0.029	0.027	0.026	0.026	0.025	0.025

Table A3.3. Illustrative Calculations --Formula Including Investment Income—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
Macedonia, Former Yugoslav Republic of	0.029	0.032	0.029	0.026	0.026	0.026	0.026
Chad	0.029	0.029	0.028	0.023	0.023	0.024	0.024
Albania	0.029	0.034	0.031	0.030	0.030	0.029	0.029
Malawi	0.029	0.024	0.023	0.011	0.011	0.012	0.011
Niger	0.028	0.013	0.012	0.012	0.012	0.012	0.011
Suriname	0.027	0.011	0.009	0.008	0.008	0.008	0.008
Armenia	0.027	0.025	0.023	0.023	0.023	0.023	0.023
Mauritania	0.027	0.013	0.012	0.009	0.009	0.010	0.010
Benin	0.026	0.021	0.020	0.015	0.015	0.015	0.015
Burkina Faso	0.025	0.018	0.017	0.019	0.018	0.018	0.018
Central African Republic	0.023	0.005	0.005	0.004	0.004	0.004	0.004
Lao People's Dem. Republic	0.022	0.013	0.012	0.013	0.013	0.013	0.013
Fiji	0.021	0.010	0.009	0.009	0.009	0.009	0.009
Barbados	0.020	0.013	0.012	0.012	0.012	0.012	0.012
Kosovo	0.017	0.016	0.014	0.011	0.011	0.011	0.011
Swaziland	0.016	0.015	0.014	0.011	0.012	0.011	0.011
Mongolia	0.015	0.018	0.017	0.013	0.013	0.013	0.013
Lesotho	0.015	0.009	0.008	0.007	0.007	0.006	0.006
Gambia, The	0.013	0.004	0.004	0.003	0.003	0.003	0.003
Montenegro	0.013	0.015	0.014	0.011	0.010	0.011	0.011
San Marino	0.010	0.013	0.010	0.008	0.008	0.008	0.008
Eritrea	0.008	0.005	0.005	0.004	0.004	0.004	0.004
Djibouti	0.007	0.004	0.003	0.003	0.003	0.003	0.003
Guinea-Bissau	0.006	0.003	0.003	0.002	0.002	0.002	0.002
Belize	0.006	0.005	0.005	0.004	0.004	0.004	0.005
Timor Leste	0.005	0.007	0.010	0.007	0.007	0.008	0.008
Vanuatu	0.005	0.002	0.002	0.002	0.002	0.002	0.002
Cape Verde	0.005	0.005	0.005	0.004	0.005	0.004	0.004
Seychelles	0.005	0.005	0.004	0.004	0.004	0.004	0.004
St. Lucia	0.004	0.004	0.004	0.003	0.003	0.003	0.003
Maldives	0.004	0.005	0.005	0.004	0.004	0.004	0.004
Solomon Islands	0.004	0.002	0.002	0.002	0.002	0.002	0.002
Bhutan	0.004	0.005	0.004	0.004	0.004	0.004	0.004
Antigua and Barbuda	0.004	0.004	0.004	0.003	0.003	0.004	0.004
Comoros	0.004	0.001	0.001	0.001	0.001	0.001	0.001

Table A3.3. Illustrative Calculations --Formula Including Investment Income -- by Member (concluded)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Calculated Quota Share Modified Formula 1/	Modified Formula without Variability 1/		Modified Formula with GDP and Openness 1/	
				Preserving Relative Weights	Distributed Evenly	Preserving Relative Weights	Distributed Evenly
Grenada	0.00344	0.00258	0.00242	0.00206	0.00206	0.00206	0.00207
Samoa	0.00340	0.00257	0.00238	0.00179	0.00182	0.00176	0.00176
São Tomé and Príncipe	0.00310	0.00156	0.00150	0.00054	0.00056	0.00051	0.00051
Tonga	0.00289	0.00138	0.00126	0.00115	0.00117	0.00112	0.00112
St. Kitts and Nevis	0.00262	0.00261	0.00246	0.00178	0.00185	0.00170	0.00172
St. Vincent and the Grenadines	0.00245	0.00262	0.00242	0.00187	0.00186	0.00188	0.00189
Dominica	0.00241	0.00161	0.00149	0.00130	0.00130	0.00130	0.00130
Kiribati	0.00235	0.00161	0.00165	0.00140	0.00174	0.00091	0.00092
Micronesia, Federated States of	0.00151	0.00136	0.00127	0.00116	0.00116	0.00118	0.00118
Marshall Islands	0.00103	0.00082	0.00079	0.00073	0.00071	0.00078	0.00078
Palau	0.00103	0.00093	0.00090	0.00085	0.00083	0.00090	0.00092
Tuvalu	0.00052	0.00042	0.00046	0.00022	0.00024	0.00020	0.00021

Source: Finance Department.

1/ The traditional openness variable in the formula is replaced with Investment Income, as a proxy for financial openness, and trade openness (openness minus investment income) weighted equally.

2/ Includes China, P.R., Hong Kong SAR, and Macao SAR.

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends -- by Member
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends 50-50 blend	70-30 blend
United States	17.407	16.061	15.898	16.225
Japan	6.464	6.259	6.167	6.352
China 1/	6.394	8.628	8.828	8.428
Germany	5.586	5.783	5.702	5.863
France	4.227	3.787	3.712	3.861
United Kingdom	4.227	4.297	4.239	4.354
Italy	3.161	3.229	3.174	3.283
India	2.751	2.447	2.582	2.312
Russian Federation	2.706	2.663	2.699	2.627
Brazil	2.316	2.106	2.116	2.095
Canada	2.312	2.231	2.203	2.259
Saudi Arabia	2.096	1.470	1.476	1.464
Spain	2.000	2.330	2.301	2.358
Mexico	1.869	1.708	1.731	1.686
Netherlands	1.832	2.076	2.055	2.098
Korea, Republic of	1.800	1.963	1.978	1.947
Australia	1.379	1.431	1.407	1.456
Belgium	1.345	1.418	1.404	1.431
Switzerland	1.210	1.143	1.124	1.161
Turkey	0.977	1.113	1.121	1.105
Indonesia	0.975	0.905	0.928	0.881
Sweden	0.929	1.064	1.049	1.078
Poland	0.859	0.989	0.997	0.980
Austria	0.825	0.827	0.816	0.837
Singapore	0.816	1.214	1.216	1.212
Norway	0.788	0.784	0.768	0.801
Venezuela, R.B. de	0.781	0.512	0.513	0.512
Malaysia	0.762	0.728	0.739	0.718
Iran, Islamic Republic of	0.748	0.656	0.686	0.625
Ireland	0.724	0.984	0.976	0.993
Denmark	0.721	0.739	0.726	0.753
Thailand	0.674	0.840	0.857	0.823
Argentina	0.669	0.576	0.592	0.561
South Africa	0.640	0.551	0.563	0.539
Nigeria	0.515	0.451	0.459	0.442

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends	
			50-50 blend	70-30 blend
Greece	0.509	0.570	0.566	0.574
Finland	0.506	0.530	0.522	0.539
United Arab Emirates	0.485	0.734	0.728	0.740
Czech Republic	0.457	0.566	0.568	0.564
Portugal	0.432	0.484	0.481	0.487
Colombia	0.429	0.386	0.395	0.376
Philippines	0.428	0.395	0.405	0.386
Egypt	0.427	0.423	0.441	0.406
Pakistan	0.426	0.333	0.351	0.315
Ukraine	0.422	0.452	0.463	0.441
Algeria	0.411	0.473	0.477	0.469
Hungary	0.407	0.481	0.482	0.479
Kuwait	0.406	0.305	0.304	0.305
Israel	0.403	0.448	0.446	0.449
Romania	0.380	0.421	0.425	0.418
Chile	0.366	0.397	0.400	0.394
Iraq	0.349	0.269	0.269	0.268
Libya	0.330	0.251	0.251	0.252
Peru	0.280	0.266	0.273	0.258
Luxembourg	0.277	0.610	0.608	0.612
New Zealand	0.263	0.245	0.242	0.248
Kazakhstan	0.243	0.334	0.337	0.331
Vietnam	0.242	0.304	0.315	0.293
Syrian Arab Republic	0.233	0.208	0.197	0.220
Bangladesh	0.224	0.178	0.188	0.167
Congo, Democratic Republic of the	0.224	0.040	0.040	0.039
Slovak Republic	0.210	0.273	0.274	0.272
Zambia	0.205	0.036	0.036	0.036
Bulgaria	0.188	0.181	0.184	0.179
Morocco	0.188	0.199	0.202	0.196
Angola	0.155	0.248	0.249	0.247
Ghana	0.155	0.049	0.050	0.047
Qatar	0.154	0.216	0.215	0.216
Croatia	0.150	0.159	0.159	0.159
Zimbabwe	0.148	0.014	0.013	0.014

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends	
			50-50 blend	70-30 blend
Ecuador	0.146	0.140	0.144	0.137
Belarus	0.143	0.159	0.164	0.155
Serbia	0.137	0.116	0.118	0.114
Côte d'Ivoire	0.136	0.055	0.055	0.054
Lebanon	0.133	0.158	0.159	0.157
Sudan	0.132	0.097	0.099	0.096
Slovenia	0.123	0.145	0.145	0.145
Sri Lanka	0.121	0.089	0.093	0.085
Uzbekistan	0.116	0.082	0.085	0.079
Tunisia	0.114	0.127	0.131	0.123
Oman	0.114	0.138	0.139	0.137
Kenya	0.114	0.073	0.075	0.071
Myanmar	0.108	0.062	0.065	0.059
Yemen, Republic of	0.102	0.087	0.089	0.086
Dominican Republic	0.100	0.097	0.099	0.095
Trinidad and Tobago	0.099	0.072	0.072	0.072
Lithuania	0.093	0.132	0.133	0.131
Uruguay	0.090	0.077	0.077	0.076
Guatemala	0.090	0.085	0.087	0.083
Tanzania	0.083	0.050	0.053	0.048
Bahrain	0.083	0.092	0.092	0.092
Azerbaijan	0.082	0.107	0.109	0.104
Jamaica	0.080	0.048	0.049	0.048
Panama	0.079	0.077	0.078	0.076
Costa Rica	0.077	0.076	0.077	0.074
Uganda	0.076	0.051	0.053	0.050
Jordan	0.072	0.075	0.075	0.074
Latvia	0.070	0.084	0.084	0.084
Afghanistan, Islamic Republic of	0.068	0.042	0.043	0.041
Senegal	0.068	0.033	0.033	0.032
Iceland	0.067	0.083	0.082	0.083
Cyprus	0.064	0.074	0.073	0.074
Brunei Darussalam	0.063	0.045	0.045	0.045
Ethiopia	0.063	0.062	0.065	0.059
El Salvador	0.060	0.059	0.061	0.058

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends	
			50-50 blend	70-30 blend
Cameroon	0.058	0.053	0.055	0.052
Bosnia and Herzegovina	0.056	0.058	0.058	0.057
Papua New Guinea	0.055	0.028	0.029	0.028
Nicaragua	0.055	0.025	0.026	0.024
Liberia	0.054	0.014	0.014	0.014
Honduras	0.052	0.050	0.052	0.049
Madagascar	0.051	0.031	0.032	0.030
Estonia	0.051	0.077	0.077	0.077
Bolivia	0.050	0.052	0.054	0.049
Turkmenistan	0.050	0.061	0.062	0.061
Mozambique	0.048	0.030	0.030	0.029
Gabon	0.045	0.040	0.041	0.040
Guinea	0.045	0.021	0.022	0.021
Georgia	0.044	0.031	0.032	0.030
Sierra Leone	0.044	0.006	0.007	0.006
Paraguay	0.042	0.045	0.046	0.044
Botswana	0.041	0.046	0.047	0.045
Namibia	0.040	0.023	0.024	0.023
Mali	0.039	0.029	0.029	0.028
Bahamas, The	0.038	0.021	0.021	0.021
Guyana	0.038	0.007	0.007	0.007
Kyrgyz Republic	0.037	0.018	0.019	0.018
Cambodia	0.037	0.036	0.038	0.035
Tajikistan	0.036	0.018	0.019	0.018
Moldova	0.036	0.024	0.025	0.024
Malta	0.035	0.035	0.035	0.035
Haiti	0.034	0.017	0.017	0.016
Somalia	0.034	0.001	0.001	0.001
Congo, Republic of	0.034	0.041	0.042	0.041
Rwanda	0.034	0.012	0.012	0.011
Equatorial Guinea	0.033	0.054	0.055	0.053
Nepal	0.033	0.034	0.036	0.033
Burundi	0.032	0.005	0.005	0.004
Togo	0.031	0.010	0.010	0.010
Mauritius	0.030	0.029	0.029	0.028

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends—by Member (continued)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends	
			50-50 blend	70-30 blend
Macedonia, Former Yugoslav Republic of	0.029	0.032	0.033	0.032
Chad	0.029	0.029	0.030	0.029
Albania	0.029	0.034	0.034	0.033
Malawi	0.029	0.024	0.025	0.024
Niger	0.028	0.013	0.013	0.013
Suriname	0.027	0.011	0.011	0.010
Armenia	0.027	0.025	0.025	0.024
Mauritania	0.027	0.013	0.013	0.012
Benin	0.026	0.021	0.021	0.020
Burkina Faso	0.025	0.018	0.019	0.017
Central African Republic	0.023	0.005	0.005	0.005
Lao People's Dem. Republic	0.022	0.013	0.014	0.013
Fiji	0.021	0.010	0.010	0.010
Barbados	0.020	0.013	0.013	0.013
Kosovo	0.017	0.016	0.015	0.016
Swaziland	0.016	0.015	0.015	0.015
Mongolia	0.015	0.018	0.019	0.018
Lesotho	0.015	0.009	0.009	0.009
Gambia, The	0.013	0.004	0.004	0.004
Montenegro	0.013	0.015	0.015	0.015
San Marino	0.010	0.013	0.013	0.013
Eritrea	0.008	0.005	0.005	0.005
Djibouti	0.007	0.004	0.004	0.003
Guinea-Bissau	0.006	0.003	0.003	0.003
Belize	0.006	0.005	0.006	0.005
Timor Leste	0.005	0.007	0.007	0.007
Vanuatu	0.005	0.002	0.002	0.002
Cape Verde	0.005	0.005	0.005	0.006
Seychelles	0.005	0.005	0.005	0.005
St. Lucia	0.004	0.004	0.004	0.004
Maldives	0.004	0.005	0.005	0.005
Solomon Islands	0.004	0.002	0.002	0.002
Bhutan	0.004	0.005	0.005	0.004
Antigua and Barbuda	0.004	0.004	0.004	0.004
Comoros	0.004	0.001	0.001	0.001

Table A3.4. Illustrative Calculations --Formula with Various GDP Blends -- by Member (concluded)
(In percent)

	14th Review Proposed Quotas	Calculated Quota Share	Formula with various GDP blends	
			50-50 blend	70-30 blend
Grenada	0.00344	0.00258	0.00262	0.00254
Samoa	0.00340	0.00257	0.00261	0.00252
São Tomé and Príncipe	0.00310	0.00156	0.00156	0.00155
Tonga	0.00289	0.00138	0.00142	0.00135
St. Kitts and Nevis	0.00262	0.00261	0.00262	0.00260
St. Vincent and the Grenadines	0.00245	0.00262	0.00266	0.00258
Dominica	0.00241	0.00161	0.00164	0.00158
Kiribati	0.00235	0.00161	0.00165	0.00156
Micronesia, Federated States of	0.00151	0.00136	0.00140	0.00131
Marshall Islands	0.00103	0.00082	0.00085	0.00079
Palau	0.00103	0.00093	0.00094	0.00092
Tuvalu	0.00052	0.00042	0.00042	0.00042

Source: Finance Department.

1/ Includes China, P.R., Hong Kong SAR, and Macao SAR.