Quota and Voice Reform—Stocktaking and Further Considerations, Statistical Appendices I and II, Statement by the Managing Director, and Summing Up of the Board Meeting
July 11, 2007

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INTERNATIONAL MONETARY FUND

Quota and Voice Reform—Stocktaking and Further Considerations

Prepared by the Quota and Voice Working Group[1]

Approved by David Burton

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I. INTRODUCTION

1. **At its Spring Meeting, the IMFC reiterated the importance of implementing the program of quota and voice reforms in line with the timetable set out by the Board of Governors in Singapore.**[2] The Committee welcomed the initial informal Board discussions on a new quota formula and stressed the importance of agreeing on a new formula, which should be simple and transparent and should capture members' relative positions in the world economy. It noted that this reform would result in higher shares for dynamic economies, many of which are emerging market economies, whose weight and role in the global economy have increased. The Committee also stressed the importance of enhancing the voice and participation of low-income countries, a key issue for which is an increase in basic votes, at a minimum preserving the voting share of low-income countries. The Committee called on the Executive Board to continue its work on the reform package as a matter of priority.

2. **The reform discussions are clearly at an important juncture, and significant progress will be needed in the coming months if the Singapore timetable is to be met.** The Board has considered the issues surrounding a new quota formula on two occasions,[3] and they have also been discussed extensively in fora outside the Fund. These discussions have helped clarify members' views and identify areas of difference. While progress has been made, sizable differences remain on some key issues. It will be important to begin to narrow these differences and find common ground that could garner the necessary broad support.

3. **With this goal in mind, the current paper seeks to provide a basis for the next Executive Board discussion.** It presents a range of illustrative simulations for a new quota formula that build on the discussions to date and are based on the new quota database through 2005.[4] It also provides an initial and very preliminary discussion of some broader issues that will need to be considered in the context of the second round ad hoc quota increases. Given the inter-linkages between a new quota formula and the second round adjustments, it is hoped that this discussion may help facilitate progress toward an agreement on the key second round issues in the coming months.

4. **It should be stressed that the paper does not present specific proposals.** This would be premature, given the significant differences that remain, as noted above. Rather, it is hoped that the illustrative simulations in this paper could help provide a basis for identifying areas of common ground, and thus pave the way for considering specific proposals in subsequent discussions. Also, the paper is not exhaustive on the second round reforms. In particular, while the simulations require assumptions for the size of the increase

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[2] *Communiqué of the International Monetary and Finance Committee of the Board of Governors of the IMF,* April 14, 2007.

[3] Informal seminars were held in December 2006 and March 2007. See *Quotas—Further Thoughts on a New Quota Formula* (2006) and *A New Quota Formula—Additional Considerations* (2007).

[4] The updated database is provided in *Quotas—Updated Calculations and Data Adjustments* (2007).

in basic votes, these are purely illustrative, and the issue is not addressed in detail in this paper. It also does not address the request in the Singapore Resolution for the Executive Board to consider the merits of an amendment of the Articles that would enable each Executive Director elected by a large number of member countries to appoint more than one Alternate Executive Director, an issue that will be taken up separately.

II. NEW QUOTA FORMULA

A. Stocktaking

5. **The discussions to date have helped clarify some broad areas of agreement and also highlighted the key outstanding differences.** On the former, there is agreement that the formula should be simple and transparent, consistent with the multiple roles of quotas, result in calculated quota shares that are broadly acceptable, and be feasible to implement statistically. Progress has also been made in narrowing the range of variables to be considered and identifying the impact of different combinations of variables and weights on members' calculated quota shares.

6. **On the quota variables**, much of the discussion has centered on modernized versions of the four traditional variables, but other possibilities have also been considered. While all issues remain open at this stage, the remainder of this section attempts briefly to take stock of the discussions to date as a basis for the simulations described in the next section:

- **GDP Conversion:** While its precise weight still needs to be determined, it seems widely agreed that GDP should be the most important variable in a new formula. The main area of difference lies over whether it should be converted at market exchange rates or PPP. The last staff paper explored the conceptual issues involved, and illustrated the impact of including a blended variable involving a combination of GDP converted at market rates and PPP, noting that the financial role of quotas suggests that the former should continue to play an important role in a blended variable. Sharply differing views have been expressed on the appropriateness of employing a blended GDP variable in the formula. The simulations presented below illustrate the use of both market rate GDP and a blended variable with a minority weight on PPP GDP.

- **Period for Measuring GDP:** A separate question raised at the last discussion was whether adjustments should be made for structural breaks resulting from, say, balance of payments crises or civil conflict. The Board had previously agreed that GDP should be measured as a three-year average rather than a single year as in the existing formulas in order to capture the latest developments while reducing potential distortions from short-term volatility.[5] The main options to address the issue of structural breaks would seem to be either adopting a longer average such as five years, or seeking to exclude outlier years according to some predetermined rule. On

[5] *IMF Executive Board Discusses Quota Formulas, Public Information Notice No. 02/59.*

further reflection, staff believes that either option would have significant disadvantages, as the former would make the GDP data less reflective of current economic developments, while the latter would add a significant new element of complexity and judgment to the measure. Accordingly, no change to the three-year average is proposed in this paper.

- **Openness:** There also seems to be wide support for retaining an openness variable in the new quota formula, notwithstanding concerns about possible distortions associated with its measurement on a gross basis. In this context, some have continued to argue that intra-currency union flows should be excluded from the measure. The last staff paper illustrated the potential impact of such an adjustment, and also noted the difficult conceptual and data issues involved. As also discussed previously, data limitations would seem at this stage to preclude development of an alternative openness measure based on value added, and neither of these options is considered further in this paper.

- **Financial Openness:** Some continue to favor broadening the openness measure to give a greater weight to financial openness. As discussed in the last staff paper, there seem to be sound conceptual grounds for doing this, but it also raises difficult data issues because comprehensive data on the most promising measure—IIP—are currently only available for about half of the membership. That paper also discussed options for proxying IIP, including the possible use of investment income.[6] This paper includes simulations with and without such a proxy pending further guidance from the Board on whether to pursue explicit inclusion of a measure of financial openness at this stage.

- **Variability:** Variability is seen by many as playing an important role in a new quota formula to capture members' potential need for Fund resources. It was previously agreed that the traditional measure should be updated to cover both current receipts and net capital flows. However, some have raised concerns that the global share of advanced economies in this updated measure remains relatively high (63 percent based on data through 2005) and asked for further work on the scope for modifying the variable to make it more reflective of members' likely need to draw on the Fund. Staff has examined a range of options for amending or redefining the measure of variability and the preliminary results of this work are reported in Appendix I. In general, this work points to the continued need for a measure that relates to economic size; this, together with the right of all members to draw on the Fund in case of balance of payments need, may limit to some degree the scope for modifications that result in major changes in global shares of this measure. Modifications that would lead to more moderate changes in shares are also examined. There are pros and cons with all of these options, and no further changes to the definition of variability are proposed in this paper pending further Board guidance.

[6] Another option would be to use IIP data where available and investment income data for remaining countries.

- **Reserves:** While some continue to favor inclusion of reserves as an indicator of financial strength and ability to contribute to the Fund's finances, others have noted that the relevance of this indicator may have declined over time, and have also raised concerns about the potential perverse incentives associated with excess reserve accumulation. The latter led to proposals for a cap on the reserves variable, and a number of options for implementing such a cap were considered in the last staff paper. As noted in that paper, the application of a reserves cap would raise a number of difficult issues, and this proposal is not pursued further here. Instead, reserves are included in the simulations below with a relatively low weight.

- **Possible new variables:** Suggestions were made to include population in the new formula, possibly with a low weight, as a measure of members' relative stakes in the international public goods provided by the Fund. This option was explored in the last staff paper but did not appear to attract significant support. The last paper also explored a proposal to develop a new measure of financial contributions to the Fund, noting that financing considerations have long played a role in determining quota increases for individual members. However, the paper also noted that explicitly including such a variable in the quota formulas would raise a number of practical difficulties, and that it may be preferable to continue to take account of such factors outside of the quota formula itself. While these issues remain open, they are not included in the simulations presented below.

7. **In addition to the quota variables, other issues to be agreed include the weights to be applied in each case and how they should be combined.** Consistent with the goal of simplicity and transparency, there seems to be a broad consensus that the variables in the new formula should be expressed in terms of shares in global totals rather than nominal levels as in the existing quota formulas, and that a linear combination of shares would be preferable to a multiplicative combination. However, a further open issue is whether a compression factor should be included in order to moderate somewhat the effects of the high correlation of size-related variables that tends to favor large economies.

B. Illustrative Simulations

8. **In line with the above, this section presents a range of illustrative simulations of a new quota formula based on updated data through 2005.** As noted in *Quotas—Updated Calculations and Data Adjustments* (2006), the data update tends in general to result in a modest increase in the aggregate calculated quota share of developing countries relative to that using the previous database. However, the new data do not change the broad conclusions drawn in previous papers about the effects of different combinations of variables and variable weights. Therefore, rather than repeat the full range of simulations shown previously, this section presents a more limited set, including some additional simulations drawing on the discussions to date. Again, it should be emphasized that the simulations are intended to be illustrative, and not to prejudge the range of options that could be considered:

- Table 1 presents simulations based on the four traditional variables updated and modernized, including GDP at market exchange rates. In all cases, GDP has the

largest weight, and as suggested by some Directors, the simulations include formulations with a higher weight on variability than in the baseline scenario presented in previous papers. The last simulation illustrates the effects of incorporating a proxy for financial openness in the openness variable.

- Table 2 focuses on simulations incorporating either a blended GDP variable or compression, both of which have been illustrated previously, as well as two new simulations showing the potential effects of combining moderate elements of both factors, which some have suggested could be a way of balancing the divergent views that have been expressed to date.[7]

9. **The broad results of these simulations for the calculated quota shares of major country groups are similar to those discussed previously** (the results for individual members are presented in a supplement to this paper). In all the variants of the simple linear formula with GDP converted at market exchange rates, the aggregate calculated quota share of advanced countries increases relative to the existing quota formulas, while that of developing countries declines. These changes are slightly less pronounced in the simulations with a higher weight on variability, and are more pronounced when the openness variable is explicitly broadened to include financial openness.[8] They are also moderated somewhat in the scenarios that employ either a GDP blend (with a minority weight on PPP) or a modest element of compression. The only simulations in which the calculated quota share of developing countries as a whole increases are those employing a somewhat higher degree of compression or a combination of both a GDP blend and compression. As discussed in previous papers, however, this result can also be obtained through a higher weight on PPP GDP in a blended GDP variable.

III. Broader Elements of the Reform Package—Preliminary Considerations

A. Key Second Round Parameters

10. **At this point in the process, it may be useful to begin to consider other elements that will need to be decided in moving forward with the second round of ad hoc increases.** These elements include the overall size of the second round ad hoc increases, the way it will be allocated, and the size of the increase in basic votes. Consideration of these elements may help to advance the broader reform discussions. Also, simulation of alternative reform packages may serve to bring out the implications of alternative quota formulas for the distribution of actual quota shares following the second round.

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[7] A suggestion has also been made that the inclusion of such elements should involve a "sunset clause" that would revert back to a simple linear formula at some future date.

[8] Use of an IIP-investment income based proxy would result in a higher share for advanced countries as a group versus an investment income based proxy, with sizable differences for some individual members.

Size of the second round

11. **On the size of the second round ad hoc quota increases,** the Resolution indicated that the second round should aim to achieve a significant further alignment of members' quotas with their relative positions in the world economy, based on the new quota formula. It was also envisaged that a broader range of countries would participate in the second round than the narrow group included in the first round. The size of the second round increase is, of course, a question for the membership to decide, and on which little guidance has so far been provided. For purely illustrative purposes, the simulations presented in this paper use second round increases of 5.6, 8.1, and 10.5 percent, which—when combined with the first round increase of 1.8 percent—imply overall quota increases of 7.5, 10, and 12.5 percent, respectively. Increases of different sizes to those presented here are of course possible.

Eligibility and allocation mechanism

12. **Various issues related to the eligibility for, and allocation of, increases will also need to be considered.** For illustrative purposes, and as a starting point for the discussions, most of the simulations in this paper assume that all members that are under-represented according to a new formula are considered eligible for quota increases—that is, eligibility is defined solely on the basis of the new quota formula. With the exception of members that may choose to forego some of the increase for which they may be eligible, increases are allocated on the same basis as for the first round. That is, increases for individual members are determined such that each member's out-of-lineness (as measured by the gap between calculated and actual quota share) is reduced by the same proportion.

13. **Other approaches that go beyond simple application of the formula could also be considered, with past practice providing some precedent for this.** In some instances in the past, this has involved the use of an additional filter. For example, for the first round of ad hoc increases, member countries needed to be significantly out-of-line according to the existing quota formulas as well as under-represented with respect to all four variables that the Executive Board was considering for inclusion in the new formula. Also, in previous quota reviews, ad hoc quota increases have at times been restricted to specific groups (e.g., developing countries) or differentiated between groups (e.g., oil producers versus others).

14. **One such approach would be to limit second round increases to members whose quotas are most out of line**—for example, whose ratio of calculated to actual quota shares exceeded a chosen threshold. Alternatively, members whose quotas are most out-of-line could receive larger proportional reductions in their misalignment than less misaligned members.

15. **A further alternative that has recently been suggested is a supplementary filter based on contributions to PPP-weighted real global GDP growth.**[9] The filter would seek to capture many of those countries whose weight and role in the world economy have been increasing in recent times, including countries that may be somewhat over-represented under the new formula now but are unlikely to remain so in the future. This would be consistent with the reform objective, as emphasized in the April 2007 IMFC Communiqué, of increasing the share of the Fund's most dynamic members. Such a filter could be used to restrict the list of eligible countries to those that have been making a strong contribution to global growth and that are either under-represented according to the formula or whose degree of over-representedness is not too large. Using a filter based on contributions to global growth to restrict eligibility would tend to filter out smaller economies but would achieve a more significant realignment of the shares of countries that remain. Alternatively, such a filter could also be used to add countries to the list of eligible members that otherwise would be limited to those that are under-represented according to the formula.

Treatment of members receiving first round increases

Consideration will also need to be given to the treatment of the ad hoc increases agreed for four members in the first round. These increases were intended as essentially a down payment on a larger reform that would include ad hoc increases for a broader list of members. Moreover, the four countries in question were chosen not because they were the most under-represented, though they were clearly among that group, but rather because they could be viewed as unambiguously under-represented taking account of both the existing quota formulas and their relative shares in the four main quota variables being considered for inclusion in a new formula, as noted above. Given these considerations, and to ensure even-handed treatment across members, it would seem reasonable when considering a broader list of ad hoc increases in the second round to take account of the increases already agreed in Singapore. In the simulations below, members' eligibility for an increase and the uniform reduction factor are determined based on a comparison of calculated quota shares under a new formula with actual quota shares prior to the Singapore increases. In these simulations, the four members receiving increases in Singapore obtain additional increases to the extent required to deliver the same overall proportionate reduction. Other approaches to a uniform reduction are also possible, as noted above.

Foregoing

16. **A further factor that will influence the degree of adjustment in quota shares in the second round is the extent to which some members that are eligible for second round increases may be willing to forego part or all of those increases.** In its report to Governors, the Executive Board noted that large advanced economies that already have sizable voting power in the Fund may be willing to consider foregoing, or at least limiting,

[9] This approach was suggested by a participant during a G-20 deputies meeting in Istanbul on July 1. A supplementary filter was combined with a formula using GDP at market exchange rates and without compression. This approach is similar to the simulation shown in Table 6.

the increases they request in the second round. This would augment the quota increases available for other eligible members for a given aggregate increase in quotas.[10] The United States has already stated that it would be willing to limit any second round increase that it would be entitled to under a new formula to a level that would restore the US voting share to its pre-Singapore level, and other advanced countries may also be willing not to take up the full amount to which they might otherwise be eligible.

17. **Particularly for the Fund's largest members, the extent of foregoing can make a significant difference in terms of the overall adjustment in quota shares that is possible for any given aggregate second round increase.** Any decision on foregoing is of course for individual members to make, and limited guidance on this issue has been provided to date. Accordingly, for purely illustrative purposes, the simulations presented in this paper use the simplifying assumption that G-7 countries will limit any second round quota increases that they are entitled to under a new quota formula to a level that restores their pre-Singapore voting shares. If a G-7 country is not eligible for a second round increase or if that increase is not large enough to affect the desired restoration, the country in question does not have its pre-Singapore voting share restored under this assumption. Other approaches are of course possible, including that the G-7 as a group may agree to limit its take up to a particular level, with some redistribution within the group.[11]

Size of increase in basic votes

18. **Under the Board of Governors Resolution, basic votes are to be at least doubled and, at a minimum, would need to protect the voting share of low-income countries**. The increase in basic votes is an integral part of the quota and voice reform, with the Resolution stipulating that the second round quota increases shall not become effective until the amendment of the Articles of Agreement related to basic votes has entered into force. As such, the Board will need to consider the scale of the increase in basic votes along with that of the second round increase. For purely illustrative purposes, in these simulations basic votes are either doubled (to 500 per member) or increased further to preserve the voting power of low-income countries as a whole at its pre-Singapore level.[12]

B. Second Round Simulations

19. **The simulations presented in this section seek to provide a very preliminary indication of possible outcomes for the second round based on the above considerations.**

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[10] *Report of the Managing Director to International Monetary and Financial Committee on IMF Quota and Voice Reform* (2006).

[11] An approach along these lines was followed in the Ninth General Review.

[12] Specifically, the simulations determine the size of basic votes that would be necessary for a given size of the second round ad hoc increases to protect low-income country voting shares under the simplifying assumption that no low-income country were to receive a quota increase in the second round. Basic votes are raised either to that level or to 500 per member, whichever is greater.

As noted, they are purely illustrative and intended solely to help advance the discussions on the new quota formula. Tables 3–5 present the results in terms of voting shares for the main country groups of three different illustrative sizes of the second round (corresponding to a total quota increase in the two rounds combined in the range of 7.5–12.5 percent).[13] In each case, simulations are presented using six alternative formulations for a new quota formula that are drawn from the scenarios considered earlier in this paper. As discussed above, the simulations assume: (a) that second round increases are allocated to all under-represented members to achieve a uniform proportional reduction in out-of-lineness, based on pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members; (b) that basic votes are doubled, except where a larger increase is needed to protect the voting shares of low-income countries; and (c) foregoing by eligible G-7 members of any increases that would take them beyond their pre-Singapore voting shares.

20. **Several very preliminary conclusions may be drawn from these simulations:**

- First, while the simulations imply significant increases in shares for individual countries that are eligible for ad hoc quota increases, the results for major country groups generally show little change or a modest increase in the voting share of developing countries as a whole in the second round. This partly reflects that, even with foregoing, major advanced countries tend to take up a significant part of the second round increase, and also that a number of smaller advanced countries would be eligible for ad hoc increases under the allocation mechanism assumed in these simulations.[14] A larger shift in aggregate shares would likely require a greater degree of foregoing or a different allocation mechanism to that illustrated here.

- Second, there tends to be more room for developing countries to gain in share in those scenarios where the overall size of the second round quota increase is larger.

- Third, while the choice of quota formula has a significant effect on the distribution of members' calculated quota shares, as discussed earlier, its impact on actual voting shares after the second round is more muted based on the assumptions used in these scenarios. In general, however, the gain in the share of developing countries is greatest in those scenarios with a formula that utilizes a blended GDP variable or that combines blended GDP with compression.

- Fourth, a relatively large number of countries would be eligible for ad hoc quota increases based purely on the criterion of under-representedness using the new formula, though the precise number and composition of these countries can vary

[13] A supplement to this report provides individual country details, as well as a list of member countries receiving second round increases under each simulation.

[14] For example, even with all G-7 countries foregoing, 41 percent of the overall increase (first and second rounds combined) would go to major advanced countries under the scenario presented in the third column of Table 3 (i.e., 50/30/15/5, with a 7.5 percent overall increase). If only the United States were to forego, this number would increase to 52 percent.

significantly across the different simulations. The number of qualifying countries is largest in the scenarios involving compression. Also, for a given second round, the extent of the proportionate reduction in out-of-lineness that is possible varies inversely with the number of eligible members.

21. **The alternative approach discussed above of using a supplementary filter to determine eligibility for the second round is illustrated in Table 6.** The scenario uses a new formula based on market rate GDP with weights of 50/30/15/5 and is based on an overall quota increase at the lower end of the above range. The filter has been calculated to capture countries that have contributed more than 0.5 percent to PPP-weighted real global growth during the period 2001–05 (see text table). These parameters have been chosen to make the simulation similar to the approach suggested by one participant at the G-20 meeting in Istanbul on July 1. Under this approach, the filter is used both to exclude countries that do not meet the above test, as well as to add additional countries that meet the test and are not over-represented by more than 50 percent using the above formula.

22. **Based on the parameters illustrated here, it can be seen that such an approach can lead to a significantly different outcome in terms of the second round increases.** In particular, the ad hoc increases would be concentrated on a significantly shorter list of countries that have made sizable contributions to global growth, and are either under-represented or not very over-represented based on the new formula. This would comprise 13 countries (left hand panel of the text table) that are under-represented, and 6 countries (shaded in the right hand panel) that are over-represented. As noted above, a further variant of this approach would be to use the filter to add additional countries to the list. Under this variant, use of the same filter would add the 6 additional countries to the broader list of under-represented countries that would qualify for ad hoc increases based on the methodology described above. It should be stressed that these simulations are intended to be purely illustrative of the potential results of a supplementary filter based on contributions to global growth. Different parameters and combinations involving such an approach could also be considered.

PPP-Weighted Real Global GDP Growth:
Countries that Contributed more than 0.5 Percent in 2001–05 1/

Underrepresented countries 2/	Percentage share of global growth	Overrepresented countries 3/	Percentage share of global growth
China 4/	32.08	India	9.50
United States	12.48	Russia	3.85
Japan	2.23	United Kingdom	2.12
Korea	2.03	Brazil	1.89
Spain	1.57	Indonesia	1.71
Thailand	1.15	Iran, I.R. of	1.24
Turkey	1.08	Canada	1.19
Mexico	0.86	France	1.18
Vietnam	0.75	Ukraine	1.01
Germany	0.68	South Africa	0.92
Poland	0.67	Australia	0.86
Italy	0.53	Pakistan	0.78
Malaysia	0.53	Philippines	0.78
		Bangladesh	0.68
		Saudi Arabia	0.59
		Argentina	0.52
		Colombia	0.51
		Myanmar	0.50

Source: Finance Department.

1/ The contribution of a country to global GDP growth in 2001–05 is calculated as the average share of the country in PPP-based global GDP in 2001–05 times its average annual real GDP growth rate (in constant local currency units) during the same period. Data series for 178 member countries were taken from World Economic Outlook database published in April 2007.
2/ Countries that are underrepresented on the basis of a linear formula (based on market rate GDP) with the weights (50/30/15/5).
3/ Countries that are overrepresented on the basis of a linear formula (based on market rate GDP) with the weights (50/30/15/5); countries that are overrepresented by less than 50 percent (with the exception of Canada, France and the UK) are shaded.
4/ Includes China, P.R., and Hong Kong SAR.

IV. ISSUES FOR DISCUSSION

23. **Directors may wish to comment in particular on**:

- The merits of including a blended GDP variable, compression, or a combination of the two in the new quota formula;

- Whether they see merit in continuing to explore the inclusion of financial openness in the formula at this stage, given the data limitations, and if so in what form;

- The importance of further pursuing changes to the definition of variability, in light of the discussion in Appendix 1.

- The appropriate weights for GDP, openness, variability and reserves in the new formula.

- The desirable total size for the second round of ad hoc quota increases, and for the increase in basic votes.

- The appropriate way to allocate second round ad hoc increases, and in particular, whether a supplementary filter along the lines of the approach discussed during the Istanbul G-20 meeting should be further explored.

Table 1. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Advanced economies	61.6	60.5	65.6	69.6	69.3	68.7	71.1
Major advanced economies	46.0	45.2	45.9	53.6	53.4	52.4	54.4
Of which: US	17.4	17.1	16.3	22.2	22.5	22.0	23.0
Other advanced economies	15.6	15.3	19.7	16.0	15.9	16.3	16.7
Developing countries	30.9	32.1	28.6	25.4	25.6	26.1	24.3
Africa	5.5	5.4	2.4	2.1	2.2	2.3	2.0
Asia 6/	10.3	11.5	16.2	13.7	13.7	13.8	13.1
Middle East, Malta & Turkey	7.6	7.6	4.8	4.0	4.1	4.2	3.7
Western Hemisphere	7.5	7.6	5.2	5.5	5.7	5.8	5.4
Transition economies	7.6	7.4	5.7	5.0	5.1	5.2	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:							
EU 27	32.9	32.4	37.8	33.9	33.3	33.3	34.4
LICs 7/	7.5	7.4	3.6	3.5	3.5	3.5	3.2

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ Trade openness and financial openness are blended in equal proportion. Financial openness is measured as average investment income in the current account adjusted for international banking interest. Trade openness is the average sum of current receipts and payments, excluding investment income, adjusted for re-exports and non-monetary gold.
6/ Including Korea and Singapore.
7/ PRGF-eligible countries.

Table 2. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (in percent)

	Actual Quotas 3/		Existing	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 6/	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP Blend 50% 5/ Openness 25% Variability 20% Reserves 5% K=0.95 6/
	Pre First Round Increases	Post First Round Increases 4/	Five Formulas					
Advanced economies	61.6	60.5	65.6	66.4	67.5	65.2	64.5	64.1
Major advanced economies	46.0	45.2	45.9	51.0	50.6	47.5	48.2	48.0
Of which: US	17.4	17.1	16.3	21.1	20.1	18.1	19.1	19.4
Other advanced economies	15.6	15.3	19.7	15.4	16.9	17.6	16.3	16.2
Developing countries	30.9	32.1	28.6	28.3	27.0	28.7	29.7	30.0
Africa	5.5	5.4	2.4	2.4	2.5	3.0	2.8	2.8
Asia 7/	10.3	11.5	16.2	16.1	14.1	14.4	16.1	16.1
Middle East, Malta & Turkey	7.6	7.6	4.8	4.1	4.4	4.9	4.5	4.6
Western Hemisphere	7.5	7.6	5.2	5.9	6.0	6.5	6.3	6.4
Transition economies	7.6	7.4	5.7	5.3	5.5	6.1	5.8	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
EU 27	32.9	32.4	37.8	32.6	34.3	34.6	33.1	32.5
LICs 8/	7.5	7.4	3.6	4.4	4.0	4.5	4.8	4.9

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ The compression (K) raises the quota formula to the power of K.
7/ Including Korea and Singapore.
8/ PRGF-eligible countries.

Table 3. Second Round Simulation—Illustration of Voting Shares 1/ 2/
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Advanced economies	60.6	59.5	59.5	59.5	59.2	59.5	59.5	59.3
Major advanced economies	45.1	44.4	44.1	44.1	44.0	44.1	43.9	44.0
Of which: US	17.0	16.7	17.0	17.0	17.0	17.0	16.9	17.0
Other advanced economies	15.4	15.2	15.5	15.5	15.2	15.5	15.6	15.3
Developing countries	31.7	32.9	32.9	33.0	33.3	32.9	32.9	33.1
Africa	6.0	5.9	6.0	6.0	6.0	6.0	6.0	6.0
Asia 5/	10.4	11.6	11.9	11.8	12.2	11.7	11.6	12.0
Middle East, Malta & Turkey	7.6	7.6	7.4	7.4	7.4	7.4	7.5	7.4
Western Hemisphere	7.7	7.8	7.6	7.7	7.7	7.7	7.8	7.7
Transition economies	7.7	7.6	7.5	7.5	7.5	7.6	7.6	7.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
No. of countries receiving ad hocs			35	34	37	50	66	52
Uniform reduction factor 6/			34.1	32.9	27.4	27.9	25.1	23.5
EU 27	32.5	32.0	32.1	32.0	31.8	32.1	32.1	31.8
LICs 7/	8.3	8.1	8.4	8.4	8.5	8.4	8.4	8.5

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) a 5.6 percent increase (total first and second round increase of 7.5 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Including Korea and Singapore.
6/ Uniform proportional reduction in the gap between calculated and actual quota shares, using the formula indicated above.
7/ PRGF-eligible countries.

Table 4. Second Round Simulation—Illustration of Voting Shares 1/ 2/
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Advanced economies	60.6	59.5	59.3	59.3	58.9	59.4	59.3	59.1
Major advanced economies	45.1	44.4	43.8	43.8	43.8	43.8	43.6	43.7
Of which: US	17.0	16.7	17.0	17.0	17.0	17.0	16.9	17.0
Other advanced economies	15.4	15.2	15.6	15.5	15.1	15.6	15.7	15.3
Developing countries	31.7	32.9	33.2	33.3	33.7	33.1	33.1	33.4
Africa	6.0	5.9	5.9	5.9	5.9	5.9	6.0	5.9
Asia 5/	10.4	11.6	12.4	12.3	12.7	12.1	11.9	12.4
Middle East, Malta & Turkey	7.6	7.6	7.4	7.4	7.3	7.4	7.5	7.4
Western Hemisphere	7.7	7.8	7.6	7.7	7.7	7.7	7.8	7.7
Transition economies	7.7	7.6	7.4	7.4	7.4	7.5	7.6	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
No. of countries receiving ad hocs			36	35	38	51	67	53
Uniform reduction factor 6/			46.1	44.6	38.2	38.8	34.5	33.2
EU 27	32.5	32.0	32.0	31.9	31.6	32.0	32.1	31.7
LICs 7/	8.3	8.1	8.3	8.3	8.5	8.3	8.3	8.5

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) an 8.1 percent increase (total first and second round increase of 10 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993-2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Including Korea and Singapore.
6/ Uniform proportional reduction in the gap between calculated and actual quota shares, using the formula indicated above.
7/ PRGF-eligible countries.

Table 5. Second Round Simulation—Illustration of Voting Shares 1/ 2/
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Advanced economies	60.6	59.5	59.1	59.0	58.5	59.1	59.1	58.7
Major advanced economies	45.1	44.4	43.5	43.5	43.5	43.5	43.3	43.4
Of which: US	17.0	16.7	17.0	17.0	17.0	17.0	16.9	17.0
Other advanced economies	15.4	15.2	15.6	15.5	15.1	15.6	15.7	15.3
Developing countries	31.7	32.9	33.6	33.6	34.1	33.4	33.4	33.8
Africa	6.0	5.9	5.9	5.9	5.9	5.9	6.0	5.9
Asia 5/	10.4	11.6	12.8	12.7	13.2	12.4	12.2	12.8
Middle East, Malta & Turkey	7.6	7.6	7.3	7.3	7.2	7.3	7.4	7.3
Western Hemisphere	7.7	7.8	7.6	7.7	7.7	7.7	7.8	7.7
Transition economies	7.7	7.6	7.4	7.3	7.4	7.5	7.6	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
No. of countries receiving ad hocs			36	35	38	51	67	54
Uniform reduction factor 6/			56.3	56.3	46.7	47.5	42.1	40.7
EU 27	32.5	32.0	31.9	31.8	31.4	31.9	32.0	31.5
LICs 7/	8.3	8.1	8.3	8.3	8.5	8.3	8.4	8.6

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) a 10.5 percent increase (total first and second round increase of 12.5 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Including Korea and Singapore.
6/ Uniform proportional reduction in the gap between calculated and actual quota shares, using the formula indicated above.
7/ PRGF-eligible countries.

Table 6. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Advanced economies	60.6	59.5	61.6	60.5	65.6	69.6	60.8	59.0
Major advanced economies	45.1	44.4	46.0	45.2	45.9	53.6	45.7	44.1
Of which: US	17.0	16.7	17.4	17.1	16.3	22.2	17.7	17.0
Other advanced economies	15.4	15.2	15.6	15.3	19.7	16.0	15.1	15.0
Developing countries	31.7	32.9	30.9	32.1	28.6	25.4	32.1	33.5
Africa	6.0	5.9	5.5	5.4	2.4	2.1	5.1	6.0
Asia 8/	10.4	11.6	10.3	11.5	16.2	13.7	12.2	12.3
Middle East, Malta & Turkey	7.6	7.6	7.6	7.6	4.8	4.0	7.3	7.4
Western Hemisphere	7.7	7.8	7.5	7.6	5.2	5.5	7.5	7.9
Transition economies	7.7	7.6	7.6	7.4	5.7	5.0	7.1	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
No. of countries receiving ad hocs							19	19
Uniform reduction factor 9/							40.0	40.0
EU 27	32.5	32.0	32.9	32.4	37.8	33.9	32.0	31.3
LICs 10/	8.3	8.1	7.5	7.4	3.6	3.5	7.3	8.6

Source: Finance Department.

1/ Based on an approach outlined by a participant during a G-20 deputies meeting in Istanbul on July 1, 2007.
2/ Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
4/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used.
5/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
6/ 0.5*GDP + 0.3*Openness + 0.15*Variability + 0.05*Reserves.
7/ Under this scenario, members are eligible for a quota increase if i) they contributed more than 0.5% to global GDP growth measured at PPP exchange rates during the period 2001-05 and ii) they are either under-represented or over-represented by not more than 50 percent under the new quota formula. They also assume: a) a 5.6 percent increase (total first and second round increase of 7.5 percent); b) a doubling of basic votes; c) foregoing by eligible G-7 countries (US, Japan, Germany, Italy) to their pre-Singapore voting shares; d) other under-represented eligible countries' out-of-lineness is reduced at a uniform proportional rate; and e) over-represented eligible members receive a 5% increase above their pre-Singapore voting shares (except the UK, Canada, and France).
8/ Including Korea and Singapore.
9/ Uniform proportional reduction in the gap between calculated and actual quota shares, applied to underrepresented countries, using the formula indicated above.
10/ PRGF-eligible countries.

Appendix I. Alternative Measures of Variability[15]

I. Background

24. Variability has traditionally been included in the quota formulas as a measure of members' potential need for Fund resources, as discussed in *A New Quota Formula—Additional Considerations* (2007). The modernized version of variability is defined as the standard deviation of current receipts and net capital flows (CR+NCF) from a centered, three-year moving average over a recent 13-year period.

25. During the recent informal discussions of the quota formula, questions were raised as to whether the measure adequately captures members' potential need for Fund resources. In particular, it was noted that advanced economies as a group hold the majority share of the variable; while these members have a right to draw should a need arise, such a circumstance was noted to be unlikely. Underlying this issue is the difficulty of capturing and balancing in a simple measure members' relative susceptibility to, and capacity to absorb, exogenous shocks, along with the potential size of access in case a borrowing need occurs.

26. This appendix considers, on a preliminary basis, possible modifications to the current definition of variability, as well as alternative formulations for a variability measure. While it is valuable to consider a range of possibilities, the feasibility and appropriateness of any of the preliminary ideas outlined below would need more rigorous assessment before any consideration of their application to the quota formula. The results of the possible modifications are discussed in each case based on the updated database through 2005 (see Tables A1 and A2). Detailed results by country will be provided in a supplement.

II. Modifying the Calculation of Variability

A. Scaling Options

27. Some observers have noted the high correlation between GDP and variability and have argued that the current measure does not adequately capture the susceptibility of a member to balance of payments disruptions. One proposal discussed in the March informal Board meeting was to scale variability by GDP or the average of current receipts and net capital flows (CR+NCF). However, scaling in this way does not improve the measurement of susceptibility to balance of payments disruptions, but rather simply eliminates from the calculation the important consideration of the potential size of need. For instance, under a measure scaled by GDP the smallest four Fund members each acquire shares that exceed those held by each of the largest 19 developing and transition economies.[16]

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[15] All the calculations referred to in this annex are preliminary.

[16] Another possibility is to scale the current variability measure by per capita GDP, under the assumption that an economy has more capacity to absorb volatility as its per capita income rises. The use of per capita GDP as a scaler leads to a sharp reduction in the advanced economy share, but unlike scaling by GDP, it does not yield a relatively large increase in the share of small economies. Nonetheless, such a measure effectively uses

(continued…)

B. The Use of a Three- Versus Five-Year Trend

28. In earlier discussions of the incorporation of net capital flows into a modernized variability measure, the Board generally agreed with the recommendation of staff to move to a three-year as opposed to a five-year trend in calculating variability. Such a move was considered appropriate to capture the greater short-term variability of capital flows. It was recognized that the shift to a three-year average would not have a significant impact at the group level and that a three-year measure would serve to smooth trends while adequately capturing very short-term fluctuations in capital flows.[17]

29. There are pros and cons associated with both a three- and five-year trend. The five-year average is smoother, therefore it attributes a greater portion of fluctuations in the series to variability versus a three year average, which would implicitly attribute a greater portion of the fluctuation to underlying trends (see Figure 1). Such fluctuations could be driven, for instance, by cycles in commodity prices, world interest rates or changes in capital flow patterns, which may or may not be associated with an increased demand for Fund resources. The use of five-year averaging, however, can exaggerate the deviations from an accelerating or decelerating growth trend. In the calculation of a centered moving average, the longer the trend of accelerating or decelerating growth, the greater the deviation of the observations from the centered moving average. Such a deviation from trend is not necessarily a case of vulnerability, and accordingly not a good measure of need.

30. As noted above, when the Board previously addressed this issue, it was recognized that the choice of a three- versus a five-year trend did not have a major impact on the distribution of variability over broad groups of members, though it could have a significant impact at an individual country level.[18] This remains the case with the updated database. In particular, switching back to the use of a five-year trend would increase developing country shares by 3.1 percentage points relative to the measure based on a three-year trend. The share of transition economies would decline by 0.4 percentage points and advanced countries by 2.7 percentage points. Developing Asia would benefit the most (+2.4 percentage points), and Western Hemisphere would also gain (+1.1 percentage points).

C. Downside Variability

31. Another option is to measure variability using the squared deviations of below-trend CR+NCF flows, based on the notion that periods of below-trend inflows are most likely to be associated with a greater potential need for Fund resources.[19] Under this method countries

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population to scale up variability (scaled down by GDP), giving very large shares to highly populated countries. As such, it also is problematic as a measure of potential need to access Fund resources.

[17] *IMF Executive Board Discusses Quota Formulas, Public Information Notice No. 02/59.*

[18] See *Alternative Quota Formulas—Further Considerations* (2002).

[19] Calculations presented here are based on the sum of squared deviations rather than averages (which are used in the standard variability calculation); this places a greater weight on the frequency of shortfalls.

that exhibit sudden and deep downswings followed by gradual recoveries would be expected to gain shares relative to countries that have symmetric fluctuations around trend.

32. Application of this method results in regional shares that are broadly similar to the current measure, increasing the developing and transition country shares by 1.5 and 0.6 percentage points, respectively.

D. Extreme Variability

33. Another concept that could be considered is to look at below-trend inflows, but focus only on the periods of strongest deviations. The idea behind this approach is that countries develop mechanisms to cope with some degree of cyclical volatility, but remain exposed to events that are extreme relative their own norms and are more likely to seek access to Fund resources under such extreme circumstances. The calculation of extreme variability could be based on the squares of the CR+NCF outturns (in deviation from a moving-average trend) that are one standard-deviation below trend.[20] By taking into account only sizeable downturns in inflows, this measure in theory should come closer to capturing the potential demand for Fund resources. Since this calculation is based on a typically small number of extreme observations, it could be subject to large changes over time for each country; this would be the case, for example where a country experienced a crisis in an early year of the current coverage period, followed by a period of relative stability.

34. The result of applying the extreme variability measure is an increase of 2.9 percentage points in the share of variability for developing countries vis-à-vis the standard measure of variability, with all regional groupings gaining. The biggest regional gainers are the Western Hemisphere and Asia (1.1 and 1.2 percentage points, respectively).

35. It should also be noted that these options for modifying the current measure of variability are not necessarily mutually exclusive. For example, combining the concepts of extreme variability and a five-year trend would increase developing and transition country shares by a total of 6.8 percentage points relative to the current measure. All developing regions would gain, with Asia and the Western Hemisphere gaining most (3.4 percentage points and 1.8 percentage points, respectively).

E. Sum of Variability of CR and Variability of NCF

36. In recommending the modernization of the variability measure to include net capital flows, the Quota Formula Review Group (QFRG) proposed a measure similar to that which has been used in recent years, based on the variability of CR+NCF.[21] In a 2001 staff paper, staff weighed arguments for and against combining CR and NCF in a single variability

[20] As with the downside variability measure, calculations for extreme variability presented here are based on the sum of squared deviations.

[21] *Report to the IMF Board of the Quota Formula Review Group* (2000).

measure as opposed to including the variability of each measure separately; on balance, staff recommended use of the sum of CR and NCF.[22] Most Directors supported the use of variability of CR+NCF, though others preferred that the variability of capital flows be included as a stand alone measure.

37. The variability of CR+NCF, as it is currently calculated, captures the net overall impact of balance of payments variability, by taking into account the possible procyclicality or countercyclicality of NCF with respect to CR that would be removed with a measure based on calculating the variability of CR and NCF separately. On the other hand, summing the variability of current receipts and net capital flows individually would be preferable if one believed that the variability of these flows affect an economy in different ways and that the extent of their co-movements should not be emphasized.

38. Empirically, the impact of calculating each term separately is modest, with the developing and transition country shares rising 2.2 and 0.9 percentage points, respectively, and the Western Hemisphere share declining.

III. Other Possible Formulations of Variability

39. A more fundamental redefinition of variability is also conceivable. The objective would be to improve the relationship between the variability measure and the susceptibility of a member to circumstances that would drive potential need for Fund resources. For example, the volatility of real GDP growth or consumption growth or the extent of consumption risk sharing with the rest of the world could be considered.

40. For the purposes of the quota formula, such measures of need would have to be scaled up to reflect the potential size of the access to Fund resources. Since the dispersion in each of the volatility measures considered below is much smaller than the dispersion in size across countries (as captured by consumption or GDP), the resulting measures of variability are still highly correlated with economic size. In other words, given the wide dispersion in economic size across countries and of the scale of potential need, size will continue to play an important role in any measure of variability entering the quota formula.

A. Volatility of GDP Growth

41. The standard deviation of real GDP growth—here multiplied by a recent three-year average of nominal GDP—is a simple measure of the overall vulnerability of a country to

[22] In the 2001 paper, staff argued that the overall balance of payments framework suggested that CR and NCR should be combined and that taking the variability of NCF as a stand-alone measure would be equivalent to measuring the variability of the current account plus reserves, a sum that may fluctuate from year to year for reasons that are not necessarily indicative of the degree of balance of payments vulnerability. However, staff also noted that the interpretation to be given to a measure that combines gross CR and NCR was unclear, and noted the question of whether a slowdown in CR ought to be treated in the same way as a capital account reversal. Moreover, staff noted the difficulty in defining the normal level around which variability is measured, given that CR and NCF may have different trends and cyclical behavior. See *Alternative Quota Formulas—Considerations* (2001).

domestically and externally driven shocks. Moreover, this measure has the benefit of a relatively low data requirement, as real GDP data are available for most members. However, the volatility of GDP is only an indirect measure of consumption volatility. Countries employ, with different degrees of success, different mechanisms to cope with income volatility (through financial markets, international financial integration, savings, social security systems) which this measure does not take into account. Also, as with the other variants below, such an approach would represent a more fundamental change from the traditional approach in the quota formulas of considering variability in a member's balance of payments and external sector vulnerability. Importantly, this would give greater weight to shocks of domestic origin, including policy slippages and political upheavals.

42. Based on the updated database, calculating variability as the volatility of GDP growth adds 5.8 and 4.8 percentage points to the shares of developing and transition economies, respectively, with Asia and the Western Hemisphere gaining most strongly.

B. Volatility of Consumption Growth

43. Ultimately, the economic costs of volatility derive from the inability of agents to smooth consumption in the face of a volatile income stream. Thus, a further alternative would be to focus on the volatility of consumption rather than the volatility of overall output. This approach would carry similar pros and cons to those noted above for GDP volatility, reflecting the impact of consumption volatility from all sources. It would, however, take into account mechanisms to cope with the effects of income volatility on consumption.

44. To illustrate this approach, the standard deviation of real consumption growth multiplied by a recent three-year average of nominal consumption provides a direct yet simple measure of consumption volatility in the face of domestically and externally driven shocks. This measure adds 12.5 and 4.5 percentage points to the shares of developing and transition countries, respectively. All regions would gain. However, the technical feasibility of constructing such a measure for the membership would need to be further investigated.

C. Measuring the Extent of Consumption Risk Sharing

45. Access to Fund resources is one way for countries to share risk internationally and reduce consumption volatility relative to income volatility. One measure of the extent to which agents in an economy can smooth consumption in the face of income fluctuations is the volatility of consumption growth relative to the volatility of income growth. A country that can successfully decouple consumption fluctuations from those of output through a high degree of domestic or international risk sharing would exhibit a lower volatility of consumption growth relative to output growth, and such a country would be expected to have a lower probability of need to access Fund resources. For the purposes of the quota formula,

this measure of need would also have to be scaled up to reflect economic size; here this is done using a recent three year average of nominal consumption.[23]

46. An advantage of this measure is that it focuses on the relationship between consumption and output, including in the event of a crisis episode affecting both (the numerator and denominator) simultaneously. As with consumption volatility, the technical feasibility of constructing this measure for the membership would also need to be further investigated.

47. Based on preliminary data, this measure reduces shares for both developing and transition economies by 5.8 and 1.7 percentage points, respectively.

[23] Measures of the lack of international consumption risk sharing such as the volatility of consumption relative GDP, or the correlation between consumption and output growth, rank large emerging markets that have had large access to GRA lending higher than the advanced and low income countries. This is in line with findings in the literature that developing countries with higher integration into international capital markets (emerging market economies) have exhibited lower degrees of consumption risk sharing than other developing economies and advanced economies. However, the dispersion in such measures is small by construction; therefore, the scaling-up by size largely determines the country shares in this exercise.

Table A1. Alternative Measures of Variability 1/
(Shares, in percent)

	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Advanced economies	62.7	11.6	8.7	60.1	60.7	58.7	55.9	59.6
Major advanced economies	43.3	0.9	6.0	42.0	41.0	37.3	38.2	40.3
Of which: US	20.7	0.1	2.6	20.2	17.7	12.6	14.2	15.5
Other advanced economies	19.5	10.7	2.7	18.1	19.7	21.4	17.7	19.4
Developing countries	30.7	76.7	81.9	33.8	32.2	33.6	36.7	32.9
Africa	3.2	32.2	21.9	3.0	3.3	3.4	3.5	3.5
Asia 6/	13.5	19.0	37.8	15.9	13.9	14.7	17.0	14.3
Middle East, Malta & Turkey	6.2	10.8	11.7	5.9	6.6	6.7	6.6	8.1
Western Hemisphere	7.8	14.7	10.6	8.9	8.4	8.9	9.6	7.0
Transition economies	6.6	11.7	9.4	6.2	7.1	7.7	7.4	7.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
EU 27	31.3	12.5	6.3	27.8	32.8	35.2	30.2	31.0
LICs 7/	4.0	46.7	39.9	3.7	4.2	4.5	3.8	4.3

Source: Finance Department.

1/ Preliminary calculations based on 1993–2005 data. Reflects the impact of adjustments to current receipts for re-exports, international banking interest, and non-monetary gold. Includes Montenegro, which became a member on January 18, 2007.
2/ Measures the square root of the sum of squared differences from a centered 3-year moving average of below trend (3-year moving average) levels of current receipts plus net capital flows.
3/ Measures only differences from a centered 3-year moving average for observations that are more than one standard deviation below the trend (3-year moving average). Like downside variability, it takes the square root of the sum of squared differences.
4/ Measures only differences from a centered 5-year moving average for observations that are more than one standard deviation below the trend (5-year moving average). Like downside variability, it takes the square root of the sum of squared differences.
5/ Share of the sum of variability of current receipts plus variability of net capital flows.
6/ Including Korea and Singapore.
7/ PRGF-eligible countries.

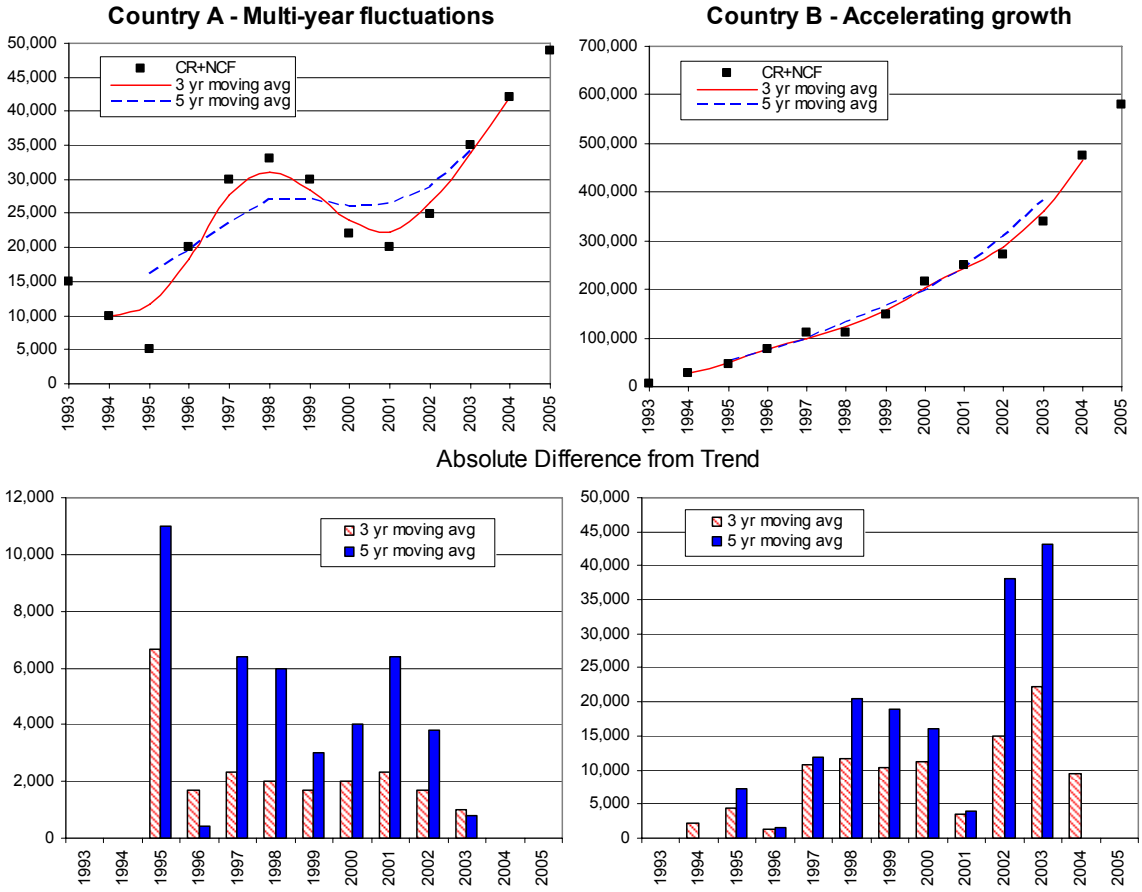
Table A2. Alternative Measures of Variability 1/
(Shares, in percent)

	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Advanced economies	62.7	5.4	3.5	8.0	52.1	45.7	70.3
Major advanced economies	43.3	1.1	0.6	2.0	42.6	35.7	55.9
Of which: US	20.7	0.2	0.1	0.2	20.2	16.1	23.5
Other advanced economies	19.5	4.3	2.8	6.0	9.5	10.1	14.4
Developing countries	30.7	69.6	81.9	80.4	36.5	43.2	24.9
Africa	3.2	35.6	45.3	40.8	3.0	6.0	3.7
Asia 6/	13.5	11.9	12.7	15.0	16.6	15.3	9.9
Middle East, Malta & Turkey	6.2	7.5	11.1	10.4	6.7	9.7	4.8
Western Hemisphere	7.8	14.7	12.8	14.2	10.1	12.2	6.5
Transition economies	6.6	25.0	14.6	11.6	11.4	11.0	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:							
EU 27	31.3	8.1	6.1	10.8	20.2	23.5	38.0
LICs 7/	4.0	45.7	50.4	49.1	4.3	7.3	5.2

Source: Finance Department.

1/ Preliminary calculations based on 1993-2005 data on GDP and consumption from the WEO database, published in April 2007. Reflects the impact of adjustments to current receipts for re-exports, international banking interest, and non-monetary gold. Includes Montenegro, which became a member on January 18, 2007.
2/ Measured as the standard deviation of real GDP growth in constant local currency units for 175 countries.
3/ Measured as the standard deviation of real consumption growth in constant local currency units for 154 countries.
4/ Calculated for 154 countries with available WEO data on real GDP and real consumption.
5/ Scaler is the series average for 2003-05. Measures scaled by consumption result in calculations for 150 countries with available WEO data.
6/ Including Korea and Singapore.
7/ PRGF-eligible countries.

Figure 1. Current Receipts Plus Net Capital Flows Relative to Three and Five Year Moving Averages



INTERNATIONAL MONETARY FUND

Quota and Voice Reform—Stocktaking and Further Considerations
Statistical Appendix

Prepared by the Quota and Voice Working Group[1]

Approved by David Burton

July 11, 2007

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[1] Messrs. Burton (Chair), Ahmed, Anjaria, Edwards, Hagan, Kuhn, and Kincaid, a FIN team led by Mr. Tweedie has worked closely with the group.

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
United States	17.380	17.076	16.284	22.173	22.457	22.049	22.979
Japan	6.228	6.119	7.011	9.240	9.318	9.111	9.108
Germany	6.086	5.979	6.850	6.848	6.716	6.690	6.586
France	5.024	4.936	4.129	4.300	4.207	4.138	4.214
United Kingdom	5.024	4.936	5.240	4.847	4.651	4.516	5.533
China 6/	2.980	3.719	6.137	5.777	5.666	5.574	5.717
Italy	3.301	3.243	3.317	3.567	3.459	3.345	3.457
Saudi Arabia	3.268	3.211	1.030	0.736	0.733	0.742	0.662
Canada	2.980	2.928	3.065	2.627	2.572	2.564	2.522
Russia	2.782	2.733	1.702	1.703	1.738	1.774	1.652
Netherlands	2.415	2.373	2.897	1.971	1.865	1.858	2.000
Belgium	2.155	2.117	2.270	1.500	1.464	1.515	1.417
India	1.945	1.911	1.287	1.468	1.457	1.417	1.377
Switzerland	1.618	1.590	1.485	1.231	1.218	1.249	1.382
Australia	1.514	1.488	1.205	1.327	1.320	1.295	1.359
Mexico	1.210	1.449	1.841	1.842	1.848	1.865	1.684
Spain	1.426	1.401	2.237	2.343	2.294	2.256	2.321
Brazil	1.420	1.396	1.069	1.412	1.461	1.477	1.425
Korea	0.764	1.346	2.512	2.182	2.187	2.223	1.954
Venezuela	1.244	1.222	0.427	0.351	0.369	0.389	0.348
Sweden	1.121	1.101	1.172	0.997	0.976	0.982	1.023
Argentina	0.990	0.973	0.368	0.468	0.497	0.525	0.497
Indonesia	0.973	0.956	0.737	0.720	0.735	0.753	0.686
Austria	0.876	0.861	1.129	0.895	0.860	0.862	0.875
South Africa	0.874	0.859	0.459	0.500	0.502	0.502	0.481
Nigeria	0.820	0.806	0.359	0.261	0.269	0.281	0.247
Norway	0.782	0.768	0.860	0.803	0.816	0.840	0.801
Denmark	0.769	0.755	1.040	0.850	0.866	0.904	0.852
Iran	0.700	0.688	0.435	0.394	0.389	0.384	0.357
Malaysia	0.695	0.683	1.374	0.761	0.766	0.811	0.671
Kuwait	0.646	0.635	0.355	0.218	0.223	0.233	0.215
Ukraine	0.642	0.631	0.301	0.240	0.243	0.252	0.207
Poland	0.640	0.629	0.779	0.753	0.761	0.777	0.694
Finland	0.591	0.581	0.529	0.530	0.529	0.538	0.550
Algeria	0.587	0.577	0.340	0.307	0.320	0.333	0.295

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Turkey	0.451	0.548	0.751	0.883	0.925	0.966	0.839
Iraq	0.556	0.546	0.278	0.190	0.214	0.242	0.190
Libya	0.526	0.517	0.243	0.179	0.192	0.207	0.178
Thailand	0.506	0.497	0.909	0.701	0.710	0.745	0.616
Hungary	0.486	0.477	0.489	0.378	0.373	0.384	0.342
Pakistan	0.484	0.475	0.196	0.248	0.254	0.257	0.237
Romania	0.482	0.474	0.248	0.233	0.234	0.238	0.213
Egypt	0.442	0.434	0.253	0.261	0.268	0.277	0.239
Israel	0.434	0.427	0.544	0.432	0.436	0.451	0.400
New Zealand	0.419	0.411	0.239	0.242	0.240	0.241	0.242
Philippines	0.412	0.404	0.473	0.376	0.388	0.413	0.337
Portugal	0.406	0.399	0.481	0.455	0.447	0.447	0.456
Singapore	0.404	0.396	1.929	0.965	1.000	1.085	1.030
Chile	0.401	0.394	0.326	0.288	0.291	0.299	0.290
Ireland	0.392	0.385	1.660	1.150	1.218	1.344	1.419
Greece	0.385	0.378	0.485	0.602	0.621	0.634	0.579
Czech Republic	0.383	0.377	0.585	0.442	0.440	0.456	0.403
Colombia	0.362	0.356	0.219	0.244	0.247	0.248	0.242
Bulgaria	0.300	0.294	0.125	0.102	0.105	0.110	0.092
Peru	0.299	0.293	0.149	0.183	0.189	0.194	0.183
United Arab Emirates	0.286	0.281	0.508	0.353	0.352	0.360	0.328
Morocco	0.275	0.270	0.165	0.150	0.148	0.148	0.136
Bangladesh	0.250	0.245	0.099	0.116	0.113	0.108	0.104
Congo, Dem. Republic of	0.249	0.245	0.023	0.019	0.020	0.020	0.018
Zambia	0.229	0.225	0.027	0.025	0.027	0.030	0.024
Serbia	0.219	0.215	0.085	0.075	0.079	0.083	0.067
Sri Lanka	0.193	0.190	0.070	0.061	0.061	0.061	0.053
Belarus	0.181	0.178	0.116	0.085	0.086	0.089	0.070
Ghana	0.173	0.170	0.042	0.036	0.037	0.039	0.031
Kazakhstan	0.171	0.168	0.189	0.148	0.151	0.157	0.140
Croatia	0.171	0.168	0.149	0.128	0.129	0.134	0.116
Slovak Republic	0.167	0.164	0.247	0.170	0.167	0.171	0.146
Zimbabwe	0.165	0.162	0.023	0.017	0.017	0.018	0.016
Trinidad and Tobago	0.157	0.154	0.064	0.046	0.047	0.049	0.043
Vietnam	0.154	0.151	0.235	0.161	0.154	0.154	0.134

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Cote d'Ivoire	0.152	0.149	0.060	0.046	0.046	0.046	0.042
Sudan	0.147	0.145	0.046	0.050	0.050	0.050	0.049
Uruguay	0.143	0.141	0.048	0.056	0.062	0.069	0.057
Ecuador	0.141	0.139	0.083	0.118	0.131	0.144	0.114
Syrian Arab Republic	0.137	0.135	0.114	0.168	0.169	0.162	0.163
Tunisia	0.134	0.132	0.106	0.089	0.088	0.090	0.080
Angola	0.134	0.132	0.156	0.104	0.112	0.124	0.100
Luxembourg	0.131	0.128	1.369	0.580	0.640	0.736	0.927
Uzbekistan	0.129	0.127	0.043	0.040	0.042	0.045	0.040
Jamaica	0.128	0.126	0.048	0.041	0.042	0.045	0.039
Kenya	0.127	0.125	0.037	0.044	0.045	0.046	0.040
Qatar	0.123	0.121	0.136	0.112	0.115	0.121	0.101
Myanmar	0.121	0.119	0.031	0.030	0.031	0.033	0.030
Yemen, Republic of	0.114	0.112	0.110	0.082	0.094	0.106	0.082
Slovenia	0.108	0.107	0.148	0.111	0.107	0.108	0.096
Dominican Republic	0.102	0.101	0.090	0.079	0.078	0.080	0.074
Brunei Darussalam	0.101	0.099	0.050	0.031	0.033	0.036	0.030
Guatemala	0.098	0.097	0.066	0.071	0.071	0.071	0.065
Panama	0.097	0.095	0.048	0.050	0.053	0.057	0.061
Lebanon	0.095	0.093	0.182	0.126	0.132	0.143	0.120
Tanzania	0.093	0.091	0.034	0.028	0.028	0.027	0.026
Oman	0.091	0.089	0.145	0.096	0.098	0.102	0.088
Cameroon	0.087	0.085	0.032	0.046	0.050	0.053	0.044
Uganda	0.084	0.083	0.025	0.022	0.023	0.024	0.021
Bolivia	0.080	0.079	0.023	0.025	0.025	0.026	0.024
El Salvador	0.080	0.079	0.060	0.051	0.051	0.052	0.046
Jordan	0.080	0.078	0.080	0.057	0.057	0.060	0.050
Bosnia-Herzegovina	0.079	0.078	0.064	0.042	0.044	0.047	0.036
Costa Rica	0.077	0.075	0.078	0.064	0.065	0.067	0.058
Islamic Republic of Afghanistan	0.076	0.074	0.041	0.027	0.029	0.031	0.025
Senegal	0.076	0.074	0.024	0.022	0.023	0.023	0.021
Azerbaijan	0.075	0.074	0.050	0.034	0.034	0.035	0.031
Gabon	0.072	0.071	0.041	0.028	0.029	0.032	0.028
Georgia	0.070	0.069	0.019	0.017	0.017	0.018	0.015
Lithuania	0.067	0.066	0.101	0.078	0.078	0.080	0.068

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Cyprus	0.065	0.064	0.063	0.057	0.058	0.060	0.060
Namibia	0.064	0.063	0.023	0.017	0.017	0.017	0.016
Bahrain	0.063	0.062	0.142	0.082	0.089	0.099	0.099
Ethiopia	0.063	0.061	0.024	0.028	0.029	0.030	0.025
Papua New Guinea	0.062	0.060	0.028	0.019	0.019	0.021	0.017
Bahamas, The	0.061	0.060	0.027	0.020	0.019	0.020	0.018
Nicaragua	0.061	0.060	0.020	0.018	0.018	0.019	0.016
Honduras	0.061	0.060	0.038	0.029	0.029	0.030	0.026
Liberia	0.060	0.059	0.005	0.006	0.006	0.008	0.005
Latvia	0.059	0.058	0.058	0.045	0.045	0.045	0.041
Moldova	0.058	0.057	0.018	0.012	0.012	0.013	0.010
Madagascar	0.057	0.056	0.015	0.015	0.016	0.016	0.014
Iceland	0.055	0.054	0.039	0.038	0.038	0.038	0.038
Mozambique	0.053	0.052	0.025	0.019	0.019	0.019	0.018
Guinea	0.050	0.049	0.009	0.010	0.010	0.010	0.009
Sierra Leone	0.049	0.048	0.004	0.004	0.004	0.005	0.004
Malta	0.048	0.047	0.053	0.031	0.031	0.033	0.034
Mauritius	0.048	0.047	0.030	0.023	0.023	0.024	0.020
Paraguay	0.047	0.046	0.037	0.029	0.031	0.033	0.027
Mali	0.044	0.043	0.014	0.014	0.014	0.014	0.013
Suriname	0.043	0.042	0.010	0.007	0.007	0.008	0.006
Armenia	0.043	0.042	0.013	0.012	0.012	0.012	0.010
Guyana	0.043	0.042	0.010	0.005	0.005	0.005	0.004
Kyrgyz Republic	0.042	0.041	0.010	0.009	0.009	0.009	0.008
Cambodia	0.041	0.040	0.031	0.021	0.020	0.021	0.018
Tajikistan	0.041	0.040	0.011	0.008	0.009	0.009	0.007
Congo, Republic of	0.040	0.039	0.032	0.021	0.022	0.024	0.021
Haiti	0.038	0.038	0.012	0.012	0.013	0.014	0.011
Somalia	0.038	0.038	0.002	0.001	0.001	0.001	0.001
Rwanda	0.037	0.037	0.006	0.007	0.007	0.008	0.006
Burundi	0.036	0.035	0.003	0.002	0.003	0.003	0.002
Turkmenistan	0.035	0.035	0.046	0.045	0.047	0.050	0.043
Togo	0.034	0.034	0.008	0.007	0.007	0.008	0.007
Nepal	0.033	0.033	0.020	0.021	0.022	0.022	0.019
Fiji	0.033	0.032	0.011	0.008	0.008	0.008	0.007

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Malawi	0.032	0.032	0.006	0.006	0.006	0.006	0.005
Macedonia, FYR	0.032	0.032	0.027	0.021	0.021	0.023	0.018
Barbados	0.032	0.031	0.014	0.012	0.012	0.013	0.011
Niger	0.031	0.030	0.007	0.008	0.008	0.008	0.007
Estonia	0.031	0.030	0.072	0.047	0.046	0.047	0.042
Mauritania	0.030	0.030	0.007	0.006	0.006	0.006	0.006
Botswana	0.029	0.029	0.051	0.040	0.041	0.044	0.041
Benin	0.029	0.028	0.009	0.009	0.009	0.009	0.009
Burkina Faso	0.028	0.028	0.010	0.012	0.012	0.012	0.011
Chad	0.026	0.026	0.024	0.022	0.025	0.029	0.022
Central African Republic	0.026	0.026	0.003	0.004	0.004	0.004	0.003
Lao, People's Dem. Republic	0.025	0.024	0.007	0.007	0.008	0.008	0.007
Mongolia	0.024	0.023	0.010	0.008	0.008	0.008	0.007
Swaziland	0.024	0.023	0.020	0.013	0.014	0.015	0.012
Albania	0.023	0.022	0.027	0.022	0.022	0.022	0.019
Lesotho	0.016	0.016	0.011	0.007	0.007	0.008	0.006
Equatorial Guinea	0.015	0.015	0.041	0.028	0.029	0.031	0.034
Gambia, The	0.015	0.014	0.002	0.002	0.002	0.002	0.002
Montenegro	0.013	0.013	0.009	0.007	0.007	0.007	0.008
Belize	0.009	0.009	0.006	0.004	0.004	0.005	0.004
San Marino	0.008	0.008	0.020	0.010	0.010	0.010	0.007
Vanuatu	0.008	0.008	0.003	0.002	0.002	0.002	0.002
Djibouti	0.007	0.007	0.003	0.003	0.004	0.004	0.003
Eritrea	0.007	0.007	0.008	0.005	0.006	0.007	0.005
St. Lucia	0.007	0.007	0.004	0.003	0.003	0.003	0.003
Guinea-Bissau	0.007	0.007	0.004	0.003	0.003	0.004	0.002
Antigua and Barbuda	0.006	0.006	0.006	0.003	0.003	0.003	0.003
Grenada	0.005	0.005	0.003	0.002	0.002	0.002	0.002
Samoa	0.005	0.005	0.002	0.002	0.002	0.002	0.001
Solomon Islands	0.005	0.005	0.003	0.002	0.002	0.002	0.001
Cape Verde	0.004	0.004	0.004	0.004	0.004	0.004	0.003
Comoros	0.004	0.004	0.001	0.001	0.001	0.001	0.001
St. Kitts and Nevis	0.004	0.004	0.002	0.002	0.002	0.002	0.001
Seychelles	0.004	0.004	0.005	0.004	0.004	0.004	0.003
St. Vincent and the Grenadines	0.004	0.004	0.002	0.002	0.002	0.002	0.002

Table 1a. Calculated Quota Shares Based on a Linear Formula with Current Quota Variables and Financial Openness 1/ 2/ (concluded)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP 45% Openness 25% Variability 25% Reserves 5%	GDP 50% Openness Blend 30% 5/ Variability 15% Reserves 5%
	Pre First Round Increases	Post First Round Increases 4/					
Dominica	0.004	0.004	0.002	0.001	0.001	0.002	0.001
Maldives	0.004	0.004	0.005	0.003	0.003	0.004	0.003
Timor-Leste	0.004	0.004	0.007	0.004	0.004	0.004	0.003
Sao Tome and Principe	0.003	0.003	0.000	0.000	0.000	0.000	0.000
Tonga	0.003	0.003	0.001	0.001	0.001	0.001	0.001
Bhutan	0.003	0.003	0.004	0.003	0.003	0.003	0.003
Kiribati	0.003	0.003	0.003	0.001	0.001	0.001	0.001
Micronesia, Fed. States of	0.002	0.002	0.002	0.001	0.001	0.002	0.001
Marshall Islands	0.002	0.002	0.001	0.001	0.001	0.001	0.001
Palau, Republic of	0.001	0.001	0.001	0.001	0.001	0.001	0.001

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ Trade openness and financial openness are blended in equal proportion. Financial openness is measured as average investment income in the current account adjusted for international banking interest. Trade openness is the average sum of current receipts and payments, excluding investment income, adjusted for re-exports and non-monetary gold.
6/ Includes China, P.R., and Hong Kong SAR.

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (in percent)

	Actual Quotas 3/		Existing	GDP Blend 50% 5/	GDP 50%	GDP 50%	GDP Blend 50% 5/	GDP Blend 50% 5/
				Openness 30%	Openness 30%	Openness 30%	Openness 30%	Openness 25%
	Pre First Round	Post First Round	Five	Variability 15%	Variability 15%	Variability 15%	Variability 15%	Variability 20%
	Increases	Increases 4/	Formulas	Reserves 5%	Reserves 5% K=0.95 6/	Reserves 5% K=0.90 6/	Reserves 5% K=0.95 6/	Reserves 5% K=0.95 6/
United States	17.380	17.076	16.284	21.120	20.102	18.107	19.149	19.387
Japan	6.228	6.119	7.011	8.691	8.751	8.236	8.238	8.305
Germany	6.086	5.979	6.850	6.568	6.584	6.289	6.314	6.191
France	5.024	4.936	4.129	4.121	4.231	4.137	4.055	3.966
United Kingdom	5.024	4.936	5.240	4.598	4.742	4.608	4.499	4.315
China 7/	2.980	3.719	6.137	7.026	5.602	5.397	6.731	6.627
Italy	3.301	3.243	3.317	3.413	3.543	3.497	3.389	3.286
Saudi Arabia	3.268	3.211	1.030	0.729	0.791	0.845	0.782	0.778
Canada	2.980	2.928	3.065	2.552	2.649	2.655	2.572	2.519
Russia	2.782	2.733	1.702	1.842	1.755	1.798	1.887	1.920
Netherlands	2.415	2.373	2.897	1.896	2.016	2.050	1.939	1.836
Belgium	2.155	2.117	2.270	1.462	1.555	1.603	1.515	1.479
India	1.945	1.911	1.287	1.994	1.524	1.573	2.034	2.023
Switzerland	1.618	1.590	1.485	1.174	1.290	1.343	1.230	1.217
Australia	1.514	1.488	1.205	1.267	1.384	1.436	1.323	1.315
Mexico	1.210	1.449	1.841	1.851	1.891	1.929	1.896	1.901
Spain	1.426	1.401	2.237	2.258	2.377	2.395	2.289	2.242
Brazil	1.420	1.396	1.069	1.545	1.469	1.518	1.596	1.644
Korea	0.764	1.346	2.512	2.175	2.221	2.247	2.210	2.214
Venezuela	1.244	1.222	0.427	0.350	0.392	0.434	0.389	0.408
Sweden	1.121	1.101	1.172	0.950	1.056	1.111	1.006	0.985
Argentina	0.990	0.973	0.368	0.527	0.514	0.562	0.575	0.605
Indonesia	0.973	0.956	0.737	0.840	0.774	0.828	0.895	0.910
Austria	0.876	0.861	1.129	0.865	0.952	1.007	0.920	0.886
South Africa	0.874	0.859	0.459	0.554	0.548	0.596	0.603	0.604
Nigeria	0.820	0.806	0.359	0.275	0.295	0.332	0.309	0.318
Norway	0.782	0.768	0.860	0.765	0.859	0.914	0.818	0.831
Denmark	0.769	0.755	1.040	0.816	0.907	0.962	0.871	0.887
Iran	0.700	0.688	0.435	0.460	0.437	0.482	0.505	0.500
Malaysia	0.695	0.683	1.374	0.784	0.817	0.871	0.838	0.842
Kuwait	0.646	0.635	0.355	0.209	0.249	0.283	0.238	0.244
Ukraine	0.642	0.631	0.301	0.288	0.273	0.308	0.324	0.327
Poland	0.640	0.629	0.779	0.777	0.809	0.863	0.831	0.839
Finland	0.591	0.581	0.529	0.508	0.579	0.628	0.555	0.554
Algeria	0.587	0.577	0.340	0.330	0.344	0.384	0.368	0.381

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/		Existing Five Formulas	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 6/	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP Blend 50% 5/ Openness 25% Variability 20% Reserves 5% K=0.95 6/
	Pre First Round Increases	Post First Round Increases 4/						
Turkey	0.451	0.548	0.751	0.906	0.940	0.995	0.961	1.003
Iraq	0.556	0.546	0.278	0.190	0.219	0.250	0.218	0.244
Libya	0.526	0.517	0.243	0.184	0.207	0.237	0.212	0.225
Thailand	0.506	0.497	0.909	0.764	0.755	0.808	0.818	0.827
Hungary	0.486	0.477	0.489	0.383	0.420	0.464	0.424	0.419
Pakistan	0.484	0.475	0.196	0.298	0.282	0.318	0.334	0.340
Romania	0.482	0.474	0.248	0.249	0.266	0.301	0.281	0.282
Egypt	0.442	0.434	0.253	0.297	0.295	0.332	0.333	0.341
Israel	0.434	0.427	0.544	0.427	0.477	0.523	0.471	0.475
New Zealand	0.419	0.411	0.239	0.234	0.275	0.310	0.265	0.264
Philippines	0.412	0.404	0.473	0.434	0.418	0.462	0.478	0.491
Portugal	0.406	0.399	0.481	0.446	0.501	0.548	0.490	0.482
Singapore	0.404	0.396	1.929	0.958	1.023	1.078	1.014	1.048
Chile	0.401	0.394	0.326	0.298	0.324	0.363	0.334	0.338
Ireland	0.392	0.385	1.660	1.129	1.209	1.262	1.185	1.253
Greece	0.385	0.378	0.485	0.575	0.654	0.705	0.624	0.644
Czech Republic	0.383	0.377	0.585	0.448	0.488	0.534	0.493	0.490
Colombia	0.362	0.356	0.219	0.283	0.277	0.312	0.318	0.322
Bulgaria	0.300	0.294	0.125	0.110	0.121	0.143	0.129	0.132
Peru	0.299	0.293	0.149	0.195	0.210	0.241	0.224	0.231
United Arab Emirates	0.286	0.281	0.508	0.347	0.394	0.437	0.386	0.385
Morocco	0.275	0.270	0.165	0.164	0.175	0.202	0.189	0.187
Bangladesh	0.250	0.245	0.099	0.160	0.136	0.160	0.185	0.182
Congo, Dem. Republic of	0.249	0.245	0.023	0.027	0.025	0.032	0.034	0.034
Zambia	0.229	0.225	0.027	0.025	0.032	0.040	0.032	0.035
Serbia	0.219	0.215	0.085	0.078	0.091	0.109	0.093	0.097
Sri Lanka	0.193	0.190	0.070	0.073	0.075	0.090	0.087	0.087
Belarus	0.181	0.178	0.116	0.093	0.102	0.121	0.111	0.111
Ghana	0.173	0.170	0.042	0.044	0.044	0.055	0.054	0.056
Kazakhstan	0.171	0.168	0.189	0.160	0.173	0.200	0.185	0.188
Croatia	0.171	0.168	0.149	0.129	0.150	0.175	0.151	0.152
Slovak Republic	0.167	0.164	0.247	0.176	0.197	0.226	0.202	0.198
Zimbabwe	0.165	0.162	0.023	0.022	0.022	0.029	0.029	0.029
Trinidad and Tobago	0.157	0.154	0.064	0.046	0.057	0.070	0.057	0.058
Vietnam	0.154	0.151	0.235	0.198	0.187	0.215	0.226	0.219

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/							
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 6/	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP Blend 50% 5/ Openness 25% Variability 20% Reserves 5% K=0.95 6/
Cote d'Ivoire	0.152	0.149	0.060	0.047	0.057	0.070	0.058	0.058
Sudan	0.147	0.145	0.046	0.060	0.062	0.075	0.073	0.073
Uruguay	0.143	0.141	0.048	0.059	0.069	0.083	0.071	0.078
Ecuador	0.141	0.139	0.083	0.121	0.139	0.163	0.142	0.156
Syrian Arab Republic	0.137	0.135	0.114	0.151	0.194	0.223	0.175	0.177
Tunisia	0.134	0.132	0.106	0.098	0.107	0.127	0.116	0.115
Angola	0.134	0.132	0.156	0.106	0.123	0.145	0.125	0.134
Luxembourg	0.131	0.128	1.369	0.577	0.631	0.682	0.626	0.687
Uzbekistan	0.129	0.127	0.043	0.047	0.050	0.061	0.058	0.061
Jamaica	0.128	0.126	0.048	0.041	0.051	0.063	0.050	0.052
Kenya	0.127	0.125	0.037	0.049	0.054	0.067	0.060	0.061
Qatar	0.123	0.121	0.136	0.107	0.132	0.155	0.126	0.130
Myanmar	0.121	0.119	0.031	0.047	0.038	0.048	0.057	0.059
Yemen, Republic of	0.114	0.112	0.110	0.082	0.099	0.118	0.099	0.112
Slovenia	0.108	0.107	0.148	0.110	0.131	0.154	0.130	0.126
Dominican Republic	0.102	0.101	0.090	0.085	0.095	0.114	0.102	0.101
Brunei Darussalam	0.101	0.099	0.050	0.031	0.039	0.048	0.039	0.041
Guatemala	0.098	0.097	0.066	0.074	0.085	0.103	0.089	0.089
Panama	0.097	0.095	0.048	0.051	0.062	0.076	0.062	0.066
Lebanon	0.095	0.093	0.182	0.125	0.148	0.172	0.146	0.153
Tanzania	0.093	0.091	0.034	0.030	0.036	0.045	0.038	0.037
Oman	0.091	0.089	0.145	0.096	0.114	0.135	0.114	0.116
Cameroon	0.087	0.085	0.032	0.051	0.057	0.070	0.062	0.066
Uganda	0.084	0.083	0.025	0.029	0.029	0.036	0.036	0.037
Bolivia	0.080	0.079	0.023	0.027	0.032	0.040	0.035	0.035
El Salvador	0.080	0.079	0.060	0.052	0.062	0.076	0.064	0.064
Jordan	0.080	0.078	0.080	0.059	0.070	0.085	0.072	0.072
Bosnia-Herzegovina	0.079	0.078	0.064	0.044	0.052	0.064	0.055	0.057
Costa Rica	0.077	0.075	0.078	0.068	0.078	0.094	0.082	0.083
Islamic Republic of Afghanistan	0.076	0.074	0.041	0.031	0.034	0.043	0.039	0.042
Senegal	0.076	0.074	0.024	0.024	0.029	0.037	0.031	0.031
Azerbaijan	0.075	0.074	0.050	0.038	0.042	0.053	0.047	0.047
Gabon	0.072	0.071	0.041	0.028	0.035	0.044	0.035	0.037
Georgia	0.070	0.069	0.019	0.018	0.022	0.028	0.024	0.024
Lithuania	0.067	0.066	0.101	0.081	0.093	0.112	0.097	0.097

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/							
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 6/	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP Blend 50% 5/ Openness 25% Variability 20% Reserves 5% K=0.95 6/
Cyprus	0.065	0.064	0.063	0.056	0.070	0.085	0.069	0.069
Namibia	0.064	0.063	0.023	0.018	0.022	0.028	0.024	0.024
Bahrain	0.063	0.062	0.142	0.082	0.098	0.117	0.098	0.105
Ethiopia	0.063	0.061	0.024	0.037	0.035	0.044	0.046	0.047
Papua New Guinea	0.062	0.060	0.028	0.020	0.024	0.031	0.026	0.027
Bahamas, The	0.061	0.060	0.027	0.019	0.025	0.032	0.025	0.024
Nicaragua	0.061	0.060	0.020	0.021	0.023	0.030	0.027	0.027
Honduras	0.061	0.060	0.038	0.031	0.037	0.046	0.039	0.039
Liberia	0.060	0.059	0.005	0.006	0.008	0.010	0.008	0.009
Latvia	0.059	0.058	0.058	0.047	0.056	0.069	0.058	0.057
Moldova	0.058	0.057	0.018	0.013	0.016	0.021	0.017	0.018
Madagascar	0.057	0.056	0.015	0.017	0.020	0.026	0.022	0.023
Iceland	0.055	0.054	0.039	0.036	0.047	0.058	0.045	0.044
Mozambique	0.053	0.052	0.025	0.022	0.024	0.031	0.029	0.029
Guinea	0.050	0.049	0.009	0.012	0.013	0.017	0.016	0.017
Sierra Leone	0.049	0.048	0.004	0.005	0.006	0.008	0.006	0.007
Malta	0.048	0.047	0.053	0.031	0.039	0.049	0.039	0.039
Mauritius	0.048	0.047	0.030	0.025	0.030	0.038	0.031	0.031
Paraguay	0.047	0.046	0.037	0.033	0.037	0.047	0.041	0.043
Mali	0.044	0.043	0.014	0.016	0.018	0.024	0.020	0.020
Suriname	0.043	0.042	0.010	0.007	0.009	0.012	0.009	0.010
Armenia	0.043	0.042	0.013	0.013	0.015	0.020	0.017	0.017
Guyana	0.043	0.042	0.010	0.006	0.007	0.010	0.008	0.008
Kyrgyz Republic	0.042	0.041	0.010	0.010	0.011	0.015	0.013	0.014
Cambodia	0.041	0.040	0.031	0.026	0.027	0.034	0.033	0.032
Tajikistan	0.041	0.040	0.011	0.010	0.011	0.015	0.013	0.013
Congo, Republic of	0.040	0.039	0.032	0.021	0.027	0.034	0.026	0.027
Haiti	0.038	0.038	0.012	0.014	0.016	0.021	0.019	0.019
Somalia	0.038	0.038	0.002	0.001	0.002	0.003	0.002	0.002
Rwanda	0.037	0.037	0.006	0.009	0.009	0.012	0.012	0.012
Burundi	0.036	0.035	0.003	0.003	0.003	0.005	0.005	0.005
Turkmenistan	0.035	0.035	0.046	0.049	0.056	0.069	0.060	0.062
Togo	0.034	0.034	0.008	0.009	0.010	0.013	0.012	0.012
Nepal	0.033	0.033	0.020	0.027	0.027	0.035	0.034	0.035
Fiji	0.033	0.032	0.011	0.008	0.011	0.015	0.011	0.011

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (continued)
(in percent)

	Actual Quotas 3/							
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 6/	GDP Blend 50% 5/ Openness 30% Variability 15% Reserves 5% K=0.95 6/	GDP Blend 50% 5/ Openness 25% Variability 20% Reserves 5% K=0.95 6/
Malawi	0.032	0.032	0.006	0.007	0.008	0.011	0.010	0.010
Macedonia, FYR	0.032	0.032	0.027	0.023	0.027	0.034	0.029	0.030
Barbados	0.032	0.031	0.014	0.012	0.016	0.021	0.016	0.016
Niger	0.031	0.030	0.007	0.009	0.010	0.014	0.012	0.012
Estonia	0.031	0.030	0.072	0.048	0.058	0.071	0.059	0.058
Mauritania	0.030	0.030	0.007	0.007	0.008	0.011	0.009	0.009
Botswana	0.029	0.029	0.051	0.041	0.050	0.061	0.051	0.053
Benin	0.029	0.028	0.009	0.010	0.012	0.017	0.013	0.013
Burkina Faso	0.028	0.028	0.010	0.014	0.016	0.020	0.018	0.018
Chad	0.026	0.026	0.024	0.024	0.029	0.036	0.030	0.034
Central African Republic	0.026	0.026	0.003	0.004	0.005	0.007	0.006	0.006
Lao, People's Dem. Republic	0.025	0.024	0.007	0.009	0.010	0.013	0.012	0.012
Mongolia	0.024	0.023	0.010	0.008	0.010	0.014	0.011	0.011
Swaziland	0.024	0.023	0.020	0.014	0.017	0.023	0.018	0.018
Albania	0.023	0.022	0.027	0.023	0.028	0.035	0.029	0.029
Lesotho	0.016	0.016	0.011	0.008	0.010	0.013	0.011	0.011
Equatorial Guinea	0.015	0.015	0.041	0.030	0.035	0.044	0.038	0.039
Gambia, The	0.015	0.014	0.002	0.002	0.003	0.004	0.003	0.003
Montenegro	0.013	0.013	0.009	0.007	0.009	0.012	0.009	0.009
Belize	0.009	0.009	0.006	0.004	0.006	0.008	0.006	0.006
San Marino	0.008	0.008	0.020	0.010	0.013	0.017	0.013	0.013
Vanuatu	0.008	0.008	0.003	0.002	0.003	0.004	0.003	0.003
Djibouti	0.007	0.007	0.003	0.003	0.005	0.006	0.005	0.005
Eritrea	0.007	0.007	0.008	0.006	0.008	0.010	0.008	0.009
St. Lucia	0.007	0.007	0.004	0.003	0.004	0.006	0.004	0.004
Guinea-Bissau	0.007	0.007	0.004	0.003	0.004	0.005	0.004	0.004
Antigua and Barbuda	0.006	0.006	0.006	0.003	0.005	0.006	0.004	0.004
Grenada	0.005	0.005	0.003	0.002	0.003	0.004	0.003	0.003
Samoa	0.005	0.005	0.002	0.002	0.002	0.003	0.003	0.003
Solomon Islands	0.005	0.005	0.003	0.002	0.002	0.003	0.003	0.003
Cape Verde	0.004	0.004	0.004	0.004	0.005	0.007	0.006	0.006
Comoros	0.004	0.004	0.001	0.001	0.002	0.002	0.002	0.002
St. Kitts and Nevis	0.004	0.004	0.002	0.002	0.002	0.003	0.002	0.002
Seychelles	0.004	0.004	0.005	0.004	0.005	0.008	0.005	0.006
St. Vincent and the Grenadines	0.004	0.004	0.002	0.002	0.003	0.004	0.003	0.003

Table 2a. Calculated Quota Shares Based on a Formula with a GDP Blend, Compression, and Combinations 1/ 2/ (concluded)
(in percent)

	Actual Quotas 3/		Existing	GDP Blend 50% 5/	GDP 50%	GDP 50%	GDP Blend 50% 5/	GDP Blend 50% 5/
	Pre First Round Increases	Post First Round Increases 4/	Five Formulas	Openness 30% Variability 15% Reserves 5%	Openness 30% Variability 15% Reserves 5% K=0.95 6/	Openness 30% Variability 15% Reserves 5% K=0.90 6/	Openness 30% Variability 15% Reserves 5% K=0.95 6/	Openness 25% Variability 20% Reserves 5% K=0.95 6/
Dominica	0.004	0.004	0.002	0.001	0.002	0.003	0.002	0.002
Maldives	0.004	0.004	0.005	0.004	0.005	0.007	0.005	0.005
Timor-Leste	0.004	0.004	0.007	0.004	0.005	0.007	0.005	0.005
Sao Tome and Principe	0.003	0.003	0.000	0.000	0.001	0.001	0.001	0.001
Tonga	0.003	0.003	0.001	0.001	0.001	0.002	0.002	0.002
Bhutan	0.003	0.003	0.004	0.003	0.004	0.006	0.005	0.005
Kiribati	0.003	0.003	0.003	0.001	0.002	0.002	0.002	0.002
Micronesia, Fed. States of	0.002	0.002	0.002	0.001	0.002	0.003	0.002	0.002
Marshall Islands	0.002	0.002	0.001	0.001	0.001	0.002	0.001	0.001
Palau, Republic of	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For ten countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ The compression (K) raises the quota formula to the power of K.
7/ Includes China, P.R., and Hong Kong SAR.

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
United States	17.023	16.732	17.023	17.023	17.023	17.023	16.904	17.023
Japan	6.108	6.003	6.108	6.108	6.108	6.108	6.108	6.108
Germany	5.968	5.866	5.968	5.968	5.968	5.968	5.920	5.923
France	4.929	4.844	4.513	4.513	4.513	4.513	4.513	4.513
United Kingdom	4.929	4.844	4.513	4.513	4.513	4.513	4.513	4.513
China 5/	2.928	3.652	3.803	3.735	3.951	3.589	3.470	3.734
Italy	3.242	3.187	3.242	3.242	3.223	3.242	3.241	3.214
Saudi Arabia	3.210	3.155	2.943	2.943	2.943	2.943	2.943	2.943
Canada	2.928	2.878	2.686	2.686	2.686	2.686	2.686	2.686
Russia	2.734	2.687	2.508	2.508	2.508	2.508	2.508	2.508
Netherlands	2.375	2.335	2.181	2.181	2.181	2.181	2.181	2.181
Belgium	2.120	2.084	1.948	1.948	1.948	1.948	1.948	1.948
India	1.916	1.883	1.761	1.761	1.904	1.761	1.761	1.911
Switzerland	1.595	1.568	1.468	1.468	1.468	1.468	1.468	1.468
Australia	1.494	1.468	1.375	1.375	1.375	1.375	1.375	1.375
Mexico	1.196	1.430	1.391	1.386	1.353	1.367	1.358	1.340
Spain	1.408	1.384	1.693	1.667	1.611	1.647	1.626	1.587
Brazil	1.402	1.378	1.291	1.399	1.419	1.399	1.410	1.426
Korea	0.760	1.329	1.246	1.246	1.246	1.246	1.246	1.246
Venezuela	1.229	1.208	1.133	1.133	1.133	1.133	1.133	1.133
Sweden	1.108	1.089	1.023	1.023	1.023	1.023	1.023	1.023
Argentina	0.981	0.964	0.907	0.907	0.907	0.907	0.907	0.907
Indonesia	0.964	0.947	0.891	0.891	0.891	0.891	0.891	0.891
Austria	0.869	0.854	0.869	0.804	0.804	0.883	0.895	0.873
South Africa	0.867	0.852	0.803	0.803	0.803	0.803	0.803	0.803
Nigeria	0.814	0.800	0.754	0.754	0.754	0.754	0.754	0.754
Norway	0.777	0.764	0.780	0.783	0.720	0.794	0.805	0.781
Denmark	0.764	0.751	0.787	0.791	0.772	0.797	0.806	0.783
Iran	0.697	0.685	0.647	0.647	0.647	0.647	0.647	0.647
Malaysia	0.692	0.680	0.711	0.712	0.713	0.722	0.732	0.722
Kuwait	0.644	0.633	0.599	0.599	0.599	0.599	0.599	0.599
Ukraine	0.640	0.629	0.595	0.595	0.595	0.595	0.595	0.595
Poland	0.638	0.627	0.674	0.675	0.673	0.682	0.690	0.680
Finland	0.590	0.580	0.550	0.550	0.550	0.550	0.598	0.550
Algeria	0.586	0.576	0.546	0.546	0.546	0.546	0.546	0.546

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Turkey	0.453	0.547	0.596	0.604	0.574	0.586	0.586	0.570
Iraq	0.556	0.546	0.518	0.518	0.518	0.518	0.518	0.518
Libya	0.526	0.517	0.491	0.491	0.491	0.491	0.491	0.491
Thailand	0.507	0.498	0.571	0.572	0.575	0.574	0.581	0.578
Hungary	0.487	0.479	0.455	0.455	0.455	0.455	0.455	0.455
Pakistan	0.485	0.477	0.453	0.453	0.453	0.453	0.453	0.453
Romania	0.483	0.475	0.452	0.452	0.452	0.452	0.452	0.452
Egypt	0.444	0.436	0.416	0.416	0.416	0.416	0.416	0.416
Israel	0.437	0.429	0.409	0.439	0.409	0.450	0.460	0.447
New Zealand	0.421	0.414	0.395	0.395	0.395	0.395	0.395	0.395
Philippines	0.414	0.407	0.389	0.389	0.423	0.418	0.429	0.432
Portugal	0.409	0.402	0.427	0.424	0.422	0.437	0.445	0.430
Singapore	0.406	0.399	0.593	0.597	0.555	0.575	0.572	0.547
Chile	0.403	0.397	0.379	0.379	0.379	0.379	0.379	0.379
Ireland	0.395	0.389	0.647	0.659	0.592	0.617	0.608	0.577
Greece	0.388	0.382	0.462	0.466	0.441	0.463	0.468	0.445
Czech Republic	0.387	0.380	0.409	0.407	0.406	0.417	0.426	0.414
Colombia	0.366	0.360	0.345	0.345	0.345	0.345	0.345	0.345
Bulgaria	0.305	0.299	0.289	0.289	0.289	0.289	0.289	0.289
Peru	0.304	0.299	0.288	0.288	0.288	0.288	0.288	0.288
United Arab Emirates	0.292	0.287	0.318	0.317	0.312	0.325	0.332	0.319
Morocco	0.281	0.276	0.267	0.267	0.267	0.267	0.267	0.267
Bangladesh	0.256	0.251	0.244	0.244	0.244	0.244	0.244	0.244
Congo, Dem. Republic of	0.256	0.251	0.244	0.244	0.244	0.244	0.244	0.244
Zambia	0.235	0.231	0.226	0.226	0.226	0.226	0.226	0.226
Serbia	0.226	0.222	0.217	0.217	0.217	0.217	0.217	0.217
Sri Lanka	0.201	0.197	0.194	0.194	0.194	0.194	0.194	0.194
Belarus	0.188	0.185	0.183	0.183	0.183	0.183	0.183	0.183
Ghana	0.180	0.177	0.175	0.175	0.175	0.175	0.175	0.175
Kazakhstan	0.179	0.176	0.174	0.174	0.174	0.186	0.192	0.189
Croatia	0.179	0.176	0.174	0.174	0.174	0.174	0.186	0.174
Slovak Republic	0.175	0.172	0.183	0.170	0.184	0.190	0.196	0.190
Zimbabwe	0.173	0.170	0.169	0.169	0.169	0.169	0.169	0.169
Trinidad and Tobago	0.165	0.162	0.161	0.161	0.161	0.161	0.161	0.161
Vietnam	0.162	0.159	0.171	0.169	0.180	0.178	0.184	0.185

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cote d'Ivoire	0.160	0.158	0.157	0.157	0.157	0.157	0.157	0.157
Sudan	0.156	0.153	0.153	0.153	0.153	0.153	0.153	0.153
Uruguay	0.152	0.149	0.149	0.149	0.149	0.149	0.149	0.149
Ecuador	0.150	0.147	0.147	0.147	0.147	0.147	0.162	0.157
Syrian Arab Republic	0.146	0.143	0.163	0.163	0.157	0.168	0.174	0.161
Tunisia	0.143	0.140	0.141	0.141	0.141	0.141	0.141	0.141
Angola	0.143	0.140	0.141	0.141	0.141	0.141	0.152	0.141
Luxembourg	0.139	0.137	0.294	0.308	0.264	0.281	0.280	0.259
Uzbekistan	0.138	0.135	0.136	0.136	0.136	0.136	0.136	0.136
Jamaica	0.137	0.134	0.135	0.135	0.135	0.135	0.135	0.135
Kenya	0.136	0.133	0.134	0.134	0.134	0.134	0.134	0.134
Qatar	0.132	0.130	0.131	0.131	0.131	0.142	0.147	0.140
Myanmar	0.130	0.128	0.129	0.129	0.129	0.129	0.129	0.129
Yemen, Republic of	0.123	0.121	0.123	0.123	0.123	0.123	0.131	0.123
Slovenia	0.118	0.116	0.126	0.118	0.126	0.131	0.136	0.130
Dominican Republic	0.112	0.110	0.112	0.112	0.112	0.112	0.122	0.112
Brunei Darussalam	0.110	0.108	0.111	0.111	0.111	0.111	0.111	0.111
Guatemala	0.108	0.106	0.109	0.109	0.109	0.109	0.116	0.109
Panama	0.106	0.104	0.107	0.107	0.107	0.107	0.107	0.107
Lebanon	0.104	0.103	0.122	0.124	0.120	0.126	0.131	0.124
Tanzania	0.103	0.101	0.104	0.104	0.104	0.104	0.104	0.104
Oman	0.100	0.099	0.110	0.110	0.110	0.114	0.119	0.113
Cameroon	0.096	0.095	0.099	0.099	0.099	0.099	0.099	0.099
Uganda	0.094	0.092	0.096	0.096	0.096	0.096	0.096	0.096
Bolivia	0.090	0.088	0.093	0.093	0.093	0.093	0.093	0.093
El Salvador	0.090	0.088	0.093	0.093	0.093	0.093	0.093	0.093
Jordan	0.090	0.088	0.092	0.092	0.092	0.092	0.099	0.092
Bosnia-Herzegovina	0.089	0.087	0.092	0.092	0.092	0.092	0.092	0.092
Costa Rica	0.087	0.085	0.090	0.090	0.090	0.095	0.099	0.096
Islamic Republic of Afghanistan	0.086	0.084	0.089	0.089	0.089	0.089	0.089	0.089
Senegal	0.086	0.084	0.089	0.089	0.089	0.089	0.089	0.089
Azerbaijan	0.085	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Gabon	0.082	0.081	0.085	0.085	0.085	0.085	0.085	0.085
Georgia	0.080	0.079	0.084	0.084	0.084	0.084	0.084	0.084
Lithuania	0.077	0.076	0.089	0.089	0.089	0.093	0.096	0.092

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cyprus	0.075	0.074	0.079	0.079	0.079	0.085	0.088	0.084
Namibia	0.074	0.073	0.078	0.078	0.078	0.078	0.078	0.078
Bahrain	0.073	0.072	0.088	0.090	0.086	0.091	0.095	0.089
Ethiopia	0.073	0.071	0.077	0.077	0.077	0.077	0.077	0.077
Papua New Guinea	0.072	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Bahamas, The	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Nicaragua	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Honduras	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Liberia	0.071	0.069	0.075	0.075	0.075	0.075	0.075	0.075
Latvia	0.070	0.068	0.074	0.074	0.074	0.074	0.080	0.074
Moldova	0.068	0.067	0.072	0.072	0.072	0.072	0.072	0.072
Madagascar	0.067	0.066	0.072	0.072	0.072	0.072	0.072	0.072
Iceland	0.065	0.064	0.070	0.070	0.070	0.070	0.075	0.070
Mozambique	0.063	0.062	0.068	0.068	0.068	0.068	0.068	0.068
Guinea	0.060	0.059	0.066	0.066	0.066	0.066	0.066	0.066
Sierra Leone	0.059	0.058	0.064	0.064	0.064	0.064	0.064	0.064
Malta	0.058	0.057	0.064	0.064	0.064	0.064	0.067	0.064
Mauritius	0.058	0.057	0.063	0.063	0.063	0.063	0.063	0.063
Paraguay	0.057	0.056	0.063	0.063	0.063	0.063	0.063	0.063
Mali	0.054	0.053	0.060	0.060	0.060	0.060	0.060	0.060
Suriname	0.054	0.053	0.059	0.059	0.059	0.059	0.059	0.059
Armenia	0.054	0.053	0.059	0.059	0.059	0.059	0.059	0.059
Guyana	0.053	0.052	0.059	0.059	0.059	0.059	0.059	0.059
Kyrgyz Republic	0.052	0.051	0.058	0.058	0.058	0.058	0.058	0.058
Cambodia	0.052	0.051	0.058	0.058	0.058	0.058	0.058	0.058
Tajikistan	0.051	0.050	0.057	0.057	0.057	0.057	0.057	0.057
Congo, Republic of	0.050	0.049	0.056	0.056	0.056	0.056	0.056	0.056
Haiti	0.049	0.048	0.055	0.055	0.055	0.055	0.055	0.055
Somalia	0.049	0.048	0.055	0.055	0.055	0.055	0.055	0.055
Rwanda	0.048	0.047	0.054	0.054	0.054	0.054	0.054	0.054
Burundi	0.047	0.046	0.053	0.053	0.053	0.053	0.053	0.053
Turkmenistan	0.046	0.045	0.058	0.059	0.058	0.060	0.063	0.060
Togo	0.045	0.044	0.052	0.052	0.052	0.052	0.052	0.052
Nepal	0.044	0.043	0.051	0.051	0.051	0.051	0.053	0.053
Fiji	0.044	0.043	0.050	0.050	0.050	0.050	0.050	0.050

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Malawi	0.043	0.042	0.050	0.050	0.050	0.050	0.050	0.050
Macedonia, FYR	0.043	0.042	0.050	0.050	0.050	0.050	0.052	0.050
Barbados	0.042	0.042	0.049	0.049	0.049	0.049	0.049	0.049
Niger	0.042	0.041	0.048	0.048	0.048	0.048	0.048	0.048
Estonia	0.041	0.041	0.056	0.055	0.055	0.058	0.060	0.057
Mauritania	0.041	0.040	0.048	0.048	0.048	0.048	0.048	0.048
Botswana	0.040	0.040	0.053	0.053	0.052	0.055	0.057	0.054
Benin	0.040	0.039	0.047	0.047	0.047	0.047	0.047	0.047
Burkina Faso	0.039	0.038	0.046	0.046	0.046	0.046	0.046	0.046
Chad	0.037	0.036	0.044	0.044	0.044	0.047	0.049	0.047
Central African Republic	0.037	0.036	0.044	0.044	0.044	0.044	0.044	0.044
Lao, People's Dem. Republic	0.036	0.035	0.043	0.043	0.043	0.043	0.043	0.043
Mongolia	0.035	0.034	0.042	0.042	0.042	0.042	0.042	0.042
Swaziland	0.035	0.034	0.042	0.042	0.042	0.042	0.042	0.042
Albania	0.034	0.033	0.041	0.041	0.043	0.044	0.046	0.044
Lesotho	0.027	0.027	0.036	0.036	0.036	0.036	0.036	0.036
Equatorial Guinea	0.026	0.026	0.040	0.040	0.039	0.041	0.043	0.041
Gambia, The	0.026	0.025	0.034	0.034	0.034	0.034	0.034	0.034
Montenegro	0.024	0.024	0.032	0.032	0.032	0.032	0.032	0.032
Belize	0.020	0.020	0.029	0.029	0.029	0.029	0.029	0.029
San Marino	0.019	0.019	0.029	0.029	0.029	0.030	0.031	0.030
Vanuatu	0.019	0.019	0.028	0.028	0.028	0.028	0.028	0.028
Djibouti	0.019	0.018	0.028	0.028	0.028	0.028	0.028	0.028
Eritrea	0.019	0.018	0.028	0.028	0.028	0.028	0.029	0.028
St. Lucia	0.018	0.018	0.027	0.027	0.027	0.027	0.027	0.027
Guinea-Bissau	0.018	0.018	0.027	0.027	0.027	0.027	0.027	0.027
Antigua and Barbuda	0.018	0.017	0.027	0.027	0.027	0.027	0.027	0.027
Grenada	0.017	0.017	0.026	0.026	0.026	0.026	0.026	0.026
Samoa	0.017	0.016	0.026	0.026	0.026	0.026	0.026	0.026
Solomon Islands	0.016	0.016	0.025	0.025	0.025	0.025	0.025	0.025
Cape Verde	0.016	0.016	0.025	0.025	0.025	0.025	0.026	0.026
Comoros	0.016	0.015	0.025	0.025	0.025	0.025	0.025	0.025
St. Kitts and Nevis	0.016	0.015	0.025	0.025	0.025	0.025	0.025	0.025
Seychelles	0.015	0.015	0.025	0.025	0.025	0.025	0.026	0.025
St. Vincent and the Grenadines	0.015	0.015	0.024	0.024	0.024	0.024	0.024	0.024

Table 3a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (concluded)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Dominica	0.015	0.015	0.024	0.024	0.024	0.024	0.024	0.024
Maldives	0.015	0.015	0.024	0.024	0.024	0.025	0.025	0.025
Timor-Leste	0.015	0.015	0.024	0.024	0.024	0.025	0.025	0.025
Sao Tome and Principe	0.015	0.015	0.024	0.024	0.024	0.024	0.024	0.024
Tonga	0.015	0.014	0.024	0.024	0.024	0.024	0.024	0.024
Bhutan	0.014	0.014	0.024	0.024	0.024	0.024	0.025	0.024
Kiribati	0.014	0.014	0.023	0.023	0.023	0.023	0.023	0.023
Micronesia, Fed. States of	0.014	0.014	0.023	0.023	0.023	0.023	0.023	0.023
Marshall Islands	0.013	0.013	0.022	0.022	0.022	0.022	0.023	0.022
Palau, Republic of	0.013	0.013	0.022	0.022	0.022	0.022	0.022	0.022

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: (a) a 5.6 percent increase (total first and second round increase of 7.5 percent); (b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and (c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Includes China, P.R., and Hong Kong SAR.

Table 3b. Second Round Simulation—Members Receiving Ad Hoc Quota Increases 1/ 2/ (Listed according to degree of out-of-liness)

GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg
Ireland	Ireland	Ireland	Ireland	Ireland	Ireland
Singapore	Singapore	Singapore	Singapore	Equatorial Guinea	Singapore
Turkey	Turkey	China 5/	Equatorial Guinea	Singapore	Equatorial Guinea
China 5/	China 5/	Turkey	Turkey	Estonia	China 5/
Equatorial Guinea	Equatorial Guinea	Equatorial Guinea	Estonia	Turkey	Turkey
Spain	Greece	Spain	China 5/	San Marino	Estonia
Greece	Spain	Estonia	Greece	Bhutan	Botswana
Estonia	Mexico	Mexico	Botswana	Botswana	Turkmenistan
Mexico	Estonia	Thailand	Spain	Turkmenistan	Bhutan
Japan	Japan	Greece	San Marino	Bahrain	Greece
Thailand	Thailand	Botswana	Turkmenistan	Seychelles	Thailand
Botswana	Bahrain	Japan	Mexico	Greece	Spain
Lebanon	Botswana	Turkmenistan	Lebanon	Lebanon	San Marino
Bahrain	Lebanon	Lebanon	Bahrain	China 5/	Bahrain
Turkmenistan	Turkmenistan	Bahrain	Bhutan	Timor-Leste	Lebanon
United States	United States	Vietnam	Thailand	Maldives	Vietnam
United Arab Emirates	United Arab Emirates	United States	Syrian Arab Republic	Spain	Lithuania
Syrian Arab Republic	Syrian Arab Republic	Poland	Japan	Lithuania	Maldives
San Marino	San Marino	United Arab Emirates	Lithuania	Cape Verde	United Arab Emirates
Poland	Poland	San Marino	United Arab Emirates	Syrian Arab Republic	Seychelles
Czech Republic	Lithuania	Lithuania	Seychelles	Thailand	Japan
Lithuania	Czech Republic	Bhutan	Timor-Leste	Mexico	Poland
Germany	Denmark	Czech Republic	Maldives	Albania	Czech Republic
Portugal	Germany	Malaysia	Czech Republic	United Arab Emirates	Timor-Leste
Denmark	Portugal	Portugal	Poland	Palau, Republic of	Albania
Malaysia	Malaysia	Syrian Arab Republic	Oman	Oman	Syrian Arab Republic
Italy	Bhutan	Brazil	Portugal	Slovenia	Cape Verde
Bhutan	Oman	Germany	Vietnam	Vietnam	Oman
Oman	Italy	Denmark	Albania	Czech Republic	Slovak Republic
Vietnam	Norway	Oman	Slovenia	Chad	Portugal
Norway	Brazil	Philippines	Denmark	Eritrea	Malaysia
Slovenia	Israel	Slovak Republic	Slovak Republic	Slovak Republic	Slovenia
Austria	Vietnam	Italy	Malaysia	Portugal	Philippines
Slovak Republic		India	Cape Verde	Poland	Chad
		Slovenia	United States	Japan	Denmark
		Albania	Norway	Cyprus	Brazil
			Israel	Qatar	Eritrea
			Chad	Malaysia	United States
			Austria	Denmark	Israel
			Germany	Costa Rica	Kazakhstan
			Italy	Micronesia, Fed. States of	Costa Rica
			Cyprus	Israel	Austria
			Qatar	Norway	Cyprus
			Brazil	Kazakhstan	Norway
			Palau, Republic of	Latvia	India
			Costa Rica	Ecuador	Germany
			Philippines	Austria	Nepal
			Eritrea	Philippines	Italy
			Kazakhstan	Dominican Republic	Qatar
				Angola	Palau, Republic of
				Marshall Islands	Ecuador
				Brazil	
				Finland	
				Macedonia, FYR	
				Jordan	
				Italy	
				Iceland	
				Guatemala	
				United States	
				Nepal	
				Germany	
				Yemen, Republic of	
				Croatia	
				Malta	
				Antigua and Barbuda	

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) a 5.6 percent increase (total first and second round increase of 7.5 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.

2/ Based on 1993-2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).

3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.

4/ The compression (K) raises the quota formula to the power of K.

5/ Includes China, P.R., and Hong Kong SAR.

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
United States	17.023	16.732	17.023	17.023	17.023	17.023	16.938	17.023
Japan	6.108	6.003	6.108	6.108	6.108	6.108	6.108	6.108
Germany	5.968	5.866	5.968	5.968	5.968	5.968	5.928	5.934
France	4.929	4.844	4.404	4.404	4.404	4.404	4.404	4.404
United Kingdom	4.929	4.844	4.404	4.404	4.404	4.404	4.404	4.404
China 5/	2.928	3.652	4.118	4.032	4.363	3.858	3.680	4.077
Italy	3.242	3.187	3.242	3.242	3.230	3.242	3.242	3.217
Saudi Arabia	3.210	3.155	2.872	2.872	2.872	2.872	2.872	2.872
Canada	2.928	2.878	2.621	2.621	2.621	2.621	2.621	2.621
Russia	2.734	2.687	2.448	2.448	2.448	2.448	2.448	2.448
Netherlands	2.375	2.335	2.129	2.129	2.129	2.129	2.129	2.129
Belgium	2.120	2.084	1.901	1.901	1.901	1.901	1.901	1.901
India	1.916	1.883	1.719	1.719	1.906	1.719	1.719	1.917
Switzerland	1.595	1.568	1.433	1.433	1.433	1.433	1.433	1.433
Australia	1.494	1.468	1.343	1.343	1.343	1.343	1.343	1.343
Mexico	1.196	1.430	1.462	1.456	1.418	1.436	1.420	1.401
Spain	1.408	1.384	1.796	1.762	1.695	1.744	1.711	1.666
Brazil	1.402	1.378	1.261	1.402	1.430	1.403	1.417	1.441
Korea	0.760	1.329	1.382	1.365	1.272	1.298	1.245	1.216
Venezuela	1.229	1.208	1.107	1.107	1.107	1.107	1.107	1.107
Sweden	1.108	1.089	0.999	0.999	0.999	0.999	0.999	0.999
Argentina	0.981	0.964	0.886	0.886	0.886	0.886	0.886	0.886
Indonesia	0.964	0.947	0.870	0.870	0.870	0.870	0.870	0.870
Austria	0.869	0.854	0.871	0.786	0.786	0.891	0.906	0.876
South Africa	0.867	0.852	0.784	0.784	0.784	0.784	0.784	0.784
Nigeria	0.814	0.800	0.737	0.737	0.737	0.737	0.737	0.737
Norway	0.777	0.764	0.782	0.787	0.704	0.801	0.816	0.784
Denmark	0.764	0.751	0.795	0.801	0.777	0.811	0.823	0.792
Iran	0.697	0.685	0.633	0.633	0.633	0.633	0.633	0.633
Malaysia	0.692	0.680	0.718	0.719	0.722	0.734	0.747	0.735
Kuwait	0.644	0.633	0.585	0.585	0.585	0.585	0.585	0.585
Ukraine	0.640	0.629	0.582	0.582	0.582	0.582	0.582	0.582
Poland	0.638	0.627	0.686	0.688	0.687	0.699	0.710	0.697
Finland	0.590	0.580	0.538	0.538	0.538	0.538	0.601	0.538
Algeria	0.586	0.576	0.534	0.534	0.534	0.534	0.534	0.534

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Turkey	0.453	0.547	0.645	0.658	0.621	0.637	0.635	0.617
Iraq	0.556	0.546	0.507	0.507	0.507	0.507	0.507	0.507
Libya	0.526	0.517	0.480	0.480	0.480	0.480	0.480	0.480
Thailand	0.507	0.498	0.594	0.595	0.602	0.600	0.607	0.607
Hungary	0.487	0.479	0.446	0.446	0.446	0.446	0.446	0.446
Pakistan	0.485	0.477	0.444	0.444	0.444	0.444	0.444	0.444
Romania	0.483	0.475	0.442	0.442	0.442	0.442	0.442	0.442
Egypt	0.444	0.436	0.407	0.407	0.407	0.407	0.407	0.407
Israel	0.437	0.429	0.401	0.439	0.401	0.454	0.468	0.450
New Zealand	0.421	0.414	0.387	0.387	0.387	0.387	0.387	0.387
Philippines	0.414	0.407	0.381	0.381	0.425	0.419	0.434	0.438
Portugal	0.409	0.402	0.433	0.429	0.426	0.447	0.458	0.438
Singapore	0.406	0.399	0.657	0.664	0.612	0.640	0.632	0.604
Chile	0.403	0.397	0.371	0.371	0.371	0.371	0.371	0.371
Ireland	0.395	0.389	0.733	0.752	0.668	0.702	0.686	0.651
Greece	0.388	0.382	0.487	0.493	0.461	0.492	0.497	0.468
Czech Republic	0.387	0.380	0.416	0.414	0.413	0.429	0.440	0.425
Colombia	0.366	0.360	0.338	0.338	0.338	0.338	0.338	0.338
Bulgaria	0.305	0.299	0.283	0.283	0.283	0.283	0.283	0.283
Peru	0.304	0.299	0.282	0.282	0.282	0.282	0.282	0.282
United Arab Emirates	0.292	0.287	0.326	0.325	0.319	0.337	0.346	0.328
Morocco	0.281	0.276	0.262	0.262	0.262	0.262	0.262	0.262
Bangladesh	0.256	0.251	0.240	0.240	0.240	0.240	0.240	0.240
Congo, Dem. Republic of	0.256	0.251	0.239	0.239	0.239	0.239	0.239	0.239
Zambia	0.235	0.231	0.222	0.222	0.222	0.222	0.222	0.222
Serbia	0.226	0.222	0.213	0.213	0.213	0.213	0.213	0.213
Sri Lanka	0.201	0.197	0.191	0.191	0.191	0.191	0.191	0.191
Belarus	0.188	0.185	0.180	0.180	0.180	0.180	0.180	0.180
Ghana	0.180	0.177	0.172	0.172	0.172	0.172	0.172	0.172
Kazakhstan	0.179	0.176	0.171	0.171	0.171	0.187	0.196	0.191
Croatia	0.179	0.176	0.171	0.171	0.171	0.171	0.187	0.171
Slovak Republic	0.175	0.172	0.184	0.168	0.185	0.193	0.202	0.194
Zimbabwe	0.173	0.170	0.166	0.166	0.166	0.166	0.166	0.166
Trinidad and Tobago	0.165	0.162	0.159	0.159	0.159	0.159	0.159	0.159
Vietnam	0.162	0.159	0.173	0.170	0.186	0.182	0.190	0.193

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cote d'Ivoire	0.160	0.158	0.155	0.155	0.155	0.155	0.155	0.155
Sudan	0.156	0.153	0.150	0.150	0.150	0.150	0.150	0.150
Uruguay	0.152	0.149	0.147	0.147	0.147	0.147	0.147	0.147
Ecuador	0.150	0.147	0.145	0.145	0.145	0.145	0.165	0.158
Syrian Arab Republic	0.146	0.143	0.167	0.167	0.159	0.175	0.182	0.166
Tunisia	0.143	0.140	0.139	0.139	0.139	0.139	0.139	0.139
Angola	0.143	0.140	0.139	0.139	0.139	0.139	0.154	0.139
Luxembourg	0.139	0.137	0.346	0.365	0.311	0.334	0.330	0.305
Uzbekistan	0.138	0.135	0.134	0.134	0.134	0.134	0.134	0.134
Jamaica	0.137	0.134	0.134	0.134	0.134	0.134	0.134	0.134
Kenya	0.136	0.133	0.133	0.133	0.133	0.133	0.133	0.133
Qatar	0.132	0.130	0.130	0.130	0.130	0.144	0.151	0.141
Myanmar	0.130	0.128	0.127	0.127	0.127	0.127	0.127	0.127
Yemen, Republic of	0.123	0.121	0.121	0.121	0.121	0.121	0.132	0.121
Slovenia	0.118	0.116	0.127	0.116	0.127	0.134	0.141	0.133
Dominican Republic	0.112	0.110	0.111	0.111	0.111	0.111	0.124	0.111
Brunei Darussalam	0.110	0.108	0.110	0.110	0.110	0.110	0.110	0.110
Guatemala	0.108	0.106	0.108	0.108	0.108	0.108	0.118	0.108
Panama	0.106	0.104	0.106	0.106	0.106	0.106	0.106	0.106
Lebanon	0.104	0.103	0.127	0.129	0.124	0.133	0.139	0.129
Tanzania	0.103	0.101	0.103	0.103	0.103	0.103	0.103	0.103
Oman	0.100	0.099	0.111	0.112	0.111	0.118	0.124	0.117
Cameroon	0.096	0.095	0.098	0.098	0.098	0.098	0.098	0.098
Uganda	0.094	0.092	0.096	0.096	0.096	0.096	0.096	0.096
Bolivia	0.090	0.088	0.092	0.092	0.092	0.092	0.092	0.092
El Salvador	0.090	0.088	0.092	0.092	0.092	0.092	0.092	0.092
Jordan	0.090	0.088	0.091	0.091	0.091	0.091	0.100	0.091
Bosnia-Herzegovina	0.089	0.087	0.091	0.091	0.091	0.091	0.091	0.091
Costa Rica	0.087	0.085	0.089	0.089	0.089	0.096	0.101	0.097
Islamic Republic of Afghanistan	0.086	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Senegal	0.086	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Azerbaijan	0.085	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Gabon	0.082	0.081	0.085	0.085	0.085	0.085	0.085	0.085
Georgia	0.080	0.079	0.083	0.083	0.083	0.083	0.083	0.083
Lithuania	0.077	0.076	0.091	0.091	0.091	0.096	0.101	0.096

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cyprus	0.075	0.074	0.079	0.079	0.079	0.086	0.091	0.086
Namibia	0.074	0.073	0.078	0.078	0.078	0.078	0.078	0.078
Bahrain	0.073	0.072	0.091	0.093	0.089	0.096	0.100	0.094
Ethiopia	0.073	0.071	0.076	0.076	0.076	0.076	0.076	0.076
Papua New Guinea	0.072	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Bahamas, The	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Nicaragua	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Honduras	0.071	0.070	0.075	0.075	0.075	0.075	0.075	0.075
Liberia	0.071	0.069	0.075	0.075	0.075	0.075	0.075	0.075
Latvia	0.070	0.068	0.074	0.074	0.074	0.074	0.082	0.074
Moldova	0.068	0.067	0.072	0.072	0.072	0.072	0.072	0.072
Madagascar	0.067	0.066	0.072	0.072	0.072	0.072	0.072	0.072
Iceland	0.065	0.064	0.070	0.070	0.070	0.070	0.076	0.070
Mozambique	0.063	0.062	0.068	0.068	0.068	0.068	0.068	0.068
Guinea	0.060	0.059	0.066	0.066	0.066	0.066	0.066	0.066
Sierra Leone	0.059	0.058	0.064	0.064	0.064	0.064	0.064	0.064
Malta	0.058	0.057	0.064	0.064	0.064	0.064	0.068	0.064
Mauritius	0.058	0.057	0.063	0.063	0.063	0.063	0.063	0.063
Paraguay	0.057	0.056	0.063	0.063	0.063	0.063	0.063	0.063
Mali	0.054	0.053	0.060	0.060	0.060	0.060	0.060	0.060
Suriname	0.054	0.053	0.059	0.059	0.059	0.059	0.059	0.059
Armenia	0.054	0.053	0.059	0.059	0.059	0.059	0.059	0.059
Guyana	0.053	0.052	0.059	0.059	0.059	0.059	0.059	0.059
Kyrgyz Republic	0.052	0.051	0.058	0.058	0.058	0.058	0.058	0.058
Cambodia	0.052	0.051	0.058	0.058	0.058	0.058	0.058	0.058
Tajikistan	0.051	0.050	0.057	0.057	0.057	0.057	0.057	0.057
Congo, Republic of	0.050	0.049	0.056	0.056	0.056	0.056	0.056	0.056
Haiti	0.049	0.048	0.055	0.055	0.055	0.055	0.055	0.055
Somalia	0.049	0.048	0.055	0.055	0.055	0.055	0.055	0.055
Rwanda	0.048	0.047	0.055	0.055	0.055	0.055	0.055	0.055
Burundi	0.047	0.046	0.053	0.053	0.053	0.053	0.053	0.053
Turkmenistan	0.046	0.045	0.060	0.061	0.061	0.063	0.067	0.064
Togo	0.045	0.044	0.052	0.052	0.052	0.052	0.052	0.052
Nepal	0.044	0.043	0.051	0.051	0.051	0.051	0.054	0.054
Fiji	0.044	0.043	0.051	0.051	0.051	0.051	0.051	0.051

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Malawi	0.043	0.042	0.050	0.050	0.050	0.050	0.050	0.050
Macedonia, FYR	0.043	0.042	0.050	0.050	0.050	0.050	0.053	0.050
Barbados	0.042	0.042	0.049	0.049	0.049	0.049	0.049	0.049
Niger	0.042	0.041	0.049	0.049	0.049	0.049	0.049	0.049
Estonia	0.041	0.041	0.059	0.058	0.058	0.062	0.065	0.060
Mauritania	0.041	0.040	0.048	0.048	0.048	0.048	0.048	0.048
Botswana	0.040	0.040	0.055	0.055	0.054	0.058	0.061	0.057
Benin	0.040	0.039	0.047	0.047	0.047	0.047	0.047	0.047
Burkina Faso	0.039	0.038	0.046	0.046	0.046	0.046	0.046	0.046
Chad	0.037	0.036	0.045	0.045	0.045	0.048	0.050	0.048
Central African Republic	0.037	0.036	0.045	0.045	0.045	0.045	0.045	0.045
Lao, People's Dem. Republic	0.036	0.035	0.044	0.044	0.044	0.044	0.044	0.044
Mongolia	0.035	0.034	0.043	0.043	0.043	0.043	0.043	0.043
Swaziland	0.035	0.034	0.043	0.043	0.043	0.043	0.043	0.043
Albania	0.034	0.033	0.042	0.042	0.044	0.046	0.048	0.046
Lesotho	0.027	0.027	0.036	0.036	0.036	0.036	0.036	0.036
Equatorial Guinea	0.026	0.026	0.042	0.042	0.042	0.044	0.046	0.044
Gambia, The	0.026	0.025	0.035	0.035	0.035	0.035	0.035	0.035
Montenegro	0.024	0.024	0.033	0.033	0.033	0.033	0.033	0.033
Belize	0.020	0.020	0.030	0.030	0.030	0.030	0.030	0.030
San Marino	0.019	0.019	0.030	0.030	0.030	0.031	0.032	0.031
Vanuatu	0.019	0.019	0.029	0.029	0.029	0.029	0.029	0.029
Djibouti	0.019	0.018	0.028	0.028	0.028	0.028	0.028	0.028
Eritrea	0.019	0.018	0.028	0.028	0.028	0.029	0.030	0.029
St. Lucia	0.018	0.018	0.028	0.028	0.028	0.028	0.028	0.028
Guinea-Bissau	0.018	0.018	0.028	0.028	0.028	0.028	0.028	0.028
Antigua and Barbuda	0.018	0.017	0.027	0.027	0.027	0.027	0.028	0.027
Grenada	0.017	0.017	0.027	0.027	0.027	0.027	0.027	0.027
Samoa	0.017	0.016	0.027	0.027	0.027	0.027	0.027	0.027
Solomon Islands	0.016	0.016	0.026	0.026	0.026	0.026	0.026	0.026
Cape Verde	0.016	0.016	0.026	0.026	0.026	0.027	0.027	0.027
Comoros	0.016	0.015	0.026	0.026	0.026	0.026	0.026	0.026
St. Kitts and Nevis	0.016	0.015	0.026	0.026	0.026	0.026	0.026	0.026
Seychelles	0.015	0.015	0.026	0.026	0.026	0.026	0.027	0.026
St. Vincent and the Grenadines	0.015	0.015	0.025	0.025	0.025	0.025	0.025	0.025

Table 4a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (concluded)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Dominica	0.015	0.015	0.025	0.025	0.025	0.025	0.025	0.025
Maldives	0.015	0.015	0.025	0.025	0.025	0.026	0.027	0.026
Timor-Leste	0.015	0.015	0.025	0.025	0.025	0.026	0.027	0.026
Sao Tome and Principe	0.015	0.015	0.025	0.025	0.025	0.025	0.025	0.025
Tonga	0.015	0.014	0.025	0.025	0.025	0.025	0.025	0.025
Bhutan	0.014	0.014	0.025	0.025	0.025	0.025	0.026	0.025
Kiribati	0.014	0.014	0.024	0.024	0.024	0.024	0.024	0.024
Micronesia, Fed. States of	0.014	0.014	0.024	0.024	0.024	0.024	0.024	0.024
Marshall Islands	0.013	0.013	0.023	0.023	0.023	0.023	0.024	0.023
Palau, Republic of	0.013	0.013	0.023	0.023	0.023	0.023	0.024	0.023

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: (a) an 8.1 percent increase (total first and second round increase of 10 percent); (b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and (c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Includes China, P.R., and Hong Kong SAR.

Table 4b. Second Round Simulation—Members Receiving Ad Hoc Quota Increases 1/ 2/ (Listed according to degree of out-of-lineness)

GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg
Ireland	Ireland	Ireland	Ireland	Ireland	Ireland
Korea	Korea	Korea	Korea	Korea	Singapore
Singapore	Singapore	Singapore	Singapore	Equatorial Guinea	Equatorial Guinea
Turkey	Turkey	China 5/	Equatorial Guinea	Singapore	China 5/
China 5/	China 5/	Turkey	Turkey	Estonia	Turkey
Equatorial Guinea	Equatorial Guinea	Equatorial Guinea	Estonia	Turkey	Estonia
Spain	Greece	Spain	China 5/	San Marino	Botswana
Greece	Spain	Estonia	Greece	Bhutan	Turkmenistan
Estonia	Mexico	Mexico	Botswana	Botswana	Bhutan
Mexico	Estonia	Thailand	Spain	Turkmenistan	Greece
Japan	Japan	Greece	San Marino	Bahrain	Thailand
Thailand	Thailand	Botswana	Turkmenistan	Seychelles	Spain
Botswana	Bahrain	Japan	Mexico	Greece	San Marino
Lebanon	Botswana	Turkmenistan	Lebanon	Lebanon	Mexico
Bahrain	Lebanon	Lebanon	Bahrain	China 5/	Bahrain
Turkmenistan	Turkmenistan	Bahrain	Bhutan	Timor-Leste	Lebanon
United States	United States	Vietnam	Thailand	Maldives	Vietnam
United Arab Emirates	United Arab Emirates	United States	Syrian Arab Republic	Spain	Lithuania
Syrian Arab Republic	Syrian Arab Republic	Poland	Japan	Lithuania	Maldives
San Marino	San Marino	United Arab Emirates	Lithuania	Cape Verde	United Arab Emirates
Poland	Poland	San Marino	United Arab Emirates	Syrian Arab Republic	Seychelles
Czech Republic	Lithuania	Lithuania	Seychelles	Thailand	Japan
Lithuania	Czech Republic	Bhutan	Timor-Leste	Mexico	Poland
Germany	Denmark	Czech Republic	Maldives	Albania	Czech Republic
Portugal	Germany	Malaysia	Czech Republic	United Arab Emirates	Timor-Leste
Denmark	Portugal	Portugal	Poland	Palau, Republic of	Albania
Malaysia	Malaysia	Syrian Arab Republic	Oman	Oman	Syrian Arab Republic
Italy	Bhutan	Brazil	Portugal	Slovenia	Cape Verde
Bhutan	Oman	Germany	Vietnam	Vietnam	Oman
Oman	Italy	Denmark	Albania	Czech Republic	Slovak Republic
Vietnam	Norway	Oman	Slovenia	Chad	Portugal
Norway	Brazil	Philippines	Denmark	Eritrea	Malaysia
Slovenia	Israel	Slovak Republic	Slovak Republic	Slovak Republic	Slovenia
Austria	Vietnam	Italy	Malaysia	Portugal	Philippines
Slovak Republic		India	Cape Verde	Poland	Chad
		Slovenia	United States	Japan	Denmark
		Albania	Norway	Cyprus	Brazil
			Israel	Qatar	Eritrea
			Chad	Malaysia	United States
			Austria	Denmark	Israel
			Germany	Costa Rica	Kazakhstan
			Italy	Micronesia, Fed. States of	Costa Rica
			Cyprus	Israel	Austria
			Qatar	Norway	Cyprus
			Brazil	Kazakhstan	Norway
			Palau, Republic of	Latvia	India
			Costa Rica	Ecuador	Germany
			Philippines	Austria	Nepal
			Eritrea	Philippines	Italy
			Kazakhstan	Dominican Republic	Qatar
				Angola	Palau, Republic of
				Marshall Islands	Ecuador
				Brazil	
				Finland	
				Macedonia, FYR	
				Jordan	
				Italy	
				Iceland	
				Guatemala	
				United States	
				Nepal	
				Germany	
				Yemen, Republic of	
				Croatia	
				Malta	
				Antigua and Barbuda	

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) a 8.1 percent increase (total first and second round increase of 10 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.

2/ Based on 1993-2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).

3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.

4/ The compression (K) raises the quota formula to the power of K.

5/ Includes China, P.R., and Hong Kong SAR.

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
United States	17.023	16.732	17.023	17.023	17.023	17.023	16.920	17.023
Japan	6.108	6.003	6.108	6.108	6.108	6.108	6.108	6.108
Germany	5.968	5.866	5.968	5.968	5.968	5.968	5.920	5.926
France	4.929	4.844	4.290	4.290	4.290	4.290	4.290	4.290
United Kingdom	4.929	4.844	4.290	4.290	4.290	4.290	4.290	4.290
China 5/	2.928	3.652	4.376	4.272	4.675	4.060	3.843	4.327
Italy	3.242	3.187	3.242	3.242	3.227	3.242	3.242	3.212
Saudi Arabia	3.210	3.155	2.799	2.799	2.799	2.799	2.799	2.799
Canada	2.928	2.878	2.554	2.554	2.554	2.554	2.554	2.554
Russia	2.734	2.687	2.386	2.386	2.386	2.386	2.386	2.386
Netherlands	2.375	2.335	2.075	2.075	2.075	2.075	2.075	2.075
Belgium	2.120	2.084	1.854	1.854	1.854	1.854	1.854	1.854
India	1.916	1.883	1.676	1.676	1.904	1.676	1.676	1.917
Switzerland	1.595	1.568	1.398	1.398	1.398	1.398	1.398	1.398
Australia	1.494	1.468	1.310	1.310	1.310	1.310	1.310	1.310
Mexico	1.196	1.430	1.520	1.513	1.466	1.489	1.469	1.446
Spain	1.408	1.384	1.880	1.839	1.757	1.818	1.777	1.722
Brazil	1.402	1.378	1.230	1.402	1.436	1.403	1.420	1.449
Korea	0.760	1.329	1.517	1.496	1.384	1.415	1.351	1.316
Venezuela	1.229	1.208	1.081	1.081	1.081	1.081	1.081	1.081
Sweden	1.108	1.089	0.976	0.976	0.976	0.976	0.976	0.976
Argentina	0.981	0.964	0.865	0.865	0.865	0.865	0.865	0.865
Indonesia	0.964	0.947	0.850	0.850	0.850	0.850	0.850	0.850
Austria	0.869	0.854	0.871	0.768	0.768	0.896	0.914	0.878
South Africa	0.867	0.852	0.766	0.766	0.766	0.766	0.766	0.766
Nigeria	0.814	0.800	0.721	0.721	0.721	0.721	0.721	0.721
Norway	0.777	0.764	0.783	0.789	0.688	0.806	0.824	0.785
Denmark	0.764	0.751	0.802	0.809	0.780	0.821	0.836	0.798
Iran	0.697	0.685	0.619	0.619	0.619	0.619	0.619	0.619
Malaysia	0.692	0.680	0.724	0.725	0.728	0.744	0.759	0.744
Kuwait	0.644	0.633	0.573	0.573	0.573	0.573	0.573	0.573
Ukraine	0.640	0.629	0.569	0.569	0.569	0.569	0.569	0.569
Poland	0.638	0.627	0.697	0.699	0.697	0.712	0.725	0.710
Finland	0.590	0.580	0.526	0.526	0.526	0.526	0.604	0.526
Algeria	0.586	0.576	0.523	0.523	0.523	0.523	0.523	0.523

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Turkey	0.453	0.547	0.687	0.702	0.658	0.677	0.674	0.653
Iraq	0.556	0.546	0.496	0.496	0.496	0.496	0.496	0.496
Libya	0.526	0.517	0.471	0.471	0.471	0.471	0.471	0.471
Thailand	0.507	0.498	0.612	0.614	0.623	0.621	0.629	0.629
Hungary	0.487	0.479	0.437	0.437	0.437	0.437	0.437	0.437
Pakistan	0.485	0.477	0.435	0.435	0.435	0.435	0.435	0.435
Romania	0.483	0.475	0.433	0.433	0.433	0.433	0.433	0.433
Egypt	0.444	0.436	0.399	0.399	0.399	0.399	0.399	0.399
Israel	0.437	0.429	0.393	0.440	0.393	0.458	0.475	0.453
New Zealand	0.421	0.414	0.380	0.380	0.380	0.380	0.380	0.380
Philippines	0.414	0.407	0.374	0.374	0.428	0.420	0.438	0.443
Portugal	0.409	0.402	0.438	0.434	0.430	0.455	0.469	0.445
Singapore	0.406	0.399	0.712	0.720	0.657	0.691	0.681	0.647
Chile	0.403	0.397	0.364	0.364	0.364	0.364	0.364	0.364
Ireland	0.395	0.389	0.807	0.830	0.727	0.769	0.749	0.707
Greece	0.388	0.382	0.509	0.515	0.477	0.514	0.521	0.485
Czech Republic	0.387	0.380	0.422	0.420	0.419	0.438	0.451	0.433
Colombia	0.366	0.360	0.332	0.332	0.332	0.332	0.332	0.332
Bulgaria	0.305	0.299	0.278	0.278	0.278	0.278	0.278	0.278
Peru	0.304	0.299	0.278	0.278	0.278	0.278	0.278	0.278
United Arab Emirates	0.292	0.287	0.334	0.332	0.325	0.346	0.358	0.336
Morocco	0.281	0.276	0.258	0.258	0.258	0.258	0.258	0.258
Bangladesh	0.256	0.251	0.236	0.236	0.236	0.236	0.236	0.236
Congo, Dem. Republic of	0.256	0.251	0.236	0.236	0.236	0.236	0.236	0.236
Zambia	0.235	0.231	0.218	0.218	0.218	0.218	0.218	0.218
Serbia	0.226	0.222	0.210	0.210	0.210	0.210	0.210	0.210
Sri Lanka	0.201	0.197	0.188	0.188	0.188	0.188	0.188	0.188
Belarus	0.188	0.185	0.178	0.178	0.178	0.178	0.178	0.178
Ghana	0.180	0.177	0.171	0.171	0.171	0.171	0.171	0.171
Kazakhstan	0.179	0.176	0.169	0.169	0.169	0.188	0.199	0.193
Croatia	0.179	0.176	0.169	0.169	0.169	0.169	0.189	0.169
Slovak Republic	0.175	0.172	0.186	0.166	0.188	0.197	0.208	0.198
Zimbabwe	0.173	0.170	0.165	0.165	0.165	0.165	0.165	0.165
Trinidad and Tobago	0.165	0.162	0.157	0.157	0.157	0.157	0.157	0.157
Vietnam	0.162	0.159	0.175	0.171	0.191	0.186	0.196	0.199

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cote d'Ivoire	0.160	0.158	0.153	0.153	0.153	0.153	0.153	0.153
Sudan	0.156	0.153	0.149	0.149	0.149	0.149	0.149	0.149
Uruguay	0.152	0.149	0.146	0.146	0.146	0.146	0.146	0.146
Ecuador	0.150	0.147	0.144	0.144	0.144	0.144	0.168	0.159
Syrian Arab Republic	0.146	0.143	0.172	0.172	0.161	0.181	0.190	0.170
Tunisia	0.143	0.140	0.138	0.138	0.138	0.138	0.138	0.138
Angola	0.143	0.140	0.138	0.138	0.138	0.138	0.157	0.138
Luxembourg	0.139	0.137	0.391	0.415	0.348	0.376	0.371	0.341
Uzbekistan	0.138	0.135	0.134	0.134	0.134	0.134	0.134	0.134
Jamaica	0.137	0.134	0.133	0.133	0.133	0.133	0.133	0.133
Kenya	0.136	0.133	0.132	0.132	0.132	0.132	0.132	0.132
Qatar	0.132	0.130	0.129	0.129	0.129	0.146	0.155	0.143
Myanmar	0.130	0.128	0.127	0.127	0.127	0.127	0.127	0.127
Yemen, Republic of	0.123	0.121	0.121	0.121	0.121	0.121	0.134	0.121
Slovenia	0.118	0.116	0.129	0.116	0.129	0.138	0.146	0.136
Dominican Republic	0.112	0.110	0.111	0.111	0.111	0.111	0.126	0.111
Brunei Darussalam	0.110	0.108	0.110	0.110	0.110	0.110	0.110	0.110
Guatemala	0.108	0.106	0.108	0.108	0.108	0.108	0.120	0.108
Panama	0.106	0.104	0.106	0.106	0.106	0.106	0.106	0.106
Lebanon	0.104	0.103	0.132	0.134	0.128	0.139	0.146	0.135
Tanzania	0.103	0.101	0.103	0.103	0.103	0.103	0.103	0.103
Oman	0.100	0.099	0.114	0.114	0.113	0.121	0.129	0.120
Cameroon	0.096	0.095	0.098	0.098	0.098	0.098	0.098	0.098
Uganda	0.094	0.092	0.096	0.096	0.096	0.096	0.096	0.096
Bolivia	0.090	0.088	0.092	0.092	0.092	0.092	0.092	0.092
El Salvador	0.090	0.088	0.092	0.092	0.092	0.092	0.092	0.092
Jordan	0.090	0.088	0.092	0.092	0.092	0.092	0.102	0.092
Bosnia-Herzegovina	0.089	0.087	0.091	0.091	0.091	0.091	0.091	0.091
Costa Rica	0.087	0.085	0.089	0.089	0.089	0.098	0.105	0.100
Islamic Republic of Afghanistan	0.086	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Senegal	0.086	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Azerbaijan	0.085	0.084	0.088	0.088	0.088	0.088	0.088	0.088
Gabon	0.082	0.081	0.085	0.085	0.085	0.085	0.085	0.085
Georgia	0.080	0.079	0.084	0.084	0.084	0.084	0.084	0.084
Lithuania	0.077	0.076	0.094	0.094	0.095	0.100	0.106	0.100

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Cyprus	0.075	0.074	0.080	0.080	0.080	0.089	0.094	0.088
Namibia	0.074	0.073	0.078	0.078	0.078	0.078	0.078	0.078
Bahrain	0.073	0.072	0.095	0.098	0.093	0.100	0.106	0.098
Ethiopia	0.073	0.071	0.077	0.077	0.077	0.077	0.077	0.077
Papua New Guinea	0.072	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Bahamas, The	0.071	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Nicaragua	0.071	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Honduras	0.071	0.070	0.076	0.076	0.076	0.076	0.076	0.076
Liberia	0.071	0.069	0.075	0.075	0.075	0.075	0.075	0.075
Latvia	0.070	0.068	0.075	0.075	0.075	0.075	0.085	0.075
Moldova	0.068	0.067	0.073	0.073	0.073	0.073	0.073	0.073
Madagascar	0.067	0.066	0.073	0.073	0.073	0.073	0.073	0.073
Iceland	0.065	0.064	0.071	0.071	0.071	0.071	0.078	0.071
Mozambique	0.063	0.062	0.069	0.069	0.069	0.069	0.069	0.069
Guinea	0.060	0.059	0.067	0.067	0.067	0.067	0.067	0.067
Sierra Leone	0.059	0.058	0.065	0.065	0.065	0.065	0.065	0.065
Malta	0.058	0.057	0.065	0.065	0.065	0.065	0.070	0.065
Mauritius	0.058	0.057	0.065	0.065	0.065	0.065	0.065	0.065
Paraguay	0.057	0.056	0.064	0.064	0.064	0.064	0.064	0.064
Mali	0.054	0.053	0.061	0.061	0.061	0.061	0.061	0.061
Suriname	0.054	0.053	0.061	0.061	0.061	0.061	0.061	0.061
Armenia	0.054	0.053	0.061	0.061	0.061	0.061	0.061	0.061
Guyana	0.053	0.052	0.060	0.060	0.060	0.060	0.060	0.060
Kyrgyz Republic	0.052	0.051	0.059	0.059	0.059	0.059	0.059	0.059
Cambodia	0.052	0.051	0.059	0.059	0.059	0.059	0.059	0.059
Tajikistan	0.051	0.050	0.059	0.059	0.059	0.059	0.059	0.059
Congo, Republic of	0.050	0.049	0.058	0.058	0.058	0.058	0.058	0.058
Haiti	0.049	0.048	0.057	0.057	0.057	0.057	0.057	0.057
Somalia	0.049	0.048	0.057	0.057	0.057	0.057	0.057	0.057
Rwanda	0.048	0.047	0.056	0.056	0.056	0.056	0.056	0.056
Burundi	0.047	0.046	0.055	0.055	0.055	0.055	0.055	0.055
Turkmenistan	0.046	0.045	0.063	0.064	0.064	0.067	0.071	0.067
Togo	0.045	0.044	0.053	0.053	0.053	0.053	0.053	0.053
Nepal	0.044	0.043	0.052	0.052	0.052	0.052	0.057	0.056
Fiji	0.044	0.043	0.052	0.052	0.052	0.052	0.052	0.052

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (continued)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Malawi	0.043	0.042	0.052	0.052	0.052	0.052	0.052	0.052
Macedonia, FYR	0.043	0.042	0.052	0.052	0.052	0.052	0.056	0.052
Barbados	0.042	0.042	0.051	0.051	0.051	0.051	0.051	0.051
Niger	0.042	0.041	0.050	0.050	0.050	0.050	0.050	0.050
Estonia	0.041	0.041	0.062	0.061	0.061	0.066	0.070	0.064
Mauritania	0.041	0.040	0.050	0.050	0.050	0.050	0.050	0.050
Botswana	0.040	0.040	0.058	0.058	0.058	0.061	0.065	0.061
Benin	0.040	0.039	0.049	0.049	0.049	0.049	0.049	0.049
Burkina Faso	0.039	0.038	0.048	0.048	0.048	0.048	0.048	0.048
Chad	0.037	0.036	0.046	0.046	0.046	0.050	0.053	0.051
Central African Republic	0.037	0.036	0.046	0.046	0.046	0.046	0.046	0.046
Lao, People's Dem. Republic	0.036	0.035	0.045	0.045	0.045	0.045	0.045	0.045
Mongolia	0.035	0.034	0.044	0.044	0.044	0.044	0.044	0.044
Swaziland	0.035	0.034	0.044	0.044	0.044	0.044	0.044	0.044
Albania	0.034	0.033	0.044	0.044	0.046	0.048	0.051	0.048
Lesotho	0.027	0.027	0.038	0.038	0.038	0.038	0.038	0.038
Equatorial Guinea	0.026	0.026	0.045	0.046	0.045	0.048	0.050	0.047
Gambia, The	0.026	0.025	0.037	0.037	0.037	0.037	0.037	0.037
Montenegro	0.024	0.024	0.035	0.035	0.035	0.035	0.035	0.035
Belize	0.020	0.020	0.032	0.032	0.032	0.032	0.032	0.032
San Marino	0.019	0.019	0.033	0.033	0.032	0.034	0.035	0.034
Vanuatu	0.019	0.019	0.031	0.031	0.031	0.031	0.031	0.031
Djibouti	0.019	0.018	0.030	0.030	0.030	0.030	0.030	0.030
Eritrea	0.019	0.018	0.030	0.030	0.030	0.031	0.032	0.032
St. Lucia	0.018	0.018	0.030	0.030	0.030	0.030	0.030	0.030
Guinea-Bissau	0.018	0.018	0.030	0.030	0.030	0.030	0.030	0.030
Antigua and Barbuda	0.018	0.017	0.030	0.030	0.030	0.030	0.030	0.030
Grenada	0.017	0.017	0.029	0.029	0.029	0.029	0.029	0.029
Samoa	0.017	0.016	0.029	0.029	0.029	0.029	0.029	0.029
Solomon Islands	0.016	0.016	0.028	0.028	0.028	0.028	0.028	0.028
Cape Verde	0.016	0.016	0.028	0.028	0.028	0.029	0.030	0.029
Comoros	0.016	0.015	0.028	0.028	0.028	0.028	0.028	0.028
St. Kitts and Nevis	0.016	0.015	0.028	0.028	0.028	0.028	0.028	0.028
Seychelles	0.015	0.015	0.028	0.028	0.028	0.029	0.029	0.029
St. Vincent and the Grenadines	0.015	0.015	0.027	0.027	0.027	0.027	0.027	0.027

Table 5a. Second Round Simulation—Illustration of Voting Shares 1/ 2/ (concluded)
(in percent)

	Pre First Round Increases	Post First Round Increases	GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Dominica	0.015	0.015	0.027	0.027	0.027	0.027	0.027	0.027
Maldives	0.015	0.015	0.027	0.027	0.027	0.028	0.029	0.028
Timor-Leste	0.015	0.015	0.027	0.027	0.027	0.028	0.029	0.028
Sao Tome and Principe	0.015	0.015	0.027	0.027	0.027	0.027	0.027	0.027
Tonga	0.015	0.014	0.027	0.027	0.027	0.027	0.027	0.027
Bhutan	0.014	0.014	0.027	0.027	0.027	0.028	0.028	0.028
Kiribati	0.014	0.014	0.026	0.026	0.026	0.026	0.026	0.026
Micronesia, Fed. States of	0.014	0.014	0.026	0.026	0.026	0.026	0.027	0.026
Marshall Islands	0.013	0.013	0.026	0.026	0.026	0.026	0.026	0.026
Palau, Republic of	0.013	0.013	0.025	0.025	0.025	0.026	0.026	0.026

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: (a) a 10.5 percent increase (total first and second round increase of 12.5 percent); (b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and (c) foregoing by eligible G-7 members to their pre-Singapore voting shares.
2/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
4/ The compression (K) raises the quota formula to the power of K.
5/ Includes China, P.R., and Hong Kong SAR.

Table 5b. Second Round Simulation—Members Receiving Ad Hoc Quota Increases 1/ 2/ (Listed according to degree of out-of-lineness)

GDP 50% Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 25% Variability 20% Reserves 5%	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5%	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.95 4/	GDP 50% Openness 30% Variability 15% Reserves 5% K=0.90 4/	GDP Blend 50% 3/ Openness 30% Variability 15% Reserves 5% K=0.95 4/
Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg	Luxembourg
Ireland	Ireland	Ireland	Ireland	Ireland	Ireland
Korea	Korea	Korea	Korea	Korea	Korea
Singapore	Singapore	Singapore	Singapore	Equatorial Guinea	Singapore
Turkey	Turkey	China 5/	Equatorial Guinea	Singapore	Equatorial Guinea
China 5/	China 5/	Turkey	Turkey	Estonia	China 5/
Equatorial Guinea	Equatorial Guinea	Equatorial Guinea	Estonia	Turkey	Turkey
Spain	Greece	Spain	China 5/	San Marino	Estonia
Greece	Spain	Estonia	Greece	Bhutan	Botswana
Estonia	Mexico	Mexico	Botswana	Botswana	Turkmenistan
Mexico	Estonia	Thailand	Spain	Turkmenistan	Bhutan
Japan	Japan	Greece	San Marino	Bahrain	Greece
Thailand	Thailand	Botswana	Turkmenistan	Seychelles	Thailand
Botswana	Bahrain	Japan	Mexico	Greece	Spain
Lebanon	Botswana	Turkmenistan	Lebanon	Lebanon	San Marino
Bahrain	Lebanon	Lebanon	Bahrain	China 5/	Mexico
Turkmenistan	Turkmenistan	Bahrain	Bhutan	Timor-Leste	Bahrain
United States	United States	Vietnam	Thailand	Maldives	Lebanon
United Arab Emirates	United Arab Emirates	United States	Syrian Arab Republic	Spain	Vietnam
Syrian Arab Republic	Syrian Arab Republic	Poland	Japan	Lithuania	Lithuania
San Marino	San Marino	United Arab Emirates	Lithuania	Cape Verde	Maldives
Poland	Poland	San Marino	United Arab Emirates	Syrian Arab Republic	United Arab Emirates
Czech Republic	Lithuania	Lithuania	Seychelles	Thailand	Seychelles
Lithuania	Czech Republic	Bhutan	Timor-Leste	Mexico	Japan
Germany	Denmark	Czech Republic	Maldives	Albania	Poland
Portugal	Germany	Malaysia	Czech Republic	United Arab Emirates	Czech Republic
Denmark	Portugal	Portugal	Poland	Palau, Republic of	Timor-Leste
Malaysia	Malaysia	Syrian Arab Republic	Oman	Oman	Albania
Italy	Bhutan	Brazil	Portugal	Slovenia	Syrian Arab Republic
Bhutan	Oman	Germany	Vietnam	Vietnam	Cape Verde
Oman	Italy	Denmark	Albania	Czech Republic	Oman
Vietnam	Norway	Oman	Slovenia	Chad	Slovak Republic
Norway	Brazil	Philippines	Denmark	Eritrea	Portugal
Slovenia	Israel	Slovak Republic	Slovak Republic	Slovak Republic	Malaysia
Austria	Vietnam	Italy	Malaysia	Portugal	Slovenia
Slovak Republic		India	Cape Verde	Poland	Philippines
		Slovenia	United States	Japan	Chad
		Albania	Norway	Cyprus	Denmark
			Israel	Qatar	Brazil
			Chad	Malaysia	Eritrea
			Austria	Denmark	United States
			Germany	Costa Rica	Israel
			Italy	Micronesia, Fed. States of	Kazakhstan
			Cyprus	Israel	Costa Rica
			Qatar	Norway	Austria
			Brazil	Kazakhstan	Cyprus
			Palau, Republic of	Latvia	Norway
			Costa Rica	Ecuador	India
			Philippines	Austria	Germany
			Eritrea	Philippines	Nepal
			Kazakhstan	Dominican Republic	Italy
				Angola	Qatar
				Marshall Islands	Palau, Republic of
				Brazil	Ecuador
				Finland	
				Macedonia, FYR	
				Jordan	
				Italy	
				Iceland	
				Guatemala	
				United States	
				Nepal	
				Germany	
				Yemen, Republic of	
				Croatia	
				Malta	
				Antigua and Barbuda	

Source: Finance Department.

1/ These simulations assume a uniform proportional reduction of out-of-lineness, based on members' pre-Singapore quota shares and taking into account the first round ad hoc increases provided to four members. They also assume: a) a 10.5 percent increase (total first and second round increase of 12.5 percent); b) at least a doubling of basic votes, and protection of the pre-Singapore voting shares of LICs; and c) foregoing by eligible G-7 members to their pre-Singapore voting shares.

2/ Based on 1993-2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).

3/ GDP is blended using 75 percent GDP weighted at market exchange rates and 25 percent GDP weighted at PPP exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.

4/ The compression (K) raises the quota formula to the power of K.

5/ Includes China, P.R., and Hong Kong SAR.

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
United States	17.023	16.732	17.380	17.076	16.284	22.173	17.687	17.023
Japan	6.108	6.003	6.228	6.119	7.011	9.240	6.332	6.108
Germany	5.968	5.866	6.086	5.979	6.850	6.848	6.187	5.968
France	4.929	4.844	5.024	4.936	4.129	4.300	4.673	4.513
United Kingdom	4.929	4.844	5.024	4.936	5.240	4.847	4.673	4.513
China 8/	2.928	3.652	2.980	3.719	6.137	5.777	4.099	3.962
Italy	3.242	3.187	3.301	3.243	3.317	3.567	3.351	3.242
Saudi Arabia	3.210	3.155	3.268	3.211	1.030	0.736	3.040	2.943
Canada	2.928	2.878	2.980	2.928	3.065	2.627	2.772	2.686
Russia	2.734	2.687	2.782	2.733	1.702	1.703	2.587	2.508
Netherlands	2.375	2.335	2.415	2.373	2.897	1.971	2.247	2.181
Belgium	2.120	2.084	2.155	2.117	2.270	1.500	2.004	1.948
India	1.916	1.883	1.945	1.911	1.287	1.468	2.071	2.011
Switzerland	1.595	1.568	1.618	1.590	1.485	1.231	1.505	1.468
Australia	1.494	1.468	1.514	1.488	1.205	1.327	1.610	1.568
Mexico	1.196	1.430	1.210	1.449	1.841	1.842	1.463	1.427
Spain	1.408	1.384	1.426	1.401	2.237	2.343	1.793	1.745
Brazil	1.402	1.378	1.420	1.396	1.069	1.412	1.509	1.472
Korea	0.760	1.329	0.764	1.346	2.512	2.182	1.332	1.301
Venezuela	1.229	1.208	1.244	1.222	0.427	0.351	1.157	1.133
Sweden	1.108	1.089	1.121	1.101	1.172	0.997	1.043	1.023
Argentina	0.981	0.964	0.990	0.973	0.368	0.468	0.921	0.907
Indonesia	0.964	0.947	0.973	0.956	0.737	0.720	1.031	1.012
Austria	0.869	0.854	0.876	0.861	1.129	0.895	0.815	0.804
South Africa	0.867	0.852	0.874	0.859	0.459	0.500	0.813	0.803
Nigeria	0.814	0.800	0.820	0.806	0.359	0.261	0.763	0.754
Norway	0.777	0.764	0.782	0.768	0.860	0.803	0.728	0.720
Denmark	0.764	0.751	0.769	0.755	1.040	0.850	0.715	0.708
Iran	0.697	0.685	0.700	0.688	0.435	0.394	0.652	0.647
Malaysia	0.692	0.680	0.695	0.683	1.374	0.761	0.722	0.715
Kuwait	0.644	0.633	0.646	0.635	0.355	0.218	0.601	0.599
Ukraine	0.640	0.629	0.642	0.631	0.301	0.240	0.597	0.595
Poland	0.638	0.627	0.640	0.629	0.779	0.753	0.686	0.680
Finland	0.590	0.580	0.591	0.581	0.529	0.530	0.550	0.550
Algeria	0.586	0.576	0.587	0.577	0.340	0.307	0.546	0.546

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/ (continued)
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Turkey	0.453	0.547	0.451	0.548	0.751	0.883	0.624	0.621
Iraq	0.556	0.546	0.556	0.546	0.278	0.190	0.517	0.518
Libya	0.526	0.517	0.526	0.517	0.243	0.179	0.489	0.491
Thailand	0.507	0.498	0.506	0.497	0.909	0.701	0.584	0.582
Hungary	0.487	0.479	0.486	0.477	0.489	0.378	0.452	0.455
Pakistan	0.485	0.477	0.484	0.475	0.196	0.248	0.450	0.453
Romania	0.483	0.475	0.482	0.474	0.248	0.233	0.448	0.452
Egypt	0.444	0.436	0.442	0.434	0.253	0.261	0.411	0.416
Israel	0.437	0.429	0.434	0.427	0.544	0.432	0.404	0.409
New Zealand	0.421	0.414	0.419	0.411	0.239	0.242	0.389	0.395
Philippines	0.414	0.407	0.412	0.404	0.473	0.376	0.431	0.435
Portugal	0.409	0.402	0.406	0.399	0.481	0.455	0.377	0.384
Singapore	0.406	0.399	0.404	0.396	1.929	0.965	0.375	0.382
Chile	0.403	0.397	0.401	0.394	0.326	0.288	0.373	0.379
Ireland	0.395	0.389	0.392	0.385	1.660	1.150	0.365	0.372
Greece	0.388	0.382	0.385	0.378	0.485	0.602	0.358	0.365
Czech Republic	0.387	0.380	0.383	0.377	0.585	0.442	0.357	0.364
Colombia	0.366	0.360	0.362	0.356	0.219	0.244	0.378	0.384
Bulgaria	0.305	0.299	0.300	0.294	0.125	0.102	0.279	0.289
Peru	0.304	0.299	0.299	0.293	0.149	0.183	0.278	0.288
United Arab Emirates	0.292	0.287	0.286	0.281	0.508	0.353	0.266	0.277
Morocco	0.281	0.276	0.275	0.270	0.165	0.150	0.256	0.267
Bangladesh	0.256	0.251	0.250	0.245	0.099	0.116	0.232	0.244
Congo, Dem. Republic of	0.256	0.251	0.249	0.245	0.023	0.019	0.232	0.244
Zambia	0.235	0.231	0.229	0.225	0.027	0.025	0.213	0.226
Serbia	0.226	0.222	0.219	0.215	0.085	0.075	0.204	0.217
Sri Lanka	0.201	0.197	0.193	0.190	0.070	0.061	0.180	0.194
Belarus	0.188	0.185	0.181	0.178	0.116	0.085	0.168	0.183
Ghana	0.180	0.177	0.173	0.170	0.042	0.036	0.161	0.175
Kazakhstan	0.179	0.176	0.171	0.168	0.189	0.148	0.159	0.174
Croatia	0.179	0.176	0.171	0.168	0.149	0.128	0.159	0.174
Slovak Republic	0.175	0.172	0.167	0.164	0.247	0.170	0.156	0.170
Zimbabwe	0.173	0.170	0.165	0.162	0.023	0.017	0.154	0.169
Trinidad and Tobago	0.165	0.162	0.157	0.154	0.064	0.046	0.146	0.161
Vietnam	0.162	0.159	0.154	0.151	0.235	0.161	0.157	0.172

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/ (continued)
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Cote d'Ivoire	0.160	0.158	0.152	0.149	0.060	0.046	0.142	0.157
Sudan	0.156	0.153	0.147	0.145	0.046	0.050	0.137	0.153
Uruguay	0.152	0.149	0.143	0.141	0.048	0.056	0.133	0.149
Ecuador	0.150	0.147	0.141	0.139	0.083	0.118	0.132	0.147
Syrian Arab Republic	0.146	0.143	0.137	0.135	0.114	0.168	0.128	0.144
Tunisia	0.143	0.140	0.134	0.132	0.106	0.089	0.125	0.141
Angola	0.143	0.140	0.134	0.132	0.156	0.104	0.125	0.141
Luxembourg	0.139	0.137	0.131	0.128	1.369	0.580	0.121	0.138
Uzbekistan	0.138	0.135	0.129	0.127	0.043	0.040	0.120	0.136
Jamaica	0.137	0.134	0.128	0.126	0.048	0.041	0.119	0.135
Kenya	0.136	0.133	0.127	0.125	0.037	0.044	0.118	0.134
Qatar	0.132	0.130	0.123	0.121	0.136	0.112	0.115	0.131
Myanmar	0.130	0.128	0.121	0.119	0.031	0.030	0.112	0.129
Yemen, Republic of	0.123	0.121	0.114	0.112	0.110	0.082	0.106	0.123
Slovenia	0.118	0.116	0.108	0.107	0.148	0.111	0.101	0.118
Dominican Republic	0.112	0.110	0.102	0.101	0.090	0.079	0.095	0.112
Brunei Darussalam	0.110	0.108	0.101	0.099	0.050	0.031	0.094	0.111
Guatemala	0.108	0.106	0.098	0.097	0.066	0.071	0.091	0.109
Panama	0.106	0.104	0.097	0.095	0.048	0.050	0.090	0.107
Lebanon	0.104	0.103	0.095	0.093	0.182	0.126	0.088	0.106
Tanzania	0.103	0.101	0.093	0.091	0.034	0.028	0.087	0.104
Oman	0.100	0.099	0.091	0.089	0.145	0.096	0.084	0.102
Cameroon	0.096	0.095	0.087	0.085	0.032	0.046	0.081	0.099
Uganda	0.094	0.092	0.084	0.083	0.025	0.022	0.079	0.096
Bolivia	0.090	0.088	0.080	0.079	0.023	0.025	0.075	0.093
El Salvador	0.090	0.088	0.080	0.079	0.060	0.051	0.075	0.093
Jordan	0.090	0.088	0.080	0.078	0.080	0.057	0.074	0.092
Bosnia-Herzegovina	0.089	0.087	0.079	0.078	0.064	0.042	0.074	0.092
Costa Rica	0.087	0.085	0.077	0.075	0.078	0.064	0.071	0.090
Islamic Republic of Afghan	0.086	0.084	0.076	0.074	0.041	0.027	0.070	0.089
Senegal	0.086	0.084	0.076	0.074	0.024	0.022	0.070	0.089
Azerbaijan	0.085	0.084	0.075	0.074	0.050	0.034	0.070	0.088
Gabon	0.082	0.081	0.072	0.071	0.041	0.028	0.067	0.085
Georgia	0.080	0.079	0.070	0.069	0.019	0.017	0.065	0.084
Lithuania	0.077	0.076	0.067	0.066	0.101	0.078	0.063	0.081

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/ (continued)
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Cyprus	0.075	0.074	0.065	0.064	0.063	0.057	0.061	0.079
Namibia	0.074	0.073	0.064	0.063	0.023	0.017	0.059	0.078
Bahrain	0.073	0.072	0.063	0.062	0.142	0.082	0.059	0.077
Ethiopia	0.073	0.071	0.063	0.061	0.024	0.028	0.058	0.077
Papua New Guinea	0.072	0.070	0.062	0.060	0.028	0.019	0.057	0.076
Bahamas, The	0.071	0.070	0.061	0.060	0.027	0.020	0.057	0.075
Nicaragua	0.071	0.070	0.061	0.060	0.020	0.018	0.057	0.075
Honduras	0.071	0.070	0.061	0.060	0.038	0.029	0.056	0.075
Liberia	0.071	0.069	0.060	0.059	0.005	0.006	0.056	0.075
Latvia	0.070	0.068	0.059	0.058	0.058	0.045	0.055	0.074
Moldova	0.068	0.067	0.058	0.057	0.018	0.012	0.054	0.072
Madagascar	0.067	0.066	0.057	0.056	0.015	0.015	0.053	0.072
Iceland	0.065	0.064	0.055	0.054	0.039	0.038	0.051	0.070
Mozambique	0.063	0.062	0.053	0.052	0.025	0.019	0.049	0.068
Guinea	0.060	0.059	0.050	0.049	0.009	0.010	0.047	0.066
Sierra Leone	0.059	0.058	0.049	0.048	0.004	0.004	0.045	0.064
Malta	0.058	0.057	0.048	0.047	0.053	0.031	0.044	0.064
Mauritius	0.058	0.057	0.048	0.047	0.030	0.023	0.044	0.063
Paraguay	0.057	0.056	0.047	0.046	0.037	0.029	0.043	0.063
Mali	0.054	0.053	0.044	0.043	0.014	0.014	0.041	0.060
Suriname	0.054	0.053	0.043	0.042	0.010	0.007	0.040	0.059
Armenia	0.054	0.053	0.043	0.042	0.013	0.012	0.040	0.059
Guyana	0.053	0.052	0.043	0.042	0.010	0.005	0.040	0.059
Kyrgyz Republic	0.052	0.051	0.042	0.041	0.010	0.009	0.039	0.058
Cambodia	0.052	0.051	0.041	0.040	0.031	0.021	0.038	0.058
Tajikistan	0.051	0.050	0.041	0.040	0.011	0.008	0.038	0.057
Congo, Republic of	0.050	0.049	0.040	0.039	0.032	0.021	0.037	0.056
Haiti	0.049	0.048	0.038	0.038	0.012	0.012	0.036	0.055
Somalia	0.049	0.048	0.038	0.038	0.002	0.001	0.036	0.055
Rwanda	0.048	0.047	0.037	0.037	0.006	0.007	0.035	0.054
Burundi	0.047	0.046	0.036	0.035	0.003	0.002	0.034	0.053
Turkmenistan	0.046	0.045	0.035	0.035	0.046	0.045	0.033	0.052
Togo	0.045	0.044	0.034	0.034	0.008	0.007	0.032	0.052
Nepal	0.044	0.043	0.033	0.033	0.020	0.021	0.031	0.051
Fiji	0.044	0.043	0.033	0.032	0.011	0.008	0.031	0.050

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/ (continued)
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Malawi	0.043	0.042	0.032	0.032	0.006	0.006	0.030	0.050
Macedonia, FYR	0.043	0.042	0.032	0.032	0.027	0.021	0.030	0.050
Barbados	0.042	0.042	0.032	0.031	0.014	0.012	0.029	0.049
Niger	0.042	0.041	0.031	0.030	0.007	0.008	0.029	0.048
Estonia	0.041	0.041	0.031	0.030	0.072	0.047	0.028	0.048
Mauritania	0.041	0.040	0.030	0.030	0.007	0.006	0.028	0.048
Botswana	0.040	0.040	0.029	0.029	0.051	0.040	0.027	0.047
Benin	0.040	0.039	0.029	0.028	0.009	0.009	0.027	0.047
Burkina Faso	0.039	0.038	0.028	0.028	0.010	0.012	0.026	0.046
Chad	0.037	0.036	0.026	0.026	0.024	0.022	0.024	0.044
Central African Republic	0.037	0.036	0.026	0.026	0.003	0.004	0.024	0.044
Lao, People's Dem. Repub	0.036	0.035	0.025	0.024	0.007	0.007	0.023	0.043
Mongolia	0.035	0.034	0.024	0.023	0.010	0.008	0.022	0.042
Swaziland	0.035	0.034	0.024	0.023	0.020	0.013	0.022	0.042
Albania	0.034	0.033	0.023	0.022	0.027	0.022	0.021	0.041
Lesotho	0.027	0.027	0.016	0.016	0.011	0.007	0.015	0.036
Equatorial Guinea	0.026	0.026	0.015	0.015	0.041	0.028	0.014	0.035
Gambia, The	0.026	0.025	0.015	0.014	0.002	0.002	0.014	0.034
Montenegro	0.024	0.024	0.013	0.013	0.009	0.007	0.012	0.032
Belize	0.020	0.020	0.009	0.009	0.006	0.004	0.008	0.029
San Marino	0.019	0.019	0.008	0.008	0.020	0.010	0.007	0.028
Vanuatu	0.019	0.019	0.008	0.008	0.003	0.002	0.007	0.028
Djibouti	0.019	0.018	0.007	0.007	0.003	0.003	0.007	0.028
Eritrea	0.019	0.018	0.007	0.007	0.008	0.005	0.007	0.028
St. Lucia	0.018	0.018	0.007	0.007	0.004	0.003	0.007	0.027
Guinea-Bissau	0.018	0.018	0.007	0.007	0.004	0.003	0.006	0.027
Antigua and Barbuda	0.018	0.017	0.006	0.006	0.006	0.003	0.006	0.027
Grenada	0.017	0.017	0.005	0.005	0.003	0.002	0.005	0.026
Samoa	0.017	0.016	0.005	0.005	0.002	0.002	0.005	0.026
Solomon Islands	0.016	0.016	0.005	0.005	0.003	0.002	0.005	0.025
Cape Verde	0.016	0.016	0.004	0.004	0.004	0.004	0.004	0.025
Comoros	0.016	0.015	0.004	0.004	0.001	0.001	0.004	0.025
St. Kitts and Nevis	0.016	0.015	0.004	0.004	0.002	0.002	0.004	0.025
Seychelles	0.015	0.015	0.004	0.004	0.005	0.004	0.004	0.025
St. Vincent and the Grenac	0.015	0.015	0.004	0.004	0.002	0.002	0.004	0.024

Table 6a. Second Round Simulation—Illustration of an Alternative Approach Involving a Supplementary Filter 1/ (concluded)
(in percent)

	Voting Share 2/		Actual Quota Share 2/ 4/		Calculated Quota Share 5/		Second Round Simulation 7/	
	Pre First Round Increases	Post First Round Increases 3/	Pre First Round Increases	Post First Round Increases 3/	Existing Five Formulas	New Formula 6/	Quota Share	Voting Share
Dominica	0.015	0.015	0.004	0.004	0.002	0.001	0.004	0.024
Maldives	0.015	0.015	0.004	0.004	0.005	0.003	0.004	0.024
Timor-Leste	0.015	0.015	0.004	0.004	0.007	0.004	0.004	0.024
Sao Tome and Principe	0.015	0.015	0.003	0.003	0.000	0.000	0.003	0.024
Tonga	0.015	0.014	0.003	0.003	0.001	0.001	0.003	0.024
Bhutan	0.014	0.014	0.003	0.003	0.004	0.003	0.003	0.024
Kiribati	0.014	0.014	0.003	0.003	0.003	0.001	0.002	0.023
Micronesia, Fed. States of	0.014	0.014	0.002	0.002	0.002	0.001	0.002	0.023
Marshall Islands	0.013	0.013	0.002	0.002	0.001	0.001	0.002	0.022
Palau, Republic of	0.013	0.013	0.001	0.001	0.001	0.001	0.001	0.022

Source: Finance Department.

1/ Based on an approach outlined by a participant during a G-20 deputies meeting in Istanbul on July 1, 2007.
2/ Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
3/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
4/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used.
5/ Based on 1993–2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
6/ 0.5*GDP + 0.3*Openness + 0.15*Variability + 0.05*Reserves.
7/ Under this scenario, members are eligible for a quota increase if (i) they contributed more than 0.5% to global GDP growth measured at PPP exchange rates during the period 2001-05 and (ii) they are either under-represented or over-represented by not more than 50 percent under the new quota formula. They also assume: (a) a 5.6 percent increase (total first and second round increase of 7.5 percent); (b) a doubling of basic votes; (c) foregoing by eligible G-7 countries (US, Japan, Germany, Italy) to their pre-Singapore voting share; (d) other under-represented eligible countries' out-of-lineness is reduced at a uniform proportional rate; and (e) over-represented eligible members receive a 5% increase above their pre-Singapore voting shares (except the UK, Canada, and France).
8/ Includes China, P.R., and Hong Kong SAR.

Table 6b. Second Round Simulation—Members Receiving Ad Hoc Quota Increases Under an Alternative Approach Involving a Supplementary Filter 1/ 2/ 3/ (Listed according to degree of out-of-lineness)

Underrepresented	Overrepresented
Korea	Brazil
Turkey	Philippines
China 4/	Australia
Spain	India
Mexico	Indonesia
Japan	Colombia
Thailand	
United States	
Poland	
Germany	
Malaysia	
Italy	
Vietnam	

Source: Finance Department.

1/ Based on an approach outlined by a participant during a G-20 deputies meeting in Istanbul on July 1, 2007.
2/ Under this simulation, members are eligible for a quota increase if i) they contributed more than 0.5% to global GDP growth measured at PPP exchange rates during the period 2001-05 and ii) they are either under-represented or over-represented by not more than 50 percent under a linear quota formula with the following weights: 50 percent GDP at market rates, 30 percent openness, 15 percent variability, and 5 percent reserves. They also assume: a) a 5.6 percent increase (total first and second round increase of 7.5 percent); b) a doubling of basic votes; c) foregoing by eligible G-7 countries (US, Japan, Germany, Italy) to their pre-Singapore voting share; d) other under-represented eligible countries' out-of-lineness is reduced at a uniform proportional rate; and e) over-represented eligible members receive a 5% increase above their pre-Singapore voting shares (except the UK, Canada, and France).
3/ Based on 1993-2005 data. Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold. For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes China, P.R., and Hong Kong SAR.

Table A1a. Alternative Measures of Variability 1/
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
United States	17.076	20.728	0.129	2.576	20.230	17.661	12.557	14.171	15.522
Japan	6.119	6.870	0.112	0.963	7.838	6.990	8.267	8.874	9.003
Germany	5.979	6.024	0.166	0.916	4.343	6.100	5.774	4.954	5.196
France	4.936	3.157	0.125	0.506	2.860	3.267	3.674	3.176	3.198
United Kingdom	4.936	2.383	0.084	0.336	2.547	2.699	2.699	3.508	3.363
China 6/	3.719	3.384	0.117	10.313	4.706	4.043	4.472	6.286	4.621
Italy	3.243	1.830	0.080	0.312	1.548	2.156	2.425	1.504	1.796
Saudi Arabia	3.211	0.814	0.231	0.379	0.786	0.841	0.638	0.727	1.684
Canada	2.928	2.282	0.167	0.361	2.589	2.100	1.907	2.042	2.185
Russia	2.733	2.183	0.269	2.576	2.095	2.291	2.400	2.457	2.856
Netherlands	2.373	1.318	0.163	0.177	1.518	1.547	1.773	1.554	2.017
Belgium	2.117	1.877	0.395	0.275	1.767	1.658	1.805	1.337	1.518
India	1.911	0.863	0.094	6.905	0.806	1.008	1.022	0.936	0.841
Switzerland	1.590	1.478	0.309	0.150	1.372	1.251	1.264	1.045	1.477
Australia	1.488	1.035	0.121	0.163	1.015	1.110	1.150	1.271	1.200
Mexico	1.449	2.061	0.216	1.546	2.425	2.284	2.383	2.449	1.791
Spain	1.401	1.742	0.125	0.360	2.205	1.852	2.120	2.275	1.885
Brazil	1.396	1.887	0.217	2.710	2.008	2.169	2.336	2.493	1.488
Korea	1.346	2.413	0.255	0.814	2.873	2.035	2.137	2.724	2.539
Venezuela	1.222	0.658	0.446	0.798	0.819	0.682	0.707	0.759	0.855
Sweden	1.101	0.949	0.206	0.124	0.979	0.983	1.154	1.088	1.150
Argentina	0.973	0.939	0.442	1.145	1.248	0.947	1.022	1.358	0.789
Indonesia	0.956	0.996	0.282	4.205	1.008	1.004	0.968	0.928	0.996
Austria	0.861	0.731	0.188	0.103	0.706	0.790	0.902	0.812	0.631
South Africa	0.859	0.515	0.181	0.573	0.588	0.512	0.551	0.735	0.482
Nigeria	0.806	0.423	0.432	3.805	0.489	0.432	0.464	0.596	0.591
Norway	0.768	1.115	0.316	0.098	0.806	1.224	1.237	0.955	1.392
Denmark	0.755	1.341	0.409	0.149	1.228	1.520	1.694	1.133	1.355
Iran	0.688	0.267	0.125	0.581	0.298	0.329	0.333	0.443	0.793
Malaysia	0.683	1.207	0.749	1.269	1.279	1.200	1.161	1.073	1.149
Kuwait	0.635	0.357	0.417	0.075	0.390	0.359	0.340	0.490	0.818
Ukraine	0.631	0.351	0.389	1.211	0.386	0.410	0.442	0.422	0.479
Poland	0.629	0.951	0.270	0.696	0.706	1.021	1.030	0.804	1.096
Finland	0.581	0.636	0.254	0.089	0.515	0.685	0.811	0.629	0.620
Algeria	0.577	0.474	0.408	0.895	0.500	0.499	0.463	0.561	0.428

Table A1a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Turkey	0.548	1.573	0.382	1.869	1.309	1.796	1.953	1.483	1.411
Iraq	0.546	0.634	1.939	3.736	0.631	0.638	0.733	0.805	0.239
Libya	0.517	0.385	0.953	0.373	0.355	0.395	0.395	0.382	0.344
Thailand	0.497	1.096	0.499	2.143	1.573	1.061	1.183	1.533	1.191
Hungary	0.477	0.458	0.338	0.228	0.417	0.529	0.598	0.599	0.388
Pakistan	0.475	0.315	0.220	2.322	0.308	0.373	0.406	0.304	0.242
Romania	0.474	0.264	0.250	0.363	0.320	0.349	0.412	0.469	0.196
Egypt	0.434	0.387	0.326	1.616	0.503	0.437	0.419	0.557	0.336
Israel	0.427	0.596	0.355	0.160	0.642	0.501	0.339	0.365	0.558
New Zealand	0.411	0.238	0.183	0.049	0.259	0.253	0.269	0.252	0.194
Philippines	0.404	0.707	0.585	3.252	0.707	0.679	0.728	0.496	0.634
Portugal	0.399	0.421	0.178	0.125	0.422	0.474	0.530	0.552	0.508
Singapore	0.396	1.974	1.364	0.395	2.047	1.973	2.015	2.162	1.461
Chile	0.394	0.383	0.296	0.323	0.455	0.387	0.349	0.478	0.394
Ireland	0.385	2.967	1.203	0.334	2.187	2.721	3.120	1.540	2.250
Greece	0.378	0.884	0.252	0.187	0.713	0.937	0.986	0.785	0.953
Czech Republic	0.377	0.577	0.391	0.267	0.508	0.628	0.668	0.653	0.499
Colombia	0.356	0.272	0.199	0.608	0.381	0.275	0.305	0.426	0.230
Bulgaria	0.294	0.169	0.523	0.270	0.107	0.184	0.211	0.142	0.173
Peru	0.293	0.262	0.274	0.512	0.263	0.223	0.184	0.267	0.213
United Arab Emirates	0.281	0.415	0.283	0.085	0.375	0.459	0.483	0.543	1.017
Morocco	0.270	0.123	0.185	0.389	0.095	0.135	0.131	0.140	0.117
Bangladesh	0.245	0.049	0.061	0.577	0.045	0.052	0.060	0.058	0.076
Congo, Dem. Republic of	0.245	0.030	0.334	1.285	0.026	0.033	0.034	0.021	0.042
Zambia	0.225	0.072	0.927	0.724	0.052	0.080	0.088	0.049	0.083
Serbia	0.215	0.135	0.439	0.220	0.120	0.119	0.141	0.110	0.128
Sri Lanka	0.190	0.064	0.226	0.314	0.060	0.061	0.062	0.045	0.052
Belarus	0.178	0.126	0.388	0.253	0.134	0.125	0.148	0.139	0.107
Ghana	0.170	0.065	0.527	0.779	0.052	0.071	0.072	0.048	0.056
Kazakhstan	0.168	0.228	0.389	0.386	0.271	0.260	0.307	0.371	0.243
Croatia	0.168	0.179	0.379	0.115	0.158	0.175	0.186	0.121	0.176
Slovak Republic	0.164	0.174	0.312	0.113	0.162	0.198	0.204	0.216	0.284
Zimbabwe	0.162	0.021	0.254	0.221	0.032	0.023	0.026	0.032	0.046
Trinidad and Tobago	0.154	0.065	0.395	0.035	0.072	0.066	0.073	0.065	0.095
Vietnam	0.151	0.118	0.189	1.053	0.137	0.133	0.144	0.149	0.160

Table A1a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Cote d'Ivoire	0.149	0.048	0.232	0.281	0.047	0.052	0.060	0.056	0.074
Sudan	0.145	0.047	0.153	0.371	0.042	0.055	0.061	0.043	0.052
Uruguay	0.141	0.161	0.858	0.199	0.164	0.189	0.209	0.203	0.129
Ecuador	0.139	0.343	0.822	0.727	0.342	0.395	0.463	0.440	0.309
Syrian Arab Republic	0.135	0.109	0.078	0.099	0.112	0.110	0.108	0.126	0.094
Tunisia	0.132	0.095	0.254	0.172	0.067	0.094	0.091	0.088	0.073
Angola	0.132	0.280	0.979	1.044	0.243	0.300	0.347	0.234	0.347
Luxembourg	0.128	1.994	4.415	0.137	1.624	2.002	2.051	1.905	1.530
Uzbekistan	0.127	0.080	0.573	0.996	0.083	0.075	0.078	0.048	0.067
Jamaica	0.126	0.073	0.579	0.103	0.083	0.075	0.088	0.095	0.059
Kenya	0.125	0.064	0.279	0.640	0.040	0.075	0.088	0.051	0.049
Qatar	0.121	0.191	0.429	0.023	0.152	0.217	0.228	0.173	0.232
Myanmar	0.119	0.050	0.351	1.186	0.052	0.040	0.039	0.035	0.040
Yemen, Republic of	0.112	0.284	1.603	2.249	0.254	0.234	0.230	0.158	0.218
Slovenia	0.107	0.088	0.203	0.027	0.098	0.096	0.096	0.133	0.098
Dominican Republic	0.101	0.092	0.266	0.151	0.113	0.089	0.083	0.073	0.079
Brunei Darussalam	0.099	0.077	1.011	0.025	0.086	0.072	0.072	0.097	0.106
Guatemala	0.097	0.071	0.184	0.155	0.057	0.077	0.089	0.071	0.062
Panama	0.095	0.109	0.562	0.122	0.088	0.113	0.122	0.084	0.101
Lebanon	0.093	0.269	0.924	0.221	0.214	0.276	0.302	0.255	0.338
Tanzania	0.091	0.016	0.104	0.265	0.012	0.018	0.019	0.012	0.055
Oman	0.089	0.154	0.437	0.075	0.181	0.164	0.150	0.185	0.205
Cameroon	0.085	0.107	0.502	0.548	0.072	0.112	0.116	0.077	0.088
Uganda	0.083	0.037	0.367	0.708	0.041	0.033	0.037	0.043	0.034
Bolivia	0.079	0.034	0.281	0.172	0.037	0.037	0.041	0.039	0.038
El Salvador	0.079	0.064	0.293	0.135	0.054	0.074	0.088	0.054	0.066
Jordan	0.078	0.081	0.517	0.197	0.058	0.085	0.090	0.063	0.071
Bosnia-Herzegovina	0.078	0.086	0.752	0.197	0.076	0.092	0.105	0.089	0.091
Costa Rica	0.075	0.092	0.359	0.104	0.094	0.086	0.069	0.073	0.079
Afghanistan, Islamic State of	0.074	0.064	0.787	1.573	0.057	0.043	0.051	0.000	0.055
Senegal	0.074	0.029	0.282	0.220	0.021	0.023	0.016	0.025	0.031
Azerbaijan	0.074	0.047	0.364	0.205	0.051	0.055	0.063	0.067	0.117
Gabon	0.071	0.062	0.619	0.057	0.062	0.058	0.051	0.056	0.077
Georgia	0.069	0.028	0.388	0.116	0.039	0.029	0.031	0.027	0.027
Lithuania	0.066	0.101	0.332	0.076	0.105	0.121	0.137	0.107	0.086

Table A1a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Cyprus	0.064	0.084	0.408	0.023	0.071	0.098	0.112	0.103	0.079
Namibia	0.063	0.022	0.306	0.042	0.025	0.022	0.023	0.033	0.032
Bahrain	0.062	0.236	1.544	0.075	0.255	0.224	0.219	0.212	0.233
Ethiopia	0.061	0.047	0.387	2.004	0.036	0.052	0.058	0.047	0.045
Papua New Guinea	0.060	0.038	0.668	0.263	0.042	0.035	0.039	0.035	0.049
Bahamas, The	0.060	0.023	0.299	0.006	0.029	0.024	0.024	0.020	0.031
Nicaragua	0.060	0.030	0.489	0.179	0.026	0.029	0.031	0.000	0.024
Honduras	0.060	0.035	0.339	0.163	0.031	0.035	0.037	0.036	0.045
Liberia	0.059	0.024	3.520	0.773	0.008	0.020	0.020	0.009	0.018
Latvia	0.058	0.046	0.248	0.038	0.062	0.054	0.060	0.089	0.053
Moldova	0.057	0.022	0.654	0.184	0.028	0.023	0.026	0.031	0.021
Madagascar	0.056	0.024	0.352	0.438	0.019	0.020	0.020	0.018	0.023
Iceland	0.054	0.043	0.237	0.005	0.062	0.053	0.057	0.086	0.049
Mozambique	0.052	0.023	0.290	0.383	0.020	0.025	0.027	0.027	0.071
Guinea	0.049	0.014	0.285	0.179	0.010	0.015	0.018	0.010	0.014
Sierra Leone	0.048	0.010	0.698	0.258	0.008	0.011	0.012	0.009	0.013
Malta	0.047	0.047	0.642	0.017	0.047	0.046	0.046	0.044	0.044
Mauritius	0.047	0.029	0.347	0.029	0.023	0.027	0.025	0.013	0.034
Paraguay	0.046	0.065	0.652	0.269	0.060	0.060	0.066	0.049	0.055
Mali	0.043	0.018	0.275	0.249	0.010	0.021	0.025	0.006	0.016
Suriname	0.042	0.018	1.150	0.035	0.019	0.019	0.020	0.023	0.016
Armenia	0.042	0.014	0.263	0.053	0.011	0.017	0.018	0.011	0.011
Guyana	0.042	0.009	0.821	0.041	0.009	0.009	0.010	0.011	0.007
Kyrgyz Republic	0.041	0.016	0.533	0.188	0.013	0.017	0.020	0.012	0.016
Cambodia	0.040	0.021	0.294	0.276	0.026	0.024	0.026	0.033	0.018
Tajikistan	0.040	0.014	0.533	0.232	0.011	0.013	0.015	0.010	0.013
Congo, Republic of	0.039	0.045	0.724	0.194	0.038	0.048	0.051	0.050	0.064
Haiti	0.038	0.025	0.506	0.289	0.018	0.024	0.023	0.010	0.022
Somalia	0.038	0.002	0.253	0.150	0.001	0.000	0.000	0.000	0.001
Rwanda	0.037	0.017	0.690	0.417	0.011	0.014	0.009	0.009	0.018
Burundi	0.035	0.006	0.609	0.308	0.005	0.006	0.006	0.007	0.005
Turkmenistan	0.035	0.076	0.389	0.126	0.053	0.087	0.096	0.062	0.073
Togo	0.034	0.013	0.477	0.196	0.011	0.009	0.010	0.007	0.011
Nepal	0.033	0.030	0.308	0.559	0.021	0.032	0.035	0.020	0.027
Fiji	0.032	0.007	0.183	0.010	0.010	0.006	0.007	0.007	0.013

Table A1a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Malawi	0.032	0.009	0.332	0.286	0.008	0.008	0.009	0.008	0.010
Macedonia, FYR	0.032	0.037	0.519	0.071	0.037	0.039	0.045	0.046	0.034
Barbados	0.031	0.020	0.521	0.009	0.015	0.025	0.027	0.009	0.015
Niger	0.030	0.012	0.322	0.300	0.008	0.013	0.014	0.009	0.023
Estonia	0.030	0.051	0.322	0.029	0.064	0.059	0.065	0.082	0.051
Mauritania	0.030	0.010	0.474	0.097	0.013	0.013	0.015	0.018	0.012
Botswana	0.029	0.065	0.581	0.069	0.056	0.065	0.060	0.051	0.058
Benin	0.028	0.006	0.115	0.065	0.005	0.007	0.007	0.006	0.010
Burkina Faso	0.028	0.016	0.237	0.210	0.016	0.018	0.021	0.016	0.013
Chad	0.026	0.076	1.354	0.883	0.059	0.075	0.088	0.065	0.073
Central African Republic	0.026	0.008	0.464	0.125	0.007	0.006	0.007	0.000	0.010
Lao, People's Dem. Republic	0.024	0.013	0.380	0.150	0.013	0.012	0.012	0.011	0.010
Mongolia	0.023	0.013	0.579	0.102	0.012	0.015	0.017	0.017	0.014
Swaziland	0.023	0.027	0.824	0.057	0.024	0.029	0.032	0.029	0.025
Albania	0.022	0.025	0.263	0.055	0.024	0.027	0.029	0.027	0.041
Lesotho	0.016	0.013	0.751	0.090	0.015	0.012	0.012	0.015	0.017
Equatorial Guinea	0.015	0.060	0.983	0.033	0.066	0.068	0.071	0.090	0.062
Gambia, The	0.014	0.004	0.742	0.075	0.004	0.005	0.005	0.005	0.004
Montenegro	0.013	0.011	0.438	0.018	0.015	0.012	0.012	0.018	0.016
Belize	0.009	0.007	0.493	0.009	0.008	0.007	0.007	0.007	0.006
San Marino	0.008	0.017	0.988	0.002	0.015	0.020	0.022	0.019	0.012
Vanuatu	0.008	0.005	1.118	0.016	0.004	0.005	0.006	0.005	0.005
Djibouti	0.007	0.009	0.962	0.051	0.006	0.009	0.010	0.007	0.007
Eritrea	0.007	0.019	1.936	0.548	0.015	0.016	0.018	0.012	0.015
St. Lucia	0.007	0.004	0.343	0.004	0.004	0.004	0.005	0.004	0.004
Guinea-Bissau	0.007	0.011	3.047	0.323	0.009	0.013	0.015	0.013	0.023
Antigua and Barbuda	0.006	0.003	0.307	0.002	0.003	0.003	0.003	0.002	0.011
Grenada	0.005	0.003	0.552	0.004	0.003	0.003	0.003	0.002	0.005
Samoa	0.005	0.004	0.752	0.009	0.003	0.004	0.005	0.004	0.003
Solomon Islands	0.005	0.003	0.796	0.025	0.004	0.003	0.000	0.003	0.004
Cape Verde	0.004	0.006	0.491	0.017	0.005	0.006	0.007	0.005	0.007
Comoros	0.004	0.001	0.183	0.010	0.001	0.001	0.001	0.001	0.001
St. Kitts and Nevis	0.004	0.002	0.274	0.001	0.002	0.001	0.002	0.001	0.004
Seychelles	0.004	0.009	0.888	0.005	0.008	0.010	0.010	0.006	0.008
St. Vincent and the Grenadines	0.004	0.003	0.498	0.004	0.003	0.002	0.003	0.000	0.003

Table A1a. Alternative Measures of Variability 1/ (concluded)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Variability Scaled by GDP	Variability Scaled by GDP per capita	Variability Using 5-Year Moving Average	Downside Variability 2/	Extreme Variability 3/	Extreme Variability: With a 5-Year Moving Average 4/	Variability of Current Receipts + Variability of Net Capital Flows 5/
Dominica	0.004	0.003	0.773	0.004	0.002	0.003	0.003	0.002	0.003
Maldives	0.004	0.005	0.456	0.010	0.003	0.003	0.004	0.002	0.006
Timor Leste	0.004	0.008	1.128	0.070	0.009	0.009	0.010	0.009	0.011
Sao Tome and Principe	0.003	0.001	1.320	0.014	0.001	0.001	0.002	0.001	0.001
Tonga	0.003	0.002	0.623	0.004	0.001	0.001	0.001	0.001	0.001
Bhutan	0.003	0.005	0.434	0.063	0.004	0.005	0.005	0.004	0.006
Kiribati	0.003	0.001	1.079	0.007	0.001	0.001	0.001	0.001	0.002
Micronesia, Fed. States of	0.002	0.003	1.089	0.008	0.002	0.003	0.003	0.002	0.004
Marshall Islands	0.002	0.002	1.141	0.004	0.001	0.002	0.003	0.001	0.003
Palau, Republic of	0.001	0.003	1.730	0.002	0.002	0.003	0.003	0.002	0.002

Source: Finance Department.

1/ Preliminary calculations based on 1993-2005 data. Reflects the impact of adjustments to current receipts for re-exports, international banking interest, and non-monetary gold. Includes Montenegro, which became a member on January 18, 2007.
2/ Measures the square root of the sum of squared differences from a centered 3-year moving average of below trend (3-year moving average) levels of current receipts plus net capital flows.
3/ Measures only differences from a centered 3-year moving average for observations that are more than one standard deviation below the trend (3-year moving average). Like downside variability, it takes the square root of the sum of squared differences.
4/ Measures only differences from a centered 5-year moving average for observations that are more than one standard deviation below the trend (5-year moving average). Like downside variability, it takes the square root of the sum of squared differences.
5/ Share of the sum of variability of current receipts plus variability of net capital flows.
6/ Includes China, P.R., and Hong Kong SAR.

Table A2a. Alternative Measures of Variability 1/
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
United States	17.076	20.728	0.173	0.084	0.232	20.162	16.125	23.525
Japan	6.119	6.870	0.213	0.093	0.210	9.418	5.950	7.077
Germany	5.979	6.024	0.144	0.112	0.370	3.792	4.389	7.718
France	4.936	3.157	0.142	0.085	0.287	2.593	2.595	4.629
United Kingdom	4.936	2.383	0.101	0.091	0.431	2.057	3.059	7.703
China 6/	3.719	3.384	0.227	0.134	0.282	4.764	3.246	3.626
Italy	3.243	1.830	0.161	0.092	0.272	2.651	2.278	3.592
Saudi Arabia	3.211	0.814	0.408	0.757	0.886	1.043	1.977	1.228
Canada	2.928	2.282	0.199	0.089	0.215	1.962	1.271	1.619
Russia	2.733	2.183	1.004	0.662	0.315	5.901	4.993	1.259
Netherlands	2.373	1.318	0.214	0.150	0.333	1.258	1.236	1.460
Belgium	2.117	1.877	0.185	0.346	0.894	0.636	1.735	2.376
India	1.911	0.863	0.231	0.163	0.336	1.543	1.483	1.625
Switzerland	1.590	1.478	0.165	0.073	0.210	0.573	0.347	0.531
Australia	1.488	1.035	0.132	0.084	0.303	0.819	0.757	1.447
Mexico	1.449	2.061	0.525	0.438	0.398	3.630	4.643	2.238
Spain	1.401	1.742	0.131	0.141	0.513	1.323	2.057	3.969
Brazil	1.396	1.887	0.287	0.238	0.396	1.805	2.528	2.230
Korea	1.346	2.413	0.651	0.616	0.452	4.464	5.367	2.088
Venezuela	1.222	0.658	1.143	0.815	0.341	1.221	1.074	0.238
Sweden	1.101	0.949	0.183	0.100	0.261	0.612	0.487	0.672
Argentina	0.973	0.939	0.973	0.727	0.357	1.497	1.579	0.411
Indonesia	0.956	0.996	0.835	0.482	0.276	2.135	1.766	0.535
Austria	0.861	0.731	0.140	0.103	0.351	0.396	0.416	0.750
South Africa	0.859	0.515	0.182	0.184	0.481	0.376	0.593	0.823
Nigeria	0.806	0.423	0.484	1.977	1.950	0.343	1.748	0.915
Norway	0.768	1.115	0.218	0.082	0.179	0.558	0.267	0.309
Denmark	0.755	1.341	0.215	0.144	0.320	0.510	0.485	0.571
Iran	0.688	0.267	0.346	0.378	0.522	0.535	0.667	0.488
Malaysia	0.683	1.207	0.721	0.600	0.397	0.841	0.758	0.266
Kuwait	0.635	0.357	0.786	0.524	0.318	0.487	0.342	0.110
Ukraine	0.631	0.351	1.519	1.167	0.367	0.991	1.100	0.183
Poland	0.629	0.951	0.277	0.170	0.294	0.706	0.682	0.624
Finland	0.581	0.636	0.195	0.081	0.198	0.355	0.207	0.268
Algeria	0.577	0.474	0.312	0.180	0.275	0.263	0.146	0.118

Table A2a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Turkey	0.548	1.573	0.880	0.653	0.354	2.628	3.010	0.865
Iraq	0.546	0.634	0.000	0.000	0.000	0.000	0.000	0.000
Libya	0.517	0.385	0.539	1.855	1.643	0.157	0.575	0.270
Thailand	0.497	1.096	0.788	0.530	0.321	1.254	1.100	0.353
Hungary	0.477	0.458	0.153	0.442	1.378	0.150	0.645	1.066
Pakistan	0.475	0.315	0.298	0.367	0.588	0.309	0.582	0.495
Romania	0.474	0.264	0.668	0.560	0.400	0.512	0.716	0.271
Egypt	0.434	0.387	0.192	0.168	0.418	0.165	0.218	0.288
Israel	0.427	0.596	0.465	0.214	0.220	0.565	0.413	0.225
New Zealand	0.411	0.238	0.234	0.165	0.336	0.220	0.227	0.246
Philippines	0.404	0.707	0.286	0.101	0.169	0.250	0.135	0.119
Portugal	0.399	0.421	0.255	0.170	0.318	0.436	0.477	0.472
Singapore	0.396	1.974	0.638	0.455	0.341	0.668	0.498	0.197
Chile	0.394	0.383	0.409	0.312	0.364	0.383	0.405	0.250
Ireland	0.385	2.967	0.365	0.194	0.253	0.653	0.400	0.277
Greece	0.378	0.884	0.146	0.099	0.324	0.372	0.403	0.697
Czech Republic	0.377	0.577	0.334	0.237	0.339	0.357	0.355	0.269
Colombia	0.356	0.272	0.397	0.307	0.370	0.392	0.475	0.303
Bulgaria	0.294	0.169	0.715	0.690	0.460	0.167	0.271	0.096
Peru	0.293	0.262	0.562	0.348	0.296	0.390	0.362	0.163
United Arab Emirates	0.281	0.415	0.584	0.760	0.622	0.620	0.942	0.409
Morocco	0.270	0.123	0.780	0.574	0.351	0.375	0.428	0.139
Bangladesh	0.245	0.049	0.083	0.137	0.785	0.048	0.121	0.369
Congo, Dem. Republic of	0.245	0.030	0.701	0.548	0.373	0.045	0.064	0.023
Zambia	0.225	0.072	0.819	0.859	0.501	0.046	0.075	0.023
Serbia	0.215	0.135	1.364	0.715	0.250	0.303	0.305	0.057
Sri Lanka	0.190	0.064	0.315	0.218	0.331	0.064	0.071	0.057
Belarus	0.178	0.126	1.134	0.423	0.178	0.266	0.140	0.031
Ghana	0.170	0.065	0.110	0.896	3.896	0.010	0.143	0.331
Kazakhstan	0.168	0.228	1.196	0.757	0.302	0.507	0.410	0.087
Croatia	0.168	0.179	0.318	0.888	1.333	0.109	0.454	0.362
Slovak Republic	0.164	0.174	0.334	0.361	0.517	0.135	0.214	0.162
Zimbabwe	0.162	0.021	0.814	1.987	1.164	0.050	0.230	0.072
Trinidad and Tobago	0.154	0.065	0.406	1.097	1.289	0.049	0.184	0.114
Vietnam	0.151	0.118	0.209	1.588	3.632	0.094	0.000	0.000

Table A2a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Cote d'Ivoire	0.149	0.048	0.702	0.590	0.401	0.106	0.137	0.049
Sudan	0.145	0.047	0.525	0.000	0.000	0.116	0.000	0.000
Uruguay	0.141	0.161	0.908	0.779	0.410	0.123	0.172	0.048
Ecuador	0.139	0.343	0.501	0.391	0.372	0.151	0.000	0.000
Syrian Arab Republic	0.135	0.109	0.389	0.435	0.535	0.396	0.734	0.478
Tunisia	0.132	0.095	0.237	0.227	0.458	0.064	0.093	0.099
Angola	0.132	0.280	1.095	2.503	1.091	0.227	0.729	0.169
Luxembourg	0.128	1.994	0.372	0.103	0.132	0.122	0.037	0.025
Uzbekistan	0.127	0.080	0.506	0.000	0.000	0.051	0.000	0.000
Jamaica	0.126	0.073	0.164	0.000	0.000	0.015	0.000	0.000
Kenya	0.125	0.064	0.271	0.384	0.676	0.045	0.113	0.106
Qatar	0.121	0.191	1.276	2.374	0.888	0.411	0.464	0.092
Myanmar	0.119	0.050	0.496	0.484	0.466	0.052	0.000	0.000
Yemen, Republic of	0.112	0.284	0.398	1.081	1.296	0.051	0.212	0.135
Slovenia	0.107	0.088	0.130	0.177	0.651	0.041	0.080	0.155
Dominican Republic	0.101	0.092	0.476	0.704	0.706	0.119	0.227	0.120
Brunei Darussalam	0.099	0.077	0.274	0.000	0.000	0.015	0.000	0.000
Guatemala	0.097	0.071	0.149	0.098	0.315	0.041	0.048	0.082
Panama	0.095	0.109	0.370	0.432	0.557	0.052	0.093	0.064
Lebanon	0.093	0.269	0.372	0.924	1.186	0.078	0.366	0.249
Tanzania	0.091	0.016	0.255	0.356	0.666	0.029	0.067	0.066
Oman	0.089	0.154	0.319	0.409	0.612	0.081	0.128	0.101
Cameroon	0.085	0.107	0.307	0.286	0.445	0.047	0.068	0.056
Uganda	0.083	0.037	0.320	0.444	0.662	0.023	0.057	0.045
Bolivia	0.079	0.034	0.215	0.121	0.269	0.019	0.017	0.020
El Salvador	0.079	0.064	0.238	0.260	0.521	0.038	0.009	0.010
Jordan	0.078	0.081	0.272	0.000	0.000	0.031	0.000	0.000
Bosnia-Herzegovina	0.078	0.086	2.493	0.502	0.096	0.206	0.099	0.010
Costa Rica	0.075	0.092	0.373	0.189	0.242	0.069	0.054	0.037
Afghanistan, Islamic State of	0.074	0.064	0.000	0.000	0.000	0.000	0.000	0.000
Senegal	0.074	0.029	0.331	0.413	0.596	0.025	0.054	0.042
Azerbaijan	0.074	0.047	1.682	0.000	0.000	0.158	0.000	0.000
Gabon	0.071	0.062	0.579	1.427	1.177	0.042	0.090	0.039
Georgia	0.069	0.028	0.865	0.000	0.000	0.045	0.000	0.000
Lithuania	0.066	0.101	0.813	0.324	0.190	0.179	0.113	0.035

Table A2a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Cyprus	0.064	0.084	0.272	0.227	0.397	0.041	0.055	0.051
Namibia	0.063	0.022	0.234	0.566	1.153	0.012	0.044	0.048
Bahrain	0.062	0.236	0.296	0.415	0.668	0.033	0.052	0.044
Ethiopia	0.061	0.047	0.821	0.797	0.463	0.073	0.145	0.045
Papua New Guinea	0.060	0.038	0.574	0.870	0.724	0.023	0.053	0.023
Bahamas, The	0.060	0.023	0.254	0.297	0.557	0.014	0.026	0.026
Nicaragua	0.060	0.030	0.255	0.510	0.956	0.011	0.043	0.043
Honduras	0.060	0.035	0.347	0.422	0.582	0.026	0.058	0.042
Liberia	0.059	0.024	0.000	0.000	0.000	0.000	0.000	0.000
Latvia	0.058	0.046	0.458	0.278	0.289	0.062	0.059	0.032
Moldova	0.057	0.022	1.597	1.516	0.453	0.040	0.078	0.012
Madagascar	0.056	0.024	0.802	0.358	0.213	0.040	0.031	0.010
Iceland	0.054	0.043	0.361	0.344	0.455	0.048	0.072	0.051
Mozambique	0.052	0.023	0.482	0.783	0.775	0.028	0.075	0.039
Guinea	0.049	0.014	0.183	0.365	0.953	0.007	0.023	0.032
Sierra Leone	0.048	0.010	2.161	1.644	0.363	0.023	0.035	0.004
Malta	0.047	0.047	0.409	0.360	0.421	0.022	0.032	0.020
Mauritius	0.047	0.029	0.325	0.482	0.708	0.020	0.041	0.032
Paraguay	0.046	0.065	0.380	0.549	0.689	0.027	0.057	0.038
Mali	0.043	0.018	0.563	0.990	0.839	0.026	0.080	0.036
Suriname	0.042	0.018	0.430	0.618	0.686	0.005	0.000	0.000
Armenia	0.042	0.014	0.575	1.040	0.863	0.021	0.067	0.029
Guyana	0.042	0.009	0.544	0.000	0.000	0.004	0.000	0.000
Kyrgyz Republic	0.041	0.016	1.179	1.293	0.523	0.026	0.049	0.011
Cambodia	0.040	0.021	0.400	0.479	0.571	0.021	0.043	0.027
Tajikistan	0.040	0.014	1.491	0.000	0.000	0.029	0.000	0.000
Congo, Republic of	0.039	0.045	0.577	1.164	0.963	0.026	0.046	0.020
Haiti	0.038	0.025	0.634	0.657	0.494	0.022	0.043	0.017
Somalia	0.038	0.002	0.000	0.000	0.000	0.000	0.000	0.000
Rwanda	0.037	0.017	2.861	1.254	0.209	0.051	0.044	0.004
Burundi	0.035	0.006	0.647	0.997	0.735	0.004	0.015	0.006
Turkmenistan	0.035	0.076	1.960	0.000	0.000	0.276	0.000	0.000
Togo	0.034	0.013	0.696	0.806	0.552	0.014	0.029	0.010
Nepal	0.033	0.030	0.322	0.347	0.514	0.023	0.039	0.030
Fiji	0.032	0.007	0.500	0.000	0.000	0.013	0.000	0.000

Table A2a. Alternative Measures of Variability 1/ (continued)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Malawi	0.032	0.009	0.911	1.292	0.676	0.017	0.054	0.015
Macedonia, FYR	0.032	0.037	0.418	0.655	0.748	0.022	0.063	0.038
Barbados	0.031	0.020	0.344	1.087	1.507	0.010	0.056	0.041
Niger	0.030	0.012	0.509	0.480	0.450	0.014	0.026	0.013
Estonia	0.030	0.051	0.592	0.288	0.232	0.068	0.046	0.020
Mauritania	0.030	0.010	0.587	1.337	1.087	0.009	0.000	0.000
Botswana	0.029	0.065	0.317	0.537	0.809	0.026	0.049	0.039
Benin	0.028	0.006	0.192	0.466	1.159	0.008	0.033	0.043
Burkina Faso	0.028	0.016	0.391	0.554	0.677	0.020	0.048	0.031
Chad	0.026	0.076	1.398	2.714	0.926	0.057	0.156	0.028
Central African Republic	0.026	0.008	0.692	0.468	0.322	0.009	0.011	0.004
Lao, People's Dem. Republic	0.024	0.013	0.155	0.731	2.257	0.004	0.028	0.045
Mongolia	0.023	0.013	0.406	0.898	1.055	0.007	0.022	0.014
Swaziland	0.023	0.027	0.101	0.989	4.690	0.002	0.036	0.090
Albania	0.022	0.025	0.848	0.596	0.335	0.059	0.080	0.024
Lesotho	0.016	0.013	0.479	0.715	0.713	0.006	0.020	0.010
Equatorial Guinea	0.015	0.060	5.628	5.469	0.464	0.250	0.069	0.003
Gambia, The	0.014	0.004	0.539	0.924	0.818	0.002	0.007	0.003
Montenegro	0.013	0.011	0.000	0.000	0.000	0.000	0.000	0.000
Belize	0.009	0.007	0.558	0.366	0.313	0.006	0.006	0.003
San Marino	0.008	0.017	0.000	0.000	0.000	0.000	0.000	0.000
Vanuatu	0.008	0.005	0.653	0.000	0.000	0.002	0.000	0.000
Djibouti	0.007	0.009	0.382	0.393	0.491	0.003	0.005	0.003
Eritrea	0.007	0.019	1.171	1.014	0.413	0.008	0.026	0.006
St. Lucia	0.007	0.004	0.366	0.000	0.000	0.003	0.000	0.000
Guinea-Bissau	0.007	0.011	1.409	1.158	0.392	0.004	0.006	0.001
Antigua and Barbuda	0.006	0.003	0.456	0.000	0.000	0.004	0.000	0.000
Grenada	0.005	0.003	0.773	0.000	0.000	0.004	0.000	0.000
Samoa	0.005	0.004	0.352	0.000	0.000	0.001	0.000	0.000
Solomon Islands	0.005	0.003	1.051	2.641	1.200	0.003	0.009	0.002
Cape Verde	0.004	0.006	0.293	0.480	0.782	0.003	0.008	0.007
Comoros	0.004	0.001	0.415	0.262	0.301	0.001	0.002	0.001
St. Kitts and Nevis	0.004	0.002	0.429	0.000	0.000	0.002	0.000	0.000
Seychelles	0.004	0.009	0.767	1.248	0.777	0.005	0.015	0.005
St. Vincent and the Grenadines	0.004	0.003	0.414	1.033	1.190	0.002	0.007	0.004

Table A2a. Alternative Measures of Variability 1/ (concluded)
(shares, in percent)

Members	Quotas	Variability of Current Receipts Plus Net Capital Flows	Volatility of GDP Growth (unscaled) 2/	Volatility of Consumption Growth (unscaled) 3/	Consumption Growth Volatility Relative to GDP Growth Volatility (unscaled) 2/ 3/ 4/	Volatility of GDP Growth (scaled up by GDP) 2/ 5/	Volatility of Consumption Growth (scaled up by consumption) 3/ 5/	Consumption Growth Volatility Relative to GDP Growth Volatility (scaled up by consumption) 2/ 3/ 4/ 5/
Dominica	0.004	0.003	0.411	0.000	0.000	0.001	0.000	0.000
Maldives	0.004	0.005	0.597	1.750	1.400	0.004	0.015	0.006
Timor Leste	0.004	0.008	0.000	0.000	0.000	0.000	0.000	0.000
Sao Tome and Principe	0.003	0.001	0.204	0.766	1.790	0.000	0.001	0.001
Tonga	0.003	0.002	0.323	0.000	0.000	0.001	0.000	0.000
Bhutan	0.003	0.005	0.263	0.000	0.000	0.002	0.000	0.000
Kiribati	0.003	0.001	0.639	0.000	0.000	0.000	0.000	0.000
Micronesia, Fed. States of	0.002	0.003	0.000	0.000	0.000	0.000	0.000	0.000
Marshall Islands	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
Palau, Republic of	0.001	0.003	0.000	0.000	0.000	0.000	0.000	0.000

Source: Finance Department.

1/ Preliminary calculations based on 1993-2005 data on GDP and consumption from the WEO database, published in April 2007. Reflects the impact of adjustments to current receipts for re-exports, international banking interest, and non-monetary gold. Includes Montenegro, which became a member on January 18, 2007.
2/ Measured as the standard deviation of real GDP growth in constant local currency units for 175 countries.
3/ Measured as the standard deviation of real consumption growth in constant local currency units for 154 countries.
4/ Calculated for 154 countries with available WEO data on real GDP and real consumption.
5/ Scaler is the series average for 2003-05. Measures scaled by consumption result in calculations for 150 countries with available WEO data.
6/ Includes China, P.R., and Hong Kong SAR.

INTERNATIONAL MONETARY FUND

Quota and Voice—Stocktaking and Further Considerations—Statistical Appendix

Prepared by the Quota and Voice Working Group

Approved by David Burton

September 6, 2007

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This supplement responds to requests made by two Executive Directors for quota calculations based on two alternative approaches:

1. A formula that uses a single variable—namely a combination of GDP converted at market exchange rates and at PPP-exchange rates—and includes a compression factor. Tables 1–3 show the summary results for three different combinations of market rate and PPP GDP (0/100, 25/75, and 50/50) and three different compression factors (zero, 0.95, and 0.90). Results for individual members are presented in Tables 1a, 2a, and 3a, respectively.

2. A linear formula that uses the four traditional quota variables with the weights determined as the estimated average contributions of those variables to calculated quotas under the existing five formulas. The estimated average contribution of each variable is the sum for all members of the variable multiplied by the coefficient in the applicable formula, divided by total calculated quotas. The variable's coefficient includes the multiplicative factor in the case of the nonlinear formulas. Based on the existing database through 2005, the estimated coefficient weights are 0.298 (GDP), 0.498 (openness), 0.131 (variability), and 0.073 (reserves). Summary results are presented in Table 4 and the results for individual members are presented in Table 4a.

Table 1. Distribution of Quotas and GDP-Blend 1/ 2/
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Advanced economies	61.6	60.5	65.6	50.5	56.7	62.9
Major advanced economies	46.0	45.2	45.9	42.3	47.4	52.5
Of which: US	17.4	17.1	16.3	20.5	22.6	24.7
Other advanced economies	15.6	15.3	19.7	8.1	9.2	10.4
Developing countries	30.9	32.1	28.6	43.3	37.7	32.1
Africa	5.5	5.4	2.4	3.4	2.9	2.5
Asia 10/	10.3	11.5	16.2	28.7	24.3	19.9
Middle East, Malta & Turkey	7.6	7.6	4.8	3.8	3.6	3.4
Western Hemisphere	7.5	7.6	5.2	7.5	6.9	6.3
Transition economies	7.6	7.4	5.7	6.2	5.6	5.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:						
EU 27	32.9	32.4	37.8	21.5	23.9	26.3
LICs 11/	7.5	7.4	3.6	9.9	8.2	6.5

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Including Korea and Singapore.
11/ PRGF-eligible countries.

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
United States	17.380	17.076	16.284	20.467	22.574	24.680
Japan	6.228	6.119	7.011	6.615	7.712	8.809
Germany	6.086	5.979	6.850	4.313	4.873	5.432
France	5.024	4.936	4.129	3.112	3.470	3.828
United Kingdom	5.024	4.936	5.240	3.095	3.593	4.092
China 10/	2.980	3.719	6.137	15.217	12.719	10.222
Italy	3.301	3.243	3.317	2.872	3.180	3.489
Saudi Arabia	3.268	3.211	1.030	0.576	0.591	0.606
Canada	2.980	2.928	3.065	1.856	2.006	2.156
Russia	2.782	2.733	1.702	2.571	2.294	2.016
Netherlands	2.415	2.373	2.897	0.861	1.011	1.160
Belgium	2.155	2.117	2.270	0.553	0.628	0.704
India	1.945	1.911	1.287	5.868	4.817	3.765
Switzerland	1.618	1.590	1.485	0.405	0.519	0.634
Australia	1.514	1.488	1.205	1.063	1.181	1.300
Mexico	1.210	1.449	1.841	1.793	1.774	1.756
Spain	1.426	1.401	2.237	1.825	1.995	2.166
Brazil	1.420	1.396	1.069	2.627	2.361	2.095
Korea	0.764	1.346	2.512	1.652	1.666	1.679
Venezuela	1.244	1.222	0.427	0.256	0.258	0.261
Sweden	1.121	1.101	1.172	0.454	0.548	0.642
Argentina	0.990	0.973	0.368	0.856	0.738	0.619
Indonesia	0.973	0.956	0.737	1.602	1.360	1.119
Austria	0.876	0.861	1.129	0.466	0.525	0.583
South Africa	0.874	0.859	0.459	0.947	0.839	0.730
Nigeria	0.820	0.806	0.359	0.287	0.260	0.232
Norway	0.782	0.768	0.860	0.328	0.404	0.481
Denmark	0.769	0.755	1.040	0.318	0.386	0.454
Iran	0.700	0.688	0.435	0.908	0.777	0.647
Malaysia	0.695	0.683	1.374	0.474	0.428	0.382
Kuwait	0.646	0.635	0.355	0.077	0.097	0.116
Ukraine	0.642	0.631	0.301	0.545	0.449	0.353
Poland	0.640	0.629	0.779	0.826	0.778	0.730
Finland	0.591	0.581	0.529	0.275	0.319	0.363
Algeria	0.587	0.577	0.340	0.392	0.346	0.301

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Turkey	0.451	0.548	0.751	0.927	0.881	0.834
Iraq	0.556	0.546	0.278	0.059	0.059	0.059
Libya	0.526	0.517	0.243	0.111	0.102	0.092
Thailand	0.506	0.497	0.909	0.903	0.776	0.649
Hungary	0.486	0.477	0.489	0.283	0.273	0.264
Pakistan	0.484	0.475	0.196	0.653	0.554	0.455
Romania	0.482	0.474	0.248	0.311	0.281	0.251
Egypt	0.442	0.434	0.253	0.505	0.432	0.359
Israel	0.434	0.427	0.544	0.263	0.272	0.282
New Zealand	0.419	0.411	0.239	0.170	0.186	0.202
Philippines	0.412	0.404	0.473	0.682	0.566	0.450
Portugal	0.406	0.399	0.481	0.349	0.368	0.387
Singapore	0.404	0.396	1.929	0.203	0.217	0.232
Chile	0.401	0.394	0.326	0.316	0.295	0.274
Ireland	0.392	0.385	1.660	0.277	0.319	0.360
Greece	0.385	0.378	0.485	0.415	0.469	0.524
Czech Republic	0.383	0.377	0.585	0.311	0.300	0.289
Colombia	0.362	0.356	0.219	0.561	0.482	0.403
Bulgaria	0.300	0.294	0.125	0.117	0.102	0.087
Peru	0.299	0.293	0.149	0.275	0.249	0.224
United Arab Emirates	0.286	0.281	0.508	0.213	0.226	0.238
Morocco	0.275	0.270	0.165	0.230	0.202	0.175
Bangladesh	0.250	0.245	0.099	0.500	0.411	0.322
Congo, Dem. Republic of	0.249	0.245	0.023	0.075	0.061	0.046
Zambia	0.229	0.225	0.027	0.018	0.017	0.016
Serbia	0.219	0.215	0.085	0.073	0.069	0.064
Sri Lanka	0.193	0.190	0.070	0.141	0.119	0.096
Belarus	0.181	0.178	0.116	0.120	0.105	0.089
Ghana	0.173	0.170	0.042	0.090	0.073	0.056
Kazakhstan	0.171	0.168	0.189	0.200	0.176	0.152
Croatia	0.171	0.168	0.149	0.091	0.090	0.088
Slovak Republic	0.167	0.164	0.247	0.143	0.132	0.122
Zimbabwe	0.165	0.162	0.023	0.056	0.046	0.036
Trinidad and Tobago	0.157	0.154	0.064	0.030	0.030	0.030
Vietnam	0.154	0.151	0.235	0.405	0.332	0.258

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Cote d'Ivoire	0.152	0.149	0.060	0.047	0.045	0.042
Sudan	0.147	0.145	0.046	0.136	0.116	0.096
Uruguay	0.143	0.141	0.048	0.055	0.050	0.044
Ecuador	0.141	0.139	0.083	0.095	0.090	0.085
Syrian Arab Republic	0.137	0.135	0.114	0.120	0.153	0.187
Tunisia	0.134	0.132	0.106	0.138	0.120	0.102
Angola	0.134	0.132	0.156	0.066	0.063	0.059
Luxembourg	0.131	0.128	1.369	0.053	0.060	0.067
Uzbekistan	0.129	0.127	0.043	0.083	0.069	0.054
Jamaica	0.128	0.126	0.048	0.020	0.021	0.021
Kenya	0.127	0.125	0.037	0.080	0.070	0.060
Qatar	0.123	0.121	0.136	0.041	0.050	0.060
Myanmar	0.121	0.119	0.031	0.155	0.123	0.090
Yemen, Republic of	0.114	0.112	0.110	0.033	0.032	0.032
Slovenia	0.108	0.107	0.148	0.073	0.074	0.075
Dominican Republic	0.102	0.101	0.090	0.109	0.097	0.085
Brunei Darussalam	0.101	0.099	0.050	0.016	0.015	0.015
Guatemala	0.098	0.097	0.066	0.096	0.089	0.082
Panama	0.097	0.095	0.048	0.039	0.038	0.037
Lebanon	0.095	0.093	0.182	0.041	0.044	0.047
Tanzania	0.093	0.091	0.034	0.044	0.040	0.036
Oman	0.091	0.089	0.145	0.068	0.067	0.066
Cameroon	0.087	0.085	0.032	0.072	0.064	0.055
Uganda	0.084	0.083	0.025	0.071	0.058	0.044
Bolivia	0.080	0.079	0.023	0.043	0.038	0.032
El Salvador	0.080	0.079	0.060	0.053	0.049	0.046
Jordan	0.080	0.078	0.080	0.046	0.041	0.037
Bosnia-Herzegovina	0.079	0.078	0.064	0.039	0.034	0.030
Costa Rica	0.077	0.075	0.078	0.075	0.068	0.061
Islamic Republic of Afghanistan	0.076	0.074	0.041	0.050	0.041	0.032
Senegal	0.076	0.074	0.024	0.034	0.030	0.026
Azerbaijan	0.075	0.074	0.050	0.058	0.049	0.041
Gabon	0.072	0.071	0.041	0.016	0.017	0.017
Georgia	0.070	0.069	0.019	0.025	0.022	0.019
Lithuania	0.067	0.066	0.101	0.079	0.073	0.067

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Cyprus	0.065	0.064	0.063	0.029	0.031	0.033
Namibia	0.064	0.063	0.023	0.025	0.022	0.019
Bahrain	0.063	0.062	0.142	0.026	0.026	0.027
Ethiopia	0.063	0.061	0.024	0.096	0.077	0.059
Papua New Guinea	0.062	0.060	0.028	0.024	0.021	0.017
Bahamas, The	0.061	0.060	0.027	0.011	0.012	0.012
Nicaragua	0.061	0.060	0.020	0.035	0.029	0.023
Honduras	0.061	0.060	0.038	0.036	0.032	0.027
Liberia	0.060	0.059	0.005	0.001	0.001	0.001
Latvia	0.059	0.058	0.058	0.047	0.043	0.040
Moldova	0.058	0.057	0.018	0.014	0.012	0.010
Madagascar	0.057	0.056	0.015	0.027	0.023	0.019
Iceland	0.055	0.054	0.039	0.017	0.021	0.025
Mozambique	0.053	0.052	0.025	0.043	0.036	0.029
Guinea	0.050	0.049	0.009	0.032	0.026	0.020
Sierra Leone	0.049	0.048	0.004	0.008	0.007	0.005
Malta	0.048	0.047	0.053	0.013	0.013	0.013
Mauritius	0.048	0.047	0.030	0.027	0.024	0.021
Paraguay	0.047	0.046	0.037	0.047	0.040	0.033
Mali	0.044	0.043	0.014	0.024	0.021	0.018
Suriname	0.043	0.042	0.010	0.005	0.004	0.004
Armenia	0.043	0.042	0.013	0.023	0.019	0.016
Guyana	0.043	0.042	0.010	0.006	0.005	0.004
Kyrgyz Republic	0.042	0.041	0.010	0.018	0.015	0.012
Cambodia	0.041	0.040	0.031	0.056	0.045	0.035
Tajikistan	0.041	0.040	0.011	0.014	0.012	0.009
Congo, Republic of	0.040	0.039	0.032	0.007	0.008	0.009
Haiti	0.038	0.038	0.012	0.026	0.022	0.017
Somalia	0.038	0.038	0.002	0.001	0.001	0.001
Rwanda	0.037	0.037	0.006	0.020	0.016	0.012
Burundi	0.036	0.035	0.003	0.009	0.007	0.005
Turkmenistan	0.035	0.035	0.046	0.063	0.056	0.049
Togo	0.034	0.034	0.008	0.016	0.013	0.010
Nepal	0.033	0.033	0.020	0.066	0.054	0.042
Fiji	0.033	0.032	0.011	0.009	0.009	0.008

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Malawi	0.032	0.032	0.006	0.013	0.011	0.009
Macedonia, FYR	0.032	0.032	0.027	0.026	0.023	0.020
Barbados	0.032	0.031	0.014	0.008	0.008	0.008
Niger	0.031	0.030	0.007	0.018	0.015	0.013
Estonia	0.031	0.030	0.072	0.036	0.034	0.032
Mauritania	0.030	0.030	0.007	0.012	0.010	0.008
Botswana	0.029	0.029	0.051	0.030	0.028	0.025
Benin	0.029	0.028	0.009	0.015	0.013	0.012
Burkina Faso	0.028	0.028	0.010	0.028	0.024	0.020
Chad	0.026	0.026	0.024	0.021	0.018	0.016
Central African Republic	0.026	0.026	0.003	0.008	0.007	0.005
Lao, People's Dem. Republic	0.025	0.024	0.007	0.020	0.017	0.013
Mongolia	0.024	0.023	0.010	0.009	0.008	0.007
Swaziland	0.024	0.023	0.020	0.010	0.009	0.008
Albania	0.023	0.022	0.027	0.028	0.025	0.023
Lesotho	0.016	0.016	0.011	0.009	0.007	0.006
Equatorial Guinea	0.015	0.015	0.041	0.030	0.025	0.020
Gambia, The	0.015	0.014	0.002	0.005	0.004	0.003
Montenegro	0.013	0.013	0.009	0.005	0.005	0.005
Belize	0.009	0.009	0.006	0.004	0.003	0.003
San Marino	0.008	0.008	0.020	0.003	0.003	0.003
Vanuatu	0.008	0.008	0.003	0.001	0.001	0.001
Djibouti	0.007	0.007	0.003	0.003	0.002	0.002
Eritrea	0.007	0.007	0.008	0.007	0.006	0.004
St. Lucia	0.007	0.007	0.004	0.002	0.002	0.002
Guinea-Bissau	0.007	0.007	0.004	0.002	0.002	0.001
Antigua and Barbuda	0.006	0.006	0.006	0.002	0.002	0.002
Grenada	0.005	0.005	0.003	0.001	0.001	0.001
Samoa	0.005	0.005	0.002	0.002	0.002	0.001
Solomon Islands	0.005	0.005	0.003	0.002	0.001	0.001
Cape Verde	0.004	0.004	0.004	0.005	0.004	0.004
Comoros	0.004	0.004	0.001	0.002	0.002	0.001
St. Kitts and Nevis	0.004	0.004	0.002	0.001	0.001	0.001
Seychelles	0.004	0.004	0.005	0.002	0.002	0.002
St. Vincent and the Grenadines	0.004	0.004	0.002	0.001	0.001	0.001

Table 1a. Distribution of Quotas and GDP-Blend—By Member 1/ 2/ (concluded)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 1.00 7/	100(25/75) 8/ K = 1.00 7/	100(50/50) 9/ K = 1.00 7/
Dominica	0.004	0.004	0.002	0.001	0.001	0.001
Maldives	0.004	0.004	0.005	0.004	0.004	0.003
Timor-Leste	0.004	0.004	0.007	0.001	0.001	0.001
Sao Tome and Principe	0.003	0.003	0.000	0.000	0.000	0.000
Tonga	0.003	0.003	0.001	0.001	0.001	0.001
Bhutan	0.003	0.003	0.004	0.005	0.004	0.003
Kiribati	0.003	0.003	0.003	0.000	0.000	0.000
Micronesia, Fed. States of	0.002	0.002	0.002	0.001	0.001	0.001
Marshall Islands	0.002	0.002	0.001	0.000	0.000	0.000
Palau, Republic of	0.001	0.001	0.001	0.000	0.000	0.000

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993-2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Includes China, P.R., and Hong Kong SAR.

Table 2. Distribution of Quotas, GDP-Blend, and Compression 1/ 2/
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Advanced economies	61.6	60.5	65.6	49.2	55.1	61.0
Major advanced economies	46.0	45.2	45.9	40.4	45.1	49.8
Of which: US	17.4	17.1	16.3	18.7	20.5	22.4
Other advanced economies	15.6	15.3	19.7	8.8	10.0	11.2
Developing countries	30.9	32.1	28.6	44.0	38.8	33.5
Africa	5.5	5.4	2.4	3.9	3.4	3.0
Asia 10/	10.3	11.5	16.2	28.0	24.0	19.9
Middle East, Malta & Turkey	7.6	7.6	4.8	4.2	4.0	3.8
Western Hemisphere	7.5	7.6	5.2	8.0	7.4	6.8
Transition economies	7.6	7.4	5.7	6.8	6.2	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:						
EU 27	32.9	32.4	37.8	22.3	24.6	26.9
LICs 11/	7.5	7.4	3.6	10.4	8.7	7.1

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Including Korea and Singapore.
11/ PRGF-eligible countries.

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
United States	17.380	17.076	16.284	18.690	20.549	22.426
Japan	6.228	6.119	7.011	6.392	7.408	8.428
Germany	6.086	5.979	6.850	4.258	4.789	5.324
France	5.024	4.936	4.129	3.122	3.469	3.818
United Kingdom	5.024	4.936	5.240	3.106	3.586	4.068
China 10/	2.980	3.719	6.137	14.103	11.916	9.707
Italy	3.301	3.243	3.317	2.893	3.193	3.496
Saudi Arabia	3.268	3.211	1.030	0.629	0.645	0.663
Canada	2.980	2.928	3.065	1.911	2.061	2.213
Russia	2.782	2.733	1.702	2.604	2.341	2.077
Netherlands	2.415	2.373	2.897	0.921	1.075	1.229
Belgium	2.155	2.117	2.270	0.605	0.684	0.764
India	1.945	1.911	1.287	5.704	4.737	3.758
Switzerland	1.618	1.590	1.485	0.450	0.571	0.691
Australia	1.514	1.488	1.205	1.125	1.246	1.368
Mexico	1.210	1.449	1.841	1.849	1.834	1.821
Spain	1.426	1.401	2.237	1.880	2.051	2.223
Brazil	1.420	1.396	1.069	2.658	2.406	2.154
Korea	0.764	1.346	2.512	1.711	1.727	1.745
Venezuela	1.244	1.222	0.427	0.291	0.294	0.297
Sweden	1.121	1.101	1.172	0.502	0.601	0.701
Argentina	0.990	0.973	0.368	0.916	0.797	0.677
Indonesia	0.973	0.956	0.737	1.661	1.425	1.187
Austria	0.876	0.861	1.129	0.514	0.577	0.639
South Africa	0.874	0.859	0.459	1.009	0.900	0.791
Nigeria	0.820	0.806	0.359	0.325	0.295	0.266
Norway	0.782	0.768	0.860	0.368	0.450	0.532
Denmark	0.769	0.755	1.040	0.357	0.431	0.504
Iran	0.700	0.688	0.435	0.969	0.838	0.705
Malaysia	0.695	0.683	1.374	0.523	0.475	0.428
Kuwait	0.646	0.635	0.355	0.093	0.115	0.137
Ukraine	0.642	0.631	0.301	0.596	0.497	0.397
Poland	0.640	0.629	0.779	0.886	0.838	0.791
Finland	0.591	0.581	0.529	0.312	0.360	0.408
Algeria	0.587	0.577	0.340	0.436	0.388	0.341

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Turkey	0.451	0.548	0.751	0.988	0.943	0.898
Iraq	0.556	0.546	0.278	0.072	0.072	0.072
Libya	0.526	0.517	0.243	0.132	0.121	0.111
Thailand	0.506	0.497	0.909	0.964	0.836	0.708
Hungary	0.486	0.477	0.489	0.320	0.310	0.301
Pakistan	0.484	0.475	0.196	0.708	0.607	0.505
Romania	0.482	0.474	0.248	0.350	0.319	0.287
Egypt	0.442	0.434	0.253	0.555	0.479	0.403
Israel	0.434	0.427	0.544	0.298	0.309	0.321
New Zealand	0.419	0.411	0.239	0.198	0.215	0.233
Philippines	0.412	0.404	0.473	0.739	0.620	0.500
Portugal	0.406	0.399	0.481	0.391	0.412	0.433
Singapore	0.404	0.396	1.929	0.233	0.249	0.266
Chile	0.401	0.394	0.326	0.355	0.334	0.312
Ireland	0.392	0.385	1.660	0.314	0.359	0.405
Greece	0.385	0.378	0.485	0.461	0.519	0.577
Czech Republic	0.383	0.377	0.585	0.351	0.339	0.327
Colombia	0.362	0.356	0.219	0.613	0.532	0.450
Bulgaria	0.300	0.294	0.125	0.138	0.122	0.105
Peru	0.299	0.293	0.149	0.311	0.284	0.257
United Arab Emirates	0.286	0.281	0.508	0.244	0.258	0.273
Morocco	0.275	0.270	0.165	0.263	0.233	0.203
Bangladesh	0.250	0.245	0.099	0.550	0.457	0.363
Congo, Dem. Republic of	0.249	0.245	0.023	0.091	0.074	0.057
Zambia	0.229	0.225	0.027	0.023	0.022	0.021
Serbia	0.219	0.215	0.085	0.089	0.084	0.079
Sri Lanka	0.193	0.190	0.070	0.165	0.140	0.115
Belarus	0.181	0.178	0.116	0.142	0.125	0.107
Ghana	0.173	0.170	0.042	0.108	0.089	0.069
Kazakhstan	0.171	0.168	0.189	0.230	0.204	0.179
Croatia	0.171	0.168	0.149	0.109	0.108	0.106
Slovak Republic	0.167	0.164	0.247	0.167	0.156	0.144
Zimbabwe	0.165	0.162	0.023	0.069	0.057	0.045
Trinidad and Tobago	0.157	0.154	0.064	0.038	0.038	0.038
Vietnam	0.154	0.151	0.235	0.450	0.373	0.295

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Cote d'Ivoire	0.152	0.149	0.060	0.058	0.055	0.053
Sudan	0.147	0.145	0.046	0.160	0.137	0.115
Uruguay	0.143	0.141	0.048	0.068	0.061	0.055
Ecuador	0.141	0.139	0.083	0.113	0.108	0.102
Syrian Arab Republic	0.137	0.135	0.114	0.142	0.179	0.217
Tunisia	0.134	0.132	0.106	0.161	0.142	0.122
Angola	0.134	0.132	0.156	0.081	0.077	0.072
Luxembourg	0.131	0.128	1.369	0.065	0.074	0.082
Uzbekistan	0.129	0.127	0.043	0.100	0.084	0.067
Jamaica	0.128	0.126	0.048	0.026	0.027	0.028
Kenya	0.127	0.125	0.037	0.096	0.085	0.074
Qatar	0.123	0.121	0.136	0.051	0.062	0.074
Myanmar	0.121	0.119	0.031	0.181	0.145	0.109
Yemen, Republic of	0.114	0.112	0.110	0.041	0.041	0.041
Slovenia	0.108	0.107	0.148	0.088	0.090	0.091
Dominican Republic	0.102	0.101	0.090	0.129	0.116	0.103
Brunei Darussalam	0.101	0.099	0.050	0.020	0.020	0.019
Guatemala	0.098	0.097	0.066	0.114	0.107	0.100
Panama	0.097	0.095	0.048	0.049	0.048	0.047
Lebanon	0.095	0.093	0.182	0.052	0.055	0.058
Tanzania	0.093	0.091	0.034	0.055	0.050	0.045
Oman	0.091	0.089	0.145	0.083	0.081	0.080
Cameroon	0.087	0.085	0.032	0.088	0.078	0.068
Uganda	0.084	0.083	0.025	0.086	0.071	0.055
Bolivia	0.080	0.079	0.023	0.053	0.047	0.041
El Salvador	0.080	0.079	0.060	0.065	0.061	0.057
Jordan	0.080	0.078	0.080	0.057	0.052	0.046
Bosnia-Herzegovina	0.079	0.078	0.064	0.048	0.043	0.038
Costa Rica	0.077	0.075	0.078	0.091	0.083	0.075
Islamic Republic of Afghanistan	0.076	0.074	0.041	0.062	0.051	0.041
Senegal	0.076	0.074	0.024	0.042	0.038	0.033
Azerbaijan	0.075	0.074	0.050	0.071	0.061	0.051
Gabon	0.072	0.071	0.041	0.021	0.022	0.022
Georgia	0.070	0.069	0.019	0.032	0.028	0.025
Lithuania	0.067	0.066	0.101	0.095	0.088	0.081

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Cyprus	0.065	0.064	0.063	0.037	0.039	0.042
Namibia	0.064	0.063	0.023	0.032	0.029	0.025
Bahrain	0.063	0.062	0.142	0.033	0.033	0.034
Ethiopia	0.063	0.061	0.024	0.114	0.094	0.072
Papua New Guinea	0.062	0.060	0.028	0.031	0.027	0.022
Bahamas, The	0.061	0.060	0.027	0.015	0.016	0.017
Nicaragua	0.061	0.060	0.020	0.044	0.037	0.030
Honduras	0.061	0.060	0.038	0.045	0.040	0.035
Liberia	0.060	0.059	0.005	0.002	0.002	0.002
Latvia	0.059	0.058	0.058	0.058	0.054	0.050
Moldova	0.058	0.057	0.018	0.018	0.016	0.013
Madagascar	0.057	0.056	0.015	0.034	0.030	0.025
Iceland	0.055	0.054	0.039	0.022	0.027	0.032
Mozambique	0.053	0.052	0.025	0.054	0.045	0.037
Guinea	0.050	0.049	0.009	0.040	0.033	0.026
Sierra Leone	0.049	0.048	0.004	0.011	0.009	0.007
Malta	0.048	0.047	0.053	0.018	0.018	0.018
Mauritius	0.048	0.047	0.030	0.034	0.030	0.027
Paraguay	0.047	0.046	0.037	0.059	0.050	0.041
Mali	0.044	0.043	0.014	0.030	0.027	0.023
Suriname	0.043	0.042	0.010	0.007	0.006	0.005
Armenia	0.043	0.042	0.013	0.029	0.025	0.021
Guyana	0.043	0.042	0.010	0.008	0.007	0.006
Kyrgyz Republic	0.042	0.041	0.010	0.023	0.019	0.015
Cambodia	0.041	0.040	0.031	0.069	0.056	0.044
Tajikistan	0.041	0.040	0.011	0.018	0.016	0.013
Congo, Republic of	0.040	0.039	0.032	0.010	0.011	0.013
Haiti	0.038	0.038	0.012	0.033	0.028	0.023
Somalia	0.038	0.038	0.002	0.002	0.002	0.002
Rwanda	0.037	0.037	0.006	0.026	0.021	0.016
Burundi	0.036	0.035	0.003	0.012	0.010	0.008
Turkmenistan	0.035	0.035	0.046	0.077	0.069	0.061
Togo	0.034	0.034	0.008	0.021	0.017	0.014
Nepal	0.033	0.033	0.020	0.080	0.066	0.052
Fiji	0.033	0.032	0.011	0.012	0.012	0.011

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Malawi	0.032	0.032	0.006	0.017	0.014	0.012
Macedonia, FYR	0.032	0.032	0.027	0.034	0.030	0.026
Barbados	0.032	0.031	0.014	0.011	0.011	0.010
Niger	0.031	0.030	0.007	0.024	0.020	0.017
Estonia	0.031	0.030	0.072	0.045	0.043	0.041
Mauritania	0.030	0.030	0.007	0.016	0.013	0.011
Botswana	0.029	0.029	0.051	0.038	0.035	0.032
Benin	0.029	0.028	0.009	0.019	0.018	0.016
Burkina Faso	0.028	0.028	0.010	0.036	0.031	0.026
Chad	0.026	0.026	0.024	0.027	0.024	0.021
Central African Republic	0.026	0.026	0.003	0.011	0.009	0.008
Lao, People's Dem. Republic	0.025	0.024	0.007	0.026	0.022	0.017
Mongolia	0.024	0.023	0.010	0.012	0.011	0.009
Swaziland	0.024	0.023	0.020	0.013	0.012	0.011
Albania	0.023	0.022	0.027	0.035	0.032	0.029
Lesotho	0.016	0.016	0.011	0.011	0.010	0.008
Equatorial Guinea	0.015	0.015	0.041	0.038	0.032	0.026
Gambia, The	0.015	0.014	0.002	0.007	0.006	0.004
Montenegro	0.013	0.013	0.009	0.006	0.006	0.006
Belize	0.009	0.009	0.006	0.005	0.005	0.004
San Marino	0.008	0.008	0.020	0.004	0.004	0.004
Vanuatu	0.008	0.008	0.003	0.002	0.002	0.001
Djibouti	0.007	0.007	0.003	0.004	0.004	0.003
Eritrea	0.007	0.007	0.008	0.009	0.008	0.006
St. Lucia	0.007	0.007	0.004	0.003	0.003	0.003
Guinea-Bissau	0.007	0.007	0.004	0.003	0.002	0.002
Antigua and Barbuda	0.006	0.006	0.006	0.002	0.002	0.003
Grenada	0.005	0.005	0.003	0.002	0.002	0.002
Samoa	0.005	0.005	0.002	0.003	0.002	0.002
Solomon Islands	0.005	0.005	0.003	0.002	0.002	0.002
Cape Verde	0.004	0.004	0.004	0.007	0.006	0.005
Comoros	0.004	0.004	0.001	0.003	0.002	0.002
St. Kitts and Nevis	0.004	0.004	0.002	0.002	0.002	0.002
Seychelles	0.004	0.004	0.005	0.003	0.003	0.003
St. Vincent and the Grenadines	0.004	0.004	0.002	0.002	0.002	0.002

Table 2a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/ (concluded)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.95 7/	100(25/75) 8/ K = 0.95 7/	100(50/50) 9/ K = 0.95 7/
Dominica	0.004	0.004	0.002	0.001	0.001	0.001
Maldives	0.004	0.004	0.005	0.006	0.005	0.004
Timor-Leste	0.004	0.004	0.007	0.002	0.002	0.002
Sao Tome and Principe	0.003	0.003	0.000	0.001	0.001	0.000
Tonga	0.003	0.003	0.001	0.002	0.002	0.001
Bhutan	0.003	0.003	0.004	0.007	0.006	0.005
Kiribati	0.003	0.003	0.003	0.001	0.001	0.000
Micronesia, Fed. States of	0.002	0.002	0.002	0.001	0.001	0.001
Marshall Islands	0.002	0.002	0.001	0.001	0.001	0.001
Palau, Republic of	0.001	0.001	0.001	0.001	0.001	0.001

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Includes China, P.R., and Hong Kong SAR.

Table 3. Distribution of Quotas, GDP-Blend, and Compression 1/ 2/
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Advanced economies	61.6	60.5	65.6	47.8	53.4	59.0
Major advanced economies	46.0	45.2	45.9	38.3	42.6	47.0
Of which: US	17.4	17.1	16.3	16.9	18.6	20.2
Other advanced economies	15.6	15.3	19.7	9.5	10.8	12.0
Developing countries	30.9	32.1	28.6	44.8	39.9	34.9
Africa	5.5	5.4	2.4	4.5	4.0	3.5
Asia 10/	10.3	11.5	16.2	27.3	23.6	19.9
Middle East, Malta & Turkey	7.6	7.6	4.8	4.6	4.4	4.3
Western Hemisphere	7.5	7.6	5.2	8.5	7.9	7.3
Transition economies	7.6	7.4	5.7	7.3	6.7	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:						
EU 27	32.9	32.4	37.8	22.9	25.2	27.5
LICs 11/	7.5	7.4	3.6	11.0	9.4	7.7

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Including Korea and Singapore.
11/ PRGF-eligible countries.

Table 3a. Distribution of Quotas, GDP-Blend, and Compression—By Member 1/ 2/

(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
United States	17.380	17.076	16.284	16.948	18.575	20.234
Japan	6.228	6.119	7.011	6.133	7.066	8.006
Germany	6.086	5.979	6.850	4.174	4.674	5.181
France	5.024	4.936	4.129	3.111	3.443	3.781
United Kingdom	5.024	4.936	5.240	3.096	3.553	4.015
China 10/	2.980	3.719	6.137	12.980	11.085	9.153
Italy	3.301	3.243	3.317	2.894	3.184	3.478
Saudi Arabia	3.268	3.211	1.030	0.682	0.700	0.720
Canada	2.980	2.928	3.065	1.954	2.103	2.255
Russia	2.782	2.733	1.702	2.620	2.372	2.124
Netherlands	2.415	2.373	2.897	0.979	1.135	1.292
Belgium	2.155	2.117	2.270	0.657	0.740	0.824
India	1.945	1.911	1.287	5.506	4.625	3.725
Switzerland	1.618	1.590	1.485	0.497	0.623	0.749
Australia	1.514	1.488	1.205	1.183	1.306	1.431
Mexico	1.210	1.449	1.841	1.894	1.883	1.875
Spain	1.426	1.401	2.237	1.924	2.093	2.265
Brazil	1.420	1.396	1.069	2.671	2.435	2.198
Korea	0.764	1.346	2.512	1.760	1.779	1.801
Venezuela	1.244	1.222	0.427	0.328	0.332	0.337
Sweden	1.121	1.101	1.172	0.551	0.654	0.759
Argentina	0.990	0.973	0.368	0.974	0.855	0.734
Indonesia	0.973	0.956	0.737	1.711	1.482	1.250
Austria	0.876	0.861	1.129	0.563	0.629	0.696
South Africa	0.874	0.859	0.459	1.067	0.959	0.851
Nigeria	0.820	0.806	0.359	0.365	0.334	0.303
Norway	0.782	0.768	0.860	0.410	0.498	0.585
Denmark	0.769	0.755	1.040	0.399	0.477	0.555
Iran	0.700	0.688	0.435	1.027	0.896	0.763
Malaysia	0.695	0.683	1.374	0.572	0.524	0.475
Kuwait	0.646	0.635	0.355	0.112	0.137	0.162
Ukraine	0.642	0.631	0.301	0.648	0.547	0.443
Poland	0.640	0.629	0.779	0.943	0.897	0.851
Finland	0.591	0.581	0.529	0.351	0.402	0.454
Algeria	0.587	0.577	0.340	0.482	0.433	0.383

Table 3a. Distribution of Quotas, GDP-Blend, and Compression -- By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Turkey	0.451	0.548	0.751	1.046	1.002	0.960
Iraq	0.556	0.546	0.278	0.087	0.087	0.088
Libya	0.526	0.517	0.243	0.155	0.144	0.132
Thailand	0.506	0.497	0.909	1.022	0.895	0.766
Hungary	0.486	0.477	0.489	0.360	0.350	0.340
Pakistan	0.484	0.475	0.196	0.763	0.661	0.557
Romania	0.482	0.474	0.248	0.392	0.359	0.325
Egypt	0.442	0.434	0.253	0.605	0.528	0.450
Israel	0.434	0.427	0.544	0.336	0.349	0.362
New Zealand	0.419	0.411	0.239	0.228	0.248	0.268
Philippines	0.412	0.404	0.473	0.794	0.674	0.551
Portugal	0.406	0.399	0.481	0.435	0.457	0.480
Singapore	0.404	0.396	1.929	0.266	0.284	0.303
Chile	0.401	0.394	0.326	0.397	0.374	0.353
Ireland	0.392	0.385	1.660	0.353	0.402	0.451
Greece	0.385	0.378	0.485	0.508	0.569	0.631
Czech Republic	0.383	0.377	0.585	0.392	0.380	0.369
Colombia	0.362	0.356	0.219	0.665	0.583	0.499
Bulgaria	0.300	0.294	0.125	0.162	0.144	0.126
Peru	0.299	0.293	0.149	0.350	0.322	0.293
United Arab Emirates	0.286	0.281	0.508	0.278	0.294	0.311
Morocco	0.275	0.270	0.165	0.298	0.267	0.235
Bangladesh	0.250	0.245	0.099	0.600	0.505	0.407
Congo, Dem. Republic of	0.249	0.245	0.023	0.109	0.090	0.070
Zambia	0.229	0.225	0.027	0.030	0.028	0.027
Serbia	0.219	0.215	0.085	0.107	0.101	0.096
Sri Lanka	0.193	0.190	0.070	0.192	0.165	0.137
Belarus	0.181	0.178	0.116	0.166	0.148	0.128
Ghana	0.173	0.170	0.042	0.129	0.107	0.085
Kazakhstan	0.171	0.168	0.189	0.263	0.235	0.208
Croatia	0.171	0.168	0.149	0.130	0.128	0.127
Slovak Republic	0.167	0.164	0.247	0.194	0.182	0.170
Zimbabwe	0.165	0.162	0.023	0.084	0.070	0.056
Trinidad and Tobago	0.157	0.154	0.064	0.048	0.048	0.048
Vietnam	0.154	0.151	0.235	0.497	0.416	0.334

Table 3a. Distribution of Quotas, GDP-Blend, and Compression -- By Member 1/ 2/ (continued)

(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Cote d'Ivoire	0.152	0.149	0.060	0.071	0.068	0.065
Sudan	0.147	0.145	0.046	0.186	0.162	0.137
Uruguay	0.143	0.141	0.048	0.082	0.075	0.069
Ecuador	0.141	0.139	0.083	0.134	0.128	0.123
Syrian Arab Republic	0.137	0.135	0.114	0.166	0.208	0.250
Tunisia	0.134	0.132	0.106	0.188	0.167	0.145
Angola	0.134	0.132	0.156	0.098	0.093	0.088
Luxembourg	0.131	0.128	1.369	0.080	0.089	0.099
Uzbekistan	0.129	0.127	0.043	0.120	0.101	0.082
Jamaica	0.128	0.126	0.048	0.033	0.034	0.035
Kenya	0.127	0.125	0.037	0.115	0.103	0.090
Qatar	0.123	0.121	0.136	0.063	0.076	0.090
Myanmar	0.121	0.119	0.031	0.209	0.170	0.130
Yemen, Republic of	0.114	0.112	0.110	0.051	0.051	0.051
Slovenia	0.108	0.107	0.148	0.106	0.108	0.110
Dominican Republic	0.102	0.101	0.090	0.152	0.138	0.123
Brunei Darussalam	0.101	0.099	0.050	0.026	0.026	0.025
Guatemala	0.098	0.097	0.066	0.135	0.127	0.119
Panama	0.097	0.095	0.048	0.060	0.059	0.058
Lebanon	0.095	0.093	0.182	0.064	0.068	0.072
Tanzania	0.093	0.091	0.034	0.067	0.062	0.057
Oman	0.091	0.089	0.145	0.100	0.099	0.098
Cameroon	0.087	0.085	0.032	0.106	0.095	0.084
Uganda	0.084	0.083	0.025	0.103	0.086	0.068
Bolivia	0.080	0.079	0.023	0.066	0.059	0.051
El Salvador	0.080	0.079	0.060	0.079	0.075	0.071
Jordan	0.080	0.078	0.080	0.070	0.064	0.058
Bosnia-Herzegovina	0.079	0.078	0.064	0.060	0.054	0.048
Costa Rica	0.077	0.075	0.078	0.109	0.100	0.091
Islamic Republic of Afghanistan	0.076	0.074	0.041	0.076	0.064	0.051
Senegal	0.076	0.074	0.024	0.053	0.048	0.043
Azerbaijan	0.075	0.074	0.050	0.087	0.075	0.063
Gabon	0.072	0.071	0.041	0.028	0.028	0.029
Georgia	0.070	0.069	0.019	0.041	0.036	0.032
Lithuania	0.067	0.066	0.101	0.114	0.106	0.099

Table 3a. Distribution of Quotas, GDP-Blend, and Compression -- By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Cyprus	0.065	0.064	0.063	0.046	0.050	0.053
Namibia	0.064	0.063	0.023	0.041	0.036	0.032
Bahrain	0.063	0.062	0.142	0.042	0.042	0.043
Ethiopia	0.063	0.061	0.024	0.136	0.112	0.088
Papua New Guinea	0.062	0.060	0.028	0.039	0.034	0.029
Bahamas, The	0.061	0.060	0.027	0.019	0.021	0.022
Nicaragua	0.061	0.060	0.020	0.055	0.046	0.038
Honduras	0.061	0.060	0.038	0.056	0.050	0.044
Liberia	0.060	0.059	0.005	0.003	0.003	0.003
Latvia	0.059	0.058	0.058	0.071	0.067	0.063
Moldova	0.058	0.057	0.018	0.024	0.021	0.018
Madagascar	0.057	0.056	0.015	0.043	0.038	0.033
Iceland	0.055	0.054	0.039	0.029	0.035	0.041
Mozambique	0.053	0.052	0.025	0.067	0.057	0.047
Guinea	0.050	0.049	0.009	0.050	0.042	0.034
Sierra Leone	0.049	0.048	0.004	0.014	0.012	0.010
Malta	0.048	0.047	0.053	0.023	0.023	0.023
Mauritius	0.048	0.047	0.030	0.043	0.039	0.035
Paraguay	0.047	0.046	0.037	0.072	0.062	0.052
Mali	0.044	0.043	0.014	0.039	0.034	0.030
Suriname	0.043	0.042	0.010	0.009	0.008	0.007
Armenia	0.043	0.042	0.013	0.037	0.032	0.027
Guyana	0.043	0.042	0.010	0.011	0.010	0.008
Kyrgyz Republic	0.042	0.041	0.010	0.030	0.025	0.020
Cambodia	0.041	0.040	0.031	0.084	0.070	0.055
Tajikistan	0.041	0.040	0.011	0.024	0.021	0.017
Congo, Republic of	0.040	0.039	0.032	0.014	0.015	0.017
Haiti	0.038	0.038	0.012	0.042	0.036	0.029
Somalia	0.038	0.038	0.002	0.003	0.003	0.003
Rwanda	0.037	0.037	0.006	0.033	0.028	0.022
Burundi	0.036	0.035	0.003	0.016	0.013	0.010
Turkmenistan	0.035	0.035	0.046	0.093	0.084	0.075
Togo	0.034	0.034	0.008	0.027	0.023	0.018
Nepal	0.033	0.033	0.020	0.097	0.081	0.065
Fiji	0.033	0.032	0.011	0.016	0.015	0.014

Table 3a. Distribution of Quotas, GDP-Blend, and Compression -- By Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Malawi	0.032	0.032	0.006	0.022	0.019	0.016
Macedonia, FYR	0.032	0.032	0.027	0.043	0.038	0.033
Barbados	0.032	0.031	0.014	0.015	0.014	0.014
Niger	0.031	0.030	0.007	0.031	0.026	0.022
Estonia	0.031	0.030	0.072	0.056	0.054	0.051
Mauritania	0.030	0.030	0.007	0.020	0.017	0.014
Botswana	0.029	0.029	0.051	0.048	0.044	0.041
Benin	0.029	0.028	0.009	0.025	0.023	0.021
Burkina Faso	0.028	0.028	0.010	0.045	0.039	0.034
Chad	0.026	0.026	0.024	0.035	0.031	0.027
Central African Republic	0.026	0.026	0.003	0.014	0.012	0.010
Lao, People's Dem. Republic	0.025	0.024	0.007	0.034	0.028	0.023
Mongolia	0.024	0.023	0.010	0.016	0.014	0.012
Swaziland	0.024	0.023	0.020	0.017	0.016	0.014
Albania	0.023	0.022	0.027	0.044	0.041	0.037
Lesotho	0.016	0.016	0.011	0.015	0.013	0.011
Equatorial Guinea	0.015	0.015	0.041	0.047	0.041	0.034
Gambia, The	0.015	0.014	0.002	0.009	0.008	0.006
Montenegro	0.013	0.013	0.009	0.009	0.009	0.009
Belize	0.009	0.009	0.006	0.007	0.007	0.006
San Marino	0.008	0.008	0.020	0.006	0.006	0.006
Vanuatu	0.008	0.008	0.003	0.003	0.002	0.002
Djibouti	0.007	0.007	0.003	0.006	0.005	0.005
Eritrea	0.007	0.007	0.008	0.013	0.010	0.008
St. Lucia	0.007	0.007	0.004	0.004	0.004	0.004
Guinea-Bissau	0.007	0.007	0.004	0.004	0.003	0.003
Antigua and Barbuda	0.006	0.006	0.006	0.003	0.004	0.004
Grenada	0.005	0.005	0.003	0.003	0.003	0.003
Samoa	0.005	0.005	0.002	0.004	0.004	0.003
Solomon Islands	0.005	0.005	0.003	0.003	0.003	0.003
Cape Verde	0.004	0.004	0.004	0.010	0.008	0.007
Comoros	0.004	0.004	0.001	0.004	0.004	0.003
St. Kitts and Nevis	0.004	0.004	0.002	0.002	0.002	0.002
Seychelles	0.004	0.004	0.005	0.004	0.004	0.004
St. Vincent and the Grenadines	0.004	0.004	0.002	0.003	0.003	0.003

Table 3a. Distribution of Quotas, GDP-Blend, and Compression -- By Member 1/ 2/ (concluded)

(In percent)

	Actual Quotas 3/			Linear Formula with GDP-Blends 5/		
	Pre First Round Increases	Post First Round Increases 4/	Existing Five Formulas	100(0/100) 6/ K = 0.90 7/	100(25/75) 8/ K = 0.90 7/	100(50/50) 9/ K = 0.90 7/
Dominica	0.004	0.004	0.002	0.002	0.002	0.002
Maldives	0.004	0.004	0.005	0.008	0.007	0.006
Timor-Leste	0.004	0.004	0.007	0.003	0.003	0.003
Sao Tome and Principe	0.003	0.003	0.000	0.001	0.001	0.001
Tonga	0.003	0.003	0.001	0.003	0.003	0.002
Bhutan	0.003	0.003	0.004	0.009	0.008	0.007
Kiribati	0.003	0.003	0.003	0.001	0.001	0.001
Micronesia, Fed. States of	0.002	0.002	0.002	0.001	0.001	0.001
Marshall Islands	0.002	0.002	0.001	0.001	0.001	0.001
Palau, Republic of	0.001	0.001	0.001	0.001	0.001	0.001

Source: Finance Department.

1/ Calculated as the sum of variable weights multiplied with a country's share in the global total of the respective variables.
2/ Based on 1993–2005 data.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used. Also includes Montenegro, which became a member on January 18, 2007 (pre-Singapore shares have been adjusted accordingly).
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey.
5/ A GDP blend (x/y) is defined as x percent of GDP weighted at market exchange rates and y percent weighted at PPP-exchange rates. PPP data were retrieved from the WEO database for 176 countries. For nine countries with no WEO data, PPP GDP was estimated based on the countries' share in global GDP at market rates.
6/ 0.0 * GDP + 1.0 * PPP GDP
7/ The compression (K) raises the quota formula to the power of K.
8/ 0.25 * GDP + 0.75 * PPP GDP
9/ 0.50 * GDP + 0.50 * PPP GDP
10/ Includes China, P.R., and Hong Kong SAR.

Table 4. Distribution of Quotas and Calculated Quotas 1/ 2/
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Advanced economies	60.5	65.6	67.7
Major advanced economies	45.2	45.9	50.2
Of which: US	17.1	16.3	19.0
Other advanced economies	15.3	19.7	17.5
Developing countries	32.1	28.6	26.8
Africa	5.4	2.4	2.3
Asia 7/	11.5	16.2	14.9
Middle East, Malta & Turkey	7.6	4.8	4.2
Western Hemisphere	7.6	5.2	5.5
Transition economies	7.4	5.7	5.4
Total	100.0	100.0	100.0
Memorandum Item:			
EU 27	32.4	37.8	36.0
LICs 8/	7.4	3.6	3.5

Source: Finance Department.

1/ Based on data through 2005 as provided in *Quotas—Updated Calculations and Data Adjustments* (2007).
2/ Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used.
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey; also includes Montenegro, which became a member on January 18, 2007.
5/ Based on 1993-2005 data and computed as traditionally specified.
6/ Calculations are based on a linear formula using the following coefficients: 0.298*GDP + 0.498*Openness + 0.131*Variability + 0.073*Reserves. The coefficients are the estimated contributions of variables to calculated quota using the existing five formulas.
7/ Including Korea and Singapore.
8/ PRGF-eligible countries.

Table 4a. Distribution of Quotas and Calculated Quotas—By Member 1/ 2/
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
United States	17.076	16.284	18.965
Japan	6.119	7.011	8.449
Germany	5.979	6.850	7.158
France	4.936	4.129	4.338
United Kingdom	4.936	5.240	5.048
China 7/	3.719	6.137	6.215
Italy	3.243	3.317	3.512
Saudi Arabia	3.211	1.030	0.781
Canada	2.928	3.065	2.776
Russia	2.733	1.702	1.753
Netherlands	2.373	2.897	2.337
Belgium	2.117	2.270	1.811
India	1.911	1.287	1.415
Switzerland	1.590	1.485	1.400
Australia	1.488	1.205	1.252
Mexico	1.449	1.841	1.882
Spain	1.401	2.237	2.347
Brazil	1.396	1.069	1.273
Korea	1.346	2.512	2.375
Venezuela	1.222	0.427	0.358
Sweden	1.101	1.172	1.096
Argentina	0.973	0.368	0.456
Indonesia	0.956	0.737	0.730
Austria	0.861	1.129	1.024
South Africa	0.859	0.459	0.492
Nigeria	0.806	0.359	0.283
Norway	0.768	0.860	0.852
Denmark	0.755	1.040	0.929
Iran	0.688	0.435	0.408
Malaysia	0.683	1.374	0.947
Kuwait	0.635	0.355	0.236
Ukraine	0.631	0.301	0.267
Poland	0.629	0.779	0.790
Finland	0.581	0.529	0.561
Algeria	0.577	0.340	0.329

Table 4a. Distribution of Quotas and Calculated Quotas -- by Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Turkey	0.548	0.751	0.874
Iraq	0.546	0.278	0.207
Libya	0.517	0.243	0.205
Thailand	0.497	0.909	0.811
Hungary	0.477	0.489	0.439
Pakistan	0.475	0.196	0.235
Romania	0.474	0.248	0.250
Egypt	0.434	0.253	0.268
Israel	0.427	0.544	0.479
New Zealand	0.411	0.239	0.247
Philippines	0.404	0.473	0.422
Portugal	0.399	0.481	0.479
Singapore	0.396	1.929	1.200
Chile	0.394	0.326	0.304
Ireland	0.385	1.660	1.322
Greece	0.378	0.485	0.559
Czech Republic	0.377	0.585	0.517
Colombia	0.356	0.219	0.238
Bulgaria	0.294	0.125	0.117
Peru	0.293	0.149	0.177
United Arab Emirates	0.281	0.508	0.392
Morocco	0.270	0.165	0.167
Bangladesh	0.245	0.099	0.109
Congo, Dem. Republic of	0.245	0.023	0.020
Zambia	0.225	0.027	0.025
Serbia	0.215	0.085	0.079
Sri Lanka	0.190	0.070	0.067
Belarus	0.178	0.116	0.095
Ghana	0.170	0.042	0.039
Kazakhstan	0.168	0.189	0.161
Croatia	0.168	0.149	0.144
Slovak Republic	0.164	0.247	0.205
Zimbabwe	0.162	0.023	0.018
Trinidad and Tobago	0.154	0.064	0.052
Vietnam	0.151	0.235	0.192

Table 4a. Distribution of Quotas and Calculated Quotas—by Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Cote d'Ivoire	0.149	0.060	0.051
Sudan	0.145	0.046	0.048
Uruguay	0.141	0.048	0.055
Ecuador	0.139	0.083	0.116
Syrian Arab Republic	0.135	0.114	0.130
Tunisia	0.132	0.106	0.100
Angola	0.132	0.156	0.111
Luxembourg	0.128	1.369	0.685
Uzbekistan	0.127	0.043	0.043
Jamaica	0.126	0.048	0.047
Kenya	0.125	0.037	0.043
Qatar	0.121	0.136	0.119
Myanmar	0.119	0.031	0.031
Yemen, Republic of	0.112	0.110	0.085
Slovenia	0.107	0.148	0.130
Dominican Republic	0.101	0.090	0.087
Brunei Darussalam	0.099	0.050	0.034
Guatemala	0.097	0.066	0.071
Panama	0.095	0.048	0.052
Lebanon	0.093	0.182	0.146
Tanzania	0.091	0.034	0.030
Oman	0.089	0.145	0.106
Cameroon	0.085	0.032	0.044
Uganda	0.083	0.025	0.023
Bolivia	0.079	0.023	0.025
El Salvador	0.079	0.060	0.055
Jordan	0.078	0.080	0.069
Bosnia-Herzegovina	0.078	0.064	0.048
Costa Rica	0.075	0.078	0.071
Islamic Republic of Afghanistan	0.074	0.041	0.029
Senegal	0.074	0.024	0.023
Azerbaijan	0.074	0.050	0.038
Gabon	0.071	0.041	0.029
Georgia	0.069	0.019	0.018
Lithuania	0.066	0.101	0.087

Table 4a. Distribution of Quotas and Calculated Quotas—by Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Cyprus	0.064	0.063	0.064
Namibia	0.063	0.023	0.018
Bahrain	0.062	0.142	0.093
Ethiopia	0.061	0.024	0.028
Papua New Guinea	0.060	0.028	0.021
Bahamas, The	0.060	0.027	0.022
Nicaragua	0.060	0.020	0.020
Honduras	0.060	0.038	0.034
Liberia	0.059	0.005	0.006
Latvia	0.058	0.058	0.052
Moldova	0.057	0.018	0.014
Madagascar	0.056	0.015	0.016
Iceland	0.054	0.039	0.040
Mozambique	0.052	0.025	0.021
Guinea	0.049	0.009	0.009
Sierra Leone	0.048	0.004	0.004
Malta	0.047	0.053	0.038
Mauritius	0.047	0.030	0.027
Paraguay	0.046	0.037	0.031
Mali	0.043	0.014	0.015
Suriname	0.042	0.010	0.007
Armenia	0.042	0.013	0.013
Guyana	0.042	0.010	0.006
Kyrgyz Republic	0.041	0.010	0.009
Cambodia	0.040	0.031	0.025
Tajikistan	0.040	0.011	0.010
Congo, Republic of	0.039	0.032	0.024
Haiti	0.038	0.012	0.013
Somalia	0.038	0.002	0.001
Rwanda	0.037	0.006	0.007
Burundi	0.035	0.003	0.002
Turkmenistan	0.035	0.046	0.047
Togo	0.034	0.008	0.008
Nepal	0.033	0.020	0.022
Fiji	0.032	0.011	0.009

Table 4a. Distribution of Quotas and Calculated Quotas—by Member 1/ 2/ (continued)
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Malawi	0.032	0.006	0.006
Macedonia, FYR	0.032	0.027	0.023
Barbados	0.031	0.014	0.014
Niger	0.030	0.007	0.007
Estonia	0.030	0.072	0.057
Mauritania	0.030	0.007	0.006
Botswana	0.029	0.051	0.046
Benin	0.028	0.009	0.009
Burkina Faso	0.028	0.010	0.011
Chad	0.026	0.024	0.023
Central African Republic	0.026	0.003	0.004
Lao, People's Dem. Republic	0.024	0.007	0.007
Mongolia	0.023	0.010	0.009
Swaziland	0.023	0.020	0.015
Albania	0.022	0.027	0.023
Lesotho	0.016	0.011	0.009
Equatorial Guinea	0.015	0.041	0.032
Gambia, The	0.014	0.002	0.002
Montenegro	0.013	0.009	0.007
Belize	0.009	0.006	0.005
San Marino	0.008	0.020	0.012
Vanuatu	0.008	0.003	0.002
Djibouti	0.007	0.003	0.004
Eritrea	0.007	0.008	0.006
St. Lucia	0.007	0.004	0.003
Guinea-Bissau	0.007	0.004	0.002
Antigua and Barbuda	0.006	0.006	0.004
Grenada	0.005	0.003	0.002
Samoa	0.005	0.002	0.002
Solomon Islands	0.005	0.003	0.002
Cape Verde	0.004	0.004	0.004
Comoros	0.004	0.001	0.001
St. Kitts and Nevis	0.004	0.002	0.002
Seychelles	0.004	0.005	0.005
St. Vincent and the Grenadines	0.004	0.002	0.002

Table 4a. Distribution of Quotas and Calculated Quotas—by Member 1/ 2/ (concluded)
(In percent)

	Actual Quotas 3/ 4/	Existing Five Formulas 5/	Linear Formula (30/50/13/7) 6/
Dominica	0.004	0.002	0.002
Maldives	0.004	0.005	0.004
Timor-Leste	0.004	0.007	0.004
Sao Tome and Principe	0.003	0.000	0.000
Tonga	0.003	0.001	0.001
Bhutan	0.003	0.004	0.004
Kiribati	0.003	0.003	0.001
Micronesia, Fed. States of	0.002	0.002	0.002
Marshall Islands	0.002	0.001	0.001
Palau, Republic of	0.001	0.001	0.001

Source: Finance Department.

1/ Based on data through 2005 as provided in *Quotas—Updated Calculations and Data Adjustments* (2007).
2/ Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.
3/ For the three countries that have not yet consented to, and paid for, their quota increases, 11th Review proposed quotas are used.
4/ Includes ad hoc increases for China, P.R., Korea, Mexico, and Turkey; also includes Montenegro, which became a member on January 18, 2007.
5/ Based on 1993-2005 data and computed as traditionally specified.
6/ Calculations are based on a linear formula using the following coefficients: 0.298*GDP + 0.498*Openness + 0.131*Variability + 0.073*Reserves. The coefficients are the estimated contributions of variables to calculated quota using the existing five formulas.
7/ Includes China, P.R., and Hong Kong SAR.

July 24, 2007

Statement by the Managing Director on
Quota and Voice Reform—Stocktaking and Further Considerations
Executive Board Meeting 07/65
July 25, 2007

1. We have reached a critical stage in the quota and voice reform process. Substantial progress in the coming months will be crucial both to maintain the momentum on reforms, and to meet the timetable set in Singapore. Let me emphasize that I continue to see quota and voice reform as essential for the future effectiveness of the Fund, and that I attach the highest priority to making as much progress as possible with this reform during the remainder of my time as Managing Director. Indeed, I believe it is very important for the Executive Board to be able to report concrete and substantial progress on the reform package to the Board of Governors at the 2007 Annual Meetings.

2. The two informal discussions we have had on the new quota formula have been useful in identifying the main issues and clarifying some broad areas of agreement. But these discussions have also highlighted significant differences of view across the membership on important issues. I would stress that we need now to begin to resolve these differences if we are to make the necessary progress on the reform package. This will require flexibility and compromise from all, and I would urge Directors not to rule out options prematurely. I also believe that the marginal benefit from additional technical work at this stage is likely to be relatively small, and we should now focus on the main choices before us.

3. The staff paper on reforms prepared for this meeting seeks to take stock of the discussions to date and presents a range of simulations for a new formula based on the updated database through 2005. The paper also includes an initial and very preliminary discussion of some broader issues that will need to be considered, including the size of second round ad hoc increase and the way in which it will be allocated. Preliminary consideration of these broader elements may help to clarify the near-term implications of different formulas, and also facilitate the formulation of preliminary views on the possible shape of the overall package. To this end, the paper includes a range of simulations intended to illustrate the effects of different options for the second round quota increases.

4. I also want to emphasize, as the paper clearly states, that these simulations are not proposals. They are intended to be purely illustrative and as an aid to advance the discussions. Given the differences that remain, it would be premature for staff or management to put a proposal or even a range of proposals on the table at this stage. This said, we are rapidly approaching the point where this will be needed. My intention, after listening carefully to Directors' views on the latest staff papers, is to explore the scope for

making specific proposals for the next discussion. To this end, I would ask that, in addition to commenting on the specific issues listed for discussion in the paper, Directors give their views on how they see the desirable overall outcome of this reform aimed at enhancing the Fund's credibility and effectiveness.

5. I also want to emphasize that strengthening the voice and representation of low income countries remains a key objective of the reform. The increase in basic votes, and the mechanism for preserving their share in total voting power, continue to be an integral part of the reform package. I also envisage coming back to the Board in the near future to consider an amendment to the Articles that would enable each Executive Director elected by a large number of member countries to appoint more than one Alternate Executive Director.

6. I look forward to a constructive Board discussion that can prepare the ground for making concrete progress in the period ahead.

August 16, 2007

The Chairman's Summing Up
Quota and Voice Reform—Stocktaking and Further Considerations
Executive Board Meeting 07/65
July 25, 2007

Directors welcomed the opportunity to continue their discussions on the new quota formula, building on the two earlier informal Board seminars on this topic. Directors stressed the importance of fundamental reform of quotas and voice for the Fund's continued effectiveness and credibility, and several underlined the desirability of achieving this through broad consensus. Directors also highlighted the need to make significant progress in the coming months in order to maintain the momentum of reform and meet the timetable set by the Board of Governors in Singapore in Resolution 61-5. In this regard, most Directors considered it important for the Executive Board to be able to report concrete and substantial progress on the reform package to the Board of Governors at the 2007 Annual Meetings, and Directors stressed that achieving this goal will require a continued spirit of flexibility, pragmatism, and compromise on all sides. Directors recalled that the IMFC had urged the Executive Board to work constructively and expeditiously on all elements of the reforms so as to garner the broadest possible support.

Today's discussion covered several key issues that will need to be agreed as part of the second round reforms. Beyond reviewing the possible elements of the new quota formula, Directors had an initial and very preliminary discussion of the broader issues surrounding the second round ad hoc quota increases. Most Directors welcomed the opportunity to discuss these broader issues, which highlight the inter-linkages between a new quota formula and the second round adjustments. Directors also recalled the importance of, and looked forward to considering, other aspects of strengthening voice—including the size of the increase in basic votes.

New Quota Formula

Directors affirmed that the new quota formula should be simple and transparent, be consistent with the multiple roles of quotas, result in calculated quota shares that are broadly acceptable, and be feasible to implement statistically. They agreed that, consistent with the goals of simplicity and transparency, the variables in the new formula should be expressed in terms of shares in global totals rather than nominal levels as in the existing quota formulas. Most Directors considered that the quota variables should be limited to updated and

modernized versions of the four variables included in the existing quota formulas—namely, GDP, openness, variability, and reserves—although significant differences remain.

Directors generally agreed that GDP should be the most important variable in the new formula. Most Directors agreed that it should be based on a three-year average in order to capture the latest developments while reducing potential distortions from short-term volatility. Views continued to differ over whether GDP should be converted at market exchange rates or PPP, with many Directors favoring exclusive use of market exchange rates in the quota formula, and many others favoring a role for PPP-GDP, including as part of a blended GDP variable.

Most Directors considered that openness should have a role in the new quota formula. Many Directors expressed concern about potential distortions associated with its measurement on a gross basis and believed that intra-currency union flows should be excluded. For these Directors, such considerations argued for moderation in the weight applied to openness. A number of other Directors, however, did not support the exclusion of intra-currency union flows. Moreover, these Directors favored a large weight for openness. With regard to financial openness, a number of Directors considered that the existing measure should be broadened to explicitly include this aspect. However, many other Directors considered that data limitations continue to argue against the inclusion of financial openness, and also expressed concern that such a measure would be heavily weighted in favor of the advanced countries.

Directors generally supported a continued role for variability. Views regarding its weight continued to diverge, with a number of Directors arguing that it should have a significantly lower weight than openness, but a number of others supported a larger weight to ensure that the quota formula adequately captures the concept of potential need. In addition, Directors generally concurred with the staff that any measure of variability should relate to the size of potential need and be consistent with the right of all members to draw on the Fund in case of balance of payments need, while noting that this would tend to limit the scope for modifications that would result in major changes in global shares of this measure. While many Directors saw scope for further staff work to develop a better measure of variability, many other Directors believed that the current measure of variability in current receipts and net capital flows should be retained.

Many Directors continued to see a role for reserves as a relevant indicator of members' financial strength and ability to contribute to the Fund's finances, with a number supporting a higher share than that presented in the staff paper. A number of other Directors argued that the relevance of this indicator has declined over time and raised concerns about potential distortions associated with excess reserve accumulation. These Directors suggested that, if a reserves variable is to be retained in the new formula, it should be given a low weight.

Directors took note of the illustrative simulations of a new quota formula presented in the staff paper based on the updated quota database through 2005. They observed that the results of these simulations do not change the broad conclusions of previous simulations based on data through 2004. In particular, the variants presented in the paper of a simple linear formula with GDP converted at market exchange rates tended to increase the aggregate calculated quota share of advanced countries relative to those using the existing quota formulas, and to reduce that of developing and transition economies. Directors also noted that these effects were moderated somewhat in the scenarios that employed either a GDP blend (with a minority weight on PPP) or a modest element of compression. A higher degree of compression, a greater weight on PPP in a GDP blend, or a combination of a GDP blend and compression would result in increased shares for developing countries. In this connection, most Directors continued to favor use of a compression factor as a means of moderating the effects of the high correlation of size-related variables that tends to favor large economies, while a few other Directors noted that compression would reduce transparency and would not bring about the desired realignment of quota shares. A few Directors suggested that some of these effects could also be achieved by moderating somewhat the weight of GDP assumed in the scenarios.

Second Round Ad Hoc Increases

Directors expressed preliminary views on the key parameters of the second round ad hoc quota increases. They recalled that Resolution 61-5 indicated that the second round should aim to achieve a significant further alignment of members' quotas with their relative positions in the world economy, based on the new quota formula. In this regard, several Directors observed that the results of illustrative simulations presented in the staff paper indicated a relatively modest change in aggregate voting shares away from advanced countries and towards developing and transition economies as a whole, and argued that a larger shift will be needed to achieve the goals of the reform. Other Directors cautioned against focusing unduly on aggregate movements in group shares, since the simulations imply significant increases for individual countries that are eligible for ad hoc increases in the second round.

Directors noted that the staff paper includes, for illustrative purposes, simulations of second round quota increases of 5.6–10.5 percent. Initial views on the size of the second round were mixed. A number of Directors favored a limited increase—perhaps of the order of 5–7 percent—in light of the Fund's comfortable liquidity situation. Noting that liquidity should not be a constraint in this context, many other Directors favored a larger increase, with some calling for consideration of an increase beyond the upper end of the range in the staff scenarios. More generally, many Directors stressed that the increase should be sufficiently large to allow for meaningful adjustments in underrepresented country shares. Looking beyond the second round of ad hoc increases, a number of Directors urged exploration of the scope for periodic and automatic adjustments in quota shares to reflect changing relative economic positions in the future. Several other Directors, however, did not

consider such automatic adjustments to be realistic, particularly considering that no change can be made to the quota of a member without its consent.

On the allocation of the second round increases, Directors noted that a new quota formula should be key to identifying under-represented countries when considering eligibility for ad hoc increases, with some Directors emphasizing that all under-represented countries should be eligible. However, many Directors observed that this could imply a relatively long list of countries, and suggested that alternative approaches should be considered, possibly involving the use of an additional filter. The illustration in the staff paper was aimed at selecting the most dynamic countries for inclusion in a second round increase, based on members' contributions to PPP-weighted real global growth—but it was recognized that this was only one possible approach. Some Directors were willing, in a spirit of compromise, to consider a PPP-weighted filter but noted their continuing preference for including PPP-GDP in the quota formula. A number of Directors, however, were concerned about the use of a filter that would exclude smaller underrepresented members, noting that size should not be a criterion for determining which countries should benefit from the second round, as it might be seen as arbitrary. Some of the Directors supporting the use of a filter were open to considering its use also to modestly expand the list of eligible countries to capture very dynamic but overrepresented countries, although others argued that the second round increases should focus exclusively on members that are currently underrepresented. Based on this discussion, Directors generally felt that the issue of the usefulness of a filter in some form deserves further reflection.

On the allocation mechanism, several Directors favored use of an approach similar to that adopted in the first round, whereby increases for individual members are determined such that each member's out-of-lineness (as measured by the gap between calculated and actual quota share) is reduced by the same proportion. Other Directors considered that a uniform proportionate reduction would not achieve a sufficient realignment of quota shares, and called for consideration of alternative approaches, such as limiting second round increases to members whose quotas are most out of line, targeting a larger proportional reduction in out-of-lineness to such members, or reducing out-of-lineness to some maximum threshold. Directors also generally agreed that, to ensure even-handed treatment across members when determining the second round increases, calculated quota shares under a new formula should be compared with pre-Singapore actual quota shares for all members, thereby taking into account the increases for the four members already agreed in Singapore when considering a broader list of ad hoc increases in the second round. A few Directors, however, argued that such an approach may overly restrict the second round increases for these four countries, and noted that at a minimum they should not lose quota share in the second round.

It was noted that the willingness of advanced economies that may be eligible for second round increases to forego part or all of those increases can have a significant impact on the overall adjustment in quota shares that is possible for any given aggregate second round increase. In this connection, two advanced countries reiterated their willingness to

forego any increase beyond the level needed to restore their pre-Singapore voting shares, and called on other advanced countries to consider a similar approach.

Voice

Directors reaffirmed that the increase in basic votes is an integral part of the quota and voice reform and noted that the scale of the increase in basic votes will need to be considered along with that of the second round increase. In this context, they recalled the commitments in Resolution 61-5 to preserve the voting power of low-income countries through at least a doubling of basic votes. A number of Directors supported at least a trebling of basic votes. Although the focus of the staff paper and the discussion was on the quota formula, several Directors reiterated their willingness to support the option in Resolution 61-5, of an amendment of the Articles to enable each Executive Director elected by a large number of member countries to appoint more than one Alternate Executive Director. A few Directors renewed their call for consideration of a system of double majority voting.

Data Adjustments

Directors welcomed the opportunity to revisit the issue of adjustments made to the database for re-exports, international banking interest, and non-monetary gold for the purpose of quota calculations. They noted that the original rationale for such adjustments arose from the important role played by openness, which is measured on a gross basis, in determining members' calculated quota shares under the existing quota formulas, and that their practical application required a significant element of judgment. It was noted that the conceptual case for making such adjustments may have diminished over time. In addition, in practice, the adjustments may involve a degree of arbitrariness when robust data are available for this purpose or even when they are not. Given these considerations, a few Directors considered that these adjustments could be discontinued. However, other Directors agreed on balance that it would be appropriate to continue adjustments for quota calculations at this stage, given that this would be consistent with past practice—including in the adjustments made in the database used for the first round of the current reform—and that, even with a linear formula, the effects of such adjustments could still be significant at an individual country level. It was agreed, however, that the continued need for data adjustments should be kept under close review in the future.

Next Steps

To conclude, today's discussion has provided important guidance in terms of Directors' views on a number of key issues that will need to be agreed as part of the next steps in the quota and voice reform. The discussion has covered a wide range of issues, and highlighted both broad areas of agreement as well as significant remaining differences of view. In line with the timetable set out in Singapore, it will be important to use the period before the Annual Meetings to begin to resolve the remaining areas of difference and focus

on the main choices before us. In this connection, we should be mindful of the guidance provided by the IMFC on the need for a new formula that is simple and transparent and captures members' relative positions in the world economy, and that the reform should result in higher shares for dynamic economies, many of which are emerging market economies, whose weight and role in the global economy have increased. Given the limited time remaining before the 2007 Annual Meetings, staff and management will give priority to considering how the views expressed and guidance provided by Directors so far can be built upon to identify more concretely the scope for specific proposals to be put before the Board for a further discussion following the recess.