IMF Publication

Fifteenth General Review of Quotas-Quota Formula and Realignment Shares

---

INTERNATIONAL MONETARY FUND

IMF POLICY PAPER

FIFTEENTH GENERAL REVIEW OF QUOTAS—QUOTA FORMULA AND REALIGNING SHARES

March 2021

IMF staff regularly produces papers proposing new IMF policies, exploring options for reform, or reviewing existing IMF policies and operations. The following documents have been released and are included in this package:

- The **Main Paper**, prepared by IMF staff and completed on August 2, 2017 for the Committee of the Whole's consideration on September 1, 2017.
- The **Annexes** (Supplement 1), prepared by IMF staff and completed on August 2, 2017.
- The **Statistical Appendix** (Supplement 2), prepared by IMF staff and completed on August 2, 2017.
- The **Chairman's Concluding Remarks**, which reflect the Chairman's understanding of the views expressed during the September 1, 2017 meeting of the Committee of the Whole.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

Electronic copies of IMF Policy Papers
are available to the public from
<http://www.imf.org/external/pp/ppindex.aspx>

International Monetary Fund
Washington, D.C.

August 2, 2017

FIFTEENTH GENERAL REVIEW OF QUOTAS—QUOTA FORMULA AND REALIGNING SHARES

EXECUTIVE SUMMARY

This paper provides background for an initial discussion under the Fifteenth General Review of Quotas (15th Review) in line with the work plan agreed by the Executive Board. It discusses issues related to further reforms of the quota formula and realigning quota shares, based on updated quota data through 2015. A companion paper, to be discussed separately, will address issues related to the size of the Fund and mix of quota and borrowed resources. Both these papers seek to facilitate initial discussions on some of the key issues for the 15th Review. No proposals are made at this stage, recognizing that further deliberations will be needed before the issues under discussion can begin to be narrowed down.

The paper takes stock of discussions on the quota formula to date, including the significant divergences that remain on many key issues. It presents illustrative simulations of possible reforms of the formula, building on previous work as well as technical staff analysis of the types of reforms that might be needed to bridge differences if a consensus were to emerge somewhere near the middle of the range implied by current positions.

The paper also discusses the broader issue of realigning quota shares under the 15th Review, and presents a limited set of simulations to illustrate the potential impact that different quota formulas may have on the distribution of actual quota shares. All these simulations protect the quota shares of the poorest members, and one set of simulations illustrates the potential impact of including an ad hoc increase based on members' voluntary financial contributions.

Approved By
Andrew Tweedie

Prepared by the Finance Department in collaboration with the Statistics Department. The FIN team comprised H. Hatanpaa (lead), M. Albino-War, R. Bhattacharya, H. Chociay, N.-J. Hansen, E. Ozturk, J. Jatene, and S. Rodriguez-Apolinar under the guidance of T. Krueger.

CONTENTS

I. INTRODUCTION	4
II. QUOTA FORMULA: TAKING STOCK	5
III. DATA UPDATE AND ILLUSTRATIVE SIMULATIONS	10
IV. REALIGNING QUOTA SHARES	18
V. ISSUES FOR DISCUSSION	27
BOXES	
1. The Quota Formula	9
2. Staff Work Since the QFR	9
FIGURES	
1. Evolution of CQS 2005-2015	11
2. Allocation of Quota Increases in Recent General Reviews	19
TABLES	
1. Illustrative Calculations: Summary	13
2. Parameters for Alternative Formulas—Midpoint Approach	16
3. Illustrative Calculations—Formulas Based on Midpoint Approach	17
4. Methods of Allocation of Quota Increases	18
5. Illustration of Allocation Mechanisms: Summary	22
6. Illustration of Allocation Mechanisms: Current Formula	23
7. Illustration of Allocation Mechanisms: Formula 1.2	24
8. Illustration of Allocation Mechanisms: Midpoint Approach: Set C	25
9. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution based on Voluntary Financial Contributions	26
ANNEX	
I. Updated Quota Database	28

Acronyms

AEs	Advanced Economies
AQS	Actual Quota Share
CQS	Calculated Quota Share
EMDCs	Emerging Market and Developing Countries
ICP	International Comparison Program
IDA	International Development Association
LDCs	Least Developed Countries
LICs	Low Income Countries
LIDCs	Low Income Developing Countries
OOL	Out-of-lineness
PP	Percentage Points
PPP	Purchasing Power Parity
PRGT	Poverty Reduction and Growth Trust
QFR	Quota Formula Review (2013)
VFCS	Voluntary Financial Contributions

I. INTRODUCTION

1. The Board of Governors has called on the Executive Board to work expeditiously on the Fifteenth General Review of Quotas (hereafter the 15th Review) in line with existing Executive Board understandings and guidance provided by the International Monetary and Financial Committee (IMFC) on October 8, 2016.¹ As set out in the Board of Governors' Resolution, this work should be completed by the Spring Meetings of 2019, and no later than the Annual Meetings of 2019. At its October 8 meeting, the IMFC reaffirmed its commitment to a strong, quota-based, and adequately resourced IMF to preserve its role at the center of the global financial safety net. The IMFC further stated that it was committed to concluding the 15th Review and agreeing on a new quota formula as a basis for a realignment of quota shares to result in increased shares for dynamic economies in line with their relative positions in the world economy and hence likely in the share of emerging market and developing countries (EMDCs) as a whole, while protecting the voice and representation of the poorest members.²

2. This paper is intended as background for an initial discussion under the 15th Review in line with the work plan agreed by the Executive Board.^{3,4} It discusses issues related to further reforms of the quota formula and realigning quota shares, based on updated quota data through 2015. A second paper, also to be discussed in September, will address issues related to the size of the Fund and the mix of quota and borrowed resources.⁵ Both these papers seek to facilitate initial discussions on some of the key issues for the 15th Review. No proposals are made at this stage, recognizing that further deliberations will be needed before the issues under discussion can begin to be narrowed down.

3. The work plan recognizes that a consensus on the key issues for the 15th Review (size and distribution of quotas and new quota formula) will need to be achieved as a package. Executive Directors held extensive discussions on the quota formula as part of the Quota Formula Review (QFR) completed in January 2013, and concluded that achieving broad consensus on a new quota formula will best be done in the context of the 15th Review rather than on a stand-alone basis.⁶ While Directors have since revisited issues related to the formula and the results of further

¹ Board of Governors Resolution No. 72-1, adopted on December 5, 2016.

² [Communiqué of the Thirty-Fourth Meeting of the IMFC](#), October 8, 2016, Washington, D.C. In their declaration at the end of the Hamburg Summit on July 7-8 2017, G20 Leaders looked forward to the completion of the 15th Review, including a new quota formula, by the Spring Meetings 2019 and no later than the Annual Meetings 2019.

³ The work plan was set out in Attachment I of [Fifteenth General Review of Quotas—Report of the Executive Board to the Board of Governors](#) (11/2/16).

⁴ The discussion of this paper will take place in a Committee of the Whole format. Under Rule D-3 of the Fund's Rules and Regulations, work on a general review of quotas is to be carried out in the first instance in a Committee of the Whole appointed for this purpose by the Executive Board at least one year prior to the date by which a general review of quotas must be undertaken or promptly if it is decided to conduct a general review before the date by which such a review must be undertaken. The Committee of the Whole for the 15th Review was established on January 30, 2013.

⁵ [Adequacy of Fund Resources—Further Considerations](#) (7/31/2017).

⁶ [Outcome of the Quota Formula Review—Report of the Executive Board to the Board of Governors](#) (1/31/13).

staff work in the context of the annual quota data updates, these discussions in general have not led to any further narrowing of views. The discussion of this paper and the companion paper on *Adequacy of Fund Resources—Further Considerations* will be the first opportunities for the Board to discuss the key issues for the 15th Review since the adoption of the above Board of Governors' Resolution. Experience suggests that achieving broad consensus on these issues will be challenging, and will require a spirit of compromise with the goal of ensuring that the Fund's resources remain adequate and that its governance structure continues to evolve in line with changing global economic realities, thereby helping to preserve international monetary stability.

4. The paper is organized as follows. Section II takes stock of discussions on the quota formula to date, including the significant divergences that remain on many key issues. Section III presents illustrative simulations of possible reforms of the formula, building on previous work as well as technical staff analysis of the types of reforms that might be needed to bridge differences if a consensus were to emerge somewhere near the middle of the range implied by current positions. Section IV discusses the broader issue of realigning quota shares under the 15th Review, and presents a limited set of simulations to illustrate the potential impact that different quota formulas may have on the distribution of actual quota shares. The analysis in this paper is based on the latest quota data through 2015, and the impact of the data update is discussed in more detail in the Annex to this paper. Staff has also prepared additional technical background work in a set of Annexes included as Supplement 1. In preparing this paper, staff has benefitted from outreach with Executive Directors' offices earlier this year, and from Directors' comments at a technical briefing of the Board held on May 30, 2017.

II. QUOTA FORMULA: TAKING STOCK

5. The quota formula has traditionally served as a guide for changes in the structure of quotas, rather than a mechanical rule. The Fund has broad discretion to decide the considerations that should guide decisions on quotas. In practice, the formula provides an important indicator and, since the 8th Review, a significant part of overall quota increases has been distributed based on the formula. However, history provides many examples where other relevant considerations (outside the formula) have been taken into account when deciding on adjustments in members' quotas, which require broad support of the membership (85 percent of the total voting power). Experience also suggests that the formula is more likely to be used in circumstances where it is widely recognized as providing a reasonable measure of members' relative economic positions.

6. Directors have underscored that the formula should conform to certain principles. It should (i) be simple and transparent, so that the basis for differences in relative quota shares is readily understandable, (ii) be consistent with the multiple roles of quotas,⁷ (iii) produce results that are broadly acceptable to the membership, and (iv) be feasible to implement statistically based on timely, high quality and widely available data. These four principles helped guide the Executive

⁷ These include their key role in determining the Fund's financial resources, their role in decisions on members' access to Fund resources, and their close link with members' voting rights. Quota shares also determine members' shares in general allocations of SDRs.

Board's deliberations on the new formula in 2008, and the Board agreed in the context of the QFR that they remain valid. As noted below, however, it is not clear based on recent discussions that the current formula still meets all these principles.

7. The current quota formula was agreed as part of a package of quota and voice reforms in 2008 (2008 Reform). This was the first change in the quota formula since 1982/83 and was viewed as a major improvement over the previous five formula system.⁸ The new formula included four variables expressed in shares, and was substantially simpler and more transparent than the previous multi-formula approach. It also included a compression factor to reduce the dispersion of calculated quota shares (Box 1). Some of the variables were also updated and modernized from those used in the previous formulas, and the practice of making ad hoc adjustments to the quota data was discontinued. While many members had reservations about aspects of the new formula, the Executive Board considered that it provided a reasonable basis for guiding the second round of ad hoc quota increases agreed under the 2008 Reform.

8. Nonetheless, the Executive Board also considered that further work was needed in several areas. These included the scope for measuring openness on a value-added rather than a gross basis, the appropriate treatment of intra-currency union flows, the appropriate way of capturing financial openness, and how to improve the measure of variability to adequately capture members' potential need for Fund resources. The Board decided to consider these issues based on additional staff analysis before the formula was used again. The inclusion of PPP GDP and compression in the formula had been one of the most difficult aspects of the deliberations, and the Board decided to include these elements in the formula for a period of 20 years (i.e., until 2028), after which the scope for retaining them would be reviewed in light of progress toward convergence between market rate and PPP GDP in EMDCs, and the overall objective of ensuring adequate voice and participation for all members.

9. The formula was used again in the 14th Review, though only to distribute part of the overall increase. In the wake of the global financial crisis, the timetable for the 14th Review was brought forward by two years as part of a far-reaching package of quota and governance reforms that was agreed in late 2010. The agreement included a doubling of quotas and a major realignment of quota shares among members. In the latter connection, it was agreed that the current quota formula should continue to be used for the 14th Review, pending a comprehensive review to be completed before the next general quota increase, and that part of the increase should be distributed using an alternative measure of economic weight, given the widespread misgivings about the formula.⁹ In the end, 60 percent of the overall increase was distributed based on the formula and the remaining 40 percent as ad hoc increases based primarily on the GDP blend variable.

⁸ [*Reform of Quota and Voice in the International Monetary Fund—Report of the Executive Board to the Board of Governors* \(3/28/08\).](#)

⁹ [*IMF Quota and Governance Reform—Elements of an Agreement* \(10/31/10\).](#)

10. As part of the agreed package of 2010 Reforms, the Board subsequently completed a comprehensive review of the quota formula in January 2013. The QFR covered a wide range of issues, including those highlighted at the conclusion of the 2008 Reform. The Executive Board's report to the Board of Governors concluded that the discussions had provided important building blocks for agreement on a new quota formula that better reflects members' relative positions in the global economy, and that the outcome of the review will form a good basis for the Executive Board to agree on a new quota formula as part of its work on the 15th Review.

11. In terms of the formula variables, GDP is generally seen as the most comprehensive measure of economic size.¹⁰ Market GDP has also been viewed as the single most relevant measure of a member's ability to contribute to the Fund's finances, though it is not the only such measure, and as relevant to a member's potential demand for Fund resources. As noted, PPP GDP was introduced as part of the 2008 Reform as a relevant measure of members' weight in the global economy from the perspective of the Fund's non-financial activities.¹¹ It was agreed in the QFR that GDP should remain the most important variable with the largest weight in the formula and scope to further increase its weight. Consideration would also be given to whether or not the weight of PPP GDP in the GDP-blend variable should be adjusted.

12. Openness seeks to capture members' integration in the world economy. It has been argued that countries that are relatively more open to trade and financial flows may have a greater stake in promoting global economic and financial stability, as well as global trade and financial integration. Openness may also have a bearing on a member's willingness or ability to make financial contributions to the Fund as well as its potential need for Fund resources. A longstanding concern is that openness enters the quota formula on a gross rather than a value added basis, which creates distortions because of double-counting of cross-border flows that can exaggerate the resulting measure of a member's relative economic position. The view has also been expressed that intra-currency union flows should be excluded. It was agreed in the QFR that openness should continue to play an important role in the formula, and concerns regarding this variable should be thoroughly examined and addressed. Several options were examined to bridge the different views, including the possible use of a cap on openness in relation to GDP, but views remained divided. Options were also explored for increasing the weight of financial openness but this did not attract sufficient support.

13. Variability is intended to measure a member's vulnerability to balance of payments shocks and therefore its potential need for Fund financing. However, questions have been raised for some time regarding the extent to which it captures what is intended. Staff has conducted extensive technical analysis of this question that has failed to find a significant relationship between variability and actual or potential demand for Fund resources, or to identify a superior measure that would better capture such demand. This work has also highlighted the high correlation between openness and variability and the potential that this measure can introduce instability and produce counterintuitive results. In the QFR, there was considerable support for dropping variability from the

¹⁰ For additional background on the quota formula variables, see Supplement 1, Annex I.

¹¹ The inclusion of PPP GDP was a compromise: some Directors questioned the inclusion of PPP GDP in the formula, while others would have preferred a larger weight.

formula. Some conditioned this support on other elements of an integrated reform package, including how its weight is reallocated and the adequacy of measures to protect the poorest members. Some continued to see a role for variability.

14. Reserves seek to provide an indicator of a member's financial strength and ability to contribute to the Fund's finances. A reserves measure has long been included in the formula, but differing views have been expressed on its continued relevance and the potential distortions associated with excess reserve accumulation. In the QFR, there was considerable support for retaining reserves with its current weight. Views were also expressed in favor of either increasing its weight or eliminating it.

15. A further issue explored in the QFR, and previously, was the scope for including a measure of actual financial contributions in the formula. Staff has done considerable work on how to capture the different forms of members' financial contributions to the Fund (see Supplement 1, Annex V for an update of this analysis). Views diverged on the merits of including such a measure in the formula, and it was agreed in the QFR to consider whether and how to take into account very significant voluntary financial contributions through ad hoc adjustments as part of the 15th Review.

16. Compression was introduced in 2008 to help moderate the influence of size on the quota formula. In the QFR, it was generally agreed that the formula should continue to include a compression factor for this purpose, and the Board agreed that consideration will be given to whether or not the current level of compression should be adjusted. One view was that the current compression factor had been a difficult compromise that should not be reopened, while others favored increasing the level of compression to give greater voice to small countries and EMDCs as a group.

17. It was also agreed that measures should be taken to protect the voice and representation of the poorest members. Considerable support was expressed for addressing this issue as part of the 15th Review.

18. Directors have revisited issues related to the quota formula on several occasions since the completion of the QFR. These discussions have taken place in the context of the annual updates of the quota data, and staff has presented the results of further analysis of the quota variables as well as illustrative calculations of possible reforms of the quota formula. In general, Directors' views have not changed significantly from those expressed during the QFR discussions, but there appears to have been some weakening in the consensus around the building blocks agreed at that time. Recent views have ranged from the position that the current formula is working well and no further reforms are needed to the view that the formula should be reduced to a single variable—GDP (without compression). There is also a spectrum of views in between these two positions. In light of these divergences, it appears difficult to conclude that the current quota formula still meets the third guiding principle outlined above, namely that it should produce results that are broadly acceptable to the membership. Thus, a key challenge for the upcoming discussions under the 15th Review is how to bridge these differences.

Box 1. The Quota Formula

The current quota formula was agreed in 2008. It includes four variables (GDP, openness, variability, and reserves), expressed in shares of global totals, with the variables assigned weights totaling to 1.0. The formula also includes a compression factor that reduces dispersion in calculated quota shares. The formula is:

$$\text{CQS} = (0.5*Y + 0.3*O + 0.15*V + 0.05*R)^k$$

where:

CQS = calculated quota share;

Y = a blend of GDP converted at market exchange rates and PPP rates averaged over a three-year period. The weights of market-based and PPP GDP are 0.60 and 0.40, respectively;

O = the annual average of the sum of current payments and current receipts (goods, services, income, and transfers) for a five-year period;

V = variability of current receipts and net capital flows (measured as the standard deviation from a centered three-year trend over a thirteen-year period);

R = twelve-month average over one year of official reserves (foreign exchange, SDR holdings, reserve position in the Fund, and monetary gold); and

k = a compression factor of 0.95. The compression factor is applied to the uncompressed calculated quota shares which are then rescaled to sum to 100.

Box 2. Staff Work Since the QFR

2013 update: [Quota Formula—Data Update and Further Considerations](#) (6/5/13) and [Annexes](#)

Openness: the staff paper provided further analysis on the characteristics of the variable and identified possible options for addressing the concerns that had been raised in the past. Given the data issues with value-added trade, these options focused on weight adjustments, compression, and caps on the overall boost that individual countries can obtain from openness.

Variability: additional staff work did not identify any significant correlation between this variable and broader measures of balance of payments difficulties as well as underlying vulnerabilities that were resolved without recourse to IMF assistance (previous staff work had focused on the relationship between variability and actual demand for Fund resources).

2014 update: [Quota Formula—Data Update and Further Considerations](#) (7/2/14) and [Annexes](#)

PPP GDP: the staff paper presented an assessment of data quality following the update of the 2011 International Comparison Program and of the distributional impact of increasing the share of PPP GDP.

Openness: update of staff's earlier examination of the openness variable based on the latest data.

Variability: summary of staff's extensive work on variability, dating back to the 2008 reform, which has failed to find evidence of any link between the current variability measure and actual or potential demand for Fund resources, or to identify a superior alternative measure that would better capture such demand.

Box 2. Staff Work Since the QFR (continued)**2015 update:** [Quota Formula—Data Update](#) (6/19/15)

PPP GDP and Openness: the staff paper updated previous staff analysis on the characteristics of these variables, noting that key conclusions from previous work remained broadly unchanged.

2016 update: [Quotas—Data Update and Simulations](#) (8/9/16)

Out-of-lineness (OOL): staff calculations showed that, following economic developments, aggregate OOL increased again to close to the level prevailing before the 14th Review.

Quota variables: staff presented a detailed analysis of the distributional impact of each variable and the compression factor. Ratios of variables to GDP (market and blend) were used to identify possible outliers.

Openness: update of previous estimates of the impact of excluding intra-currency union trade.

Country groups: the paper discussed the implications of aligning the classification with the current WEO.

Poorest members: staff provided an update of the definition used in the 14th Review and introduced alternative lists for identifying the poorest members (PRGT, UN LDC and WEO LDC).

Voluntary financial contributions: staff updated data on the main indicators of financial contributions and illustrated possible ways to combine them.

Allocation: illustrative allocations based on selective increases were presented, considering ad hoc elements to protect the poorest members and to take into account financial contributions.

III. DATA UPDATE AND ILLUSTRATIVE SIMULATIONS

19. Staff has updated the quota database by one year through 2015. The results based on the current quota formula are presented in the Annex to this paper.¹² In general, the broad trends observed in previous data updates have continued, with a further 0.5 percentage point increase in the calculated quota share (CQS) of EMDCs as a group to 49.8 percent (Figure 1).¹³ This represents the smallest annual gain since the current quota formula was agreed in 2008. The gain in EMDC shares continues to be centered on Asia, with China recording the largest individual increase (0.6 percentage points). Among the major advanced economies, the CQS of the United States rose slightly while most other countries recorded small declines. An overall measure of the extent to which members' actual quota shares diverge from CQS (out-of-lineness or OOL) has increased further with the latest update and is now slightly higher than was the case prior to the adjustment in shares under the 14th Review.

¹² Results for all members are presented in Supplement 2, Statistical Appendix.

¹³ The results in this paper are based on the same country groupings that have been used for quota work since the 11th Review (including the 2008 Reform and the 14th Review). Staff had proposed aligning the country groups with the current WEO classification (See [Quota—Data Update and Simulations](#) (8/9/16), pp. 48–49). However, Directors' views were mixed at the informal discussion in September 2016 and staff for now has retained the previous classification. The new classification could still be adopted if there is broad support for such a change.

Figure 1. Evolution of CQS 2005-2015 1/
(In percent)

Source: Finance Department

1/ Numbers adjacent to each line denote the change in percentage points between the current CQS based on data through 2015, relative to the CQS based on data through 2005.

20. In previous papers, staff has presented illustrative simulations of possible reforms of the quota formula. These simulations, which have sought to build on the outcome of the QFR, have (i) retained GDP as the most important variable, and explored different options for the relative weight of market and PPP GDP; (ii) retained openness with a sizable weight, and explored possible options that could address the concerns expressed about this variable; (iii) excluded variability with different options for redistributing its weight;¹⁴ (iv) retained reserves with its current 5 percent weight; and (v) explored the impact of varying the compression factor.

21. Staff has updated these simulations based on the latest data.¹⁵ The results for the main country groups are shown in Table 1. Only the broad results are discussed below, with the implications for individual members' quota shares reported in supplements to this paper.¹⁶ The overall results are broadly similar to those illustrated in the [August 2016 paper](#), though starting from a different base given the data update. The main results can be summarized as follows:

- *Set 1: Simplification of the current formula – dropping variability, keeping current GDP and openness measures.* Dropping variability and allocating part or all of the weight to GDP reduces (compared to the current formula) the CQS of other advanced economies and increases that of major advanced economies and EMDCs as a group. The shifts are larger when the weight of

¹⁴ As noted in Section II, this reform received considerable support in the QFR, though some Directors have conditioned their support for dropping variability on other elements of the reform package. As discussed in previous papers (and summarized in Annex II of [Quota Formula—Data Update and Further Considerations—Annexes](#)), staff has undertaken extensive work to explore the links between variability and actual or potential demand for Fund resources and has found no evidence of such a link (for more details, see also Supplement 1, Annex I).

¹⁵ As in the past, staff could also circulate additional simulations if requested by Executive Directors.

¹⁶ Results for members with the largest quotas and for country groups are presented in Supplement 1, Annex II, and results for all members are presented in Supplement 2, Statistical Appendix.

openness is also reduced. The majority of large countries gain from dropping variability, while around one quarter of small countries gain.¹⁷

- *Set 2: Same as Set 1, but with different combinations of GDP blend.* Increasing the weight of PPP GDP in the GDP blend leads to a higher CQS for EMDCs relative to the current formula. More EMDCs and small countries gain with an increased weight for PPP GDP relative to Set 1. Conversely, increasing the weight of market GDP in the GDP blend reduces the share of both EMDCs and LICs.
- *Set 3: Same as Set 1 but with different openness measures.*¹⁸ Capping openness has been discussed as a possible means to address some of the shortcomings identified with this variable. Caps tend to reduce the CQS of other advanced economies and increase the CQS for major advanced economies and EMDCs as a group. Also, there is generally a larger number of gainers among EMDCs, LICs, and small countries compared with Set 1, including when the weight of openness is reduced, as capping openness redistributes the very large boost received by some countries under the current measure across the rest of the membership.
- *Set 4: Same as Set 1, but with different degrees of compression.* A higher degree of compression reduces the share of the largest economies and increases the share of all other members. As a result, it leads to the largest number of gainers among EMDCs and LICs, as well as among small countries in the simulations of Table 1. Reducing the degree of compression has the opposite impact, with gains for the largest members and reduced shares for all other members.

22. As noted, previous discussions based on similar illustrative simulations to those presented above have not led to a convergence of views. These simulations have illustrated the impact of possible reforms and the trade-offs between different variable specifications. However, there are no indications so far that they are producing results that would be broadly acceptable to the membership. This may partly reflect the fact that these discussions took place during a period when the broader work on the 15th Review was delayed. However, it may also reflect more fundamental differences of view that still need to be reconciled.

¹⁷ Table I.7 in Supplement 1, Annex I presents also a simulation that drops variability and allocates all of its weight to openness, while keeping the current GDP and openness measures. In this simulation, the distribution of CQS would be broadly unchanged relative to the current formula across the largest individual countries and major country groups, highlighting the high correlation between variability and openness.

¹⁸ As discussed in Supplement 1, Annex I, staff has explored the use of a cap to address one possible concern with the openness variable, namely that for some countries it can generate CQS that appear very large in relation to other measures of their relative economic positions.

Table 1. Illustrative Calculations: Summary

	Calculated Quota Share (in percent)				Number of Gainers 1/	of which:			of which: 2/	
	Major Advanced	Other Advanced	EMDCs	LICs		AEs (26)	EMDCs excl. LICs (93)	LICs (70)	Large countries (18)	Small countries (171)
14th Review Quota Share	43.36	14.28	42.36	3.31						
Current CQS	35.69	14.46	49.84	2.28						
Set 1. Current GDP and openness measures, dropping variability										
1. Weight of variability split evenly between GDP and openness	36.29	13.66	50.05	2.19	59	7	31	21	13	46
2. Weight of variability split between GDP (2/3) and openness (1/3)	36.36	13.41	50.23	2.20	55	6	28	21	13	42
3. All weight of variability to GDP	36.51	12.90	50.59	2.23	53	5	27	21	13	40
4. Weight of openness reduced to 0.25	36.66	12.39	50.94	2.25	51	4	27	20	12	39
Set 2. Same as Set 1, but with different GDP blends										
1. <i>Weight of variability split evenly between GDP and openness</i>										
a. 50/50 GDP blend	35.55	13.44	51.01	2.27	66	3	38	25	11	55
b. 55/45 GDP blend	35.92	13.55	50.53	2.23	67	5	37	25	13	54
c. 65/35 GDP blend	36.66	13.77	49.57	2.15	54	9	27	18	14	40
2. <i>Weight of variability split between GDP (2/3) and openness (1/3)</i>										
a. 50/50 GDP blend	35.59	13.18	51.23	2.28	63	2	36	25	10	53
b. 55/45 GDP blend	35.98	13.29	50.73	2.24	58	4	30	24	12	46
c. 65/35 GDP blend	36.75	13.52	49.73	2.16	52	9	24	19	14	38
3. <i>All weight of variability to GDP</i>										
a. 50/50 GDP blend	35.67	12.65	51.68	2.32	57	1	31	25	9	48
b. 55/45 GDP blend	36.09	12.78	51.13	2.27	57	4	29	24	12	45
c. 65/35 GDP blend	36.93	13.03	50.04	2.19	51	7	25	19	14	37
4. <i>Weight of openness reduced to 0.25</i>										
a. 50/50 GDP blend	35.76	12.12	52.12	2.35	57	2	31	24	10	47
b. 55/45 GDP blend	36.21	12.26	51.53	2.30	54	3	29	22	11	43
c. 65/35 GDP blend	37.12	12.53	50.36	2.21	47	6	25	16	13	34

Source: Finance Department

1/ Countries with positive change in relation to current CQS.

2/ Countries are classified as "large" if their current GDP blend share exceeds 1.0 percent.

Table 1. Illustrative Calculations: Summary (concluded)

	Calculated Quota Share (in percent)				Number of Gainers 1/	of which:			of which: 2/	
	Major Advanced	Other Advanced	EMDCs	LICs		AEs (26)	EMDCs excl. LICs (93)	LICs (70)	Large countries (18)	Small countries (171)
14th Review Quota Share	43.36	14.28	42.36	3.31						
Current CQS	35.69	14.46	49.84	2.28						
Set 3. Same as Set 1, but with different openness measures										
1. <i>Weight of variability split evenly between GDP and openness</i>										
a. Nominal openness capped at 85th percentile	36.94	12.85	50.21	2.22	77	11	39	27	16	61
b. Nominal openness capped at 75th percentile	37.32	12.46	50.22	2.23	78	13	38	27	17	61
c. Openness share capped at 1.8	37.71	11.65	50.64	2.25	88	12	46	30	17	71
d. Openness share capped at 1.5	37.95	11.22	50.83	2.28	79	10	40	29	16	63
2. <i>Weight of variability split between GDP (2/3) and openness (1/3)</i>										
a. Nominal openness capped at 85th percentile	36.97	12.65	50.38	2.23	73	9	38	26	15	58
b. Nominal openness capped at 75th percentile	37.33	12.28	50.39	2.24	75	11	37	27	16	59
c. Openness share capped at 1.8	37.69	11.53	50.78	2.26	79	11	39	29	17	62
d. Openness share capped at 1.5	37.91	11.12	50.96	2.29	76	10	40	26	16	60
3. <i>All weight of variability to GDP</i>										
a. Nominal openness capped at 85th percentile	37.03	12.25	50.72	2.25	59	8	29	22	14	45
b. Nominal openness capped at 75th percentile	37.34	11.93	50.72	2.26	68	9	34	25	15	53
c. Openness share capped at 1.8	37.66	11.28	51.06	2.28	73	9	38	26	15	58
d. Openness share capped at 1.5	37.85	10.94	51.22	2.30	71	9	36	26	15	56
Set 4. Same as Set 1, but with different compressions										
1. <i>With a higher degree of compression (0.925)</i>										
a. Dropping variability, weight split evenly between GDP and openness	35.35	13.99	50.66	2.41	122	8	62	52	11	111
b. Dropping variability, weight split between GDP (2/3) and openness (1/3)	35.42	13.74	50.84	2.43	117	6	60	51	11	106
c. Dropping variability, all weight to GDP	35.57	13.24	51.19	2.46	108	6	54	48	12	96
d. Dropping variability, weight of openness reduced to 0.25	35.72	12.74	51.55	2.48	104	6	51	47	12	92
2. <i>With a lower degree of compression (0.975)</i>										
a. Dropping variability, weight split evenly between GDP and openness	37.21	13.32	49.47	1.99	19	6	12	1	12	7
b. Dropping variability, weight split between GDP (2/3) and openness (1/3)	37.29	13.07	49.65	2.00	20	6	13	1	13	7
c. Dropping variability, all weight to GDP	37.44	12.56	50.01	2.02	26	5	18	3	13	13
d. Dropping variability, weight of openness reduced to 0.25	37.59	12.04	50.37	2.05	29	3	19	7	11	18

Source: Finance Department

1/ Countries with positive change in relation to current CQS.

2/ Countries are classified as "large" if their current GDP blend share exceeds 1.0 percent.

23. Staff has also conducted a technical exercise to explore possible reforms that would generate shares near the midpoint of the range of views expressed so far. This exercise recognizes that compromises will likely be needed on all sides to achieve a result that can command broad support. As noted, views expressed to date have included maintaining the current formula and moving to a GDP only formula proxied by the current blend. As illustrated in the second and third columns of Table 3, these two formulas yield similar results in terms of overall shares between AEs and EMDCs (roughly 50/50). However, they yield very different results for some individual countries and thus would involve a reallocation of CQS within each broad group (in general, moving to a GDP only formula would shift shares from smaller to larger economies). The midpoint between the results of these two formulas is shown in the fourth column.¹⁹

24. Several variants were explored to identify formulas that most closely approximate the midpoint, based on the current quota data. In each case, the underlying parameter restrictions were established upfront (see below), and then alternative combinations were explored to find the best fit with the midpoint. The best fit is defined as the formula that minimizes the sum of the absolute differences between all members' midpoint shares and their respective CQS produced by the formula. The result is purely mechanical and does not involve any further judgment about the relative merits of alternative combinations after the initial parameters have been established. Four variants were explored (see Table 2 for the parameters):

- **Set A: Variants explored in the formula simulations to date:** the range of parameters is defined by the illustrative formulas shown above and in last year's quota data update paper. All combinations of variable weights and other elements (e.g., compression within the range of 0.975-0.925 and absolute or shares caps for openness²⁰) within these parameters are explored to find the best fit to the midpoint. In all simulations, variability is dropped and the weight of reserves is kept at 5 percent. As before, three different combinations for reallocating the weight of variability between GDP and openness are explored, including one where the weight of openness is reduced.
- **Set B: Same as Set A, but with a wider range for the weights on GDP and openness, the split between market and PPP GDP in the GDP blend, and the compression factor:** as in Set A, variability is dropped and the weight of reserves is kept at 5 percent. Other restrictions are substantially relaxed, allowing the range of GDP blends to vary widely (from market-only to PPP-only) in increments of 5 pp; the weights of GDP and openness vary from 0 to 95 percent in increments of 2.5 pp; and the compression factor varies between 0.9 and 1.0 in increments of 2.5 pp.

¹⁹ For example, for the US, its CQS under the current formula is 14.5 percent while its GDP blend share is 20.1 percent. Accordingly, the midpoint in percent is the average of these two numbers, i.e., $17.3 = \frac{1}{2} [14.5 + 20.1]$.

²⁰ As the measure of openness with shares caps depended on the "openness/GDP blend" ratio, different distributions of openness are calculated according to the GDP blend of each alternative specification.

- **Set C: Same as Set B, but allowing the weight on reserves to also vary:** rather than being fixed as in Set B, the weight of reserves is allowed to vary in the range 0 to 10 percent, with 2.5 pp increments. Reflecting this modification, the weights of GDP and openness are allowed to vary from 0 to 100 percent.

Table 2. Parameters for Alternative Formulas—Midpoint Approach

Restriction set	Weights (in percent) 1/					Compression factor
	Market/PPP blend	GDP	Openness 2/	Variability	Reserves	
A. Previous formula simulations	50/50 to 65/35	57.5, 60, 65 or 70	37.5, 35, 30 or 25	dropped	5	0.925, 0.950 or 0.975
B. Wider range for GDP, openness, blend and compression	0/100 to 100/0	0 to 95	0 to 95		0 to 10	0.900, 0.925, 0.950, 0.975 or 1.000
C. Allowing reserves to vary		0 to 100	0 to 100			

1/ When not explicit, variable weights change in 2.5 pp increments. GDP blend changes in 5 pp increments.

2/ All sets allow alternative definitions of openness: absolute caps (85th and 75th percentiles) and shares caps (1.8 and 1.5 ratio). Sets B and C also include openness excluding intra currency union flows.

25. The results of these illustrative simulations are summarized in the last three columns of Table 3. In each case, the results are shown for the combination that yields the closest fit to the mid-point shares consistent with the established parameters.²¹ In general, these simulations suggest that a higher weight for GDP and a lower level of compression would be required to generate results near the midpoint distribution. For example, under Set A where the maximum weight on GDP is limited ex ante to 70 percent, there are still sizable divergences from the midpoint in some cases. These differences are reduced as the restrictions are relaxed (Sets B and C). For the latter two sets of simulations, the closest fit to the midpoint distribution involves a GDP share of 75-77.5 percent, an openness share of 20 percent, a compression factor of 0.975, and a 2.5-5 percent weight on reserves.²²

²¹ Supplement 1, Annex III presents results for additional variable combinations.

²² To improve the fit to the midpoint, staff also experimented with a full relaxation of constraints, allowing variability to be included in the formula. In this setting, the resulting formula has a low weight for variability (around half of current weight), and a much lower weight for openness. For more details, see Supplement 1, Annex III.

Table 3. Illustrative Calculations—Formulas Based on Midpoint Approach
(In percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Advanced economies	57.6	50.2	49.6	49.9	49.6	49.9	49.9
Major advanced economies	43.4	35.7	40.5	38.1	37.6	38.2	38.3
United States	17.4	14.5	20.1	17.3	16.6	17.2	17.4
Japan	6.5	5.1	5.5	5.3	5.4	5.5	5.3
Germany	5.6	5.0	4.3	4.6	4.7	4.6	4.7
France	4.2	3.2	3.1	3.1	3.2	3.2	3.2
United Kingdom	4.2	3.6	3.2	3.4	3.4	3.3	3.4
Italy	3.2	2.4	2.4	2.4	2.4	2.4	2.4
Canada	2.3	2.0	1.9	2.0	2.0	2.0	2.0
Other advanced economies	14.3	14.5	9.1	11.8	12.0	11.7	11.5
Spain	2.0	1.8	1.6	1.7	1.7	1.7	1.7
Netherlands	1.8	2.1	1.0	1.5	1.6	1.5	1.5
Australia	1.4	1.4	1.5	1.5	1.4	1.5	1.5
Belgium	1.3	1.1	0.6	0.8	0.9	0.8	0.8
Switzerland	1.2	1.7	0.7	1.2	1.3	1.3	1.2
Sweden	0.9	0.9	0.6	0.7	0.8	0.7	0.7
Austria	0.8	0.7	0.5	0.6	0.6	0.6	0.6
Norway	0.8	0.7	0.5	0.6	0.6	0.6	0.6
Ireland	0.7	0.8	0.3	0.5	0.6	0.5	0.5
Denmark	0.7	0.6	0.4	0.5	0.5	0.5	0.5
Emerging Market and Developing Countries 2/	42.4	49.8	50.4	50.1	50.4	50.1	50.1
Africa	4.4	3.7	3.3	3.5	3.4	3.3	3.4
South Africa	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Nigeria	0.5	0.7	0.8	0.7	0.7	0.7	0.7
Asia	16.0	24.2	27.0	25.6	26.3	26.2	26.1
China 3/	6.4	12.6	15.4	14.0	14.4	14.6	14.3
India	2.7	3.1	4.3	3.7	3.7	3.6	3.8
Korea, Republic of	1.8	2.0	1.7	1.9	2.1	2.0	2.0
Indonesia	1.0	1.3	1.7	1.5	1.5	1.5	1.5
Singapore	0.8	1.3	0.4	0.9	1.0	0.9	0.9
Malaysia	0.8	0.8	0.5	0.6	0.7	0.6	0.7
Thailand	0.7	1.0	0.7	0.9	0.9	0.8	0.8
Middle East, Malta and Turkey	6.7	7.2	6.0	6.6	6.5	6.4	6.3
Saudi Arabia	2.1	1.7	1.2	1.4	1.4	1.4	1.3
Turkey	1.0	1.2	1.3	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.9	0.8	0.8	0.8	0.8
Western Hemisphere	7.9	7.4	8.1	7.8	7.6	7.7	7.8
Brazil	2.3	2.3	2.9	2.6	2.5	2.6	2.6
Mexico	1.9	1.7	1.8	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.7	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.8	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	6.0	6.7	6.6	6.4	6.5
Russia	2.7	2.6	2.8	2.7	2.6	2.6	2.7
Poland	0.9	0.9	0.8	0.8	0.9	0.8	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:							
EU28	30.4	27.0	20.8	23.9	24.2	23.7	23.8
LICs 4/	3.3	2.3	2.0	2.1	2.0	2.0	2.1
Goodness of Fit					3.3	2.5	1.8

Source: Finance Department

1/ Formulas with least total absolute distance from midpoint (column 4), under different sets of restrictions, are as follows:

Set A: $(0.70 * \text{GDP} + 0.25 * \text{Openness} + 0.05 * \text{Reserves})^{0.975}$ with 60/40 GDP blend.

Set B: $(0.75 * \text{GDP} + 0.20 * \text{Openness} + 0.05 * \text{Reserves})^{0.975}$ with 65/35 GDP blend.

Set C: $(0.775 * \text{GDP} + 0.200 * \text{Openness} + 0.025 * \text{Reserves})^{0.975}$ with 60/40 GDP blend.

2/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

4/ Currently PRGT-eligible countries. Includes 70 countries.

IV. REALIGNING QUOTA SHARES

26. As noted, realigning quota shares to reflect members' relative economic positions has been identified as a key goal of the 15th Review. In addition to assessing the overall adequacy of quota resources, the regular five-yearly general reviews of quotas provide an opportunity to realign quota shares. Given the central role played by quotas in the Fund's finances and governance structure, ensuring that quota shares evolve in line with members' changing relative positions remains central to the Fund's continued overall effectiveness.

27. The extent of any realignment depends on the size of the overall quota increase and how it is distributed. Various approaches have been used to distribute general quota increases in the past (Table 4 and Figure 2). Prior to the 14th Review, these typically included a sizable equiproportional element, which goes to all members and leaves existing quota shares unchanged, and a selective element, which is also distributed to all members but based on the results of the quota formula. The latter approach results in a partial adjustment of actual quota shares (AQS) towards CQS, because the new quota shares will reflect a weighted sum of initial AQS and CQS. In the case of a selective increase, the extent of the realignment will therefore depend directly on the size of the overall increase. Ad hoc increases in quotas for a subset of members can also help achieve a broad consensus. This approach can lead to a larger increase in AQS for some members whose shares are considered substantially out of line, or alternatively can limit the dilution of AQS for some other members (for example, protection for the poorest members under the 14th Review). Ad hoc increases can also provide an alternative or supplementary distribution key to the quota formula if, for example, it is not possible to agree on a formula that can command sufficiently broad support. In the 14th Review, 60 percent of the increase was distributed on a selective basis to all members, and the remaining 40 percent as ad hoc increases for a subset of members, primarily based on shares in the GDP blend variable.

Table 4. Methods of Allocation of Quota Increases

	Equiproportional	Selective	Ad hoc
Eligibility	All members	All members	Subset of members
Mechanism	Increase proportional to current quota shares	Increase proportional to calculated quota shares	Based on agreed criteria (possibly including formula)
Impact	Quota shares are not modified	Resulting quota shares are a weighted average of current and calculated quota shares ^{1/}	Variable (may either provide more rapid realignment to a selected metric or limit certain shifts in quota shares)

1/ The weight of current shares will be 100 percent and the weight of calculated shares will be equal to the percentage point increase in total quotas.

Figure 2. Allocation of Quota Increases in Recent General Reviews

Source: Finance Department

28. Given the early stage of discussions, this section presents a very limited set of illustrative simulations of quota share realignments. The main purpose is to illustrate, for a relatively wide range of overall quota increases, the potential impact that different quota formulas may have on the distribution of members' actual quota shares. For simplicity and pending future Board guidance, the simulations all assume that the bulk of the quota increase is distributed based on the formula, i.e., as selective increases. This would require that it is indeed possible to agree on a new quota formula that can command broad support, thus limiting the need for adjustments based on other parameters. As in the 14th Review, no equiproportional increase is assumed (any such increase would tend to dampen the realignments shown in these simulations). In all cases, a relatively small part of the overall increase is allocated as ad hoc increases to protect the quota (and voting) shares of the poorest members. The final set of simulations also illustrates the potential impact of providing additional ad hoc increases to recognize members' voluntary financial contributions to the Fund, an option that was discussed during the QFR.

29. More specifically, the simulations include the following elements:

- **Size of overall increase:** Three purely illustrative alternatives are considered. The first two repeat the analysis presented in the [August 2016 staff paper](#), covering an increase of 70 percent that would broadly maintain the Fund's lending capacity after the bilateral borrowing agreements expire, and an increase (125 percent) that would largely restore quotas to the ratios observed in previous general reviews of quotas based on an average of relevant indicators.²³

²³ As detailed in the companion paper on [Adequacy of Fund Resources—Further Considerations](#) (7/31/17), updated calculations based in these reference points indicate quota increases that are somewhat higher than in the calculations presented in the August 2016 staff paper. Specifically, with a somewhat higher amount of bilateral

During staff's outreach earlier this year, a number of Directors suggested to illustrate the impact of a smaller increase and, in response, results are also presented for a 50 percent increase.²⁴

- **Illustrative quota formulas:** In addition to the current quota formula, which is included to provide a basis for comparison, the results are shown for two alternative quota formulas discussed in Section III. The first is Formula 1.2, which eliminates variability and redistributes two-thirds of its weight to GDP and one-third to openness.²⁵ The second is Set C which, of all the variants considered above, is the formula that most closely approximates the midpoint distribution.
- **Protection of the poorest:** For illustrative purposes, the definition of the poorest members is the same as that used in the 14th Review, namely those countries that are PRGT-eligible and meet the IDA per capita GNI cut-off or twice that amount for small states. Using the FY 2017 IDA cut-off (which is based on calendar year 2015 GNI data), this generates a list of 37 members eligible for protection (compared with 52 members at the time of the 14th Review).²⁶ As in the 14th Review, protection is applied at an individual country level. The "cost of protection" in these illustrative simulations ranges from 0.7 to 0.8 percent.²⁷ Supplement 1, Annex IV discusses alternative protection lists (e.g., the full list of PRGT-eligible countries) that could be considered, and it also illustrates their potential cost implications.
- **Voluntary financial contributions:** The last set of simulations allocates 5 percent of the overall increase as ad hoc increases to a sub-set of members based on their voluntary financial contributions to the Fund. As discussed in previous papers, there are many possible ways of measuring such contributions and staff could conduct further work on this topic based on Directors' guidance.²⁸

---

agreements now effective in the context of the 2016 Bilateral Agreements, a quota increase of 72 percent would be needed to maintain the Fund's lending capacity when the bilateral borrowing agreements expire; and restoring the ratio of quotas relative to an average of relevant indicators (GDP, current external payments, capital flows to EMDCs, and External Financing Needs) would indicate a quota increase of 124 percent. The latter number is higher than staff's estimate last year (113 percent) and, accordingly, the size simulation related to this benchmark was increased from 115 percent in the August 2016 paper to 125 percent. A quota increase of 117 percent would maintain the Fund's current lending capacity in the absence of any access to borrowed resources (i.e., bilateral borrowing agreements and NAB/GAB).

²⁴ For comparison, the average increase of the five previous general quota reviews that resulted in increases was close to 60 percent.

²⁵ See Table 1, the second formula of Set 1.

²⁶ In addition to these 52 members, Zimbabwe was included in the group of protected countries, despite not being PRGT-eligible at the time of the 14th Review due to arrears. South Sudan joined the Fund after the 14th Review, but received a treatment consistent with the poorest members in the calculation of its quota.

²⁷ The cost of protection is defined as the share of the total quota increase that is allocated in an ad hoc manner to protect the eligible members in the list of poorest countries against a decline in their quota shares.

²⁸ Supplement 1, Annex V updates staff's earlier work on possible composite measures of voluntary financial contributions. The version used here is VFCS II, which aggregates each member's share across four types of contributions, with weights of 0.3 for the NAB, 0.3 for 2012 and 2016 bilateral borrowing agreements, 0.2 for PRGT loans and concessional financing subsidies combined, and 0.2 for capacity development.

30. Summary results for major country groups and the 35 members with the largest quotas are presented below (Tables 5-9). The following points may be noted:

- All the simulations result in an increase in quota share of EMDCs as a group, in line with the expectation in the IMFC's October 2016 Communique. As expected for a distribution that is mainly selective, the size of the realignment increases with the size of the overall increase.
- When the current quota formula is used as the primary distribution key, the realignment results in a shift in quota share of 2.6 – 4.4 pp from the major advanced economies to EMDCs, with the share of other advanced economies as a group being largely unchanged.
- When formula 1.2 is used, the overall shifts are broadly similar to those based on the current formula. The aggregate shift to EMDCs is modestly higher (2.8 – 4.6 pp), while the share of other advanced economies declines modestly.
- When the midpoint Set C formula is used, the overall shift to EMDCs as a group is also modestly higher than with the current formula (2.7 – 4.6 pp), while the decline in share of major advanced economies is lower (-1.8 – -3.0 pp) and there is a somewhat larger decline in the share of other advanced economies.
- The inclusion of ad hoc increases to recognize voluntary financial contributions reduces the aggregate shift towards EMDCs in the example illustrated here to 2.3 – 3.8 pp.
- The aggregate share of LICs declines modestly, reflecting net declines for the group of low income countries that are not eligible for protection.
- As shown in Tables 6 – 9, the use of different formulas has a significant impact on quota share for some individual countries. In particular, given the heavy weight of selective increases in these simulations, the results are heavily dependent on whether and to what extent individual countries are under- or over-represented under the formulas, and also on the size of the quota increase.

31. It should be stressed that the illustrative simulations presented above are solely intended to help inform Directors' initial discussions on some of the key issues for the 15th Review. Based on Directors' views, staff will build on this work in future papers, recognizing that the various elements of the review, including the quota formula, the size of any quota increase, and the various methods available to distribute such an increase, are closely inter-linked. These elements will need to come together as a self-reinforcing package in order to command the necessary broad support for an agreement on the 15th Review.

Table 5. Illustration of Allocation Mechanisms: Summary

	Size of Overall Increase	Actual Quota Shares (in percent)			
		Major Advanced	Other Advanced	EMDCs	LICs
14th Review Quota Share		43.36	14.28	42.36	3.31
Based on the Current Formula:					
$(0.50 \times \text{GDP} + 0.30 \times \text{Openness} + 0.15 \times \text{Variability} + 0.05 \times \text{Reserves})^{0.95}$	50 percent	40.73	14.31	44.97	3.19
	70 percent	40.11	14.31	45.58	3.16
	125 percent	38.97	14.33	46.71	3.10
Based on Formula 1.2:					
$(0.60 \times \text{GDP} + 0.35 \times \text{Openness} + 0.05 \times \text{Reserves})^{0.95}$	50 percent	40.94	13.95	45.11	3.19
	70 percent	40.36	13.88	45.76	3.16
	125 percent	39.32	13.74	46.95	3.11
Based on Midpoint Formula Set C:					
$(0.775 \times \text{GDP} + 0.20 \times \text{Openness} + 0.025 \times \text{Reserves})^{0.975}$	50 percent	41.58	13.33	45.09	3.17
	70 percent	41.16	13.10	45.73	3.14
	125 percent	40.39	12.69	46.91	3.08
Based on Formula 1.2, includes 5 percent ad hoc distribution based on voluntary financial contributions (VFCS II):					
$(0.60 \times \text{GDP} + 0.35 \times \text{Openness} + 0.05 \times \text{Reserves})^{0.95}$	50 percent	41.27	14.06	44.67	3.17
	70 percent	40.77	14.01	45.21	3.14
	125 percent	39.87	13.92	46.21	3.08

Source: Finance Department

Table 6. Illustration of Allocation Mechanisms: Current Formula^{1/}
(In percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Advanced economies	57.6	50.2	55.0	54.4	53.3
Major advanced economies	43.4	35.7	40.7	40.1	39.0
United States	17.4	14.5	16.4	16.2	15.7
Japan	6.5	5.1	6.0	5.9	5.7
Germany	5.6	5.0	5.4	5.3	5.2
France	4.2	3.2	3.9	3.8	3.6
United Kingdom	4.2	3.6	4.0	3.9	3.8
Italy	3.2	2.4	2.9	2.8	2.7
Canada	2.3	2.0	2.2	2.2	2.1
Other advanced economies	14.3	14.5	14.3	14.3	14.3
Spain	2.0	1.8	1.9	1.9	1.9
Netherlands	1.8	2.1	1.9	1.9	2.0
Australia	1.4	1.4	1.4	1.4	1.4
Belgium	1.3	1.1	1.3	1.2	1.2
Switzerland	1.2	1.7	1.4	1.4	1.5
Sweden	0.9	0.9	0.9	0.9	0.9
Austria	0.8	0.7	0.8	0.8	0.8
Norway	0.8	0.7	0.8	0.8	0.7
Ireland	0.7	0.8	0.7	0.7	0.7
Denmark	0.7	0.6	0.7	0.7	0.6
Emerging Market and Developing Countries 2/	42.4	49.8	45.0	45.6	46.7
Africa	4.4	3.7	4.4	4.4	4.3
South Africa	0.6	0.5	0.6	0.6	0.6
Nigeria	0.5	0.7	0.6	0.6	0.6
Asia	16.0	24.2	18.7	19.3	20.5
China 3/	6.4	12.6	8.4	8.9	9.8
India	2.7	3.1	2.9	2.9	2.9
Korea, Republic of	1.8	2.0	1.9	1.9	1.9
Indonesia	1.0	1.3	1.1	1.1	1.2
Singapore	0.8	1.3	1.0	1.0	1.1
Malaysia	0.8	0.8	0.8	0.8	0.8
Thailand	0.7	1.0	0.8	0.8	0.8
Middle East, Malta and Turkey	6.7	7.2	6.9	6.9	7.0
Saudi Arabia	2.1	1.7	1.9	1.9	1.8
Turkey	1.0	1.2	1.0	1.0	1.1
Iran, I.R. of	0.7	0.7	0.7	0.7	0.7
Western Hemisphere	7.9	7.4	7.7	7.7	7.6
Brazil	2.3	2.3	2.3	2.3	2.3
Mexico	1.9	1.7	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.7	0.7	0.7
Argentina	0.7	0.6	0.7	0.7	0.6
Transition economies	7.2	7.3	7.3	7.3	7.3
Russia	2.7	2.6	2.7	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	27.0	29.2	28.9	28.4
LICs 4/	3.3	2.3	3.2	3.2	3.1
Updated 14th Review Poorest 5/	1.7	1.1	1.7	1.8	1.8

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

2/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

4/ Currently PRGT-eligible countries.

5/ Updated 14th Review list to include countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) and twice that amount for small states, as defined by the IMF. Currently includes 37 member countries.

Table 7. Illustration of Allocation Mechanisms: Formula 1.2^{1/}

(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Advanced economies	57.6	49.8	54.9	54.2	53.1
Major advanced economies	43.4	36.4	40.9	40.4	39.3
United States	17.4	15.2	16.6	16.4	16.1
Japan	6.5	5.1	6.0	5.9	5.7
Germany	5.6	4.9	5.4	5.3	5.2
France	4.2	3.2	3.9	3.8	3.7
United Kingdom	4.2	3.4	4.0	3.9	3.8
Italy	3.2	2.4	2.9	2.8	2.7
Canada	2.3	2.1	2.2	2.2	2.2
Other advanced economies	14.3	13.4	14.0	13.9	13.7
Spain	2.0	1.7	1.9	1.9	1.8
Netherlands	1.8	1.9	1.8	1.9	1.9
Australia	1.4	1.5	1.4	1.4	1.4
Belgium	1.3	1.1	1.2	1.2	1.2
Switzerland	1.2	1.5	1.3	1.3	1.4
Sweden	0.9	0.8	0.9	0.9	0.9
Austria	0.8	0.7	0.8	0.8	0.7
Norway	0.8	0.7	0.7	0.7	0.7
Ireland	0.7	0.7	0.7	0.7	0.7
Denmark	0.7	0.6	0.7	0.7	0.6
Emerging Market and Developing Countries 2/	42.4	50.2	45.1	45.8	46.9
Africa	4.4	3.6	4.4	4.3	4.3
South Africa	0.6	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.6	0.6	0.6
Asia	16.0	25.4	19.1	19.8	21.2
China 3/	6.4	13.3	8.7	9.2	10.2
India	2.7	3.4	3.0	3.0	3.1
Korea, Republic of	1.8	2.2	1.9	1.9	2.0
Indonesia	1.0	1.4	1.1	1.1	1.2
Singapore	0.8	1.2	0.9	1.0	1.0
Malaysia	0.8	0.7	0.8	0.8	0.7
Thailand	0.7	0.9	0.8	0.8	0.8
Middle East, Malta and Turkey	6.7	6.7	6.7	6.7	6.7
Saudi Arabia	2.1	1.5	1.9	1.8	1.7
Turkey	1.0	1.2	1.0	1.1	1.1
Iran, I.R. of	0.7	0.7	0.7	0.7	0.7
Western Hemisphere	7.9	7.6	7.8	7.7	7.7
Brazil	2.3	2.3	2.3	2.3	2.3
Mexico	1.9	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.7	0.7	0.7
Argentina	0.7	0.7	0.7	0.7	0.7
Transition economies	7.2	7.0	7.1	7.1	7.1
Russia	2.7	2.6	2.7	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	26.0	28.8	28.5	27.8
LICs 4/	3.3	2.2	3.2	3.2	3.1
Updated 14th Review Poorest 5/	1.7	1.0	1.7	1.8	1.8

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

2/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

4/ Currently PRGT-eligible countries.

5/ Updated 14th Review list to include countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) and twice that amount for small states, as defined by the IMF. Currently includes 37 member countries.

Table 8. Illustration of Allocation Mechanisms: Midpoint Approach: Set C^{1/}
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Advanced economies	57.6	49.9	54.9	54.3	53.1
Major advanced economies	43.4	38.3	41.6	41.2	40.4
United States	17.4	17.4	17.3	17.3	17.3
Japan	6.5	5.3	6.1	6.0	5.8
Germany	5.6	4.7	5.3	5.2	5.1
France	4.2	3.2	3.9	3.8	3.6
United Kingdom	4.2	3.4	3.9	3.9	3.7
Italy	3.2	2.4	2.9	2.8	2.7
Canada	2.3	2.0	2.2	2.2	2.1
Other advanced economies	14.3	11.5	13.3	13.1	12.7
Spain	2.0	1.7	1.9	1.9	1.8
Netherlands	1.8	1.5	1.7	1.7	1.6
Australia	1.4	1.5	1.4	1.4	1.4
Belgium	1.3	0.8	1.2	1.1	1.1
Switzerland	1.2	1.2	1.2	1.2	1.2
Sweden	0.9	0.7	0.9	0.8	0.8
Austria	0.8	0.6	0.7	0.7	0.7
Norway	0.8	0.6	0.7	0.7	0.7
Ireland	0.7	0.5	0.7	0.6	0.6
Denmark	0.7	0.5	0.6	0.6	0.6
Emerging Market and Developing Countries 2/	42.4	50.1	45.1	45.7	46.9
Africa	4.4	3.4	4.3	4.3	4.3
South Africa	0.6	0.5	0.6	0.6	0.6
Nigeria	0.5	0.7	0.6	0.6	0.6
Asia	16.0	26.1	19.3	20.1	21.5
China 3/	6.4	14.3	9.0	9.6	10.7
India	2.7	3.8	3.1	3.2	3.3
Korea, Republic of	1.8	2.0	1.9	1.9	1.9
Indonesia	1.0	1.5	1.2	1.2	1.3
Singapore	0.8	0.9	0.8	0.8	0.8
Malaysia	0.8	0.7	0.7	0.7	0.7
Thailand	0.7	0.8	0.7	0.7	0.8
Middle East, Malta and Turkey	6.7	6.3	6.6	6.6	6.5
Saudi Arabia	2.1	1.3	1.8	1.8	1.7
Turkey	1.0	1.2	1.1	1.1	1.1
Iran, I.R. of	0.7	0.8	0.8	0.8	0.8
Western Hemisphere	7.9	7.8	7.8	7.8	7.8
Brazil	2.3	2.6	2.4	2.4	2.4
Mexico	1.9	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.7	0.7	0.7
Argentina	0.7	0.7	0.7	0.7	0.7
Transition economies	7.2	6.5	7.0	6.9	6.8
Russia	2.7	2.7	2.7	2.7	2.7
Poland	0.9	0.8	0.9	0.8	0.8
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	23.8	28.1	27.6	26.6
LICs 4/	3.3	2.1	3.2	3.1	3.1
Updated 14th Review Poorest 5/	1.7	1.0	1.7	1.8	1.8

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

2/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

4/ Currently PRGT-eligible countries.

5/ Updated 14th Review list to include countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) and twice that amount for small states, as defined by the IMF. Currently includes 37 member countries.

Table 9. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution based on Voluntary Financial Contributions^{1/2/}
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Advanced economies	57.6	49.8	55.3	54.8	53.8
Major advanced economies	43.4	36.4	41.3	40.8	39.9
United States	17.4	15.2	16.4	16.2	15.8
Japan	6.5	5.1	6.3	6.2	6.2
Germany	5.6	4.9	5.4	5.3	5.3
France	4.2	3.2	3.9	3.9	3.8
United Kingdom	4.2	3.4	4.0	4.0	3.9
Italy	3.2	2.4	2.9	2.9	2.8
Canada	2.3	2.1	2.3	2.3	2.2
Other advanced economies	14.3	13.4	14.1	14.0	13.9
Spain	2.0	1.7	1.9	1.9	1.9
Netherlands	1.8	1.9	1.9	1.9	1.9
Australia	1.4	1.5	1.4	1.4	1.4
Belgium	1.3	1.1	1.3	1.2	1.2
Switzerland	1.2	1.5	1.3	1.4	1.4
Sweden	0.9	0.8	0.9	0.9	0.9
Austria	0.8	0.7	0.8	0.8	0.7
Norway	0.8	0.7	0.8	0.8	0.7
Ireland	0.7	0.7	0.7	0.7	0.7
Denmark	0.7	0.6	0.7	0.7	0.6
Emerging Market and Developing Countries 3/	42.4	50.2	44.7	45.2	46.2
Africa	4.4	3.6	4.3	4.3	4.3
South Africa	0.6	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.6	0.6	0.6
Asia	16.0	25.4	18.9	19.6	20.8
China 4/	6.4	13.3	8.6	9.1	10.0
India	2.7	3.4	2.9	3.0	3.1
Korea, Republic of	1.8	2.2	1.9	1.9	2.0
Indonesia	1.0	1.4	1.1	1.1	1.2
Singapore	0.8	1.2	0.9	1.0	1.0
Malaysia	0.8	0.7	0.7	0.7	0.7
Thailand	0.7	0.9	0.7	0.8	0.8
Middle East, Malta and Turkey	6.7	6.7	6.7	6.7	6.6
Saudi Arabia	2.1	1.5	1.9	1.9	1.8
Turkey	1.0	1.2	1.0	1.0	1.1
Iran, I.R. of	0.7	0.7	0.7	0.7	0.7
Western Hemisphere	7.9	7.6	7.7	7.7	7.6
Brazil	2.3	2.3	2.3	2.3	2.3
Mexico	1.9	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.7	0.7	0.6
Argentina	0.7	0.7	0.7	0.7	0.6
Transition economies	7.2	7.0	7.1	7.0	6.9
Russia	2.7	2.6	2.6	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	26.0	29.1	28.8	28.2
LICs 5/	3.3	2.2	3.2	3.1	3.1
Updated 14th Review Poorest 6/	1.7	1.0	1.7	1.7	1.8

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members and with 5 percent of the overall increase allocated as ad hoc increases based on voluntary financial contributions.

2/ Voluntary financial contributions are based on VFCS II, which is the weighted average of contribution shares, with weights of 0.3 for NAB, 0.3 for 2012 and 2016 bilateral borrowing agreements, 0.2 for PRGT loans and concessional financing subsidies combined, and 0.2 for capacity development. See Supplement 1, Annex V for details.

3/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

4/ Including China, P.R., Hong Kong SAR, and Macao SAR.

5/ Currently PRGT-eligible countries.

6/ Updated 14th Review list to include countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) and twice that amount for small states, as defined by the IMF. Currently includes 37 member countries.

V. ISSUES FOR DISCUSSION

32. This paper seeks to provide a basis for an initial discussion of the Committee of the Whole on the 15th General Review of Quotas. It focuses on the quota formula and realignment of quota shares under the 15th Review. A companion paper to be discussed separately addresses issues relating to the size of the Fund and the adequacy of quota resources.

33. The paper does not make any proposals on the quota formula at this stage, pending further Board guidance on possible approaches to bridging the remaining differences. While Directors have had several opportunities to discuss the quota formula in recent years, significant differences of view remain on the extent and direction of needed reforms. Against this background, the paper updates earlier simulations of possible reforms using data through 2015, and presents some additional technical simulations of reforms that produce results broadly around the middle of the range of views expressed in discussions so far.

34. The paper also includes a brief discussion of possible broad approaches to distributing quota increases under the 15th Review. Only a very limited set of simulations is included at this early stage of the discussions, mainly to illustrate the potential impact that different quota formulas may have on the distribution of members' actual quota shares. All these simulations protect the quota shares of the poorest members, and one set of simulations illustrates the potential impact of including an ad hoc increase based on members' voluntary financial contributions. It is recognized that considerable further work will be needed as discussions advance on the closely-related questions of the formula and the appropriate size of total quotas.

35. Directors may wish to comment on the following:

- What do Directors see as the most promising approaches to a reform of the quota formula that could command broad support? Do they still see scope for a possible landing point within the range of reforms that has been considered in previous update papers?
- How do Directors view the outcome of staff's technical work on reforms that produce results around the middle of the current range of views, and do they see merit in further exploring reforms that would build on this work?
- Are there other possible reforms of the formula beyond those considered to date that could help to broaden support?
- What are Directors' initial views on the possible approaches to realigning quota shares, and what do they see as the most promising areas for further work? Are there particular elements that would be helpful in advancing the discussions and helping guide future staff work?
- Do Directors have views on the options for measuring voluntary financial contributions presented in Supplement 1, Annex V and are there additional areas of work that would be helpful?
- Do Directors have any further views at this stage on how to define the list of the poorest members (discussed in Supplement 1, Annex IV) that would be eligible for protection under the 15th Review?

Annex I. Updated Quota Database

A. Developments in Calculated Quota Shares

1. Staff has updated the quota database through 2015. The update advances by one year the data presented last August,¹ using the same sources as in past updates (see Box 1 and the Statistical Appendix). The new data continue the broad trends observed previously, but the shifts between the main country groups are generally smaller. Calculated quota shares (CQS) for the main country groups and individual members are shown in Table I.1a and Statistical Appendix Table A1.² These results and those presented in the rest of this section are based on the current quota formula and country group classifications.³

2. The data update results in a modest further increase in the CQS of EMDCs as a group. Their aggregate share increases by 0.5 percentage points (pp) to 49.8 percent (Tables I.1a and I.1b), which constitutes the smallest overall gain relative to the previous year for EMDCs since the current quota formula was agreed in 2008. EMDC shares in Asia continue to record gains, driven by China, while the share of transition economies declines slightly, and EMDC shares in other regions remain broadly stable. Among the advanced economies (AEs), the share of the major AEs declines by 0.4 pp which is about half of the decline in the last update (0.7 pp). Among major AEs, the US share increases (0.2 pp) while the shares of other countries decline or remain broadly unchanged. The share of other AEs as a group decreases by 0.1 pp, offsetting an increase of 0.1 pp in the previous update. These results are in part indicative of a narrowing growth differential between EMDCs and AEs and, as indicated below, also of the appreciation of the U.S. dollar over the underlying data period.

3. The cumulative shifts in CQS over a longer timeframe have been sizable:

- *The aggregate shift to EMDCs has been 13.6 pp since the current quota formula was agreed in 2008 based on data through 2005* (Figure I.1 and Table I.1a). China has accounted close to half (6.2 pp) of this increase, with India (1.1 pp), Saudi Arabia (0.8 pp)⁴, Russia and Brazil (both 0.5 pp) also recording sizable gains. The aggregate share of low income countries (LICs) increased by more than one third.⁵ Among AEs, the major advanced economies' share declined by 11.9 pp, with the US and Japan accounting for about two thirds of this decline. Over the same period, the share of other advanced economies as a group declined by 1.7 pp.

¹ [Quota Formula—Data Update and Simulations](#) (8/9/16).

² Individual country data and simulation results, as well as some additional technical material, are presented in Supplement 2, Statistical Appendix.

³ The current formula is $CQS = (0.50 \cdot GDP + 0.30 \cdot Openness + 0.15 \cdot Variability + 0.05 \cdot Reserves)^k$. GDP is blended using 60 percent market and 40 percent PPP exchange rates; K is a compression factor of 0.95; see Box 1.

⁴ Numbers presented in text may differ from those calculated using figures from the Tables shown in this Annex due to rounding.

⁵ LICs are defined as countries that are currently PRGT eligible.

Figure I.1. Evolution of CQS 2005–2015^{1/}
(In percent)

Source: Finance Department

1/ Figures adjacent to each line denote the change in percentage points between the current CQS based on data through 2015, relative to the CQS based on data through 2005.

- The CQS of EMDCs has increased by 8.1 pp since the 14th Review, which was based on data through 2008. Over this 7-year period, by far the largest increase was recorded by China (4.7 pp), while India (0.7 pp), Indonesia (0.4 pp), and Saudi Arabia (0.3 pp) also recorded sizable gains. Asia accounted for about four-fifths of the total gains for EMDCs. The CQS of LICs increased by 0.6 pp. Among AEs, the combined CQS of the major advanced economies declined by 7.2 pp. All countries in this group lost CQS, with the US (-2.5 pp), Japan (-1.4 pp), and the UK (-1.1 pp) experiencing the largest falls. The share of other advanced economies declined by 0.9 pp, with Spain (-0.5 pp) recording the largest decline and Switzerland experiencing the largest gain (0.5 pp).

- *CQS changes in relative terms, i.e., measured in percent, have varied widely* (Table I.1b). Among the larger EMDCs, China saw the largest relative increase in its CQS since the 14th Review (58.9 percent), followed by Indonesia (44.9 percent) and Nigeria (39.2 percent). In addition, the CQS for India increased by close to a third and the CQS for Saudi Arabia and Thailand increased by about a quarter. For major AEs, the decline in CQS ranged from 23.5 percent for the UK to 11.9 percent for Canada. Among other AEs, changes in CQS varied widely, with Switzerland (40.5 percent) recording the largest gain and Greece (-39.0 percent) and Ireland (-28.4 percent) the largest declines.

Box I.1. Data Sources and Methodology^{1/}

The data sources and methodology remain closely in line with past practice. The primary data source is the Fund's *International Financial Statistics (IFS)*. Missing data were supplemented in the first instance by the *World Economic Outlook (WEO)* database. Remaining missing data were computed based on staff reports and, in very few instances, country desk data. As is customary, a cutoff date of January 31, 2017 for incorporating new data in the quota database was employed for *IFS*; consistent with this cutoff, the Fall 2016 publication was used for *WEO* data.

The PPP GDP data are calculated by dividing a country's nominal GDP in its own currency by its corresponding PPP factor. The 2011 *International Comparison Program (ICP)* PPP factors were extended to include 2012-15 using *WEO* methodology.

Data for openness and variability reflect the ongoing implementation of BPM6, introduced in the 2013 quota data update. Country coverage has broadened with this update to include 133 BPM6-data reporting members compared with 120 previously. Under the BPM6 methodology, the full value of goods for processing is no longer counted under the reported (gross) exports and imports (these are goods processed under contract for an explicit fee by a non-resident processing entity, where the goods being processed do not change ownership); rather only the fees from processing are recorded under services. As discussed in Annex I of [Quota Formula—Data Update and Further Considerations](#) (6/5/13), the overall impact of this change is relatively modest.

1/ See the Statistical Appendix for additional details.

4. The most recent gain in CQS for EMDCs reflects increases in shares of most quota formula variables, particularly GDP, consistent with continued divergence in global growth rates. With the slowdown in the growth rate in EMDCs since the latest update, the growth divergence has narrowed further but nonetheless remains sizable (Figure I.2 upper panel). As a result, the aggregate share of EMDCs in the GDP blend increased by 0.8 pp (Tables I.2a and I.2b). Notwithstanding the slight decline in external flows from 2014 to 2015, EMDCs recorded modest gains in their shares of global openness (based on average for 2011-2015) and variability (Figure I.2 lower panel, and Table I.2a). The share of EMDCs in global reserves declined to 75.2 percent from 76.7 percent. This decline reflects mainly losses in the shares of China (-0.9 pp) and Russia (-0.7 pp), only partly offset by increasing shares in several EMDCs across regions, and particularly in India and Korea.

Table I.1a. Distribution of Quotas and Calculated Quotas
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th Review 3/	2008 Reform (2005) 4/	14th Review (2008)	Previous (2014)	Current (2015)
Advanced economies	60.4	57.6	63.8	58.2	50.7	50.2
Major advanced economies	45.3	43.4	47.6	42.9	36.1	35.7
United States	17.7	17.4	19.0	17.0	14.3	14.5
Japan	6.6	6.5	8.0	6.5	5.3	5.1
Germany	6.1	5.6	6.2	5.7	5.1	5.0
France	4.5	4.2	4.0	3.8	3.3	3.2
United Kingdom	4.5	4.2	4.4	4.7	3.6	3.6
Italy	3.3	3.2	3.3	3.0	2.5	2.4
Canada	2.7	2.3	2.6	2.3	2.1	2.0
Other advanced economies	15.1	14.3	16.2	15.3	14.6	14.5
Spain	1.7	2.0	2.3	2.2	1.8	1.8
Netherlands	2.2	1.8	1.9	1.9	2.1	2.1
Australia	1.4	1.4	1.3	1.4	1.5	1.4
Belgium	1.9	1.3	1.5	1.3	1.1	1.1
Switzerland	1.5	1.2	1.2	1.2	1.6	1.7
Sweden	1.0	0.9	1.0	0.9	0.9	0.9
Austria	0.9	0.8	0.9	0.8	0.7	0.7
Norway	0.8	0.8	0.8	0.8	0.8	0.7
Ireland	0.5	0.7	1.2	1.1	0.7	0.8
Denmark	0.8	0.7	0.9	0.7	0.6	0.6
Emerging Market and Developing Countries 5/	39.6	42.4	36.2	41.8	49.3	49.8
Africa	5.0	4.4	2.8	3.1	3.7	3.7
South Africa	0.8	0.6	0.6	0.6	0.5	0.5
Nigeria	0.7	0.5	0.3	0.5	0.7	0.7
Asia	12.6	16.0	15.8	17.7	23.4	24.2
China 6/	4.0	6.4	6.4	7.9	12.0	12.6
India	2.4	2.7	2.0	2.4	3.0	3.1
Korea, Republic of	1.4	1.8	2.2	2.1	2.0	2.0
Indonesia	0.9	1.0	0.9	0.9	1.3	1.3
Singapore	0.6	0.8	1.0	1.2	1.3	1.3
Malaysia	0.7	0.8	0.9	0.8	0.8	0.8
Thailand	0.6	0.7	0.8	0.8	1.0	1.0
Middle East, Malta & Turkey	7.2	6.7	4.8	6.2	7.2	7.2
Saudi Arabia	2.9	2.1	0.8	1.3	1.7	1.7
Turkey	0.6	1.0	1.0	1.1	1.1	1.2
Iran, Islamic Republic of	0.6	0.7	0.6	0.7	0.8	0.7
Western Hemisphere	7.7	7.9	6.6	7.0	7.4	7.4
Brazil	1.8	2.3	1.7	2.2	2.3	2.2
Mexico	1.5	1.9	2.0	1.8	1.7	1.7
Venezuela, República Bolivariana de	1.1	0.8	0.4	0.5	0.5	0.6
Argentina	0.9	0.7	0.6	0.6	0.6	0.6
Transition economies	7.1	7.2	6.2	7.7	7.6	7.3
Russian Federation	2.5	2.7	2.1	2.9	2.7	2.6
Poland	0.7	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:						
EU 28	32.0	30.4	33.1	31.5	27.5	27.0
LICs 7/	3.3	3.3	1.6	1.7	2.2	2.3

Source: Finance Department

1/ These results are based on the current quota formula: $CQS = (0.50 \times GDP + 0.30 \times Openness + 0.15 \times Variability + 0.05 \times Reserves)^K$. GDP blend using 60 percent market and 40 percent PPP exchange rates. K is a compression factor of 0.95.

2/ The "2008 Reform" reflects quotas after the "second round" ad hoc quota increases for 54 members agreed in 2008, following the "first round" ad hoc increases for four members agreed in 2006. Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively. For the two countries, Somalia and Sudan, that have not yet consented to and paid for their quota increases, 11th Review proposed quotas are used.

3/ Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

4/ Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.

5/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

6/ Including China, P.R., Hong Kong SAR and Macao SAR.

7/ Currently PRGT-eligible countries.

Table I.1b. Changes in Distribution of Calculated Quotas
(In percent)

	Calculated Quota Shares 1/				Changes w.r.t Previous CQS		Changes w.r.t 14th Review CQS	
	2008 Reform (2005) 2/	14th Review (2008)	Previous (2014)	Current (2015)	Absolute Change (2015 vs 2014) (in pp)	Relative Change (2015 vs 2014) (in percent)	Absolute Change (2015 vs 2008) (in pp)	Relative Change (2015 vs 2008) (in percent)
Advanced economies	63.8	58.2	50.7	50.2	-0.5	-1.1	-8.1	-13.9
Major advanced economies	47.6	42.9	36.1	35.7	-0.4	-1.1	-7.2	-16.8
United States	19.0	17.0	14.3	14.5	0.2	1.1	-2.5	-14.8
Japan	8.0	6.5	5.3	5.1	-0.2	-3.8	-1.4	-21.4
Germany	6.2	5.7	5.1	5.0	-0.1	-2.1	-0.7	-12.8
France	4.0	3.8	3.3	3.2	-0.1	-2.6	-0.6	-16.4
United Kingdom	4.4	4.7	3.6	3.6	0.0	0.0	-1.1	-23.5
Italy	3.3	3.0	2.5	2.4	-0.1	-3.8	-0.6	-19.8
Canada	2.6	2.3	2.1	2.0	-0.1	-2.6	-0.3	-11.9
Other advanced economies	16.2	15.3	14.6	14.5	-0.1	-1.0	-0.9	-5.6
Spain	2.3	2.2	1.8	1.8	0.0	-2.2	-0.5	-21.6
Netherlands	1.9	1.9	2.1	2.1	0.0	-1.9	0.2	11.4
Australia	1.3	1.4	1.5	1.4	-0.1	-4.5	0.0	2.6
Belgium	1.5	1.3	1.1	1.1	0.0	-1.8	-0.2	-15.9
Switzerland	1.2	1.2	1.6	1.7	0.1	5.6	0.5	40.5
Sweden	1.0	0.9	0.9	0.9	0.0	-3.7	0.0	-4.9
Austria	0.9	0.8	0.7	0.7	0.0	-2.1	-0.1	-14.2
Norway	0.8	0.8	0.8	0.7	0.0	-6.5	-0.1	-11.9
Ireland	1.2	1.1	0.7	0.8	0.0	4.1	-0.3	-28.4
Denmark	0.9	0.7	0.6	0.6	0.0	-0.2	-0.1	-20.3
Emerging Market and Developing Countries 3/	36.2	41.8	49.3	49.8	0.5	1.1	8.1	19.3
Africa	2.8	3.1	3.7	3.7	0.0	0.1	0.5	16.7
South Africa	0.6	0.6	0.5	0.5	0.0	-3.2	-0.1	-10.0
Nigeria	0.3	0.5	0.7	0.7	0.0	-0.4	0.2	39.2
Asia	15.8	17.7	23.4	24.2	0.8	3.3	6.5	36.5
China 4/	6.4	7.9	12.0	12.6	0.6	4.6	4.7	58.9
India	2.0	2.4	3.0	3.1	0.1	2.7	0.7	29.5
Korea, Republic of	2.2	2.1	2.0	2.0	0.0	1.4	-0.1	-5.6
Indonesia	0.9	0.9	1.3	1.3	0.0	0.9	0.4	44.9
Singapore	1.0	1.2	1.3	1.3	0.0	-0.2	0.1	9.4
Malaysia	0.9	0.8	0.8	0.8	0.0	-2.9	0.0	-3.9
Thailand	0.8	0.8	1.0	1.0	0.0	-0.2	0.2	24.9
Middle East, Malta & Turkey	4.8	6.2	7.2	7.2	0.0	-0.4	1.0	16.6
Saudi Arabia	0.8	1.3	1.7	1.7	0.0	-1.5	0.3	24.4
Turkey	1.0	1.1	1.1	1.2	0.0	3.7	0.0	1.1
Iran, Islamic Republic of	0.6	0.7	0.8	0.7	0.0	-5.9	0.1	9.4
Western Hemisphere	6.6	7.0	7.4	7.4	0.0	0.2	0.4	5.4
Brazil	1.7	2.2	2.3	2.3	-0.1	-3.6	0.1	4.5
Mexico	2.0	1.8	1.7	1.7	0.0	0.1	-0.1	-3.1
Venezuela, República Bolivariana de	0.4	0.5	0.5	0.6	0.1	18.2	0.1	14.8
Argentina	0.6	0.6	0.6	0.6	0.0	0.9	0.0	6.6
Transition economies	6.2	7.7	7.6	7.3	-0.2	-2.9	-0.3	-4.4
Russian Federation	2.1	2.9	2.7	2.6	-0.1	-5.4	-0.4	-12.7
Poland	0.9	0.9	0.9	0.9	0.0	0.1	0.0	-2.9
Total	100.0	100.0	100.0	100.0				
Memorandum Item:								
EU 28	33.1	31.5	27.5	27.0	-0.5	-1.7	-4.5	-14.2
LICs 5/	1.6	1.7	2.2	2.3	0.1	3.5	0.6	34.2

Source: Finance Department

1/ These results are based on the current quota formula: $CQS = (0.50 \times GDP + 0.30 \times Openness + 0.15 \times Variability + 0.05 \times Reserves)^K$. GDP blend using 60 percent market and 40 percent PPP exchange rates. K is a compression factor of 0.95.

2/ Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.

3/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

4/ Including China, P.R., Hong Kong SAR and Macao SAR.

5/ Currently PRGT-eligible countries.

Figure I.2. Selected Macroeconomic Developments**Average Real GDP Growth Rates** **Openness****Current Receipts and Current Payments (billions of SDRs)**

Source: World Economic Outlook (for GDP growth data) and Finance Department.

5. Figure I.3 shows the contributions of the five quota variables to CQS for major groups during the last five data updates.⁶ For EMDCs as a group, the rising shares of market GDP, PPP GDP, and openness have been the main contributors to the increases in their CQS (Figure I.3, bottom panel). For the major advanced countries, the reverse applies as this group has steadily lost share across all three variables. Market GDP continues to make the most important contribution to CQS for this group, whereas for EMDCs, the contributions of market GDP, PPP GDP, and openness are broadly similar (reflecting their larger share of PPP GDP, which has a lower weight in the formula). Openness and variability combined contribute roughly 60 percent of the CQS for other advanced economies as a group (for a more comprehensive discussion on the relationship between openness and variability, see Supplement 1, Annex I).

⁶ The contribution of each quota variable is defined as each major group's aggregate share multiplied by its coefficient in the quota formula (e.g., 0.3 for market GDP and 0.2 for PPP GDP). The contributions will not equal the corresponding CQS due to compression.

Figure I.3. Contributions of Country Groups and Quota Variables to CQS
(In percentage points)

Major Advanced Economies--CQS 35.7 Percent

Other Advanced Economies--CQS 14.5 Percent

EMDCs--CQS 49.8 Percent

Source: Finance Department

Table I.2a. Distribution of Quotas and Updated Quota Variables
(In percent)

	14th General Review Quota Shares 1/	GDP Blend 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Advanced economies	57.6	49.6	50.5	56.9	57.3	54.9	55.6	24.8	23.3
Major advanced economies	43.4	40.5	41.0	37.5	37.7	35.2	36.1	15.4	15.0
United States	17.4	20.1	19.8	12.8	12.6	12.8	13.1	1.1	1.2
Japan	6.5	5.5	5.9	4.1	4.2	5.0	5.1	11.0	10.7
Germany	5.6	4.3	4.4	7.2	7.3	5.5	5.7	0.6	0.6
France	4.2	3.1	3.2	4.0	4.1	3.0	3.0	0.5	0.5
United Kingdom	4.2	3.2	3.1	4.3	4.4	4.6	4.7	1.0	0.8
Italy	3.2	2.4	2.5	2.6	2.7	2.6	2.6	0.5	0.5
Canada	2.3	1.9	2.0	2.5	2.5	1.8	1.8	0.7	0.6
Other advanced economies	14.3	9.1	9.4	19.4	19.6	19.8	19.5	9.4	8.4
Spain	2.0	1.6	1.7	1.9	2.0	2.0	2.0	0.4	0.3
Netherlands	1.8	1.0	1.0	3.7	3.8	3.1	3.1	0.2	0.2
Australia	1.4	1.5	1.6	1.4	1.5	1.3	1.3	0.4	0.4
Belgium	1.3	0.6	0.6	1.9	1.9	1.4	1.4	0.1	0.2
Switzerland	1.2	0.7	0.7	2.2	2.2	2.7	2.4	5.1	4.3
Sweden	0.9	0.6	0.6	1.1	1.1	1.2	1.4	0.5	0.5
Austria	0.8	0.5	0.5	1.0	1.0	0.9	0.9	0.1	0.1
Norway	0.8	0.5	0.5	0.8	0.8	1.0	1.2	0.6	0.6
Ireland	0.7	0.3	0.3	1.3	1.2	1.2	1.3	0.0	0.0
Denmark	0.7	0.4	0.4	0.8	0.8	0.6	0.6	0.8	0.7
Emerging Market and Developing Countries 6/	42.4	50.4	49.5	43.1	42.7	45.1	44.4	75.2	76.7
Africa	4.4	3.3	3.3	2.7	2.8	3.8	3.7	3.2	3.5
South Africa	0.6	0.5	0.6	0.5	0.5	0.3	0.3	0.4	0.4
Nigeria	0.5	0.8	0.8	0.4	0.4	0.6	0.5	0.3	0.3
Asia	16.0	27.0	25.8	21.9	21.2	16.7	16.6	46.5	46.7
China 7/	6.4	15.4	14.4	10.3	9.8	8.2	8.2	33.0	33.9
India	2.7	4.3	4.2	2.1	2.1	1.4	1.4	3.0	2.5
Korea, Republic of	1.8	1.7	1.7	2.6	2.6	1.0	0.9	3.3	3.1
Indonesia	1.0	1.7	1.7	0.8	0.8	0.8	0.7	1.0	0.9
Singapore	0.8	0.4	0.4	2.3	2.3	1.8	1.7	2.3	2.3
Malaysia	0.8	0.5	0.5	0.9	1.0	0.8	0.8	0.9	1.1
Thailand	0.7	0.7	0.7	1.1	1.1	1.2	1.2	1.4	1.4
Middle East, Malta & Turkey	6.7	6.0	6.1	6.0	6.0	9.1	8.8	11.6	12.0
Saudi Arabia	2.1	1.2	1.2	1.2	1.2	2.5	2.5	6.1	6.4
Turkey	1.0	1.3	1.2	0.9	0.9	1.0	1.1	0.9	1.0
Iran, Islamic Republic of	0.7	0.9	1.0	0.3	0.4	0.6	0.5	1.2	1.1
Western Hemisphere	7.9	8.1	8.2	5.4	5.4	6.5	6.3	7.4	7.1
Brazil	2.3	2.9	3.1	1.2	1.3	1.8	1.7	3.3	3.2
Mexico	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.7	1.6
Venezuela, República Bolivariana de	0.8	0.7	0.5	0.3	0.3	0.5	0.5	0.1	0.1
Argentina	0.7	0.8	0.8	0.4	0.4	0.5	0.4	0.3	0.2
Transition economies	7.2	6.0	6.3	7.2	7.3	8.9	9.0	6.5	7.3
Russian Federation	2.7	2.8	3.0	2.2	2.2	2.6	2.6	2.9	3.6
Poland	0.9	0.8	0.8	1.0	1.0	0.9	0.9	0.9	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Items:									
EU 28	30.4	20.8	21.3	36.1	36.6	33.1	33.7	7.3	7.0
LICs 8/	3.3	2.0	1.9	1.6	1.5	2.3	2.2	1.3	1.3

Source: Finance Department

1/ Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Based on IFS data through 2015.

3/ Based on IFS data through 2014.

4/ GDP blend using 60 percent market and 40 percent PPP exchange rates.

5/ Variability of current receipts minus net capital flows (due to change in sign convention in BPM6).

6/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

7/ Including China, P.R., Hong Kong SAR, and Macao SAR.

8/ Currently PRGT-eligible countries.

Table I.2b. Updated GDP Blend Variable
(In percent)

	14th General Review Quota Shares 1/	Calculated Quota Shares 2/ 3/	GDP		PPP GDP 5/		GDP Blend 6/	
			Current 3/	Previous 4/	Current 3/	Previous 4/	Current 3/	Previous 4/
Advanced economies	57.6	50.2	56.7	57.6	39.0	39.8	49.6	50.5
Major advanced economies	43.4	35.7	46.1	46.5	32.2	32.8	40.5	41.0
United States	17.4	14.5	22.9	22.2	16.1	16.3	20.1	19.8
Japan	6.5	5.1	6.3	6.9	4.4	4.5	5.5	5.9
Germany	5.6	5.0	4.8	4.9	3.5	3.5	4.3	4.4
France	4.2	3.2	3.5	3.7	2.4	2.5	3.1	3.2
United Kingdom	4.2	3.6	3.7	3.6	2.4	2.4	3.2	3.1
Italy	3.2	2.4	2.7	2.8	2.0	2.1	2.4	2.5
Canada	2.3	2.0	2.3	2.4	1.5	1.5	1.9	2.0
Other advanced economies	14.3	14.5	10.6	11.1	6.9	7.0	9.1	9.4
Spain	2.0	1.8	1.7	1.8	1.4	1.5	1.6	1.7
Netherlands	1.8	2.1	1.1	1.1	0.8	0.8	1.0	1.0
Australia	1.4	1.4	1.8	2.0	1.0	1.0	1.5	1.6
Belgium	1.3	1.1	0.7	0.7	0.4	0.5	0.6	0.6
Switzerland	1.2	1.7	0.9	0.9	0.4	0.4	0.7	0.7
Sweden	0.9	0.9	0.7	0.7	0.4	0.4	0.6	0.6
Austria	0.8	0.7	0.5	0.6	0.4	0.4	0.5	0.5
Norway	0.8	0.7	0.6	0.7	0.3	0.3	0.5	0.5
Ireland	0.7	0.8	0.3	0.3	0.2	0.2	0.3	0.3
Denmark	0.7	0.6	0.4	0.4	0.2	0.2	0.4	0.4
Emerging Market and Developing Countries 7/	42.4	49.8	43.3	42.4	61.0	60.2	50.4	49.5
Africa	4.4	3.7	2.7	2.7	4.1	4.1	3.3	3.3
South Africa	0.6	0.5	0.5	0.5	0.7	0.7	0.5	0.6
Nigeria	0.5	0.7	0.7	0.7	1.0	1.0	0.8	0.8
Asia	16.0	24.2	22.7	21.3	33.5	32.5	27.0	25.8
China 8/	6.4	12.6	14.2	13.0	17.3	16.5	15.4	14.4
India	2.7	3.1	2.6	2.6	6.8	6.6	4.3	4.2
Korea, Republic of	1.8	2.0	1.8	1.7	1.6	1.7	1.7	1.7
Indonesia	1.0	1.3	1.2	1.2	2.5	2.4	1.7	1.7
Singapore	0.8	1.3	0.4	0.4	0.4	0.4	0.4	0.4
Malaysia	0.8	0.8	0.4	0.4	0.7	0.7	0.5	0.5
Thailand	0.7	1.0	0.5	0.5	1.0	1.0	0.7	0.7
Middle East, Malta & Turkey	6.7	7.2	5.0	5.2	7.3	7.4	6.0	6.1
Saudi Arabia	2.1	1.7	0.9	1.0	1.5	1.5	1.2	1.2
Turkey	1.0	1.2	1.2	1.1	1.4	1.4	1.3	1.2
Iran, Islamic Republic of	0.7	0.7	0.6	0.8	1.2	1.3	0.9	1.0
Western Hemisphere	7.9	7.4	7.8	7.7	8.5	8.8	8.1	8.2
Brazil	2.3	2.2	2.8	3.0	3.0	3.1	2.9	3.1
Mexico	1.9	1.7	1.6	1.7	2.0	2.0	1.8	1.8
Venezuela, República Bolivariana de	0.8	0.6	0.8	0.5	0.5	0.5	0.7	0.5
Argentina	0.7	0.6	0.8	0.7	0.8	0.9	0.8	0.8
Transition economies	7.2	7.3	5.1	5.5	7.4	7.4	6.0	6.3
Russian Federation	2.7	2.6	2.3	2.7	3.5	3.4	2.8	3.0
Poland	0.9	0.9	0.7	0.7	0.9	0.9	0.8	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Item:								
EU 28	30.4	27.0	23.1	23.7	17.3	17.7	20.8	21.3
LICs 9/	3.3	2.3	1.5	1.4	2.7	2.6	2.0	1.9

Source: Finance Department

1/ Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Based on the following formula: $CQS = (0.50 \times GDP + 0.30 \times Openness + 0.15 \times Variability + 0.05 \times Reserves)^k$. GDP blended using 60 percent market and 40 percent PPP exchange rates. K is a compression factor of 0.95.

3/ Based on IFS data through 2015.

4/ Based on IFS data through 2014.

5/ Current PPP-GDP data were retrieved from the WEO database for 186 countries. For the countries with no WEO data (Nauru, Somalia and Syrian Arab Republic), PPP-GDP was gap filled.

6/ GDP blend using 60 percent market and 40 percent PPP exchange rates.

7/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

8/ Including China, P.R., Hong Kong SAR, and Macao SAR.

9/ Currently PRGT-eligible countries.

6. As in previous updates, there were sizable absolute changes in CQS for some individual members (Table I.3a). Among the largest gainers, China again recorded the largest individual increase in CQS (0.56 pp) broadly in line with the last update. Two AEs, the U.S. and Switzerland were the next largest gainers. For the U.S., the 0.16 pp increase in CQS reflected mainly a higher share in market GDP, driven by a stronger dollar. The gains for Switzerland were mainly associated with higher shares in variability and reserves. Seven of the 10 largest declines in CQS were for AEs, with Japan (-0.20 pp) and Germany (-0.11 pp) registering the largest individual declines mainly due to lower shares in market GDP. Declines in other AEs are mainly explained by lower shares in both market GDP and openness.

Table I.3a. Top 10 Positive and Negative Absolute Changes in Calculated Quota Shares
(In percentage points)

	Difference between Current and Previous CQS 1/	Contribution of Variables to Change in CQS 2/					
		Market GDP	PPP GDP	GDP Blend 3/	Openness	Variability	Reserves
Top 10: Positive Change							
China 4/	0.557	0.363	0.149	0.513	0.160	0.002	-0.043
United States	0.156	0.202	-0.043	0.159	0.064	-0.045	-0.006
Switzerland	0.091	-0.003	-0.002	-0.005	0.011	0.049	0.038
Venezuela, R.B. de	0.086	0.096	-0.007	0.089	-0.004	-0.002	0.000
India	0.081	0.020	0.035	0.055	0.006	-0.001	0.024
Turkey	0.041	0.040	0.000	0.041	0.003	-0.002	-0.001
United Arab Emirates	0.034	-0.002	0.000	-0.002	0.014	0.019	0.003
Ireland	0.031	0.008	0.003	0.011	0.022	-0.004	0.000
Korea, Republic of	0.028	0.016	-0.002	0.013	-0.003	0.006	0.012
Vietnam	0.026	0.004	0.002	0.007	0.019	-0.001	0.001
Top 10: Negative Change							
Japan	-0.204	-0.171	-0.029	-0.200	-0.020	-0.021	0.016
Russia	-0.146	-0.102	0.015	-0.087	-0.027	-0.006	-0.035
Germany	-0.107	-0.041	-0.016	-0.056	-0.031	-0.031	-0.001
Italy	-0.095	-0.045	-0.017	-0.062	-0.030	-0.009	0.000
France	-0.084	-0.047	-0.013	-0.060	-0.027	-0.004	0.000
Brazil	-0.084	-0.075	-0.023	-0.098	-0.013	0.017	0.005
Australia	-0.067	-0.050	-0.002	-0.052	-0.014	-0.003	0.000
Canada	-0.055	-0.044	-0.005	-0.049	-0.007	-0.005	0.003
Norway	-0.049	-0.019	-0.001	-0.020	-0.007	-0.024	0.001
Iran, I.R. of	-0.045	-0.044	-0.007	-0.051	-0.011	0.015	0.003

Source: Finance Department

1/ Current and previous calculations are based on data through 2015 and 2014 respectively, using the existing formula.

2/ Difference in the shares for each variable between the current and previous datasets, multiplied by the variable weight in the quota formula. The change in CQS also reflects the effect of compression.

3/ GDP blended using 60 percent market and 40 percent PPP factors.

4/ Including China, P.R., Hong Kong SAR and Macao SAR.

7. Changes in percent of CQS were large for some individual members. Grenada had by far the largest relative gain in its CQS, which increased by a quarter compared to its CQS in the previous data update, explained mainly by gains in the share in variability. Kiribati and Venezuela also recorded large relative increases in their CQS, in the former case mainly driven by gain in the country's share in variability and in the latter case driven by a gain in the share in market GDP.⁷ The three countries with the largest relative declines in CQS (ranging from 11 to 19 percent) were San Marino, South Sudan and Tuvalu. The declines for San Marino and South Sudan are explained mainly by openness and variability. The decline for Tuvalu is mainly explained by reserves.

⁷ For Venezuela, the reported increase in market GDP reflects the combined effects of very high inflation rates and distortions in the official exchange rate.

Table I.3b. Top 10 Positive and Negative Relative Changes in Calculated Quota Shares
(In percent)

	Change in CQS in percent of CQS Update 2014 1/	Contribution of Variables to Relative Change in CQS 2/						Memorandum Items	
		GDP	PPP	GDP Blend 3/	Openness	Variability	Reserves	CQS Update 2015	CQS Update 2014
Top 10: Positive Change									
Grenada	25.6	2.0	0.4	2.4	0.5	23.1	0.9	0.0024	0.0019
Kiribati	18.2	-0.6	0.1	-0.5	2.0	17.3	0.5	0.0012	0.0010
Venezuela, R.B. de	18.2	22.2	-1.6	20.6	-0.9	-0.6	0.0	0.5559	0.4703
Papua New Guinea	14.1	8.7	5.3	14.0	-0.4	2.1	-0.8	0.0354	0.0310
Iceland	12.5	0.3	0.0	0.3	0.9	11.8	0.2	0.1306	0.1161
Myanmar	12.0	1.8	5.4	7.2	3.0	2.5	-0.1	0.1241	0.1107
Brunei	11.9	-1.1	-1.0	-2.0	-1.6	16.0	0.1	0.0477	0.0426
Eritrea	11.4	5.0	0.9	6.0	3.2	1.4	1.3	0.0071	0.0064
Djibouti	10.0	1.7	0.4	2.2	4.7	3.2	0.4	0.0040	0.0037
Somalia	9.8	1.7	0.6	2.3	5.0	2.9	0.1	0.0122	0.0111
Top 10: Negative Change									
San Marino	-19.1	-0.2	-0.2	-0.4	-9.9	-9.5	-0.3	0.0091	0.0113
South Sudan	-15.3	3.1	0.5	3.6	-4.8	-14.6	-0.3	0.0418	0.0493
Tuvalu	-10.6	-0.7	-0.1	-0.8	-1.8	0.6	-9.1	0.0002	0.0003
Timor-Leste	-9.2	-5.5	-3.8	-9.3	-2.6	2.9	-0.7	0.0107	0.0118
Lao P.D.R.	-8.6	2.6	1.3	3.9	1.5	-14.9	0.6	0.0227	0.0248
Libya	-6.8	-2.3	-1.9	-4.2	-2.3	1.9	-2.7	0.2444	0.2624
Norway	-6.5	-2.7	-0.2	-2.8	-0.9	-3.3	0.2	0.7150	0.7644
Malawi	-6.0	0.8	0.2	1.0	-0.7	-7.4	0.8	0.0160	0.0170
Iran, I.R. of	-5.9	-6.2	-1.0	-7.1	-1.5	2.0	0.4	0.7194	0.7645
Central African Rep.	-5.8	-3.1	-4.0	-7.1	0.0	0.9	0.0	0.0038	0.0040

Source: Finance Department

1/ Current and previous calculations are based on data through 2015 and 2014 respectively, using the existing formula.

2/ Difference in the shares for each variable between the current previous datasets, multiplied by the variable weight in the quota formula and divided by the weighted sum of variables in the previous dataset. The relative change in CQS also reflects the effect of compression.

3/ GDP blended using 60 percent market and 40 percent PPP factors.

B. Developments in Out-Of-Lineness

8. Out-of-lineness (OOL) based on the current formula has increased further. Comparing CQS with 14th Review quota shares, at the aggregate level AEs are over-represented and EMDCs under-represented by 7.5 pp, compared with 7.0 pp in the previous update (Table I.4). The number of underrepresented members decreased slightly to 71 compared with 73 in the previous update.

9. These developments illustrate that calculated quota shares can over time depart significantly from actual quota shares given the periodic nature of quota adjustments.

- **The 14th Review quota increases resulted in a major reduction of OOL.** Aggregate OOL for the membership would have been more than halved if the new quotas had become effective immediately after the 14th Review was completed in 2010 (Figure I.4).
- **Subsequent economic developments have increased aggregate OOL again and this measure is now slightly above the level prevailing before the 14th Review.** The 71 countries that are now under-represented based on the current formula have an aggregate OOL of about 11.8 pp. Within this group, one country—China—accounts for roughly half the aggregate OOL (6.2 pp), compared with about one-third prior to the 14th Review (3.9 pp). Excluding China, the degree of OOL among under-represented countries is lower than it was at the time of the 14th

Review (decline from 6.8 pp to 5.6 pp). Among over-represented countries, the US, Japan, and France currently account for 45 percent of the total OOL, and as a group, major advanced economies now account for about two-thirds of the aggregate over-representation. These results are obviously sensitive to the quota formula used to measure CQS and a different formula could generate a different OOL distribution.⁸ However, they also highlight the importance of making periodic adjustments in quota shares to reflect members' changing relative positions in the global economy.

Table I.4. Under- and Overrepresented Countries by Major Country Groups^{1/}
(In percent)

	14th General Review	Difference 3/		Number of Countries		2008 Reform	Difference 7/
	Quota Share 2/ (In percent)	Current 4/	Previous 5/	Current	Previous	Quota Share 6/ (In percent)	
Advanced economies	57.6	-7.5	-7.0	26	26	60.5	-2.2
Underrepresented	-	1.3	1.3	8	10	--	1.8
Overrepresented	-	-8.8	-8.2	18	16	--	-4.1
Emerging Market and Developing Countries	42.4	7.5	7.0	163	163	39.5	2.2
Underrepresented	-	10.5	9.7	63	63	--	8.9
Overrepresented	-	-3.0	-2.8	100	100	--	-6.7
Total Underrepresented Countries	29.4	11.8	11.0	71	73	30.7	10.7
Total Overrepresented Countries	70.6	-11.8	-11.0	118	116	69.3	-10.7
Memorandum Items:							
EU 28	30.4	-3.4	-2.9	28	28	32.0	-0.5
Underrepresented	-	0.9	0.9	12	14	--	2.2
Overrepresented	-	-4.3	-3.8	16	14	--	-2.8
LICs 8/	3.3	-1.0	-1.1	70	70	3.3	-1.6
Underrepresented	-	0.2	0.1	13	12	--	0.0
Overrepresented	-	-1.2	-1.2	57	58	--	-1.6

Source: Finance Department

1/ Under- and over-represented countries for the two datasets, respectively.

2/ Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

3/ Difference between calculated quota shares and 14th General Review quota shares.

4/ Based on IFS data through 2015.

5/ Based on IFS data through 2014.

6/ The "2008 Reform" reflects quotas after the "second round" ad hoc quota increases for 54 members agreed in 2008, following the "first round" ad hoc increases for four members agreed in 2006. Excludes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively. For the two countries, Somalia and Sudan, that have not yet consented to and paid for their quota increases, 11th Review proposed quotas are used.

7/ Difference between calculated quota shares based on IFS data through 2008 (14th Review) and 2008 Reform quota shares.

8/ Currently PRGT-eligible countries.

⁸ Staff has looked at the OOL implied by some other alternative formulas discussed in the main text. These tend to show a similar overall level of OOL to the current formula at the aggregate level, though the composition can change significantly (see, for example, the results for the midpoint set C formula shown in Figure I.4). China would account for around half or more of total under-representation in all these cases.

Figure I.4. Out-of-Lineness (OOL)
(In percentage points, in percent of total OOL)

Source: Finance Department

1/ Difference between 2008 Reform AQS and CQS (2010) based on data through 2008 (187 members).

2/ Difference between 14th Review AQS and CQS (2010) based on data through 2008 (187 members).

3/ Difference between 14th Review AQS and CQS (2016) based on data through 2014 (189 members).

4/ Difference between 14th Review AQS and CQS (2017) based on data through 2015 (189 members).

5/ Difference between 14th Review AQS and Midpoint Set C Formula based on data through 2015 (189 members).

August 2, 2017

FIFTEENTH GENERAL REVIEW OF QUOTAS—QUOTA FORMULA AND REALIGNING SHARES—ANNEXES

Approved By
Andrew Tweedie

Prepared by the Finance Department.

CONTENTS

ANNEXES

I. Quota Formula Variables	2
II. Illustrative Formula Simulations	19
III. Additional Illustrative Formula Simulations	30
IV. Protection of the Poorest Members	33
V. Voluntary Financial Contributions	41

Annex I. Quota Formula Variables

This annex updates previous analysis of the distributional effects of the quota formula variables, using the latest data, and discusses alternative measures of openness.

A. Overview of Quota Variables

1. **The quota formula seeks to capture the multiple roles of quotas.** These include their key role in determining the Fund's financial resources, their role in decisions on members' access to Fund resources, and their close link with members' voting rights. Quota shares also determine members' shares in a general allocation of SDRs. Thus, the formula has typically sought to capture members' relative positions in the world economy, their financial strength and ability to contribute usable resources, as well as their potential need to borrow from the Fund. Some individual quota variables are intended to capture more than one aspect.
2. **The current quota formula was agreed in 2008 and includes four variables and a compression factor.** The four variables are GDP (measured as a blend of market and PPP GDP), openness, variability, and reserves. All of them are expressed in shares of global totals, with the variables assigned weights totaling to 1.0. The formula also includes a compression factor that reduces dispersion in calculated quota shares.¹
3. **Figure I.1 presents the calculated quota shares of major country groups and their shares in each variable in the quota formula, based on the latest data update.** A few points are worth noting: (i) the aggregate shares of advanced economies (AEs) and emerging market and developing countries (EMDCs) in the GDP blend variable are broadly equal; (ii) AEs have a larger share in openness and variability, reflecting the relatively large share for the group of other advanced economies (more than double their share in GDP); (iii) EMDCs have a much larger share in the reserves variable; and (iv) the aggregate group shares in openness and variability are broadly identical.
4. **The quota variables are all partly related to economic size, and therefore are quite highly correlated in most cases.** The correlations between variables are shown in Table I.1. At the aggregate level, the correlations between GDP, openness, and variability are relatively high, while shares in reserves are less correlated with the other variables. This is particularly the case for AEs, where there is a very low correlation between reserves and the other variables. Excluding the ten largest members (by GDP blend share), the correlations between the GDP blend variable and the other variables in the quota formula decline significantly, while the correlation between openness and variability remains very high.
5. **These effects can be observed also in the relationship between market GDP shares and shares of the other quota formula variables.** Figure I.2 plots this relationship using the latest data through 2015. As can be seen from the upper left-hand side (LHS) panel, the relationship between

¹ The current formula is $CQS = (0.50 \cdot GDP + 0.30 \cdot Openness + 0.15 \cdot Variability + 0.05 \cdot Reserves)^k$. GDP is blended using 60 percent market and 40 percent PPP exchange rates; K is a compression factor of 0.95.

members' shares in the GDP PPP variable and market GDP is reasonably close for most members. However, there is a clear distinction between advanced economies and EMDCs: all AEs have higher shares in market GDP than in PPP GDP, while the converse is true for almost all EMDCs. The dispersion is wider for openness and variability (upper RHS and lower LHS), where a number of smaller AEs have significantly higher shares than in market GDP (and conversely, some larger AEs have larger shares in GDP). A marked differentiation among country groups is evident for reserves, with several large EMDCs having higher shares in reserves in relation to market GDP, while the reverse is true for most AEs (lower RHS).

Figure I.1. Shares of Major Country Groups in Each Quota Variable
(in percent)

Source: Finance Department.

Table I.1. Correlation between Quota Variables

Advanced Economies					All Members 1/				
	GDP Blend	Openness	Variability	Reserves		GDP Blend	Openness	Variability	Reserves
GDP Blend	1.00				GDP Blend	1.00			
Openness	0.92	1.00			Openness	0.93	1.00		
Variability	0.95	0.98	1.00		Variability	0.93	0.98	1.00	
Reserves	0.23	0.22	0.31	1.00	Reserves	0.63	0.59	0.56	1.00
EMDCs					All Members excluding Top 10 2/				
	GDP Blend	Openness	Variability	Reserves		GDP Blend	Openness	Variability	Reserves
GDP Blend	1.00				GDP Blend	1.00			
Openness	0.96	1.00			Openness	0.78	1.00		
Variability	0.93	0.96	1.00		Variability	0.75	0.92	1.00	
Reserves	0.96	0.95	0.93	1.00	Reserves	0.56	0.57	0.68	1.00

Source: Finance Department.

1/ Given the heterogeneity of data and differing distributions, it is possible for correlations for the full sample to fall outside of the range for the two sub samples.

2/ Large members in terms of share of GDP blend (60 percent market GDP and 40 percent PPP GDP).

Figure I.2. Relationship between Quota Variables and Market GDP share
(2017 Data Update)

Source: Finance Department.

1/ The dispersion is given by the average of the following measure for each point: $[\text{Max}(x,y) - \text{Min}(x,y)] / [\text{Max}(x,y) + \text{Min}(x,y)]$.

B. Variables in the Quota Formula

GDP Blend

6. **The current GDP variable is a blend of market GDP shares (60 percent) and PPP GDP shares (40 percent).** As Figure I.3 shows, the distribution of members' ratios of nominal PPP GDP relative to market GDP shows that most EMDCs have a ratio above 1 and most AEs have a ratio below 1. The statistical measure of skewness is very low.

7. **Relative to market GDP, most EMDCs and LICs benefit from PPP GDP, and the relative benefits tend to be larger for countries with lower per capita incomes.** All but three countries in the bottom quartile of the income distribution benefit from a higher weight on PPP GDP relative to market GDP, and they also record, along with countries in the third quartile, the largest relative gains (see Table I.2). This pattern is to be expected, as PPP GDP seeks to capture the output of economies, and the market price of many non-tradable goods tends to be lower in countries with lower per capita incomes, reflecting in part low wage costs in services that are not tradable. There are no clear differences in terms of countries that benefit from PPP GDP when countries are grouped by size of their market GDP, except that the median ratios for the top and bottom quartiles are somewhat lower than those for the 2nd and 3rd quartiles.

8. **Current PPP GDP data are based on the 2011 International Comparison Program (ICP) global estimates of purchasing power parity rates.** The 2011 PPP rates are based on broader country coverage than the previous (2005) estimates and reflect also further methodological improvements. Incorporation of these estimates led to a markedly higher aggregate share of EMDCs

in global PPP GDP (58.1 percent vs. 52.8 percent on the basis of the 2005 ICP data). Consequently, the CQS of EMDCs increased by 1.0 percentage point.² The 2017 round of the ICP is proceeding as scheduled with results expected during 2019.³

Table I.2. Countries that Benefit from PPP GDP

	By Size (Market GDP) 1/				By Income (GDP per Capita) 1/				By Grouping			Total
	Top Quartile	3rd	2nd	Bottom Quartile	Top Quartile	3rd	2nd	Bottom Quartile	AE (26)	EMDC excl. LIC (93)	LIC (70)	
PPP / Market GDP Shares												
Number of countries who benefit (ratio >1)	23	40	43	35	16	42	38	45	0	82	59	141
Median 2/	1.4	1.6	1.6	1.3	1.1	1.3	1.7	1.7		1.4	1.7	1.5
Average 2/	1.6	1.6	1.6	1.5	1.2	1.4	1.7	1.8		1.5	1.7	1.6

Source: Finance Department

1/ Each quartile includes 47 countries, except the bottom quartile that includes 48 countries.

2/ Average or median ratio among the countries which have ratios greater than 1.

Openness

9. Key characteristics of the openness variable noted in previous papers include the following (Table I.3):

- **Openness benefits many smaller economies.** More than two-thirds of the membership (131 countries based on the latest data update) gain from the inclusion of openness in the formula.⁴ The number of countries that benefit from openness is inversely related to size.
- **The gains from openness are positively related to income.** Over 90 percent of countries (43 out of 47) in the top quartile in terms of per capita income gain from openness, compared with less than half (23 countries) in the bottom quartile. Among the gainers, high income countries also gain more on average than low income countries.
- **These results are also reflected in the distribution of openness shares across major country groupings** (Figure I.1 in the previous section). The main gainers from openness at the aggregate level are small advanced countries, whose openness share on average is roughly double their share in the GDP blend. Smaller EMDCs in aggregate gain modestly from openness (though some individual countries have large gains), while other country groups, including LICs as a whole, do not gain from openness.

² See [Quota Formula-Data Update and Further Considerations](#) (7/2/14).

³ The benchmark estimates for 2017 will be based on a transition to a rolling survey approach (beginning in 2017), which involves spreading the price data collection over a three-year time period around the reference year. The Technical Advisory Group (TAG) of the ICP met in May 2017 and agreed on a plan to address technical and research questions in the ICP via smaller, specialized task forces. The next ICP Governing Board meeting is scheduled for September 15, 2017 and the 4th ICP Inter-Agency Coordination Group (IACG) meeting will take place during the week of October 23-27, 2017. The IMF is represented on the IACG and the ICP Governing Board.

⁴ Consistent with past practice, a country is deemed to benefit from the inclusion of openness (or variability or reserves) if its share in this variable is larger than its share in the GDP blend variable.

Table I.3. Countries that Benefit from Openness

	By Size (Market GDP) 1/				By Income (GDP per Capita) 1/				By Grouping			Total
	Top Quartile	3rd	2nd	Bottom Quartile	Top Quartile	3rd	2nd	Bottom Quartile	AE (26)	EMDC excl. LIC (93)	LIC (70)	
Openness / GDP Blend Shares												
Number of countries who benefit (ratio > 1)	26	28	34	43	43	31	34	23	23	64	44	131
Median 2/	1.6	1.6	1.4	1.7	1.9	1.5	1.5	1.3	1.7	1.6	1.4	1.5
Average 2/	2.0	2.3	1.7	2.1	2.7	1.7	1.8	1.5	2.9	1.9	1.8	2.0

Source: Finance Department

1/ Each quartile includes 47 countries, except the bottom quartile that includes 48 countries.

2/ Average or median ratio among the countries which have ratios greater than 1.

10. The distribution of members' shares in openness relative to GDP is highly skewed.

While the median ratio of openness to market GDP for the membership is 1.02, 13 countries have ratios greater than 2 (with the highest being above 11) and 36 have ratios above 1.5 (Figure I.4a). In terms of openness relative to GDP blend shares, roughly 60 percent of members have shares of less than 1.5. However, 37 members have a share of openness that is more than double their share in the GDP blend variable, and one member has a ratio of openness to GDP blend share above 20 (Figure I.4b). The combined effect of openness and variability, which have similar highly skewed distributions (see below) and a collective weight in the formula of 45 percent, generates very large CQS for some countries relative to their GDP shares.

Figure I.4a. Ratio of Openness Level to Market GDP Level

Source: Finance Department.

11. Concerns have been raised about the measurement of the openness variable, which is based on a gross measure that can lead to double counting of cross border flows. With possibly multiple cross border flows of goods, especially in vertically integrated production processes, a gross flow measure can result in a distorted picture of openness.⁵ Previous staff work has also highlighted the very large boost that the current openness variable provides for some countries, resulting in CQS that appear large in relation to other measures of their relative economic positions.

12. In principle, trade data on a value-added basis could be used to address the double counting problem, but severe data limitations remain in this area.⁶ First, current OECD-WTO TiVA estimates cover only about a third of the membership (63 members, or 6 more than last year) and are available only for 1995-2011 (two additional years than last year).⁷ Second, while reasonably robust estimates are available for goods exports and imports, large inconsistencies in bilateral trade in services data exist even for OECD members. The OECD-WTO uses an algorithm to approximate the allocation of bilateral services since these services account for about one quarter of total trade flows. Third, value added trade is not directly recorded by an official statistical agency (unlike other quota variables) but rather depends on input-output tables under several assumptions, including on shares of intermediate to final consumption goods at the sectoral level and on production technology for firms in each industry. The OECD applies a series of balancing procedures to reconcile the bilateral asymmetries, if data are missing. In sum, the lack of official recording of trade

⁵ See, for example, [Quota Formula—Data Update and Further Considerations](#) (6/5/13).

⁶ This topic was discussed in [Quota Formula – Data Update and Further Considerations](#) (7/2/14).

⁷ Representing OECD, EU28, G20, most East and South-East economies and a selection of South American countries.

data on a value-added basis combined with the considerable shortcomings on country coverage, quality, timeliness, prevent the use of such estimates for the purposes of the quota formula.

13. Staff has explored several options to address the issues with the current measure of openness. One approach is to maintain the current definition of openness but to modestly lower its weight in the formula. If combined with dropping variability, such an approach would significantly moderate the overall impact on CQS of the highly skewed distribution of openness (and variability). Staff has also explored the possibility of introducing a cap on the overall boost that individual countries can receive from openness. Two types of caps have been considered: one based on capping the absolute level of openness in relation to market GDP (absolute cap) and the second based on capping the ratio of openness to GDP blend shares (shares cap).⁸ Both approaches require an element of judgment in determining where to set the cap, and also add some complexity to the calculations. Table I.4 updates earlier calculations to illustrate the impact of capping openness. The thresholds are the same as in the August 2016 paper.⁹ Further work to refine the thresholds would be needed if there is interest in pursuing such an approach.

14. The view has also been expressed that intra-currency union flows should be excluded from the openness variable. Staff has explored this issue on several occasions in the past, and noted conceptual and practical issues with such an approach.¹⁰ At a conceptual level, the euro area crisis as well as balance of payments needs in CEMAC, ECCU, and WAEMU members have highlighted that balance of payments crises can also occur at the intra-currency union level. Also, potential distortions associated with cross-border flows arise whenever there is vertical integration in the production process and are not limited to currency unions, though the existence of a currency union may contribute to the growth of such flows. At a practical level, available data only cover merchandise trade and are not available on a comprehensive basis for intra-currency union services flows.¹¹ Also, except for the euro area, only very few member countries of currency unions report data on intra-currency union trade, and such an approach would not address the issue of relatively large openness shares of financial centers. With these caveats, updated estimates of the impact of excluding intra-currency union flows from the openness variable are shown in Table I.4.¹²

⁸ Staff also explored the approach of compressing the openness ratio. See [Quota Formula – Data Update and Further Considerations – Annexes](#) (6/6/13), Annex III for a detailed discussion.

⁹ In the June 2013 paper, the 1.7 cap on the ratio of the openness share to GDP blend share was equivalent to the 75th percentile of the distribution of this ratio. In the July 2014, June 2015, and August 2016 papers, the 1.8 cap was applied to maintaining the cap at a level broadly corresponding to the top quartile of the distribution based on the updated data.

¹⁰ For example, see [Quotas—Updated Calculations and Quota Variables](#) (8/27/09), [Quota Formula Review—Additional Considerations—Annexes](#) (9/4/12), and [Quota Formula Review—Data Update and Issues](#) (8/17/11).

¹¹ The data on intra-currency union trade in goods is obtained from the IMF's Direction of Trade database. These data include all trade in goods, including goods for processing gross flows, while the data underlying openness is on a BPM6 basis, including in trade flows only the processing fees (services). For the euro area countries as well as the other currency unions, no adjustment of goods for processing was made due to data constraints. Data on intra-currency union services flows are not fully available and thus no adjustments are made for these flows.

¹² Staff has presented the results of excluding intra-currency union trade as part of the annual update of additional quota variables. These updates are posted on the Fund's intranet.

Table I.4. Openness Shares Under Caps and Excluding Intra Currency Union Trade ^{1/}
(In percent)

	Openness Shares	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excl. Intra-CU trade	GDP blend Shares
		2.0	1.8	1.5	95th 2/	85th 2/	75th 2/		
Advanced economies	56.87	55.64	55.41	54.87	56.87	56.51	56.50	53.53	49.61
Major advanced economies	37.46	40.91	41.38	41.99	38.40	39.24	40.30	36.30	40.52
United States	12.77	13.95	14.22	15.25	13.09	13.38	13.74	13.87	20.14
Japan	4.09	4.47	4.55	4.88	4.19	4.29	4.40	4.44	5.53
Germany	7.16	7.82	7.66	6.38	7.34	7.50	7.71	5.60	4.26
France	3.98	4.34	4.43	4.62	4.08	4.17	4.28	3.00	3.08
United Kingdom	4.34	4.74	4.83	4.78	4.45	4.55	4.67	4.71	3.19
Italy	2.65	2.89	2.95	3.16	2.71	2.77	2.85	2.01	2.39
Canada	2.46	2.69	2.74	2.91	2.53	2.58	2.65	2.67	1.94
Other advanced economies	19.41	14.73	14.04	12.89	18.48	17.27	16.20	17.23	9.09
Spain	1.94	2.12	2.16	2.32	1.99	2.03	2.09	1.46	1.62
Netherlands	3.67	1.91	1.72	1.43	3.65	2.79	2.32	2.80	0.96
Australia	1.41	1.54	1.57	1.68	1.44	1.48	1.52	1.53	1.50
Belgium	1.86	1.15	1.03	0.86	1.90	1.69	1.41	0.98	0.57
Switzerland	2.23	1.43	1.29	1.07	2.28	2.30	1.92	2.42	0.71
Sweden	1.14	1.20	1.08	0.90	1.17	1.19	1.22	1.23	0.60
Austria	0.98	0.95	0.85	0.71	1.00	1.02	1.05	0.64	0.47
Norway	0.80	0.87	0.89	0.74	0.82	0.83	0.86	0.86	0.50
Ireland	1.30	0.60	0.54	0.45	1.15	0.88	0.73	1.28	0.30
Denmark	0.76	0.71	0.64	0.53	0.78	0.80	0.82	0.82	0.35
Luxembourg	1.35	0.13	0.12	0.10	0.27	0.20	0.17	1.40	0.07
Emerging Market and Developing Countries 3/	43.13	44.36	44.59	45.13	43.13	43.49	43.50	46.47	50.39
Africa	2.74	2.95	2.99	3.13	2.80	2.85	2.90	2.96	3.29
South Africa	0.49	0.53	0.54	0.58	0.50	0.51	0.53	0.53	0.53
Nigeria	0.40	0.44	0.45	0.48	0.41	0.42	0.43	0.44	0.80
Asia	21.88	22.21	22.42	22.69	21.41	21.54	21.65	23.75	27.01
China 4/	10.30	11.25	11.46	12.29	10.56	10.79	11.08	11.18	15.44
India	2.12	2.31	2.36	2.53	2.17	2.22	2.28	2.30	4.30
Korea	2.63	2.87	2.93	2.60	2.70	2.76	2.83	2.86	1.73
Indonesia	0.83	0.91	0.93	0.99	0.85	0.87	0.90	0.90	1.69
Singapore	2.28	0.81	0.73	0.61	1.32	1.01	0.84	2.47	0.41
Malaysia	0.95	1.03	0.96	0.80	0.97	0.99	0.89	1.03	0.54
Thailand	1.10	1.20	1.23	1.08	1.13	1.16	1.14	1.20	0.72
Middle East, Malta and Turkey	5.95	6.05	6.00	5.84	6.03	6.11	5.99	6.45	5.95
Saudi Arabia	1.22	1.34	1.36	1.46	1.25	1.28	1.32	1.33	1.16
Turkey	0.90	0.98	1.00	1.07	0.92	0.94	0.97	0.97	1.28
Iran, Islamic Republic of	0.34	0.37	0.38	0.40	0.35	0.35	0.36	0.37	0.86
Western Hemisphere	5.38	5.86	5.95	6.31	5.52	5.64	5.78	5.84	8.10
Brazil	1.23	1.34	1.37	1.47	1.26	1.29	1.32	1.33	2.86
Mexico	1.67	1.83	1.86	2.00	1.72	1.75	1.80	1.82	1.77
Venezuela, República Bolivariana de	0.31	0.34	0.34	0.37	0.32	0.32	0.33	0.34	0.68
Argentina	0.36	0.40	0.40	0.43	0.37	0.38	0.39	0.39	0.79
Transition economies	7.18	7.29	7.23	7.16	7.36	7.35	7.18	7.46	6.04
Russian Federation	2.16	2.35	2.40	2.57	2.21	2.26	2.32	2.34	2.78
Poland	1.03	1.13	1.15	1.14	1.06	1.08	1.11	1.12	0.76
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Memorandum items:									
EU28	36.11	33.33	32.66	30.52	35.53	34.55	34.03	30.65	20.76
LICs 5/	1.55	1.67	1.69	1.76	1.59	1.61	1.64	1.67	2.00

Source: Finance Department

1/ Shading indicates countries with capped openness shares or excluding intra currency union trade lower than their original openness shares.

2/ These correspond to the thresholds on absolute ratios of openness to market GDP of 2.22, 1.66, and 1.35 for the 95th, 85th and 75th percentile caps, respectively.

3/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic and Slovenia.

4/ Including China, P.R., Hong Kong SAR, and Macao SAR.

5/ Currently PRGT-eligible countries.

Variability

15. Variability is intended to capture members' vulnerability to balance of payments shocks and potential need for Fund resources. However, extensive staff work has failed to find any significant link between the current variable and actual or potential external vulnerabilities, or to identify a superior measure.

16. Key characteristics of variability identified previously include (Table I.5):

- **Variability tends to benefit smaller economies.** About 90 percent of the countries (43 out of 48) in the bottom quartile have variability/GDP blend shares larger than 1.
- **Countries with lower per capita incomes benefit less compared to middle and high income economies.** Only 60 percent of the countries (29 out of 48) in the bottom quartile in terms of per capita income gain from variability, compared with 70 to 85 percent of the countries in the other quartiles.
- **As with openness, these results are also reflected in the distribution of variability shares across major country groupings.** The main gainers from variability at the aggregate level are small advanced countries, whose share on average is roughly double their share in the GDP blend (Figure I.1 above). Over 70 percent of LICs and other EMDCs also gain from variability, though on average to a much lesser extent than advanced economies.

Table I.5. Countries that Benefit from Variability

	By Size (Market GDP) 1/				By Income (GDP per Capita) 1/				By Grouping			Total
	Top Quartile	3rd	2nd	Bottom Quartile	Top Quartile	3rd	2nd	Bottom Quartile	AE (26)	EMDC excl. LIC (93)	LIC (70)	
Variability / GDP Blend Shares												
Number of countries who benefit (ratio > 1)	24	33	36	43	40	34	33	29	21	66	49	136
Median 2/	1.8	1.9	2.0	2.2	2.3	1.9	1.8	2.0	2.0	1.9	2.1	2.0
Average 2/	2.1	2.8	3.5	3.0	3.9	2.2	2.4	2.9	4.7	2.3	2.9	2.9

Source: Finance Department

1/ Each quartile includes 47 countries, except the bottom quartile that includes 48 countries.

2/ Average or median ratio among the countries which have ratios greater than 1.

17. The distribution of members' shares in variability relative to GDP is also highly skewed. While the median ratio of variability to GDP blend for the membership as a whole is 1.64, 69 countries have ratios greater than 2 (with the highest being above 33) and 103 have ratios above 1.5 (Figure I.5).

Figure I.5. Ratio of Variability Share to Blend GDP Share

Source: Finance Department.

Links between Openness and Variability

18. Both openness and variability produce similar results in terms of shares. While the specific measures differ, both variables use nominal data on the scale of external flows. In particular, openness measures the size of current payments and current receipts, whereas variability seeks to capture volatility in the level of current receipts and net capital flows. For many countries, these yield very similar results. This can be seen from several angles:

- The overall dispersion in the distribution of openness and variability shares is low, e.g., slightly below that between market and PPP GDP and significantly below that between other quota variables and market GDP (see Text Figure and Figure I.2 in Section A).
- The distribution of openness and variability shares among the main country groups is almost identical (Figure I.1 in Section A).
- As noted, once the largest economies are excluded (their weight tends to dominate the comparisons of size-related variables), the correlation between openness and variability is 0.98, well above that between other variables (Table I.1).

Openness and Variability

- The distribution of gainers from variability is broadly similar to that for openness, in terms of both size and income levels, as well as across the major country groupings as shown above (Tables I.3 and I.5). Small advanced countries gain the most from variability, benefiting almost as much as from openness. Smaller EMDCs and LICs also gain from variability relative to GDP, but the gains are more modest.
- At the individual country level, the countries that gain the most from openness also have relatively high shares in variability (Figure I.6).
- A purely illustrative calculation, showing the impact of dropping variability and moving all of its weight to openness, indicates that the distribution of CQS would be broadly unchanged across the largest individual countries and major country groups (Table I.6).

Figure I.6. Top 15 Countries—Ratio of Openness Share to GDP Blend Share and Variability Share to GDP Blend Share ^{1/}

Source: Finance Department

^{1/} Countries ranked by openness share to GDP blend share.

Table I.6. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and All Weight to Openness
(In percent)

	14th General Review Quotas	Current Formula	All to openness
Advanced economies	57.6	50.2	50.5
Major advanced economies	43.4	35.7	36.1
United States	17.4	14.5	14.5
Japan	6.5	5.1	5.0
Germany	5.6	5.0	5.2
France	4.2	3.2	3.3
United Kingdom	4.2	3.6	3.5
Italy	3.2	2.4	2.4
Canada	2.3	2.0	2.1
Other advanced economies	14.3	14.5	14.4
Spain	2.0	1.8	1.7
Netherlands	1.8	2.1	2.2
Australia	1.4	1.4	1.4
Belgium	1.3	1.1	1.2
Switzerland	1.2	1.7	1.7
Sweden	0.9	0.9	0.9
Austria	0.8	0.7	0.7
Norway	0.8	0.7	0.7
Ireland	0.7	0.8	0.8
Denmark	0.7	0.6	0.6
Emerging Market and Developing Countries 1/	42.4	49.8	49.5
Africa	4.4	3.7	3.5
South Africa	0.6	0.5	0.5
Nigeria	0.5	0.7	0.6
Asia	16.0	24.2	25.0
China 2/	6.4	12.6	12.9
India	2.7	3.1	3.2
Korea, Republic of	1.8	2.0	2.2
Indonesia	1.0	1.3	1.3
Singapore	0.8	1.3	1.4
Malaysia	0.8	0.8	0.8
Thailand	0.7	1.0	1.0
Middle East, Malta and Turkey	6.7	7.2	6.7
Saudi Arabia	2.1	1.7	1.5
Turkey	1.0	1.2	1.1
Iran, I.R. of	0.7	0.7	0.7
Western Hemisphere	7.9	7.4	7.3
Brazil	2.3	2.3	2.2
Mexico	1.9	1.7	1.8
Venezuela, R.B. de	0.8	0.6	0.5
Argentina	0.7	0.6	0.6
Transition economies	7.2	7.3	7.1
Russia	2.7	2.6	2.5
Poland	0.9	0.9	0.9
Total	100.0	100.0	100.0
Memorandum items:			
EU28	30.4	27.0	27.5
LICs 3/	3.3	2.3	2.2
Coefficients for quota variables			
GDP		0.30	0.30
PPP GDP		0.20	0.20
Openness		0.30	0.45
Variability		0.15	0.00
Reserves		0.05	0.05
Compression factor		0.95	0.95

Source: Finance Department.

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

Reserves

19. Some key characteristics of the impact of reserves include (Table I.7):

- **Reserves benefit many smaller economies.** About two thirds of the countries (32 out of 48) in the bottom quartile have reserves/GDP blend shares larger than 1, compared with about 40 percent for the other 3 quartiles.
- **Low per capita income countries benefit less compared to middle and high income economies.** Only one-fourth of the countries (12 out of 48) in the bottom quartile in terms of per capita income gain from reserves, compared with more than 50 percent of the countries (29 and 28 out of 47) in the second and third quartiles.
- **In relative terms, EMDCs (excluding LICs) are the main gainers from reserves,** with over half of the countries in this group benefiting. Roughly 44 percent of LICs benefit from reserves, and only 27 percent of AEs.

Table I.7. Countries that Benefit from Reserves

	By Size (Market GDP) 1/				By Income (GDP per Capita) 1/				By Grouping			Total
	Top Quartile	3rd	2nd	Bottom Quartile	Top Quartile	3rd	2nd	Bottom Quartile	AE (26)	EMDC excl. LIC (93)	LIC (70)	
Reserves / GDP Blend Shares												
Number of countries who benefit (ratio > 1)	17	21	18	32	19	29	28	12	7	50	31	88
Median 2/	1.9	1.8	1.4	1.6	1.9	1.7	1.4	1.5	2.2	1.7	1.5	1.6
Average 2/	2.4	2.4	1.6	2.6	2.4	2.1	2.0	3.4	2.7	2.1	2.6	2.3

Source: Finance Department

1/ Each quartile includes 47 countries, except the bottom quartile that includes 48 countries.

2/ Average or median ratio among the countries which have ratios greater than 1.

20. The distribution of members' reserves relative to GDP is quite skewed (Figures I.7a and I.7b). In terms of shares, 26 members have reserves shares more than double their shares in GDP blend (the highest ratio is almost 24 times) and 51 members have ratios greater than 1.5. Based on the latest data, 88 members benefit to some extent from the inclusion of reserves in the formula.

Figure I.7a. Ratio of Reserves Level to Market GDP Level

Source: Finance Department.

Figure I.7b. Ratio of Reserves Share to Blend GDP Share

Source: Finance Department.

Compression factor

21. The characteristics of the compression factor are summarized below (Table I.8):

- **The compression factor benefits all but the largest economies.** The CQS of the largest 8 members (based on the uncompressed formula and using the current quota database) are reduced, while the CQS of all other members are increased. In total, compared with a linear combination of the quota formula variables, the compression factor shifts approximately 3 percentage points of shares from the 8 largest members to the remaining 181 members. The original ranking of countries is unchanged with compression.
- **As a group, low income countries benefit more compared to high income economies.** While the compression factor is unrelated to income, almost all countries in the bottom two quartiles in terms of per capita income gain from its inclusion.
- **In terms of major country groups, EMDCs and LICs are the main gainers.** All LICs benefit as do all but three EMDCs. Twenty-one out of 26 AEs also benefit from compression.

Table I.8. Countries that Benefit from Compression

	By Size (Market GDP) 1/				By Income (GDP per Capita) 1/				By Grouping			Total
	Top Quartile	3rd	2nd	Bottom Quartile	Top Quartile	3rd	2nd	Bottom Quartile	AE (26)	EMDC excl. LIC (93)	LIC (70)	
CQS / uncompressed linear combination												
Number of countries who benefit (ratio > 1)	39	47	47	48	42	45	47	47	21	90	70	181
Median 2/	1.1	1.2	1.2	1.4	1.1	1.2	1.3	1.3	1.1	1.2	1.3	1.2
Average 2/	1.1	1.2	1.2	1.4	1.1	1.2	1.3	1.3	1.1	1.2	1.3	1.2

Source: Finance Department.

1/ Each quartile includes 47 countries, except the bottom quartile that includes 48 countries.

2/ Average or median ratio among the countries which have ratios greater than 1.

22. The benefits of compression are inversely related to country size. As noted, the eight largest countries lose from compression while the rest of the membership benefits. The median ratio of CQS (i.e., including compression) to uncompressed calculated quota share for the membership is 1.20, and 4 countries have ratios greater than 1.5. (Figure I.8). As the figure shows, the lower share of the eight largest countries after including the compression factor enables the allocation of a larger share for the rest of the 181 countries (ratio of CQS to uncompressed linear combination > 1).

Figure I.8. Ratio of CQS to Uncompressed Linear Combination

Source: Finance Department.

Annex II. Illustrative Formula Simulations

This annex presents updated results of previous illustrative simulations of possible reforms of the quota formula, as summarized in Table 1 of the main paper. The Annex covers the results for the 35 members with the largest quotas and for major country groups. Results for all individual member countries are presented in Supplement 2, Statistical Appendix.

1. The illustrative simulations presented in this annex cover four broad sets of reforms, as described in the main text:

- Set 1: Simplification of the current formula – dropping variability, keeping current GDP and openness measures (Table II.1).
- Set 2: same as Set 1, but with different combinations of GDP blend (Tables II.2-II.5).
- Set 3: same as Set 1 but with different openness measures (Tables II.6-II.8)
- Set 4: same as set 1, but with a higher and a lower degree of compression (Tables II.9-II.10).

Table II.1. Illustrative Calculations—Current GDP and Openness Measures, and Dropping Variability
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability, and :
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Advanced economies	57.6	50.2	49.9	49.8	49.4	49.1
Major advanced economies	43.4	35.7	36.3	36.4	36.5	36.7
United States	17.4	14.5	15.0	15.2	15.5	15.8
Japan	6.5	5.1	5.1	5.1	5.2	5.3
Germany	5.6	5.0	5.0	4.9	4.8	4.7
France	4.2	3.2	3.2	3.2	3.2	3.2
United Kingdom	4.2	3.6	3.5	3.4	3.4	3.3
Italy	3.2	2.4	2.4	2.4	2.4	2.4
Canada	2.3	2.0	2.1	2.1	2.1	2.0
Other advanced economies	14.3	14.5	13.7	13.4	12.9	12.4
Spain	2.0	1.8	1.7	1.7	1.7	1.7
Netherlands	1.8	2.1	2.0	1.9	1.8	1.6
Australia	1.4	1.4	1.5	1.5	1.5	1.5
Belgium	1.3	1.1	1.1	1.1	1.0	0.9
Switzerland	1.2	1.7	1.5	1.5	1.4	1.4
Sweden	0.9	0.9	0.8	0.8	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.7	0.6
Norway	0.8	0.7	0.7	0.7	0.6	0.6
Ireland	0.7	0.8	0.7	0.7	0.6	0.6
Denmark	0.7	0.6	0.6	0.6	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	50.1	50.2	50.6	50.9
Africa	4.4	3.7	3.5	3.6	3.6	3.6
South Africa	0.6	0.5	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7	0.7
Asia	16.0	24.2	25.3	25.4	25.7	25.9
China 2/	6.4	12.6	13.2	13.3	13.6	13.8
India	2.7	3.1	3.4	3.4	3.5	3.6
Korea, Republic of	1.8	2.0	2.2	2.2	2.1	2.1
Indonesia	1.0	1.3	1.4	1.4	1.4	1.5
Singapore	0.8	1.3	1.2	1.2	1.1	1.0
Malaysia	0.8	0.8	0.8	0.7	0.7	0.7
Thailand	0.7	1.0	0.9	0.9	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	6.7	6.7	6.7	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.7	0.7	0.8	0.8
Western Hemisphere	7.9	7.4	7.5	7.6	7.7	7.8
Brazil	2.3	2.3	2.3	2.3	2.4	2.5
Mexico	1.9	1.7	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	7.0	7.0	6.9	6.8
Russia	2.7	2.6	2.6	2.6	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	26.4	26.0	25.3	24.5
LICs 3/	3.3	2.3	2.2	2.2	2.2	2.3
Coefficients for quota variables 4/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department.

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.2. Illustrative Calculations—Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend
(In percent)

	14th General Review Quotas	Current Formula	50/50	55/45	65/35
Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:					
Advanced economies	57.6	50.2	49.0	49.5	50.4
Major advanced economies	43.4	35.7	35.5	35.9	36.7
United States	17.4	14.5	14.6	14.8	15.2
Japan	6.5	5.1	5.0	5.0	5.1
Germany	5.6	5.0	4.9	5.0	5.0
France	4.2	3.2	3.2	3.2	3.3
United Kingdom	4.2	3.6	3.4	3.4	3.5
Italy	3.2	2.4	2.4	2.4	2.4
Canada	2.3	2.0	2.1	2.1	2.1
Other advanced economies	14.3	14.5	13.4	13.5	13.8
Spain	2.0	1.8	1.7	1.7	1.7
Netherlands	1.8	2.1	1.9	2.0	2.0
Australia	1.4	1.4	1.4	1.4	1.5
Belgium	1.3	1.1	1.1	1.1	1.1
Switzerland	1.2	1.7	1.5	1.5	1.6
Sweden	0.9	0.9	0.8	0.8	0.9
Austria	0.8	0.7	0.7	0.7	0.7
Norway	0.8	0.7	0.6	0.7	0.7
Ireland	0.7	0.8	0.7	0.7	0.7
Denmark	0.7	0.6	0.6	0.6	0.6
Emerging Market and Developing Countries 1/	42.4	49.8	51.0	50.5	49.6
Africa	4.4	3.7	3.6	3.6	3.5
South Africa	0.6	0.5	0.6	0.6	0.5
Nigeria	0.5	0.7	0.7	0.7	0.7
Asia	16.0	24.2	25.9	25.6	25.0
China 2/	6.4	12.6	13.4	13.3	13.2
India	2.7	3.1	3.6	3.5	3.3
Korea, Republic of	1.8	2.0	2.2	2.2	2.2
Indonesia	1.0	1.3	1.5	1.4	1.3
Singapore	0.8	1.3	1.2	1.2	1.2
Malaysia	0.8	0.8	0.8	0.8	0.7
Thailand	0.7	1.0	1.0	1.0	0.9
Middle East, Malta and Turkey	6.7	7.2	6.8	6.8	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.8	0.7	0.7
Western Hemisphere	7.9	7.4	7.5	7.5	7.5
Brazil	2.3	2.3	2.3	2.3	2.3
Mexico	1.9	1.7	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.5	0.5	0.6
Argentina	0.7	0.6	0.7	0.7	0.7
Transition economies	7.2	7.3	7.1	7.1	6.9
Russia	2.7	2.6	2.6	2.6	2.5
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	27.0	26.0	26.2	26.5
LICs 3/	3.3	2.3	2.3	2.2	2.2
Coefficients for quota variables 4/					
GDP		0.300	0.288	0.316	0.374
PPP GDP		0.200	0.288	0.259	0.201
Openness		0.300	0.375	0.375	0.375
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department.

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.3. Illustrative Calculations—Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Advanced economies	57.6	50.2	48.8	49.3	50.3
Major advanced economies	43.4	35.7	35.6	36.0	36.8
United States	17.4	14.5	14.8	15.0	15.3
Japan	6.5	5.1	5.0	5.1	5.2
Germany	5.6	5.0	4.9	4.9	5.0
France	4.2	3.2	3.2	3.2	3.3
United Kingdom	4.2	3.6	3.4	3.4	3.5
Italy	3.2	2.4	2.4	2.4	2.4
Canada	2.3	2.0	2.0	2.1	2.1
Other advanced economies	14.3	14.5	13.2	13.3	13.5
Spain	2.0	1.8	1.7	1.7	1.7
Netherlands	1.8	2.1	1.9	1.9	1.9
Australia	1.4	1.4	1.4	1.4	1.5
Belgium	1.3	1.1	1.0	1.0	1.1
Switzerland	1.2	1.7	1.5	1.5	1.5
Sweden	0.9	0.9	0.8	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.7
Norway	0.8	0.7	0.6	0.6	0.7
Ireland	0.7	0.8	0.7	0.7	0.7
Denmark	0.7	0.6	0.5	0.6	0.6
Emerging Market and Developing Countries 1/	42.4	49.8	51.2	50.7	49.7
Africa	4.4	3.7	3.6	3.6	3.5
South Africa	0.6	0.5	0.6	0.6	0.5
Nigeria	0.5	0.7	0.7	0.7	0.7
Asia	16.0	24.2	26.0	25.7	25.1
China 2/	6.4	12.6	13.5	13.4	13.3
India	2.7	3.1	3.7	3.5	3.3
Korea, Republic of	1.8	2.0	2.1	2.1	2.2
Indonesia	1.0	1.3	1.5	1.4	1.4
Singapore	0.8	1.3	1.2	1.2	1.2
Malaysia	0.8	0.8	0.8	0.8	0.7
Thailand	0.7	1.0	1.0	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	6.9	6.8	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.8	0.8	0.7
Western Hemisphere	7.9	7.4	7.6	7.6	7.5
Brazil	2.3	2.3	2.3	2.3	2.3
Mexico	1.9	1.7	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.5	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7
Transition economies	7.2	7.3	7.1	7.0	6.9
Russia	2.7	2.6	2.6	2.6	2.5
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	27.0	25.7	25.8	26.2
LICs 3/	3.3	2.3	2.3	2.2	2.2
Coefficients for quota variables 4/					
GDP		0.300	0.300	0.330	0.390
PPP GDP		0.200	0.300	0.270	0.210
Openness		0.300	0.350	0.350	0.350
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department.

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.4. Illustrative Calculations—Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend

(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP Blends:		
			50/50	55/45	65/35
Advanced economies	57.6	50.2	48.3	48.9	50.0
Major advanced economies	43.4	35.7	35.7	36.1	36.9
United States	17.4	14.5	15.1	15.3	15.7
Japan	6.5	5.1	5.1	5.1	5.3
Germany	5.6	5.0	4.7	4.8	4.8
France	4.2	3.2	3.1	3.2	3.2
United Kingdom	4.2	3.6	3.3	3.3	3.4
Italy	3.2	2.4	2.3	2.4	2.4
Canada	2.3	2.0	2.0	2.0	2.1
Other advanced economies	14.3	14.5	12.7	12.8	13.0
Spain	2.0	1.8	1.7	1.7	1.7
Netherlands	1.8	2.1	1.7	1.8	1.8
Australia	1.4	1.4	1.4	1.4	1.5
Belgium	1.3	1.1	1.0	1.0	1.0
Switzerland	1.2	1.7	1.4	1.4	1.4
Sweden	0.9	0.9	0.8	0.8	0.8
Austria	0.8	0.7	0.6	0.6	0.7
Norway	0.8	0.7	0.6	0.6	0.6
Ireland	0.7	0.8	0.6	0.6	0.6
Denmark	0.7	0.6	0.5	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	51.7	51.1	50.0
Africa	4.4	3.7	3.7	3.6	3.5
South Africa	0.6	0.5	0.6	0.6	0.5
Nigeria	0.5	0.7	0.7	0.7	0.7
Asia	16.0	24.2	26.3	26.0	25.4
China 2/	6.4	12.6	13.7	13.7	13.5
India	2.7	3.1	3.8	3.7	3.4
Korea, Republic of	1.8	2.0	2.1	2.1	2.1
Indonesia	1.0	1.3	1.5	1.5	1.4
Singapore	0.8	1.3	1.1	1.1	1.1
Malaysia	0.8	0.8	0.7	0.7	0.7
Thailand	0.7	1.0	0.9	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	6.9	6.8	6.6
Saudi Arabia	2.1	1.7	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.8	0.8	0.7
Western Hemisphere	7.9	7.4	7.7	7.7	7.7
Brazil	2.3	2.3	2.4	2.4	2.4
Mexico	1.9	1.7	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7
Transition economies	7.2	7.3	7.1	7.0	6.8
Russia	2.7	2.6	2.7	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	27.0	24.9	25.1	25.5
LICs 3/	3.3	2.3	2.3	2.3	2.2
Coefficients for quota variables 4/					
GDP		0.300	0.325	0.358	0.423
PPP GDP		0.200	0.325	0.293	0.228
Openness		0.300	0.300	0.300	0.300
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.5. Illustrative Calculations—Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight of openness reduced to 0.25, and GDP Blends		
			50/50	55/45	65/35
Advanced economies	57.6	50.2	47.9	48.5	49.6
Major advanced economies	43.4	35.7	35.8	36.2	37.1
United States	17.4	14.5	15.4	15.6	16.0
Japan	6.5	5.1	5.1	5.2	5.3
Germany	5.6	5.0	4.6	4.6	4.7
France	4.2	3.2	3.1	3.1	3.2
United Kingdom	4.2	3.6	3.2	3.3	3.4
Italy	3.2	2.4	2.3	2.4	2.4
Canada	2.3	2.0	2.0	2.0	2.1
Other advanced economies	14.3	14.5	12.1	12.3	12.5
Spain	2.0	1.8	1.7	1.7	1.7
Netherlands	1.8	2.1	1.6	1.6	1.7
Australia	1.4	1.4	1.4	1.4	1.5
Belgium	1.3	1.1	0.9	0.9	0.9
Switzerland	1.2	1.7	1.3	1.3	1.4
Sweden	0.9	0.9	0.8	0.8	0.8
Austria	0.8	0.7	0.6	0.6	0.6
Norway	0.8	0.7	0.6	0.6	0.6
Ireland	0.7	0.8	0.6	0.6	0.6
Denmark	0.7	0.6	0.5	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	52.1	51.5	50.4
Africa	4.4	3.7	3.7	3.7	3.6
South Africa	0.6	0.5	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7
Asia	16.0	24.2	26.6	26.3	25.6
China 2/	6.4	12.6	14.0	13.9	13.7
India	2.7	3.1	3.9	3.8	3.5
Korea, Republic of	1.8	2.0	2.1	2.1	2.1
Indonesia	1.0	1.3	1.6	1.5	1.4
Singapore	0.8	1.3	1.0	1.0	1.0
Malaysia	0.8	0.8	0.7	0.7	0.7
Thailand	0.7	1.0	0.9	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	6.9	6.8	6.6
Saudi Arabia	2.1	1.7	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.8	0.8	0.8
Western Hemisphere	7.9	7.4	7.9	7.9	7.8
Brazil	2.3	2.3	2.5	2.5	2.5
Mexico	1.9	1.7	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7
Transition economies	7.2	7.3	7.0	6.9	6.8
Russia	2.7	2.6	2.7	2.7	2.6
Poland	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0
Memorandum items:					
EU28	30.4	27.0	24.1	24.3	24.7
LICs 3/	3.3	2.3	2.3	2.3	2.2
Coefficients for quota variables 4/					
GDP		0.300	0.350	0.385	0.455
PPP GDP		0.200	0.350	0.315	0.245
Openness		0.300	0.250	0.250	0.250
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.6. Illustrative Calculations—Current GDP Blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures

(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split evenly between GDP and openness, and different openness measures			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Advanced economies	57.6	50.2	49.8	49.8	49.4	49.2
Major advanced economies	43.4	35.7	36.9	37.3	37.7	37.9
United States	17.4	14.5	15.2	15.3	15.5	15.8
Japan	6.5	5.1	5.2	5.2	5.3	5.4
Germany	5.6	5.0	5.1	5.2	5.2	4.7
France	4.2	3.2	3.3	3.4	3.4	3.5
United Kingdom	4.2	3.6	3.5	3.6	3.6	3.6
Italy	3.2	2.4	2.4	2.5	2.5	2.6
Canada	2.3	2.0	2.1	2.2	2.2	2.3
Other advanced economies	14.3	14.5	12.9	12.5	11.6	11.2
Spain	2.0	1.8	1.8	1.8	1.8	1.9
Netherlands	1.8	2.1	1.6	1.5	1.3	1.1
Australia	1.4	1.4	1.5	1.5	1.5	1.6
Belgium	1.3	1.1	1.0	0.9	0.8	0.7
Switzerland	1.2	1.7	1.6	1.4	1.2	1.1
Sweden	0.9	0.9	0.9	0.9	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.6	0.6
Norway	0.8	0.7	0.7	0.7	0.7	0.6
Ireland	0.7	0.8	0.5	0.5	0.4	0.4
Denmark	0.7	0.6	0.6	0.6	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	50.2	50.2	50.6	50.8
Africa	4.4	3.7	3.6	3.6	3.7	3.7
South Africa	0.6	0.5	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7	0.7
Asia	16.0	24.2	25.2	25.2	25.5	25.6
China 2/	6.4	12.6	13.4	13.5	13.6	13.9
India	2.7	3.1	3.4	3.4	3.5	3.5
Korea, Republic of	1.8	2.0	2.2	2.2	2.3	2.2
Indonesia	1.0	1.3	1.4	1.4	1.4	1.4
Singapore	0.8	1.3	0.8	0.7	0.7	0.6
Malaysia	0.8	0.8	0.8	0.7	0.8	0.7
Thailand	0.7	1.0	1.0	1.0	1.0	0.9
Middle East, Malta and Turkey	6.7	7.2	6.8	6.7	6.7	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5	1.6
Turkey	1.0	1.2	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.7	0.7	0.7	0.8
Western Hemisphere	7.9	7.4	7.6	7.6	7.7	7.9
Brazil	2.3	2.3	2.3	2.3	2.3	2.4
Mexico	1.9	1.7	1.8	1.8	1.8	1.9
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	7.1	7.0	7.0	7.0
Russia	2.7	2.6	2.6	2.6	2.6	2.7
Poland	0.9	0.9	0.9	0.9	1.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	25.8	25.6	25.0	24.3
LICs 3/	3.3	2.3	2.2	2.2	2.3	2.3
Coefficients for quota variables 4/						
GDP		0.300	0.345	0.345	0.345	0.345
PPP GDP		0.200	0.230	0.230	0.230	0.230
Openness		0.300	0.375	0.375	0.375	0.375
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.7. Illustrative Calculations—Current GDP Blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Advanced economies	57.6	50.2	49.6	49.6	49.2	49.0
Major advanced economies	43.4	35.7	37.0	37.3	37.7	37.9
United States	17.4	14.5	15.4	15.5	15.6	16.0
Japan	6.5	5.1	5.2	5.2	5.3	5.4
Germany	5.6	5.0	5.0	5.1	5.1	4.7
France	4.2	3.2	3.3	3.3	3.4	3.5
United Kingdom	4.2	3.6	3.5	3.6	3.6	3.6
Italy	3.2	2.4	2.4	2.5	2.5	2.6
Canada	2.3	2.0	2.1	2.2	2.2	2.2
Other advanced economies	14.3	14.5	12.7	12.3	11.5	11.1
Spain	2.0	1.8	1.7	1.8	1.8	1.8
Netherlands	1.8	2.1	1.6	1.4	1.2	1.1
Australia	1.4	1.4	1.5	1.5	1.5	1.6
Belgium	1.3	1.1	1.0	0.9	0.8	0.7
Switzerland	1.2	1.7	1.5	1.4	1.2	1.1
Sweden	0.9	0.9	0.9	0.9	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.6	0.6
Norway	0.8	0.7	0.7	0.7	0.7	0.6
Ireland	0.7	0.8	0.5	0.5	0.4	0.4
Denmark	0.7	0.6	0.6	0.6	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	50.4	50.4	50.8	51.0
Africa	4.4	3.7	3.6	3.6	3.7	3.7
South Africa	0.6	0.5	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7	0.7
Asia	16.0	24.2	25.3	25.4	25.6	25.7
China 2/	6.4	12.6	13.5	13.6	13.7	14.0
India	2.7	3.1	3.5	3.5	3.5	3.6
Korea, Republic of	1.8	2.0	2.2	2.2	2.3	2.1
Indonesia	1.0	1.3	1.4	1.4	1.4	1.5
Singapore	0.8	1.3	0.8	0.7	0.7	0.6
Malaysia	0.8	0.8	0.8	0.7	0.8	0.7
Thailand	0.7	1.0	1.0	0.9	1.0	0.9
Middle East, Malta and Turkey	6.7	7.2	6.8	6.7	6.7	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5	1.6
Turkey	1.0	1.2	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.7	0.8	0.8	0.8
Western Hemisphere	7.9	7.4	7.7	7.7	7.8	7.9
Brazil	2.3	2.3	2.3	2.4	2.4	2.4
Mexico	1.9	1.7	1.8	1.8	1.8	1.9
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	7.0	7.0	7.0	7.0
Russia	2.7	2.6	2.6	2.6	2.7	2.7
Poland	0.9	0.9	0.9	0.9	1.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	25.4	25.2	24.8	24.0
LICs 3/	3.3	2.3	2.2	2.2	2.3	2.3
Coefficients for quota variables 4/						
GDP		0.300	0.360	0.360	0.360	0.360
PPP GDP		0.200	0.240	0.240	0.240	0.240
Openness		0.300	0.350	0.350	0.350	0.350
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

**Table II.8. Illustrative Calculations—Current GDP Blend, Dropping Variability,
All Weight to GDP, and Different Openness Measures**
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, all weight to GDP, and different openness measures			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Advanced economies	57.6	50.2	49.3	49.3	48.9	48.8
Major advanced economies	43.4	35.7	37.0	37.3	37.7	37.8
United States	17.4	14.5	15.7	15.8	15.9	16.2
Japan	6.5	5.1	5.3	5.3	5.3	5.4
Germany	5.6	5.0	4.9	5.0	4.9	4.6
France	4.2	3.2	3.2	3.3	3.3	3.4
United Kingdom	4.2	3.6	3.4	3.5	3.5	3.5
Italy	3.2	2.4	2.4	2.4	2.5	2.5
Canada	2.3	2.0	2.1	2.1	2.1	2.2
Other advanced economies	14.3	14.5	12.2	11.9	11.3	10.9
Spain	2.0	1.8	1.7	1.7	1.8	1.8
Netherlands	1.8	2.1	1.5	1.4	1.2	1.1
Australia	1.4	1.4	1.5	1.5	1.5	1.6
Belgium	1.3	1.1	0.9	0.9	0.7	0.7
Switzerland	1.2	1.7	1.5	1.3	1.2	1.1
Sweden	0.9	0.9	0.8	0.8	0.8	0.7
Austria	0.8	0.7	0.7	0.7	0.6	0.6
Norway	0.8	0.7	0.6	0.7	0.7	0.6
Ireland	0.7	0.8	0.5	0.5	0.4	0.4
Denmark	0.7	0.6	0.6	0.6	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	50.7	50.7	51.1	51.2
Africa	4.4	3.7	3.6	3.6	3.7	3.7
South Africa	0.6	0.5	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7	0.7
Asia	16.0	24.2	25.6	25.6	25.8	25.9
China 2/	6.4	12.6	13.7	13.8	13.9	14.1
India	2.7	3.1	3.6	3.6	3.6	3.7
Korea, Republic of	1.8	2.0	2.1	2.2	2.2	2.1
Indonesia	1.0	1.3	1.5	1.5	1.5	1.5
Singapore	0.8	1.3	0.7	0.7	0.6	0.6
Malaysia	0.8	0.8	0.7	0.7	0.7	0.7
Thailand	0.7	1.0	0.9	0.9	1.0	0.9
Middle East, Malta and Turkey	6.7	7.2	6.8	6.7	6.7	6.7
Saudi Arabia	2.1	1.7	1.5	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2	1.3
Iran, I.R. of	0.7	0.7	0.8	0.8	0.8	0.8
Western Hemisphere	7.9	7.4	7.8	7.8	7.9	8.0
Brazil	2.3	2.3	2.4	2.4	2.5	2.5
Mexico	1.9	1.7	1.8	1.8	1.8	1.9
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	7.0	6.9	6.9	6.9
Russia	2.7	2.6	2.6	2.7	2.7	2.7
Poland	0.9	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	24.8	24.6	24.2	23.6
LICs 3/	3.3	2.3	2.3	2.3	2.3	2.3
Coefficients for quota variables 4/						
GDP		0.300	0.390	0.390	0.390	0.390
PPP GDP		0.200	0.260	0.260	0.260	0.260
Openness		0.300	0.300	0.300	0.300	0.300
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.9. Illustrative Calculations—Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Advanced economies	57.6	50.2	49.3	49.2	48.8	48.5
Major advanced economies	43.4	35.7	35.3	35.4	35.6	35.7
United States	17.4	14.5	14.3	14.4	14.8	15.1
Japan	6.5	5.1	5.0	5.0	5.1	5.2
Germany	5.6	5.0	4.9	4.8	4.7	4.6
France	4.2	3.2	3.2	3.2	3.2	3.1
United Kingdom	4.2	3.6	3.4	3.4	3.4	3.3
Italy	3.2	2.4	2.4	2.4	2.4	2.4
Canada	2.3	2.0	2.1	2.1	2.1	2.1
Other advanced economies	14.3	14.5	14.0	13.7	13.2	12.7
Spain	2.0	1.8	1.7	1.7	1.7	1.7
Netherlands	1.8	2.1	2.0	1.9	1.8	1.7
Australia	1.4	1.4	1.5	1.5	1.5	1.5
Belgium	1.3	1.1	1.1	1.1	1.0	0.9
Switzerland	1.2	1.7	1.6	1.5	1.5	1.4
Sweden	0.9	0.9	0.9	0.9	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.7	0.7
Norway	0.8	0.7	0.7	0.7	0.7	0.6
Ireland	0.7	0.8	0.7	0.7	0.7	0.6
Denmark	0.7	0.6	0.6	0.6	0.6	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	50.7	50.8	51.2	51.5
Africa	4.4	3.7	3.8	3.8	3.8	3.9
South Africa	0.6	0.5	0.6	0.6	0.6	0.6
Nigeria	0.5	0.7	0.7	0.7	0.7	0.7
Asia	16.0	24.2	24.9	25.1	25.3	25.5
China 2/	6.4	12.6	12.6	12.8	13.0	13.2
India	2.7	3.1	3.3	3.4	3.5	3.6
Korea, Republic of	1.8	2.0	2.2	2.2	2.1	2.1
Indonesia	1.0	1.3	1.4	1.4	1.5	1.5
Singapore	0.8	1.3	1.3	1.2	1.1	1.0
Malaysia	0.8	0.8	0.8	0.8	0.7	0.7
Thailand	0.7	1.0	1.0	1.0	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	7.0	7.0	7.0	7.0
Saudi Arabia	2.1	1.7	1.5	1.5	1.5	1.5
Turkey	1.0	1.2	1.2	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.8	0.8	0.8	0.8
Western Hemisphere	7.9	7.4	7.7	7.8	7.9	8.1
Brazil	2.3	2.3	2.3	2.3	2.4	2.5
Mexico	1.9	1.7	1.8	1.8	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.6	0.6	0.6	0.6
Argentina	0.7	0.6	0.7	0.7	0.7	0.7
Transition economies	7.2	7.3	7.3	7.2	7.2	7.1
Russia	2.7	2.6	2.6	2.6	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	26.6	26.2	25.5	24.8
LICs 3/	3.3	2.3	2.4	2.4	2.5	2.5
Coefficients for quota variables 4/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.925	0.925	0.925	0.925

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Table II.10. Illustrative Calculations—Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)
(In percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Advanced economies	57.6	50.2	50.5	50.4	50.0	49.6
Major advanced economies	43.4	35.7	37.2	37.3	37.4	37.6
United States	17.4	14.5	15.7	15.9	16.2	16.6
Japan	6.5	5.1	5.2	5.2	5.3	5.4
Germany	5.6	5.0	5.1	5.0	4.9	4.7
France	4.2	3.2	3.3	3.2	3.2	3.2
United Kingdom	4.2	3.6	3.5	3.5	3.4	3.4
Italy	3.2	2.4	2.4	2.4	2.4	2.4
Canada	2.3	2.0	2.1	2.1	2.1	2.0
Other advanced economies	14.3	14.5	13.3	13.1	12.6	12.0
Spain	2.0	1.8	1.7	1.7	1.7	1.7
Netherlands	1.8	2.1	2.0	1.9	1.8	1.6
Australia	1.4	1.4	1.4	1.4	1.4	1.4
Belgium	1.3	1.1	1.1	1.0	1.0	0.9
Switzerland	1.2	1.7	1.5	1.5	1.4	1.3
Sweden	0.9	0.9	0.8	0.8	0.8	0.8
Austria	0.8	0.7	0.7	0.7	0.6	0.6
Norway	0.8	0.7	0.6	0.6	0.6	0.6
Ireland	0.7	0.8	0.7	0.7	0.6	0.6
Denmark	0.7	0.6	0.6	0.5	0.5	0.5
Emerging Market and Developing Countries 1/	42.4	49.8	49.5	49.6	50.0	50.4
Africa	4.4	3.7	3.3	3.3	3.3	3.4
South Africa	0.6	0.5	0.5	0.5	0.5	0.5
Nigeria	0.5	0.7	0.6	0.7	0.7	0.7
Asia	16.0	24.2	25.7	25.8	26.1	26.3
China 2/	6.4	12.6	13.8	13.9	14.2	14.4
India	2.7	3.1	3.4	3.5	3.6	3.7
Korea, Republic of	1.8	2.0	2.2	2.1	2.1	2.1
Indonesia	1.0	1.3	1.4	1.4	1.4	1.5
Singapore	0.8	1.3	1.2	1.2	1.1	1.0
Malaysia	0.8	0.8	0.7	0.7	0.7	0.7
Thailand	0.7	1.0	0.9	0.9	0.9	0.9
Middle East, Malta and Turkey	6.7	7.2	6.5	6.5	6.5	6.5
Saudi Arabia	2.1	1.7	1.5	1.5	1.4	1.4
Turkey	1.0	1.2	1.1	1.2	1.2	1.2
Iran, I.R. of	0.7	0.7	0.7	0.7	0.7	0.8
Western Hemisphere	7.9	7.4	7.3	7.3	7.5	7.6
Brazil	2.3	2.3	2.3	2.3	2.4	2.5
Mexico	1.9	1.7	1.7	1.7	1.8	1.8
Venezuela, R.B. de	0.8	0.6	0.5	0.5	0.6	0.6
Argentina	0.7	0.6	0.6	0.6	0.7	0.7
Transition economies	7.2	7.3	6.7	6.7	6.6	6.6
Russia	2.7	2.6	2.6	2.6	2.6	2.6
Poland	0.9	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum items:						
EU28	30.4	27.0	26.1	25.7	25.0	24.2
LICs 3/	3.3	2.3	2.0	2.0	2.0	2.0
Coefficients for quota variables 4/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.975	0.975	0.975	0.975

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Shown coefficients may not add up to one due to rounding.

Annex III. Additional Illustrative Formula Simulations

This annex provides additional information on a technical exercise discussed in the main paper to simulate possible reforms in the quota formula that would be required to generate outcomes near the midpoint of the range of views on the formula that have been expressed so far.

- 1. As discussed in the main paper, a range of views on the formula have been expressed in the discussions so far.** One broad view is that the current formula is broadly adequate and does not need major reforms. Another broad view is that economic size is the only relevant indicator of members' relative positions in the global economy and that the quota formula should be reduced to a single variable—GDP (and without compression). There is also a spectrum of views between these positions.
- 2. These two views imply different results in terms of the distribution of calculated quota shares (CQS).** The implied distributions are broadly the same at the aggregate level in terms of the total CQS of AEs and EMDCs. However, they are significantly different at the level of individual countries.
- 3. Staff has conducted a technical exercise to identify the types of reforms that could be required to generate CQS near the midpoint of the distributions implied by these two broad views.** First, the midpoint is calculated for each member as the simple average of CQS implied by the current formula and an alternative formula based solely on the GDP blend. Second, several variants are explored to identify formulas that most closely approximate the midpoint. In each case, the permissible range for the underlying parameters was established upfront, and then all alternative combinations within that range were explored to find the best fit with the midpoint. Three sets of parameters were explored, as described in Table III.1. The first set is based on the range of reforms considered in this and previous quota data update papers (see Annex II). The second and third sets involve a substantial relaxation of the restrictions on these parameters to allow exploration of a much broader range of reforms.

Table III.1. Parameters for Alternative Formulas—Midpoint Approach

Restriction set	Weights (in percent) 1/					Compression factor
	Market/PPP blend	GDP	Openness 2/	Variability	Reserves	
A. Previous formula simulations	50/50 to 65/35	57.5, 60, 65 or 70	37.5, 35, 30 or 25	dropped	5	0.925, 0.950 or 0.975
B. Wider range for GDP, openness, blend and compression	0/100 to 100/0	0 to 95	0 to 95		0 to 10	0.900, 0.925, 0.950, 0.975 or 1.000
C. Allowing reserves to vary		0 to 100	0 to 100			

1/ When not explicit, variable weights change in 2.5 pp increments. GDP blend changes in 5 pp increments.

2/ All sets allow alternative definitions of openness: absolute caps (85th and 75th percentiles) and shares caps (1.8 and 1.5 ratio). Sets B and C also include openness excluding intra currency union flows.

4. Within each set, illustrative quota formulas were identified that minimize the absolute distance to the midpoint. For each formula specification, this measure of best fit is calculated as the sum of absolute differences between the quota shares produced by the formula and the quota shares from the midpoint. The results are purely mechanical and do not involve any further judgment about the relative merits of alternative combinations after the initial parameters have been established.

5. For each set, the results for the five quota formulas that provide the closest fit with the midpoint are shown in Tables III.2a-2c. For example, in Set A, which is the most restrictive, the formula with the best fit is one that includes a 70 percent weight for the current GDP blend measure, 25 percent weight for openness (uncapped), 5 percent for reserves, and less (0.975) compression than in the current formula. The absolute distance from the midpoint for this best fit formula of Set A is 3.31 pp. Loosening the restrictions improves the goodness of fit, to 2.49 pp for Set B and 1.84 pp for Set C for the formulas that generate the best fit in each respective set.

Table III.2a. Illustrative formulas – Set A (Previous Formula Simulations)

Rank	Formula specification							Total absolute distance from midpoint (pp)
	Blend	GDP	Openness		Variability	Reserves	Compression	
			Weight	Definition				
1	60/40	70.0	25.0	Normal	0.0	5.0	0.975	3.31
2	65/35	70.0	25.0	Normal	0.0	5.0	0.975	3.49
3	55/45	70.0	25.0	Normal	0.0	5.0	0.975	3.57
4	60/40	70.0	25.0	Absolute (85%)	0.0	5.0	0.975	3.80
5	65/35	70.0	25.0	Absolute (85%)	0.0	5.0	0.975	4.08

**Table III.2b. Illustrative Formulas – Set B
(Wider Range for GDP, Openness, Blend and Compression)**

Rank	Formula specification							Total absolute distance from midpoint (pp)
	Blend	GDP	Openness		Variability	Reserves	Compression	
			Weight	Definition				
1	65/35	75.0	20.0	Normal	0.0	5.0	0.975	2.49
2	60/40	75.0	20.0	Normal	0.0	5.0	0.975	2.62
3	65/35	77.5	17.5	Normal	0.0	5.0	0.975	2.63
4	70/30	77.5	17.5	Normal	0.0	5.0	0.950	2.71
5	65/35	77.5	17.5	Normal	0.0	5.0	0.950	2.74

Table III.2c. Illustrative Formulas – Set C (Allowing Reserves to Vary)

Rank	Formula specification							Total absolute distance from midpoint (pp)
	Blend	GDP	Openness		Variability	Reserves	Compression	
			Weight	Definition				
1	60/40	77.5	20.0	Normal	0.0	2.5	0.975	1.84
2	60/40	75.0	22.5	Normal	0.0	2.5	0.975	1.88
3	65/35	75.0	22.5	Normal	0.0	2.5	0.975	2.31
4	65/35	77.5	20.0	Normal	0.0	2.5	0.975	2.32
5	60/40	72.5	25.0	Normal	0.0	2.5	0.975	2.42

6. Overall, the midpoint calculations tend to produce formulas with a higher weight for GDP, less compression, and the current measure of openness. In each set, all top-five formulas that minimize the distance to the midpoint involve a weight for GDP of at least 70 percent, and 72.5–77.5 percent in Sets B and C where the restrictions are relaxed. There is some fluctuation in the composition of the GDP blend, but it remains broadly around the current 60/40 mix of market and PPP GDP. In most formulas, the compression factor is increased to 0.975 (resulting in a lower degree of compression). In all sets, the weight of openness is reduced, ranging from 17.5 to 25 percent. Alternative specifications of openness feature only in some of the top-five formulas for Set A (with absolute cap at the 85th percentile). When the weight of reserves is allowed to vary (Set C), the weight of this variable is reduced to 2.5 percent in the formulas that yield the best fit.¹

7. Reducing the restrictions in the sets of formulas reduces substantially the distance between calculated quota shares and the midpoint for some individual members. Table III.3 shows the largest individual deviations relative to the midpoint for the formulas with best fit in each set (by member results for each formula are found in Supplement 2, Statistical Appendix). In Set A, the imposed restrictions cause sizable deviations from the midpoint for a few members, e.g., the US (0.7 pp below the midpoint), China (0.4 pp above), and Korea (0.2 pp above). The relaxation of restrictions on GDP and openness in Set B improves the overall fit, with China recording the largest deviation from its calculated midpoint (0.6 pp above) and all other deviations below 0.2 pp. By allowing reserves to vary from zero to 10 percent in Set C, the gap for China is reduced (to 0.2 pp), and all other deviations are at most 0.1 pp.

Table III.3. Largest Individual Deviations from the Midpoint (In percentage points)

	Rank	Set A Formula		Set B Formula		Set C Formula	
Above midpoint	1	China	0.41	China	0.55	China	0.25
	2	Korea, Republic of	0.19	Japan	0.18	Korea, Republic of	0.11
	3	Singapore	0.14	Korea, Republic of	0.15	India	0.10
	4	Germany	0.13	Switzerland	0.06	Germany	0.09
	5	Switzerland	0.12	Canada	0.05	United States	0.07
Below midpoint	5	India	-0.04	Russia	-0.05	Libya	-0.05
	4	Ukraine	-0.05	Iceland	-0.05	Ukraine	-0.05
	3	Iceland	-0.05	Ukraine	-0.06	Iceland	-0.05
	2	Brazil	-0.07	India	-0.08	Switzerland	-0.07
	1	United States	-0.73	United States	-0.14	Saudi Arabia	-0.09

¹ All these simulations assume that variability is dropped. Staff also explored a set of simulations where variability is permitted to remain in the formula with a weight up to its current weight of 15 percent. In this set, the best fit was obtained with the following specification: $(0.75 \cdot \text{GDP} + 0.15 \cdot \text{Openness} + 0.075 \cdot \text{Variability} + 0.025 \cdot \text{Reserves})^{0.975}$, with a 60/40 blend of market and PPP GDP and uncapped openness. It restores variability at a smaller weight (7.5 percent), mostly coming from a reduction in the weight of openness. In other words, variability would enter with a small weight while the weight of openness would be further reduced. In this case, the coefficients are exactly the average of the coefficients of the current formula and a GDP-blend only formula, reflecting the nature of the midpoint distribution used in this exercise.

Annex IV. Protection of the Poorest Members

Board of Governors Resolution No. 66-2 on the 14th Review stated that steps shall be taken to protect the voice and representation of the poorest members under the 15th Review. The commitment to protect the voice and representation of the poorest members was reiterated in the Executive Board's report on the outcome of the 2013 quota formula review and subsequent guidance by the IMFC and the Board of Governors.¹ Accordingly, it will be necessary to define how such protection would be provided and the definition of members who would qualify for protection. This annex discusses some options and presents illustrative results of their implications for the "cost of protection".

1. In the 14th Review, the definition of the poorest Fund members was based on PRGT-eligibility and per capita GNI. Specifically, the poorest members were defined as PRGT-eligible countries with annual per capita GNI below the prevailing operational IDA cut-off in 2008 (US\$1,135) or below twice the IDA's cut-off for countries meeting the definition of a "small country" under the PRGT eligibility criteria. The countries covered included 52 members plus Zimbabwe, which was not PRGT-eligible at the time due to arrears. South Sudan, which joined the Fund subsequently, also met this criterion and was protected through the 14th Review quota increase included in its membership resolution. The combined post-14th Review quota share² for these 54 countries is 3.3 percent.

2. Other options for defining the poorest members were also discussed at the time. These included the full list of PRGT-eligible countries, as well as the list of low income countries as defined in the IBRD's World Development Indicators with an annual per capita GNI of US\$975 or less. However, the definition described in the previous paragraph was seen as the preferred approach. It was also decided that protection should be provided through ad hoc quota increases at the individual country level for the eligible countries in the group rather than for the group as a whole.

3. Using the same approach as under the 14th Review, and the updated IDA income cut-off of US\$1,185, the current list of the poorest members would include 37 countries.³ The FY 2017 IDA per capita GNI threshold is based on calendar year data for 2015. The reduction in the number of qualifying members reflects the fact that the IDA cut-off has been increased relatively modestly in U.S. dollar terms since the 14th Review, while many of the poorest countries have

¹ See, e.g., the *Board of Governors Resolution No. 72-1 on the Fifteenth General Review of Quotas* (12/5/16) and the [Communiqué of the Thirty-Fifth Meeting of the IMFC](#), April 22, 2017, Washington, D.C.

² In this paper, post-14th Review quota shares are calculated assuming that all members have paid for quota increases under the 14th Review. As of June 30, 2017, only eight members have not paid for their quota increases. Marshall Islands, Palau, and Papua New Guinea have consented to, but not yet paid for their quota increases. Eritrea, Micronesia, Somalia, Sudan, and Syria have not consented to their quota increases under the 14th Review. Somalia and Sudan are currently not eligible to consent to their quota increases under the 11th and 14th General Reviews due to protracted arrears to the Fund in the General Resources Account.

³ The IDA per capita GNI threshold is reviewed annually, every July. The threshold was set at US\$1,215 for both FY 2015 (July 1, 2014 – June 30, 2015) and FY 2016 (July 1, 2015 – June 30, 2016). The IDA threshold for FY 2017 (July 1, 2016 – June 30, 2017) was reduced to US\$ 1,185, mainly reflecting the strong appreciation of the US dollar. The IDA income threshold for FY 2018, based on 2016 GNI, is US\$ 1,165. In order to maintain consistency with the 2015 data cut-off used in this paper, the FY 2017 threshold is used for the update of the poorest members list.

enjoyed relatively strong income growth. The combined post-14th Review quota shares for these 37 countries is 1.7 percent. This definition is used for protecting the quota shares of the poorest members in all illustrative allocation simulations presented in the main paper.

4. In addition to the approach followed under the 14th Review, other options could also be considered for the list of poorest countries eligible for protection in the 15th Review. These include the full list of PRGT-eligible countries, as well as alternatives such as United Nations list of least developed countries and the WEO's low income developing countries (see Table IV.1).

All PRGT-Eligible Countries

5. There are currently 70 PRGT-eligible countries. The PRGT eligibility is reviewed every two years, with the latest review in May 2017.⁴ The combined AQS for the 70 currently PRGT-eligible countries is 3.3 percent, which is almost identical to the combined AQS of countries in the original 14th Review list, even though the latter included a significantly lower number of countries. This reflects the graduation of Vietnam from the PRGT eligibility in 2015. Vietnam was protected under the 14th Review and had a relatively large quota share.

The United Nations list of least developed countries (LDCs)

6. This list includes 47 low-income countries confronting severe structural impediments to sustainable development. The list of LDCs is reviewed every three years and is based on three criteria: Gross National Income (GNI) per capita,⁵ the human asset index (HAI),⁶ and the economic vulnerability index (EVI).⁷ Both HAI and EVI are composed of several indicators. The combined AQS for the UN LDCs is 2.4 percent. The UN list includes Angola, which is neither PRGT-eligible nor included in the WEO LIDC list (see below). Equatorial Guinea, which was in a similar situation, dropped out of the list in 2017, following a scheduled graduation.

The WEO's Low Income Developing Countries (LIDCs)

7. This group was introduced in 2014 and currently includes 60 countries, of which 43 were protected under the 14th Review.⁸ LIDCs are currently defined as countries that (i) were designated PRGT-eligible in the 2013 PRGT eligibility review, and (ii) had a level of per capita GNI less than the PRGT income graduation threshold for non-small states (that is, twice the IDA

⁴ For more details, please refer to [Eligibility to Use the Fund's Facilities for Concessional Financing for 2017](#) (4/13/17).

⁵ The threshold for inclusion is based on a three-year average of the level of GNI per capita, and is the same which the World Bank uses for identifying low-income countries. The 2015 Triennial Review set the GNI per capita threshold at US\$1,035 for three years.

⁶ The HAI is a measure of the level of human capital, and consists of four indicators, two on health and nutrition (percentage of population undernourished, and mortality rate for children aged five years or under) and two on education (gross secondary school enrolment ratio, and the adult literacy rate).

⁷ The EVI measures the structural vulnerability of countries to exogenous economic and environmental shocks and contains, five of which are grouped into an exposure index and three into a shock index.

⁸ Staff plans to present an update of the WEO LIDC list in the October 2017 World Economic Outlook.

operational threshold, or US\$2,390 in 2011 as measured by the World Bank’s Atlas method), and also Zimbabwe. As the current LIDC list is based on 2013 PRGT eligibility, it still includes Bolivia, Mongolia, Nigeria, and Vietnam, which have graduated from PRGT eligibility in 2015. The combined AQS for the 60 WEO LIDCs is 4.0 percent (if the four countries that are no longer PRGT-eligible are excluded, this number drops to 3.2 percent).

Cost of Protection

8. Alternative definitions for the poorest members eligible for protection would have different implications in terms of the potential “cost of protection”. In the past, the “cost of protection” has been defined as the share of the total quota increase that is allocated in an ad hoc manner to protect the eligible members in the list of poorest countries against a decline in their quota shares. The cost of protection depends on a number of factors, among which are:

- actual and calculated quota shares of the eligible countries to be protected,
- the overall size of the quota increase, and
- the allocation method for the quota increase.

9. Simulations similar to the ones used in the main paper suggest that the costs of protection are likely to be relatively small in aggregate. Table IV.2 summarizes the cost of protection for the four types of allocation used in the main paper⁹, using all five groups of poorest countries discussed in this Annex. For these simulations, the cost of protection is independent from the size of increase.¹⁰ In all cases the share of quota increases that would have to be allotted for protection is less than 1.5 percent. The full list of PRGT-eligible countries has the highest cost of protection, followed fairly closely by the WEO LIDC list, with costs similar to the 14th Review list. The updated IDA cut-off list gives the lowest costs of protection.

⁹ This comprises three selective allocations (based on the current formula, formula 1.2 and midpoint set C) and one combination of selective and small ad hoc proportional to voluntary financial contributions (based on formula 1.2 and VFCS II, respectively).

¹⁰ This reflects the fact that the part of the increase used for protection comes from a reduction in the selective component of the increase and, for the simulation with financial contributions, the size of the ad hoc component is a fixed share of the total increase.

Table IV.1. Alternative Lists of Poorest Member Countries Qualifying for Protection

Country	PRGT-eligible countries 1/	14th Review List 2/	Updated IDA Cut-off List 3/	United Nations List	WEO LDC List	Country	PRGT-eligible countries 1/	14th Review List 2/	Updated IDA Cut-off List 3/	United Nations List	WEO LDC List
1 Afghanistan	*	*	*	*	*	39 Mali	*	*	*	*	*
2 Angola				*		40 Marshall Islands	*				
3 Bangladesh	*	*		*	*	41 Mauritania	*	*		*	*
4 Benin	*	*	*	*	*	42 Micronesia	*				
5 Bhutan	*	*		*	*	43 Moldova	*				*
6 Bolivia					*	44 Mongolia					*
7 Burkina Faso	*	*	*	*	*	45 Mozambique	*	*	*	*	*
8 Burundi	*	*	*	*	*	46 Myanmar	*	*	*	*	*
9 Cabo Verde	*					47 Nepal	*	*	*	*	*
10 Cambodia	*	*	*	*	*	48 Nicaragua	*	*	*	*	*
11 Cameroon	*				*	49 Niger	*	*	*	*	*
12 Central African Rep.	*	*	*	*	*	50 Nigeria					*
13 Chad	*	*	*	*	*	51 Papua New Guinea	*	*			*
14 Comoros	*	*	*	*	*	52 Rwanda	*	*	*	*	*
15 Congo, Dem. Rep. of	*	*	*	*	*	53 Samoa	*				
16 Congo, Rep. of	*				*	54 São Tomé and Príncipe	*	*	*	*	*
17 Côte d'Ivoire	*	*			*	55 Senegal	*	*	*	*	*
18 Djibouti	*	*	*	*	*	56 Sierra Leone	*	*	*	*	*
19 Dominica	*					57 Solomon Islands	*	*	*	*	*
20 Eritrea	*	*	*	*	*	58 Somalia	*	*		*	*
21 Ethiopia	*	*	*	*	*	59 South Sudan	*	*	*	*	*
22 Gambia, The	*	*	*	*	*	60 St. Lucia	*				
23 Ghana	*	*			*	61 St. Vincent and the Grenadines	*				
24 Grenada	*					62 Sudan	*	*		*	*
25 Guinea	*	*	*	*	*	63 Tajikistan	*	*			*
26 Guinea-Bissau	*	*	*	*	*	64 Tanzania	*	*	*	*	*
27 Guyana	*	*				65 Timor-Leste	*		*	*	
28 Haiti	*	*	*	*	*	66 Togo	*	*	*	*	*
29 Honduras	*				*	67 Tonga	*				
30 Kenya	*	*			*	68 Tuvalu	*			*	
31 Kiribati	*	*		*	*	69 Uganda	*	*	*	*	*
32 Kyrgyz Republic	*	*	*		*	70 Uzbekistan	*	*			*
33 Lao P.D.R.	*	*		*	*	71 Vanuatu	*			*	
34 Lesotho	*	*		*	*	72 Vietnam		*			*
35 Liberia	*	*	*	*	*	73 Yemen	*	*	*	*	*
36 Madagascar	*	*	*	*	*	74 Zambia	*	*		*	*
37 Malawi	*	*	*	*	*	75 Zimbabwe	*	*	*		*
38 Maldives	*										
No. of countries							70	54	37	47	60
Combined AQS of countries in the list (percent)							3.3	3.3	1.7	2.4	4.0
Combined CQS of countries in the list (percent) based on 2015 data used in the current quota formula							2.3	2.5	1.1	1.8	3.4
No. of eligible countries for which AQS > CQS							57	44	30	36	46

Source: Finance Department

1/ Effective May 31, 2017.

2/ Countries that were PRGT-eligible and met the IDA per capita GNI cut-off of US\$1,135 in 2008 (or twice that amount for small states, as defined by the IMF), plus Zimbabwe.

3/ Countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) or twice that amount for small states, as defined by the IMF.

10. Broadening protection provides substantial gains for several countries as they become eligible for protection, with small changes for the remaining members. To illustrate the impact both on countries that are potentially eligible for protection and on the rest of the membership, Tables IV.3 and IV.4 compare the resulting quota shares for an illustrative allocation considering the costliest scenario (125 percent increase, based on Midpoint Set C formula) for moving from the narrower updated IDA cut-off list (comprising 37 countries) to the broader PRGT-eligible list (comprising 70 countries). Table IV.3 shows the outcome of broadening the protection list for the 35 largest countries (none of which are eligible for protection) and the main country groups. The largest decline in quota shares for an individual country is 0.06 pp and the relative decline for all members not eligible for protection is around 0.3 to 0.4 percent of their respective quotas. Table IV.4 shows the impact of the change on the group of PRGT-eligible countries). For 32 countries that were already effectively protected under the narrower list, there is no change in quota shares, as their actual quota shares are again protected and will remain unchanged. However, for 29 countries which become eligible for protection, gains are sizable—their quota share increases are on average above 40 percent (or the average prevented fall in their quota shares is around 30 percent).¹

Table IV.2. Cost of Protection – Share of Total Quota Increase Allotted for Protection
(in percent)

Allocation	PRGT-eligible countries 1/	14th Review List 2/	Updated IDA Cut-Off List 3/	United Nations List	WEO LIDC List
Current Formula (selective)	1.21	1.16	0.68	0.77	1.17
Formula 1.2 (selective)	1.31	1.26	0.78	0.87	1.26
Midpoint Set C (selective)	1.42	1.35	0.84	0.92	1.37
Formula 1.2 (selective) with VFCS II (ad hoc, 5 percent of total increase)	1.35	1.31	0.80	0.90	1.31

Source: Finance Department

1/ Effective May 31, 2017.

2/ Countries that were PRGT-eligible and met the IDA per capita GNI cut-off of US\$1,135 in 2008 (or twice that amount for small states, as defined by the IMF), plus Zimbabwe.

3/ Countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) or twice that amount for small states, as defined by the IMF.

¹¹ There are also nine PRGT-eligible countries with CQS greater than AQS, and these countries would not need protection. As with other non-protected countries, their quota share would decline moderately, reflecting the cost of protection that is borne by all other members.

**Table IV.3. Illustrative Allocation – Selective Quota Increase (125%) –
Midpoint Set C Formula
(In percent)**

	14th General Review	CQS Based on Middle Ground Set C Formula	Resulting Quota Shares by Protection Group		Difference between PRGT and Updated IDA Cut-off List	
			Updated IDA Cut-off List (a)	PRGT (b)	Percentage Points (c) = (b) - (a)	Percent Change (d) = (c) / (a)
Advanced economies	57.6	49.9	53.1	52.9	-0.16	-0.31%
Major advanced economies	43.4	38.3	40.4	40.3	-0.12	-0.31%
United States	17.4	17.4	17.3	17.2	-0.06	-0.33%
Japan	6.5	5.3	5.8	5.8	-0.02	-0.30%
Germany	5.6	4.7	5.1	5.0	-0.02	-0.30%
France	4.2	3.2	3.6	3.6	-0.01	-0.29%
United Kingdom	4.2	3.4	3.7	3.7	-0.01	-0.29%
Italy	3.2	2.4	2.7	2.7	-0.01	-0.29%
Canada	2.3	2.0	2.1	2.1	-0.01	-0.31%
Other advanced economies	14.3	11.5	12.7	12.7	-0.04	-0.30%
Spain	2.0	1.7	1.8	1.8	-0.01	-0.30%
Netherlands	1.8	1.5	1.6	1.6	0.00	-0.30%
Australia	1.4	1.5	1.4	1.4	0.00	-0.34%
Belgium	1.3	0.8	1.1	1.1	0.00	-0.26%
Switzerland	1.2	1.2	1.2	1.2	0.00	-0.32%
Sweden	0.9	0.7	0.8	0.8	0.00	-0.29%
Austria	0.8	0.6	0.7	0.7	0.00	-0.28%
Norway	0.8	0.6	0.7	0.7	0.00	-0.28%
Ireland	0.7	0.5	0.6	0.6	0.00	-0.28%
Denmark	0.7	0.5	0.6	0.6	0.00	-0.26%
Emerging Market and Developing Countries 1/	42.4	50.1	46.9	47.1	0.16	0.35%
Africa	4.4	3.4	4.3	4.5	0.22	5.23%
South Africa	0.6	0.5	0.6	0.6	0.00	-0.30%
Nigeria	0.5	0.7	0.6	0.6	0.00	-0.38%
Asia	16.0	26.1	21.5	21.5	-0.06	-0.30%
China 2/	6.4	14.3	10.7	10.6	-0.05	-0.43%
India	2.7	3.8	3.3	3.3	-0.01	-0.37%
Korea, Republic of	1.8	2.0	1.9	1.9	-0.01	-0.34%
Indonesia	1.0	1.5	1.3	1.3	0.00	-0.39%
Singapore	0.8	0.9	0.8	0.8	0.00	-0.33%
Malaysia	0.8	0.7	0.7	0.7	0.00	-0.30%
Thailand	0.7	0.8	0.8	0.8	0.00	-0.36%
Middle East, Malta and Turkey	6.7	6.3	6.5	6.5	-0.02	-0.31%
Saudi Arabia	2.1	1.3	1.7	1.7	0.00	-0.26%
Turkey	1.0	1.2	1.1	1.1	0.00	-0.36%
Iran, I.R. of	0.7	0.8	0.8	0.8	0.00	-0.33%
Western Hemisphere	7.9	7.8	7.8	7.8	0.02	0.29%
Brazil	2.3	2.6	2.4	2.4	-0.01	-0.34%
Mexico	1.9	1.8	1.8	1.8	-0.01	-0.32%
Venezuela, R.B. de	0.8	0.6	0.7	0.7	0.00	-0.29%
Argentina	0.7	0.7	0.7	0.7	0.00	-0.34%
Transition economies	7.2	6.5	6.8	6.8	0.00	0.03%
Russia	2.7	2.7	2.7	2.7	-0.01	-0.32%
Poland	0.9	0.8	0.8	0.8	0.00	-0.32%
Total	100.0	100.0	100.0	100.0	0.00	0.00%
Memorandum items:						
EU28	30.4	23.8	26.6	26.5	-0.08	-0.29%
LICs 3/	3.3	2.1	3.1	3.4	0.32	10.33%
Updated 14th Review Poorest 4/	1.7	1.0	1.8	1.8	0.00	-0.06%

Source: Finance Department

1/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

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

3/ Currently PRGT-eligible countries.

4/ Updated 14th Review list to include countries that are PRGT-eligible and meet the FY 2017 IDA per capita GNI cut-off of US\$1,185 (data through 2015) and twice that amount for small states, as defined by the IMF. Currently includes 37 member countries.

Table IV.4. Illustrative Allocation - Selective Quota Increase (125%) – Midpoint Set C Formula
(In percent)

	14th General Review	CQS Based on Middle Ground Set C Formula	Resulting Quota Shares by Protection Group		Difference between PRGT and Updated IDA Cut-off List	
			Updated IDA Cut-off List	PRGT	Percentage Points	Percent Change
			(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
Afghanistan, Islamic Republic of	0.06788	0.04227	0.06788	0.06788	0.00000	0.0%
Bangladesh	0.22359	0.32687	0.27945	0.27839	-0.00106	-0.4%
Benin	0.02595	0.01610	0.02595	0.02595	0.00000	0.0%
Bhutan	0.00428	0.00471	0.00450	0.00448	-0.00002	-0.3%
Burkina Faso	0.02524	0.02160	0.02524	0.02524	0.00000	0.0%
Burundi	0.03228	0.00536	0.03228	0.03228	0.00000	0.0%
Cabo Verde	0.00497	0.00364	0.00422	0.00497	0.00075	17.9%
Cambodia	0.03669	0.03899	0.03778	0.03766	-0.00013	-0.3%
Cameroon	0.05786	0.05019	0.05336	0.05786	0.00450	8.4%
Central African Republic	0.02335	0.00268	0.02335	0.02335	0.00000	0.0%
Chad	0.02939	0.02316	0.02939	0.02939	0.00000	0.0%
Comoros	0.00373	0.00128	0.00373	0.00373	0.00000	0.0%
Congo, Democratic Republic of the	0.22347	0.06047	0.22347	0.22347	0.00000	0.0%
Congo, Republic of	0.03396	0.02736	0.03016	0.03396	0.00380	12.6%
Côte d'Ivoire	0.13634	0.05843	0.09279	0.13634	0.04356	46.9%
Djibouti	0.00667	0.00302	0.00667	0.00667	0.00000	0.0%
Dominica	0.00241	0.00094	0.00159	0.00241	0.00082	51.7%
Eritrea	0.00767	0.00676	0.00767	0.00767	0.00000	0.0%
Ethiopia	0.06304	0.09612	0.08097	0.08066	-0.00031	-0.4%
Gambia, The	0.01304	0.00224	0.01304	0.01304	0.00000	0.0%
Ghana	0.15471	0.07933	0.11247	0.15471	0.04224	37.6%
Grenada	0.00344	0.00155	0.00238	0.00344	0.00106	44.3%
Guinea	0.04490	0.01225	0.04490	0.04490	0.00000	0.0%
Guinea-Bissau	0.00595	0.00212	0.00595	0.00595	0.00000	0.0%
Guyana	0.03811	0.00630	0.02041	0.03811	0.01770	86.7%
Haiti	0.03434	0.01584	0.03434	0.03434	0.00000	0.0%
Honduras	0.05237	0.03599	0.04310	0.05237	0.00926	21.5%
Kenya	0.11379	0.09709	0.10406	0.11379	0.00973	9.3%
Kiribati	0.00235	0.00054	0.00134	0.00235	0.00101	74.9%
Kyrgyz Republic	0.03723	0.01707	0.03723	0.03723	0.00000	0.0%
Lao People's Democratic Republic	0.02218	0.02297	0.02251	0.02244	-0.00007	-0.3%
Lesotho	0.01463	0.00588	0.00974	0.01463	0.00489	50.2%
Liberia	0.05417	0.00528	0.05417	0.05417	0.00000	0.0%
Madagascar	0.05123	0.02192	0.05123	0.05123	0.00000	0.0%
Malawi	0.02910	0.01311	0.02910	0.02910	0.00000	0.0%

Table IV.4. Illustrative Allocation - Selective Quota Increase (125%) – Midpoint Set C Formula (concluded)
(In percent)

	14th General Review	CQS Based on Middle Ground Set C Formula	Resulting Quota Shares by Protection Group		Difference between PRGT and Updated IDA Cut-off List	
			Updated IDA Cut-off List	PRGT	Percentage Points	Percent Change
			(a)	(b)	(c) = (b) - (a)	(d) = (c) / (a)
Maldives	0.00444	0.00672	0.00568	0.00566	-0.00002	-0.4%
Mali	0.03912	0.02319	0.03912	0.03912	0.00000	0.0%
Marshall Islands	0.00103	0.00043	0.00069	0.00103	0.00033	48.1%
Mauritania	0.02700	0.01154	0.01836	0.02700	0.00865	47.1%
Micronesia, Federated States of	0.00151	0.00067	0.00104	0.00151	0.00047	44.9%
Moldova	0.03616	0.01632	0.02506	0.03616	0.01110	44.3%
Mozambique	0.04763	0.02896	0.04763	0.04763	0.00000	0.0%
Myanmar	0.10834	0.13617	0.12317	0.12272	-0.00044	-0.4%
Nepal	0.03289	0.04376	0.03873	0.03858	-0.00014	-0.4%
Nicaragua	0.05450	0.02423	0.03757	0.05450	0.01693	45.1%
Niger	0.02759	0.01403	0.02759	0.02759	0.00000	0.0%
Papua New Guinea	0.05518	0.03009	0.04110	0.05518	0.01407	34.2%
Rwanda	0.03358	0.01429	0.03358	0.03358	0.00000	0.0%
Samoa	0.00340	0.00139	0.00228	0.00340	0.00112	49.1%
São Tomé and Príncipe	0.00310	0.00063	0.00310	0.00310	0.00000	0.0%
Senegal	0.06784	0.02797	0.06784	0.06784	0.00000	0.0%
Sierra Leone	0.04348	0.00916	0.04348	0.04348	0.00000	0.0%
Solomon Islands	0.00436	0.00200	0.00436	0.00436	0.00000	0.0%
Somalia	0.03425	0.01036	0.02093	0.03425	0.01332	63.7%
South Sudan, Republic of	0.05157	0.02256	0.05157	0.05157	0.00000	0.0%
St. Lucia	0.00449	0.00244	0.00334	0.00449	0.00115	34.4%
St. Vincent and the Grenadines	0.00245	0.00132	0.00182	0.00245	0.00063	34.8%
Sudan	0.13211	0.11496	0.12205	0.13211	0.01006	8.2%
Tajikistan	0.03648	0.01717	0.02567	0.03648	0.01081	42.1%
Tanzania	0.08339	0.08206	0.08339	0.08339	0.00000	0.0%
Timor-Leste	0.00537	0.00728	0.00640	0.00637	-0.00002	-0.4%
Togo	0.03077	0.00907	0.03077	0.03077	0.00000	0.0%
Tonga	0.00289	0.00087	0.00177	0.00289	0.00113	63.7%
Tuvalu	0.00052	0.00011	0.00029	0.00052	0.00023	78.6%
Uganda	0.07568	0.04899	0.07568	0.07568	0.00000	0.0%
Uzbekistan	0.11555	0.11531	0.11488	0.11555	0.00067	0.6%
Vanuatu	0.00499	0.00132	0.00295	0.00499	0.00204	69.4%
Yemen, Republic of	0.10209	0.06369	0.10209	0.10209	0.00000	0.0%
Zambia	0.20506	0.04531	0.11610	0.20506	0.08896	76.6%
Zimbabwe	0.14817	0.02522	0.14817	0.14817	0.00000	0.0%

Source: Finance Department

Annex V. Voluntary Financial Contributions

This Annex updates staff estimates of members' voluntary financial contributions (VFCS) to the Fund. The calculations cover the main forms of voluntary financial contributions, including bilateral and multilateral loans to the General Resources Account (GRA), loan contributions to the Poverty Reduction and Growth Trust (PRGT) and its predecessors, subsidy contributions to concessional financing, and financing for capacity development (i.e., technical assistance and training). Building on staff's earlier work, it also illustrates alternative forms of aggregating such diverse contributions, recognizing the difficulties involved.

Background

1. **Options for recognizing financial contributions were discussed extensively during the QFR.**¹ Directors recognized the importance of financial contributions to the Fund. Much of the discussion focused on whether to include a measure of financial contributions in the quota formula, and different views were expressed on this issue. One view was that voluntary financial contributions should be included in the quota formula (either instead of, or as a complement to, reserves) as it would help incentivize the provision of such contributions to the Fund. Another view was that such inclusion was inconsistent with the Fund's role as a quota-based institution. Following an extensive debate, the Executive Board's QFR report to the Board of Governors noted that: *"Views diverged on the merits of such an approach. It was agreed to consider whether and how to take into account very significant voluntary financial contributions through ad hoc adjustments as part of the 15th Review."*²
2. **Differences in views remain regarding whether and, if so, how to recognize voluntary financial contributions in the context of the 15th Review.** Directors have discussed the issue of voluntary financial contributions repeatedly since the QFR, including in the context of 2016 quota data update.³ As reflected in the Executive Board's Report to the Board of Governors on progress on the Fifteenth Review of Quotas in September 2016, *"[d]ifferences also remain, inter alia, over whether and, if so, how to recognize members' voluntary financial contributions in quota adjustments."*⁴ The timetable set forth in the Executive Board's Report to the Board of Governors in November 2016 envisages that the issue of whether and, if so, how to recognize voluntary financial contributions will be discussed as part of the work during the second half of 2017 and early 2018.⁵

¹ See [Quota Formula Review—Initial Considerations](#) (2/10/12), [Quota Formula Review—Data Update and Further Considerations](#) (6/28/12), and [Quota Formula Review—Additional Considerations](#) (9/4/12), and [Quota Formula Review—Further Considerations](#) (11/8/12). See also the summary of the Executive Board Meetings that discussed these papers in [PIN 12/35](#), [PIN/12/94](#), [PIN12/120](#) and [PIN 12/145](#), respectively.

² See [Outcome of the Quota Formula Review—Draft Report of the Executive Board to the Board of Governors](#) (1/30/13).

³ [Quotas—Data Update and Simulations](#) (8/9/16) provided background for this discussion.

⁴ See [Report of the Executive Board to the Board of Governors on Progress on the Fifteenth General Review of Quotas](#) (9/30/16).

⁵ See [Fifteenth General Review of Quotas—Report to the Board of Governors](#) (11/2/16).

3. Staff has updated earlier estimates of members' voluntary financial contributions to the Fund. In light of the outcome of the QFR and subsequent Board discussions, the annex focuses solely on voluntary financial contributions to the Fund. For example, members' participation in the Financial Transactions Plan is not covered here as this is an obligation of membership that meet the relevant criteria. Similarly, the estimates include only financial contributions and do not attempt to capture members' in-kind contributions or financing provided by members bilaterally to other members in the context of the Fund's financial arrangements.

4. The voluntary financial contributions considered in this annex include a broad range of contributions. They cover bilateral borrowing agreements with the Fund, multilateral support for Fund liquidity in the GRA through the New Arrangements to Borrow (NAB),⁶ loan contributions to the PRGT (and its predecessors), subsidy contributions for concessional financing, and capacity development (CD). As discussed below, there are multiple ways of aggregating these different forms of financial contributions.

5. The diversity of forms of voluntary financial contributions raises a number of issues when it comes to defining and constructing an aggregate measure. These include:

- The need to determine the relevant time frame for considering contributions;
- How to combine contributions that differ substantially both in magnitude and in form, with some contributions involving budget outlays and others involving the temporary provision of loans; and
- How to aggregate diverse contributions over time.

While recognizing the challenges related to timing of voluntary contributions and comparability of different types of contributions, this Annex uses the approach presented in previous staff work, where contributions are measured mainly on a commitment basis, reflecting the amounts that members stand ready to (have pledged to) provide to the Fund regardless of the amounts that are actually drawn.

Update of the Three Aggregate Measures of VFCs

6. The Annex updates the three aggregate measures of voluntary financial contributions presented in [Quotas—Data Update and Simulations](#) (8/9/16). These measures are defined as follows:⁷

⁶ The GAB is not included in the illustrative aggregate measures of voluntary financial contributions because it does not add to the Fund's overall lending envelope, as outstanding drawings and available commitments under the NAB and the GAB may not exceed the total amount of NAB credit arrangements.

⁷ See Box V.1 for more details, and Table V.1 for a summary of selected indicators of members' financial contributions to the Fund. Table V.2 provides a summary of the distribution across broad country groups of these three aggregate measures of voluntary financial contributions.

- **VFCS I** – the simple average of member contribution shares to the following five voluntary financial contributions: i) NAB, ii) 2012 and 2016 bilateral borrowing agreements as of end-April 2017,⁸ iii) PRGT loans, iv) subsidies for concessional financing, and v) capacity development.
- **VFCS II** – same contributions as in VFCS I, but with fixed weights for the main forms of contributions. Specifically, VFCS II is a weighted average of member contributions to the NAB (0.3), effective 2012 and 2016 bilateral borrowing agreements as of end-April 2017 (0.3), PRGT loans and subsidies for concessional financing combined (0.2), and capacity development (0.2). The higher weight on NAB/bilateral resources would reflect to some extent the large magnitude of resources provided compared to contributions to concessional financing and capacity development.
- **VFCS III** – same contributions as in VFCS I, but using the higher of the 14th Review quota share or VFCS I share rebased to ensure that total shares add up to 100 percent. This metric recognizes members that have provided financial contributions in excess of their respective quota shares. One implication of this approach, however, is that members that have contributed, but less than their 14th Review quota shares, are treated the same as other members that have not contributed.

7. Based on all three measures, AEs account for a much larger share of voluntary financial contributions than their 14th Review AQS or current CQS (see Figure V.1). The share of AEs is the highest (almost 80 percent) for VFS I, i.e., the measure that averages contributions shares across all five forms. On the other hand, VFCS III results in a smaller share of AEs, as it also recognizes a member's quota share. There are also significant differences across individual member countries, both within the group of AEs and among EMDCs.

8. The main paper illustrates one possible approach to recognizing voluntary financial contributions through ad hoc adjustments as part of the 15th Review (Table 9). These calculations use the measure VFCS II above, and allocate 5 percent of the overall quota increase to be distributed based on shares in this measure. As discussed in previous staff papers, there are many possible ways of measuring such contributions and staff could conduct further work on this topic based on Directors' guidance.⁹

⁸ These include effective 2012 and 2016 bilateral borrowing agreements, approved 2016 bilateral borrowing agreements expected to become effective shortly, and pledges to the 2016 borrowing agreements by members whose agreements were at advanced stages under their domestic processes as of end-April 2017.

⁹ See [Fourteenth General Review of Quotas – Realigning Quota Shares – Further Considerations – Simulation Requests](#) (8/27/10).

Figure V.1. Financial Contributions: Distribution of Aggregate Measures by Major Country Groupings

Source: Finance Department

Box V.1. Components of Voluntary Financial Contributions Shares

Aggregate measures of Voluntary Financial Contributions by member countries comprise five key components:

- All credit arrangements under the New Arrangements to Borrow (NAB) that were effective as of end-April 2017.
- All effective 2012 and 2016 bilateral borrowing agreements with the Fund, approved 2016 bilateral borrowing agreements expected to become effective shortly, and pledges to the 2016 borrowing agreements by members whose agreements were at advanced stages under their domestic processes as of end-April 2017.
- All loan commitments by member countries to the PRG Trust (and its predecessors) cumulative from 1988 to end-April 2017.
- Cumulative subsidy contribution (as of end-April 2017) to various concessional financing initiatives, including^{1/}:
  - (i) the PRGF-ESF Trust^{2/} (1987);
  - (ii) the PRG-HIPC Trust^{3/} (1999);
  - (iii) the MDRI^{4/} and ESF (2005);
  - (iv) the PRGT Subsidy Account (2009); and
  - (v) the CCRT^{5/} (2015); as well as
  - (vi) the distribution in 2012/13 of windfall profits from the sale of gold in 2009/10 to the PRGT Subsidy Account.
- Net disbursements for capacity development (technical assistance and training) over the period FY1999-FY2017.

1/ Years refer to start of new fundraising round (in some cases multi-year) approved by the Executive Board.

2/ Poverty Reduction and Growth Facility and Exogenous Shocks Facility Trust

3/ Trust for Special Poverty Reduction and Growth Operations for the Heavily Indebted Poor Countries and Interim ECF Subsidy Operations

4/ Multilateral Debt Relief Initiative

5/ Catastrophe Containment and Relief Trust

Table V.1. Financial Contributions to the Fund: Selected Indicators
(In percent, unless otherwise indicated)

	14th Review Quota Share	Share in Financial Contributions to				
		NAB 1/	Bilateral Borrowing Agreements 2/	PRGT Loans 3/	Concessional Financing Subsidies 4/	Capacity Development 5/
Advanced Economies	57.6	75.0	64.9	89.5	80.0	85.0
Major advanced economies	43.4	57.9	44.5	69.8	59.9	60.4
United States	17.4	15.6	0.0	0.0	12.4	0.7
Japan	6.5	18.6	14.1	25.8	13.8	36.8
Germany	5.6	7.2	10.7	8.1	6.4	2.2
France	4.2	5.3	8.1	14.5	7.5	1.5
United Kingdom	4.2	5.3	3.0	9.8	9.6	9.9
Italy	3.2	3.8	6.0	6.4	5.1	0.7
Canada	2.3	2.1	2.6	5.0	5.2	8.6
Other advanced economies	14.3	17.1	20.4	19.7	20.2	24.6
Spain	2.0	1.9	3.8	4.6	1.3	0.5
Netherlands	1.8	2.5	3.5	4.3	3.2	4.1
Australia	1.4	1.2	1.5	0.0	1.2	3.4
Belgium	1.3	2.2	2.6	2.1	2.4	1.7
Switzerland	1.2	3.1	0.0	3.3	2.4	8.5
Sweden	0.9	1.3	2.4	1.5	3.0	0.9
Austria	0.8	1.0	1.6	0.0	1.4	0.1
Norway	0.8	1.1	1.9	2.2	1.4	2.4
Ireland	0.7	0.0	0.0	0.0	0.2	0.0
Denmark	0.7	0.9	1.4	1.8	1.4	0.8
Emerging Market and Developing Countries 6/	42.4	25.0	35.1	10.5	20.0	15.0
Africa	4.4	0.2	1.6	0.0	2.2	5.1
South Africa	0.6	0.2	0.4	0.0	0.4	0.0
Nigeria	0.5	0.0	0.0	0.0	0.4	0.0
Asia	16.0	14.0	18.4	8.6	7.7	2.9
China 7/	6.4	8.8	10.1	5.3	2.0	0.4
India	2.7	2.5	2.4	0.0	1.3	1.2
Korea	1.8	1.9	3.5	3.2	1.6	1.2
Indonesia	1.0	0.0	0.0	0.0	0.2	0.0
Malaysia	0.8	0.2	0.2	0.0	0.8	0.0
Singapore	0.8	0.4	0.9	0.0	0.6	0.0
Thailand	0.7	0.2	0.9	0.0	0.4	0.0
Middle East, Malta, and Turkey	6.7	3.3	4.8	1.9	4.3	5.3
Saudi Arabia	2.1	3.1	3.5	1.5	2.6	0.3
Turkey	1.0	0.0	1.2	0.0	0.4	0.0
Iran, Islamic Republic of	0.7	0.0	0.0	0.0	0.3	0.0
Western Hemisphere	7.9	4.3	5.4	0.0	2.9	1.6
Brazil	2.3	2.5	2.4	0.0	0.2	0.2
Mexico	1.9	1.4	2.4	0.0	1.2	0.8
Venezuela, R.B. de	0.8	0.0	0.0	0.0	0.0	0.0
Argentina	0.7	0.0	0.0	0.0	1.0	0.0
Transition economies	7.2	3.2	5.0	0.0	2.9	0.1
Russia	2.7	2.5	2.4	0.0	1.4	0.1
Poland	0.9	0.7	1.6	0.0	0.2	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Memorandum Items:						
EU28	30.4	33.6	47.1	53.2	44.4	23.5
LICs 8/	3.3	0.0	0.0	0.0	0.9	2.8
Total contributions (in millions of SDRs) 9/		180,233	310,106	33,808	7,475	1,317

Source: Finance Department

1/ All credit arrangements under the NAB that were effective as of end-April 2017.

2/ Effective 2012 and 2016 bilateral borrowing agreements, approved 2016 bilateral borrowing agreements expected to become effective shortly, and pledges to the 2016 borrowing agreements by members whose agreements were at advanced stages under their domestic processes as of end-April 2017. Amounts based on end-April 2017 exchange rates.

3/ Cumulative loan commitments to the PRGF-ESF Trust as of end-April 2017.

4/ Total bilateral resources received or pledged since 1987 for subsidizing concessional lending, and HIPC, MDRI and CCRT debt relief, as of end-April 2017.

5/ Cash contributions to the IMF for technical assistance and training (excluding in kind contributions), FY1999-FY2017.

6/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

7/ Including China, P.R. Hong Kong SAR and Macao SAR.

8/ Currently PRGT-eligible countries.

9/ Except for capacity development, which is in millions of US dollars.

Table V.2. Financial Contributions to the Fund: Aggregate Measures
(In percent)

	14th Review Quota Share	Calculated Quota Share (CQS)	Various aggregate measures		
			VFCS I 1/	VFCS II 2/	VFCS III 3/
Advanced Economies	57.6	50.2	78.9	76.5	67.8
Major advanced economies	43.4	35.7	58.5	56.4	51.5
United States	17.4	14.5	5.7	5.3	12.8
Japan	6.5	5.1	21.8	21.9	16.0
Germany	5.6	5.0	6.9	7.4	5.1
France	4.2	3.2	7.4	6.9	5.4
United Kingdom	4.2	3.6	7.5	6.4	5.5
Italy	3.2	2.4	4.4	4.3	3.2
Canada	2.3	2.0	4.7	4.2	3.5
Other advanced economies	14.3	14.5	20.4	20.1	16.3
Spain	2.0	1.8	2.4	2.6	1.8
Netherlands	1.8	2.1	3.5	3.4	2.6
Australia	1.4	1.4	1.5	1.5	1.1
Belgium	1.3	1.1	2.2	2.2	1.6
Switzerland	1.2	1.7	3.4	3.2	2.5
Sweden	0.9	0.9	1.8	1.6	1.3
Austria	0.8	0.7	0.8	0.8	0.6
Norway	0.8	0.7	1.8	1.8	1.3
Ireland	0.7	0.8	0.0	0.0	0.5
Denmark	0.7	0.6	1.2	1.2	0.9
Emerging Market and Developing Countries 4/	42.4	49.8	21.1	23.5	32.2
Africa	4.4	3.7	1.8	1.6	3.6
South Africa	0.6	0.5	0.2	0.2	0.5
Nigeria	0.5	0.7	0.1	0.0	0.4
Asia	16.0	24.2	10.3	12.0	12.1
China 5/	6.4	12.6	5.3	6.7	4.7
India	2.7	3.1	1.4	1.7	2.0
Korea	1.8	2.0	2.3	2.5	1.7
Indonesia	1.0	1.3	0.0	0.0	0.7
Malaysia	0.8	0.8	0.2	0.2	0.6
Singapore	0.8	1.3	0.4	0.4	0.6
Thailand	0.7	1.0	0.3	0.4	0.5
Middle East, Malta, and Turkey	6.7	7.2	3.9	4.0	5.2
Saudi Arabia	2.1	1.7	2.2	2.4	1.6
Turkey	1.0	1.2	0.3	0.4	0.7
Iran, Islamic Republic of	0.7	0.7	0.1	0.0	0.5
Western Hemisphere	7.9	7.4	2.8	3.3	5.8
Brazil	2.3	2.3	1.0	1.5	1.7
Mexico	1.9	1.7	1.1	1.3	1.4
Venezuela, R.B. de	0.8	0.6	0.0	0.0	0.6
Argentina	0.7	0.6	0.2	0.0	0.5
Transition economies	7.2	7.3	2.2	2.6	5.3
Russia	2.7	2.6	1.3	1.5	2.0
Poland	0.9	0.9	0.5	0.7	0.6
Total	100.0	100.0	100.0	100.0	100.0
Memorandum Items:					
EU28	30.4	27.0	40.4	39.2	32.2
LICs 6/	3.3	2.3	0.7	0.6	2.5

Source: Finance Department

1/ Average of contribution shares in NAB, bilateral borrowing agreements, PRGT loans, concessional financing subsidies, and capacity development.

2/ Weighted average of contribution shares with weights of 0.3 for NAB, 0.3 for bilateral borrowing agreements, 0.2 for PRGT loans and concessional financing subsidies combined, and 0.2 for capacity development.

3/ Measure of "generous" contributions which uses the higher of 14th Review quota share or VFCS I share rebased to ensure that total shares add up to 100 percent.

4/ Including Czech Republic, Estonia, Korea, Latvia, Lithuania, Malta, Singapore, Slovak Republic, and Slovenia.

5/ Including China, P.R., Hong Kong SAR, and Macao SAR.

6/ Currently PRGT-eligible countries.

August 2, 2017

**FIFTEENTH GENERAL REVIEW OF QUOTAS—QUOTA
FORMULA AND REALIGNING SHARES—STATISTICAL
APPENDIX**

Approved By
**Andrew Tweedie and
Louis Marc Ducharme**

Prepared by the Finance and Statistics Departments. The FIN team comprised Ezgi Ozturk (lead), Maria Albino-War, Rina Bhattacharya, Henrique Chociay, Niels-Jakob Hansen, Joao Jatene, and Sergio Rodriguez-Apolinar under the guidance of Heikki Hatanpaa. The STA team comprised Jimmy McHugh (lead), Silvia Matei, Lisbeth Rivas, Venkateswarlu Josyula, Aimee Cheung Kai Suet, Niall O' Hanlon, Raja Hettiarachchi, Kenneth Kirkley, Martin McConagha, Ercument Tulun, and Lamya Kejji under the guidance of He Qi.

CONTENTS

I. INTRODUCTION	3
II. REQUIRED DATA	3
III. SELECTION OF THE DATABASE	4
IV. DATA AVAILABILITY AND ADJUSTMENTS	7
BOXES	
A1. Methodological Issues	6
A2. Changes with BPM6	11
TABLES	
A1. Distribution of Quotas and Calculated Quotas—by Member	13
A2. Distribution of Quotas and Updated Quota Variables—by Member	19
A3. Updated GDP Blend Variable—by Member	25
A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member	31
A5. Out-of-Lineness—by Member	37
A6. Distribution of Quotas and Updated Quota Variables—by Member	43
A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member	49
A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member	55

A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member	<u>61</u>
A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member	<u>67</u>
A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member	<u>73</u>
A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member	<u>79</u>
A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member	<u>85</u>
A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member	<u>91</u>
A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP, and Different Openness Measures—by Member	<u>97</u>
A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member	<u>103</u>
A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member	<u>109</u>
A18. Illustrative calculations—Formulas Based on Midpoint Approach—by Member	<u>115</u>
A19. Illustration of Allocation Mechanisms: Current Formula—by Member	<u>121</u>
A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member	<u>127</u>
A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—by Member	<u>133</u>
A22. Illustration of Allocation Mechanisms: Formula 1.2, includes 5 percent Ad Hoc Distribution based on Voluntary Financial Contributions—by Member	<u>139</u>

I. INTRODUCTION¹

1. This appendix discusses the required data, the selection of the database, and the derivation of the data series used for the quota calculations.
2. The quota database is updated annually with the latest information as of end-January of the previous year. This year, the required data series were updated with data through 2015. The remainder of this paper is structured as follows: Section II describes the required data, Section III discusses selection of the database, and Section IV concludes with a description of data availability and adjustments.

II. REQUIRED DATA

3. The quota database requires the following data for all 189 member countries (converted into SDRs as the common denominator):²
  - *GDP at market prices* for three years (2013–15).
  - *PPP GDP* (GDP at purchasing power parity) for three years (2013–15). PPP GDP for a given economy is the volume of goods and services produced for final uses by that economy relative to other economies. It is calculated by deflating GDP at market prices by the PPP price level index, allowing comparisons across countries for a given period.
  - *Current receipts* (goods, services, primary income, secondary income, and capital account)³ for 13 years (2003–15). Current receipts are defined as the credit component of all economic transactions between resident and nonresident entities other than those relating to financial transactions.
  - *Current payments* (goods, services, primary income, and secondary income, and capital account)⁴ for five years (2011–15). Current payments are defined as the debit component of all economic transactions between resident and nonresident entities other than those relating to financial account transactions.

¹ Prepared jointly by FIN and STA. GDP and balance of payments data for the updated quota calculations were compiled by STA in coordination with FIN.

² The cutoff date for both *IFS* and *WEO* data was January 31, 2017; in the case of the latter, the cutoff date implied the use of the Fall 2016 *WEO* database.

³ The balance of payments data are based on the *Balance of Payments and International Investment Position Manual*, sixth edition (BPM6). To help ensure comparability with previous quota calculations, both current and capital transfers—excluding exceptional financing, to the extent possible—are included here in current receipts, where such data is available.

⁴ Ibid; exceptional financing transactions are only on the credit side of the current and capital accounts.

- *Net capital flows* for 13 years (2003–15). Net capital flows relate to cross-border transactions of the financial account in all external financial assets and liabilities except reserve assets, credit and loans from the Fund, and exceptional financing. This measures net financial flows.⁵
- *Official reserves*, defined as the sum of the average over the 12 months of 2015 of foreign exchange, SDR holdings, reserve position in the Fund, and monetary gold valued at SDR 35 per fine troy ounce.

4. Errors and omissions have not been included in the measure of variability of current receipts and net capital flows. Errors and omissions are, by definition, a residual item, which reflects recording errors that cannot be ascribed to any particular balance of payments category. Consistent with past practice, these recording errors are not incorporated into the variables of the quota database.

5. Along the same lines, transactions in both reserve assets and reserve-related liabilities should be excluded from net financial flows (referred to as “net capital flows”) so that only autonomous and not financing flows are captured. Data on transactions in reserve assets are available for most members in International Financial Statistics (IFS) and have been excluded from net capital flows. However, because of the continuing lack of data on reserve-related liabilities for many members, changes in reserve-related liabilities have not been excluded from the measure of net capital flows in this database. Although reserve-related liabilities are not a standard component in BPM6, short-term reserve-related liabilities on a remaining maturity basis are a memorandum item to the international investment position.

6. Credit and loans from the Fund, and exceptional financing have been excluded from the variability measure for the same reason that reserve asset changes have been excluded. Such transactions, including borrowing from the Fund, accumulation and repayment of arrears, and debt forgiveness or rescheduling, represent exceptional measures undertaken to finance balance of payments needs. In the analytic presentation of the balance of payments, exceptional financing flows are shown “below the line” because they are not autonomous balance of payments transactions. For these reasons, and consistent with past practice, these transactions are not included in the variability measure.

III. SELECTION OF THE DATABASE

7. The database containing the variables used in the quota calculations would ideally have the following attributes: it should be comprehensive, i.e., contain all required data—compiled in line with internationally accepted concepts and definitions—for all members; the data would be from official sources (central banks and national statistical agencies); and the data would be comparable (consistent and coherent) across time and countries. This would ensure similar treatment for all countries’ data and facilitate the comparability of results in a transparent manner.

⁵ The variable is referred to as “net capital flows” to maintain continuity with the term used in previous quota calculations.

8. As in past quota updates, the main source of data used in the quota calculations was the Fund's central macroeconomic database of country, regional, and global statistics. STA manages this database (using a data processing system known as DMXplus) for international statistical cooperation and publication purposes, and to support the Fund's surveillance and use of Fund resources functions.⁶ The database, which encompasses a number of component databases, embodies, to the extent possible, the application of international statistical methodologies for the compilation of economic and financial data. Gap-filling and aggregations are performed in the EcOS data management system.

9. The *IFS* data are reported to STA by central banks and national statistical agencies, and are mostly based on internationally consistent definitions, such as the *BPM6*⁷ and the *1993/2008 System of National Accounts* (1993/2008 SNA). While ideally one would aim for long time series that are consistent across time and countries, data gaps exist. For instance, there are some missing data for GDP and current and financial account transactions for some countries for some years.

10. Missing observations were largely supplemented using the World Economic Outlook (WEO) database. For countries whose authorities continue to report in BPM5 framework, a conversion matrix was used.⁸ Compared to the previous template, the new BPM6 template used by the WEO introduced a number of changes, some of which impacted on the gap-filling procedures as follows: (i) more details became available for some series (e.g., gross flows were included on *an optional basis* for primary income, secondary income, and capital account, as well as for the IIP (total assets and liabilities)); and (ii) some indicators used in the calculation of the net capital flows were removed (net credit and loans from the IMF) or became optional (the exceptional financing series). To the extent possible, STA collected additional information from IMF country desks on the gross flows series underlying the variables included in the quota that were not reported to WEO (optional reporting) or no longer required by the new template. WEO does not collect separate data for goods for processing or for reverse investment. Unless the authorities reported BPM6 data to desks, no imputations were made by STA for these variables. This is consistent with the generic conversion of reported IFS data where, if a country did not report data for goods for processing or reverse investment, no imputations were made.

11. At the outset of the development of the database for the quota calculations, STA was aware that for some member countries there were large differences between the IFS and the WEO data sets. These data discrepancies between the two data sources may also have been influenced by the

---

⁶ In this paper, the data drawn from the DMXplus are referred to as the IFS database, following the practice in past quota review papers.

⁷ Starting with the August 2012 IFS, STA publishes balance of payments data using the BPM6 presentation. Therefore, starting with the 2013 quota data round, in consultation between STA and countries, data were converted to a BPM6 presentation using generic conversion rules developed by STA, for around one-third of the countries that continue to report on a BPM5 basis.

⁸ The conversion matrix was developed by the WEO team in collaboration with STA to assist IMF country desks with the conversion of BPM5 series to BPM6.

varying institutional, legal, and accounting contexts of data compilation across member countries (Boxes A1 and A2).

Box A1. Methodological Issues

With regard to GDP data, the 1993 SNA extended the scope of GDP slightly, adding production of goods for own final use to output and mineral exploration, computer software, and artistic originals to capital formation. This has resulted in an increase in reported GDP levels. Most IMF members have adopted the 1993 SNA for reporting GDP data to the IFS with some of them having revised historical data. By now, the size of data inconsistencies across countries due to the revisions related to the 1993 SNA is likely to be smaller than other differences related to known measurement problems with GDP (e.g., under-coverage of surveys, outdated base years, or differing adjustment methods for the size of the non-observed economic activity).

Further changes introduced by the System of National Accounts 2008 (2008 SNA) have impacted on GDP and other macro-economic aggregates for member countries. Some of the noteworthy changes brought out by the 2008 SNA are: including research and development expenditures in gross capital formation rather than in intermediate consumption, and including depreciation of research and development assets in consumption of fixed capital; including net acquisitions of weapon systems in gross capital formation rather than in government final consumption, and including depreciation of military assets in consumption of fixed capital; making refinements to the calculation of Financial Intermediation Services Indirectly Measured for loans and deposits using a reference rate and requiring implementation of the reference rate method rather than treating it as an option; and calculation of non-life insurance output using the adjusted claims and the adjusted premium supplements. Where they are relevant, these changes are expected to increase GDP. Some countries, e.g., Australia, Canada, European Union members, USA, Brazil, India, Indonesia, Mexico, Philippines, South Africa, Uganda, and Kenya have already moved to the 2008 SNA, others are in the process of implementing it.

With regard to BOP series for quota calculations, the current receipts and payments cover goods, services, primary income, secondary income, and the capital account. The capital account, which includes capital transfers and acquisition/disposals of non-produced nonfinancial assets, ensures comparability with previous quota calculations. Starting with July 2015 IFS issue, the IFS (and the on-line Balance of Payments Statistics database) excluded the migrants' transfers from the capital account, in line with BPM6 guidance. These had originally been retained since the 2012 launch of the BPM6-basis generic-converted series to ensure consistency with the balance of capital account and net errors and omissions series in the BPM5-based series.

With regard to financial account transactions, the accuracy of financial account data in many countries, including those in the IFS database, is uneven and the data are generally less comprehensive than the

Box A1. Methodological Issues (concluded)

other data used for the quota formulas. This reflects classification and practical difficulties encountered by countries in compiling the data. Financial account data, particularly on the private nonbank sector, are generally difficult and resource intensive to compile. The switch from data collection systems based predominantly on government and balance sheet records to systems (particularly surveys) incorporating large private nonbank sector transactions has been slow. Many countries are still in the midst of adapting their collection and recording systems to take account of changes in the composition and magnitude of financial transactions, including new instruments such as financial derivatives. Institutional and accounting requirements for data compilation may differ across countries and data availability on the private nonbank sector varies. In the IFS, in some instances, only aggregates and not component series are reported.

With regard to official reserves, the majority of IMF members follow accepted international practices in reporting their data for dissemination in the Fund's main statistical publications, the IFS and the monthly online Balance of Payments Statistics database. BPM6 contains a number of clarifications for the reporting of reserve assets. Box A2, Changes with BPM6, includes clarifications on the currency composition of the official reserves. In addition, SDDS subscribers and SDDS Plus adherents disseminate data in the Data Template on International Reserves and Foreign Currency Liquidity. The updated [International Reserves and Foreign Currency Liquidity: Guidelines for a Data Template](#) (Guidelines) are consistent with BPM6 and available on the IMF website at <http://www.imf.org/external/np/sta/ir/IRProcessWeb/dataguide.htm>.

IV. DATA AVAILABILITY AND ADJUSTMENTS

12. The data stored in the IFS database were used as reported, where members reported balance of payments statistics to STA. Of the 189 members, the number reporting data to IFS for at least some of the years are as follows: 179 for the period 2003–15; and 175 for the period 2011–15. When data were not available for some members for the timeframe required for the quota calculations, estimates were made, largely on the basis of the WEO, as described above.⁹ For members where neither IFS nor WEO data were available, FIN obtained data from staff reports and IMF country desks. The number of countries reporting their BOP data under BPM6 has been increasing, 133 Fund members now report their own BPM6-based balance of payments statistics to STA; the remainder that still provide data on the basis of BPM5 are then converted by STA into BPM6 format (see Box A2). In order to compile the current receipts and payments and net capital flows, data sets were prepared as defined above.

13. The data source breakdown for the period 2003–15 is as follows: of the 179 members reporting data for IFS—for 130, data are derived entirely from IFS reported data, for 44, data are derived from a combination of IFS and WEO estimates, for 3, data are derived from IFS and WEO but have missing data for some years, and for 2, data are derived from IFS reported data and have

⁹ The methods used to fill gaps were, in principle, largely similar to those used for the purpose of publishing World and Regional Tables in the Balance of Payments Statistics Yearbook (BOPSY), and were described in External Review of Quota Formulas—Quantification (4/12/01).

missing data for the current year (no WEO data available); for the 10 members not reporting any data to IFS—for 7, data are derived entirely from WEO estimates and for 3 (Nauru, San Marino and Somalia), data have neither IFS nor WEO data available.

14. The data source breakdown for the period 2011–15 is as follows: of the 175 members reporting data for IFS—for 143, data are derived entirely from IFS reported data, for 31, data are obtained from a combination of IFS and WEO estimates, and for 1, data is derived from IFS reported data and has missing data for the last two years (no WEO data available); for the 14 members not reporting any data for IFS—for 10, data are derived entirely from WEO estimates, four countries (Nauru, San Marino, Somalia, and Syrian Arab Republic) have neither IFS nor WEO data available.

15. The following sections describe for each of the data categories the general procedures employed by STA to construct the required database for the quota calculations.

Goods and Services Transactions

16. Data reported by members and maintained in IFS were used for each country. Where there were data gaps prior to or after the latest year of reporting to STA, estimates were made by applying the growth rates derived from the WEO to the closest reported data (credits and debits). For countries where no data were reported to STA, available WEO data were used. For China, P.R., Hong Kong, SAR, and Macao, SAR, goods data were adjusted for trade among the mainland, Hong Kong, SAR, and Macau, SAR based on the Direction of Trade database.¹⁰

Primary Income, Secondary Income, and the Capital Account

17. Data on primary income and secondary income reported by members and maintained in IFS were used for each country. Where there were data gaps, estimates were derived using WEO data series. The adjustment procedure consisted of the following: (1) if available, WEO gross flows are used; (2) if not, and the gap was in the leading year(s) of the series (2003), then WEO net value was inserted for the leading year(s) where data were missing, either as credits if WEO showed a net credit balance or as debits if a net debit balance was shown in WEO; (3) if the gap was after a reported observation, then the WEO net value was used for each year; also, the latest reported debits and credits were carried forward; however, to assure that gross debits and credits are consistent with the net values shown, a positive adjustment is made to the carry forward credit when the net WEO value shows a higher net credit, or to the carry forward debit when the net WEO value shows a higher net debit.

¹⁰ Balance of payments (BOP) trade in goods data are reported in IFS on a BPM6 basis and do not include goods for processing (GFP), while the Direction of Trade Statistics (DoT) includes all trade in goods. While staff was able to adjust for this factor in previous databases, this is no longer possible with the move to BPM6 reporting. As such, using DoT to adjust the BPM6 data for intra-trade may lead to an over-estimation of the intra-trade flows. Based on data available for the quota database updated through 2011, any such over-adjustment is likely to be small.

18. The primary source for data on the capital account as per BPM6 is the IFS data provided by member countries. When no data are reported for IFS, the WEO gross flows were used, if available. If not, the WEO net capital account value, depending on its sign, was used to derive an estimate. In a few cases, countries reported to IFS only “net” capital account data. When a country reports to IFS only a net value for the capital account, that full value is allocated to credits (if positive) or debits (if negative). Countries reporting under BPM6 have eliminated migrants’ transfer from their capital accounts (according to BPM6, a change of ownership is no longer imputed).

Net Capital Flows¹¹

19. The primary source for data on net capital flows is the IFS financial account data provided by member countries to STA. When no data are reported for IFS, WEO values are used to fill in the gaps, to the extent possible. While the IFS provides the financial account balance in the analytical presentation (i.e., net (standard) financial flows excluding the group consisting of (i) reserve assets, (ii) exceptional financing, and (iii) the net credit and loans from the IMF), the new WEO template no longer covers some of these components. Data on net credit and loans from the IMF for all countries were sourced from the IFS database, while the exceptional financing data for the missing data entry points were obtained from WEO and some from the desks, to the extent possible.

Official Reserves

20. Position data on official reserves—comprising monetary gold, SDR holdings, reserve position in the Fund, and foreign exchange holdings—were obtained from IFS.¹² Monetary gold was valued at SDR 35 per fine troy ounce. In deriving annual average holdings of official reserves for 2015, for each reserve component, the average data for each of the 12 months of 2015 were summed and then divided by 12. SDR holdings and reserve position in the Fund are based on Fund accounts and data are available for the entire period. However, data for foreign exchange is not always reported for the entire 12-month period. If this is the case, the number of months for which data were reported was used to calculate the average. If a country did not report its foreign exchange and/or monetary gold holdings data to STA for publication in IFS, staff reports are used to gap fill this information (see also missing data series, below).

GDP

21. The IFS and WEO databases provided GDP data for 186 members (all Fund members except Somalia, Syrian Arab Republic and Nauru). The IFS database is the source of data for 152 members, WEO data were used for 17 members, and WEO growth rates were applied to the latest IFS data to

¹¹ The term “net capital flows” refers to transactions in the financial account.

¹² Consistent with the treatment of reserves for the 2001 ad hoc quota increase for China, P.R., the reserves of Hong Kong, SAR and Macao, SAR are not included for quota calculations.

estimate missing data for 17¹³ members. When IFS data were missing for a long period (i.e., most recent data are for 2009 or earlier), these have been directly replaced by WEO estimates, otherwise WEO growth rates were applied to the last available IFS observations.

PPP GDP

22. The PPP-based GDP data reflect the new ICP rates and were derived using the WEO methodology for 186 countries (all Fund members except Nauru, Somalia, and Syrian Arab Republic). Under the WEO methodology, PPP-based GDP is calculated by dividing a country's nominal GDP in domestic currency by its PPP price index relative to the United States¹⁴ and then converting it into SDR units, using the SDR-USD exchange rate. The PPP price indices are based on the data from the International Comparison Program (ICP) for 2011 that were released in April 2014.¹⁵ These data were then extended forward (to 2015) by using the growth in relative GDP deflators (the deflator of a country divided by the deflator of the United States).¹⁶ The data for Somalia were estimated using its share in global GDP based on 11th Quota Review data (see para 24). For Syrian Arab Republic, the 2010 observation was repeated for 2011-15.

Conversion to SDRs

23. The balance of payments and the GDP data series in U.S. dollars were converted to SDRs using period-average exchange rates.

Missing Data Series

24. Data that were missing from IFS and WEO were obtained almost entirely from recent staff reports. For Somalia all series except PPP GDP were taken from 2016 Somalia Article IV document, which provided data only for 2013, 2014, 2015. For the years before 2013, the data were assumed to

¹³ This includes countries which did not have IFS data for the reference three years but supplied data for the years immediately preceding the reference period. For comparison, WEO growth rates were applied in the case of 17 countries in the database extending through 2015 (versus 38 in the previous database update).

¹⁴ The choice of the numéraire country is arbitrary and does not affect the calculations, since PPP price indexes are adjusted to be transitive across countries.

¹⁵ See *Purchasing Power Parities and Real Expenditures of World Economies – Summary of Results and Findings of the 2011 International Comparison Program*, 2014. The 2017 round of the ICP is proceeding as scheduled with results expected during 2019. The benchmark estimates for 2017 will be based on a transition to a rolling survey approach (beginning in 2017) which involves spreading the price data collection over a three-year time period around the reference year. The Technical Advisory Group (TAG) of the ICP met during May, 2017 and agreed on a plan to address technical and research questions in the ICP via smaller, specialized task forces. The next ICP Governing Board meeting is confirmed for September 15, 2017 and the 4th ICP Inter-Agency Coordination Group (IACG) meeting will take place during the week of October 23-27, 2017. The Statistics Department is represented on the IACG and the ICP Governing Board.

¹⁶ The computation of the PPP GDP data was performed by the Research Department. The data for the GDP in local currency and the GDP deflators were obtained from the October 2016 WEO, consistent with the January 31, 2017 data cutoff date for the quota data.

be equal to 2013 values. For PPP GDP, the market GDP ratio is used to estimate the PPP GDP. Syrian Arab Republic stopped reporting its data as of 2010; the 2010 observation has been repeated ever since. For San Marino (2003–15) and South Sudan (2003–10), all variables except GDP and official reserves were derived from staff reports. For Libya, all variables except GDP, PPP GDP, and official reserves were missing for the last two years, which were gap-filled using 2014 data submitted last year and repeating it for 2015. For Nauru, all variables are gap-filled using the IMF country desk data.

25. Countries for which only official reserves data were derived from staff reports or country desk economists include Eritrea, Ethiopia, Ethiopia, Guinea, Iran, Kiribati, Nauru, Somalia, Turkmenistan, Tuvalu and Uzbekistan.

26. Gaps in data for current receipts for the following countries were filled using staff reports or data provided by country desk economists: South Sudan (2004–10), Iraq (2003), and Montenegro (2003–5). For Bahrain, the current receipts data from the desk better reflected latest updates and were used instead of the IFS data.

27. Gaps in data for net capital flows for Syrian Arab Republic (2002–06) and Marshall Islands (2003–04, and 2015) were filled using staff reports or previously reported data. For Bahrain, financial account data from the desk better reflected latest updates and were used instead of IFS data. For Egypt, GDP data for 2015 were gap-filled using area department data.

Box A2. Changes with BPM6

The *Balance of Payments and International Investment Position Manual*, sixth edition (BPM6) introduced a number of changes to data underlying the variables included in the quota formula. The IFS (and the on-line Balance of Payments Statistics database) began publishing data using the BPM6 presentation exclusively starting in August 2012. Full implementation of BPM6 by IMF member countries will continue over the next years (133 members reported their own BPM6 data as of end-January 2017), and as a result, there will be a mixture of BPM5 and BPM6 reporting that will affect future quota database updates. The main changes affecting quota data are:

- **Treatment of goods for processing:** BPM6 captures in trade flows (recorded under services) only the explicit fees that are paid to the goods processor, rather than the full value of the goods entering and leaving the processing economy, in the case where the goods do not change ownership. This change will particularly affect those countries for which goods for processing are important in its trade; and will take longer for some countries to implement since it requires additional data collection. This modification will reduce openness for those countries where goods for processing is a significant component of their trade; variability could also be affected, especially, if revisions do not cover the full 13-year period used to estimate this variable. This change reduces the “double counting” of trade, which has been a concern in previous discussions on quota variables.

Box A2. Changes with BPM6 (concluded)

- **Migrant transfers:** under BPM6, the personal effects, financial assets, and liabilities of persons changing residence are no longer covered by a capital transfer.
- **IIP coverage:** The IIP is more prominent in BPM6 than in BPM5. Partly as a result of this increase in emphasis, efforts are underway to strengthen coverage of the IIP, which has been considered as a measure of financial openness. Official coverage has been improving in recent years and it is expected to continue (as of end-January 2017, 122 members reported IIP in BPM6 format).
- **Recording of foreign direct investment (FDI):** FDI is included in gross financial flows and the IIP data, which have been discussed as alternative measures of financial openness in previous quota papers. Under the BPM5 methodology, some components of the direct investment account are netted out. Starting with BPM6, direct investment components are shown on a gross basis. All of the components of FDI needed to construct the BPM5 measure of FDI are collected separately (as standard components) under BPM6, and so this is a presentational change and not a change in data collection.
- **SDR allocations:** The inclusion of the 2009 SDR allocations as liabilities in the financial account, and the inclusion of an equal size increase in SDR holdings as assets in the financial account, impacted the calculation of gross capital (financial) flows. Similarly, (cumulative) SDR allocations are shown in the IIP as liabilities. BPM6 did not introduce changes in the treatment of SDR holdings in the IIP; SDR holdings were recorded in the IIP under both BPM5 and BPM6. Unlike the other changes noted above, STA implemented this particular change effective with reporting of data for 2009, ensuring that the new SDR allocations implemented in that year would be recorded in all member country data consistent with the latest approved methodology. STA has traditionally used the IMF's own data (provided by FIN) for recording positions and transactions related to SDRs in IFS.
- **Reserve assets:** In the case where an economy has risk exposures that are closely related to its neighbor (perhaps due to substantial trade ties), and where it holds assets denominated in the currency of its neighbor, BPM6 clarifies that these holdings should be excluded from reserves if that currency is not convertible. Under BPM5, it was less clear whether such holdings could be included in reserves.
- **Treatment of Special Purpose Entities (SPEs):** Some countries, i.e. the Netherlands, Cyprus, and Malta, have recently experienced significant revisions to their BOP and IIP data as a result of incorporating the SPEs in the BPM6 estimates. Generally, the SPEs are located in either important offshore financial centers or involved in non-financial sector activities, or both. In the external sector, the SPEs are treated as resident companies of the host countries, generally owned by multinational enterprise groups mostly active abroad and having weak ties with the host economy. In the financial sector, for example, these companies act as intra-group financial intermediaries, channeling funds whose volume and direction are regulated by the parent companies. The most affected entries in the external sector are direct and portfolio investment (flows and stocks), as well as the related investment income.

Table A1. Distribution of Quotas and Calculated Quotas—by Member
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
United States	17.660	17.398	18.991	16.987	14.323	14.478
Japan	6.552	6.461	8.032	6.493	5.304	5.100
China 5/	3.994	6.390	6.390	7.917	12.024	12.581
Germany	6.107	5.583	6.227	5.678	5.058	4.951
France	4.502	4.225	4.016	3.789	3.252	3.168
United Kingdom	4.502	4.225	4.429	4.663	3.567	3.568
Italy	3.305	3.159	3.336	2.992	2.494	2.399
India	2.441	2.749	1.997	2.403	3.032	3.113
Russia	2.493	2.705	2.053	2.938	2.710	2.564
Brazil	1.782	2.315	1.725	2.153	2.334	2.250
Canada	2.670	2.311	2.569	2.303	2.084	2.030
Saudi Arabia	2.929	2.095	0.835	1.337	1.689	1.663
Spain	1.687	1.999	2.304	2.236	1.793	1.753
Mexico	1.520	1.868	1.970	1.793	1.735	1.737
Netherlands	2.164	1.831	1.930	1.857	2.111	2.070
Korea, Republic of	1.411	1.799	2.245	2.108	1.962	1.989
Australia	1.357	1.378	1.321	1.396	1.499	1.432
Belgium	1.931	1.344	1.504	1.324	1.133	1.113
Switzerland	1.450	1.210	1.211	1.227	1.633	1.723
Turkey	0.610	0.977	0.987	1.148	1.120	1.161
Indonesia	0.872	0.974	0.901	0.902	1.295	1.307
Sweden	1.004	0.929	0.993	0.942	0.931	0.896
Poland	0.708	0.859	0.868	0.949	0.920	0.921
Austria	0.886	0.824	0.913	0.836	0.733	0.717
Singapore	0.590	0.816	1.031	1.195	1.310	1.307
Norway	0.790	0.787	0.810	0.812	0.764	0.715
Venezuela, R.B. de	1.115	0.780	0.428	0.484	0.470	0.556
Malaysia	0.744	0.762	0.859	0.792	0.784	0.761
Iran, I.R. of	0.628	0.748	0.594	0.658	0.764	0.719
Ireland	0.527	0.723	1.173	1.077	0.741	0.771
Denmark	0.793	0.721	0.853	0.731	0.584	0.583
Thailand	0.604	0.673	0.836	0.789	0.987	0.986
Argentina	0.888	0.668	0.583	0.597	0.631	0.637
South Africa	0.783	0.640	0.589	0.578	0.537	0.520
Nigeria	0.735	0.515	0.337	0.477	0.666	0.663

Table A1. Distribution of Quotas and Calculated Quotas—by Member (continued)
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
Greece	0.462	0.509	0.644	0.572	0.362	0.349
Finland	0.530	0.505	0.545	0.513	0.424	0.414
United Arab Emirates	0.315	0.485	0.385	0.767	0.876	0.910
Czech Republic	0.420	0.457	0.508	0.519	0.485	0.470
Portugal	0.432	0.432	0.494	0.448	0.382	0.368
Colombia	0.325	0.429	0.326	0.381	0.446	0.439
Philippines	0.427	0.428	0.465	0.430	0.467	0.483
Egypt	0.396	0.427	0.382	0.404	0.499	0.511
Pakistan	0.433	0.426	0.356	0.342	0.372	0.391
Ukraine	0.575	0.422	0.338	0.422	0.419	0.397
Algeria	0.526	0.411	0.374	0.411	0.471	0.453
Hungary	0.435	0.407	0.433	0.407	0.410	0.398
Kuwait	0.579	0.405	0.257	0.315	0.334	0.321
Israel	0.445	0.403	0.471	0.408	0.424	0.431
Romania	0.432	0.380	0.302	0.380	0.383	0.381
Chile	0.359	0.366	0.350	0.377	0.438	0.426
Iraq	0.498	0.349	0.225	0.267	0.408	0.408
Libya	0.471	0.330	0.215	0.252	0.262	0.244
Peru	0.268	0.280	0.241	0.270	0.320	0.319
Luxembourg	0.176	0.277	0.624	0.503	0.652	0.673
New Zealand	0.375	0.262	0.263	0.262	0.240	0.244
Kazakhstan	0.179	0.243	0.199	0.328	0.379	0.382
Vietnam	0.193	0.242	0.230	0.303	0.412	0.438
Syrian Arab Republic	0.145	0.233	0.165	0.208	0.182	0.173
Bangladesh	0.224	0.224	0.173	0.169	0.259	0.278
Congo, Dem. Rep. of	0.223	0.223	0.028	0.035	0.083	0.084
Slovak Republic	0.179	0.210	0.208	0.261	0.265	0.259
Zambia	0.205	0.205	0.034	0.039	0.051	0.051
Bulgaria	0.268	0.188	0.137	0.164	0.163	0.159
Morocco	0.247	0.187	0.186	0.185	0.193	0.201
Angola	0.120	0.155	0.134	0.214	0.254	0.253
Ghana	0.155	0.155	0.050	0.050	0.080	0.087
Qatar	0.127	0.154	0.135	0.194	0.407	0.404
Croatia	0.153	0.150	0.154	0.150	0.116	0.113
Zimbabwe	0.148	0.148	0.020	0.016	0.029	0.029

Table A1. Distribution of Quotas and Calculated Quotas—by Member (continued)
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
Ecuador	0.146	0.146	0.157	0.147	0.147	0.148
Belarus	0.162	0.143	0.121	0.143	0.174	0.169
Serbia	0.196	0.137	0.099	0.129	0.110	0.108
Côte d'Ivoire	0.136	0.136	0.061	0.056	0.062	0.062
Lebanon	0.112	0.133	0.151	0.168	0.155	0.151
Sudan	0.132	0.132	0.075	0.089	0.097	0.103
Slovenia	0.115	0.123	0.132	0.136	0.117	0.115
Sri Lanka	0.173	0.121	0.090	0.089	0.119	0.125
Uzbekistan	0.116	0.116	0.065	0.071	0.113	0.115
Tunisia	0.120	0.114	0.117	0.114	0.110	0.108
Oman	0.099	0.114	0.120	0.139	0.193	0.190
Kenya	0.114	0.114	0.065	0.076	0.087	0.094
Myanmar	0.108	0.108	0.049	0.057	0.111	0.124
Yemen	0.102	0.102	0.110	0.100	0.081	0.080
Dominican Republic	0.092	0.100	0.100	0.097	0.110	0.110
Trinidad and Tobago	0.141	0.098	0.059	0.064	0.080	0.084
Lithuania	0.077	0.093	0.100	0.111	0.132	0.131
Uruguay	0.129	0.090	0.073	0.077	0.084	0.084
Guatemala	0.088	0.090	0.095	0.086	0.089	0.093
Tanzania	0.083	0.083	0.044	0.046	0.083	0.085
Bahrain	0.074	0.083	0.100	0.098	0.087	0.088
Azerbaijan	0.067	0.082	0.051	0.086	0.137	0.133
Jamaica	0.115	0.080	0.053	0.047	0.036	0.035
Panama	0.087	0.079	0.065	0.079	0.099	0.103
Costa Rica	0.078	0.077	0.083	0.077	0.075	0.080
Uganda	0.076	0.076	0.035	0.055	0.043	0.045
Jordan	0.071	0.072	0.073	0.073	0.089	0.091
Latvia	0.060	0.070	0.060	0.086	0.074	0.074
Afghanistan	0.068	0.068	0.038	0.041	0.084	0.084
Senegal	0.068	0.068	0.032	0.032	0.036	0.036
Iceland	0.049	0.067	0.043	0.100	0.116	0.131
Cyprus	0.066	0.064	0.069	0.065	0.073	0.070
Brunei	0.090	0.063	0.041	0.042	0.043	0.048
Ethiopia	0.056	0.063	0.047	0.054	0.081	0.088
El Salvador	0.072	0.060	0.068	0.060	0.049	0.050

Table A1. Distribution of Quotas and Calculated Quotas—by Member (continued)
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
Cameroon	0.078	0.058	0.063	0.058	0.049	0.050
Bosnia & Herzegovina	0.071	0.056	0.056	0.056	0.043	0.042
Papua New Guinea	0.055	0.055	0.026	0.030	0.031	0.035
Nicaragua	0.055	0.055	0.027	0.026	0.027	0.027
Liberia	0.054	0.054	0.008	0.013	0.010	0.010
Honduras	0.054	0.052	0.042	0.052	0.042	0.043
South Sudan	0.052	0.052	n.a.	n.a.	0.049	0.042
Madagascar	0.051	0.051	0.024	0.026	0.022	0.022
Estonia	0.039	0.051	0.060	0.071	0.071	0.071
Bolivia	0.072	0.050	0.041	0.047	0.063	0.064
Turkmenistan	0.041	0.050	0.056	0.062	0.093	0.095
Mozambique	0.048	0.048	0.027	0.031	0.038	0.038
Gabon	0.065	0.045	0.039	0.040	0.040	0.039
Guinea	0.045	0.045	0.015	0.014	0.017	0.017
Georgia	0.063	0.044	0.025	0.030	0.035	0.035
Sierra Leone	0.043	0.043	0.006	0.006	0.012	0.012
Paraguay	0.042	0.042	0.043	0.043	0.058	0.060
Botswana	0.037	0.041	0.054	0.049	0.041	0.044
Namibia	0.057	0.040	0.023	0.023	0.030	0.030
Mali	0.039	0.039	0.021	0.032	0.027	0.028
Bahamas, The	0.055	0.038	0.025	0.022	0.017	0.017
Guyana	0.038	0.038	0.008	0.007	0.009	0.009
Kyrgyz Republic	0.037	0.037	0.014	0.017	0.022	0.023
Cambodia	0.037	0.037	0.032	0.034	0.040	0.044
Tajikistan	0.036	0.036	0.014	0.019	0.021	0.020
Moldova	0.052	0.036	0.018	0.021	0.025	0.024
Malta	0.043	0.035	0.039	0.035	0.067	0.067
Haiti	0.034	0.034	0.018	0.016	0.020	0.020
Somalia	0.034	0.034	0.002	0.002	0.011	0.012
Congo, Rep. of	0.035	0.034	0.029	0.034	0.050	0.052
Rwanda	0.034	0.034	0.011	0.011	0.017	0.018
Equatorial Guinea	0.022	0.033	0.038	0.052	0.054	0.056
Nepal	0.030	0.033	0.033	0.032	0.042	0.045
Burundi	0.032	0.032	0.004	0.003	0.006	0.006
Togo	0.031	0.031	0.011	0.010	0.013	0.013

Table A1. Distribution of Quotas and Calculated Quotas—by Member (continued)
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
Mauritius	0.0426	0.0298	0.0313	0.0269	0.0460	0.0461
Macedonia, FYR	0.0289	0.0294	0.0302	0.0303	0.0289	0.0296
Chad	0.0279	0.0294	0.0320	0.0318	0.0283	0.0282
Albania	0.0252	0.0292	0.0308	0.0306	0.0294	0.0287
Malawi	0.0291	0.0291	0.0099	0.0290	0.0170	0.0160
Niger	0.0276	0.0276	0.0121	0.0129	0.0146	0.0150
Suriname	0.0386	0.0270	0.0098	0.0104	0.0121	0.0120
Armenia	0.0386	0.0270	0.0183	0.0248	0.0253	0.0256
Mauritania	0.0270	0.0270	0.0091	0.0111	0.0149	0.0145
Benin	0.0260	0.0260	0.0148	0.0231	0.0184	0.0195
Burkina Faso	0.0252	0.0252	0.0190	0.0188	0.0221	0.0222
Central African Rep.	0.0234	0.0234	0.0058	0.0057	0.0040	0.0038
Lao P.D.R.	0.0222	0.0222	0.0129	0.0142	0.0248	0.0227
Fiji	0.0295	0.0206	0.0107	0.0120	0.0105	0.0105
Barbados	0.0283	0.0198	0.0161	0.0135	0.0096	0.0095
Kosovo	0.0247	0.0173	n.a.	0.0162	0.0155	0.0154
Swaziland	0.0213	0.0165	0.0181	0.0165	0.0124	0.0122
Mongolia	0.0214	0.0152	0.0120	0.0149	0.0364	0.0370
Lesotho	0.0146	0.0146	0.0102	0.0099	0.0089	0.0086
Gambia, The	0.0130	0.0130	0.0032	0.0032	0.0027	0.0026
Montenegro	0.0115	0.0127	0.0096	0.0146	0.0123	0.0124
San Marino	0.0094	0.0103	0.0128	0.0122	0.0113	0.0091
Eritrea	0.0077	0.0077	0.0082	0.0065	0.0064	0.0071
Djibouti	0.0067	0.0067	0.0049	0.0037	0.0037	0.0040
Guinea-Bissau	0.0060	0.0060	0.0038	0.0023	0.0058	0.0058
Belize	0.0079	0.0056	0.0063	0.0055	0.0045	0.0046
Timor-Leste	0.0045	0.0054	0.0062	0.0067	0.0118	0.0107
Vanuatu	0.0071	0.0050	0.0027	0.0023	0.0020	0.0021
Cabo Verde	0.0047	0.0050	0.0052	0.0054	0.0051	0.0050
Seychelles	0.0046	0.0048	0.0056	0.0052	0.0057	0.0058
St. Lucia	0.0064	0.0045	0.0044	0.0038	0.0032	0.0032
Maldives	0.0042	0.0044	0.0050	0.0049	0.0097	0.0105
Solomon Islands	0.0044	0.0044	0.0026	0.0025	0.0030	0.0031
Bhutan	0.0036	0.0043	0.0050	0.0050	0.0069	0.0070
Antigua and Barbuda	0.0057	0.0042	0.0046	0.0042	0.0030	0.0030

Table A1. Distribution of Quotas and Calculated Quotas—by Member (concluded)
(In percent)

	Quota Shares		Calculated Quota Shares 1/			
	2008 Reform 2/	14th General Review 3/	2008 Reform 4/ (2005)	14th General Review (2008)	Previous (2014)	Current (2015)
Comoros	0.00373	0.00373	0.00162	0.00194	0.00181	0.00176
Grenada	0.00491	0.00344	0.00319	0.00263	0.00192	0.00241
Samoa	0.00486	0.00340	0.00253	0.00316	0.00190	0.00184
São Tomé and Príncipe	0.00310	0.00310	0.00065	0.00159	0.00139	0.00141
Tonga	0.00289	0.00289	0.00155	0.00132	0.00129	0.00133
St. Kitts	0.00373	0.00262	0.00231	0.00216	0.00210	0.00217
St. Vincent	0.00348	0.00245	0.00263	0.00239	0.00181	0.00179
Dominica	0.00344	0.00241	0.00211	0.00171	0.00122	0.00126
Kiribati	0.00235	0.00235	0.00176	0.00179	0.00104	0.00123
Micronesia, FS of	0.00214	0.00151	0.00214	0.00144	0.00121	0.00124
Marshall Islands	0.00147	0.00103	0.00127	0.00098	0.00086	0.00085
Palau	0.00147	0.00103	0.00151	0.00100	0.00074	0.00076
Nauru	0.00084	0.00059	n.a.	n.a.	0.00036	0.00038
Tuvalu	0.00075	0.00052	n.a.	0.00044	0.00026	0.00023

Source: Finance Department.

n.a.: non-available.

1/ Based on the current formula: $CQS = (0.50 \cdot GDP + 0.30 \cdot Openness + 0.15 \cdot Variability + 0.05 \cdot Reserves)^K$. GDP blended using 60 percent market and 40 percent PPP exchange rates. K is a compression factor of 0.95. Years in parentheses indicate the end period for the IFS data used in the calculations.

2/ The "2008 Reform" reflects quotas after the "second round" ad hoc quota increases for 54 members agreed in 2008, following the "first round" ad hoc increases for four members agreed in 2006. Includes South Sudan and Nauru which became members on April 18, 2012 and April 12, 2016, respectively. For the two countries, Somalia and Sudan, that have not yet consented to and paid for their quota increases, 11th Review proposed quotas are used.

3/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

4/ Reflects the impact of adjustments to current receipts and payments for re-exports, international banking interest, and non-monetary gold.

5/ Including China, P.R., Hong Kong SAR, and Macao SAR.

Table A2. Distribution of Quotas and Updated Quota Variables—by Member
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
United States	17.398	20.137	19.819	12.772	12.558	12.803	13.101	1.107	1.234
Japan	6.461	5.533	5.933	4.090	4.158	4.991	5.129	11.037	10.716
China 6/	6.390	15.441	14.416	10.297	9.763	8.223	8.210	33.011	33.878
Germany	5.583	4.255	4.368	7.163	7.265	5.496	5.704	0.595	0.615
France	4.225	3.077	3.197	3.978	4.068	3.005	3.031	0.469	0.479
United Kingdom	4.225	3.190	3.147	4.339	4.375	4.578	4.716	1.019	0.833
Italy	3.159	2.387	2.511	2.647	2.747	2.552	2.608	0.450	0.458
India	2.749	4.299	4.189	2.116	2.094	1.421	1.425	3.005	2.529
Russia	2.705	2.781	2.955	2.156	2.246	2.570	2.614	2.880	3.579
Brazil	2.315	2.862	3.059	1.229	1.273	1.825	1.710	3.270	3.162
Canada	2.311	1.941	2.039	2.464	2.486	1.751	1.783	0.701	0.647
Saudi Arabia	2.095	1.158	1.188	1.223	1.230	2.514	2.498	6.096	6.351
Spain	1.999	1.623	1.701	1.939	1.988	2.041	1.995	0.399	0.311
Mexico	1.868	1.766	1.800	1.673	1.621	1.565	1.575	1.678	1.603
Netherlands	1.831	0.956	0.991	3.673	3.752	3.074	3.078	0.167	0.191
Korea, Republic of	1.799	1.734	1.708	2.630	2.641	0.961	0.920	3.293	3.063
Australia	1.378	1.501	1.605	1.408	1.456	1.305	1.323	0.438	0.438
Belgium	1.344	0.574	0.597	1.856	1.912	1.433	1.383	0.146	0.153
Switzerland	1.210	0.715	0.724	2.228	2.192	2.739	2.410	5.062	4.307
Turkey	0.977	1.282	1.201	0.897	0.886	1.050	1.063	0.931	0.952
Indonesia	0.974	1.692	1.700	0.833	0.836	0.792	0.703	0.951	0.902
Sweden	0.929	0.600	0.619	1.136	1.149	1.221	1.358	0.500	0.518
Poland	0.859	0.759	0.768	1.031	1.025	0.944	0.930	0.870	0.846
Austria	0.824	0.473	0.489	0.977	1.005	0.905	0.901	0.126	0.125
Singapore	0.816	0.405	0.407	2.278	2.286	1.758	1.738	2.267	2.323
Norway	0.787	0.496	0.537	0.796	0.817	1.023	1.181	0.579	0.552
Venezuela, R.B. de	0.780	0.682	0.505	0.310	0.322	0.510	0.526	0.059	0.060
Malaysia	0.762	0.535	0.538	0.946	0.966	0.789	0.822	0.903	1.097
Iran, I.R. of	0.748	0.860	0.963	0.339	0.375	0.560	0.463	1.155	1.100
Ireland	0.723	0.299	0.277	1.300	1.225	1.229	1.257	0.016	0.012
Denmark	0.721	0.355	0.363	0.759	0.764	0.635	0.645	0.789	0.674
Thailand	0.673	0.717	0.728	1.103	1.084	1.200	1.218	1.376	1.369
Argentina	0.668	0.792	0.794	0.363	0.377	0.494	0.438	0.262	0.225
South Africa	0.640	0.532	0.554	0.489	0.502	0.310	0.323	0.380	0.383
Nigeria	0.515	0.799	0.791	0.403	0.426	0.555	0.540	0.292	0.342

Table A2. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Greece	0.509	0.280	0.304	0.326	0.346	0.504	0.472	0.018	0.020
Finland	0.505	0.285	0.297	0.465	0.484	0.602	0.589	0.078	0.079
United Arab Emirates	0.485	0.531	0.534	1.278	1.231	1.191	1.066	0.702	0.651
Czech Republic	0.457	0.277	0.284	0.659	0.661	0.455	0.536	0.522	0.483
Portugal	0.432	0.276	0.286	0.416	0.435	0.446	0.474	0.057	0.036
Colombia	0.429	0.510	0.534	0.295	0.295	0.242	0.214	0.418	0.386
Philippines	0.428	0.480	0.464	0.356	0.342	0.418	0.415	0.667	0.623
Egypt	0.427	0.612	0.585	0.267	0.272	0.513	0.523	0.128	0.115
Pakistan	0.426	0.531	0.512	0.198	0.194	0.151	0.122	0.132	0.079
Ukraine	0.422	0.242	0.279	0.330	0.354	0.908	0.867	0.088	0.113
Algeria	0.411	0.358	0.371	0.270	0.281	0.553	0.530	1.423	1.639
Hungary	0.407	0.195	0.198	0.509	0.525	0.626	0.645	0.346	0.398
Kuwait	0.405	0.222	0.244	0.361	0.365	0.365	0.369	0.279	0.281
Israel	0.403	0.338	0.329	0.420	0.418	0.389	0.397	0.793	0.740
Romania	0.380	0.295	0.294	0.327	0.319	0.559	0.573	0.307	0.360
Chile	0.366	0.355	0.366	0.382	0.399	0.525	0.533	0.349	0.347
Iraq	0.349	0.346	0.354	0.274	0.291	0.590	0.516	0.536	0.586
Libya	0.330	0.078	0.098	0.129	0.146	0.681	0.650	0.729	0.854
Peru	0.280	0.295	0.297	0.208	0.209	0.327	0.328	0.546	0.544
Luxembourg	0.277	0.067	0.067	1.353	1.311	1.252	1.202	0.006	0.007
New Zealand	0.262	0.208	0.210	0.237	0.238	0.221	0.189	0.155	0.154
Kazakhstan	0.243	0.326	0.321	0.323	0.340	0.512	0.480	0.194	0.180
Vietnam	0.242	0.335	0.322	0.564	0.501	0.316	0.321	0.309	0.299
Syrian Arab Republic	0.233	0.231	0.243	0.081	0.084	0.069	0.078	0.004	0.004
Bangladesh	0.224	0.347	0.323	0.171	0.162	0.079	0.075	0.222	0.175
Congo, Dem. Rep. of	0.223	0.056	0.052	0.055	0.056	0.167	0.168	0.013	0.015
Slovak Republic	0.210	0.132	0.135	0.351	0.348	0.384	0.424	0.018	0.010
Zambia	0.205	0.041	0.043	0.040	0.040	0.052	0.049	0.028	0.027
Bulgaria	0.188	0.091	0.091	0.148	0.155	0.258	0.277	0.180	0.155
Morocco	0.187	0.180	0.180	0.173	0.171	0.168	0.125	0.183	0.172
Angola	0.155	0.169	0.162	0.223	0.235	0.412	0.403	0.226	0.257
Ghana	0.155	0.073	0.073	0.080	0.073	0.081	0.041	0.002	0.037
Qatar	0.154	0.262	0.273	0.429	0.419	0.593	0.592	0.361	0.364
Croatia	0.150	0.076	0.080	0.107	0.109	0.124	0.128	0.138	0.141
Zimbabwe	0.148	0.021	0.021	0.030	0.028	0.020	0.025	0.003	0.003

Table A2. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Ecuador	0.146	0.144	0.142	0.110	0.111	0.136	0.137	0.030	0.038
Belarus	0.143	0.116	0.122	0.182	0.186	0.215	0.216	0.028	0.037
Serbia	0.137	0.069	0.071	0.091	0.090	0.165	0.168	0.099	0.114
Côte d'Ivoire	0.136	0.053	0.050	0.055	0.057	0.042	0.044	0.044	0.039
Lebanon	0.133	0.069	0.068	0.139	0.139	0.238	0.278	0.366	0.338
Sudan	0.132	0.126	0.112	0.042	0.047	0.079	0.077	0.002	0.002
Slovenia	0.123	0.059	0.061	0.144	0.145	0.162	0.166	0.008	0.008
Sri Lanka	0.121	0.140	0.132	0.088	0.083	0.047	0.048	0.057	0.067
Uzbekistan	0.116	0.113	0.107	0.066	0.068	0.073	0.075	0.222	0.217
Tunisia	0.114	0.082	0.084	0.097	0.102	0.117	0.117	0.066	0.062
Oman	0.114	0.120	0.123	0.195	0.192	0.262	0.278	0.167	0.150
Kenya	0.114	0.096	0.090	0.063	0.061	0.058	0.045	0.067	0.063
Myanmar	0.108	0.146	0.133	0.058	0.049	0.090	0.074	0.036	0.038
Yemen	0.102	0.062	0.067	0.049	0.053	0.142	0.112	0.001	0.041
Dominican Republic	0.100	0.102	0.099	0.088	0.085	0.093	0.106	0.044	0.039
Trinidad and Tobago	0.098	0.038	0.036	0.078	0.069	0.152	0.156	0.099	0.095
Lithuania	0.093	0.065	0.066	0.150	0.148	0.231	0.217	0.009	0.069
Uruguay	0.090	0.067	0.069	0.056	0.056	0.081	0.078	0.159	0.150
Guatemala	0.090	0.091	0.087	0.077	0.074	0.043	0.041	0.067	0.059
Tanzania	0.083	0.084	0.081	0.045	0.044	0.093	0.092	0.037	0.039
Bahrain	0.083	0.049	0.049	0.101	0.095	0.115	0.116	0.042	0.049
Azerbaijan	0.082	0.114	0.119	0.113	0.116	0.124	0.107	0.085	0.138
Jamaica	0.080	0.020	0.021	0.030	0.030	0.052	0.055	0.025	0.019
Panama	0.079	0.069	0.063	0.127	0.124	0.087	0.090	0.035	0.024
Costa Rica	0.077	0.067	0.065	0.068	0.064	0.062	0.054	0.073	0.063
Uganda	0.076	0.049	0.045	0.028	0.028	0.016	0.016	0.026	0.030
Jordan	0.072	0.058	0.056	0.088	0.086	0.095	0.092	0.140	0.128
Latvia	0.070	0.041	0.042	0.079	0.078	0.105	0.107	0.029	0.027
Afghanistan	0.068	0.039	0.039	0.031	0.027	0.258	0.266	0.059	0.056
Senegal	0.068	0.024	0.024	0.028	0.027	0.049	0.050	0.017	0.018
Iceland	0.067	0.018	0.018	0.032	0.029	0.607	0.529	0.040	0.037
Cyprus	0.064	0.028	0.030	0.083	0.093	0.125	0.117	0.003	0.003
Brunei	0.063	0.025	0.026	0.038	0.040	0.090	0.053	0.029	0.028
Ethiopia	0.063	0.100	0.091	0.051	0.047	0.051	0.043	0.030	0.025
El Salvador	0.060	0.039	0.039	0.043	0.041	0.048	0.046	0.025	0.023

Table A2. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Cameroon	0.058	0.049	0.048	0.034	0.033	0.032	0.030	0.026	0.027
Bosnia & Herzegovina	0.056	0.029	0.029	0.037	0.038	0.044	0.044	0.041	0.042
Papua New Guinea	0.055	0.026	0.019	0.030	0.030	0.035	0.032	0.018	0.022
Nicaragua	0.055	0.020	0.020	0.026	0.024	0.018	0.020	0.022	0.018
Liberia	0.054	0.003	0.003	0.010	0.010	0.017	0.018	0.005	0.004
Honduras	0.052	0.030	0.030	0.041	0.040	0.037	0.038	0.032	0.026
South Sudan	0.052	0.020	0.017	0.022	0.029	0.113	0.152	0.002	0.004
Madagascar	0.051	0.021	0.021	0.016	0.015	0.011	0.012	0.007	0.006
Estonia	0.051	0.033	0.033	0.085	0.085	0.112	0.110	0.004	0.004
Bolivia	0.050	0.051	0.050	0.049	0.046	0.044	0.050	0.117	0.114
Turkmenistan	0.050	0.063	0.062	0.073	0.072	0.086	0.081	0.274	0.269
Mozambique	0.048	0.024	0.024	0.033	0.031	0.048	0.050	0.023	0.028
Gabon	0.045	0.025	0.026	0.034	0.036	0.051	0.050	0.019	0.024
Guinea	0.045	0.011	0.011	0.011	0.010	0.026	0.027	0.005	0.006
Georgia	0.044	0.025	0.025	0.036	0.035	0.026	0.025	0.022	0.022
Sierra Leone	0.043	0.008	0.008	0.008	0.008	0.018	0.017	0.005	0.005
Paraguay	0.042	0.044	0.044	0.053	0.053	0.054	0.047	0.057	0.053
Botswana	0.041	0.024	0.025	0.037	0.036	0.053	0.038	0.076	0.072
Namibia	0.040	0.019	0.019	0.029	0.029	0.036	0.035	0.012	0.012
Mali	0.039	0.021	0.019	0.020	0.019	0.038	0.038	0.007	0.008
Bahamas, The	0.038	0.010	0.010	0.017	0.017	0.019	0.016	0.009	0.008
Guyana	0.038	0.004	0.004	0.009	0.009	0.009	0.009	0.005	0.006
Kyrgyz Republic	0.037	0.013	0.013	0.023	0.022	0.023	0.021	0.015	0.017
Cambodia	0.037	0.032	0.030	0.044	0.039	0.024	0.023	0.057	0.046
Tajikistan	0.036	0.015	0.015	0.017	0.019	0.017	0.020	0.001	0.001
Moldova	0.036	0.012	0.013	0.022	0.022	0.033	0.036	0.016	0.023
Malta	0.035	0.013	0.013	0.112	0.111	0.099	0.103	0.005	0.007
Haiti	0.034	0.013	0.014	0.015	0.015	0.022	0.019	0.017	0.017
Somalia	0.034	0.008	0.007	0.015	0.014	0.006	0.004	0.000	0.000
Congo, Rep. of	0.034	0.020	0.021	0.041	0.046	0.126	0.093	0.029	0.045
Rwanda	0.034	0.013	0.013	0.009	0.009	0.026	0.025	0.009	0.008
Equatorial Guinea	0.033	0.028	0.025	0.059	0.062	0.088	0.080	0.016	0.032
Nepal	0.033	0.041	0.039	0.031	0.029	0.022	0.022	0.062	0.050
Burundi	0.032	0.005	0.005	0.003	0.003	0.005	0.005	0.002	0.003
Togo	0.031	0.007	0.007	0.011	0.011	0.017	0.018	0.005	0.004

Table A2. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Mauritius	0.0298	0.0182	0.0183	0.0426	0.0424	0.0918	0.0926	0.0335	0.0315
Macedonia, FYR	0.0294	0.0186	0.0185	0.0274	0.0270	0.0329	0.0290	0.0206	0.0224
Chad	0.0294	0.0207	0.0211	0.0215	0.0217	0.0348	0.0329	0.0052	0.0077
Albania	0.0292	0.0214	0.0221	0.0221	0.0233	0.0270	0.0275	0.0249	0.0231
Malawi	0.0291	0.0118	0.0115	0.0105	0.0109	0.0193	0.0258	0.0062	0.0040
Niger	0.0276	0.0127	0.0126	0.0108	0.0108	0.0095	0.0073	0.0093	0.0105
Suriname	0.0270	0.0073	0.0074	0.0104	0.0104	0.0137	0.0136	0.0038	0.0057
Armenia	0.0270	0.0177	0.0173	0.0213	0.0215	0.0279	0.0265	0.0141	0.0155
Mauritania	0.0270	0.0098	0.0085	0.0122	0.0128	0.0168	0.0217	0.0000	0.0000
Benin	0.0260	0.0147	0.0138	0.0127	0.0108	0.0242	0.0247	0.0065	0.0076
Burkina Faso	0.0252	0.0203	0.0202	0.0164	0.0144	0.0143	0.0176	0.0029	0.0034
Central African Rep.	0.0234	0.0023	0.0027	0.0019	0.0019	0.0055	0.0053	0.0020	0.0020
Lao P.D.R.	0.0222	0.0221	0.0206	0.0148	0.0139	0.0118	0.0312	0.0095	0.0072
Fiji	0.0206	0.0063	0.0061	0.0106	0.0105	0.0079	0.0084	0.0083	0.0078
Barbados	0.0198	0.0051	0.0051	0.0105	0.0105	0.0073	0.0077	0.0055	0.0055
Kosovo	0.0173	0.0117	0.0119	0.0137	0.0135	0.0098	0.0095	0.0069	0.0091
Swaziland	0.0165	0.0076	0.0076	0.0118	0.0122	0.0105	0.0107	0.0060	0.0065
Mongolia	0.0152	0.0223	0.0217	0.0272	0.0260	0.0648	0.0652	0.0126	0.0133
Lesotho	0.0146	0.0037	0.0038	0.0094	0.0100	0.0078	0.0084	0.0094	0.0094
Gambia, The	0.0130	0.0019	0.0019	0.0019	0.0020	0.0017	0.0018	0.0013	0.0017
Montenegro	0.0127	0.0070	0.0070	0.0100	0.0102	0.0165	0.0166	0.0074	0.0056
San Marino	0.0103	0.0021	0.0022	0.0099	0.0127	0.0174	0.0228	0.0034	0.0038
Eritrea	0.0077	0.0063	0.0057	0.0043	0.0038	0.0043	0.0038	0.0027	0.0015
Djibouti	0.0067	0.0023	0.0022	0.0032	0.0028	0.0038	0.0032	0.0035	0.0033
Guinea-Bissau	0.0060	0.0018	0.0019	0.0013	0.0013	0.0181	0.0184	0.0029	0.0024
Belize	0.0056	0.0024	0.0024	0.0045	0.0044	0.0035	0.0035	0.0044	0.0039
Timor-Leste	0.0054	0.0056	0.0073	0.0091	0.0099	0.0160	0.0143	0.0023	0.0035
Vanuatu	0.0050	0.0009	0.0009	0.0018	0.0017	0.0027	0.0022	0.0021	0.0016
Cabo Verde	0.0050	0.0026	0.0027	0.0046	0.0049	0.0047	0.0042	0.0042	0.0041
Seychelles	0.0048	0.0020	0.0020	0.0057	0.0055	0.0084	0.0085	0.0046	0.0040
St. Lucia	0.0045	0.0018	0.0018	0.0028	0.0029	0.0024	0.0025	0.0029	0.0020
Maldives	0.0044	0.0043	0.0039	0.0114	0.0107	0.0135	0.0124	0.0059	0.0043
Solomon Islands	0.0044	0.0012	0.0012	0.0030	0.0030	0.0028	0.0027	0.0045	0.0044
Bhutan	0.0043	0.0036	0.0036	0.0047	0.0047	0.0096	0.0093	0.0100	0.0094
Antigua and Barbuda	0.0042	0.0018	0.0017	0.0026	0.0026	0.0021	0.0022	0.0030	0.0023

Table A2. Distribution of Quotas and Updated Quota Variables—by Member (concluded)
(In percent)

	14th General Review	GDP Blend 4/		Openness		Variability 5/		Reserves	
	Quota shares 1/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Comoros	0.00373	0.00094	0.00094	0.00141	0.00137	0.00157	0.00188	0.00134	0.00142
Grenada	0.00344	0.00122	0.00115	0.00147	0.00144	0.00361	0.00158	0.00161	0.00137
Samoa	0.00340	0.00099	0.00102	0.00173	0.00173	0.00122	0.00135	0.00126	0.00142
São Tomé and Príncipe	0.00310	0.00048	0.00047	0.00059	0.00054	0.00336	0.00341	0.00065	0.00057
Tonga	0.00289	0.00052	0.00054	0.00135	0.00120	0.00105	0.00110	0.00134	0.00136
St. Kitts	0.00262	0.00113	0.00108	0.00168	0.00169	0.00193	0.00166	0.00272	0.00300
St. Vincent	0.00245	0.00101	0.00102	0.00133	0.00136	0.00164	0.00172	0.00142	0.00122
Dominica	0.00241	0.00070	0.00071	0.00099	0.00098	0.00097	0.00085	0.00105	0.00082
Kiribati	0.00235	0.00021	0.00022	0.00073	0.00068	0.00164	0.00084	0.00504	0.00498
Micronesia, FS of	0.00151	0.00036	0.00037	0.00117	0.00116	0.00163	0.00156	0.00109	0.00084
Marshall Islands	0.00103	0.00021	0.00022	0.00090	0.00088	0.00123	0.00127	0.00004	0.00004
Palau	0.00103	0.00030	0.00028	0.00086	0.00081	0.00055	0.00065	0.00004	0.00004
Nauru	0.00059	0.00013	0.00012	0.00040	0.00036	0.00030	0.00033	0.00024	0.00015
Tuvalu	0.00052	0.00004	0.00004	0.00022	0.00023	0.00026	0.00026	0.00031	0.00060

Source: Finance Department.

1/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Based on IFS data through 2015.

3/ Based on IFS data through 2014.

4/ GDP blend using 60 percent market and 40 percent purchasing power (PPP).

5/ Variability of current receipts minus (instead of plus) net capital flows due to change in sign convention in BPM6.

6/ Including China, P.R., Hong Kong SAR, and Macao SAR.

Table A3. Updated GDP Blend Variable—by Member
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
United States	17.398	22.861	22.187	16.051	16.267	20.137	19.819
Japan	6.461	6.289	6.860	4.399	4.542	5.533	5.933
China 6/	6.390	14.216	13.005	17.279	16.532	15.441	14.416
Germany	5.583	4.781	4.916	3.467	3.546	4.255	4.368
France	4.225	3.526	3.681	2.405	2.472	3.077	3.197
United Kingdom	4.225	3.714	3.645	2.405	2.399	3.190	3.147
Italy	3.159	2.662	2.811	1.975	2.061	2.387	2.511
India	2.749	2.623	2.557	6.813	6.636	4.299	4.189
Russia	2.705	2.320	2.661	3.471	3.396	2.781	2.955
Brazil	2.315	2.777	3.028	2.989	3.105	2.862	3.059
Canada	2.311	2.256	2.402	1.467	1.494	1.941	2.039
Saudi Arabia	2.095	0.937	0.984	1.489	1.494	1.158	1.188
Spain	1.999	1.746	1.837	1.439	1.497	1.623	1.701
Mexico	1.868	1.619	1.653	1.987	2.019	1.766	1.800
Netherlands	1.831	1.090	1.138	0.753	0.770	0.956	0.991
Korea, Republic of	1.799	1.795	1.742	1.644	1.656	1.734	1.708
Australia	1.378	1.825	1.991	1.015	1.027	1.501	1.605
Belgium	1.344	0.660	0.689	0.445	0.459	0.574	0.597
Switzerland	1.210	0.901	0.911	0.435	0.445	0.715	0.724
Turkey	0.977	1.200	1.066	1.405	1.404	1.282	1.201
Indonesia	0.974	1.167	1.201	2.481	2.447	1.692	1.700
Sweden	0.929	0.720	0.749	0.419	0.423	0.600	0.619
Poland	0.859	0.672	0.684	0.888	0.894	0.759	0.768
Austria	0.824	0.543	0.563	0.367	0.379	0.473	0.489
Singapore	0.816	0.395	0.398	0.421	0.421	0.405	0.407
Norway	0.787	0.614	0.677	0.320	0.326	0.496	0.537
Venezuela, R.B. de	0.780	0.807	0.488	0.495	0.530	0.682	0.505
Malaysia	0.762	0.419	0.432	0.709	0.699	0.535	0.538
Iran, I.R. of	0.748	0.610	0.757	1.237	1.271	0.860	0.963
Ireland	0.723	0.342	0.316	0.235	0.218	0.299	0.277
Denmark	0.721	0.436	0.447	0.233	0.239	0.355	0.363
Thailand	0.673	0.534	0.541	0.991	1.009	0.717	0.728
Argentina	0.668	0.787	0.724	0.800	0.899	0.792	0.794
South Africa	0.640	0.452	0.480	0.653	0.665	0.532	0.554
Nigeria	0.515	0.690	0.683	0.962	0.952	0.799	0.791

Table A3. Updated GDP Blend Variable—by Member (continued)
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Greece	0.509	0.293	0.323	0.261	0.275	0.280	0.304
Finland	0.505	0.338	0.353	0.205	0.214	0.285	0.297
United Arab Emirates	0.485	0.506	0.513	0.567	0.566	0.531	0.534
Czech Republic	0.457	0.263	0.274	0.297	0.299	0.277	0.284
Portugal	0.432	0.286	0.297	0.261	0.269	0.276	0.286
Colombia	0.429	0.458	0.499	0.588	0.588	0.510	0.534
Philippines	0.428	0.372	0.357	0.642	0.625	0.480	0.464
Egypt	0.427	0.403	0.384	0.926	0.887	0.612	0.585
Pakistan	0.426	0.340	0.310	0.818	0.815	0.531	0.512
Ukraine	0.422	0.177	0.217	0.340	0.373	0.242	0.279
Algeria	0.411	0.257	0.280	0.510	0.508	0.358	0.371
Hungary	0.407	0.172	0.177	0.229	0.230	0.195	0.198
Kuwait	0.405	0.196	0.226	0.262	0.270	0.222	0.244
Israel	0.403	0.395	0.379	0.253	0.254	0.338	0.329
Romania	0.380	0.247	0.246	0.366	0.366	0.295	0.294
Chile	0.366	0.339	0.354	0.379	0.383	0.355	0.366
Iraq	0.349	0.246	0.257	0.495	0.500	0.346	0.354
Libya	0.330	0.065	0.083	0.097	0.120	0.078	0.098
Peru	0.280	0.262	0.264	0.346	0.345	0.295	0.297
Luxembourg	0.277	0.080	0.080	0.049	0.049	0.067	0.067
New Zealand	0.262	0.247	0.250	0.149	0.149	0.208	0.210
Kazakhstan	0.243	0.270	0.279	0.409	0.384	0.326	0.321
Vietnam	0.242	0.242	0.227	0.475	0.465	0.335	0.322
Syrian Arab Republic	0.233	0.304	0.317	0.122	0.133	0.231	0.243
Bangladesh	0.224	0.247	0.215	0.498	0.484	0.347	0.323
Congo, Dem. Rep. of	0.223	0.058	0.053	0.053	0.051	0.056	0.052
Slovak Republic	0.210	0.125	0.129	0.143	0.144	0.132	0.135
Zambia	0.205	0.032	0.034	0.055	0.056	0.041	0.043
Bulgaria	0.188	0.070	0.071	0.122	0.122	0.091	0.091
Morocco	0.187	0.139	0.140	0.241	0.241	0.180	0.180
Angola	0.155	0.174	0.163	0.163	0.161	0.169	0.162
Ghana	0.155	0.053	0.055	0.101	0.099	0.073	0.073
Qatar	0.154	0.249	0.268	0.283	0.282	0.262	0.273
Croatia	0.150	0.071	0.076	0.082	0.085	0.076	0.080
Zimbabwe	0.148	0.018	0.018	0.025	0.025	0.021	0.021

Table A3. Updated GDP Blend Variable—by Member (continued)
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Ecuador	0.146	0.130	0.125	0.166	0.167	0.144	0.142
Belarus	0.143	0.089	0.094	0.156	0.163	0.116	0.122
Serbia	0.137	0.055	0.058	0.089	0.092	0.069	0.071
Côte d'Ivoire	0.136	0.043	0.041	0.067	0.064	0.053	0.050
Lebanon	0.133	0.065	0.062	0.075	0.076	0.069	0.068
Sudan	0.132	0.110	0.088	0.149	0.148	0.126	0.112
Slovenia	0.123	0.061	0.063	0.057	0.058	0.059	0.061
Sri Lanka	0.121	0.104	0.089	0.195	0.195	0.140	0.132
Uzbekistan	0.116	0.082	0.076	0.160	0.153	0.113	0.107
Tunisia	0.114	0.060	0.061	0.115	0.117	0.082	0.084
Oman	0.114	0.100	0.105	0.148	0.151	0.120	0.123
Kenya	0.114	0.079	0.069	0.123	0.121	0.096	0.090
Myanmar	0.108	0.082	0.077	0.242	0.216	0.146	0.133
Yemen	0.102	0.046	0.046	0.086	0.098	0.062	0.067
Dominican Republic	0.100	0.084	0.082	0.128	0.125	0.102	0.099
Trinidad and Tobago	0.098	0.036	0.033	0.041	0.041	0.038	0.036
Lithuania	0.093	0.059	0.061	0.074	0.074	0.065	0.066
Uruguay	0.090	0.068	0.071	0.065	0.066	0.067	0.069
Guatemala	0.090	0.077	0.072	0.111	0.110	0.091	0.087
Tanzania	0.083	0.061	0.058	0.119	0.115	0.084	0.081
Bahrain	0.083	0.043	0.043	0.057	0.057	0.049	0.049
Azerbaijan	0.082	0.088	0.097	0.152	0.153	0.114	0.119
Jamaica	0.080	0.019	0.019	0.022	0.023	0.020	0.021
Panama	0.079	0.064	0.059	0.075	0.069	0.069	0.063
Costa Rica	0.077	0.068	0.064	0.066	0.066	0.067	0.065
Uganda	0.076	0.035	0.029	0.070	0.069	0.049	0.045
Jordan	0.072	0.047	0.044	0.074	0.074	0.058	0.056
Latvia	0.070	0.039	0.040	0.044	0.045	0.041	0.042
Afghanistan	0.068	0.028	0.028	0.056	0.057	0.039	0.039
Senegal	0.068	0.019	0.020	0.032	0.031	0.024	0.024
Iceland	0.067	0.022	0.021	0.013	0.013	0.018	0.018
Cyprus	0.064	0.029	0.032	0.026	0.027	0.028	0.030
Brunei	0.063	0.021	0.022	0.031	0.032	0.025	0.026
Ethiopia	0.063	0.076	0.068	0.135	0.127	0.100	0.091
El Salvador	0.060	0.033	0.032	0.047	0.048	0.039	0.039

Table A3. Updated GDP Blend Variable—by Member (continued)
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Cameroon	0.058	0.039	0.039	0.063	0.062	0.049	0.048
Bosnia & Herzegovina	0.056	0.024	0.025	0.036	0.036	0.029	0.029
Papua New Guinea	0.055	0.028	0.021	0.023	0.017	0.026	0.019
Nicaragua	0.055	0.016	0.015	0.028	0.027	0.020	0.020
Liberia	0.054	0.003	0.003	0.003	0.003	0.003	0.003
Honduras	0.052	0.025	0.025	0.036	0.036	0.030	0.030
South Sudan	0.052	0.019	0.015	0.021	0.020	0.020	0.017
Madagascar	0.051	0.014	0.014	0.031	0.032	0.021	0.021
Estonia	0.051	0.032	0.032	0.034	0.034	0.033	0.033
Bolivia	0.050	0.042	0.040	0.065	0.064	0.051	0.050
Turkmenistan	0.050	0.054	0.055	0.075	0.072	0.063	0.062
Mozambique	0.048	0.021	0.021	0.029	0.028	0.024	0.024
Gabon	0.045	0.022	0.023	0.030	0.030	0.025	0.026
Guinea	0.045	0.009	0.008	0.014	0.014	0.011	0.011
Georgia	0.044	0.020	0.021	0.032	0.032	0.025	0.025
Sierra Leone	0.043	0.006	0.006	0.011	0.011	0.008	0.008
Paraguay	0.042	0.038	0.038	0.054	0.052	0.044	0.044
Botswana	0.041	0.020	0.020	0.032	0.032	0.024	0.025
Namibia	0.040	0.016	0.017	0.022	0.021	0.019	0.019
Mali	0.039	0.015	0.015	0.031	0.025	0.021	0.019
Bahamas, The	0.038	0.011	0.011	0.008	0.009	0.010	0.010
Guyana	0.038	0.004	0.004	0.005	0.005	0.004	0.004
Kyrgyz Republic	0.037	0.009	0.009	0.018	0.017	0.013	0.013
Cambodia	0.037	0.022	0.020	0.046	0.045	0.032	0.030
Tajikistan	0.036	0.011	0.011	0.021	0.020	0.015	0.015
Moldova	0.036	0.010	0.010	0.016	0.016	0.012	0.013
Malta	0.035	0.013	0.013	0.013	0.013	0.013	0.013
Haiti	0.034	0.011	0.011	0.017	0.017	0.013	0.014
Somalia	0.034	0.008	0.007	0.008	0.007	0.008	0.007
Congo, Rep. of	0.034	0.016	0.018	0.026	0.026	0.020	0.021
Rwanda	0.034	0.011	0.010	0.018	0.017	0.013	0.013
Equatorial Guinea	0.033	0.024	0.022	0.033	0.028	0.028	0.025
Nepal	0.033	0.027	0.025	0.062	0.061	0.041	0.039
Burundi	0.032	0.004	0.004	0.007	0.008	0.005	0.005
Togo	0.031	0.006	0.006	0.009	0.009	0.007	0.007

Table A3. Updated GDP Blend Variable—by Member (continued)
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Mauritius	0.0298	0.0158	0.0159	0.0217	0.0218	0.0182	0.0183
Macedonia, FYR	0.0294	0.0138	0.0138	0.0256	0.0257	0.0186	0.0185
Chad	0.0294	0.0165	0.0174	0.0269	0.0267	0.0207	0.0211
Albania	0.0292	0.0163	0.0170	0.0291	0.0297	0.0214	0.0221
Malawi	0.0291	0.0077	0.0074	0.0179	0.0178	0.0118	0.0115
Niger	0.0276	0.0101	0.0101	0.0166	0.0163	0.0127	0.0126
Suriname	0.0270	0.0067	0.0067	0.0082	0.0084	0.0073	0.0074
Armenia	0.0270	0.0146	0.0138	0.0225	0.0226	0.0177	0.0173
Mauritania	0.0270	0.0068	0.0048	0.0142	0.0141	0.0098	0.0085
Benin	0.0260	0.0112	0.0110	0.0199	0.0181	0.0147	0.0138
Burkina Faso	0.0252	0.0156	0.0158	0.0272	0.0269	0.0203	0.0202
Central African Rep.	0.0234	0.0021	0.0024	0.0027	0.0032	0.0023	0.0027
Lao P.D.R.	0.0222	0.0154	0.0137	0.0320	0.0308	0.0221	0.0206
Fiji	0.0206	0.0057	0.0056	0.0070	0.0068	0.0063	0.0061
Barbados	0.0198	0.0058	0.0056	0.0042	0.0044	0.0051	0.0051
Kosovo	0.0173	0.0091	0.0093	0.0155	0.0157	0.0117	0.0119
Swaziland	0.0165	0.0062	0.0061	0.0097	0.0099	0.0076	0.0076
Mongolia	0.0152	0.0160	0.0157	0.0317	0.0307	0.0223	0.0217
Lesotho	0.0146	0.0028	0.0030	0.0051	0.0052	0.0037	0.0038
Gambia, The	0.0130	0.0012	0.0012	0.0029	0.0029	0.0019	0.0019
Montenegro	0.0127	0.0057	0.0058	0.0089	0.0088	0.0070	0.0070
San Marino	0.0103	0.0023	0.0024	0.0018	0.0019	0.0021	0.0022
Eritrea	0.0077	0.0054	0.0046	0.0076	0.0074	0.0063	0.0057
Djibouti	0.0067	0.0021	0.0019	0.0027	0.0026	0.0023	0.0022
Guinea-Bissau	0.0060	0.0015	0.0015	0.0024	0.0024	0.0018	0.0019
Belize	0.0056	0.0022	0.0022	0.0027	0.0028	0.0024	0.0024
Timor-Leste	0.0054	0.0055	0.0071	0.0058	0.0075	0.0056	0.0073
Vanuatu	0.0050	0.0010	0.0011	0.0006	0.0006	0.0009	0.0009
Cabo Verde	0.0050	0.0023	0.0024	0.0031	0.0031	0.0026	0.0027
Seychelles	0.0048	0.0019	0.0018	0.0021	0.0022	0.0020	0.0020
St. Lucia	0.0045	0.0018	0.0018	0.0018	0.0019	0.0018	0.0018
Maldives	0.0044	0.0041	0.0037	0.0046	0.0043	0.0043	0.0039
Solomon Islands	0.0044	0.0013	0.0013	0.0010	0.0010	0.0012	0.0012
Bhutan	0.0043	0.0026	0.0025	0.0052	0.0053	0.0036	0.0036
Antigua and Barbuda	0.0042	0.0017	0.0016	0.0019	0.0019	0.0018	0.0017

Table A3. Updated GDP Blend Variable—by Member (concluded)
(In percent)

	14th General Review Quota Shares 1/	GDP		PPP GDP 4/		GDP Blend 5/	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Comoros	0.00373	0.00084	0.00083	0.00109	0.00111	0.00094	0.00094
Grenada	0.00344	0.00120	0.00111	0.00124	0.00122	0.00122	0.00115
Samoa	0.00340	0.00105	0.00107	0.00090	0.00095	0.00099	0.00102
São Tomé and Príncipe	0.00310	0.00042	0.00040	0.00058	0.00058	0.00048	0.00047
Tonga	0.00289	0.00056	0.00059	0.00047	0.00047	0.00052	0.00054
St. Kitts	0.00262	0.00110	0.00103	0.00118	0.00116	0.00113	0.00108
St. Vincent	0.00245	0.00096	0.00095	0.00109	0.00112	0.00101	0.00102
Dominica	0.00241	0.00068	0.00069	0.00072	0.00074	0.00070	0.00071
Kiribati	0.00235	0.00023	0.00025	0.00018	0.00017	0.00021	0.00022
Micronesia, FS of	0.00151	0.00042	0.00042	0.00028	0.00030	0.00036	0.00037
Marshall Islands	0.00103	0.00025	0.00025	0.00016	0.00017	0.00021	0.00022
Palau	0.00103	0.00034	0.00031	0.00023	0.00023	0.00030	0.00028
Nauru	0.00059	0.00014	0.00016	0.00012	0.00006	0.00013	0.00012
Tuvalu	0.00052	0.00005	0.00005	0.00003	0.00003	0.00004	0.00004

Source: Finance Department.

1/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Based on IFS data through 2015.

3/ Based on IFS data through 2014.

4/ Current PPP-GDP data were retrieved from the WEO database for 186 countries. For the countries with no WEO data (Nauru, Somalia, and Syrian Arab Republic), PPP-GDP was gap filled.

5/ GDP blended using 60 percent market and 40 percent purchasing power (PPP).

6/ Including China, P.R., Hong Kong SAR, and Macao SAR.

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
United States	17.398	0.202	-0.043	0.159	0.064	-0.045	-0.006	0.172	0.156
Japan	6.461	-0.171	-0.029	-0.200	-0.020	-0.021	0.016	-0.225	-0.204
China 3/	6.390	0.363	0.149	0.513	0.160	0.002	-0.043	0.632	0.557
Germany	5.583	-0.041	-0.016	-0.056	-0.031	-0.031	-0.001	-0.119	-0.107
France	4.225	-0.047	-0.013	-0.060	-0.027	-0.004	0.000	-0.091	-0.084
United Kingdom	4.225	0.021	0.001	0.022	-0.011	-0.021	0.009	0.000	0.001
Italy	3.159	-0.045	-0.017	-0.062	-0.030	-0.009	0.000	-0.101	-0.095
India	2.749	0.020	0.035	0.055	0.006	-0.001	0.024	0.085	0.081
Russia	2.705	-0.102	0.015	-0.087	-0.027	-0.006	-0.035	-0.155	-0.146
Brazil	2.315	-0.075	-0.023	-0.098	-0.013	0.017	0.005	-0.089	-0.084
Canada	2.311	-0.044	-0.005	-0.049	-0.007	-0.005	0.003	-0.058	-0.055
Saudi Arabia	2.095	-0.014	-0.001	-0.015	-0.002	0.002	-0.013	-0.028	-0.026
Spain	1.999	-0.027	-0.012	-0.039	-0.015	0.007	0.004	-0.042	-0.040
Mexico	1.868	-0.010	-0.006	-0.017	0.016	-0.002	0.004	0.001	0.002
Netherlands	1.831	-0.014	-0.003	-0.018	-0.024	-0.001	-0.001	-0.043	-0.040
Korea, Republic of	1.799	0.016	-0.002	0.013	-0.003	0.006	0.012	0.028	0.028
Australia	1.378	-0.050	-0.002	-0.052	-0.014	-0.003	0.000	-0.069	-0.067
Belgium	1.344	-0.009	-0.003	-0.011	-0.017	0.008	0.000	-0.021	-0.021
Switzerland	1.210	-0.003	-0.002	-0.005	0.011	0.049	0.038	0.093	0.091
Turkey	0.977	0.040	0.000	0.041	0.003	-0.002	-0.001	0.041	0.041
Indonesia	0.974	-0.010	0.007	-0.004	-0.001	0.013	0.002	0.011	0.012
Sweden	0.929	-0.009	-0.001	-0.010	-0.004	-0.021	-0.001	-0.035	-0.035
Poland	0.859	-0.003	-0.001	-0.005	0.002	0.002	0.001	0.001	0.001
Austria	0.824	-0.006	-0.002	-0.008	-0.008	0.001	0.000	-0.016	-0.016
Singapore	0.816	-0.001	0.000	-0.001	-0.002	0.003	-0.003	-0.003	-0.002
Norway	0.787	-0.019	-0.001	-0.020	-0.007	-0.024	0.001	-0.049	-0.049
Venezuela, R.B. de	0.780	0.096	-0.007	0.089	-0.004	-0.002	0.000	0.083	0.086
Malaysia	0.762	-0.004	0.002	-0.002	-0.006	-0.005	-0.010	-0.023	-0.023
Iran, I.R. of	0.748	-0.044	-0.007	-0.051	-0.011	0.015	0.003	-0.045	-0.045
Ireland	0.723	0.008	0.003	0.011	0.022	-0.004	0.000	0.030	0.031
Denmark	0.721	-0.003	-0.001	-0.004	-0.001	-0.002	0.006	-0.002	-0.001
Thailand	0.673	-0.002	-0.003	-0.005	0.006	-0.003	0.000	-0.002	-0.002
Argentina	0.668	0.019	-0.020	-0.001	-0.004	0.008	0.002	0.005	0.006
South Africa	0.640	-0.008	-0.002	-0.011	-0.004	-0.002	0.000	-0.017	-0.017
Nigeria	0.515	0.002	0.002	0.004	-0.007	0.002	-0.003	-0.003	-0.003

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member (continued)
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
Greece	0.509	-0.009	-0.003	-0.012	-0.006	0.005	0.000	-0.013	-0.014
Finland	0.505	-0.004	-0.002	-0.006	-0.006	0.002	0.000	-0.010	-0.010
United Arab Emirates	0.485	-0.002	0.000	-0.002	0.014	0.019	0.003	0.034	0.034
Czech Republic	0.457	-0.003	0.000	-0.004	0.000	-0.012	0.002	-0.014	-0.015
Portugal	0.432	-0.003	-0.002	-0.005	-0.006	-0.004	0.001	-0.014	-0.014
Colombia	0.429	-0.012	0.000	-0.012	0.000	0.004	0.002	-0.006	-0.006
Philippines	0.428	0.005	0.003	0.008	0.004	0.000	0.002	0.015	0.016
Egypt	0.427	0.006	0.008	0.013	-0.001	-0.001	0.001	0.011	0.012
Pakistan	0.426	0.009	0.000	0.009	0.001	0.004	0.003	0.018	0.019
Ukraine	0.422	-0.012	-0.007	-0.019	-0.007	0.006	-0.001	-0.021	-0.022
Algeria	0.411	-0.007	0.001	-0.006	-0.003	0.003	-0.011	-0.017	-0.017
Hungary	0.407	-0.001	0.000	-0.002	-0.005	-0.003	-0.003	-0.012	-0.012
Kuwait	0.405	-0.009	-0.002	-0.011	-0.001	-0.001	0.000	-0.013	-0.013
Israel	0.403	0.005	0.000	0.005	0.000	-0.001	0.003	0.006	0.007
Romania	0.380	0.000	0.000	0.000	0.002	-0.002	-0.003	-0.002	-0.002
Chile	0.366	-0.004	-0.001	-0.005	-0.005	-0.001	0.000	-0.012	-0.012
Iraq	0.349	-0.003	-0.001	-0.004	-0.005	0.011	-0.002	-0.001	-0.001
Libya	0.330	-0.005	-0.004	-0.010	-0.005	0.005	-0.006	-0.017	-0.018
Peru	0.280	-0.001	0.000	-0.001	0.000	0.000	0.000	-0.001	-0.001
Luxembourg	0.277	0.000	0.000	0.000	0.013	0.007	0.000	0.020	0.021
New Zealand	0.262	-0.001	0.000	-0.001	0.000	0.005	0.000	0.004	0.004
Kazakhstan	0.243	-0.003	0.005	0.002	-0.005	0.005	0.001	0.003	0.003
Vietnam	0.242	0.004	0.002	0.007	0.019	-0.001	0.001	0.025	0.026
Syrian Arab Republic	0.233	-0.004	-0.002	-0.006	-0.001	-0.001	0.000	-0.008	-0.009
Bangladesh	0.224	0.010	0.003	0.012	0.003	0.001	0.002	0.018	0.019
Congo, Dem. Rep. of	0.223	0.001	0.000	0.002	0.000	0.000	0.000	0.001	0.002
Slovak Republic	0.210	-0.001	0.000	-0.001	0.001	-0.006	0.000	-0.006	-0.006
Zambia	0.205	0.000	0.000	-0.001	0.000	0.000	0.000	0.000	0.000
Bulgaria	0.188	0.000	0.000	0.000	-0.002	-0.003	0.001	-0.003	-0.004
Morocco	0.187	0.000	0.000	0.000	0.001	0.006	0.001	0.007	0.008
Angola	0.155	0.003	0.000	0.003	-0.004	0.001	-0.002	0.000	0.000
Ghana	0.155	-0.001	0.000	0.000	0.002	0.006	-0.002	0.006	0.007
Qatar	0.154	-0.006	0.000	-0.006	0.003	0.000	0.000	-0.003	-0.003
Croatia	0.150	-0.001	-0.001	-0.002	0.000	-0.001	0.000	-0.003	-0.003
Zimbabwe	0.148	0.000	0.000	0.000	0.000	-0.001	0.000	0.000	0.000

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member (continued)
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
Ecuador	0.14626	0.00137	-0.00022	0.00115	-0.00029	-0.00013	-0.00037	0.00036	0.00047
Belarus	0.14286	-0.00160	-0.00133	-0.00292	-0.00113	-0.00017	-0.00046	-0.00468	-0.00505
Serbia	0.13727	-0.00069	-0.00059	-0.00128	0.00036	-0.00045	-0.00073	-0.00209	-0.00230
Côte d'Ivoire	0.13634	0.00053	0.00074	0.00128	-0.00063	-0.00031	0.00026	0.00059	0.00071
Lebanon	0.13280	0.00065	-0.00028	0.00037	-0.00006	-0.00600	0.00139	-0.00431	-0.00467
Sudan	0.13211	0.00665	0.00011	0.00676	-0.00156	0.00034	0.00000	0.00554	0.00628
Slovenia	0.12295	-0.00067	-0.00025	-0.00092	-0.00038	-0.00051	-0.00004	-0.00185	-0.00201
Sri Lanka	0.12134	0.00440	-0.00005	0.00435	0.00159	-0.00007	-0.00050	0.00537	0.00604
Uzbekistan	0.11555	0.00178	0.00132	0.00310	-0.00075	-0.00030	0.00024	0.00229	0.00261
Tunisia	0.11429	-0.00039	-0.00045	-0.00083	-0.00149	0.00008	0.00018	-0.00207	-0.00227
Oman	0.11412	-0.00122	-0.00047	-0.00170	0.00083	-0.00237	0.00081	-0.00243	-0.00255
Kenya	0.11379	0.00282	0.00045	0.00327	0.00052	0.00191	0.00016	0.00586	0.00666
Myanmar	0.10834	0.00168	0.00508	0.00676	0.00286	0.00238	-0.00010	0.01190	0.01333
Yemen	0.10209	-0.00011	-0.00236	-0.00247	-0.00124	0.00461	-0.00199	-0.00109	-0.00120
Dominican Republic	0.10008	0.00068	0.00068	0.00136	0.00071	-0.00204	0.00027	0.00030	0.00038
Trinidad and Tobago	0.09849	0.00091	-0.00003	0.00088	0.00267	-0.00049	0.00022	0.00328	0.00377
Lithuania	0.09257	-0.00046	-0.00011	-0.00057	0.00063	0.00211	-0.00295	-0.00078	-0.00081
Uruguay	0.08995	-0.00116	-0.00013	-0.00129	0.00003	0.00035	0.00048	-0.00044	-0.00046
Guatemala	0.08985	0.00161	0.00007	0.00168	0.00075	0.00039	0.00038	0.00320	0.00366
Tanzania	0.08339	0.00081	0.00076	0.00157	0.00018	0.00017	-0.00006	0.00187	0.00216
Bahrain	0.08280	0.00004	-0.00004	0.00000	0.00155	-0.00012	-0.00034	0.00109	0.00128
Azerbaijan	0.08211	-0.00262	-0.00018	-0.00279	-0.00084	0.00260	-0.00264	-0.00367	-0.00401
Jamaica	0.08027	-0.00012	-0.00013	-0.00026	0.00005	-0.00046	0.00026	-0.00041	-0.00047
Panama	0.07899	0.00147	0.00131	0.00278	0.00101	-0.00040	0.00052	0.00392	0.00445
Costa Rica	0.07744	0.00114	0.00006	0.00119	0.00142	0.00115	0.00049	0.00425	0.00488
Uganda	0.07568	0.00187	0.00015	0.00202	0.00022	-0.00011	-0.00016	0.00196	0.00232
Jordan	0.07192	0.00076	-0.00014	0.00062	0.00036	0.00036	0.00061	0.00195	0.00225
Latvia	0.06966	-0.00040	-0.00028	-0.00068	0.00033	-0.00026	0.00007	-0.00053	-0.00057
Afghanistan	0.06788	-0.00004	-0.00020	-0.00024	0.00127	-0.00110	0.00016	0.00010	0.00016
Senegal	0.06784	-0.00015	0.00007	-0.00008	0.00020	-0.00020	-0.00001	-0.00009	-0.00009
Iceland	0.06746	0.00026	0.00000	0.00026	0.00084	0.01169	0.00015	0.01295	0.01447
Cyprus	0.06369	-0.00079	-0.00033	-0.00113	-0.00315	0.00116	0.00001	-0.00312	-0.00354
Brunei	0.06316	-0.00036	-0.00034	-0.00070	-0.00054	0.00551	0.00004	0.00431	0.00508
Ethiopia	0.06304	0.00249	0.00164	0.00413	0.00124	0.00123	0.00023	0.00682	0.00779
El Salvador	0.06021	0.00017	-0.00018	-0.00001	0.00038	0.00022	0.00013	0.00071	0.00085

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member (continued)
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
Cameroon	0.05786	0.00016	0.00026	0.00042	0.00023	0.00032	-0.00007	0.00090	0.00108
Bosnia & Herzegovina	0.05559	-0.00033	0.00003	-0.00030	-0.00022	0.00007	-0.00004	-0.00049	-0.00057
Papua New Guinea	0.05518	0.00215	0.00130	0.00345	-0.00010	0.00051	-0.00021	0.00365	0.00437
Nicaragua	0.05450	0.00026	0.00008	0.00034	0.00034	-0.00032	0.00018	0.00054	0.00067
Liberia	0.05417	0.00003	-0.00001	0.00002	0.00006	-0.00024	0.00003	-0.00013	-0.00015
Honduras	0.05237	0.00015	-0.00004	0.00011	0.00048	-0.00009	0.00031	0.00081	0.00097
South Sudan	0.05157	0.00123	0.00020	0.00143	-0.00191	-0.00587	-0.00011	-0.00646	-0.00756
Madagascar	0.05123	-0.00007	-0.00005	-0.00012	0.00009	-0.00014	0.00002	-0.00015	-0.00017
Estonia	0.05107	-0.00011	-0.00013	-0.00024	-0.00015	0.00035	0.00000	-0.00004	0.00000
Bolivia	0.05033	0.00067	0.00025	0.00092	0.00084	-0.00097	0.00014	0.00093	0.00109
Turkmenistan	0.05002	-0.00028	0.00073	0.00045	0.00026	0.00069	0.00021	0.00161	0.00186
Mozambique	0.04763	-0.00013	0.00013	0.00000	0.00066	-0.00024	-0.00023	0.00019	0.00024
Gabon	0.04528	-0.00047	0.00005	-0.00042	-0.00070	0.00026	-0.00024	-0.00110	-0.00130
Guinea	0.04490	0.00016	-0.00008	0.00008	0.00018	-0.00003	-0.00005	0.00018	0.00023
Georgia	0.04411	-0.00032	-0.00001	-0.00033	0.00051	0.00018	0.00000	0.00036	0.00045
Sierra Leone	0.04348	0.00000	-0.00010	-0.00010	0.00012	0.00008	0.00003	0.00013	0.00018
Paraguay	0.04222	0.00009	0.00032	0.00041	-0.00012	0.00111	0.00018	0.00158	0.00185
Botswana	0.04134	-0.00008	-0.00018	-0.00026	0.00034	0.00216	0.00022	0.00246	0.00293
Namibia	0.04006	-0.00036	0.00013	-0.00023	0.00007	0.00009	-0.00003	-0.00010	-0.00011
Mali	0.03912	0.00003	0.00114	0.00117	0.00006	-0.00004	-0.00005	0.00114	0.00138
Bahamas, The	0.03824	0.00008	-0.00007	0.00001	-0.00001	0.00049	0.00002	0.00051	0.00063
Guyana	0.03811	0.00004	0.00000	0.00004	-0.00002	-0.00001	-0.00003	-0.00002	-0.00001
Kyrgyz Republic	0.03723	-0.00003	0.00009	0.00006	0.00031	0.00032	-0.00008	0.00061	0.00075
Cambodia	0.03669	0.00047	0.00031	0.00078	0.00153	0.00010	0.00056	0.00297	0.00352
Tajikistan	0.03648	-0.00001	0.00012	0.00011	-0.00048	-0.00040	-0.00002	-0.00079	-0.00097
Moldova	0.03616	-0.00014	0.00002	-0.00012	0.00001	-0.00044	-0.00033	-0.00088	-0.00106
Malta	0.03528	0.00002	0.00006	0.00008	0.00045	-0.00046	-0.00007	0.00000	0.00003
Haiti	0.03434	-0.00002	-0.00003	-0.00005	-0.00012	0.00043	-0.00001	0.00025	0.00032
Somalia	0.03425	0.00014	0.00005	0.00019	0.00042	0.00024	0.00001	0.00086	0.00109
Congo, Rep. of	0.03396	-0.00072	0.00002	-0.00070	-0.00150	0.00506	-0.00079	0.00207	0.00244
Rwanda	0.03358	0.00007	0.00009	0.00016	0.00019	0.00007	0.00002	0.00044	0.00054
Equatorial Guinea	0.03302	0.00052	0.00107	0.00159	-0.00078	0.00131	-0.00078	0.00134	0.00157
Nepal	0.03289	0.00060	0.00009	0.00069	0.00059	0.00007	0.00057	0.00192	0.00228
Burundi	0.03228	0.00000	-0.00010	-0.00010	-0.00003	0.00000	-0.00003	-0.00016	-0.00021
Togo	0.03077	0.00000	0.00003	0.00003	-0.00008	-0.00012	0.00003	-0.00014	-0.00017

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member (continued)
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
Mauritius	0.02981	-0.00004	-0.00001	-0.00005	0.00006	-0.00011	0.00010	0.00000	0.00002
Macedonia, FYR	0.02941	0.00002	-0.00001	0.00001	0.00013	0.00057	-0.00009	0.00062	0.00076
Chad	0.02939	-0.00026	0.00005	-0.00021	-0.00006	0.00028	-0.00012	-0.00011	-0.00011
Albania	0.02920	-0.00019	-0.00013	-0.00032	-0.00035	-0.00007	0.00009	-0.00065	-0.00076
Malawi	0.02910	0.00010	0.00003	0.00013	-0.00010	-0.00097	0.00011	-0.00083	-0.00102
Niger	0.02759	0.00000	0.00006	0.00006	0.00001	0.00034	-0.00006	0.00035	0.00045
Suriname	0.02702	-0.00002	-0.00004	-0.00006	-0.00001	0.00002	-0.00009	-0.00014	-0.00018
Armenia	0.02700	0.00021	-0.00002	0.00019	-0.00005	0.00020	-0.00007	0.00027	0.00034
Mauritania	0.02700	0.00058	0.00003	0.00061	-0.00018	-0.00073	0.00000	-0.00030	-0.00037
Benin	0.02595	0.00009	0.00037	0.00046	0.00055	-0.00008	-0.00006	0.00087	0.00108
Burkina Faso	0.02524	-0.00005	0.00006	0.00001	0.00060	-0.00049	-0.00002	0.00010	0.00012
Central African Rep.	0.02335	-0.00009	-0.00011	-0.00020	0.00000	0.00003	0.00000	-0.00017	-0.00023
Lao P.D.R.	0.02218	0.00051	0.00024	0.00075	0.00028	-0.00291	0.00012	-0.00176	-0.00213
Fiji	0.02063	0.00004	0.00006	0.00010	0.00003	-0.00008	0.00002	0.00007	0.00009
Barbados	0.01981	0.00005	-0.00003	0.00002	-0.00001	-0.00007	0.00000	-0.00006	-0.00008
Kosovo	0.01732	-0.00004	-0.00004	-0.00008	0.00007	0.00004	-0.00011	-0.00008	-0.00009
Swaziland	0.01646	0.00003	-0.00003	0.00000	-0.00013	-0.00002	-0.00002	-0.00017	-0.00022
Mongolia	0.01516	0.00009	0.00020	0.00029	0.00034	-0.00006	-0.00003	0.00054	0.00066
Lesotho	0.01463	-0.00005	0.00000	-0.00005	-0.00016	-0.00008	0.00000	-0.00029	-0.00037
Gambia, The	0.01304	0.00000	0.00000	0.00000	0.00000	-0.00002	-0.00002	-0.00004	-0.00006
Montenegro	0.01268	-0.00002	0.00000	-0.00002	-0.00005	0.00000	0.00009	0.00002	0.00003
San Marino	0.01031	-0.00002	-0.00001	-0.00003	-0.00084	-0.00081	-0.00002	-0.00170	-0.00216
Eritrea	0.00767	0.00023	0.00004	0.00027	0.00015	0.00007	0.00006	0.00055	0.00072
Djibouti	0.00667	0.00004	0.00001	0.00005	0.00012	0.00008	0.00001	0.00026	0.00037
Guinea-Bissau	0.00595	-0.00001	0.00000	-0.00001	0.00001	-0.00004	0.00003	-0.00001	-0.00002
Belize	0.00560	0.00001	-0.00001	0.00000	0.00004	-0.00001	0.00003	0.00006	0.00008
Timor-Leste	0.00537	-0.00049	-0.00034	-0.00083	-0.00023	0.00026	-0.00006	-0.00086	-0.00108
Vanuatu	0.00499	-0.00001	0.00000	-0.00001	0.00002	0.00008	0.00003	0.00012	0.00015
Cabo Verde	0.00497	-0.00002	-0.00002	-0.00004	-0.00007	0.00008	0.00001	-0.00002	-0.00003
Seychelles	0.00480	0.00002	-0.00002	0.00000	0.00005	-0.00002	0.00003	0.00006	0.00009
St. Lucia	0.00449	0.00001	-0.00001	0.00000	-0.00003	-0.00002	0.00004	-0.00001	-0.00001
Maldives	0.00444	0.00012	0.00007	0.00019	0.00022	0.00017	0.00008	0.00066	0.00082
Solomon Islands	0.00436	0.00001	0.00000	0.00001	0.00001	0.00001	0.00001	0.00004	0.00005
Bhutan	0.00428	0.00003	-0.00002	0.00001	0.00000	0.00004	0.00003	0.00008	0.00011
Antigua and Barbuda	0.00419	0.00002	0.00000	0.00002	-0.00001	-0.00001	0.00003	0.00003	0.00006

Table A4. Contributions to Changes in Calculated Quota Shares (CQS)—by Member (concluded)
(in percentage points)

	14th General Review Quota Shares (In percent) 1/	Contribution of Variables to Change in CQS 2/						Total	
		GDP	PPP GDP	GDP Blend (1)	Openness (2)	Variability (3)	Reserves (4)	Sum Cols (1 - 4)	CQS Change
Comoros	0.00373	0.00000	0.00000	0.00000	0.00001	-0.00005	0.00000	-0.00004	-0.00005
Grenada	0.00344	0.00003	0.00001	0.00004	0.00001	0.00030	0.00001	0.00036	0.00049
Samoa	0.00340	-0.00001	-0.00001	-0.00002	0.00000	-0.00002	-0.00001	-0.00005	-0.00006
São Tomé and Príncipe	0.00310	0.00001	0.00000	0.00001	0.00001	-0.00001	0.00000	0.00001	0.00002
Tonga	0.00289	-0.00001	0.00000	-0.00001	0.00005	-0.00001	0.00000	0.00003	0.00004
St. Kitts	0.00262	0.00002	0.00000	0.00002	0.00000	0.00004	-0.00001	0.00005	0.00007
St. Vincent	0.00245	0.00000	-0.00001	-0.00001	-0.00001	-0.00001	0.00001	-0.00002	-0.00002
Dominica	0.00241	0.00000	0.00000	0.00000	0.00000	0.00002	0.00001	0.00003	0.00004
Kiribati	0.00235	0.00000	0.00000	0.00000	0.00001	0.00012	0.00000	0.00013	0.00019
Micronesia, FS of	0.00151	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00002	0.00003
Marshall Islands	0.00103	0.00000	0.00000	0.00000	0.00000	-0.00001	0.00000	-0.00001	-0.00001
Palau	0.00103	0.00001	0.00000	0.00001	0.00002	-0.00001	0.00000	0.00002	0.00002
Nauru	0.00059	-0.00001	0.00001	0.00000	0.00001	0.00000	0.00000	0.00001	0.00003
Tuvalu	0.00052	0.00000	0.00000	0.00000	0.00000	0.00000	-0.00001	-0.00001	-0.00003

Source: Finance Department.

1/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Difference in the shares for each variable between the current and previous datasets, multiplied by the variable weight in the quota formula. The change in CQS also reflects the effect of compression.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

Table A5. Out-of-Lineness—by Member

	Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)
Qatar	2.621	Qatar	2.638	China 6/	2.704	China 6/	2.587
Mongolia	2.444	Mongolia	2.400	Indonesia	2.546	Indonesia	2.511
Luxembourg	2.428	Luxembourg	2.354	India	2.478	India	2.414
Maldives	2.366	Timor-Leste	2.204	Myanmar	2.232	Bangladesh	2.167
Timor-Leste	2.002	Maldives	2.181	Bangladesh	2.225	Egypt	2.078
China 6/	1.969	Malta	1.904	Egypt	2.168	Mongolia	2.028
Iceland	1.936	China 6/	1.882	Ethiopia	2.139	Ethiopia	2.008
Malta	1.904	Turkmenistan	1.859	Mongolia	2.093	Myanmar	1.997
Turkmenistan	1.896	United Arab Emirates	1.808	Vietnam	1.967	Vietnam	1.922
United Arab Emirates	1.878	Iceland	1.721	Pakistan	1.920	Pakistan	1.915
Vietnam	1.812	Vietnam	1.703	Nepal	1.878	Azerbaijan	1.866
Equatorial Guinea	1.691	Oman	1.687	Nigeria	1.869	Nepal	1.864
Oman	1.665	Azerbaijan	1.664	Azerbaijan	1.855	Nigeria	1.851
Bhutan	1.642	Equatorial Guinea	1.643	Qatar	1.837	Qatar	1.830
Angola	1.634	Angola	1.635	Kazakhstan	1.684	Iran, I.R. of	1.700
Azerbaijan	1.615	Bhutan	1.617	Iran, I.R. of	1.654	Sri Lanka	1.608
Singapore	1.602	Singapore	1.605	Sri Lanka	1.606	Kazakhstan	1.581
Kazakhstan	1.574	Kazakhstan	1.561	Turkmenistan	1.509	Thailand	1.498
Mauritius	1.545	Mauritius	1.544	Philippines	1.498	Philippines	1.459
Congo, Rep. of	1.541	Congo, Rep. of	1.469	Thailand	1.473	Turkey	1.438
Thailand	1.464	Thailand	1.466	Lao P.D.R.	1.444	Turkmenistan	1.436
Switzerland	1.425	Lithuania	1.429	Turkey	1.439	Iraq	1.435
Lithuania	1.420	Estonia	1.389	Tanzania	1.423	Timor-Leste	1.396
Paraguay	1.411	Paraguay	1.367	Iraq	1.419	Lao P.D.R.	1.389
Ethiopia	1.404	Switzerland	1.350	Uzbekistan	1.382	Tanzania	1.377
Estonia	1.389	Indonesia	1.329	Colombia	1.372	Colombia	1.372
Nepal	1.358	Nigeria	1.294	Oman	1.301	Argentina	1.346
Indonesia	1.341	Nepal	1.288	Brazil	1.291	Brazil	1.341
Panama	1.308	Ethiopia	1.280	Bolivia	1.289	Uzbekistan	1.325
Nigeria	1.289	Slovak Republic	1.265	Morocco	1.285	Oman	1.321
Bolivia	1.272	Panama	1.251	Russia	1.283	Morocco	1.284
Jordan	1.263	Bolivia	1.250	Dominican Republic	1.280	Bolivia	1.264
Bangladesh	1.245	Afghanistan	1.241	Paraguay	1.276	Russia	1.255
Afghanistan	1.243	Jordan	1.232	Cambodia	1.267	Dominican Republic	1.246
Slovak Republic	1.235	Belarus	1.216	Algeria	1.243	Bhutan	1.243

Table A5. Out-of-Lineness—by Member (continued)

Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)	
Seychelles	1.200	Chile	1.198	Peru	1.235	Paraguay	1.238
Cambodia	1.199	Seychelles	1.181	Guatemala	1.232	Algeria	1.236
Egypt	1.196	Iraq	1.171	Bhutan	1.221	Peru	1.234
Turkey	1.189	Lebanon	1.170	Argentina	1.198	Guatemala	1.228
Belarus	1.180	Egypt	1.168	United Arab Emirates	1.170	Cambodia	1.225
Iraq	1.169	Bangladesh	1.159	Ecuador	1.133	United Arab Emirates	1.168
Chile	1.166	Netherlands	1.152	Sudan	1.124	Belarus	1.142
Myanmar	1.145	Cyprus	1.147	Belarus	1.095	Ecuador	1.140
Peru	1.141	Turkey	1.146	Cameroon	1.086	Sudan	1.120
Lebanon	1.135	Algeria	1.146	Kenya	1.083	Mexico	1.081
India	1.132	Peru	1.145	Timor-Leste	1.080	Burkina Faso	1.065
Netherlands	1.130	Lao P.D.R.	1.119	Burkina Faso	1.076	Cameroon	1.063
Philippines	1.128	Cambodia	1.104	Mexico	1.063	Kenya	1.063
Korea, Republic of	1.106	India	1.103	Angola	1.050	Chile	1.048
Algeria	1.103	Dominican Republic	1.096	Chile	1.035	Poland	1.041
Dominican Republic	1.100	San Marino	1.093	Poland	1.034	South Africa	1.040
Cyprus	1.092	Philippines	1.091	Maldives	1.032	Angola	1.039
Poland	1.073	Korea, Republic of	1.090	Jordan	1.024	Jordan	1.033
Morocco	1.073	Australia	1.088	South Africa	1.021	Tunisia	1.022
Israel	1.071	Poland	1.072	Equatorial Guinea	1.012	Albania	1.019
Ireland	1.067	Latvia	1.067	Tunisia	1.002	Romania	0.964
Bahrain	1.063	Czech Republic	1.061	Albania	0.996	Eritrea	0.963
Latvia	1.059	Israel	1.054	Eritrea	0.992	Yemen	0.962
Botswana	1.053	Bahrain	1.048	Romania	0.963	Maldives	0.958
Australia	1.040	Colombia	1.040	Panama	0.955	United States	0.935
Guatemala	1.036	Morocco	1.029	Malaysia	0.931	Korea, Republic of	0.920
Costa Rica	1.036	Malaysia	1.029	United States	0.923	Malaysia	0.917
Czech Republic	1.029	Ireland	1.024	Uganda	0.920	Uganda	0.910
Sri Lanka	1.028	Iran, I.R. of	1.022	Chad	0.917	Kosovo	0.909
Colombia	1.025	Myanmar	1.022	Korea, Republic of	0.914	Chad	0.908
Lao P.D.R.	1.023	Cabo Verde	1.017	Kosovo	0.897	Ukraine	0.885
Tanzania	1.021	Hungary	1.009	Macedonia, FYR	0.872	Macedonia, FYR	0.873
Cabo Verde	1.011	Brazil	1.008	Costa Rica	0.855	Panama	0.872
Ecuador	1.009	Romania	1.008	Yemen	0.846	Costa Rica	0.852
Macedonia, FYR	1.008	Albania	1.008	Armenia	0.832	Equatorial Guinea	0.850

Table A5. Out-of-Lineness—by Member (continued)

Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)	
Romania	1.002	Ecuador	1.006	Afghanistan	0.825	Afghanistan	0.840
Uzbekistan	0.999	Sweden	1.002	Ukraine	0.805	Armenia	0.836
Malaysia	0.999	Russia	1.002	Lithuania	0.797	Lithuania	0.803
Albania	0.982	Guatemala	0.995	Mali	0.785	El Salvador	0.799
Hungary	0.979	Tanzania	0.995	El Salvador	0.784	Botswana	0.785
Montenegro	0.975	Ukraine	0.994	Benin	0.766	Congo, Rep. of	0.758
Brazil	0.972	Botswana	0.982	Botswana	0.764	Spain	0.749
Guinea-Bissau	0.968	Macedonia, FYR	0.982	Congo, Rep. of	0.761	Australia	0.746
Sweden	0.965	Sri Lanka	0.979	Australia	0.737	Uruguay	0.734
Iran, I.R. of	0.962	Uzbekistan	0.977	Mauritius	0.729	Mauritius	0.731
Chad	0.960	Costa Rica	0.973	Uruguay	0.727	Georgia	0.715
Argentina	0.953	Montenegro	0.973	Spain	0.720	Saudi Arabia	0.713
Armenia	0.949	Norway	0.971	Georgia	0.714	Japan	0.703
Russia	0.948	Guinea-Bissau	0.971	Saudi Arabia	0.711	Montenegro	0.697
Ukraine	0.942	Chad	0.964	Montenegro	0.698	Honduras	0.697
Tunisia	0.941	Tunisia	0.960	Honduras	0.693	Benin	0.696
Slovenia	0.933	South Sudan	0.957	Bahrain	0.684	Bahrain	0.687
Uruguay	0.933	Slovenia	0.950	Japan	0.681	Slovak Republic	0.685
New Zealand	0.930	Argentina	0.945	Slovak Republic	0.680	Venezuela, R.B. de	0.679
Mexico	0.930	Uruguay	0.938	Gabon	0.671	Estonia	0.673
Eritrea	0.924	Armenia	0.937	Estonia	0.661	Serbia	0.671
Pakistan	0.917	Mexico	0.929	Ghana	0.655	Gabon	0.665
Norway	0.908	New Zealand	0.914	Bosnia & Herzegovina	0.653	Kuwait	0.665
Kosovo	0.889	Germany	0.906	Czech Republic	0.650	Czech Republic	0.654
Germany	0.887	Canada	0.902	Bulgaria	0.650	Italy	0.652
San Marino	0.884	Spain	0.897	Serbia	0.649	Bosnia & Herzegovina	0.650
Burkina Faso	0.881	Kosovo	0.894	Kuwait	0.646	Bulgaria	0.648
Canada	0.878	Gabon	0.892	Canada	0.635	Canada	0.646
Spain	0.877	Austria	0.889	Venezuela, R.B. de	0.634	Latvia	0.646
Austria	0.870	Portugal	0.885	Israel	0.629	Ghana	0.640
Gabon	0.863	Burkina Faso	0.876	Latvia	0.626	Mali	0.640
Cameroon	0.863	Pakistan	0.874	Italy	0.625	Germany	0.635
Portugal	0.853	Bulgaria	0.867	Germany	0.621	Cabo Verde	0.632
Trinidad and Tobago	0.850	Cameroon	0.844	Cabo Verde	0.617	Israel	0.630
Bulgaria	0.847	United Kingdom	0.844	Malawi	0.616	Portugal	0.623

Table A5. Out-of-Lineness—by Member (continued)

Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)	
United Kingdom	0.844	Belgium	0.843	Madagascar	0.613	Madagascar	0.618
United States	0.832	Marshall Islands	0.841	Portugal	0.605	Malawi	0.611
Marshall Islands	0.830	South Africa	0.839	Niger	0.601	Swaziland	0.599
El Salvador	0.828	Finland	0.839	Mozambique	0.599	Niger	0.590
St. Kitts	0.828	Eritrea	0.830	Swaziland	0.591	Mozambique	0.586
Belgium	0.828	Kuwait	0.825	France	0.569	France	0.585
Kenya	0.826	United States	0.823	United Kingdom	0.569	Lebanon	0.575
Belize	0.825	Japan	0.821	Tajikistan	0.567	Syrian Arab Republic	0.570
Micronesia, FS of	0.822	El Salvador	0.814	New Zealand	0.567	New Zealand	0.569
Finland	0.819	Trinidad and Tobago	0.811	Lebanon	0.564	Croatia	0.568
Honduras	0.817	Denmark	0.810	Hungary	0.563	United Kingdom	0.568
South Africa	0.812	Belize	0.810	Namibia	0.553	Hungary	0.566
South Sudan	0.810	Saudi Arabia	0.806	Croatia	0.548	Tajikistan	0.551
Denmark	0.808	Serbia	0.803	Mauritania	0.526	Greece	0.541
Georgia	0.804	St. Kitts	0.801	Syrian Arab Republic	0.524	Namibia	0.537
Saudi Arabia	0.794	Micronesia, FS of	0.800	Rwanda	0.521	Mauritania	0.521
Mozambique	0.793	Yemen	0.798	Singapore	0.516	Singapore	0.516
Kuwait	0.792	Honduras	0.798	Greece	0.513	Brunei	0.511
Japan	0.789	Libya	0.796	Nicaragua	0.506	Rwanda	0.508
Yemen	0.786	Georgia	0.794	Côte d'Ivoire	0.494	Nicaragua	0.499
Serbia	0.786	Italy	0.789	Haiti	0.492	Haiti	0.497
Sudan	0.782	Mozambique	0.788	Belize	0.487	Belize	0.495
Bosnia & Herzegovina	0.764	Syrian Arab Republic	0.782	Brunei	0.484	Slovenia	0.471
Italy	0.759	Bosnia & Herzegovina	0.775	Kyrgyz Republic	0.480	Kyrgyz Republic	0.468
Brunei	0.755	Croatia	0.772	Senegal	0.468	Côte d'Ivoire	0.467
Namibia	0.754	France	0.770	Slovenia	0.461	Seychelles	0.464
Benin	0.752	Kenya	0.768	Sweden	0.451	Senegal	0.463
France	0.750	Namibia	0.757	St. Kitts	0.451	Austria	0.459
Croatia	0.749	Swaziland	0.756	Moldova	0.447	Sweden	0.456
Syrian Arab Republic	0.745	St. Vincent	0.737	St. Vincent	0.445	St. Vincent	0.455
Swaziland	0.743	Sudan	0.734	Austria	0.445	Antigua and Barbuda	0.449
Libya	0.741	Palau	0.719	Antigua and Barbuda	0.445	Moldova	0.444
Palau	0.736	St. Lucia	0.715	Seychelles	0.441	St. Kitts	0.442
St. Vincent	0.730	Greece	0.712	Papua New Guinea	0.419	Cyprus	0.428
Mali	0.728	Benin	0.710	Trinidad and Tobago	0.416	Finland	0.422

Table A5. Out-of-Lineness—by Member (continued)

Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)	
Antigua and Barbuda	0.721	Antigua and Barbuda	0.708	South Sudan	0.416	St. Lucia	0.421
St. Lucia	0.713	Solomon Islands	0.694	Netherlands	0.411	Netherlands	0.421
Venezuela, R.B. de	0.712	Mali	0.692	Norway	0.406	Trinidad and Tobago	0.418
Solomon Islands	0.705	Moldova	0.679	Finland	0.406	Norway	0.414
Grenada	0.701	Brunei	0.675	St. Lucia	0.405	Guinea-Bissau	0.399
Greece	0.685	Lesotho	0.610	Cyprus	0.402	South Sudan	0.397
Nauru	0.653	Nauru	0.608	Djibouti	0.400	Djibouti	0.391
Moldova	0.650	Venezuela, R.B. de	0.603	Guinea-Bissau	0.396	Malta	0.372
Papua New Guinea	0.641	Kyrgyz Republic	0.587	Malta	0.381	Switzerland	0.368
Kyrgyz Republic	0.607	Malawi	0.585	Grenada	0.362	Libya	0.363
Djibouti	0.605	Haiti	0.570	Switzerland	0.360	Grenada	0.353
Uganda	0.597	Tajikistan	0.566	Lesotho	0.351	Lesotho	0.353
Lesotho	0.584	Uganda	0.566	Fiji	0.341	Belgium	0.342
Haiti	0.579	Papua New Guinea	0.562	Belgium	0.331	Denmark	0.331
Ghana	0.560	Samoa	0.561	Ireland	0.325	Fiji	0.327
Malawi	0.550	Grenada	0.558	Denmark	0.324	Guinea	0.318
Niger	0.545	Mauritania	0.551	Guinea	0.309	Suriname	0.312
Samoa	0.543	Djibouti	0.550	Togo	0.307	Dominica	0.305
Tajikistan	0.540	Senegal	0.531	Suriname	0.305	Ireland	0.301
Mauritania	0.538	Niger	0.529	Dominica	0.298	Togo	0.301
Rwanda	0.534	Rwanda	0.517	Libya	0.295	Papua New Guinea	0.301
Senegal	0.529	Ghana	0.514	Comoros	0.293	Comoros	0.298
Kiribati	0.523	Dominica	0.507	Jamaica	0.278	Jamaica	0.286
Dominica	0.522	Fiji	0.507	Zambia	0.268	Samoa	0.279
Fiji	0.511	Tuvalu	0.496	Samoa	0.265	Zambia	0.271
Nicaragua	0.504	Nicaragua	0.492	Sierra Leone	0.244	Sierra Leone	0.255
Barbados	0.480	Comoros	0.484	Congo, Dem. Rep. of	0.238	Burundi	0.239
Comoros	0.471	Barbados	0.483	Solomon Islands	0.234	Solomon Islands	0.235
Tonga	0.459	Côte d'Ivoire	0.451	Palau	0.225	Congo, Dem. Rep. of	0.228
Côte d'Ivoire	0.457	Suriname	0.449	Burundi	0.224	Palau	0.227
São Tomé and Príncipe	0.456	São Tomé and Príncipe	0.448	Gambia, The	0.222	Bahamas, The	0.225
Bahamas, The	0.454	Tonga	0.445	Somalia	0.220	Gambia, The	0.224
Tuvalu	0.443	Jamaica	0.443	Bahamas, The	0.215	Barbados	0.220
Suriname	0.442	Kiribati	0.443	Barbados	0.213	Somalia	0.212
Jamaica	0.437	Bahamas, The	0.437	Nauru	0.203	Micronesia, FS of	0.200

Table A5. Out-of-Lineness—by Member (concluded)

	Current CQS / 14th General Review Quotas 1/ 2/ 3/ (1)		Previous CQS / 14th General Review Quotas 1/ 2/ 4/ (2)		PPP GDP / 14th General Review Quotas 1/ 3/ 5/ (3)		Previous PPP GDP / 14th General Review Quotas 1/ 4/ 5/ (4)
Vanuatu	0.430	Madagascar	0.430	Iceland	0.199	Iceland	0.199
Madagascar	0.426	Togo	0.420	Micronesia, FS of	0.187	São Tomé and Príncipe	0.185
Togo	0.414	Vanuatu	0.400	São Tomé and Príncipe	0.186	San Marino	0.182
Congo, Dem. Rep. of	0.376	Congo, Dem. Rep. of	0.369	Luxembourg	0.177	Luxembourg	0.176
Guinea	0.373	Guinea	0.368	San Marino	0.175	Zimbabwe	0.170
Somalia	0.357	Somalia	0.325	Zimbabwe	0.169	Marshall Islands	0.167
Sierra Leone	0.283	Sierra Leone	0.278	Tonga	0.164	Tonga	0.164
Zambia	0.250	Zambia	0.250	Marshall Islands	0.153	Central African Rep.	0.138
Guyana	0.232	Guyana	0.232	Guyana	0.134	Guyana	0.133
Gambia, The	0.201	Gambia, The	0.205	Vanuatu	0.125	Vanuatu	0.128
Zimbabwe	0.192	Zimbabwe	0.194	Central African Rep.	0.114	Nauru	0.104
Liberia	0.181	Burundi	0.187	Kiribati	0.076	Kiribati	0.074
Burundi	0.181	Liberia	0.184	Liberia	0.063	Liberia	0.064
Central African Rep.	0.161	Central African Rep.	0.171	Tuvalu	0.063	Tuvalu	0.064

Source: Finance Department.

1/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Out-of-lineness is measured as the calculated quota share based on the quota formula divided by the 14th General Review quota share.

3/ Based on IFS data through 2015.

4/ Based on IFS data through 2014.

5/ Out-of-lineness is measured as the PPP GDP share divided by the 14th General Review quota share.

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

Table A6. Distribution of Quotas and Updated Quota Variables—by Member
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
United States	82,994.2	11,775,182	10,977,668	11,775,182	10,977,668	4,482,190	4,246,770	119,485	120,280	87,512	94,719
Japan	30,820.5	3,239,165	3,394,254	3,227,066	3,065,528	1,435,457	1,406,256	46,579	47,090	872,277	822,571
China 6/	30,482.9	7,322,430	6,434,582	12,675,941	11,157,060	3,613,652	3,301,487	76,744	75,379	2,608,989	2,600,450
Germany	26,634.4	2,462,415	2,432,550	2,543,667	2,392,939	2,513,723	2,456,824	51,295	52,372	46,991	47,239
France	20,155.1	1,816,078	1,821,361	1,764,276	1,668,143	1,396,026	1,375,651	28,046	27,824	37,075	36,733
United Kingdom	20,155.1	1,912,801	1,803,402	1,764,086	1,619,049	1,522,591	1,479,439	42,726	43,298	80,558	63,926
Italy	15,070.0	1,371,093	1,390,908	1,448,838	1,390,964	928,965	929,098	23,814	23,948	35,588	35,122
India	13,114.4	1,351,060	1,265,388	4,998,154	4,478,365	742,557	708,255	13,264	13,087	237,512	194,161
Russia	12,903.7	1,195,257	1,316,498	2,546,515	2,291,627	756,552	759,510	23,988	23,996	227,597	274,740
Brazil	11,042.0	1,430,629	1,498,366	2,192,994	2,095,469	431,127	430,624	17,034	15,699	258,451	242,729
Canada	11,023.9	1,162,249	1,188,272	1,076,393	1,008,211	864,531	840,665	16,342	16,372	55,385	49,693
Saudi Arabia	9,992.6	482,598	486,752	1,092,245	1,008,154	429,058	415,862	23,461	22,934	481,814	487,489
Spain	9,535.5	899,408	908,762	1,055,791	1,010,328	680,562	672,403	19,050	18,316	31,497	23,860
Mexico	8,912.7	833,895	817,995	1,457,679	1,362,728	587,187	548,167	14,605	14,462	132,592	123,077
Netherlands	8,736.5	561,689	562,911	552,515	519,793	1,288,932	1,268,859	28,687	28,257	13,161	14,633
Korea, Republic of	8,582.7	924,360	861,989	1,206,213	1,117,665	922,895	893,073	8,971	8,445	260,245	235,092
Australia	6,572.4	940,167	984,900	744,639	693,324	494,162	492,287	12,177	12,148	34,594	33,653
Belgium	6,410.7	339,862	340,694	326,616	309,724	651,165	646,694	13,374	12,695	11,527	11,729
Switzerland	5,771.1	463,945	450,662	319,419	300,293	781,720	741,340	25,567	22,123	400,062	330,641
Turkey	4,658.6	618,252	527,337	1,031,019	947,699	314,873	299,648	9,801	9,762	73,589	73,040
Indonesia	4,648.4	600,923	594,444	1,820,264	1,651,587	292,245	282,730	7,389	6,452	75,139	69,238
Sweden	4,430.0	370,963	370,630	307,064	285,541	398,822	388,587	11,391	12,469	39,533	39,782
Poland	4,095.4	346,365	338,448	651,461	603,028	361,846	346,615	8,809	8,540	68,788	64,952
Austria	3,932.0	279,945	278,401	269,011	255,441	342,993	339,902	8,445	8,273	9,951	9,562
Singapore	3,891.9	203,267	196,955	308,827	284,018	799,286	772,920	16,408	15,954	179,189	178,301
Norway	3,754.7	316,121	335,102	234,664	219,987	279,166	276,392	9,549	10,843	45,779	42,378
Venezuela, R.B. de	3,722.7	415,734	241,372	362,998	357,413	108,654	108,871	4,761	4,830	4,649	4,593
Malaysia	3,633.8	215,686	213,549	520,425	471,561	331,839	326,720	7,359	7,550	71,398	84,237
Iran, I.R. of	3,567.1	313,989	374,761	907,249	857,775	118,795	126,819	5,229	4,250	91,264	84,403
Ireland	3,449.9	176,315	156,190	172,602	147,041	456,084	414,261	11,471	11,544	1,298	947
Denmark	3,439.4	224,459	221,026	171,240	161,025	266,353	258,250	5,923	5,924	62,356	51,736
Thailand	3,211.9	275,001	267,492	727,362	680,832	387,131	366,550	11,203	11,184	108,725	105,057
Argentina	3,187.3	405,220	358,259	587,119	606,798	127,434	127,476	4,613	4,024	20,744	17,247
South Africa	3,051.2	232,563	237,310	478,955	449,020	171,625	169,654	2,894	2,965	30,036	29,404
Nigeria	2,454.5	355,541	338,022	705,690	642,777	141,488	143,932	5,180	4,960	23,042	26,257

Table A6. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Greece	2,428.9	150,742	159,573	191,466	185,760	114,494	117,108	4,700	4,330	1,445	1,509
Finland	2,410.6	174,273	174,647	150,520	144,085	163,144	163,777	5,617	5,406	6,155	6,032
United Arab Emirates	2,311.2	260,808	253,853	416,019	381,966	448,517	416,319	11,117	9,790	55,513	49,980
Czech Republic	2,180.2	135,649	135,668	217,854	201,755	231,399	223,520	4,245	4,923	41,261	37,085
Portugal	2,060.1	147,419	147,173	191,758	181,630	146,025	147,000	4,167	4,355	4,475	2,789
Colombia	2,044.5	236,022	246,704	431,514	396,961	103,441	99,740	2,263	1,964	33,046	29,640
Philippines	2,042.9	191,806	176,564	470,714	421,733	125,047	115,563	3,898	3,813	52,739	47,817
Egypt	2,037.1	207,686	190,057	679,341	598,858	93,704	91,948	4,785	4,797	10,150	8,855
Pakistan	2,031.0	175,121	153,367	599,796	550,231	69,461	65,760	1,409	1,117	10,461	6,095
Ukraine	2,011.8	91,094	107,387	249,093	251,806	115,677	119,636	8,477	7,956	6,943	8,697
Algeria	1,959.9	132,231	138,346	374,510	342,737	94,860	94,901	5,158	4,866	112,480	125,841
Hungary	1,940.0	88,593	87,516	168,052	155,221	178,611	177,619	5,840	5,920	27,341	30,546
Kuwait	1,933.5	101,070	111,989	192,051	181,915	126,568	123,340	3,411	3,392	22,081	21,579
Israel	1,920.9	203,429	187,715	185,888	171,111	147,224	141,380	3,629	3,648	62,676	56,793
Romania	1,811.4	127,354	121,927	268,375	247,160	114,614	107,849	5,218	5,263	24,224	27,633
Chile	1,744.3	174,784	175,038	277,704	258,681	134,042	134,909	4,896	4,894	27,605	26,620
Iraq	1,663.8	126,863	127,007	363,068	337,683	96,260	98,535	5,510	4,741	42,388	44,993
Libya	1,573.2	33,686	41,227	71,445	80,730	45,152	49,462	6,352	5,972	57,582	65,578
Peru	1,334.5	134,709	130,783	253,473	232,894	72,907	70,625	3,055	3,016	43,126	41,744
Luxembourg	1,321.8	41,070	39,452	35,891	33,002	474,861	443,411	11,682	11,036	513	565
New Zealand	1,252.1	127,238	123,617	109,148	100,873	83,252	80,333	2,065	1,737	12,237	11,820
Kazakhstan	1,158.4	139,000	137,974	300,086	259,102	113,233	114,947	4,778	4,406	15,327	13,844
Vietnam	1,153.1	124,457	112,328	348,835	313,502	197,796	169,469	2,945	2,947	24,460	22,979
Syrian Arab Republic	1,109.8	156,778	156,778	89,474	89,474	28,431	28,290	646	720	282	282
Bangladesh	1,066.6	127,362	106,388	365,007	326,924	60,094	54,777	738	688	17,550	13,471
Congo, Dem. Rep. of	1,066.0	29,780	26,441	39,084	34,376	19,339	18,917	1,561	1,544	1,031	1,118
Slovak Republic	1,001.0	64,503	63,752	104,628	96,971	123,207	117,820	3,586	3,889	1,429	750
Zambia	978.2	16,659	16,742	40,350	37,490	13,917	13,405	484	450	2,217	2,091
Bulgaria	896.3	36,311	35,024	89,546	82,185	52,072	52,280	2,405	2,539	14,195	11,875
Morocco	894.4	71,510	69,047	176,744	162,432	60,729	57,793	1,565	1,149	14,493	13,216
Angola	740.1	89,395	80,718	119,492	108,767	78,257	79,419	3,846	3,702	17,870	19,728
Ghana	738.0	27,505	27,448	74,368	66,785	28,091	24,680	753	377	196	2,875
Qatar	735.1	128,070	132,472	207,640	190,323	150,459	141,749	5,539	5,439	28,535	27,917
Croatia	717.4	36,820	37,502	60,460	57,653	37,588	36,773	1,162	1,180	10,938	10,840
Zimbabwe	706.8	9,450	8,771	18,400	17,000	10,430	9,528	182	229	238	259

Table A6. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Ecuador	697.7	66,967	62,069	121,548	112,549	38,585	37,512	1,272	1,260	2,391	2,885
Belarus	681.5	45,745	46,578	114,792	110,071	64,020	62,966	2,006	1,984	2,174	2,820
Serbia	654.8	28,540	28,553	65,393	62,145	31,893	30,330	1,542	1,544	7,839	8,727
Côte d'Ivoire	650.4	22,030	20,283	49,397	42,933	19,292	19,301	389	401	3,470	2,977
Lebanon	633.5	33,232	30,846	54,942	51,499	48,718	47,017	2,220	2,551	28,945	25,980
Sudan	630.2	56,883	43,671	108,973	99,882	14,674	15,898	736	703	125	125
Slovenia	586.5	31,521	31,381	41,618	39,119	50,383	48,980	1,517	1,523	604	646
Sri Lanka	578.8	53,474	44,112	142,933	131,640	30,986	28,061	442	439	4,475	5,121
Uzbekistan	551.2	42,010	37,419	117,119	103,297	23,119	23,126	680	687	17,545	16,668
Tunisia	545.2	30,977	30,395	84,029	78,802	34,168	34,609	1,096	1,074	5,202	4,775
Oman	544.4	51,736	51,712	108,902	101,778	68,279	64,865	2,448	2,553	13,174	11,545
Kenya	542.8	40,525	34,278	90,368	81,615	21,999	20,619	541	415	5,271	4,867
Myanmar	516.8	42,440	38,002	177,380	146,017	20,521	16,547	837	677	2,875	2,950
Yemen	487.0	23,484	22,743	63,370	66,254	17,066	17,839	1,329	1,025	118	3,163
Dominican Republic	477.4	43,448	40,615	93,998	84,187	30,734	28,820	866	977	3,489	2,974
Trinidad and Tobago	469.8	18,311	16,094	30,080	27,764	27,244	23,239	1,422	1,429	7,822	7,262
Lithuania	441.6	30,509	30,071	54,108	50,137	52,531	49,907	2,154	1,990	744	5,259
Uruguay	429.1	34,776	35,315	47,949	44,555	19,628	18,884	752	718	12,577	11,485
Guatemala	428.6	39,899	35,663	81,177	74,445	26,948	25,120	405	375	5,287	4,550
Tanzania	397.8	31,172	28,611	87,064	77,511	15,809	15,032	869	844	2,956	2,957
Bahrain	395.0	22,192	21,256	41,571	38,375	35,281	32,248	1,074	1,064	3,357	3,785
Azerbaijan	391.7	45,406	47,931	111,742	103,387	39,566	39,075	1,159	981	6,728	10,591
Jamaica	382.9	9,579	9,402	16,376	15,518	10,447	10,015	486	506	1,943	1,487
Panama	376.8	33,048	29,323	55,355	46,501	44,589	41,824	815	827	2,761	1,877
Costa Rica	369.4	34,824	31,575	48,579	44,501	23,949	21,482	577	498	5,740	4,824
Uganda	361.0	17,950	14,162	51,059	46,469	9,951	9,344	146	151	2,084	2,273
Jordan	343.1	24,169	21,963	54,008	50,140	30,769	29,249	882	846	11,053	9,794
Latvia	332.3	20,069	19,932	31,970	30,358	27,698	26,314	981	981	2,268	2,089
Afghanistan	323.8	14,205	13,706	41,089	38,470	10,964	9,131	2,412	2,440	4,690	4,302
Senegal	323.6	9,958	9,812	23,308	21,193	9,750	9,170	457	462	1,376	1,357
Iceland	321.8	11,085	10,220	9,844	9,040	11,265	9,903	5,662	4,854	3,150	2,826
Cyprus	303.8	15,052	15,769	18,760	18,379	29,016	31,516	1,164	1,075	254	236
Brunei	301.3	10,802	10,977	22,426	21,780	13,349	13,472	836	485	2,315	2,186
Ethiopia	300.7	39,132	33,485	98,899	85,442	17,899	15,851	477	394	2,349	1,934
El Salvador	287.2	16,998	16,046	34,606	32,456	15,000	14,026	444	424	2,012	1,763

Table A6. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Cameroon	276.0	20,289	19,218	46,095	41,519	11,898	11,208	297	273	2,036	2,088
Bosnia & Herzegovina	265.2	12,267	12,336	26,620	24,372	13,127	12,903	412	401	3,224	3,200
Papua New Guinea	263.2	14,592	10,469	16,943	11,198	10,502	10,239	328	291	1,404	1,680
Nicaragua	260.0	7,995	7,247	20,225	18,348	8,988	8,276	170	187	1,707	1,383
Liberia	258.4	1,356	1,252	2,506	2,325	3,669	3,463	154	166	371	316
Honduras	249.8	13,127	12,370	26,631	24,617	14,458	13,388	350	350	2,558	2,007
South Sudan	246.0	9,665	7,261	15,736	13,802	7,870	9,742	1,052	1,395	179	341
Madagascar	244.4	6,987	6,833	23,059	21,375	5,465	5,165	103	110	526	481
Estonia	243.6	16,547	16,074	24,759	23,200	29,693	28,783	1,047	1,008	291	276
Bolivia	240.1	21,827	19,860	47,589	42,949	17,137	15,572	410	462	9,239	8,759
Turkmenistan	238.6	27,804	27,167	55,365	48,477	25,689	24,465	801	746	21,620	20,668
Mozambique	227.2	10,763	10,554	20,947	18,823	11,561	10,393	452	460	1,808	2,116
Gabon	216.0	11,255	11,594	22,293	20,323	11,785	12,150	480	457	1,521	1,854
Guinea	214.2	4,488	4,049	10,176	9,633	3,794	3,448	247	245	407	475
Georgia	210.4	10,497	10,616	23,114	21,296	12,787	11,744	242	227	1,770	1,721
Sierra Leone	207.4	3,184	3,053	7,768	7,485	2,818	2,576	164	156	428	371
Paraguay	201.4	19,630	18,713	39,519	35,271	18,455	17,922	504	428	4,500	4,090
Botswana	197.2	10,147	9,878	23,168	21,904	13,108	12,244	492	352	6,044	5,532
Namibia	191.1	8,347	8,617	16,246	14,505	10,177	9,728	333	322	931	951
Mali	186.6	7,627	7,281	22,527	16,883	6,851	6,531	354	350	561	625
Bahamas, The	182.4	5,870	5,509	6,042	5,794	5,876	5,670	176	144	681	635
Guyana	181.8	2,085	1,944	3,743	3,432	3,134	3,040	87	86	416	443
Kyrgyz Republic	177.6	4,813	4,671	13,109	11,762	8,225	7,579	215	192	1,216	1,305
Cambodia	175.0	11,306	10,085	34,098	30,317	15,550	13,260	220	211	4,502	3,514
Tajikistan	174.0	5,764	5,554	15,179	13,565	5,976	6,297	162	184	82	113
Moldova	172.5	5,046	5,084	11,855	10,843	7,583	7,298	306	328	1,275	1,746
Malta	168.3	6,803	6,504	9,855	8,851	39,420	37,481	928	941	420	515
Haiti	163.8	5,734	5,537	12,382	11,506	5,295	5,240	207	177	1,364	1,333
Somalia	163.4	4,017	3,630	5,519	4,901	5,256	4,595	55	39	32	18
Congo, Rep. of	162.0	8,037	8,907	18,954	17,362	14,520	15,681	1,180	851	2,300	3,450
Rwanda	160.2	5,458	5,133	12,842	11,518	3,329	2,998	240	232	680	627
Equatorial Guinea	157.5	12,430	11,086	24,502	18,945	20,715	20,841	824	730	1,302	2,460
Nepal	156.9	13,718	12,186	45,309	41,371	10,911	9,847	209	202	4,879	3,862
Burundi	154.0	1,839	1,769	5,299	5,197	1,072	1,072	44	43	164	206
Togo	146.8	2,875	2,769	6,922	6,253	3,826	3,779	161	165	373	314

Table A6. Distribution of Quotas and Updated Quota Variables—by Member (continued)
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Mauritius	142.2	8,133	7,881	15,941	14,699	14,945	14,332	857	850	2,647	2,418
Macedonia, FYR	140.3	7,130	6,811	18,805	17,331	9,620	9,122	307	267	1,626	1,722
Chad	140.2	8,499	8,594	19,770	18,016	7,553	7,341	325	302	414	591
Albania	139.3	8,417	8,398	21,334	20,072	7,759	7,867	252	252	1,969	1,771
Malawi	138.8	3,974	3,648	13,159	12,004	3,701	3,676	180	237	492	309
Niger	131.6	5,193	4,988	12,170	10,977	3,803	3,653	89	67	735	807
Suriname	128.9	3,441	3,339	6,040	5,685	3,652	3,533	128	125	304	440
Armenia	128.8	7,496	6,846	16,475	15,228	7,480	7,269	260	243	1,112	1,189
Mauritania	128.8	3,496	2,398	10,427	9,502	4,292	4,342	157	199	1	1
Benin	123.8	5,793	5,420	14,584	12,183	4,446	3,660	226	227	514	587
Burkina Faso	120.4	8,055	7,817	19,930	18,146	5,754	4,867	133	161	233	264
Central African Rep.	111.4	1,087	1,189	1,946	2,175	672	646	51	49	158	155
Lao P.D.R.	105.8	7,937	6,786	23,491	20,787	5,196	4,689	110	287	751	552
Fiji	98.4	2,961	2,780	5,165	4,558	3,716	3,549	74	77	655	601
Barbados	94.5	2,967	2,775	3,098	2,946	3,679	3,558	68	71	434	426
Kosovo	82.6	4,702	4,587	11,393	10,622	4,809	4,552	91	87	549	699
Swaziland	78.5	3,215	3,040	7,134	6,652	4,147	4,142	98	98	473	498
Mongolia	72.3	8,259	7,778	23,268	20,740	9,536	8,803	605	599	999	1,020
Lesotho	69.8	1,444	1,472	3,770	3,483	3,307	3,366	73	77	743	719
Gambia, The	62.2	604	573	2,127	1,971	681	661	15	16	99	128
Montenegro	60.5	2,944	2,866	6,496	5,967	3,519	3,450	154	152	585	428
San Marino	49.2	1,185	1,171	1,321	1,263	3,463	4,279	162	209	266	295
Eritrea	36.6	2,769	2,275	5,581	4,988	1,514	1,289	40	35	214	113
Djibouti	31.8	1,079	963	1,956	1,761	1,132	952	35	30	277	252
Guinea-Bissau	28.4	760	752	1,729	1,604	471	443	169	169	230	184
Belize	26.7	1,144	1,076	1,999	1,868	1,594	1,494	32	32	348	296
Timor-Leste	25.6	2,838	3,532	4,253	5,055	3,205	3,348	149	131	179	267
Vanuatu	23.8	531	526	458	432	631	587	25	20	167	120
Cabo Verde	23.7	1,202	1,192	2,247	2,118	1,631	1,646	44	39	331	313
Seychelles	22.9	966	888	1,555	1,504	1,993	1,865	78	78	365	306
St. Lucia	21.4	934	876	1,332	1,273	979	980	23	23	227	154
Maldives	21.2	2,111	1,833	3,364	2,874	3,994	3,606	126	114	466	334
Solomon Islands	20.8	694	659	748	693	1,065	1,009	26	25	354	335
Bhutan	20.4	1,315	1,216	3,831	3,587	1,647	1,585	89	85	789	723
Antigua and Barbuda	20.0	865	793	1,368	1,271	910	884	20	20	233	174

Table A6. Distribution of Quotas and Updated Quota Variables—by Member (concluded)
(in SDR millions)

	14th General Review Quotas 1/	GDP		PPP GDP 4/		Openness		Variability 5/		Reserves	
		Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/	Current 2/	Previous 3/
Comoros	17.8	434	410	803	750	496	463	15	17	106	109
Grenada	16.4	619	551	912	820	514	488	34	15	127	105
Samoa	16.2	542	531	660	639	607	587	11	12	100	109
São Tomé and Príncipe	14.8	216	197	424	388	205	184	31	31	51	43
Tonga	13.8	288	293	347	320	474	404	10	10	106	104
St. Kitts	12.5	568	512	866	781	591	570	18	15	215	231
St. Vincent	11.7	494	469	801	754	468	461	15	16	112	94
Dominica	11.5	351	343	527	497	348	332	9	8	83	63
Kiribati	11.2	120	123	131	118	255	231	15	8	399	382
Micronesia, FS of	7.2	215	207	207	204	410	391	15	14	87	64
Marshall Islands	4.9	127	125	115	116	315	298	11	12	3	3
Palau	4.9	177	154	170	157	302	273	5	6	3	3
Nauru	2.8	71	77	87	41	140	122	3	3	19	12
Tuvalu	2.5	24	25	24	22	78	79	2	2	24	46

Source: Finance Department.

1/ Includes South Sudan and Nauru, which became members on April 18, 2012 and April 12, 2016, respectively; reflects their quota increases proposed in their respective membership resolutions after the effectiveness of the 14th Review.

2/ Based on IFS data through 2015.

3/ Based on IFS data through 2014.

4/ Current PPP-GDP data were retrieved from the WEO database for 186 countries. For the countries with no WEO data (Nauru, Somalia, and Syrian Arab Republic), PPP-GDP was gap filled.

5/ Variability of current receipts minus (instead of plus) net capital flows due to change in sign convention in BPM6.

6/ Including China, P.R., Hong Kong SAR, and Macao SAR.

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
United States	12.772	13.950	14.217	15.248	13.093	13.380	13.742	13.867	20.137
Japan	4.090	4.467	4.553	4.883	4.193	4.285	4.401	4.441	5.533
China 2/	10.297	11.247	11.462	12.293	10.556	10.787	11.079	11.180	15.441
Germany	7.163	7.823	7.659	6.383	7.343	7.504	7.707	5.596	4.255
France	3.978	4.345	4.428	4.616	4.078	4.167	4.280	3.000	3.077
United Kingdom	4.339	4.739	4.829	4.785	4.448	4.545	4.668	4.710	3.190
Italy	2.647	2.891	2.947	3.160	2.714	2.773	2.848	2.012	2.387
India	2.116	2.311	2.355	2.526	2.169	2.217	2.277	2.297	4.299
Russia	2.156	2.355	2.400	2.574	2.210	2.258	2.319	2.341	2.781
Brazil	1.229	1.342	1.367	1.467	1.259	1.287	1.322	1.334	2.862
Canada	2.464	2.691	2.742	2.911	2.525	2.581	2.650	2.675	1.941
Saudi Arabia	1.223	1.335	1.361	1.460	1.253	1.281	1.315	1.327	1.158
Spain	1.939	2.118	2.159	2.315	1.988	2.032	2.086	1.456	1.623
Mexico	1.673	1.827	1.862	1.998	1.715	1.753	1.800	1.817	1.766
Netherlands	3.673	1.911	1.720	1.433	3.649	2.788	2.323	2.802	0.956
Korea, Republic of	2.630	2.872	2.927	2.602	2.696	2.755	2.829	2.855	1.734
Australia	1.408	1.538	1.567	1.681	1.444	1.475	1.515	1.529	1.501
Belgium	1.856	1.148	1.033	0.861	1.902	1.687	1.406	0.984	0.574
Switzerland	2.228	1.429	1.286	1.072	2.284	2.303	1.919	2.418	0.715
Turkey	0.897	0.980	0.999	1.071	0.920	0.940	0.965	0.974	1.282
Indonesia	0.833	0.910	0.927	0.994	0.854	0.872	0.896	0.904	1.693
Sweden	1.136	1.199	1.079	0.899	1.165	1.191	1.223	1.234	0.600
Poland	1.031	1.126	1.148	1.138	1.057	1.080	1.109	1.119	0.759
Austria	0.977	0.946	0.851	0.709	1.002	1.024	1.052	0.644	0.473
Singapore	2.278	0.810	0.729	0.608	1.321	1.009	0.841	2.473	0.405
Norway	0.796	0.869	0.885	0.744	0.815	0.833	0.856	0.864	0.496
Venezuela, R.B. de	0.310	0.338	0.345	0.370	0.317	0.324	0.333	0.336	0.682
Malaysia	0.946	1.033	0.963	0.803	0.969	0.991	0.892	1.027	0.535
Iran, I.R. of	0.339	0.370	0.377	0.404	0.347	0.355	0.364	0.368	0.860
Ireland	1.300	0.599	0.539	0.449	1.145	0.875	0.729	1.282	0.300
Denmark	0.759	0.710	0.639	0.532	0.778	0.795	0.817	0.824	0.355
Thailand	1.103	1.205	1.228	1.075	1.131	1.156	1.138	1.198	0.717
Argentina	0.363	0.397	0.404	0.434	0.372	0.380	0.391	0.394	0.792
South Africa	0.489	0.534	0.544	0.584	0.501	0.512	0.526	0.531	0.532
Nigeria	0.403	0.440	0.449	0.481	0.413	0.422	0.434	0.438	0.799

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member (continued)
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
Greece	0.326	0.356	0.363	0.389	0.334	0.342	0.351	0.283	0.280
Finland	0.465	0.508	0.513	0.428	0.477	0.487	0.500	0.393	0.285
United Arab Emirates	1.278	1.061	0.955	0.796	1.310	1.295	1.079	1.388	0.531
Czech Republic	0.659	0.554	0.498	0.415	0.676	0.673	0.561	0.716	0.277
Portugal	0.416	0.454	0.463	0.414	0.427	0.436	0.448	0.274	0.276
Colombia	0.295	0.322	0.328	0.352	0.302	0.309	0.317	0.320	0.510
Philippines	0.356	0.389	0.397	0.425	0.365	0.373	0.383	0.387	0.480
Egypt	0.267	0.292	0.297	0.319	0.274	0.280	0.287	0.290	0.612
Pakistan	0.198	0.216	0.220	0.236	0.203	0.207	0.213	0.215	0.531
Ukraine	0.330	0.360	0.367	0.363	0.338	0.345	0.355	0.358	0.242
Algeria	0.270	0.295	0.301	0.323	0.277	0.283	0.291	0.294	0.358
Hungary	0.509	0.390	0.351	0.292	0.522	0.440	0.366	0.553	0.195
Kuwait	0.361	0.394	0.400	0.334	0.370	0.378	0.388	0.392	0.223
Israel	0.420	0.458	0.467	0.501	0.430	0.439	0.451	0.456	0.338
Romania	0.327	0.357	0.364	0.390	0.335	0.342	0.351	0.355	0.295
Chile	0.382	0.417	0.425	0.456	0.392	0.400	0.411	0.415	0.355
Iraq	0.274	0.300	0.305	0.327	0.281	0.287	0.295	0.298	0.346
Libya	0.129	0.141	0.141	0.117	0.132	0.135	0.138	0.140	0.078
Peru	0.208	0.227	0.231	0.248	0.213	0.218	0.224	0.226	0.295
Luxembourg	1.353	0.135	0.121	0.101	0.267	0.204	0.170	1.402	0.067
New Zealand	0.237	0.259	0.264	0.283	0.243	0.249	0.255	0.258	0.208
Kazakhstan	0.323	0.352	0.359	0.385	0.331	0.338	0.347	0.350	0.326
Vietnam	0.564	0.616	0.603	0.503	0.578	0.590	0.515	0.612	0.335
Syrian Arab Republic	0.081	0.088	0.090	0.097	0.083	0.085	0.087	0.088	0.231
Bangladesh	0.171	0.187	0.191	0.204	0.176	0.179	0.184	0.186	0.347
Congo, Dem. Rep. of	0.055	0.060	0.061	0.066	0.056	0.058	0.059	0.060	0.056
Slovak Republic	0.351	0.264	0.238	0.198	0.360	0.320	0.267	0.237	0.132
Zambia	0.040	0.043	0.044	0.047	0.041	0.042	0.043	0.043	0.041
Bulgaria	0.148	0.162	0.164	0.137	0.152	0.155	0.150	0.161	0.091
Morocco	0.173	0.189	0.193	0.207	0.177	0.181	0.186	0.188	0.180
Angola	0.223	0.244	0.248	0.254	0.229	0.234	0.240	0.242	0.169
Ghana	0.080	0.087	0.089	0.096	0.082	0.084	0.086	0.087	0.073
Qatar	0.429	0.468	0.472	0.394	0.440	0.449	0.461	0.466	0.262
Croatia	0.107	0.117	0.119	0.114	0.110	0.112	0.115	0.116	0.076
Zimbabwe	0.030	0.032	0.033	0.032	0.030	0.031	0.032	0.032	0.021

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member (continued)
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
Ecuador	0.110	0.120	0.122	0.131	0.113	0.115	0.118	0.119	0.144
Belarus	0.182	0.199	0.203	0.174	0.187	0.191	0.189	0.198	0.116
Serbia	0.091	0.099	0.101	0.103	0.093	0.095	0.098	0.099	0.069
Côte d'Ivoire	0.055	0.060	0.061	0.066	0.056	0.058	0.059	0.057	0.053
Lebanon	0.139	0.137	0.124	0.103	0.142	0.145	0.137	0.151	0.069
Sudan	0.042	0.046	0.047	0.050	0.043	0.044	0.045	0.045	0.126
Slovenia	0.144	0.119	0.107	0.089	0.147	0.150	0.130	0.083	0.059
Sri Lanka	0.088	0.096	0.098	0.105	0.091	0.092	0.095	0.096	0.140
Uzbekistan	0.066	0.072	0.073	0.079	0.068	0.069	0.071	0.072	0.113
Tunisia	0.097	0.106	0.108	0.116	0.100	0.102	0.105	0.106	0.082
Oman	0.195	0.213	0.215	0.179	0.199	0.204	0.209	0.211	0.120
Kenya	0.063	0.068	0.070	0.075	0.064	0.066	0.067	0.068	0.097
Myanmar	0.058	0.064	0.065	0.070	0.060	0.061	0.063	0.064	0.146
Yemen	0.049	0.053	0.054	0.058	0.050	0.051	0.052	0.053	0.062
Dominican Republic	0.088	0.096	0.097	0.105	0.090	0.092	0.094	0.095	0.102
Trinidad and Tobago	0.078	0.075	0.068	0.057	0.080	0.081	0.076	0.084	0.038
Lithuania	0.150	0.130	0.117	0.098	0.153	0.151	0.126	0.112	0.065
Uruguay	0.056	0.061	0.062	0.067	0.057	0.059	0.060	0.061	0.067
Guatemala	0.077	0.084	0.085	0.092	0.079	0.080	0.083	0.083	0.091
Tanzania	0.045	0.049	0.050	0.054	0.046	0.047	0.048	0.049	0.084
Bahrain	0.101	0.097	0.087	0.073	0.103	0.105	0.092	0.109	0.049
Azerbaijan	0.113	0.123	0.125	0.135	0.116	0.118	0.121	0.122	0.114
Jamaica	0.030	0.033	0.033	0.030	0.031	0.031	0.032	0.032	0.020
Panama	0.127	0.137	0.124	0.103	0.130	0.133	0.137	0.138	0.069
Costa Rica	0.068	0.075	0.076	0.081	0.070	0.071	0.073	0.074	0.067
Uganda	0.028	0.031	0.032	0.034	0.029	0.030	0.031	0.031	0.049
Jordan	0.088	0.096	0.098	0.086	0.090	0.092	0.094	0.095	0.058
Latvia	0.079	0.082	0.073	0.061	0.081	0.083	0.083	0.053	0.041
Afghanistan	0.031	0.034	0.035	0.037	0.032	0.033	0.034	0.034	0.039
Senegal	0.028	0.030	0.031	0.033	0.028	0.029	0.030	0.029	0.024
Iceland	0.032	0.035	0.033	0.027	0.033	0.034	0.035	0.035	0.018
Cyprus	0.083	0.056	0.050	0.042	0.085	0.075	0.062	0.080	0.028
Brunei	0.038	0.042	0.042	0.037	0.039	0.040	0.041	0.041	0.025
Ethiopia	0.051	0.056	0.057	0.061	0.052	0.053	0.055	0.055	0.100
El Salvador	0.043	0.047	0.048	0.051	0.044	0.045	0.046	0.046	0.039

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member (continued)
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
Cameroon	0.034	0.037	0.038	0.040	0.035	0.036	0.036	0.036	0.049
Bosnia & Herzegovina	0.037	0.041	0.042	0.043	0.038	0.039	0.040	0.041	0.029
Papua New Guinea	0.030	0.033	0.033	0.036	0.031	0.031	0.032	0.033	0.026
Nicaragua	0.026	0.028	0.029	0.031	0.026	0.027	0.028	0.028	0.020
Liberia	0.010	0.006	0.005	0.004	0.009	0.007	0.006	0.011	0.003
Honduras	0.041	0.045	0.046	0.045	0.042	0.043	0.044	0.045	0.030
South Sudan	0.022	0.024	0.025	0.027	0.023	0.023	0.024	0.024	0.020
Madagascar	0.016	0.017	0.017	0.019	0.016	0.016	0.017	0.017	0.021
Estonia	0.085	0.066	0.059	0.049	0.087	0.082	0.068	0.058	0.033
Bolivia	0.049	0.053	0.054	0.058	0.050	0.051	0.053	0.053	0.051
Turkmenistan	0.073	0.080	0.081	0.087	0.075	0.077	0.079	0.080	0.063
Mozambique	0.033	0.036	0.037	0.036	0.034	0.035	0.035	0.036	0.024
Gabon	0.034	0.037	0.037	0.038	0.034	0.035	0.036	0.036	0.025
Guinea	0.011	0.012	0.012	0.013	0.011	0.011	0.012	0.012	0.011
Georgia	0.036	0.040	0.041	0.037	0.037	0.038	0.039	0.040	0.025
Sierra Leone	0.008	0.009	0.009	0.010	0.008	0.008	0.009	0.009	0.008
Paraguay	0.053	0.057	0.059	0.063	0.054	0.055	0.057	0.057	0.044
Botswana	0.037	0.041	0.042	0.037	0.038	0.039	0.040	0.041	0.025
Namibia	0.029	0.032	0.032	0.028	0.030	0.030	0.031	0.032	0.019
Mali	0.020	0.021	0.022	0.023	0.020	0.020	0.021	0.020	0.021
Bahamas, The	0.017	0.018	0.018	0.015	0.017	0.018	0.018	0.018	0.010
Guyana	0.009	0.009	0.008	0.007	0.009	0.009	0.009	0.010	0.005
Kyrgyz Republic	0.023	0.026	0.023	0.019	0.024	0.024	0.020	0.025	0.013
Cambodia	0.044	0.048	0.049	0.048	0.045	0.046	0.047	0.048	0.032
Tajikistan	0.017	0.019	0.019	0.020	0.017	0.018	0.018	0.019	0.015
Moldova	0.022	0.024	0.022	0.019	0.022	0.023	0.021	0.024	0.012
Malta	0.112	0.027	0.024	0.020	0.044	0.034	0.028	0.112	0.013
Haiti	0.015	0.016	0.017	0.018	0.015	0.016	0.016	0.016	0.013
Somalia	0.015	0.015	0.014	0.012	0.015	0.016	0.016	0.016	0.008
Congo, Rep. of	0.041	0.039	0.035	0.030	0.042	0.040	0.033	0.045	0.020
Rwanda	0.009	0.010	0.011	0.011	0.010	0.010	0.010	0.010	0.013
Equatorial Guinea	0.059	0.056	0.050	0.042	0.061	0.062	0.051	0.064	0.028
Nepal	0.031	0.034	0.035	0.037	0.032	0.033	0.033	0.034	0.041
Burundi	0.003	0.003	0.003	0.004	0.003	0.003	0.003	0.003	0.005
Togo	0.011	0.012	0.012	0.011	0.011	0.011	0.012	0.011	0.007

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member (continued)
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
Mauritius	0.0426	0.0363	0.0327	0.0272	0.0437	0.0404	0.0336	0.0460	0.0180
Macedonia, FYR	0.0274	0.0299	0.0305	0.0278	0.0281	0.0287	0.0295	0.0300	0.0190
Chad	0.0215	0.0235	0.0240	0.0257	0.0221	0.0225	0.0232	0.0230	0.0210
Albania	0.0221	0.0241	0.0246	0.0264	0.0227	0.0232	0.0238	0.0240	0.0210
Malawi	0.0105	0.0115	0.0117	0.0126	0.0108	0.0110	0.0113	0.0120	0.0120
Niger	0.0108	0.0118	0.0121	0.0129	0.0111	0.0114	0.0117	0.0110	0.0130
Suriname	0.0104	0.0114	0.0116	0.0110	0.0107	0.0109	0.0112	0.0110	0.0070
Armenia	0.0213	0.0233	0.0237	0.0254	0.0219	0.0223	0.0229	0.0230	0.0180
Mauritania	0.0122	0.0134	0.0136	0.0146	0.0125	0.0128	0.0132	0.0130	0.0100
Benin	0.0127	0.0138	0.0141	0.0151	0.0130	0.0133	0.0136	0.0130	0.0150
Burkina Faso	0.0164	0.0179	0.0183	0.0196	0.0168	0.0172	0.0176	0.0160	0.0200
Central African Rep.	0.0019	0.0021	0.0021	0.0023	0.0020	0.0020	0.0021	0.0020	0.0020
Lao P.D.R.	0.0148	0.0162	0.0165	0.0177	0.0152	0.0155	0.0159	0.0160	0.0220
Fiji	0.0106	0.0116	0.0113	0.0094	0.0109	0.0111	0.0114	0.0120	0.0060
Barbados	0.0105	0.0103	0.0093	0.0077	0.0107	0.0110	0.0113	0.0110	0.0050
Kosovo	0.0137	0.0150	0.0153	0.0164	0.0140	0.0144	0.0147	0.0150	0.0120
Swaziland	0.0118	0.0129	0.0132	0.0115	0.0121	0.0124	0.0127	0.0130	0.0080
Mongolia	0.0272	0.0297	0.0302	0.0324	0.0279	0.0285	0.0292	0.0300	0.0220
Lesotho	0.0094	0.0075	0.0067	0.0056	0.0094	0.0072	0.0060	0.0100	0.0040
Gambia, The	0.0019	0.0021	0.0022	0.0023	0.0020	0.0020	0.0021	0.0020	0.0020
Montenegro	0.0100	0.0110	0.0112	0.0105	0.0103	0.0105	0.0108	0.0110	0.0070
San Marino	0.0099	0.0042	0.0038	0.0032	0.0077	0.0059	0.0049	0.0110	0.0020
Eritrea	0.0043	0.0047	0.0048	0.0051	0.0044	0.0045	0.0046	0.0050	0.0060
Djibouti	0.0032	0.0035	0.0036	0.0035	0.0033	0.0034	0.0035	0.0040	0.0020
Guinea-Bissau	0.0013	0.0015	0.0015	0.0016	0.0014	0.0014	0.0014	0.0010	0.0020
Belize	0.0045	0.0048	0.0044	0.0036	0.0047	0.0048	0.0047	0.0050	0.0020
Timor-Leste	0.0091	0.0100	0.0101	0.0084	0.0094	0.0096	0.0098	0.0100	0.0060
Vanuatu	0.0018	0.0017	0.0016	0.0013	0.0018	0.0019	0.0019	0.0020	0.0010
Cabo Verde	0.0046	0.0051	0.0047	0.0039	0.0048	0.0049	0.0050	0.0050	0.0030
Seychelles	0.0057	0.0039	0.0036	0.0030	0.0058	0.0048	0.0040	0.0060	0.0020
St. Lucia	0.0028	0.0030	0.0031	0.0027	0.0029	0.0029	0.0030	0.0030	0.0020
Maldives	0.0114	0.0086	0.0077	0.0064	0.0117	0.0105	0.0087	0.0120	0.0040
Solomon Islands	0.0030	0.0024	0.0022	0.0018	0.0031	0.0032	0.0029	0.0030	0.0010
Bhutan	0.0047	0.0051	0.0052	0.0054	0.0048	0.0049	0.0051	0.0050	0.0040
Antigua and Barbuda	0.0026	0.0028	0.0029	0.0026	0.0027	0.0027	0.0028	0.0030	0.0020

Table A7. Openness Shares Under Caps and Excluding Intra Currency Union Trade—by Member (concluded)
(in percent)

	Openness Share	Capped Openness (Shares)			Capped Openness (Absolute)			Openness Excluding Intra Currency Union	GDP blend Share
		2.0	1.8	1.5	95th 1/	85th 1/	75th 1/		
Comoros	0.00141	0.00155	0.00157	0.00142	0.00145	0.00148	0.00152	0.00154	0.00094
Grenada	0.00147	0.00160	0.00163	0.00175	0.00150	0.00154	0.00158	0.00147	0.00122
Samoa	0.00173	0.00189	0.00178	0.00149	0.00177	0.00181	0.00186	0.00188	0.00099
São Tomé and Príncipe	0.00059	0.00064	0.00065	0.00070	0.00060	0.00061	0.00063	0.00064	0.00048
Tonga	0.00135	0.00105	0.00094	0.00079	0.00138	0.00141	0.00119	0.00147	0.00052
St. Kitts	0.00168	0.00184	0.00187	0.00170	0.00173	0.00176	0.00181	0.00176	0.00113
St. Vincent	0.00133	0.00146	0.00148	0.00152	0.00137	0.00140	0.00144	0.00137	0.00101
Dominica	0.00099	0.00108	0.00110	0.00104	0.00102	0.00104	0.00107	0.00094	0.00070
Kiribati	0.00073	0.00042	0.00038	0.00032	0.00075	0.00060	0.00050	0.00079	0.00021
Micronesia, FS of	0.00117	0.00073	0.00065	0.00055	0.00120	0.00107	0.00089	0.00127	0.00036
Marshall Islands	0.00090	0.00042	0.00038	0.00032	0.00082	0.00063	0.00052	0.00097	0.00021
Palau	0.00086	0.00060	0.00054	0.00045	0.00088	0.00088	0.00073	0.00094	0.00030
Nauru	0.00040	0.00026	0.00023	0.00020	0.00041	0.00035	0.00029	0.00043	0.00013
Tuvalu	0.00022	0.00008	0.00007	0.00006	0.00016	0.00012	0.00010	0.00024	0.00004

Source: Finance Department

1/ These correspond to the thresholds on absolute ratios of openness to market GDP of 2.22, 1.66, and 1.35 for the 95th, 85th and 75th percentile caps, respectively.

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

**Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member
(in percent)**

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
United States	17.398	14.478	14.992	15.158	15.491	15.824
Japan	6.461	5.100	5.089	5.125	5.195	5.266
China 1/	6.390	12.581	13.224	13.342	13.578	13.815
Germany	5.583	4.951	4.994	4.929	4.799	4.669
France	4.225	3.168	3.250	3.230	3.190	3.151
United Kingdom	4.225	3.568	3.463	3.438	3.387	3.336
Italy	3.159	2.399	2.400	2.395	2.385	2.374
India	2.749	3.113	3.373	3.425	3.531	3.636
Russia	2.705	2.564	2.556	2.572	2.604	2.636
Brazil	2.315	2.250	2.288	2.328	2.408	2.488
Canada	2.311	2.030	2.100	2.089	2.065	2.042
Saudi Arabia	2.095	1.663	1.474	1.473	1.471	1.469
Spain	1.999	1.753	1.719	1.712	1.698	1.685
Mexico	1.868	1.737	1.764	1.767	1.773	1.779
Netherlands	1.831	2.070	1.966	1.901	1.771	1.640
Korea, Republic of	1.799	1.989	2.171	2.150	2.109	2.068
Australia	1.378	1.432	1.458	1.461	1.467	1.473
Belgium	1.344	1.113	1.083	1.052	0.988	0.925
Switzerland	1.210	1.723	1.543	1.506	1.433	1.360
Turkey	0.977	1.161	1.170	1.180	1.200	1.220
Indonesia	0.974	1.307	1.380	1.401	1.445	1.488
Sweden	0.929	0.896	0.845	0.832	0.806	0.779
Poland	0.859	0.921	0.916	0.910	0.897	0.884
Austria	0.824	0.717	0.692	0.679	0.654	0.629
Singapore	0.816	1.307	1.249	1.203	1.111	1.019
Norway	0.787	0.715	0.659	0.652	0.637	0.622
Venezuela, R.B. de	0.780	0.556	0.555	0.565	0.585	0.604
Malaysia	0.762	0.761	0.756	0.746	0.725	0.705
Iran, I.R. of	0.748	0.719	0.727	0.741	0.768	0.795
Ireland	0.723	0.771	0.708	0.683	0.632	0.581
Denmark	0.721	0.583	0.572	0.562	0.542	0.521
Thailand	0.673	0.986	0.945	0.935	0.917	0.898
Argentina	0.668	0.637	0.651	0.662	0.685	0.707
South Africa	0.640	0.520	0.552	0.553	0.556	0.559
Nigeria	0.515	0.663	0.672	0.682	0.703	0.724

Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Greece	0.509	0.349	0.318	0.317	0.315	0.312
Finland	0.505	0.414	0.379	0.374	0.365	0.356
United Arab Emirates	0.485	0.910	0.869	0.851	0.814	0.776
Czech Republic	0.457	0.470	0.474	0.464	0.444	0.425
Portugal	0.432	0.368	0.353	0.350	0.343	0.336
Colombia	0.429	0.439	0.466	0.471	0.483	0.495
Philippines	0.428	0.483	0.485	0.488	0.495	0.502
Egypt	0.427	0.511	0.501	0.510	0.528	0.547
Pakistan	0.426	0.391	0.425	0.434	0.452	0.470
Ukraine	0.422	0.397	0.300	0.297	0.293	0.289
Algeria	0.411	0.453	0.417	0.420	0.425	0.430
Hungary	0.407	0.398	0.356	0.348	0.331	0.315
Kuwait	0.405	0.321	0.310	0.307	0.300	0.292
Israel	0.403	0.431	0.431	0.429	0.425	0.421
Romania	0.380	0.381	0.342	0.341	0.340	0.339
Chile	0.366	0.426	0.403	0.402	0.401	0.400
Iraq	0.349	0.408	0.365	0.367	0.371	0.375
Libya	0.330	0.244	0.151	0.149	0.147	0.144
Peru	0.280	0.319	0.308	0.310	0.315	0.320
Luxembourg	0.277	0.673	0.591	0.559	0.492	0.426
New Zealand	0.262	0.244	0.245	0.244	0.243	0.242
Kazakhstan	0.243	0.382	0.353	0.354	0.354	0.355
Vietnam	0.242	0.438	0.460	0.454	0.443	0.431
Syrian Arab Republic	0.233	0.173	0.188	0.192	0.201	0.209
Bangladesh	0.224	0.278	0.308	0.313	0.323	0.332
Congo, Dem. Rep. of	0.223	0.084	0.065	0.065	0.065	0.065
Slovak Republic	0.210	0.259	0.237	0.231	0.219	0.208
Zambia	0.205	0.051	0.049	0.050	0.050	0.050
Bulgaria	0.188	0.159	0.137	0.135	0.132	0.129
Morocco	0.187	0.201	0.203	0.203	0.204	0.204
Angola	0.155	0.253	0.219	0.218	0.215	0.212
Ghana	0.155	0.087	0.086	0.086	0.086	0.085
Qatar	0.154	0.404	0.366	0.362	0.353	0.345
Croatia	0.150	0.113	0.107	0.107	0.105	0.103
Zimbabwe	0.148	0.029	0.030	0.029	0.029	0.028

Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Ecuador	0.146	0.148	0.146	0.147	0.149	0.151
Belarus	0.143	0.169	0.158	0.156	0.153	0.149
Serbia	0.137	0.108	0.094	0.093	0.092	0.091
Côte d'Ivoire	0.136	0.062	0.065	0.064	0.064	0.064
Lebanon	0.133	0.151	0.129	0.127	0.123	0.119
Sudan	0.132	0.103	0.104	0.107	0.112	0.116
Slovenia	0.123	0.115	0.105	0.102	0.098	0.093
Sri Lanka	0.121	0.125	0.136	0.138	0.141	0.144
Uzbekistan	0.116	0.115	0.119	0.120	0.123	0.125
Tunisia	0.114	0.108	0.103	0.103	0.102	0.101
Oman	0.114	0.190	0.173	0.171	0.167	0.163
Kenya	0.114	0.094	0.098	0.099	0.101	0.103
Myanmar	0.108	0.124	0.127	0.129	0.134	0.139
Yemen	0.102	0.080	0.066	0.066	0.067	0.068
Dominican Republic	0.100	0.110	0.111	0.111	0.112	0.113
Trinidad and Tobago	0.098	0.084	0.068	0.067	0.064	0.062
Lithuania	0.093	0.131	0.111	0.109	0.104	0.099
Uruguay	0.090	0.084	0.081	0.081	0.082	0.083
Guatemala	0.090	0.093	0.100	0.101	0.101	0.102
Tanzania	0.083	0.085	0.080	0.082	0.084	0.086
Bahrain	0.083	0.088	0.081	0.080	0.077	0.074
Azerbaijan	0.082	0.133	0.131	0.131	0.131	0.132
Jamaica	0.080	0.035	0.030	0.030	0.029	0.029
Panama	0.079	0.103	0.105	0.104	0.101	0.097
Costa Rica	0.077	0.080	0.081	0.081	0.081	0.081
Uganda	0.076	0.045	0.049	0.050	0.051	0.052
Jordan	0.072	0.091	0.087	0.087	0.085	0.083
Latvia	0.070	0.074	0.066	0.065	0.063	0.061
Afghanistan	0.068	0.084	0.046	0.046	0.047	0.047
Senegal	0.068	0.036	0.032	0.032	0.032	0.031
Iceland	0.067	0.131	0.031	0.031	0.030	0.029
Cyprus	0.064	0.070	0.058	0.056	0.053	0.050
Brunei	0.063	0.048	0.038	0.037	0.036	0.036
Ethiopia	0.063	0.088	0.093	0.094	0.097	0.100
El Salvador	0.060	0.050	0.049	0.049	0.048	0.048

Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Cameroon	0.058	0.050	0.052	0.052	0.053	0.054
Bosnia & Herzegovina	0.056	0.042	0.041	0.040	0.040	0.039
Papua New Guinea	0.055	0.035	0.034	0.034	0.034	0.034
Nicaragua	0.055	0.027	0.028	0.028	0.028	0.028
Liberia	0.054	0.010	0.008	0.008	0.007	0.007
Honduras	0.052	0.043	0.043	0.042	0.042	0.041
South Sudan	0.052	0.042	0.025	0.025	0.025	0.025
Madagascar	0.051	0.022	0.023	0.023	0.024	0.024
Estonia	0.051	0.071	0.062	0.060	0.057	0.054
Bolivia	0.050	0.064	0.065	0.065	0.066	0.066
Turkmenistan	0.050	0.095	0.092	0.092	0.091	0.091
Mozambique	0.048	0.038	0.034	0.034	0.034	0.033
Gabon	0.045	0.039	0.035	0.035	0.035	0.034
Guinea	0.045	0.017	0.014	0.014	0.014	0.014
Georgia	0.044	0.035	0.036	0.036	0.035	0.035
Sierra Leone	0.043	0.012	0.011	0.011	0.011	0.011
Paraguay	0.042	0.060	0.059	0.059	0.058	0.058
Botswana	0.041	0.044	0.040	0.039	0.039	0.038
Namibia	0.040	0.030	0.028	0.028	0.027	0.027
Mali	0.039	0.028	0.025	0.025	0.026	0.026
Bahamas, The	0.038	0.017	0.016	0.016	0.016	0.015
Guyana	0.038	0.009	0.008	0.008	0.008	0.008
Kyrgyz Republic	0.037	0.023	0.022	0.021	0.021	0.020
Cambodia	0.037	0.044	0.047	0.046	0.046	0.045
Tajikistan	0.036	0.020	0.020	0.019	0.019	0.019
Moldova	0.036	0.024	0.021	0.020	0.020	0.019
Malta	0.035	0.067	0.061	0.058	0.052	0.047
Haiti	0.034	0.020	0.018	0.018	0.018	0.018
Somalia	0.034	0.012	0.013	0.013	0.013	0.012
Congo, Rep. of	0.034	0.052	0.036	0.035	0.034	0.032
Rwanda	0.034	0.018	0.015	0.015	0.016	0.016
Equatorial Guinea	0.033	0.056	0.048	0.047	0.045	0.044
Nepal	0.033	0.045	0.047	0.047	0.048	0.049
Burundi	0.032	0.006	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.011	0.011

Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Mauritius	0.0298	0.0461	0.0353	0.0345	0.0331	0.0317
Macedonia, FYR	0.0294	0.0296	0.0279	0.0277	0.0272	0.0267
Chad	0.0294	0.0282	0.0258	0.0258	0.0258	0.0257
Albania	0.0292	0.0287	0.0278	0.0278	0.0278	0.0277
Malawi	0.0291	0.0160	0.0145	0.0146	0.0147	0.0148
Niger	0.0276	0.0150	0.0155	0.0156	0.0157	0.0158
Suriname	0.0270	0.0120	0.0111	0.0110	0.0108	0.0106
Armenia	0.0270	0.0256	0.0242	0.0241	0.0239	0.0237
Mauritania	0.0270	0.0145	0.0135	0.0134	0.0133	0.0131
Benin	0.0260	0.0195	0.0176	0.0177	0.0178	0.0180
Burkina Faso	0.0252	0.0222	0.0230	0.0232	0.0234	0.0237
Central African Rep.	0.0234	0.0038	0.0031	0.0031	0.0031	0.0032
Lao P.D.R.	0.0222	0.0227	0.0240	0.0242	0.0247	0.0251
Fiji	0.0206	0.0105	0.0107	0.0105	0.0103	0.0100
Barbados	0.0198	0.0095	0.0096	0.0095	0.0091	0.0088
Kosovo	0.0173	0.0154	0.0160	0.0159	0.0158	0.0157
Swaziland	0.0165	0.0122	0.0121	0.0120	0.0117	0.0115
Mongolia	0.0152	0.0370	0.0299	0.0298	0.0295	0.0293
Lesotho	0.0146	0.0086	0.0083	0.0082	0.0078	0.0074
Gambia, The	0.0130	0.0026	0.0027	0.0027	0.0027	0.0027
Montenegro	0.0127	0.0124	0.0109	0.0108	0.0106	0.0104
San Marino	0.0103	0.0091	0.0069	0.0067	0.0062	0.0057
Eritrea	0.0077	0.0071	0.0073	0.0074	0.0075	0.0076
Djibouti	0.0067	0.0040	0.0038	0.0038	0.0038	0.0037
Guinea-Bissau	0.0060	0.0058	0.0025	0.0025	0.0025	0.0025
Belize	0.0056	0.0046	0.0046	0.0046	0.0044	0.0043
Timor-Leste	0.0054	0.0107	0.0091	0.0090	0.0088	0.0086
Vanuatu	0.0050	0.0021	0.0019	0.0018	0.0018	0.0017
Cabo Verde	0.0050	0.0050	0.0048	0.0048	0.0046	0.0045
Seychelles	0.0048	0.0058	0.0049	0.0047	0.0045	0.0043
St. Lucia	0.0045	0.0032	0.0032	0.0031	0.0031	0.0030
Maldives	0.0044	0.0105	0.0095	0.0092	0.0088	0.0083
Solomon Islands	0.0044	0.0031	0.0029	0.0029	0.0028	0.0026
Bhutan	0.0043	0.0070	0.0060	0.0059	0.0059	0.0058
Antigua and Barbuda	0.0042	0.0030	0.0030	0.0030	0.0030	0.0029

Table A8. Illustrative Calculations - Current GDP and Openness Measures, and Dropping Variability—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Comoros	0.00373	0.00176	0.00168	0.00166	0.00163	0.00160
Grenada	0.00344	0.00241	0.00195	0.00194	0.00192	0.00191
Samoa	0.00340	0.00184	0.00188	0.00185	0.00180	0.00175
São Tomé and Príncipe	0.00310	0.00141	0.00081	0.00081	0.00080	0.00079
Tonga	0.00289	0.00133	0.00131	0.00128	0.00122	0.00116
St. Kitts	0.00262	0.00217	0.00207	0.00205	0.00201	0.00198
St. Vincent	0.00245	0.00179	0.00170	0.00169	0.00167	0.00165
Dominica	0.00241	0.00126	0.00123	0.00122	0.00120	0.00118
Kiribati	0.00235	0.00123	0.00098	0.00096	0.00093	0.00089
Micronesia, FS of	0.00151	0.00124	0.00106	0.00103	0.00097	0.00092
Marshall Islands	0.00103	0.00085	0.00071	0.00068	0.00063	0.00058
Palau	0.00103	0.00076	0.00076	0.00074	0.00070	0.00066
Nauru	0.00059	0.00038	0.00038	0.00037	0.00035	0.00033
Tuvalu	0.00052	0.00023	0.00020	0.00020	0.00018	0.00017
Coefficients for quota variables 2/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
United States	17.398	14.478	14.644	14.818	15.167
Japan	6.461	5.100	4.987	5.038	5.141
China 1/	6.390	12.581	13.370	13.297	13.151
Germany	5.583	4.951	4.921	4.957	5.030
France	4.225	3.168	3.187	3.219	3.281
United Kingdom	4.225	3.568	3.391	3.427	3.500
Italy	3.159	2.399	2.361	2.381	2.420
India	2.749	3.113	3.596	3.485	3.261
Russia	2.705	2.564	2.618	2.587	2.526
Brazil	2.315	2.250	2.298	2.293	2.283
Canada	2.311	2.030	2.056	2.078	2.123
Saudi Arabia	2.095	1.663	1.504	1.489	1.459
Spain	1.999	1.753	1.701	1.710	1.728
Mexico	1.868	1.737	1.784	1.774	1.755
Netherlands	1.831	2.070	1.946	1.956	1.976
Korea, Republic of	1.799	1.989	2.161	2.166	2.176
Australia	1.378	1.432	1.412	1.435	1.482
Belgium	1.344	1.113	1.070	1.077	1.089
Switzerland	1.210	1.723	1.516	1.529	1.556
Turkey	0.977	1.161	1.181	1.175	1.164
Indonesia	0.974	1.307	1.453	1.416	1.343
Sweden	0.929	0.896	0.827	0.836	0.854
Poland	0.859	0.921	0.928	0.922	0.910
Austria	0.824	0.717	0.681	0.687	0.697
Singapore	0.816	1.307	1.250	1.249	1.249
Norway	0.787	0.715	0.641	0.650	0.668
Venezuela, R.B. de	0.780	0.556	0.536	0.546	0.565
Malaysia	0.762	0.761	0.772	0.764	0.747
Iran, I.R. of	0.748	0.719	0.763	0.745	0.709
Ireland	0.723	0.771	0.701	0.705	0.711
Denmark	0.721	0.583	0.560	0.566	0.579
Thailand	0.673	0.986	0.970	0.958	0.932
Argentina	0.668	0.637	0.652	0.651	0.651
South Africa	0.640	0.520	0.564	0.558	0.546
Nigeria	0.515	0.663	0.688	0.680	0.664

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
Greece	0.509	0.349	0.316	0.317	0.319
Finland	0.505	0.414	0.371	0.375	0.383
United Arab Emirates	0.485	0.910	0.872	0.871	0.868
Czech Republic	0.457	0.470	0.475	0.474	0.473
Portugal	0.432	0.368	0.352	0.352	0.354
Colombia	0.429	0.439	0.473	0.469	0.462
Philippines	0.428	0.483	0.500	0.492	0.477
Egypt	0.427	0.511	0.532	0.516	0.485
Pakistan	0.426	0.391	0.454	0.439	0.411
Ukraine	0.422	0.397	0.309	0.304	0.295
Algeria	0.411	0.453	0.432	0.425	0.410
Hungary	0.407	0.398	0.359	0.358	0.354
Kuwait	0.405	0.321	0.314	0.312	0.308
Israel	0.403	0.431	0.422	0.426	0.435
Romania	0.380	0.381	0.349	0.346	0.339
Chile	0.366	0.426	0.405	0.404	0.402
Iraq	0.349	0.408	0.379	0.372	0.357
Libya	0.330	0.244	0.153	0.152	0.150
Peru	0.280	0.319	0.313	0.310	0.305
Luxembourg	0.277	0.673	0.589	0.590	0.593
New Zealand	0.262	0.244	0.239	0.242	0.248
Kazakhstan	0.243	0.382	0.362	0.358	0.349
Vietnam	0.242	0.438	0.474	0.467	0.453
Syrian Arab Republic	0.233	0.173	0.176	0.182	0.194
Bangladesh	0.224	0.278	0.323	0.316	0.300
Congo, Dem. Rep. of	0.223	0.084	0.065	0.065	0.065
Slovak Republic	0.210	0.259	0.238	0.237	0.236
Zambia	0.205	0.051	0.051	0.050	0.049
Bulgaria	0.188	0.159	0.140	0.138	0.135
Morocco	0.187	0.201	0.209	0.206	0.200
Angola	0.155	0.253	0.218	0.219	0.220
Ghana	0.155	0.087	0.089	0.088	0.085
Qatar	0.154	0.404	0.368	0.367	0.365
Croatia	0.150	0.113	0.108	0.108	0.107
Zimbabwe	0.148	0.029	0.030	0.030	0.029

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
Ecuador	0.146	0.148	0.149	0.147	0.145
Belarus	0.143	0.169	0.162	0.160	0.156
Serbia	0.137	0.108	0.096	0.095	0.093
Côte d'Ivoire	0.136	0.062	0.066	0.065	0.064
Lebanon	0.133	0.151	0.129	0.129	0.129
Sudan	0.132	0.103	0.107	0.106	0.103
Slovenia	0.123	0.115	0.104	0.105	0.105
Sri Lanka	0.121	0.125	0.142	0.139	0.133
Uzbekistan	0.116	0.115	0.123	0.121	0.116
Tunisia	0.114	0.108	0.107	0.105	0.101
Oman	0.114	0.190	0.176	0.175	0.172
Kenya	0.114	0.094	0.101	0.099	0.097
Myanmar	0.108	0.124	0.137	0.132	0.121
Yemen	0.102	0.080	0.068	0.067	0.064
Dominican Republic	0.100	0.110	0.113	0.112	0.109
Trinidad and Tobago	0.098	0.084	0.068	0.068	0.067
Lithuania	0.093	0.131	0.112	0.112	0.111
Uruguay	0.090	0.084	0.081	0.081	0.081
Guatemala	0.090	0.093	0.102	0.101	0.099
Tanzania	0.083	0.085	0.084	0.082	0.079
Bahrain	0.083	0.088	0.082	0.082	0.081
Azerbaijan	0.082	0.133	0.135	0.133	0.129
Jamaica	0.080	0.035	0.031	0.030	0.030
Panama	0.079	0.103	0.106	0.106	0.105
Costa Rica	0.077	0.080	0.081	0.081	0.081
Uganda	0.076	0.045	0.052	0.050	0.048
Jordan	0.072	0.091	0.089	0.088	0.087
Latvia	0.070	0.074	0.066	0.066	0.066
Afghanistan	0.068	0.084	0.048	0.047	0.045
Senegal	0.068	0.036	0.033	0.032	0.031
Iceland	0.067	0.131	0.030	0.031	0.031
Cyprus	0.064	0.070	0.057	0.058	0.058
Brunei	0.063	0.048	0.038	0.038	0.037
Ethiopia	0.063	0.088	0.097	0.095	0.091
El Salvador	0.060	0.050	0.050	0.049	0.048

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
Cameroon	0.058	0.050	0.053	0.052	0.051
Bosnia & Herzegovina	0.056	0.042	0.041	0.041	0.040
Papua New Guinea	0.055	0.035	0.034	0.034	0.034
Nicaragua	0.055	0.027	0.029	0.029	0.028
Liberia	0.054	0.010	0.008	0.008	0.008
Honduras	0.052	0.043	0.043	0.043	0.042
South Sudan	0.052	0.042	0.026	0.026	0.025
Madagascar	0.051	0.022	0.024	0.024	0.023
Estonia	0.051	0.071	0.062	0.062	0.062
Bolivia	0.050	0.064	0.067	0.066	0.065
Turkmenistan	0.050	0.095	0.093	0.093	0.091
Mozambique	0.048	0.038	0.035	0.035	0.034
Gabon	0.045	0.039	0.036	0.036	0.035
Guinea	0.045	0.017	0.014	0.014	0.014
Georgia	0.044	0.035	0.037	0.037	0.036
Sierra Leone	0.043	0.012	0.011	0.011	0.010
Paraguay	0.042	0.060	0.060	0.059	0.058
Botswana	0.041	0.044	0.041	0.040	0.039
Namibia	0.040	0.030	0.029	0.028	0.028
Mali	0.039	0.028	0.026	0.026	0.025
Bahamas, The	0.038	0.017	0.016	0.016	0.017
Guyana	0.038	0.009	0.008	0.008	0.008
Kyrgyz Republic	0.037	0.023	0.022	0.022	0.021
Cambodia	0.037	0.044	0.048	0.047	0.046
Tajikistan	0.036	0.020	0.020	0.020	0.019
Moldova	0.036	0.024	0.021	0.021	0.020
Malta	0.035	0.067	0.061	0.061	0.061
Haiti	0.034	0.020	0.019	0.019	0.018
Somalia	0.034	0.012	0.013	0.013	0.013
Congo, Rep. of	0.034	0.052	0.036	0.036	0.035
Rwanda	0.034	0.018	0.016	0.016	0.015
Equatorial Guinea	0.033	0.056	0.049	0.048	0.048
Nepal	0.033	0.045	0.049	0.048	0.046
Burundi	0.032	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.012	0.011	0.011

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
Mauritius	0.0298	0.0461	0.0356	0.0355	0.0351
Macedonia, FYR	0.0294	0.0296	0.0287	0.0283	0.0275
Chad	0.0294	0.0282	0.0265	0.0262	0.0255
Albania	0.0292	0.0287	0.0287	0.0282	0.0274
Malawi	0.0291	0.0160	0.0153	0.0149	0.0142
Niger	0.0276	0.0150	0.0160	0.0157	0.0153
Suriname	0.0270	0.0120	0.0112	0.0111	0.0110
Armenia	0.0270	0.0256	0.0247	0.0244	0.0239
Mauritania	0.0270	0.0145	0.0140	0.0137	0.0132
Benin	0.0260	0.0195	0.0182	0.0179	0.0173
Burkina Faso	0.0252	0.0222	0.0238	0.0234	0.0226
Central African Rep.	0.0234	0.0038	0.0031	0.0031	0.0031
Lao P.D.R.	0.0222	0.0227	0.0251	0.0245	0.0234
Fiji	0.0206	0.0105	0.0108	0.0107	0.0106
Barbados	0.0198	0.0095	0.0095	0.0096	0.0097
Kosovo	0.0173	0.0154	0.0164	0.0162	0.0158
Swaziland	0.0165	0.0122	0.0124	0.0122	0.0120
Mongolia	0.0152	0.0370	0.0310	0.0305	0.0294
Lesotho	0.0146	0.0086	0.0085	0.0084	0.0082
Gambia, The	0.0130	0.0026	0.0028	0.0027	0.0026
Montenegro	0.0127	0.0124	0.0111	0.0110	0.0108
San Marino	0.0103	0.0091	0.0069	0.0069	0.0070
Eritrea	0.0077	0.0071	0.0075	0.0074	0.0072
Djibouti	0.0067	0.0040	0.0039	0.0039	0.0038
Guinea-Bissau	0.0060	0.0058	0.0025	0.0025	0.0024
Belize	0.0056	0.0046	0.0047	0.0047	0.0046
Timor-Leste	0.0054	0.0107	0.0091	0.0091	0.0091
Vanuatu	0.0050	0.0021	0.0018	0.0019	0.0019
Cabo Verde	0.0050	0.0050	0.0049	0.0049	0.0048
Seychelles	0.0048	0.0058	0.0049	0.0049	0.0049
St. Lucia	0.0045	0.0032	0.0032	0.0032	0.0032
Maldives	0.0044	0.0105	0.0095	0.0095	0.0094
Solomon Islands	0.0044	0.0031	0.0029	0.0029	0.0030
Bhutan	0.0043	0.0070	0.0062	0.0061	0.0059
Antigua and Barbuda	0.0042	0.0030	0.0030	0.0030	0.0030

Table A9. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Combinations of GDP Blend—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split evenly between GDP and openness, and GDP blends:		
			50/50	55/45	65/35
Comoros	0.00373	0.00176	0.00170	0.00169	0.00167
Grenada	0.00344	0.00241	0.00195	0.00195	0.00194
Samoa	0.00340	0.00184	0.00186	0.00187	0.00188
São Tomé and Príncipe	0.00310	0.00141	0.00082	0.00082	0.00080
Tonga	0.00289	0.00133	0.00130	0.00130	0.00131
St. Kitts	0.00262	0.00217	0.00207	0.00207	0.00207
St. Vincent	0.00245	0.00179	0.00171	0.00170	0.00169
Dominica	0.00241	0.00126	0.00124	0.00124	0.00123
Kiribati	0.00235	0.00123	0.00098	0.00098	0.00098
Micronesia, FS of	0.00151	0.00124	0.00105	0.00105	0.00107
Marshall Islands	0.00103	0.00085	0.00070	0.00070	0.00071
Palau	0.00103	0.00076	0.00075	0.00076	0.00077
Nauru	0.00059	0.00038	0.00037	0.00038	0.00038
Tuvalu	0.00052	0.00023	0.00020	0.00020	0.00020
Coefficients for quota variables 2/					
GDP		0.300	0.288	0.316	0.374
PPP GDP		0.200	0.288	0.259	0.201
Openness		0.300	0.375	0.375	0.375
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

**Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member
(in percent)**

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
United States	17.398	14.478	14.795	14.977	15.340
Japan	6.461	5.100	5.017	5.071	5.178
China 1/	6.390	12.581	13.494	13.418	13.266
Germany	5.583	4.951	4.853	4.891	4.967
France	4.225	3.168	3.165	3.197	3.263
United Kingdom	4.225	3.568	3.362	3.400	3.476
Italy	3.159	2.399	2.354	2.375	2.416
India	2.749	3.113	3.658	3.542	3.308
Russia	2.705	2.564	2.636	2.604	2.540
Brazil	2.315	2.250	2.338	2.333	2.322
Canada	2.311	2.030	2.042	2.065	2.112
Saudi Arabia	2.095	1.663	1.504	1.489	1.457
Spain	1.999	1.753	1.693	1.703	1.722
Mexico	1.868	1.737	1.788	1.777	1.757
Netherlands	1.831	2.070	1.880	1.891	1.911
Korea, Republic of	1.799	1.989	2.140	2.145	2.155
Australia	1.378	1.432	1.413	1.437	1.485
Belgium	1.344	1.113	1.038	1.045	1.058
Switzerland	1.210	1.723	1.478	1.492	1.520
Turkey	0.977	1.161	1.191	1.185	1.174
Indonesia	0.974	1.307	1.478	1.440	1.363
Sweden	0.929	0.896	0.813	0.823	0.841
Poland	0.859	0.921	0.922	0.916	0.904
Austria	0.824	0.717	0.668	0.674	0.685
Singapore	0.816	1.307	1.204	1.204	1.203
Norway	0.787	0.715	0.633	0.643	0.661
Venezuela, R.B. de	0.780	0.556	0.545	0.555	0.575
Malaysia	0.762	0.761	0.763	0.754	0.737
Iran, I.R. of	0.748	0.719	0.779	0.760	0.722
Ireland	0.723	0.771	0.676	0.679	0.686
Denmark	0.721	0.583	0.549	0.556	0.569
Thailand	0.673	0.986	0.962	0.949	0.922
Argentina	0.668	0.637	0.663	0.663	0.662
South Africa	0.640	0.520	0.566	0.559	0.547
Nigeria	0.515	0.663	0.699	0.690	0.674

Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Greece	0.509	0.349	0.315	0.316	0.318
Finland	0.505	0.414	0.366	0.370	0.379
United Arab Emirates	0.485	0.910	0.854	0.852	0.849
Czech Republic	0.457	0.470	0.466	0.465	0.463
Portugal	0.432	0.368	0.348	0.349	0.351
Colombia	0.429	0.439	0.479	0.475	0.467
Philippines	0.428	0.483	0.504	0.496	0.480
Egypt	0.427	0.511	0.542	0.526	0.494
Pakistan	0.426	0.391	0.464	0.449	0.419
Ukraine	0.422	0.397	0.308	0.302	0.292
Algeria	0.411	0.453	0.435	0.428	0.412
Hungary	0.407	0.398	0.351	0.349	0.346
Kuwait	0.405	0.321	0.311	0.309	0.305
Israel	0.403	0.431	0.420	0.424	0.433
Romania	0.380	0.381	0.349	0.345	0.338
Chile	0.366	0.426	0.405	0.403	0.401
Iraq	0.349	0.408	0.382	0.374	0.359
Libya	0.330	0.244	0.151	0.150	0.148
Peru	0.280	0.319	0.315	0.313	0.308
Luxembourg	0.277	0.673	0.556	0.557	0.560
New Zealand	0.262	0.244	0.238	0.241	0.248
Kazakhstan	0.243	0.382	0.362	0.358	0.349
Vietnam	0.242	0.438	0.469	0.461	0.447
Syrian Arab Republic	0.233	0.173	0.180	0.186	0.198
Bangladesh	0.224	0.278	0.329	0.321	0.305
Congo, Dem. Rep. of	0.223	0.084	0.065	0.065	0.065
Slovak Republic	0.210	0.259	0.232	0.232	0.231
Zambia	0.205	0.051	0.051	0.050	0.049
Bulgaria	0.188	0.159	0.139	0.137	0.134
Morocco	0.187	0.201	0.210	0.207	0.200
Angola	0.155	0.253	0.217	0.217	0.218
Ghana	0.155	0.087	0.089	0.088	0.084
Qatar	0.154	0.404	0.364	0.363	0.361
Croatia	0.150	0.113	0.107	0.107	0.106
Zimbabwe	0.148	0.029	0.030	0.030	0.029

Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Ecuador	0.146	0.148	0.150	0.149	0.146
Belarus	0.143	0.169	0.161	0.159	0.154
Serbia	0.137	0.108	0.095	0.094	0.092
Côte d'Ivoire	0.136	0.062	0.066	0.065	0.064
Lebanon	0.133	0.151	0.128	0.127	0.127
Sudan	0.132	0.103	0.109	0.108	0.106
Slovenia	0.123	0.115	0.102	0.102	0.103
Sri Lanka	0.121	0.125	0.144	0.141	0.135
Uzbekistan	0.116	0.115	0.125	0.122	0.117
Tunisia	0.114	0.108	0.106	0.105	0.101
Oman	0.114	0.190	0.174	0.173	0.170
Kenya	0.114	0.094	0.102	0.100	0.097
Myanmar	0.108	0.124	0.140	0.134	0.124
Yemen	0.102	0.080	0.069	0.067	0.065
Dominican Republic	0.100	0.110	0.114	0.113	0.110
Trinidad and Tobago	0.098	0.084	0.067	0.067	0.066
Lithuania	0.093	0.131	0.110	0.109	0.108
Uruguay	0.090	0.084	0.081	0.081	0.081
Guatemala	0.090	0.093	0.103	0.102	0.100
Tanzania	0.083	0.085	0.086	0.084	0.080
Bahrain	0.083	0.088	0.081	0.080	0.079
Azerbaijan	0.082	0.133	0.135	0.133	0.129
Jamaica	0.080	0.035	0.030	0.030	0.030
Panama	0.079	0.103	0.104	0.104	0.103
Costa Rica	0.077	0.080	0.081	0.081	0.081
Uganda	0.076	0.045	0.052	0.051	0.049
Jordan	0.072	0.091	0.088	0.087	0.086
Latvia	0.070	0.074	0.065	0.065	0.065
Afghanistan	0.068	0.084	0.048	0.047	0.045
Senegal	0.068	0.036	0.033	0.032	0.031
Iceland	0.067	0.131	0.030	0.030	0.031
Cyprus	0.064	0.070	0.056	0.056	0.056
Brunei	0.063	0.048	0.038	0.037	0.037
Ethiopia	0.063	0.088	0.098	0.096	0.092
El Salvador	0.060	0.050	0.050	0.049	0.048

Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Cameroon	0.058	0.050	0.054	0.053	0.051
Bosnia & Herzegovina	0.056	0.042	0.041	0.041	0.040
Papua New Guinea	0.055	0.035	0.034	0.034	0.034
Nicaragua	0.055	0.027	0.029	0.029	0.028
Liberia	0.054	0.010	0.008	0.008	0.008
Honduras	0.052	0.043	0.043	0.043	0.042
South Sudan	0.052	0.042	0.026	0.025	0.025
Madagascar	0.051	0.022	0.025	0.024	0.023
Estonia	0.051	0.071	0.060	0.060	0.060
Bolivia	0.050	0.064	0.067	0.066	0.065
Turkmenistan	0.050	0.095	0.093	0.092	0.091
Mozambique	0.048	0.038	0.035	0.034	0.034
Gabon	0.045	0.039	0.036	0.035	0.035
Guinea	0.045	0.017	0.014	0.014	0.014
Georgia	0.044	0.035	0.037	0.036	0.036
Sierra Leone	0.043	0.012	0.011	0.011	0.010
Paraguay	0.042	0.060	0.060	0.059	0.058
Botswana	0.041	0.044	0.040	0.040	0.039
Namibia	0.040	0.030	0.028	0.028	0.028
Mali	0.039	0.028	0.027	0.026	0.025
Bahamas, The	0.038	0.017	0.016	0.016	0.016
Guyana	0.038	0.009	0.008	0.008	0.008
Kyrgyz Republic	0.037	0.023	0.022	0.022	0.021
Cambodia	0.037	0.044	0.048	0.047	0.045
Tajikistan	0.036	0.020	0.020	0.020	0.019
Moldova	0.036	0.024	0.021	0.021	0.020
Malta	0.035	0.067	0.058	0.058	0.058
Haiti	0.034	0.020	0.019	0.019	0.018
Somalia	0.034	0.012	0.013	0.013	0.013
Congo, Rep. of	0.034	0.052	0.036	0.035	0.035
Rwanda	0.034	0.018	0.016	0.016	0.015
Equatorial Guinea	0.033	0.056	0.048	0.048	0.047
Nepal	0.033	0.045	0.050	0.049	0.046
Burundi	0.032	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.011

Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Mauritius	0.0298	0.0461	0.0350	0.0347	0.0343
Macedonia, FYR	0.0294	0.0296	0.0285	0.0281	0.0273
Chad	0.0294	0.0282	0.0265	0.0262	0.0254
Albania	0.0292	0.0287	0.0287	0.0282	0.0273
Malawi	0.0291	0.0160	0.0153	0.0150	0.0142
Niger	0.0276	0.0150	0.0160	0.0158	0.0153
Suriname	0.0270	0.0120	0.0111	0.0110	0.0109
Armenia	0.0270	0.0256	0.0246	0.0244	0.0238
Mauritania	0.0270	0.0145	0.0139	0.0137	0.0131
Benin	0.0260	0.0195	0.0183	0.0180	0.0174
Burkina Faso	0.0252	0.0222	0.0240	0.0236	0.0227
Central African Rep.	0.0234	0.0038	0.0031	0.0031	0.0031
Lao P.D.R.	0.0222	0.0227	0.0254	0.0248	0.0236
Fiji	0.0206	0.0105	0.0106	0.0106	0.0105
Barbados	0.0198	0.0095	0.0093	0.0094	0.0095
Kosovo	0.0173	0.0154	0.0164	0.0162	0.0157
Swaziland	0.0165	0.0122	0.0122	0.0121	0.0119
Mongolia	0.0152	0.0370	0.0309	0.0304	0.0293
Lesotho	0.0146	0.0086	0.0083	0.0082	0.0081
Gambia, The	0.0130	0.0026	0.0028	0.0027	0.0026
Montenegro	0.0127	0.0124	0.0110	0.0109	0.0107
San Marino	0.0103	0.0091	0.0066	0.0067	0.0067
Eritrea	0.0077	0.0071	0.0075	0.0075	0.0073
Djibouti	0.0067	0.0040	0.0039	0.0038	0.0038
Guinea-Bissau	0.0060	0.0058	0.0025	0.0025	0.0024
Belize	0.0056	0.0046	0.0046	0.0046	0.0045
Timor-Leste	0.0054	0.0107	0.0090	0.0090	0.0090
Vanuatu	0.0050	0.0021	0.0018	0.0018	0.0019
Cabo Verde	0.0050	0.0050	0.0048	0.0048	0.0047
Seychelles	0.0048	0.0058	0.0048	0.0048	0.0047
St. Lucia	0.0045	0.0032	0.0031	0.0031	0.0032
Maldives	0.0044	0.0105	0.0093	0.0093	0.0092
Solomon Islands	0.0044	0.0031	0.0029	0.0029	0.0029
Bhutan	0.0043	0.0070	0.0062	0.0061	0.0058
Antigua and Barbuda	0.0042	0.0030	0.0030	0.0030	0.0030

Table A10. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Combinations of GDP Blend—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight split between GDP (2/3) and openness (1/3), and GDP blends:		
			50/50	55/45	65/35
Comoros	0.00373	0.00176	0.00168	0.00167	0.00165
Grenada	0.00344	0.00241	0.00194	0.00194	0.00194
Samoa	0.00340	0.00184	0.00184	0.00185	0.00186
São Tomé and Príncipe	0.00310	0.00141	0.00082	0.00081	0.00080
Tonga	0.00289	0.00133	0.00127	0.00127	0.00128
St. Kitts	0.00262	0.00217	0.00206	0.00205	0.00205
St. Vincent	0.00245	0.00179	0.00170	0.00169	0.00168
Dominica	0.00241	0.00126	0.00123	0.00123	0.00122
Kiribati	0.00235	0.00123	0.00096	0.00096	0.00097
Micronesia, FS of	0.00151	0.00124	0.00102	0.00102	0.00104
Marshall Islands	0.00103	0.00085	0.00068	0.00068	0.00069
Palau	0.00103	0.00076	0.00073	0.00074	0.00075
Nauru	0.00059	0.00038	0.00036	0.00037	0.00037
Tuvalu	0.00052	0.00023	0.00019	0.00019	0.00020
Coefficients for quota variables 2/					
GDP		0.300	0.300	0.330	0.390
PPP GDP		0.200	0.300	0.270	0.210
Openness		0.300	0.350	0.350	0.350
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
United States	17.398	14.478	15.097	15.294	15.688
Japan	6.461	5.100	5.079	5.137	5.253
China 1/	6.390	12.581	13.742	13.660	13.495
Germany	5.583	4.951	4.717	4.758	4.840
France	4.225	3.168	3.120	3.155	3.226
United Kingdom	4.225	3.568	3.305	3.346	3.428
Italy	3.159	2.399	2.340	2.363	2.407
India	2.749	3.113	3.783	3.657	3.404
Russia	2.705	2.564	2.674	2.639	2.569
Brazil	2.315	2.250	2.420	2.414	2.402
Canada	2.311	2.030	2.015	2.040	2.091
Saudi Arabia	2.095	1.663	1.505	1.488	1.454
Spain	1.999	1.753	1.678	1.688	1.709
Mexico	1.868	1.737	1.795	1.784	1.762
Netherlands	1.831	2.070	1.748	1.760	1.782
Korea, Republic of	1.799	1.989	2.098	2.104	2.114
Australia	1.378	1.432	1.414	1.441	1.493
Belgium	1.344	1.113	0.974	0.981	0.996
Switzerland	1.210	1.723	1.403	1.418	1.449
Turkey	0.977	1.161	1.212	1.206	1.194
Indonesia	0.974	1.307	1.528	1.486	1.403
Sweden	0.929	0.896	0.785	0.795	0.816
Poland	0.859	0.921	0.910	0.904	0.890
Austria	0.824	0.717	0.642	0.648	0.660
Singapore	0.816	1.307	1.112	1.112	1.111
Norway	0.787	0.715	0.617	0.627	0.647
Venezuela, R.B. de	0.780	0.556	0.563	0.574	0.595
Malaysia	0.762	0.761	0.744	0.735	0.716
Iran, I.R. of	0.748	0.719	0.809	0.788	0.748
Ireland	0.723	0.771	0.625	0.628	0.636
Denmark	0.721	0.583	0.528	0.535	0.549
Thailand	0.673	0.986	0.946	0.931	0.902
Argentina	0.668	0.637	0.685	0.685	0.685
South Africa	0.640	0.520	0.569	0.563	0.550
Nigeria	0.515	0.663	0.721	0.712	0.694

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
Greece	0.509	0.349	0.312	0.313	0.316
Finland	0.505	0.414	0.356	0.361	0.370
United Arab Emirates	0.485	0.910	0.817	0.815	0.812
Czech Republic	0.457	0.470	0.446	0.445	0.443
Portugal	0.432	0.368	0.341	0.342	0.344
Colombia	0.429	0.439	0.491	0.487	0.479
Philippines	0.428	0.483	0.513	0.504	0.486
Egypt	0.427	0.511	0.563	0.546	0.511
Pakistan	0.426	0.391	0.484	0.468	0.436
Ukraine	0.422	0.397	0.304	0.299	0.287
Algeria	0.411	0.453	0.442	0.433	0.416
Hungary	0.407	0.398	0.335	0.333	0.330
Kuwait	0.405	0.321	0.304	0.302	0.297
Israel	0.403	0.431	0.415	0.420	0.430
Romania	0.380	0.381	0.348	0.344	0.336
Chile	0.366	0.426	0.404	0.402	0.400
Iraq	0.349	0.408	0.388	0.379	0.362
Libya	0.330	0.244	0.149	0.148	0.146
Peru	0.280	0.319	0.321	0.318	0.312
Luxembourg	0.277	0.673	0.490	0.491	0.494
New Zealand	0.262	0.244	0.236	0.239	0.246
Kazakhstan	0.243	0.382	0.363	0.359	0.349
Vietnam	0.242	0.438	0.458	0.451	0.435
Syrian Arab Republic	0.233	0.173	0.188	0.194	0.207
Bangladesh	0.224	0.278	0.340	0.331	0.314
Congo, Dem. Rep. of	0.223	0.084	0.065	0.065	0.065
Slovak Republic	0.210	0.259	0.220	0.220	0.219
Zambia	0.205	0.051	0.051	0.050	0.049
Bulgaria	0.188	0.159	0.136	0.134	0.130
Morocco	0.187	0.201	0.211	0.207	0.200
Angola	0.155	0.253	0.214	0.215	0.216
Ghana	0.155	0.087	0.089	0.087	0.084
Qatar	0.154	0.404	0.355	0.354	0.352
Croatia	0.150	0.113	0.106	0.105	0.105
Zimbabwe	0.148	0.029	0.029	0.029	0.029

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
Ecuador	0.146	0.148	0.152	0.151	0.148
Belarus	0.143	0.169	0.158	0.155	0.151
Serbia	0.137	0.108	0.094	0.093	0.091
Côte d'Ivoire	0.136	0.062	0.066	0.065	0.063
Lebanon	0.133	0.151	0.124	0.123	0.123
Sudan	0.132	0.103	0.114	0.113	0.110
Slovenia	0.123	0.115	0.097	0.098	0.098
Sri Lanka	0.121	0.125	0.147	0.144	0.138
Uzbekistan	0.116	0.115	0.128	0.125	0.120
Tunisia	0.114	0.108	0.106	0.104	0.100
Oman	0.114	0.190	0.171	0.169	0.166
Kenya	0.114	0.094	0.104	0.103	0.099
Myanmar	0.108	0.124	0.145	0.140	0.128
Yemen	0.102	0.080	0.070	0.068	0.065
Dominican Republic	0.100	0.110	0.115	0.114	0.110
Trinidad and Tobago	0.098	0.084	0.065	0.064	0.064
Lithuania	0.093	0.131	0.105	0.105	0.104
Uruguay	0.090	0.084	0.082	0.082	0.082
Guatemala	0.090	0.093	0.104	0.103	0.100
Tanzania	0.083	0.085	0.088	0.086	0.082
Bahrain	0.083	0.088	0.078	0.077	0.077
Azerbaijan	0.082	0.133	0.136	0.134	0.129
Jamaica	0.080	0.035	0.030	0.030	0.029
Panama	0.079	0.103	0.101	0.101	0.100
Costa Rica	0.077	0.080	0.081	0.081	0.081
Uganda	0.076	0.045	0.054	0.052	0.050
Jordan	0.072	0.091	0.087	0.086	0.084
Latvia	0.070	0.074	0.063	0.063	0.063
Afghanistan	0.068	0.084	0.049	0.048	0.046
Senegal	0.068	0.036	0.033	0.032	0.031
Iceland	0.067	0.131	0.029	0.029	0.030
Cyprus	0.064	0.070	0.053	0.053	0.053
Brunei	0.063	0.048	0.037	0.037	0.036
Ethiopia	0.063	0.088	0.101	0.099	0.095
El Salvador	0.060	0.050	0.050	0.049	0.048

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
Cameroon	0.058	0.050	0.055	0.054	0.052
Bosnia & Herzegovina	0.056	0.042	0.041	0.040	0.039
Papua New Guinea	0.055	0.035	0.033	0.034	0.034
Nicaragua	0.055	0.027	0.029	0.028	0.028
Liberia	0.054	0.010	0.007	0.007	0.007
Honduras	0.052	0.043	0.042	0.042	0.041
South Sudan	0.052	0.042	0.025	0.025	0.025
Madagascar	0.051	0.022	0.025	0.024	0.023
Estonia	0.051	0.071	0.058	0.057	0.057
Bolivia	0.050	0.064	0.067	0.066	0.065
Turkmenistan	0.050	0.095	0.093	0.092	0.090
Mozambique	0.048	0.038	0.034	0.034	0.033
Gabon	0.045	0.039	0.035	0.035	0.034
Guinea	0.045	0.017	0.014	0.014	0.014
Georgia	0.044	0.035	0.036	0.036	0.035
Sierra Leone	0.043	0.012	0.011	0.011	0.010
Paraguay	0.042	0.060	0.059	0.059	0.058
Botswana	0.041	0.044	0.040	0.039	0.038
Namibia	0.040	0.030	0.028	0.027	0.027
Mali	0.039	0.028	0.027	0.026	0.025
Bahamas, The	0.038	0.017	0.016	0.016	0.016
Guyana	0.038	0.009	0.008	0.008	0.008
Kyrgyz Republic	0.037	0.023	0.021	0.021	0.020
Cambodia	0.037	0.044	0.047	0.047	0.045
Tajikistan	0.036	0.020	0.020	0.020	0.019
Moldova	0.036	0.024	0.020	0.020	0.020
Malta	0.035	0.067	0.052	0.052	0.052
Haiti	0.034	0.020	0.019	0.019	0.018
Somalia	0.034	0.012	0.013	0.013	0.013
Congo, Rep. of	0.034	0.052	0.034	0.034	0.033
Rwanda	0.034	0.018	0.016	0.016	0.015
Equatorial Guinea	0.033	0.056	0.046	0.046	0.045
Nepal	0.033	0.045	0.051	0.049	0.047
Burundi	0.032	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.011

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
Mauritius	0.0298	0.0461	0.0336	0.0333	0.0329
Macedonia, FYR	0.0294	0.0296	0.0281	0.0276	0.0267
Chad	0.0294	0.0282	0.0266	0.0262	0.0254
Albania	0.0292	0.0287	0.0287	0.0283	0.0273
Malawi	0.0291	0.0160	0.0155	0.0151	0.0143
Niger	0.0276	0.0150	0.0162	0.0159	0.0154
Suriname	0.0270	0.0120	0.0109	0.0108	0.0107
Armenia	0.0270	0.0256	0.0245	0.0242	0.0236
Mauritania	0.0270	0.0145	0.0138	0.0136	0.0130
Benin	0.0260	0.0195	0.0185	0.0182	0.0175
Burkina Faso	0.0252	0.0222	0.0243	0.0239	0.0230
Central African Rep.	0.0234	0.0038	0.0032	0.0031	0.0031
Lao P.D.R.	0.0222	0.0227	0.0260	0.0253	0.0240
Fiji	0.0206	0.0105	0.0104	0.0103	0.0102
Barbados	0.0198	0.0095	0.0090	0.0091	0.0092
Kosovo	0.0173	0.0154	0.0163	0.0161	0.0156
Swaziland	0.0165	0.0122	0.0120	0.0119	0.0116
Mongolia	0.0152	0.0370	0.0307	0.0301	0.0289
Lesotho	0.0146	0.0086	0.0080	0.0079	0.0077
Gambia, The	0.0130	0.0026	0.0028	0.0027	0.0026
Montenegro	0.0127	0.0124	0.0108	0.0107	0.0105
San Marino	0.0103	0.0091	0.0061	0.0062	0.0062
Eritrea	0.0077	0.0071	0.0077	0.0076	0.0074
Djibouti	0.0067	0.0040	0.0038	0.0038	0.0037
Guinea-Bissau	0.0060	0.0058	0.0026	0.0025	0.0025
Belize	0.0056	0.0046	0.0045	0.0044	0.0044
Timor-Leste	0.0054	0.0107	0.0088	0.0088	0.0088
Vanuatu	0.0050	0.0021	0.0017	0.0018	0.0018
Cabo Verde	0.0050	0.0050	0.0047	0.0047	0.0046
Seychelles	0.0048	0.0058	0.0045	0.0045	0.0045
St. Lucia	0.0045	0.0032	0.0031	0.0031	0.0031
Maldives	0.0044	0.0105	0.0088	0.0088	0.0088
Solomon Islands	0.0044	0.0031	0.0027	0.0028	0.0028
Bhutan	0.0043	0.0070	0.0061	0.0060	0.0058
Antigua and Barbuda	0.0042	0.0030	0.0030	0.0030	0.0030

Table A11. Illustrative Calculations - Current Openness Measure, Dropping Variability, All Weight to GDP, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, all weight to GDP, and GDP blends:		
			50/50	55/45	65/35
Comoros	0.00373	0.00176	0.00165	0.00164	0.00162
Grenada	0.00344	0.00241	0.00193	0.00192	0.00192
Samoa	0.00340	0.00184	0.00179	0.00180	0.00181
São Tomé and Príncipe	0.00310	0.00141	0.00082	0.00081	0.00079
Tonga	0.00289	0.00133	0.00121	0.00122	0.00122
St. Kitts	0.00262	0.00217	0.00202	0.00202	0.00201
St. Vincent	0.00245	0.00179	0.00168	0.00167	0.00166
Dominica	0.00241	0.00126	0.00121	0.00121	0.00120
Kiribati	0.00235	0.00123	0.00092	0.00092	0.00093
Micronesia, FS of	0.00151	0.00124	0.00096	0.00097	0.00098
Marshall Islands	0.00103	0.00085	0.00062	0.00063	0.00064
Palau	0.00103	0.00076	0.00069	0.00070	0.00071
Nauru	0.00059	0.00038	0.00034	0.00035	0.00035
Tuvalu	0.00052	0.00023	0.00018	0.00018	0.00018
Coefficients for quota variables 2/					
GDP		0.300	0.325	0.358	0.423
PPP GDP		0.200	0.325	0.293	0.228
Openness		0.300	0.300	0.300	0.300
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
United States	17.398	14.478	15.400	15.612	16.037
Japan	6.461	5.100	5.141	5.204	5.329
China 1/	6.390	12.581	13.992	13.903	13.726
Germany	5.583	4.951	4.581	4.625	4.713
France	4.225	3.168	3.075	3.113	3.189
United Kingdom	4.225	3.568	3.247	3.292	3.380
Italy	3.159	2.399	2.327	2.351	2.398
India	2.749	3.113	3.908	3.772	3.500
Russia	2.705	2.564	2.711	2.674	2.599
Brazil	2.315	2.250	2.501	2.494	2.482
Canada	2.311	2.030	1.987	2.015	2.069
Saudi Arabia	2.095	1.663	1.506	1.488	1.451
Spain	1.999	1.753	1.663	1.674	1.696
Mexico	1.868	1.737	1.803	1.791	1.768
Netherlands	1.831	2.070	1.616	1.628	1.652
Korea, Republic of	1.799	1.989	2.056	2.062	2.074
Australia	1.378	1.432	1.416	1.445	1.501
Belgium	1.344	1.113	0.909	0.917	0.933
Switzerland	1.210	1.723	1.327	1.344	1.377
Turkey	0.977	1.161	1.233	1.227	1.213
Indonesia	0.974	1.307	1.577	1.533	1.444
Sweden	0.929	0.896	0.757	0.768	0.790
Poland	0.859	0.921	0.899	0.891	0.877
Austria	0.824	0.717	0.616	0.622	0.635
Singapore	0.816	1.307	1.020	1.019	1.018
Norway	0.787	0.715	0.601	0.611	0.633
Venezuela, R.B. de	0.780	0.556	0.581	0.593	0.616
Malaysia	0.762	0.761	0.725	0.715	0.695
Iran, I.R. of	0.748	0.719	0.839	0.817	0.773
Ireland	0.723	0.771	0.573	0.577	0.585
Denmark	0.721	0.583	0.506	0.514	0.529
Thailand	0.673	0.986	0.930	0.914	0.882
Argentina	0.668	0.637	0.708	0.708	0.707
South Africa	0.640	0.520	0.573	0.566	0.552
Nigeria	0.515	0.663	0.743	0.733	0.715

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
Greece	0.509	0.349	0.310	0.311	0.314
Finland	0.505	0.414	0.346	0.351	0.361
United Arab Emirates	0.485	0.910	0.780	0.778	0.774
Czech Republic	0.457	0.470	0.427	0.426	0.424
Portugal	0.432	0.368	0.333	0.334	0.337
Colombia	0.429	0.439	0.504	0.499	0.490
Philippines	0.428	0.483	0.521	0.511	0.492
Egypt	0.427	0.511	0.584	0.565	0.528
Pakistan	0.426	0.391	0.504	0.487	0.452
Ukraine	0.422	0.397	0.300	0.295	0.283
Algeria	0.411	0.453	0.448	0.439	0.420
Hungary	0.407	0.398	0.319	0.317	0.313
Kuwait	0.405	0.321	0.297	0.295	0.290
Israel	0.403	0.431	0.410	0.416	0.426
Romania	0.380	0.381	0.347	0.343	0.334
Chile	0.366	0.426	0.403	0.402	0.399
Iraq	0.349	0.408	0.393	0.384	0.366
Libya	0.330	0.244	0.146	0.145	0.143
Peru	0.280	0.319	0.326	0.323	0.317
Luxembourg	0.277	0.673	0.423	0.424	0.427
New Zealand	0.262	0.244	0.234	0.238	0.245
Kazakhstan	0.243	0.382	0.365	0.360	0.350
Vietnam	0.242	0.438	0.448	0.440	0.423
Syrian Arab Republic	0.233	0.173	0.195	0.202	0.216
Bangladesh	0.224	0.278	0.351	0.341	0.323
Congo, Dem. Rep. of	0.223	0.084	0.065	0.065	0.066
Slovak Republic	0.210	0.259	0.209	0.208	0.207
Zambia	0.205	0.051	0.052	0.051	0.049
Bulgaria	0.188	0.159	0.133	0.131	0.127
Morocco	0.187	0.201	0.212	0.208	0.201
Angola	0.155	0.253	0.211	0.212	0.213
Ghana	0.155	0.087	0.089	0.087	0.083
Qatar	0.154	0.404	0.347	0.346	0.344
Croatia	0.150	0.113	0.104	0.104	0.103
Zimbabwe	0.148	0.029	0.029	0.029	0.028

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
Ecuador	0.146	0.148	0.154	0.153	0.150
Belarus	0.143	0.169	0.155	0.152	0.147
Serbia	0.137	0.108	0.093	0.092	0.090
Côte d'Ivoire	0.136	0.062	0.066	0.065	0.063
Lebanon	0.133	0.151	0.120	0.120	0.119
Sudan	0.132	0.103	0.119	0.118	0.115
Slovenia	0.123	0.115	0.093	0.093	0.093
Sri Lanka	0.121	0.125	0.151	0.147	0.140
Uzbekistan	0.116	0.115	0.131	0.128	0.122
Tunisia	0.114	0.108	0.105	0.103	0.099
Oman	0.114	0.190	0.167	0.165	0.162
Kenya	0.114	0.094	0.106	0.105	0.101
Myanmar	0.108	0.124	0.151	0.145	0.133
Yemen	0.102	0.080	0.071	0.069	0.066
Dominican Republic	0.100	0.110	0.116	0.115	0.111
Trinidad and Tobago	0.098	0.084	0.062	0.062	0.062
Lithuania	0.093	0.131	0.100	0.100	0.099
Uruguay	0.090	0.084	0.082	0.082	0.083
Guatemala	0.090	0.093	0.105	0.104	0.101
Tanzania	0.083	0.085	0.091	0.088	0.084
Bahrain	0.083	0.088	0.075	0.075	0.074
Azerbaijan	0.082	0.133	0.137	0.134	0.129
Jamaica	0.080	0.035	0.029	0.029	0.029
Panama	0.079	0.103	0.098	0.098	0.097
Costa Rica	0.077	0.080	0.081	0.081	0.082
Uganda	0.076	0.045	0.055	0.054	0.051
Jordan	0.072	0.091	0.085	0.084	0.082
Latvia	0.070	0.074	0.061	0.061	0.061
Afghanistan	0.068	0.084	0.049	0.048	0.046
Senegal	0.068	0.036	0.032	0.032	0.031
Iceland	0.067	0.131	0.028	0.029	0.029
Cyprus	0.064	0.070	0.049	0.050	0.050
Brunei	0.063	0.048	0.036	0.036	0.035
Ethiopia	0.063	0.088	0.105	0.102	0.098
El Salvador	0.060	0.050	0.049	0.049	0.048

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
Cameroon	0.058	0.050	0.056	0.055	0.053
Bosnia & Herzegovina	0.056	0.042	0.040	0.040	0.039
Papua New Guinea	0.055	0.035	0.033	0.033	0.034
Nicaragua	0.055	0.027	0.029	0.028	0.027
Liberia	0.054	0.010	0.007	0.007	0.007
Honduras	0.052	0.043	0.042	0.041	0.040
South Sudan	0.052	0.042	0.025	0.025	0.025
Madagascar	0.051	0.022	0.026	0.025	0.023
Estonia	0.051	0.071	0.055	0.054	0.054
Bolivia	0.050	0.064	0.068	0.067	0.065
Turkmenistan	0.050	0.095	0.092	0.092	0.090
Mozambique	0.048	0.038	0.034	0.033	0.033
Gabon	0.045	0.039	0.035	0.034	0.034
Guinea	0.045	0.017	0.014	0.014	0.014
Georgia	0.044	0.035	0.036	0.035	0.034
Sierra Leone	0.043	0.012	0.011	0.011	0.010
Paraguay	0.042	0.060	0.059	0.058	0.057
Botswana	0.041	0.044	0.039	0.038	0.037
Namibia	0.040	0.030	0.027	0.027	0.026
Mali	0.039	0.028	0.027	0.026	0.025
Bahamas, The	0.038	0.017	0.015	0.015	0.016
Guyana	0.038	0.009	0.008	0.008	0.008
Kyrgyz Republic	0.037	0.023	0.021	0.021	0.020
Cambodia	0.037	0.044	0.047	0.046	0.044
Tajikistan	0.036	0.020	0.020	0.020	0.019
Moldova	0.036	0.024	0.020	0.020	0.019
Malta	0.035	0.067	0.047	0.047	0.047
Haiti	0.034	0.020	0.019	0.019	0.018
Somalia	0.034	0.012	0.012	0.012	0.012
Congo, Rep. of	0.034	0.052	0.033	0.033	0.032
Rwanda	0.034	0.018	0.017	0.016	0.016
Equatorial Guinea	0.033	0.056	0.044	0.044	0.043
Nepal	0.033	0.045	0.052	0.050	0.047
Burundi	0.032	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.010

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
Mauritius	0.0298	0.0461	0.0322	0.0319	0.0314
Macedonia, FYR	0.0294	0.0296	0.0276	0.0271	0.0262
Chad	0.0294	0.0282	0.0266	0.0262	0.0253
Albania	0.0292	0.0287	0.0288	0.0283	0.0272
Malawi	0.0291	0.0160	0.0156	0.0152	0.0143
Niger	0.0276	0.0150	0.0164	0.0161	0.0155
Suriname	0.0270	0.0120	0.0107	0.0107	0.0105
Armenia	0.0270	0.0256	0.0243	0.0240	0.0234
Mauritania	0.0270	0.0145	0.0138	0.0134	0.0128
Benin	0.0260	0.0195	0.0187	0.0183	0.0176
Burkina Faso	0.0252	0.0222	0.0246	0.0242	0.0232
Central African Rep.	0.0234	0.0038	0.0032	0.0032	0.0031
Lao P.D.R.	0.0222	0.0227	0.0265	0.0258	0.0244
Fiji	0.0206	0.0105	0.0101	0.0101	0.0100
Barbados	0.0198	0.0095	0.0087	0.0087	0.0089
Kosovo	0.0173	0.0154	0.0162	0.0160	0.0154
Swaziland	0.0165	0.0122	0.0118	0.0116	0.0113
Mongolia	0.0152	0.0370	0.0306	0.0299	0.0286
Lesotho	0.0146	0.0086	0.0076	0.0075	0.0073
Gambia, The	0.0130	0.0026	0.0028	0.0028	0.0026
Montenegro	0.0127	0.0124	0.0107	0.0105	0.0103
San Marino	0.0103	0.0091	0.0056	0.0057	0.0057
Eritrea	0.0077	0.0071	0.0078	0.0077	0.0075
Djibouti	0.0067	0.0040	0.0037	0.0037	0.0037
Guinea-Bissau	0.0060	0.0058	0.0026	0.0026	0.0025
Belize	0.0056	0.0046	0.0043	0.0043	0.0043
Timor-Leste	0.0054	0.0107	0.0086	0.0086	0.0086
Vanuatu	0.0050	0.0021	0.0017	0.0017	0.0017
Cabo Verde	0.0050	0.0050	0.0046	0.0045	0.0045
Seychelles	0.0048	0.0058	0.0043	0.0043	0.0043
St. Lucia	0.0045	0.0032	0.0030	0.0030	0.0030
Maldives	0.0044	0.0105	0.0084	0.0084	0.0083
Solomon Islands	0.0044	0.0031	0.0026	0.0026	0.0027
Bhutan	0.0043	0.0070	0.0061	0.0059	0.0057
Antigua and Barbuda	0.0042	0.0030	0.0029	0.0029	0.0029

Table A12. Illustrative Calculations - Current Openness Measure, Dropping Variability, Weight of Openness Reduced to 0.25, and Different Combinations of GDP Blend—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, current openness measure, weight of openness reduced to 0.25, and GDP blends:		
			50/50	55/45	65/35
Comoros	0.00373	0.00176	0.00162	0.00161	0.00159
Grenada	0.00344	0.00241	0.00191	0.00191	0.00191
Samoa	0.00340	0.00184	0.00174	0.00174	0.00176
São Tomé and Príncipe	0.00310	0.00141	0.00081	0.00080	0.00079
Tonga	0.00289	0.00133	0.00115	0.00116	0.00117
St. Kitts	0.00262	0.00217	0.00198	0.00198	0.00197
St. Vincent	0.00245	0.00179	0.00166	0.00165	0.00164
Dominica	0.00241	0.00126	0.00119	0.00119	0.00118
Kiribati	0.00235	0.00123	0.00088	0.00089	0.00089
Micronesia, FS of	0.00151	0.00124	0.00090	0.00091	0.00092
Marshall Islands	0.00103	0.00085	0.00057	0.00058	0.00059
Palau	0.00103	0.00076	0.00065	0.00066	0.00067
Nauru	0.00059	0.00038	0.00032	0.00033	0.00033
Tuvalu	0.00052	0.00023	0.00017	0.00017	0.00017
Coefficients for quota variables 2/					
GDP		0.300	0.350	0.385	0.455
PPP GDP		0.200	0.350	0.315	0.245
Openness		0.300	0.250	0.250	0.250
Variability		0.150	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
United States	17.398	14.478	15.206	15.332	15.497	15.849
Japan	6.461	5.100	5.162	5.205	5.260	5.380
China 1/	6.390	12.581	13.398	13.501	13.635	13.923
Germany	5.583	4.951	5.116	5.189	5.176	4.740
France	4.225	3.168	3.320	3.362	3.416	3.486
United Kingdom	4.225	3.568	3.539	3.585	3.644	3.632
Italy	3.159	2.399	2.448	2.476	2.513	2.592
India	2.749	3.113	3.412	3.435	3.465	3.529
Russia	2.705	2.564	2.596	2.619	2.649	2.714
Brazil	2.315	2.250	2.311	2.325	2.343	2.381
Canada	2.311	2.030	2.145	2.171	2.206	2.269
Saudi Arabia	2.095	1.663	1.497	1.510	1.528	1.566
Spain	1.999	1.753	1.755	1.776	1.803	1.862
Mexico	1.868	1.737	1.795	1.813	1.837	1.888
Netherlands	1.831	2.070	1.646	1.476	1.254	1.149
Korea, Republic of	1.799	1.989	2.218	2.246	2.283	2.168
Australia	1.378	1.432	1.484	1.500	1.520	1.564
Belgium	1.344	1.113	1.021	0.916	0.775	0.710
Switzerland	1.210	1.723	1.572	1.432	1.198	1.119
Turkey	0.977	1.161	1.187	1.197	1.210	1.238
Indonesia	0.974	1.307	1.396	1.405	1.418	1.444
Sweden	0.929	0.896	0.867	0.879	0.825	0.758
Poland	0.859	0.921	0.936	0.947	0.962	0.960
Austria	0.824	0.717	0.710	0.721	0.645	0.591
Singapore	0.816	1.307	0.774	0.710	0.668	0.622
Norway	0.787	0.715	0.674	0.683	0.695	0.642
Venezuela, R.B. de	0.780	0.556	0.561	0.565	0.570	0.580
Malaysia	0.762	0.761	0.774	0.737	0.764	0.703
Iran, I.R. of	0.748	0.719	0.734	0.738	0.744	0.755
Ireland	0.723	0.771	0.545	0.489	0.415	0.380
Denmark	0.721	0.583	0.587	0.596	0.527	0.486
Thailand	0.673	0.986	0.965	0.959	0.994	0.937
Argentina	0.668	0.637	0.658	0.663	0.668	0.680
South Africa	0.640	0.520	0.562	0.567	0.575	0.591
Nigeria	0.515	0.663	0.680	0.685	0.691	0.704

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Greece	0.509	0.349	0.324	0.328	0.333	0.344
Finland	0.505	0.414	0.388	0.394	0.399	0.366
United Arab Emirates	0.485	0.910	0.876	0.795	0.748	0.688
Czech Republic	0.457	0.470	0.480	0.436	0.411	0.379
Portugal	0.432	0.368	0.361	0.366	0.373	0.354
Colombia	0.429	0.439	0.472	0.475	0.480	0.489
Philippines	0.428	0.483	0.492	0.496	0.501	0.513
Egypt	0.427	0.511	0.506	0.509	0.514	0.523
Pakistan	0.426	0.391	0.429	0.432	0.435	0.442
Ukraine	0.422	0.397	0.306	0.310	0.315	0.314
Algeria	0.411	0.453	0.423	0.426	0.430	0.439
Hungary	0.407	0.398	0.329	0.300	0.294	0.270
Kuwait	0.405	0.321	0.317	0.322	0.327	0.300
Israel	0.403	0.431	0.439	0.444	0.450	0.464
Romania	0.380	0.381	0.349	0.353	0.358	0.369
Chile	0.366	0.426	0.410	0.415	0.421	0.433
Iraq	0.349	0.408	0.370	0.373	0.378	0.387
Libya	0.330	0.244	0.153	0.155	0.156	0.147
Peru	0.280	0.319	0.312	0.315	0.318	0.325
Luxembourg	0.277	0.673	0.135	0.121	0.101	0.092
New Zealand	0.262	0.244	0.250	0.253	0.256	0.264
Kazakhstan	0.243	0.382	0.360	0.364	0.369	0.379
Vietnam	0.242	0.438	0.471	0.442	0.477	0.438
Syrian Arab Republic	0.233	0.173	0.190	0.191	0.192	0.195
Bangladesh	0.224	0.278	0.312	0.314	0.316	0.322
Congo, Dem. Rep. of	0.223	0.084	0.066	0.067	0.068	0.070
Slovak Republic	0.210	0.259	0.225	0.203	0.191	0.175
Zambia	0.205	0.051	0.050	0.051	0.052	0.053
Bulgaria	0.188	0.159	0.140	0.138	0.144	0.132
Morocco	0.187	0.201	0.207	0.209	0.212	0.217
Angola	0.155	0.253	0.224	0.226	0.230	0.233
Ghana	0.155	0.087	0.088	0.089	0.090	0.093
Qatar	0.154	0.404	0.374	0.379	0.384	0.353
Croatia	0.150	0.113	0.110	0.111	0.113	0.111
Zimbabwe	0.148	0.029	0.030	0.031	0.031	0.031

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Ecuador	0.146	0.148	0.149	0.150	0.152	0.156
Belarus	0.143	0.169	0.162	0.161	0.167	0.155
Serbia	0.137	0.108	0.096	0.097	0.098	0.099
Côte d'Ivoire	0.136	0.062	0.066	0.066	0.067	0.069
Lebanon	0.133	0.151	0.132	0.128	0.123	0.114
Sudan	0.132	0.103	0.105	0.106	0.107	0.108
Slovenia	0.123	0.115	0.108	0.099	0.089	0.082
Sri Lanka	0.121	0.125	0.138	0.139	0.141	0.144
Uzbekistan	0.116	0.115	0.120	0.121	0.122	0.124
Tunisia	0.114	0.108	0.105	0.106	0.108	0.111
Oman	0.114	0.190	0.177	0.180	0.182	0.168
Kenya	0.114	0.094	0.099	0.100	0.101	0.103
Myanmar	0.108	0.124	0.128	0.129	0.130	0.132
Yemen	0.102	0.080	0.067	0.067	0.068	0.070
Dominican Republic	0.100	0.110	0.113	0.114	0.115	0.118
Trinidad and Tobago	0.098	0.084	0.069	0.067	0.064	0.059
Lithuania	0.093	0.131	0.112	0.101	0.098	0.089
Uruguay	0.090	0.084	0.082	0.083	0.084	0.086
Guatemala	0.090	0.093	0.102	0.103	0.104	0.107
Tanzania	0.083	0.085	0.081	0.082	0.083	0.084
Bahrain	0.083	0.088	0.083	0.078	0.076	0.070
Azerbaijan	0.082	0.133	0.134	0.135	0.137	0.141
Jamaica	0.080	0.035	0.031	0.031	0.032	0.031
Panama	0.079	0.103	0.108	0.110	0.104	0.095
Costa Rica	0.077	0.080	0.083	0.084	0.085	0.087
Uganda	0.076	0.045	0.050	0.050	0.051	0.052
Jordan	0.072	0.091	0.089	0.090	0.092	0.087
Latvia	0.070	0.074	0.068	0.068	0.064	0.059
Afghanistan	0.068	0.084	0.047	0.047	0.048	0.049
Senegal	0.068	0.036	0.033	0.033	0.033	0.034
Iceland	0.067	0.131	0.032	0.032	0.031	0.029
Cyprus	0.064	0.070	0.054	0.049	0.043	0.040
Brunei	0.063	0.048	0.038	0.039	0.040	0.037
Ethiopia	0.063	0.088	0.094	0.095	0.096	0.097
El Salvador	0.060	0.050	0.050	0.050	0.051	0.053

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Cameroon	0.058	0.050	0.052	0.053	0.054	0.055
Bosnia & Herzegovina	0.056	0.042	0.041	0.042	0.043	0.043
Papua New Guinea	0.055	0.035	0.035	0.035	0.036	0.037
Nicaragua	0.055	0.027	0.029	0.029	0.030	0.031
Liberia	0.054	0.010	0.006	0.006	0.005	0.005
Honduras	0.052	0.043	0.043	0.044	0.045	0.044
South Sudan	0.052	0.042	0.026	0.026	0.027	0.028
Madagascar	0.051	0.022	0.024	0.024	0.024	0.025
Estonia	0.051	0.071	0.061	0.055	0.051	0.047
Bolivia	0.050	0.064	0.066	0.067	0.068	0.070
Turkmenistan	0.050	0.095	0.094	0.095	0.096	0.098
Mozambique	0.048	0.038	0.035	0.035	0.036	0.036
Gabon	0.045	0.039	0.036	0.036	0.037	0.037
Guinea	0.045	0.017	0.014	0.014	0.014	0.015
Georgia	0.044	0.035	0.037	0.038	0.038	0.037
Sierra Leone	0.043	0.012	0.011	0.011	0.011	0.011
Paraguay	0.042	0.060	0.060	0.061	0.062	0.063
Botswana	0.041	0.044	0.041	0.041	0.042	0.040
Namibia	0.040	0.030	0.029	0.029	0.030	0.028
Mali	0.039	0.028	0.026	0.026	0.026	0.027
Bahamas, The	0.038	0.017	0.017	0.017	0.017	0.016
Guyana	0.038	0.009	0.009	0.008	0.008	0.007
Kyrgyz Republic	0.037	0.023	0.022	0.020	0.022	0.020
Cambodia	0.037	0.044	0.048	0.048	0.049	0.048
Tajikistan	0.036	0.020	0.020	0.020	0.020	0.021
Moldova	0.036	0.024	0.021	0.020	0.021	0.019
Malta	0.035	0.067	0.026	0.024	0.022	0.020
Haiti	0.034	0.020	0.019	0.019	0.019	0.020
Somalia	0.034	0.012	0.014	0.014	0.013	0.012
Congo, Rep. of	0.034	0.052	0.035	0.032	0.033	0.030
Rwanda	0.034	0.018	0.016	0.016	0.016	0.016
Equatorial Guinea	0.033	0.056	0.049	0.045	0.044	0.041
Nepal	0.033	0.045	0.048	0.048	0.049	0.050
Burundi	0.032	0.006	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.012	0.012	0.011

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member (continued)
(in percent)

Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:						
	14th General Review Quotas	Current Formula	Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Mauritius	0.0298	0.0461	0.0343	0.0313	0.0309	0.0285
Macedonia, FYR	0.0294	0.0296	0.0286	0.0289	0.0294	0.0282
Chad	0.0294	0.0282	0.0263	0.0266	0.0270	0.0278
Albania	0.0292	0.0287	0.0283	0.0286	0.0290	0.0298
Malawi	0.0291	0.0160	0.0148	0.0149	0.0151	0.0155
Niger	0.0276	0.0150	0.0158	0.0159	0.0161	0.0165
Suriname	0.0270	0.0120	0.0113	0.0115	0.0116	0.0114
Armenia	0.0270	0.0256	0.0247	0.0250	0.0253	0.0261
Mauritania	0.0270	0.0145	0.0138	0.0139	0.0141	0.0146
Benin	0.0260	0.0195	0.0179	0.0181	0.0183	0.0188
Burkina Faso	0.0252	0.0222	0.0234	0.0236	0.0239	0.0246
Central African Rep.	0.0234	0.0038	0.0031	0.0032	0.0032	0.0033
Lao P.D.R.	0.0222	0.0227	0.0243	0.0245	0.0248	0.0254
Fiji	0.0206	0.0105	0.0109	0.0111	0.0110	0.0101
Barbados	0.0198	0.0095	0.0099	0.0100	0.0091	0.0083
Kosovo	0.0173	0.0154	0.0163	0.0165	0.0167	0.0173
Swaziland	0.0165	0.0122	0.0124	0.0126	0.0128	0.0120
Mongolia	0.0152	0.0370	0.0306	0.0309	0.0314	0.0324
Lesotho	0.0146	0.0086	0.0072	0.0067	0.0070	0.0065
Gambia, The	0.0130	0.0026	0.0027	0.0028	0.0028	0.0029
Montenegro	0.0127	0.0124	0.0111	0.0112	0.0114	0.0111
San Marino	0.0103	0.0091	0.0050	0.0045	0.0039	0.0036
Eritrea	0.0077	0.0071	0.0074	0.0075	0.0076	0.0077
Djibouti	0.0067	0.0040	0.0039	0.0040	0.0040	0.0040
Guinea-Bissau	0.0060	0.0058	0.0025	0.0025	0.0025	0.0026
Belize	0.0056	0.0046	0.0047	0.0047	0.0046	0.0042
Timor-Leste	0.0054	0.0107	0.0093	0.0095	0.0096	0.0088
Vanuatu	0.0050	0.0021	0.0019	0.0019	0.0018	0.0016
Cabo Verde	0.0050	0.0050	0.0049	0.0050	0.0049	0.0045
Seychelles	0.0048	0.0058	0.0044	0.0040	0.0038	0.0035
St. Lucia	0.0045	0.0032	0.0033	0.0033	0.0033	0.0032
Maldives	0.0044	0.0105	0.0090	0.0082	0.0077	0.0071
Solomon Islands	0.0044	0.0031	0.0030	0.0029	0.0025	0.0023
Bhutan	0.0043	0.0070	0.0061	0.0062	0.0063	0.0064
Antigua and Barbuda	0.0042	0.0030	0.0031	0.0031	0.0032	0.0031

Table A13. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Evenly Between GDP and Openness, and Different Openness Measures—by Member (concluded)
(in percent)

Formula w/o variability, weight split evenly between GDP and openness, and different openness measures:						
	14th General Review Quotas	Current Formula	Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Comoros	0.00373	0.00176	0.00172	0.00174	0.00177	0.00169
Grenada	0.00344	0.00241	0.00198	0.00201	0.00204	0.00210
Samoa	0.00340	0.00184	0.00192	0.00195	0.00191	0.00176
São Tomé and Príncipe	0.00310	0.00141	0.00083	0.00084	0.00085	0.00088
Tonga	0.00289	0.00133	0.00134	0.00122	0.00109	0.00101
St. Kitts	0.00262	0.00217	0.00211	0.00214	0.00217	0.00208
St. Vincent	0.00245	0.00179	0.00173	0.00175	0.00178	0.00180
Dominica	0.00241	0.00126	0.00126	0.00128	0.00130	0.00127
Kiribati	0.00235	0.00123	0.00091	0.00086	0.00079	0.00076
Micronesia, FS of	0.00151	0.00124	0.00101	0.00091	0.00078	0.00072
Marshall Islands	0.00103	0.00085	0.00056	0.00050	0.00042	0.00039
Palau	0.00103	0.00076	0.00077	0.00069	0.00059	0.00054
Nauru	0.00059	0.00038	0.00035	0.00032	0.00028	0.00026
Tuvalu	0.00052	0.00023	0.00014	0.00013	0.00011	0.00011
Coefficients for quota variables 2/						
GDP		0.300	0.345	0.345	0.345	0.345
PPP GDP		0.200	0.230	0.230	0.230	0.230
Openness		0.300	0.375	0.375	0.375	0.375
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
United States	17.398	14.478	15.358	15.476	15.630	15.959
Japan	6.461	5.100	5.192	5.232	5.285	5.396
China 1/	6.390	12.581	13.504	13.601	13.727	13.995
Germany	5.583	4.951	5.043	5.112	5.099	4.692
France	4.225	3.168	3.295	3.334	3.385	3.451
United Kingdom	4.225	3.568	3.509	3.551	3.606	3.595
Italy	3.159	2.399	2.440	2.466	2.501	2.575
India	2.749	3.113	3.462	3.483	3.511	3.571
Russia	2.705	2.564	2.609	2.631	2.659	2.720
Brazil	2.315	2.250	2.350	2.363	2.379	2.415
Canada	2.311	2.030	2.130	2.155	2.187	2.246
Saudi Arabia	2.095	1.663	1.494	1.507	1.524	1.559
Spain	1.999	1.753	1.745	1.765	1.791	1.846
Mexico	1.868	1.737	1.796	1.813	1.836	1.883
Netherlands	1.831	2.070	1.602	1.443	1.236	1.137
Korea, Republic of	1.799	1.989	2.194	2.221	2.255	2.148
Australia	1.378	1.432	1.486	1.500	1.519	1.560
Belgium	1.344	1.113	0.994	0.895	0.764	0.703
Switzerland	1.210	1.723	1.534	1.403	1.184	1.111
Turkey	0.977	1.161	1.196	1.205	1.218	1.244
Indonesia	0.974	1.307	1.416	1.425	1.437	1.461
Sweden	0.929	0.896	0.852	0.864	0.814	0.750
Poland	0.859	0.921	0.928	0.939	0.953	0.950
Austria	0.824	0.717	0.697	0.707	0.635	0.585
Singapore	0.816	1.307	0.759	0.699	0.660	0.617
Norway	0.787	0.715	0.666	0.674	0.685	0.635
Venezuela, R.B. de	0.780	0.556	0.571	0.574	0.579	0.589
Malaysia	0.762	0.761	0.762	0.728	0.753	0.697
Iran, I.R. of	0.748	0.719	0.747	0.751	0.756	0.767
Ireland	0.723	0.771	0.531	0.478	0.408	0.376
Denmark	0.721	0.583	0.576	0.584	0.520	0.482
Thailand	0.673	0.986	0.955	0.949	0.981	0.929
Argentina	0.668	0.637	0.669	0.673	0.679	0.690
South Africa	0.640	0.520	0.562	0.568	0.575	0.589
Nigeria	0.515	0.663	0.690	0.694	0.700	0.713

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Greece	0.509	0.349	0.323	0.326	0.331	0.341
Finland	0.505	0.414	0.383	0.388	0.393	0.362
United Arab Emirates	0.485	0.910	0.857	0.781	0.738	0.682
Czech Republic	0.457	0.470	0.469	0.429	0.406	0.375
Portugal	0.432	0.368	0.357	0.362	0.368	0.350
Colombia	0.429	0.439	0.477	0.480	0.485	0.494
Philippines	0.428	0.483	0.495	0.499	0.504	0.515
Egypt	0.427	0.511	0.515	0.518	0.522	0.530
Pakistan	0.426	0.391	0.438	0.440	0.443	0.450
Ukraine	0.422	0.397	0.304	0.307	0.312	0.311
Algeria	0.411	0.453	0.425	0.428	0.432	0.440
Hungary	0.407	0.398	0.322	0.295	0.289	0.268
Kuwait	0.405	0.321	0.313	0.317	0.322	0.298
Israel	0.403	0.431	0.437	0.441	0.447	0.460
Romania	0.380	0.381	0.348	0.351	0.356	0.366
Chile	0.366	0.426	0.409	0.414	0.419	0.431
Iraq	0.349	0.408	0.372	0.375	0.379	0.387
Libya	0.330	0.244	0.152	0.153	0.154	0.145
Peru	0.280	0.319	0.314	0.317	0.320	0.326
Luxembourg	0.277	0.673	0.132	0.118	0.099	0.091
New Zealand	0.262	0.244	0.249	0.251	0.255	0.262
Kazakhstan	0.243	0.382	0.360	0.363	0.368	0.378
Vietnam	0.242	0.438	0.465	0.437	0.470	0.433
Syrian Arab Republic	0.233	0.173	0.194	0.195	0.196	0.199
Bangladesh	0.224	0.278	0.316	0.318	0.321	0.326
Congo, Dem. Rep. of	0.223	0.084	0.066	0.067	0.068	0.070
Slovak Republic	0.210	0.259	0.220	0.199	0.188	0.173
Zambia	0.205	0.051	0.050	0.051	0.051	0.053
Bulgaria	0.188	0.159	0.138	0.136	0.142	0.131
Morocco	0.187	0.201	0.207	0.209	0.211	0.217
Angola	0.155	0.253	0.222	0.225	0.228	0.230
Ghana	0.155	0.087	0.088	0.088	0.090	0.092
Qatar	0.154	0.404	0.370	0.374	0.379	0.350
Croatia	0.150	0.113	0.109	0.110	0.112	0.110
Zimbabwe	0.148	0.029	0.030	0.030	0.031	0.030

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Ecuador	0.146	0.148	0.150	0.151	0.153	0.156
Belarus	0.143	0.169	0.160	0.159	0.165	0.154
Serbia	0.137	0.108	0.095	0.096	0.097	0.098
Côte d'Ivoire	0.136	0.062	0.066	0.066	0.067	0.069
Lebanon	0.133	0.151	0.130	0.127	0.121	0.113
Sudan	0.132	0.103	0.108	0.108	0.109	0.110
Slovenia	0.123	0.115	0.105	0.097	0.088	0.081
Sri Lanka	0.121	0.125	0.140	0.141	0.142	0.145
Uzbekistan	0.116	0.115	0.121	0.122	0.123	0.125
Tunisia	0.114	0.108	0.105	0.106	0.107	0.110
Oman	0.114	0.190	0.175	0.177	0.180	0.166
Kenya	0.114	0.094	0.100	0.101	0.102	0.104
Myanmar	0.108	0.124	0.130	0.131	0.132	0.134
Yemen	0.102	0.080	0.067	0.068	0.068	0.070
Dominican Republic	0.100	0.110	0.113	0.114	0.115	0.118
Trinidad and Tobago	0.098	0.084	0.068	0.066	0.063	0.058
Lithuania	0.093	0.131	0.110	0.100	0.096	0.088
Uruguay	0.090	0.084	0.082	0.083	0.084	0.086
Guatemala	0.090	0.093	0.102	0.103	0.104	0.107
Tanzania	0.083	0.085	0.083	0.083	0.084	0.085
Bahrain	0.083	0.088	0.082	0.077	0.075	0.069
Azerbaijan	0.082	0.133	0.133	0.135	0.137	0.140
Jamaica	0.080	0.035	0.031	0.031	0.032	0.030
Panama	0.079	0.103	0.106	0.108	0.103	0.095
Costa Rica	0.077	0.080	0.083	0.084	0.085	0.087
Uganda	0.076	0.045	0.051	0.051	0.051	0.052
Jordan	0.072	0.091	0.088	0.089	0.091	0.086
Latvia	0.070	0.074	0.067	0.067	0.063	0.058
Afghanistan	0.068	0.084	0.047	0.047	0.048	0.049
Senegal	0.068	0.036	0.032	0.033	0.033	0.034
Iceland	0.067	0.131	0.031	0.032	0.031	0.029
Cyprus	0.064	0.070	0.053	0.048	0.043	0.039
Brunei	0.063	0.048	0.038	0.038	0.039	0.037
Ethiopia	0.063	0.088	0.095	0.096	0.097	0.098
El Salvador	0.060	0.050	0.050	0.050	0.051	0.052

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Cameroon	0.058	0.050	0.053	0.053	0.054	0.055
Bosnia & Herzegovina	0.056	0.042	0.041	0.042	0.042	0.043
Papua New Guinea	0.055	0.035	0.035	0.035	0.036	0.037
Nicaragua	0.055	0.027	0.029	0.029	0.030	0.030
Liberia	0.054	0.010	0.006	0.006	0.005	0.005
Honduras	0.052	0.043	0.043	0.044	0.044	0.044
South Sudan	0.052	0.042	0.026	0.026	0.027	0.027
Madagascar	0.051	0.022	0.024	0.024	0.024	0.025
Estonia	0.051	0.071	0.059	0.054	0.050	0.046
Bolivia	0.050	0.064	0.066	0.067	0.068	0.069
Turkmenistan	0.050	0.095	0.093	0.094	0.095	0.098
Mozambique	0.048	0.038	0.035	0.035	0.036	0.035
Gabon	0.045	0.039	0.036	0.036	0.037	0.037
Guinea	0.045	0.017	0.014	0.014	0.014	0.015
Georgia	0.044	0.035	0.037	0.037	0.038	0.037
Sierra Leone	0.043	0.012	0.011	0.011	0.011	0.011
Paraguay	0.042	0.060	0.060	0.060	0.061	0.063
Botswana	0.041	0.044	0.040	0.041	0.041	0.039
Namibia	0.040	0.030	0.028	0.029	0.029	0.027
Mali	0.039	0.028	0.026	0.026	0.026	0.027
Bahamas, The	0.038	0.017	0.017	0.017	0.017	0.016
Guyana	0.038	0.009	0.008	0.008	0.008	0.007
Kyrgyz Republic	0.037	0.023	0.022	0.020	0.021	0.020
Cambodia	0.037	0.044	0.047	0.047	0.048	0.048
Tajikistan	0.036	0.020	0.020	0.020	0.020	0.021
Moldova	0.036	0.024	0.021	0.020	0.021	0.019
Malta	0.035	0.067	0.026	0.023	0.021	0.020
Haiti	0.034	0.020	0.019	0.019	0.019	0.020
Somalia	0.034	0.012	0.013	0.014	0.013	0.012
Congo, Rep. of	0.034	0.052	0.034	0.032	0.032	0.030
Rwanda	0.034	0.018	0.016	0.016	0.016	0.016
Equatorial Guinea	0.033	0.056	0.048	0.044	0.044	0.040
Nepal	0.033	0.045	0.048	0.048	0.049	0.050
Burundi	0.032	0.006	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.012	0.011

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (continued)
(in percent)

Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:						
	14th General Review Quotas	Current Formula	Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Mauritius	0.0298	0.0461	0.0337	0.0308	0.0305	0.0282
Macedonia, FYR	0.0294	0.0296	0.0283	0.0286	0.0290	0.0279
Chad	0.0294	0.0282	0.0263	0.0265	0.0269	0.0276
Albania	0.0292	0.0287	0.0283	0.0285	0.0289	0.0297
Malawi	0.0291	0.0160	0.0148	0.0150	0.0151	0.0155
Niger	0.0276	0.0150	0.0158	0.0159	0.0161	0.0165
Suriname	0.0270	0.0120	0.0112	0.0113	0.0115	0.0112
Armenia	0.0270	0.0256	0.0245	0.0248	0.0252	0.0259
Mauritania	0.0270	0.0145	0.0137	0.0138	0.0140	0.0145
Benin	0.0260	0.0195	0.0180	0.0181	0.0183	0.0188
Burkina Faso	0.0252	0.0222	0.0235	0.0237	0.0240	0.0246
Central African Rep.	0.0234	0.0038	0.0031	0.0032	0.0032	0.0033
Lao P.D.R.	0.0222	0.0227	0.0245	0.0247	0.0250	0.0255
Fiji	0.0206	0.0105	0.0108	0.0109	0.0109	0.0100
Barbados	0.0198	0.0095	0.0097	0.0098	0.0089	0.0082
Kosovo	0.0173	0.0154	0.0162	0.0164	0.0166	0.0171
Swaziland	0.0165	0.0122	0.0122	0.0124	0.0126	0.0119
Mongolia	0.0152	0.0370	0.0304	0.0307	0.0312	0.0321
Lesotho	0.0146	0.0086	0.0071	0.0066	0.0069	0.0064
Gambia, The	0.0130	0.0026	0.0027	0.0028	0.0028	0.0029
Montenegro	0.0127	0.0124	0.0110	0.0111	0.0113	0.0110
San Marino	0.0103	0.0091	0.0049	0.0044	0.0039	0.0036
Eritrea	0.0077	0.0071	0.0075	0.0075	0.0076	0.0078
Djibouti	0.0067	0.0040	0.0039	0.0039	0.0040	0.0039
Guinea-Bissau	0.0060	0.0058	0.0025	0.0025	0.0026	0.0026
Belize	0.0056	0.0046	0.0047	0.0047	0.0045	0.0042
Timor-Leste	0.0054	0.0107	0.0092	0.0093	0.0095	0.0087
Vanuatu	0.0050	0.0021	0.0019	0.0019	0.0017	0.0016
Cabo Verde	0.0050	0.0050	0.0049	0.0049	0.0048	0.0044
Seychelles	0.0048	0.0058	0.0043	0.0040	0.0038	0.0035
St. Lucia	0.0045	0.0032	0.0032	0.0033	0.0033	0.0031
Maldives	0.0044	0.0105	0.0088	0.0081	0.0076	0.0070
Solomon Islands	0.0044	0.0031	0.0030	0.0028	0.0025	0.0023
Bhutan	0.0043	0.0070	0.0061	0.0061	0.0062	0.0063
Antigua and Barbuda	0.0042	0.0030	0.0031	0.0031	0.0032	0.0030

Table A14. Illustrative Calculations - Current GDP blend, Dropping Variability, Weight Split Between GDP (2/3) and Openness (1/3), and Different Openness Measures—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, weight split between GDP (2/3) and openness (1/3), and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Comoros	0.00373	0.00176	0.00170	0.00172	0.00175	0.00167
Grenada	0.00344	0.00241	0.00197	0.00200	0.00202	0.00208
Samoa	0.00340	0.00184	0.00189	0.00192	0.00188	0.00174
São Tomé and Príncipe	0.00310	0.00141	0.00082	0.00083	0.00084	0.00087
Tonga	0.00289	0.00133	0.00131	0.00120	0.00108	0.00100
St. Kitts	0.00262	0.00217	0.00209	0.00212	0.00215	0.00207
St. Vincent	0.00245	0.00179	0.00172	0.00174	0.00176	0.00178
Dominica	0.00241	0.00126	0.00125	0.00126	0.00128	0.00125
Kiribati	0.00235	0.00123	0.00090	0.00085	0.00079	0.00076
Micronesia, FS of	0.00151	0.00124	0.00098	0.00089	0.00077	0.00072
Marshall Islands	0.00103	0.00085	0.00055	0.00049	0.00041	0.00038
Palau	0.00103	0.00076	0.00075	0.00068	0.00058	0.00053
Nauru	0.00059	0.00038	0.00034	0.00031	0.00028	0.00026
Tuvalu	0.00052	0.00023	0.00014	0.00013	0.00011	0.00011
Coefficients for quota variables 2/						
GDP		0.300	0.360	0.360	0.360	0.360
PPP GDP		0.200	0.240	0.240	0.240	0.240
Openness		0.300	0.350	0.350	0.350	0.350
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

**Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP,
and Different Openness Measures—by Member
(in percent)**

	14th General Review Quotas	Current Formula	Formula w/o variability, all weight to GDP, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
United States	17.398	14.478	15.663	15.765	15.897	16.180
Japan	6.461	5.100	5.254	5.288	5.333	5.429
China 1/	6.390	12.581	13.718	13.801	13.909	14.140
Germany	5.583	4.951	4.898	4.956	4.946	4.596
France	4.225	3.168	3.247	3.280	3.324	3.380
United Kingdom	4.225	3.568	3.448	3.484	3.532	3.522
Italy	3.159	2.399	2.423	2.446	2.475	2.539
India	2.749	3.113	3.562	3.581	3.605	3.656
Russia	2.705	2.564	2.636	2.655	2.679	2.731
Brazil	2.315	2.250	2.427	2.438	2.452	2.483
Canada	2.311	2.030	2.101	2.122	2.150	2.201
Saudi Arabia	2.095	1.663	1.489	1.500	1.515	1.545
Spain	1.999	1.753	1.727	1.744	1.766	1.813
Mexico	1.868	1.737	1.798	1.813	1.832	1.873
Netherlands	1.831	2.070	1.513	1.377	1.198	1.114
Korea, Republic of	1.799	1.989	2.147	2.170	2.199	2.107
Australia	1.378	1.432	1.488	1.501	1.517	1.552
Belgium	1.344	1.113	0.938	0.854	0.741	0.689
Switzerland	1.210	1.723	1.457	1.344	1.157	1.093
Turkey	0.977	1.161	1.214	1.222	1.232	1.255
Indonesia	0.974	1.307	1.458	1.465	1.475	1.497
Sweden	0.929	0.896	0.823	0.833	0.790	0.735
Poland	0.859	0.921	0.912	0.922	0.934	0.932
Austria	0.824	0.717	0.669	0.678	0.616	0.573
Singapore	0.816	1.307	0.729	0.678	0.644	0.607
Norway	0.787	0.715	0.649	0.656	0.666	0.623
Venezuela, R.B. de	0.780	0.556	0.590	0.593	0.597	0.605
Malaysia	0.762	0.761	0.740	0.710	0.732	0.683
Iran, I.R. of	0.748	0.719	0.774	0.777	0.781	0.790
Ireland	0.723	0.771	0.501	0.456	0.396	0.368
Denmark	0.721	0.583	0.554	0.561	0.505	0.473
Thailand	0.673	0.986	0.933	0.928	0.956	0.911
Argentina	0.668	0.637	0.691	0.694	0.699	0.708
South Africa	0.640	0.520	0.564	0.568	0.574	0.587
Nigeria	0.515	0.663	0.710	0.714	0.718	0.729

**Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP,
and Different Openness Measures—by Member (continued)**
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, all weight to GDP, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Greece	0.509	0.349	0.320	0.323	0.327	0.336
Finland	0.505	0.414	0.373	0.377	0.381	0.354
United Arab Emirates	0.485	0.910	0.819	0.754	0.717	0.668
Czech Republic	0.457	0.470	0.449	0.414	0.394	0.368
Portugal	0.432	0.368	0.349	0.353	0.358	0.343
Colombia	0.429	0.439	0.488	0.491	0.494	0.502
Philippines	0.428	0.483	0.501	0.504	0.508	0.518
Egypt	0.427	0.511	0.533	0.535	0.539	0.546
Pakistan	0.426	0.391	0.455	0.457	0.460	0.465
Ukraine	0.422	0.397	0.298	0.301	0.305	0.304
Algeria	0.411	0.453	0.429	0.432	0.435	0.442
Hungary	0.407	0.398	0.310	0.286	0.281	0.263
Kuwait	0.405	0.321	0.305	0.309	0.313	0.292
Israel	0.403	0.431	0.432	0.436	0.441	0.452
Romania	0.380	0.381	0.345	0.348	0.353	0.361
Chile	0.366	0.426	0.407	0.411	0.416	0.426
Iraq	0.349	0.408	0.375	0.378	0.381	0.389
Libya	0.330	0.244	0.149	0.150	0.151	0.143
Peru	0.280	0.319	0.319	0.321	0.323	0.329
Luxembourg	0.277	0.673	0.124	0.113	0.096	0.089
New Zealand	0.262	0.244	0.247	0.249	0.252	0.259
Kazakhstan	0.243	0.382	0.359	0.362	0.366	0.375
Vietnam	0.242	0.438	0.452	0.428	0.456	0.425
Syrian Arab Republic	0.233	0.173	0.202	0.203	0.204	0.206
Bangladesh	0.224	0.278	0.325	0.327	0.329	0.334
Congo, Dem. Rep. of	0.223	0.084	0.066	0.067	0.068	0.069
Slovak Republic	0.210	0.259	0.209	0.192	0.183	0.170
Zambia	0.205	0.051	0.050	0.051	0.051	0.052
Bulgaria	0.188	0.159	0.135	0.133	0.138	0.129
Morocco	0.187	0.201	0.207	0.208	0.211	0.215
Angola	0.155	0.253	0.219	0.221	0.224	0.226
Ghana	0.155	0.087	0.087	0.088	0.089	0.091
Qatar	0.154	0.404	0.360	0.364	0.368	0.343
Croatia	0.150	0.113	0.107	0.108	0.109	0.107
Zimbabwe	0.148	0.029	0.029	0.030	0.030	0.030

**Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP,
and Different Openness Measures—by Member (continued)**
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, all weight to GDP, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Ecuador	0.146	0.148	0.151	0.152	0.154	0.157
Belarus	0.143	0.169	0.156	0.155	0.160	0.150
Serbia	0.137	0.108	0.094	0.095	0.096	0.097
Côte d'Ivoire	0.136	0.062	0.065	0.066	0.067	0.068
Lebanon	0.133	0.151	0.125	0.123	0.118	0.111
Sudan	0.132	0.103	0.112	0.113	0.113	0.115
Slovenia	0.123	0.115	0.100	0.093	0.085	0.079
Sri Lanka	0.121	0.125	0.142	0.143	0.144	0.147
Uzbekistan	0.116	0.115	0.124	0.124	0.125	0.127
Tunisia	0.114	0.108	0.104	0.105	0.106	0.109
Oman	0.114	0.190	0.171	0.172	0.175	0.163
Kenya	0.114	0.094	0.102	0.103	0.104	0.105
Myanmar	0.108	0.124	0.135	0.136	0.136	0.138
Yemen	0.102	0.080	0.068	0.068	0.069	0.070
Dominican Republic	0.100	0.110	0.114	0.114	0.116	0.118
Trinidad and Tobago	0.098	0.084	0.066	0.064	0.061	0.057
Lithuania	0.093	0.131	0.105	0.096	0.093	0.087
Uruguay	0.090	0.084	0.083	0.083	0.084	0.086
Guatemala	0.090	0.093	0.103	0.104	0.105	0.107
Tanzania	0.083	0.085	0.085	0.085	0.086	0.087
Bahrain	0.083	0.088	0.079	0.074	0.073	0.068
Azerbaijan	0.082	0.133	0.133	0.134	0.136	0.139
Jamaica	0.080	0.035	0.030	0.030	0.031	0.030
Panama	0.079	0.103	0.103	0.104	0.100	0.093
Costa Rica	0.077	0.080	0.083	0.083	0.084	0.086
Uganda	0.076	0.045	0.052	0.052	0.052	0.053
Jordan	0.072	0.091	0.086	0.087	0.088	0.085
Latvia	0.070	0.074	0.064	0.064	0.061	0.057
Afghanistan	0.068	0.084	0.047	0.048	0.048	0.049
Senegal	0.068	0.036	0.032	0.032	0.033	0.034
Iceland	0.067	0.131	0.030	0.031	0.030	0.028
Cyprus	0.064	0.070	0.050	0.046	0.041	0.039
Brunei	0.063	0.048	0.037	0.037	0.038	0.036
Ethiopia	0.063	0.088	0.098	0.099	0.099	0.101
El Salvador	0.060	0.050	0.049	0.050	0.050	0.052

Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP, and Different Openness Measures—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, all weight to GDP, and different openness measures:			
			Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Cameroon	0.058	0.050	0.054	0.054	0.055	0.056
Bosnia & Herzegovina	0.056	0.042	0.041	0.041	0.042	0.042
Papua New Guinea	0.055	0.035	0.034	0.035	0.035	0.036
Nicaragua	0.055	0.027	0.028	0.029	0.029	0.030
Liberia	0.054	0.010	0.006	0.005	0.005	0.005
Honduras	0.052	0.043	0.042	0.043	0.043	0.043
South Sudan	0.052	0.042	0.026	0.026	0.026	0.027
Madagascar	0.051	0.022	0.024	0.024	0.024	0.025
Estonia	0.051	0.071	0.057	0.052	0.049	0.045
Bolivia	0.050	0.064	0.066	0.067	0.068	0.069
Turkmenistan	0.050	0.095	0.093	0.093	0.094	0.096
Mozambique	0.048	0.038	0.034	0.034	0.035	0.035
Gabon	0.045	0.039	0.035	0.036	0.036	0.036
Guinea	0.045	0.017	0.014	0.014	0.014	0.015
Georgia	0.044	0.035	0.036	0.036	0.037	0.036
Sierra Leone	0.043	0.012	0.011	0.011	0.011	0.011
Paraguay	0.042	0.060	0.059	0.060	0.060	0.062
Botswana	0.041	0.044	0.039	0.040	0.040	0.039
Namibia	0.040	0.030	0.028	0.028	0.028	0.027
Mali	0.039	0.028	0.026	0.026	0.026	0.027
Bahamas, The	0.038	0.017	0.016	0.016	0.016	0.015
Guyana	0.038	0.009	0.008	0.008	0.008	0.007
Kyrgyz Republic	0.037	0.023	0.021	0.020	0.021	0.019
Cambodia	0.037	0.044	0.046	0.047	0.047	0.047
Tajikistan	0.036	0.020	0.020	0.020	0.020	0.021
Moldova	0.036	0.024	0.020	0.020	0.020	0.019
Malta	0.035	0.067	0.024	0.022	0.021	0.019
Haiti	0.034	0.020	0.019	0.019	0.019	0.020
Somalia	0.034	0.012	0.013	0.013	0.012	0.011
Congo, Rep. of	0.034	0.052	0.033	0.031	0.032	0.029
Rwanda	0.034	0.018	0.016	0.016	0.016	0.016
Equatorial Guinea	0.033	0.056	0.046	0.043	0.042	0.039
Nepal	0.033	0.045	0.049	0.049	0.049	0.050
Burundi	0.032	0.006	0.006	0.006	0.006	0.006
Togo	0.031	0.013	0.011	0.011	0.011	0.011

**Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP,
and Different Openness Measures—by Member (continued)**
(in percent)

Formula w/o variability, all weight to GDP, and different openness measures:						
	14th General Review Quotas	Current Formula	Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Mauritius	0.0298	0.0461	0.0323	0.0299	0.0296	0.0277
Macedonia, FYR	0.0294	0.0296	0.0277	0.0280	0.0283	0.0274
Chad	0.0294	0.0282	0.0262	0.0264	0.0267	0.0274
Albania	0.0292	0.0287	0.0282	0.0284	0.0287	0.0294
Malawi	0.0291	0.0160	0.0149	0.0150	0.0152	0.0155
Niger	0.0276	0.0150	0.0159	0.0160	0.0162	0.0165
Suriname	0.0270	0.0120	0.0110	0.0111	0.0113	0.0110
Armenia	0.0270	0.0256	0.0243	0.0245	0.0248	0.0255
Mauritania	0.0270	0.0145	0.0135	0.0136	0.0138	0.0142
Benin	0.0260	0.0195	0.0181	0.0182	0.0184	0.0188
Burkina Faso	0.0252	0.0222	0.0237	0.0239	0.0241	0.0246
Central African Rep.	0.0234	0.0038	0.0032	0.0032	0.0032	0.0033
Lao P.D.R.	0.0222	0.0227	0.0249	0.0251	0.0253	0.0258
Fiji	0.0206	0.0105	0.0105	0.0106	0.0106	0.0099
Barbados	0.0198	0.0095	0.0093	0.0094	0.0087	0.0081
Kosovo	0.0173	0.0154	0.0161	0.0162	0.0164	0.0168
Swaziland	0.0165	0.0122	0.0120	0.0121	0.0123	0.0116
Mongolia	0.0152	0.0370	0.0300	0.0303	0.0307	0.0315
Lesotho	0.0146	0.0086	0.0069	0.0065	0.0068	0.0063
Gambia, The	0.0130	0.0026	0.0027	0.0027	0.0028	0.0028
Montenegro	0.0127	0.0124	0.0108	0.0109	0.0110	0.0108
San Marino	0.0103	0.0091	0.0046	0.0042	0.0038	0.0035
Eritrea	0.0077	0.0071	0.0076	0.0076	0.0077	0.0079
Djibouti	0.0067	0.0040	0.0038	0.0039	0.0039	0.0039
Guinea-Bissau	0.0060	0.0058	0.0025	0.0026	0.0026	0.0026
Belize	0.0056	0.0046	0.0045	0.0045	0.0044	0.0041
Timor-Leste	0.0054	0.0107	0.0090	0.0091	0.0092	0.0086
Vanuatu	0.0050	0.0021	0.0018	0.0018	0.0017	0.0016
Cabo Verde	0.0050	0.0050	0.0047	0.0048	0.0047	0.0044
Seychelles	0.0048	0.0058	0.0042	0.0038	0.0037	0.0034
St. Lucia	0.0045	0.0032	0.0031	0.0032	0.0032	0.0031
Maldives	0.0044	0.0105	0.0084	0.0078	0.0074	0.0069
Solomon Islands	0.0044	0.0031	0.0028	0.0027	0.0024	0.0023
Bhutan	0.0043	0.0070	0.0060	0.0060	0.0061	0.0062
Antigua and Barbuda	0.0042	0.0030	0.0030	0.0030	0.0031	0.0030

Table A15. Illustrative Calculations - Current GDP blend, Dropping Variability, All Weight to GDP, and Different Openness Measures—by Member (concluded)
(in percent)

Formula w/o variability, all weight to GDP, and different openness measures:						
	14th General Review Quotas	Current Formula	Nominal openness capped at the 85th percentile	Nominal openness capped at the 75th percentile	Openness shares capped at 1.8	Openness shares capped at 1.5
Comoros	0.00373	0.00176	0.00166	0.00168	0.00170	0.00164
Grenada	0.00344	0.00241	0.00195	0.00197	0.00200	0.00205
Samoa	0.00340	0.00184	0.00184	0.00186	0.00183	0.00171
São Tomé and Príncipe	0.00310	0.00141	0.00081	0.00082	0.00083	0.00085
Tonga	0.00289	0.00133	0.00125	0.00115	0.00105	0.00098
St. Kitts	0.00262	0.00217	0.00205	0.00207	0.00210	0.00203
St. Vincent	0.00245	0.00179	0.00169	0.00171	0.00173	0.00175
Dominica	0.00241	0.00126	0.00123	0.00124	0.00126	0.00123
Kiribati	0.00235	0.00123	0.00087	0.00083	0.00078	0.00075
Micronesia, FS of	0.00151	0.00124	0.00093	0.00085	0.00075	0.00070
Marshall Islands	0.00103	0.00085	0.00051	0.00047	0.00040	0.00037
Palau	0.00103	0.00076	0.00071	0.00065	0.00056	0.00052
Nauru	0.00059	0.00038	0.00033	0.00030	0.00027	0.00025
Tuvalu	0.00052	0.00023	0.00013	0.00012	0.00011	0.00010
Coefficients for quota variables 2/						
GDP		0.300	0.390	0.390	0.390	0.390
PPP GDP		0.200	0.260	0.260	0.260	0.260
Openness		0.300	0.300	0.300	0.300	0.300
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.950	0.950	0.950	0.950

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
United States	17.398	14.478	14.292	14.449	14.764	15.080
Japan	6.461	5.100	4.992	5.026	5.096	5.166
China 1/	6.390	12.581	12.648	12.760	12.985	13.212
Germany	5.583	4.951	4.900	4.839	4.717	4.595
France	4.225	3.168	3.225	3.207	3.170	3.133
United Kingdom	4.225	3.568	3.431	3.407	3.360	3.312
Italy	3.159	2.399	2.401	2.397	2.388	2.379
India	2.749	3.113	3.344	3.395	3.498	3.602
Russia	2.705	2.564	2.553	2.569	2.601	2.634
Brazil	2.315	2.250	2.291	2.331	2.410	2.489
Canada	2.311	2.030	2.109	2.098	2.076	2.054
Saudi Arabia	2.095	1.663	1.493	1.493	1.492	1.490
Spain	1.999	1.753	1.735	1.729	1.716	1.703
Mexico	1.868	1.737	1.779	1.783	1.789	1.796
Netherlands	1.831	2.070	1.977	1.914	1.787	1.659
Korea, Republic of	1.799	1.989	2.177	2.158	2.118	2.079
Australia	1.378	1.432	1.478	1.481	1.488	1.494
Belgium	1.344	1.113	1.106	1.075	1.013	0.950
Switzerland	1.210	1.723	1.561	1.526	1.454	1.383
Turkey	0.977	1.161	1.192	1.203	1.223	1.244
Indonesia	0.974	1.307	1.400	1.422	1.466	1.509
Sweden	0.929	0.896	0.869	0.856	0.830	0.804
Poland	0.859	0.921	0.940	0.934	0.921	0.909
Austria	0.824	0.717	0.715	0.703	0.678	0.652
Singapore	0.816	1.307	1.271	1.226	1.135	1.043
Norway	0.787	0.715	0.682	0.675	0.660	0.646
Venezuela, R.B. de	0.780	0.556	0.577	0.587	0.607	0.628
Malaysia	0.762	0.761	0.779	0.769	0.749	0.729
Iran, I.R. of	0.748	0.719	0.751	0.765	0.792	0.820
Ireland	0.723	0.771	0.731	0.706	0.655	0.604
Denmark	0.721	0.583	0.595	0.585	0.564	0.544
Thailand	0.673	0.986	0.968	0.959	0.941	0.923
Argentina	0.668	0.637	0.674	0.686	0.709	0.732
South Africa	0.640	0.520	0.574	0.576	0.579	0.582
Nigeria	0.515	0.663	0.695	0.706	0.727	0.748

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Greece	0.509	0.349	0.335	0.334	0.332	0.330
Finland	0.505	0.414	0.398	0.393	0.384	0.375
United Arab Emirates	0.485	0.910	0.893	0.875	0.838	0.801
Czech Republic	0.457	0.470	0.494	0.485	0.465	0.445
Portugal	0.432	0.368	0.372	0.368	0.361	0.354
Colombia	0.429	0.439	0.486	0.492	0.504	0.516
Philippines	0.428	0.483	0.506	0.509	0.516	0.523
Egypt	0.427	0.511	0.522	0.531	0.550	0.569
Pakistan	0.426	0.391	0.445	0.454	0.473	0.491
Ukraine	0.422	0.397	0.317	0.314	0.310	0.306
Algeria	0.411	0.453	0.437	0.440	0.445	0.450
Hungary	0.407	0.398	0.374	0.366	0.349	0.333
Kuwait	0.405	0.321	0.328	0.324	0.317	0.310
Israel	0.403	0.431	0.451	0.449	0.445	0.441
Romania	0.380	0.381	0.360	0.360	0.358	0.357
Chile	0.366	0.426	0.422	0.422	0.421	0.420
Iraq	0.349	0.408	0.383	0.385	0.390	0.394
Libya	0.330	0.244	0.162	0.161	0.158	0.155
Peru	0.280	0.319	0.325	0.328	0.333	0.338
Luxembourg	0.277	0.673	0.614	0.581	0.514	0.446
New Zealand	0.262	0.244	0.260	0.260	0.258	0.257
Kazakhstan	0.243	0.382	0.372	0.372	0.373	0.373
Vietnam	0.242	0.438	0.481	0.475	0.463	0.452
Syrian Arab Republic	0.233	0.173	0.201	0.206	0.214	0.223
Bangladesh	0.224	0.278	0.325	0.330	0.340	0.350
Congo, Dem. Rep. of	0.223	0.084	0.072	0.072	0.072	0.072
Slovak Republic	0.210	0.259	0.252	0.246	0.234	0.222
Zambia	0.205	0.051	0.055	0.055	0.055	0.055
Bulgaria	0.188	0.159	0.148	0.146	0.143	0.140
Morocco	0.187	0.201	0.217	0.217	0.218	0.218
Angola	0.155	0.253	0.234	0.232	0.229	0.227
Ghana	0.155	0.087	0.094	0.094	0.094	0.093
Qatar	0.154	0.404	0.385	0.380	0.372	0.363
Croatia	0.150	0.113	0.117	0.116	0.114	0.112
Zimbabwe	0.148	0.029	0.033	0.033	0.032	0.032

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Ecuador	0.146	0.148	0.158	0.159	0.161	0.163
Belarus	0.143	0.169	0.170	0.168	0.165	0.161
Serbia	0.137	0.108	0.102	0.102	0.100	0.099
Côte d'Ivoire	0.136	0.062	0.071	0.071	0.071	0.071
Lebanon	0.133	0.151	0.139	0.137	0.133	0.129
Sudan	0.132	0.103	0.113	0.116	0.121	0.126
Slovenia	0.123	0.115	0.114	0.111	0.106	0.102
Sri Lanka	0.121	0.125	0.147	0.149	0.152	0.155
Uzbekistan	0.116	0.115	0.128	0.130	0.133	0.136
Tunisia	0.114	0.108	0.112	0.112	0.111	0.110
Oman	0.114	0.190	0.186	0.184	0.180	0.176
Kenya	0.114	0.094	0.107	0.108	0.110	0.112
Myanmar	0.108	0.124	0.137	0.139	0.145	0.150
Yemen	0.102	0.080	0.072	0.072	0.073	0.074
Dominican Republic	0.100	0.110	0.120	0.121	0.122	0.123
Trinidad and Tobago	0.098	0.084	0.074	0.073	0.071	0.068
Lithuania	0.093	0.131	0.120	0.118	0.113	0.108
Uruguay	0.090	0.084	0.088	0.089	0.090	0.090
Guatemala	0.090	0.093	0.109	0.109	0.110	0.111
Tanzania	0.083	0.085	0.088	0.089	0.092	0.094
Bahrain	0.083	0.088	0.089	0.087	0.084	0.081
Azerbaijan	0.082	0.133	0.142	0.142	0.142	0.142
Jamaica	0.080	0.035	0.034	0.034	0.033	0.033
Panama	0.079	0.103	0.114	0.113	0.109	0.106
Costa Rica	0.077	0.080	0.089	0.089	0.089	0.089
Uganda	0.076	0.045	0.055	0.055	0.057	0.058
Jordan	0.072	0.091	0.095	0.094	0.093	0.091
Latvia	0.070	0.074	0.073	0.072	0.069	0.067
Afghanistan	0.068	0.084	0.051	0.051	0.052	0.052
Senegal	0.068	0.036	0.036	0.036	0.035	0.035
Iceland	0.067	0.131	0.035	0.034	0.033	0.033
Cyprus	0.064	0.070	0.064	0.062	0.059	0.055
Brunei	0.063	0.048	0.042	0.041	0.041	0.040
Ethiopia	0.063	0.088	0.101	0.103	0.106	0.109
El Salvador	0.060	0.050	0.054	0.054	0.054	0.054

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Cameroon	0.058	0.050	0.057	0.058	0.059	0.060
Bosnia & Herzegovina	0.056	0.042	0.045	0.045	0.045	0.044
Papua New Guinea	0.055	0.035	0.038	0.038	0.038	0.038
Nicaragua	0.055	0.027	0.032	0.032	0.031	0.031
Liberia	0.054	0.010	0.009	0.009	0.008	0.008
Honduras	0.052	0.043	0.047	0.047	0.046	0.046
South Sudan	0.052	0.042	0.029	0.029	0.028	0.028
Madagascar	0.051	0.022	0.026	0.026	0.027	0.027
Estonia	0.051	0.071	0.068	0.067	0.063	0.060
Bolivia	0.050	0.064	0.072	0.072	0.072	0.072
Turkmenistan	0.050	0.095	0.100	0.100	0.100	0.099
Mozambique	0.048	0.038	0.038	0.038	0.038	0.037
Gabon	0.045	0.039	0.039	0.039	0.039	0.038
Guinea	0.045	0.017	0.016	0.016	0.016	0.016
Georgia	0.044	0.035	0.041	0.040	0.040	0.039
Sierra Leone	0.043	0.012	0.012	0.012	0.012	0.012
Paraguay	0.042	0.060	0.065	0.065	0.064	0.064
Botswana	0.041	0.044	0.044	0.044	0.043	0.042
Namibia	0.040	0.030	0.032	0.031	0.031	0.030
Mali	0.039	0.028	0.029	0.029	0.029	0.029
Bahamas, The	0.038	0.017	0.019	0.018	0.018	0.018
Guyana	0.038	0.009	0.010	0.010	0.009	0.009
Kyrgyz Republic	0.037	0.023	0.025	0.024	0.024	0.023
Cambodia	0.037	0.044	0.052	0.051	0.051	0.050
Tajikistan	0.036	0.020	0.022	0.022	0.022	0.022
Moldova	0.036	0.024	0.023	0.023	0.023	0.022
Malta	0.035	0.067	0.067	0.064	0.058	0.052
Haiti	0.034	0.020	0.021	0.021	0.021	0.021
Somalia	0.034	0.012	0.015	0.015	0.015	0.014
Congo, Rep. of	0.034	0.052	0.040	0.039	0.038	0.036
Rwanda	0.034	0.018	0.017	0.018	0.018	0.018
Equatorial Guinea	0.033	0.056	0.053	0.052	0.050	0.049
Nepal	0.033	0.045	0.052	0.053	0.053	0.054
Burundi	0.032	0.006	0.007	0.007	0.007	0.007
Togo	0.031	0.013	0.013	0.013	0.013	0.012

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Mauritius	0.0298	0.0461	0.0394	0.0386	0.0371	0.0356
Macedonia, FYR	0.0294	0.0296	0.0314	0.0311	0.0306	0.0300
Chad	0.0294	0.0282	0.0291	0.0291	0.0291	0.0290
Albania	0.0292	0.0287	0.0313	0.0313	0.0313	0.0312
Malawi	0.0291	0.0160	0.0166	0.0167	0.0168	0.0169
Niger	0.0276	0.0150	0.0177	0.0178	0.0179	0.0181
Suriname	0.0270	0.0120	0.0128	0.0126	0.0124	0.0122
Armenia	0.0270	0.0256	0.0273	0.0272	0.0270	0.0268
Mauritania	0.0270	0.0145	0.0154	0.0154	0.0152	0.0151
Benin	0.0260	0.0195	0.0201	0.0201	0.0203	0.0205
Burkina Faso	0.0252	0.0222	0.0260	0.0262	0.0265	0.0268
Central African Rep.	0.0234	0.0038	0.0037	0.0037	0.0037	0.0038
Lao P.D.R.	0.0222	0.0227	0.0271	0.0273	0.0278	0.0284
Fiji	0.0206	0.0105	0.0123	0.0122	0.0119	0.0116
Barbados	0.0198	0.0095	0.0111	0.0110	0.0106	0.0102
Kosovo	0.0173	0.0154	0.0182	0.0182	0.0181	0.0179
Swaziland	0.0165	0.0122	0.0139	0.0138	0.0135	0.0132
Mongolia	0.0152	0.0370	0.0336	0.0335	0.0332	0.0329
Lesotho	0.0146	0.0086	0.0097	0.0095	0.0091	0.0087
Gambia, The	0.0130	0.0026	0.0032	0.0032	0.0032	0.0032
Montenegro	0.0127	0.0124	0.0125	0.0124	0.0122	0.0120
San Marino	0.0103	0.0091	0.0081	0.0078	0.0072	0.0067
Eritrea	0.0077	0.0071	0.0085	0.0086	0.0087	0.0089
Djibouti	0.0067	0.0040	0.0045	0.0045	0.0045	0.0044
Guinea-Bissau	0.0060	0.0058	0.0029	0.0030	0.0030	0.0031
Belize	0.0056	0.0046	0.0055	0.0054	0.0052	0.0051
Timor-Leste	0.0054	0.0107	0.0106	0.0105	0.0102	0.0100
Vanuatu	0.0050	0.0021	0.0023	0.0022	0.0022	0.0021
Cabo Verde	0.0050	0.0050	0.0057	0.0056	0.0055	0.0053
Seychelles	0.0048	0.0058	0.0057	0.0056	0.0053	0.0050
St. Lucia	0.0045	0.0032	0.0038	0.0038	0.0037	0.0036
Maldives	0.0044	0.0105	0.0109	0.0107	0.0102	0.0097
Solomon Islands	0.0044	0.0031	0.0035	0.0034	0.0033	0.0032
Bhutan	0.0043	0.0070	0.0070	0.0070	0.0069	0.0068
Antigua and Barbuda	0.0042	0.0030	0.0036	0.0036	0.0035	0.0035

Table A16. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Higher Compression (0.925)—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Comoros	0.00373	0.00176	0.00203	0.00202	0.00198	0.00194
Grenada	0.00344	0.00241	0.00235	0.00234	0.00232	0.00230
Samoa	0.00340	0.00184	0.00227	0.00224	0.00218	0.00212
São Tomé and Príncipe	0.00310	0.00141	0.00100	0.00100	0.00099	0.00098
Tonga	0.00289	0.00133	0.00159	0.00156	0.00149	0.00142
St. Kitts	0.00262	0.00217	0.00249	0.00247	0.00243	0.00239
St. Vincent	0.00245	0.00179	0.00206	0.00204	0.00202	0.00200
Dominica	0.00241	0.00126	0.00151	0.00150	0.00147	0.00145
Kiribati	0.00235	0.00123	0.00120	0.00118	0.00114	0.00110
Micronesia, FS of	0.00151	0.00124	0.00130	0.00126	0.00120	0.00113
Marshall Islands	0.00103	0.00085	0.00088	0.00085	0.00079	0.00073
Palau	0.00103	0.00076	0.00094	0.00092	0.00087	0.00082
Nauru	0.00059	0.00038	0.00047	0.00046	0.00044	0.00041
Tuvalu	0.00052	0.00023	0.00026	0.00025	0.00023	0.00022
Coefficients for quota variables 2/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.925	0.925	0.925	0.925

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

**Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member
(in percent)**

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
United States	17.398	14.478	15.703	15.878	16.229	16.580
Japan	6.461	5.100	5.181	5.217	5.288	5.360
China 1/	6.390	12.581	13.805	13.928	14.175	14.422
Germany	5.583	4.951	5.081	5.012	4.875	4.737
France	4.225	3.168	3.270	3.248	3.206	3.164
United Kingdom	4.225	3.568	3.490	3.463	3.409	3.355
Italy	3.159	2.399	2.396	2.390	2.378	2.367
India	2.749	3.113	3.397	3.450	3.558	3.665
Russia	2.705	2.564	2.556	2.572	2.603	2.635
Brazil	2.315	2.250	2.280	2.321	2.402	2.483
Canada	2.311	2.030	2.089	2.077	2.052	2.027
Saudi Arabia	2.095	1.663	1.452	1.451	1.448	1.446
Spain	1.999	1.753	1.701	1.694	1.679	1.664
Mexico	1.868	1.737	1.747	1.749	1.755	1.760
Netherlands	1.831	2.070	1.952	1.885	1.752	1.619
Korea, Republic of	1.799	1.989	2.161	2.140	2.097	2.054
Australia	1.378	1.432	1.437	1.439	1.444	1.450
Belgium	1.344	1.113	1.059	1.027	0.963	0.899
Switzerland	1.210	1.723	1.522	1.485	1.410	1.336
Turkey	0.977	1.161	1.146	1.155	1.175	1.195
Indonesia	0.974	1.307	1.357	1.379	1.422	1.465
Sweden	0.929	0.896	0.821	0.808	0.781	0.754
Poland	0.859	0.921	0.892	0.885	0.872	0.858
Austria	0.824	0.717	0.668	0.656	0.630	0.605
Singapore	0.816	1.307	1.225	1.179	1.086	0.993
Norway	0.787	0.715	0.636	0.628	0.614	0.599
Venezuela, R.B. de	0.780	0.556	0.533	0.543	0.562	0.581
Malaysia	0.762	0.761	0.732	0.721	0.701	0.681
Iran, I.R. of	0.748	0.719	0.703	0.717	0.743	0.770
Ireland	0.723	0.771	0.684	0.659	0.609	0.558
Denmark	0.721	0.583	0.550	0.540	0.520	0.499
Thailand	0.673	0.986	0.920	0.911	0.892	0.873
Argentina	0.668	0.637	0.628	0.639	0.661	0.683
South Africa	0.640	0.520	0.530	0.531	0.534	0.536
Nigeria	0.515	0.663	0.649	0.659	0.679	0.699

Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Greece	0.509	0.349	0.301	0.300	0.297	0.295
Finland	0.505	0.414	0.360	0.356	0.347	0.338
United Arab Emirates	0.485	0.910	0.845	0.826	0.789	0.751
Czech Republic	0.457	0.470	0.453	0.443	0.424	0.404
Portugal	0.432	0.368	0.335	0.332	0.325	0.318
Colombia	0.429	0.439	0.445	0.451	0.462	0.473
Philippines	0.428	0.483	0.464	0.467	0.473	0.480
Egypt	0.427	0.511	0.480	0.488	0.506	0.524
Pakistan	0.426	0.391	0.406	0.414	0.431	0.449
Ukraine	0.422	0.397	0.283	0.281	0.276	0.272
Algeria	0.411	0.453	0.398	0.400	0.405	0.409
Hungary	0.407	0.398	0.338	0.330	0.314	0.298
Kuwait	0.405	0.321	0.293	0.290	0.283	0.276
Israel	0.403	0.431	0.411	0.409	0.405	0.401
Romania	0.380	0.381	0.324	0.324	0.322	0.321
Chile	0.366	0.426	0.384	0.383	0.382	0.381
Iraq	0.349	0.408	0.346	0.348	0.352	0.356
Libya	0.330	0.244	0.140	0.139	0.136	0.133
Peru	0.280	0.319	0.291	0.293	0.298	0.303
Luxembourg	0.277	0.673	0.569	0.536	0.471	0.406
New Zealand	0.262	0.244	0.230	0.230	0.228	0.227
Kazakhstan	0.243	0.382	0.335	0.336	0.336	0.336
Vietnam	0.242	0.438	0.440	0.434	0.422	0.411
Syrian Arab Republic	0.233	0.173	0.176	0.180	0.187	0.195
Bangladesh	0.224	0.278	0.291	0.296	0.305	0.314
Congo, Dem. Rep. of	0.223	0.084	0.059	0.059	0.059	0.059
Slovak Republic	0.210	0.259	0.222	0.217	0.205	0.194
Zambia	0.205	0.051	0.045	0.045	0.045	0.045
Bulgaria	0.188	0.159	0.127	0.125	0.122	0.119
Morocco	0.187	0.201	0.190	0.190	0.191	0.191
Angola	0.155	0.253	0.205	0.204	0.201	0.199
Ghana	0.155	0.087	0.079	0.079	0.078	0.078
Qatar	0.154	0.404	0.348	0.343	0.335	0.327
Croatia	0.150	0.113	0.099	0.098	0.096	0.095
Zimbabwe	0.148	0.029	0.026	0.026	0.026	0.025

Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Ecuador	0.146	0.148	0.136	0.137	0.139	0.140
Belarus	0.143	0.169	0.147	0.145	0.142	0.138
Serbia	0.137	0.108	0.086	0.085	0.084	0.083
Côte d'Ivoire	0.136	0.062	0.059	0.058	0.058	0.058
Lebanon	0.133	0.151	0.119	0.117	0.114	0.110
Sudan	0.132	0.103	0.096	0.098	0.103	0.107
Slovenia	0.123	0.115	0.096	0.094	0.090	0.085
Sri Lanka	0.121	0.125	0.126	0.128	0.130	0.133
Uzbekistan	0.116	0.115	0.109	0.111	0.113	0.116
Tunisia	0.114	0.108	0.095	0.094	0.094	0.093
Oman	0.114	0.190	0.161	0.159	0.156	0.152
Kenya	0.114	0.094	0.094	0.091	0.093	0.094
Myanmar	0.108	0.124	0.117	0.119	0.124	0.129
Yemen	0.102	0.080	0.059	0.060	0.061	0.061
Dominican Republic	0.100	0.110	0.102	0.102	0.103	0.104
Trinidad and Tobago	0.098	0.084	0.061	0.060	0.058	0.056
Lithuania	0.093	0.131	0.102	0.100	0.096	0.091
Uruguay	0.090	0.084	0.074	0.074	0.075	0.075
Guatemala	0.090	0.093	0.092	0.092	0.093	0.094
Tanzania	0.083	0.085	0.073	0.074	0.077	0.079
Bahrain	0.083	0.088	0.074	0.073	0.070	0.067
Azerbaijan	0.082	0.133	0.121	0.121	0.121	0.122
Jamaica	0.080	0.035	0.027	0.027	0.026	0.026
Panama	0.079	0.103	0.097	0.095	0.092	0.089
Costa Rica	0.077	0.080	0.074	0.074	0.074	0.074
Uganda	0.076	0.045	0.044	0.045	0.046	0.047
Jordan	0.072	0.091	0.080	0.079	0.078	0.076
Latvia	0.070	0.074	0.060	0.059	0.057	0.055
Afghanistan	0.068	0.084	0.041	0.042	0.042	0.042
Senegal	0.068	0.036	0.028	0.028	0.028	0.028
Iceland	0.067	0.131	0.028	0.027	0.026	0.026
Cyprus	0.064	0.070	0.052	0.051	0.048	0.045
Brunei	0.063	0.048	0.034	0.033	0.033	0.032
Ethiopia	0.063	0.088	0.085	0.086	0.089	0.092
El Salvador	0.060	0.050	0.044	0.044	0.044	0.043

Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Cameroon	0.058	0.050	0.047	0.047	0.048	0.049
Bosnia & Herzegovina	0.056	0.042	0.036	0.036	0.036	0.035
Papua New Guinea	0.055	0.035	0.031	0.030	0.030	0.030
Nicaragua	0.055	0.027	0.025	0.025	0.025	0.025
Liberia	0.054	0.010	0.007	0.007	0.006	0.006
Honduras	0.052	0.043	0.038	0.038	0.037	0.037
South Sudan	0.052	0.042	0.023	0.022	0.022	0.022
Madagascar	0.051	0.022	0.020	0.021	0.021	0.021
Estonia	0.051	0.071	0.056	0.055	0.052	0.049
Bolivia	0.050	0.064	0.059	0.059	0.059	0.060
Turkmenistan	0.050	0.095	0.084	0.084	0.084	0.083
Mozambique	0.048	0.038	0.031	0.030	0.030	0.029
Gabon	0.045	0.039	0.031	0.031	0.031	0.030
Guinea	0.045	0.017	0.012	0.012	0.012	0.012
Georgia	0.044	0.035	0.033	0.032	0.032	0.031
Sierra Leone	0.043	0.012	0.009	0.009	0.009	0.009
Paraguay	0.042	0.060	0.053	0.053	0.053	0.052
Botswana	0.041	0.044	0.036	0.035	0.035	0.034
Namibia	0.040	0.030	0.025	0.025	0.024	0.024
Mali	0.039	0.028	0.022	0.022	0.023	0.023
Bahamas, The	0.038	0.017	0.014	0.014	0.014	0.013
Guyana	0.038	0.009	0.007	0.007	0.007	0.007
Kyrgyz Republic	0.037	0.023	0.019	0.019	0.018	0.018
Cambodia	0.037	0.044	0.042	0.042	0.041	0.040
Tajikistan	0.036	0.020	0.017	0.017	0.017	0.017
Moldova	0.036	0.024	0.018	0.018	0.017	0.017
Malta	0.035	0.067	0.055	0.053	0.047	0.042
Haiti	0.034	0.020	0.016	0.016	0.016	0.016
Somalia	0.034	0.012	0.012	0.011	0.011	0.011
Congo, Rep. of	0.034	0.052	0.032	0.031	0.030	0.029
Rwanda	0.034	0.018	0.013	0.013	0.014	0.014
Equatorial Guinea	0.033	0.056	0.043	0.042	0.041	0.039
Nepal	0.033	0.045	0.042	0.043	0.043	0.044
Burundi	0.032	0.006	0.005	0.005	0.005	0.005
Togo	0.031	0.013	0.010	0.010	0.009	0.009

Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Mauritius	0.0298	0.0461	0.0315	0.0308	0.0295	0.0282
Macedonia, FYR	0.0294	0.0296	0.0248	0.0246	0.0241	0.0236
Chad	0.0294	0.0282	0.0229	0.0228	0.0228	0.0228
Albania	0.0292	0.0287	0.0247	0.0247	0.0246	0.0246
Malawi	0.0291	0.0160	0.0127	0.0127	0.0128	0.0129
Niger	0.0276	0.0150	0.0135	0.0136	0.0137	0.0138
Suriname	0.0270	0.0120	0.0096	0.0095	0.0093	0.0092
Armenia	0.0270	0.0256	0.0214	0.0213	0.0211	0.0209
Mauritania	0.0270	0.0145	0.0117	0.0117	0.0115	0.0114
Benin	0.0260	0.0195	0.0154	0.0155	0.0156	0.0157
Burkina Faso	0.0252	0.0222	0.0203	0.0205	0.0207	0.0209
Central African Rep.	0.0234	0.0038	0.0026	0.0026	0.0026	0.0026
Lao P.D.R.	0.0222	0.0227	0.0212	0.0214	0.0218	0.0222
Fiji	0.0206	0.0105	0.0092	0.0091	0.0089	0.0086
Barbados	0.0198	0.0095	0.0083	0.0082	0.0079	0.0076
Kosovo	0.0173	0.0154	0.0140	0.0139	0.0138	0.0137
Swaziland	0.0165	0.0122	0.0105	0.0104	0.0102	0.0099
Mongolia	0.0152	0.0370	0.0266	0.0265	0.0262	0.0260
Lesotho	0.0146	0.0086	0.0072	0.0070	0.0067	0.0064
Gambia, The	0.0130	0.0026	0.0022	0.0022	0.0022	0.0022
Montenegro	0.0127	0.0124	0.0094	0.0093	0.0092	0.0090
San Marino	0.0103	0.0091	0.0059	0.0057	0.0053	0.0048
Eritrea	0.0077	0.0071	0.0063	0.0063	0.0064	0.0065
Djibouti	0.0067	0.0040	0.0032	0.0032	0.0032	0.0031
Guinea-Bissau	0.0060	0.0058	0.0020	0.0021	0.0021	0.0021
Belize	0.0056	0.0046	0.0039	0.0039	0.0037	0.0036
Timor-Leste	0.0054	0.0107	0.0079	0.0078	0.0076	0.0074
Vanuatu	0.0050	0.0021	0.0015	0.0015	0.0015	0.0014
Cabo Verde	0.0050	0.0050	0.0041	0.0040	0.0039	0.0038
Seychelles	0.0048	0.0058	0.0041	0.0040	0.0038	0.0036
St. Lucia	0.0045	0.0032	0.0027	0.0026	0.0026	0.0025
Maldives	0.0044	0.0105	0.0082	0.0080	0.0076	0.0072
Solomon Islands	0.0044	0.0031	0.0025	0.0024	0.0023	0.0022
Bhutan	0.0043	0.0070	0.0051	0.0051	0.0050	0.0050
Antigua and Barbuda	0.0042	0.0030	0.0025	0.0025	0.0025	0.0024

Table A17. Illustrative Calculations - Current GDP and Openness Measures, Dropping Variability, and Lower Compression (0.975)—by Member (concluded)
(in percent)

	14th General Review Quotas	Current Formula	Formula w/o variability, and weight split:			Formula w/o variability and:
			Even split	GDP (2/3), openness (1/3)	All to GDP blend	Weight of openness reduced to 0.25
Comoros	0.00373	0.00176	0.00139	0.00137	0.00134	0.00132
Grenada	0.00344	0.00241	0.00161	0.00160	0.00159	0.00158
Samoa	0.00340	0.00184	0.00155	0.00153	0.00149	0.00144
São Tomé and Príncipe	0.00310	0.00141	0.00066	0.00065	0.00065	0.00064
Tonga	0.00289	0.00133	0.00107	0.00105	0.00100	0.00095
St. Kitts	0.00262	0.00217	0.00171	0.00170	0.00167	0.00164
St. Vincent	0.00245	0.00179	0.00140	0.00139	0.00137	0.00135
Dominica	0.00241	0.00126	0.00101	0.00100	0.00098	0.00097
Kiribati	0.00235	0.00123	0.00080	0.00078	0.00075	0.00072
Micronesia, FS of	0.00151	0.00124	0.00086	0.00084	0.00079	0.00074
Marshall Islands	0.00103	0.00085	0.00057	0.00055	0.00051	0.00047
Palau	0.00103	0.00076	0.00062	0.00060	0.00057	0.00053
Nauru	0.00059	0.00038	0.00030	0.00029	0.00027	0.00026
Tuvalu	0.00052	0.00023	0.00016	0.00015	0.00014	0.00013
Coefficients for quota variables 2/						
GDP		0.300	0.345	0.360	0.390	0.420
PPP GDP		0.200	0.230	0.240	0.260	0.280
Openness		0.300	0.375	0.350	0.300	0.250
Variability		0.150	0.000	0.000	0.000	0.000
Reserves		0.050	0.050	0.050	0.050	0.050
Compression factor		0.950	0.975	0.975	0.975	0.975

Source: Finance Department

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

2/ Shown coefficients may not add up to one due to rounding.

**Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member
(in percent)**

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
United States	17.398	14.478	20.137	17.308	16.580	17.172	17.375
Japan	6.461	5.100	5.533	5.317	5.360	5.501	5.300
China 2/	6.390	12.581	15.441	14.011	14.422	14.565	14.260
Germany	5.583	4.951	4.255	4.603	4.737	4.648	4.688
France	4.225	3.168	3.077	3.123	3.164	3.163	3.185
United Kingdom	4.225	3.568	3.190	3.379	3.355	3.349	3.354
Italy	3.159	2.399	2.387	2.393	2.367	2.381	2.403
India	2.749	3.113	4.299	3.706	3.665	3.621	3.804
Russia	2.705	2.564	2.781	2.673	2.635	2.625	2.665
Brazil	2.315	2.250	2.862	2.556	2.483	2.557	2.554
Canada	2.311	2.030	1.941	1.986	2.027	2.032	2.033
Saudi Arabia	2.095	1.663	1.158	1.411	1.446	1.423	1.321
Spain	1.999	1.753	1.623	1.688	1.664	1.661	1.680
Mexico	1.868	1.737	1.766	1.752	1.760	1.752	1.768
Netherlands	1.831	2.070	0.956	1.513	1.619	1.498	1.505
Korea, Republic of	1.799	1.989	1.734	1.862	2.054	2.016	1.972
Australia	1.378	1.432	1.501	1.467	1.450	1.486	1.482
Belgium	1.344	1.113	0.574	0.844	0.899	0.843	0.846
Switzerland	1.210	1.723	0.715	1.219	1.336	1.279	1.153
Turkey	0.977	1.161	1.282	1.222	1.195	1.207	1.224
Indonesia	0.974	1.307	1.692	1.500	1.465	1.460	1.527
Sweden	0.929	0.896	0.600	0.748	0.754	0.739	0.730
Poland	0.859	0.921	0.759	0.840	0.858	0.837	0.842
Austria	0.824	0.717	0.473	0.595	0.605	0.587	0.589
Singapore	0.816	1.307	0.405	0.856	0.993	0.899	0.853
Norway	0.787	0.715	0.496	0.606	0.599	0.595	0.582
Venezuela, R.B. de	0.780	0.556	0.682	0.619	0.581	0.612	0.616
Malaysia	0.762	0.761	0.535	0.648	0.681	0.649	0.651
Iran, I.R. of	0.748	0.719	0.860	0.790	0.770	0.773	0.789
Ireland	0.723	0.771	0.299	0.535	0.558	0.512	0.515
Denmark	0.721	0.583	0.355	0.469	0.499	0.487	0.468
Thailand	0.673	0.986	0.717	0.852	0.873	0.836	0.837
Argentina	0.668	0.637	0.792	0.715	0.683	0.705	0.718
South Africa	0.640	0.520	0.532	0.526	0.536	0.531	0.543
Nigeria	0.515	0.663	0.799	0.731	0.699	0.710	0.733

Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Greece	0.509	0.349	0.280	0.315	0.295	0.294	0.300
Finland	0.505	0.414	0.285	0.350	0.338	0.334	0.334
United Arab Emirates	0.485	0.910	0.531	0.721	0.751	0.712	0.710
Czech Republic	0.457	0.470	0.277	0.374	0.404	0.384	0.379
Portugal	0.432	0.368	0.276	0.322	0.318	0.312	0.316
Colombia	0.429	0.439	0.510	0.475	0.473	0.479	0.487
Philippines	0.428	0.483	0.480	0.482	0.480	0.476	0.482
Egypt	0.427	0.511	0.612	0.562	0.524	0.522	0.554
Pakistan	0.426	0.391	0.531	0.461	0.449	0.448	0.476
Ukraine	0.422	0.397	0.242	0.320	0.272	0.261	0.272
Algeria	0.411	0.453	0.358	0.406	0.409	0.404	0.387
Hungary	0.407	0.398	0.195	0.297	0.298	0.279	0.278
Kuwait	0.405	0.321	0.222	0.272	0.276	0.266	0.267
Israel	0.403	0.431	0.338	0.385	0.401	0.403	0.385
Romania	0.380	0.381	0.295	0.338	0.321	0.315	0.319
Chile	0.366	0.426	0.355	0.391	0.381	0.378	0.380
Iraq	0.349	0.408	0.346	0.377	0.356	0.350	0.355
Libya	0.330	0.244	0.078	0.161	0.133	0.130	0.114
Peru	0.280	0.319	0.295	0.307	0.303	0.304	0.301
Luxembourg	0.277	0.673	0.067	0.370	0.406	0.341	0.341
New Zealand	0.262	0.244	0.208	0.226	0.227	0.229	0.227
Kazakhstan	0.243	0.382	0.326	0.354	0.336	0.331	0.340
Vietnam	0.242	0.438	0.335	0.387	0.411	0.390	0.400
Syrian Arab Republic	0.233	0.173	0.231	0.202	0.195	0.211	0.209
Bangladesh	0.224	0.278	0.347	0.313	0.314	0.314	0.327
Congo, Dem. Rep. of	0.223	0.084	0.056	0.070	0.059	0.060	0.060
Slovak Republic	0.210	0.259	0.132	0.196	0.194	0.182	0.186
Zambia	0.205	0.051	0.041	0.046	0.045	0.044	0.045
Bulgaria	0.188	0.159	0.091	0.125	0.119	0.114	0.114
Morocco	0.187	0.201	0.180	0.191	0.191	0.187	0.191
Angola	0.155	0.253	0.169	0.211	0.199	0.196	0.195
Ghana	0.155	0.087	0.073	0.080	0.078	0.076	0.079
Qatar	0.154	0.404	0.262	0.333	0.327	0.317	0.316
Croatia	0.150	0.113	0.076	0.095	0.095	0.093	0.091
Zimbabwe	0.148	0.029	0.021	0.025	0.025	0.024	0.025

Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Ecuador	0.146	0.148	0.144	0.146	0.140	0.141	0.145
Belarus	0.143	0.169	0.116	0.143	0.138	0.132	0.137
Serbia	0.137	0.108	0.069	0.089	0.083	0.081	0.081
Côte d'Ivoire	0.136	0.062	0.053	0.058	0.058	0.057	0.058
Lebanon	0.133	0.151	0.069	0.110	0.110	0.106	0.098
Sudan	0.132	0.103	0.126	0.115	0.107	0.110	0.115
Slovenia	0.123	0.115	0.059	0.087	0.085	0.081	0.082
Sri Lanka	0.121	0.125	0.140	0.133	0.133	0.132	0.138
Uzbekistan	0.116	0.115	0.113	0.114	0.116	0.115	0.115
Tunisia	0.114	0.108	0.082	0.095	0.093	0.090	0.092
Oman	0.114	0.190	0.120	0.155	0.152	0.146	0.147
Kenya	0.114	0.094	0.096	0.095	0.094	0.095	0.097
Myanmar	0.108	0.124	0.146	0.135	0.129	0.127	0.136
Yemen	0.102	0.080	0.062	0.071	0.061	0.060	0.064
Dominican Republic	0.100	0.110	0.102	0.106	0.104	0.103	0.106
Trinidad and Tobago	0.098	0.084	0.038	0.061	0.056	0.054	0.052
Lithuania	0.093	0.131	0.065	0.098	0.091	0.086	0.088
Uruguay	0.090	0.084	0.067	0.076	0.075	0.076	0.073
Guatemala	0.090	0.093	0.091	0.092	0.094	0.093	0.095
Tanzania	0.083	0.085	0.084	0.085	0.079	0.078	0.082
Bahrain	0.083	0.088	0.049	0.069	0.067	0.064	0.065
Azerbaijan	0.082	0.133	0.114	0.124	0.122	0.119	0.122
Jamaica	0.080	0.035	0.020	0.028	0.026	0.025	0.025
Panama	0.079	0.103	0.069	0.086	0.089	0.086	0.087
Costa Rica	0.077	0.080	0.067	0.074	0.074	0.074	0.074
Uganda	0.076	0.045	0.049	0.047	0.047	0.047	0.049
Jordan	0.072	0.091	0.058	0.075	0.076	0.073	0.072
Latvia	0.070	0.074	0.041	0.058	0.055	0.053	0.053
Afghanistan	0.068	0.084	0.039	0.062	0.042	0.042	0.042
Senegal	0.068	0.036	0.024	0.030	0.028	0.027	0.028
Iceland	0.067	0.131	0.018	0.075	0.026	0.025	0.024
Cyprus	0.064	0.070	0.028	0.049	0.045	0.042	0.043
Brunei	0.063	0.048	0.025	0.037	0.032	0.031	0.031
Ethiopia	0.063	0.088	0.100	0.094	0.092	0.092	0.096
El Salvador	0.060	0.050	0.039	0.045	0.043	0.043	0.044

Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Cameroon	0.058	0.050	0.049	0.050	0.049	0.049	0.050
Bosnia & Herzegovina	0.056	0.042	0.029	0.036	0.035	0.034	0.035
Papua New Guinea	0.055	0.035	0.026	0.031	0.030	0.030	0.030
Nicaragua	0.055	0.027	0.020	0.024	0.025	0.024	0.024
Liberia	0.054	0.010	0.003	0.007	0.006	0.005	0.005
Honduras	0.052	0.043	0.030	0.037	0.037	0.036	0.036
South Sudan	0.052	0.042	0.020	0.031	0.022	0.022	0.023
Madagascar	0.051	0.022	0.021	0.022	0.021	0.021	0.022
Estonia	0.051	0.071	0.033	0.052	0.049	0.046	0.047
Bolivia	0.050	0.064	0.051	0.058	0.060	0.059	0.058
Turkmenistan	0.050	0.095	0.063	0.079	0.083	0.082	0.077
Mozambique	0.048	0.038	0.024	0.031	0.029	0.029	0.029
Gabon	0.045	0.039	0.025	0.032	0.030	0.030	0.030
Guinea	0.045	0.017	0.011	0.014	0.012	0.012	0.012
Georgia	0.044	0.035	0.025	0.030	0.031	0.030	0.030
Sierra Leone	0.043	0.012	0.008	0.010	0.009	0.009	0.009
Paraguay	0.042	0.060	0.044	0.052	0.052	0.051	0.051
Botswana	0.041	0.044	0.024	0.034	0.034	0.033	0.032
Namibia	0.040	0.030	0.019	0.025	0.024	0.023	0.023
Mali	0.039	0.028	0.021	0.025	0.023	0.022	0.023
Bahamas, The	0.038	0.017	0.010	0.014	0.013	0.013	0.013
Guyana	0.038	0.009	0.004	0.007	0.007	0.006	0.006
Kyrgyz Republic	0.037	0.023	0.013	0.018	0.018	0.017	0.017
Cambodia	0.037	0.044	0.032	0.038	0.040	0.039	0.039
Tajikistan	0.036	0.020	0.015	0.018	0.017	0.016	0.017
Moldova	0.036	0.024	0.012	0.018	0.017	0.016	0.016
Malta	0.035	0.067	0.013	0.040	0.042	0.037	0.037
Haiti	0.034	0.020	0.013	0.017	0.016	0.016	0.016
Somalia	0.034	0.012	0.008	0.010	0.011	0.010	0.010
Congo, Rep. of	0.034	0.052	0.020	0.036	0.029	0.027	0.027
Rwanda	0.034	0.018	0.013	0.016	0.014	0.014	0.014
Equatorial Guinea	0.033	0.056	0.028	0.042	0.039	0.037	0.038
Nepal	0.033	0.045	0.041	0.043	0.044	0.043	0.044
Burundi	0.032	0.006	0.005	0.006	0.005	0.005	0.005
Togo	0.031	0.013	0.007	0.010	0.009	0.009	0.009

Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Mauritius	0.0298	0.0461	0.0182	0.0322	0.0282	0.0266	0.0264
Macedonia, FYR	0.0294	0.0296	0.0186	0.0241	0.0236	0.0226	0.0231
Chad	0.0294	0.0282	0.0207	0.0245	0.0228	0.0223	0.0232
Albania	0.0292	0.0287	0.0214	0.0251	0.0246	0.0241	0.0245
Malawi	0.0291	0.0160	0.0118	0.0139	0.0129	0.0125	0.0131
Niger	0.0276	0.0150	0.0127	0.0139	0.0138	0.0137	0.0140
Suriname	0.0270	0.0120	0.0073	0.0097	0.0092	0.0089	0.0091
Armenia	0.0270	0.0256	0.0177	0.0217	0.0209	0.0204	0.0208
Mauritania	0.0270	0.0145	0.0098	0.0122	0.0114	0.0109	0.0115
Benin	0.0260	0.0195	0.0147	0.0171	0.0157	0.0155	0.0161
Burkina Faso	0.0252	0.0222	0.0203	0.0213	0.0209	0.0206	0.0216
Central African Rep.	0.0234	0.0038	0.0023	0.0031	0.0026	0.0026	0.0027
Lao P.D.R.	0.0222	0.0227	0.0221	0.0224	0.0222	0.0219	0.0230
Fiji	0.0206	0.0105	0.0063	0.0084	0.0086	0.0083	0.0083
Barbados	0.0198	0.0095	0.0051	0.0073	0.0076	0.0073	0.0073
Kosovo	0.0173	0.0154	0.0117	0.0136	0.0137	0.0133	0.0137
Swaziland	0.0165	0.0122	0.0076	0.0099	0.0099	0.0096	0.0098
Mongolia	0.0152	0.0370	0.0223	0.0297	0.0260	0.0251	0.0260
Lesotho	0.0146	0.0086	0.0037	0.0062	0.0064	0.0059	0.0059
Gambia, The	0.0130	0.0026	0.0019	0.0023	0.0022	0.0021	0.0022
Montenegro	0.0127	0.0124	0.0070	0.0097	0.0090	0.0087	0.0088
San Marino	0.0103	0.0091	0.0021	0.0056	0.0048	0.0044	0.0044
Eritrea	0.0077	0.0071	0.0063	0.0067	0.0065	0.0066	0.0068
Djibouti	0.0067	0.0040	0.0023	0.0032	0.0031	0.0030	0.0030
Guinea-Bissau	0.0060	0.0058	0.0018	0.0038	0.0021	0.0021	0.0021
Belize	0.0056	0.0046	0.0024	0.0035	0.0036	0.0035	0.0034
Timor-Leste	0.0054	0.0107	0.0056	0.0082	0.0074	0.0072	0.0073
Vanuatu	0.0050	0.0021	0.0009	0.0015	0.0014	0.0014	0.0013
Cabo Verde	0.0050	0.0050	0.0026	0.0038	0.0038	0.0037	0.0036
Seychelles	0.0048	0.0058	0.0020	0.0039	0.0036	0.0034	0.0033
St. Lucia	0.0045	0.0032	0.0018	0.0025	0.0025	0.0025	0.0024
Maldives	0.0044	0.0105	0.0043	0.0074	0.0072	0.0067	0.0067
Solomon Islands	0.0044	0.0031	0.0012	0.0022	0.0022	0.0021	0.0020
Bhutan	0.0043	0.0070	0.0036	0.0053	0.0050	0.0048	0.0047
Antigua and Barbuda	0.0042	0.0030	0.0018	0.0024	0.0024	0.0024	0.0023

Table A18. Illustrative Calculations—Formulas Based on Midpoint Approach—By Member (continued)
(in percent)

	14th General Review Quotas	Current Formula	GDP Blend	Midpoint	Illustrative Formulas 1/		
					Set A	Set B	Set C
Comoros	0.00373	0.00176	0.00094	0.00135	0.00132	0.00128	0.00128
Grenada	0.00344	0.00241	0.00122	0.00182	0.00158	0.00156	0.00155
Samoa	0.00340	0.00184	0.00099	0.00142	0.00144	0.00141	0.00139
São Tomé and Príncipe	0.00310	0.00141	0.00048	0.00095	0.00064	0.00063	0.00063
Tonga	0.00289	0.00133	0.00052	0.00093	0.00095	0.00090	0.00087
St. Kitts	0.00262	0.00217	0.00113	0.00165	0.00164	0.00160	0.00156
St. Vincent	0.00245	0.00179	0.00101	0.00140	0.00135	0.00133	0.00132
Dominica	0.00241	0.00126	0.00070	0.00098	0.00097	0.00095	0.00094
Kiribati	0.00235	0.00123	0.00021	0.00072	0.00072	0.00069	0.00054
Micronesia, FS of	0.00151	0.00124	0.00036	0.00080	0.00074	0.00070	0.00067
Marshall Islands	0.00103	0.00085	0.00021	0.00053	0.00047	0.00043	0.00043
Palau	0.00103	0.00076	0.00030	0.00053	0.00053	0.00050	0.00051
Nauru	0.00059	0.00038	0.00013	0.00026	0.00026	0.00024	0.00024
Tuvalu	0.00052	0.00023	0.00004	0.00014	0.00013	0.00012	0.00011
Coefficients for quota variables 3/							
GDP		0.300	0.600		0.420	0.488	0.465
PPP GDP		0.200	0.400		0.280	0.263	0.310
Openness		0.300	0.000		0.250	0.200	0.200
Variability		0.150	0.000		0.000	0.000	0.000
Reserves		0.050	0.000		0.050	0.050	0.025
Compression factor		0.950	1.000		0.975	0.975	0.975

Source: Finance Department

1/ Formulas with least total absolute distance from middle ground, in different sets of restrictions:

Set A: $(0.70 * \text{GDP} + 0.25 * \text{Openness} + 0.05 * \text{Reserves})^{0.975}$ with 60/40 GDP blend.

Set B: $(0.75 * \text{GDP} + 0.20 * \text{Openness} + 0.05 * \text{Reserves})^{0.975}$ with 65/35 GDP blend.

Set C: $(0.775 * \text{GDP} + 0.200 * \text{Openness} + 0.025 * \text{Reserves})^{0.975}$ with 60/40 GDP blend.

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

3/ Shown coefficients may not add up to one due to rounding.

**Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/
(in percent)**

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
United States	17.398	14.478	16.392	16.156	15.722
Japan	6.461	5.100	5.996	5.887	5.686
China 2/	6.390	12.581	8.425	8.904	9.782
Germany	5.583	4.951	5.361	5.309	5.213
France	4.225	3.168	3.866	3.781	3.626
United Kingdom	4.225	3.568	3.998	3.945	3.847
Italy	3.159	2.399	2.900	2.839	2.728
India	2.749	3.113	2.863	2.890	2.939
Russia	2.705	2.564	2.652	2.640	2.617
Brazil	2.315	2.250	2.288	2.282	2.270
Canada	2.311	2.030	2.213	2.190	2.147
Saudi Arabia	2.095	1.663	1.947	1.912	1.849
Spain	1.999	1.753	1.913	1.893	1.855
Mexico	1.868	1.737	1.821	1.810	1.789
Netherlands	1.831	2.070	1.906	1.924	1.956
Korea, Republic of	1.799	1.989	1.858	1.872	1.897
Australia	1.378	1.432	1.393	1.396	1.403
Belgium	1.344	1.113	1.264	1.246	1.211
Switzerland	1.210	1.723	1.377	1.417	1.489
Turkey	0.977	1.161	1.035	1.049	1.075
Indonesia	0.974	1.307	1.082	1.108	1.154
Sweden	0.929	0.896	0.916	0.913	0.907
Poland	0.859	0.921	0.877	0.882	0.890
Austria	0.824	0.717	0.787	0.778	0.762
Singapore	0.816	1.307	0.977	1.015	1.084
Norway	0.787	0.715	0.761	0.755	0.744
Venezuela, R.B. de	0.780	0.556	0.704	0.686	0.654
Malaysia	0.762	0.761	0.760	0.759	0.758
Iran, I.R. of	0.748	0.719	0.737	0.734	0.729
Ireland	0.723	0.771	0.738	0.741	0.747
Denmark	0.721	0.583	0.674	0.663	0.642
Thailand	0.673	0.986	0.775	0.799	0.843
Argentina	0.668	0.637	0.656	0.653	0.648
South Africa	0.640	0.520	0.598	0.589	0.571
Nigeria	0.515	0.663	0.563	0.574	0.595

Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/ (continued)
(in percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Greece	0.509	0.349	0.455	0.442	0.419
Finland	0.505	0.414	0.474	0.466	0.453
United Arab Emirates	0.485	0.910	0.624	0.657	0.717
Czech Republic	0.457	0.470	0.460	0.461	0.463
Portugal	0.432	0.368	0.410	0.405	0.395
Colombia	0.429	0.439	0.431	0.432	0.433
Philippines	0.428	0.483	0.445	0.450	0.457
Egypt	0.427	0.511	0.454	0.460	0.472
Pakistan	0.426	0.391	0.413	0.410	0.405
Ukraine	0.422	0.397	0.413	0.411	0.407
Algeria	0.411	0.453	0.424	0.427	0.433
Hungary	0.407	0.398	0.403	0.402	0.400
Kuwait	0.405	0.321	0.377	0.370	0.357
Israel	0.403	0.431	0.411	0.413	0.417
Romania	0.380	0.381	0.379	0.379	0.379
Chile	0.366	0.426	0.385	0.389	0.398
Iraq	0.349	0.408	0.368	0.372	0.380
Libya	0.330	0.244	0.301	0.294	0.281
Peru	0.280	0.319	0.292	0.295	0.300
Luxembourg	0.277	0.673	0.407	0.438	0.494
New Zealand	0.262	0.244	0.256	0.254	0.251
Kazakhstan	0.243	0.382	0.288	0.299	0.319
Vietnam	0.242	0.438	0.306	0.321	0.349
Syrian Arab Republic	0.233	0.173	0.212	0.208	0.199
Bangladesh	0.224	0.278	0.241	0.245	0.253
Congo, Dem. Rep. of	0.223	0.084	0.223	0.223	0.223
Slovak Republic	0.210	0.259	0.226	0.229	0.236
Zambia	0.205	0.051	0.154	0.142	0.119
Bulgaria	0.188	0.159	0.178	0.176	0.171
Morocco	0.187	0.201	0.192	0.193	0.194
Angola	0.155	0.253	0.187	0.195	0.209
Ghana	0.155	0.087	0.132	0.126	0.117
Qatar	0.154	0.404	0.236	0.256	0.291
Croatia	0.150	0.113	0.138	0.135	0.129
Zimbabwe	0.148	0.029	0.148	0.148	0.148

Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/ (continued)
(in percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Ecuador	0.146	0.148	0.146	0.146	0.146
Belarus	0.143	0.169	0.151	0.153	0.157
Serbia	0.137	0.108	0.127	0.125	0.121
Côte d'Ivoire	0.136	0.062	0.112	0.106	0.095
Lebanon	0.133	0.151	0.138	0.140	0.142
Sudan	0.132	0.103	0.122	0.120	0.116
Slovenia	0.123	0.115	0.120	0.119	0.118
Sri Lanka	0.121	0.125	0.122	0.122	0.123
Uzbekistan	0.116	0.115	0.115	0.115	0.115
Tunisia	0.114	0.108	0.112	0.111	0.110
Oman	0.114	0.190	0.139	0.145	0.156
Kenya	0.114	0.094	0.107	0.105	0.102
Myanmar	0.108	0.124	0.113	0.114	0.117
Yemen	0.102	0.080	0.102	0.102	0.102
Dominican Republic	0.100	0.110	0.103	0.104	0.105
Trinidad and Tobago	0.098	0.084	0.093	0.092	0.090
Lithuania	0.093	0.131	0.105	0.108	0.114
Uruguay	0.090	0.084	0.088	0.087	0.086
Guatemala	0.090	0.093	0.091	0.091	0.091
Tanzania	0.083	0.085	0.084	0.084	0.084
Bahrain	0.083	0.088	0.084	0.085	0.085
Azerbaijan	0.082	0.133	0.099	0.103	0.110
Jamaica	0.080	0.035	0.065	0.062	0.055
Panama	0.079	0.103	0.087	0.089	0.092
Costa Rica	0.077	0.080	0.078	0.078	0.079
Uganda	0.076	0.045	0.076	0.076	0.076
Jordan	0.072	0.091	0.078	0.079	0.082
Latvia	0.070	0.074	0.071	0.071	0.072
Afghanistan	0.068	0.084	0.073	0.074	0.077
Senegal	0.068	0.036	0.068	0.068	0.068
Iceland	0.067	0.131	0.088	0.093	0.102
Cyprus	0.064	0.070	0.065	0.066	0.067
Brunei	0.063	0.048	0.058	0.057	0.054
Ethiopia	0.063	0.088	0.071	0.073	0.077
El Salvador	0.060	0.050	0.057	0.056	0.054

Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/ (continued)
(in percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Cameroon	0.058	0.050	0.055	0.054	0.053
Bosnia & Herzegovina	0.056	0.042	0.051	0.050	0.048
Papua New Guinea	0.055	0.035	0.048	0.047	0.044
Nicaragua	0.055	0.027	0.045	0.043	0.039
Liberia	0.054	0.010	0.054	0.054	0.054
Honduras	0.052	0.043	0.049	0.048	0.047
South Sudan	0.052	0.042	0.052	0.052	0.052
Madagascar	0.051	0.022	0.051	0.051	0.051
Estonia	0.051	0.071	0.058	0.059	0.062
Bolivia	0.050	0.064	0.055	0.056	0.058
Turkmenistan	0.050	0.095	0.065	0.068	0.075
Mozambique	0.048	0.038	0.048	0.048	0.048
Gabon	0.045	0.039	0.043	0.043	0.042
Guinea	0.045	0.017	0.045	0.045	0.045
Georgia	0.044	0.035	0.041	0.040	0.039
Sierra Leone	0.043	0.012	0.043	0.043	0.043
Paraguay	0.042	0.060	0.048	0.049	0.052
Botswana	0.041	0.044	0.042	0.042	0.042
Namibia	0.040	0.030	0.037	0.036	0.034
Mali	0.039	0.028	0.039	0.039	0.039
Bahamas, The	0.038	0.017	0.031	0.030	0.027
Guyana	0.038	0.009	0.028	0.026	0.022
Kyrgyz Republic	0.037	0.023	0.037	0.037	0.037
Cambodia	0.037	0.044	0.039	0.040	0.041
Tajikistan	0.036	0.020	0.031	0.030	0.027
Moldova	0.036	0.024	0.032	0.031	0.029
Malta	0.035	0.067	0.046	0.048	0.053
Haiti	0.034	0.020	0.034	0.034	0.034
Somalia	0.034	0.012	0.027	0.025	0.022
Congo, Rep. of	0.034	0.052	0.040	0.041	0.044
Rwanda	0.034	0.018	0.034	0.034	0.034
Equatorial Guinea	0.033	0.056	0.040	0.042	0.045
Nepal	0.033	0.045	0.037	0.038	0.039
Burundi	0.032	0.006	0.032	0.032	0.032
Togo	0.031	0.013	0.031	0.031	0.031

Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/ (continued)
(in percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Mauritius	0.0298	0.0461	0.0351	0.0364	0.0387
Macedonia, FYR	0.0294	0.0296	0.0294	0.0294	0.0294
Chad	0.0294	0.0282	0.0294	0.0294	0.0294
Albania	0.0292	0.0287	0.0290	0.0289	0.0288
Malawi	0.0291	0.0160	0.0291	0.0291	0.0291
Niger	0.0276	0.0150	0.0276	0.0276	0.0276
Suriname	0.0270	0.0120	0.0220	0.0208	0.0186
Armenia	0.0270	0.0256	0.0265	0.0264	0.0261
Mauritania	0.0270	0.0145	0.0228	0.0218	0.0200
Benin	0.0260	0.0195	0.0260	0.0260	0.0260
Burkina Faso	0.0252	0.0222	0.0252	0.0252	0.0252
Central African Rep.	0.0234	0.0038	0.0234	0.0234	0.0234
Lao P.D.R.	0.0222	0.0227	0.0223	0.0223	0.0224
Fiji	0.0206	0.0105	0.0172	0.0164	0.0150
Barbados	0.0198	0.0095	0.0164	0.0155	0.0140
Kosovo	0.0173	0.0154	0.0166	0.0165	0.0162
Swaziland	0.0165	0.0122	0.0150	0.0147	0.0141
Mongolia	0.0152	0.0370	0.0224	0.0241	0.0272
Lesotho	0.0146	0.0086	0.0126	0.0121	0.0112
Gambia, The	0.0130	0.0026	0.0130	0.0130	0.0130
Montenegro	0.0127	0.0124	0.0125	0.0125	0.0125
San Marino	0.0103	0.0091	0.0099	0.0098	0.0096
Eritrea	0.0077	0.0071	0.0077	0.0077	0.0077
Djibouti	0.0067	0.0040	0.0067	0.0067	0.0067
Guinea-Bissau	0.0060	0.0058	0.0060	0.0060	0.0060
Belize	0.0056	0.0046	0.0053	0.0052	0.0050
Timor-Leste	0.0054	0.0107	0.0071	0.0076	0.0083
Vanuatu	0.0050	0.0021	0.0040	0.0038	0.0034
Cabo Verde	0.0050	0.0050	0.0050	0.0050	0.0050
Seychelles	0.0048	0.0058	0.0051	0.0052	0.0053
St. Lucia	0.0045	0.0032	0.0040	0.0039	0.0038
Maldives	0.0044	0.0105	0.0064	0.0069	0.0078
Solomon Islands	0.0044	0.0031	0.0044	0.0044	0.0044
Bhutan	0.0043	0.0070	0.0052	0.0054	0.0058
Antigua and Barbuda	0.0042	0.0030	0.0038	0.0037	0.0035

Table A19. Illustration of Allocation Mechanisms: Current Formula—by Member 1/ (concluded)
(in percent)

	14th General Review Quotas	CQS based on Current Formula	Overall Increase		
			50%	70%	125%
Comoros	0.00373	0.00176	0.00373	0.00373	0.00373
Grenada	0.00344	0.00241	0.00309	0.00301	0.00286
Samoa	0.00340	0.00184	0.00287	0.00275	0.00253
São Tomé and Príncipe	0.00310	0.00141	0.00310	0.00310	0.00310
Tonga	0.00289	0.00133	0.00237	0.00224	0.00202
St. Kitts	0.00262	0.00217	0.00247	0.00243	0.00236
St. Vincent	0.00245	0.00179	0.00223	0.00217	0.00208
Dominica	0.00241	0.00126	0.00202	0.00193	0.00177
Kiribati	0.00235	0.00123	0.00197	0.00188	0.00172
Micronesia, FS of	0.00151	0.00124	0.00142	0.00140	0.00136
Marshall Islands	0.00103	0.00085	0.00097	0.00095	0.00093
Palau	0.00103	0.00076	0.00093	0.00091	0.00087
Nauru	0.00059	0.00038	0.00052	0.00050	0.00047
Tuvalu	0.00052	0.00023	0.00043	0.00040	0.00036

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

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

**Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
United States	17.398	15.158	16.612	16.428	16.089
Japan	6.461	5.125	6.002	5.894	5.696
China 2/	6.390	13.342	8.673	9.210	10.195
Germany	5.583	4.929	5.352	5.298	5.198
France	4.225	3.230	3.885	3.805	3.658
United Kingdom	4.225	3.438	3.954	3.890	3.773
Italy	3.159	2.395	2.898	2.837	2.724
India	2.749	3.425	2.966	3.017	3.110
Russia	2.705	2.572	2.654	2.642	2.620
Brazil	2.315	2.328	2.313	2.313	2.312
Canada	2.311	2.089	2.231	2.213	2.178
Saudi Arabia	2.095	1.473	1.884	1.834	1.743
Spain	1.999	1.712	1.899	1.875	1.832
Mexico	1.868	1.767	1.830	1.821	1.805
Netherlands	1.831	1.901	1.850	1.854	1.862
Korea, Republic of	1.799	2.150	1.911	1.937	1.985
Australia	1.378	1.461	1.402	1.407	1.418
Belgium	1.344	1.052	1.244	1.220	1.177
Switzerland	1.210	1.506	1.305	1.327	1.368
Turkey	0.977	1.180	1.041	1.056	1.084
Indonesia	0.974	1.401	1.113	1.146	1.206
Sweden	0.929	0.832	0.894	0.886	0.871
Poland	0.859	0.910	0.873	0.877	0.883
Austria	0.824	0.679	0.774	0.762	0.741
Singapore	0.816	1.203	0.942	0.971	1.026
Norway	0.787	0.652	0.740	0.729	0.709
Venezuela, R.B. de	0.780	0.565	0.707	0.690	0.658
Malaysia	0.762	0.746	0.754	0.753	0.750
Iran, I.R. of	0.748	0.741	0.744	0.743	0.741
Ireland	0.723	0.683	0.708	0.704	0.698
Denmark	0.721	0.562	0.667	0.654	0.630
Thailand	0.673	0.935	0.758	0.778	0.815
Argentina	0.668	0.662	0.665	0.664	0.662
South Africa	0.640	0.553	0.609	0.602	0.589
Nigeria	0.515	0.682	0.569	0.581	0.605

Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Greece	0.509	0.317	0.444	0.429	0.401
Finland	0.505	0.374	0.461	0.450	0.431
United Arab Emirates	0.485	0.851	0.604	0.633	0.684
Czech Republic	0.457	0.464	0.458	0.458	0.459
Portugal	0.432	0.350	0.404	0.397	0.385
Colombia	0.429	0.471	0.442	0.445	0.450
Philippines	0.428	0.488	0.447	0.451	0.459
Egypt	0.427	0.510	0.453	0.460	0.471
Pakistan	0.426	0.434	0.427	0.428	0.429
Ukraine	0.422	0.297	0.380	0.370	0.351
Algeria	0.411	0.420	0.413	0.413	0.414
Hungary	0.407	0.348	0.386	0.381	0.372
Kuwait	0.405	0.307	0.372	0.364	0.349
Israel	0.403	0.429	0.410	0.412	0.415
Romania	0.380	0.341	0.366	0.363	0.357
Chile	0.366	0.402	0.377	0.379	0.384
Iraq	0.349	0.367	0.354	0.355	0.357
Libya	0.330	0.149	0.269	0.255	0.229
Peru	0.280	0.310	0.289	0.291	0.295
Luxembourg	0.277	0.559	0.369	0.391	0.431
New Zealand	0.262	0.244	0.256	0.254	0.251
Kazakhstan	0.243	0.354	0.279	0.287	0.303
Vietnam	0.242	0.454	0.311	0.328	0.358
Syrian Arab Republic	0.233	0.192	0.219	0.215	0.209
Bangladesh	0.224	0.313	0.253	0.259	0.272
Congo, Dem. Rep. of	0.223	0.065	0.223	0.223	0.223
Slovak Republic	0.210	0.231	0.216	0.218	0.221
Zambia	0.205	0.050	0.153	0.141	0.118
Bulgaria	0.188	0.135	0.170	0.166	0.158
Morocco	0.187	0.203	0.192	0.193	0.195
Angola	0.155	0.218	0.175	0.180	0.189
Ghana	0.155	0.086	0.132	0.126	0.116
Qatar	0.154	0.362	0.222	0.238	0.268
Croatia	0.150	0.107	0.135	0.132	0.126
Zimbabwe	0.148	0.029	0.148	0.148	0.148

Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Ecuador	0.146	0.147	0.146	0.146	0.146
Belarus	0.143	0.156	0.147	0.148	0.150
Serbia	0.137	0.093	0.122	0.119	0.112
Côte d'Ivoire	0.136	0.064	0.112	0.107	0.096
Lebanon	0.133	0.127	0.131	0.130	0.129
Sudan	0.132	0.107	0.123	0.121	0.118
Slovenia	0.123	0.102	0.116	0.114	0.111
Sri Lanka	0.121	0.138	0.126	0.128	0.130
Uzbekistan	0.116	0.120	0.117	0.117	0.117
Tunisia	0.114	0.103	0.110	0.109	0.107
Oman	0.114	0.171	0.133	0.137	0.145
Kenya	0.114	0.099	0.109	0.107	0.105
Myanmar	0.108	0.129	0.115	0.116	0.119
Yemen	0.102	0.066	0.102	0.102	0.102
Dominican Republic	0.100	0.111	0.103	0.104	0.106
Trinidad and Tobago	0.098	0.067	0.088	0.085	0.080
Lithuania	0.093	0.109	0.098	0.099	0.101
Uruguay	0.090	0.081	0.087	0.086	0.085
Guatemala	0.090	0.101	0.093	0.094	0.095
Tanzania	0.083	0.082	0.083	0.083	0.083
Bahrain	0.083	0.080	0.082	0.081	0.081
Azerbaijan	0.082	0.131	0.098	0.102	0.109
Jamaica	0.080	0.030	0.063	0.059	0.052
Panama	0.079	0.104	0.087	0.089	0.092
Costa Rica	0.077	0.081	0.079	0.079	0.079
Uganda	0.076	0.050	0.076	0.076	0.076
Jordan	0.072	0.087	0.077	0.078	0.080
Latvia	0.070	0.065	0.068	0.068	0.067
Afghanistan	0.068	0.046	0.068	0.068	0.068
Senegal	0.068	0.032	0.068	0.068	0.068
Iceland	0.067	0.031	0.055	0.052	0.047
Cyprus	0.064	0.056	0.061	0.060	0.059
Brunei	0.063	0.037	0.054	0.052	0.049
Ethiopia	0.063	0.094	0.073	0.076	0.080
El Salvador	0.060	0.049	0.056	0.055	0.054

Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Cameroon	0.058	0.052	0.056	0.055	0.054
Bosnia & Herzegovina	0.056	0.040	0.050	0.049	0.047
Papua New Guinea	0.055	0.034	0.048	0.046	0.043
Nicaragua	0.055	0.028	0.046	0.044	0.040
Liberia	0.054	0.008	0.054	0.054	0.054
Honduras	0.052	0.042	0.049	0.048	0.047
South Sudan	0.052	0.025	0.052	0.052	0.052
Madagascar	0.051	0.023	0.051	0.051	0.051
Estonia	0.051	0.060	0.054	0.055	0.056
Bolivia	0.050	0.065	0.055	0.056	0.058
Turkmenistan	0.050	0.092	0.064	0.067	0.073
Mozambique	0.048	0.034	0.048	0.048	0.048
Gabon	0.045	0.035	0.042	0.041	0.039
Guinea	0.045	0.014	0.045	0.045	0.045
Georgia	0.044	0.036	0.041	0.041	0.039
Sierra Leone	0.043	0.011	0.043	0.043	0.043
Paraguay	0.042	0.059	0.048	0.049	0.051
Botswana	0.041	0.039	0.041	0.040	0.040
Namibia	0.040	0.028	0.036	0.035	0.033
Mali	0.039	0.025	0.039	0.039	0.039
Bahamas, The	0.038	0.016	0.031	0.029	0.026
Guyana	0.038	0.008	0.028	0.026	0.021
Kyrgyz Republic	0.037	0.021	0.037	0.037	0.037
Cambodia	0.037	0.046	0.040	0.041	0.042
Tajikistan	0.036	0.019	0.031	0.029	0.027
Moldova	0.036	0.020	0.031	0.030	0.027
Malta	0.035	0.058	0.043	0.045	0.048
Haiti	0.034	0.018	0.034	0.034	0.034
Somalia	0.034	0.013	0.027	0.025	0.022
Congo, Rep. of	0.034	0.035	0.034	0.034	0.034
Rwanda	0.034	0.015	0.034	0.034	0.034
Equatorial Guinea	0.033	0.047	0.038	0.039	0.041
Nepal	0.033	0.047	0.038	0.039	0.041
Burundi	0.032	0.006	0.032	0.032	0.032
Togo	0.031	0.011	0.031	0.031	0.031

Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Mauritius	0.0298	0.0345	0.0313	0.0316	0.0323
Macedonia, FYR	0.0294	0.0277	0.0288	0.0286	0.0283
Chad	0.0294	0.0258	0.0294	0.0294	0.0294
Albania	0.0292	0.0278	0.0287	0.0285	0.0283
Malawi	0.0291	0.0146	0.0291	0.0291	0.0291
Niger	0.0276	0.0156	0.0276	0.0276	0.0276
Suriname	0.0270	0.0110	0.0216	0.0204	0.0181
Armenia	0.0270	0.0241	0.0260	0.0257	0.0253
Mauritania	0.0270	0.0134	0.0224	0.0214	0.0194
Benin	0.0260	0.0177	0.0260	0.0260	0.0260
Burkina Faso	0.0252	0.0232	0.0252	0.0252	0.0252
Central African Rep.	0.0234	0.0031	0.0234	0.0234	0.0234
Lao P.D.R.	0.0222	0.0242	0.0228	0.0229	0.0232
Fiji	0.0206	0.0105	0.0172	0.0164	0.0150
Barbados	0.0198	0.0095	0.0163	0.0155	0.0140
Kosovo	0.0173	0.0159	0.0168	0.0167	0.0165
Swaziland	0.0165	0.0120	0.0149	0.0146	0.0139
Mongolia	0.0152	0.0298	0.0200	0.0211	0.0232
Lesotho	0.0146	0.0082	0.0125	0.0119	0.0110
Gambia, The	0.0130	0.0027	0.0130	0.0130	0.0130
Montenegro	0.0127	0.0108	0.0120	0.0119	0.0116
San Marino	0.0103	0.0067	0.0091	0.0088	0.0083
Eritrea	0.0077	0.0074	0.0077	0.0077	0.0077
Djibouti	0.0067	0.0038	0.0067	0.0067	0.0067
Guinea-Bissau	0.0060	0.0025	0.0060	0.0060	0.0060
Belize	0.0056	0.0046	0.0052	0.0052	0.0050
Timor-Leste	0.0054	0.0090	0.0066	0.0068	0.0074
Vanuatu	0.0050	0.0018	0.0039	0.0037	0.0032
Cabo Verde	0.0050	0.0048	0.0049	0.0049	0.0048
Seychelles	0.0048	0.0047	0.0048	0.0048	0.0048
St. Lucia	0.0045	0.0031	0.0040	0.0039	0.0037
Maldives	0.0044	0.0092	0.0060	0.0064	0.0071
Solomon Islands	0.0044	0.0029	0.0044	0.0044	0.0044
Bhutan	0.0043	0.0059	0.0048	0.0049	0.0052
Antigua and Barbuda	0.0042	0.0030	0.0038	0.0037	0.0035

Table A20. Illustration of Allocation Mechanisms: Formula 1.2—by Member 1/ (concluded)
(In percent)

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Comoros	0.00373	0.00166	0.00373	0.00373	0.00373
Grenada	0.00344	0.00194	0.00293	0.00281	0.00260
Samoa	0.00340	0.00185	0.00288	0.00275	0.00253
São Tomé and Príncipe	0.00310	0.00081	0.00310	0.00310	0.00310
Tonga	0.00289	0.00128	0.00235	0.00222	0.00199
St. Kitts	0.00262	0.00205	0.00242	0.00238	0.00229
St. Vincent	0.00245	0.00169	0.00219	0.00213	0.00202
Dominica	0.00241	0.00122	0.00201	0.00192	0.00175
Kiribati	0.00235	0.00096	0.00188	0.00177	0.00157
Micronesia, FS of	0.00151	0.00103	0.00135	0.00131	0.00124
Marshall Islands	0.00103	0.00068	0.00091	0.00088	0.00083
Palau	0.00103	0.00074	0.00093	0.00091	0.00087
Nauru	0.00059	0.00037	0.00051	0.00050	0.00046
Tuvalu	0.00052	0.00020	0.00041	0.00039	0.00034

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

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

**Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/
(In percent)**

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
United States	17.398	17.375	17.342	17.329	17.305
Japan	6.461	5.300	6.059	5.965	5.792
China 2/	6.390	14.260	8.974	9.582	10.696
Germany	5.583	4.688	5.272	5.199	5.064
France	4.225	3.185	3.870	3.786	3.633
United Kingdom	4.225	3.354	3.925	3.855	3.725
Italy	3.159	2.403	2.900	2.839	2.728
India	2.749	3.804	3.090	3.171	3.318
Russia	2.705	2.665	2.684	2.679	2.670
Brazil	2.315	2.554	2.388	2.405	2.436
Canada	2.311	2.033	2.213	2.190	2.147
Saudi Arabia	2.095	1.321	1.833	1.772	1.659
Spain	1.999	1.680	1.888	1.862	1.814
Mexico	1.868	1.768	1.830	1.821	1.804
Netherlands	1.831	1.505	1.718	1.692	1.643
Korea, Republic of	1.799	1.972	1.851	1.864	1.886
Australia	1.378	1.482	1.408	1.415	1.429
Belgium	1.344	0.846	1.176	1.136	1.063
Switzerland	1.210	1.153	1.188	1.182	1.173
Turkey	0.977	1.224	1.056	1.074	1.108
Indonesia	0.974	1.527	1.154	1.197	1.274
Sweden	0.929	0.730	0.860	0.844	0.815
Poland	0.859	0.842	0.851	0.849	0.846
Austria	0.824	0.589	0.744	0.725	0.691
Singapore	0.816	0.853	0.826	0.828	0.832
Norway	0.787	0.582	0.717	0.701	0.670
Venezuela, R.B. de	0.780	0.616	0.724	0.711	0.686
Malaysia	0.762	0.651	0.723	0.714	0.697
Iran, I.R. of	0.748	0.789	0.759	0.762	0.767
Ireland	0.723	0.515	0.652	0.636	0.605
Denmark	0.721	0.468	0.635	0.615	0.578
Thailand	0.673	0.837	0.726	0.738	0.760
Argentina	0.668	0.718	0.683	0.686	0.693
South Africa	0.640	0.543	0.606	0.598	0.583
Nigeria	0.515	0.733	0.585	0.602	0.632

Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Greece	0.509	0.300	0.439	0.422	0.391
Finland	0.505	0.334	0.447	0.434	0.409
United Arab Emirates	0.485	0.710	0.558	0.575	0.606
Czech Republic	0.457	0.379	0.430	0.424	0.412
Portugal	0.432	0.316	0.392	0.383	0.366
Colombia	0.429	0.487	0.447	0.451	0.459
Philippines	0.428	0.482	0.445	0.449	0.456
Egypt	0.427	0.554	0.468	0.478	0.495
Pakistan	0.426	0.476	0.441	0.445	0.452
Ukraine	0.422	0.272	0.371	0.359	0.337
Algeria	0.411	0.387	0.402	0.400	0.396
Hungary	0.407	0.278	0.363	0.353	0.334
Kuwait	0.405	0.267	0.359	0.348	0.327
Israel	0.403	0.385	0.396	0.394	0.391
Romania	0.380	0.319	0.359	0.354	0.344
Chile	0.366	0.380	0.369	0.370	0.372
Iraq	0.349	0.355	0.350	0.350	0.351
Libya	0.330	0.114	0.257	0.240	0.209
Peru	0.280	0.301	0.286	0.287	0.290
Luxembourg	0.277	0.341	0.298	0.302	0.311
New Zealand	0.262	0.227	0.250	0.247	0.242
Kazakhstan	0.243	0.340	0.274	0.282	0.295
Vietnam	0.242	0.400	0.293	0.306	0.328
Syrian Arab Republic	0.233	0.209	0.224	0.222	0.219
Bangladesh	0.224	0.327	0.257	0.265	0.279
Congo, Dem. Rep. of	0.223	0.060	0.223	0.223	0.223
Slovak Republic	0.210	0.186	0.201	0.199	0.196
Zambia	0.205	0.045	0.152	0.139	0.116
Bulgaria	0.188	0.114	0.163	0.157	0.146
Morocco	0.187	0.191	0.188	0.188	0.189
Angola	0.155	0.195	0.168	0.171	0.176
Ghana	0.155	0.079	0.129	0.123	0.112
Qatar	0.154	0.316	0.207	0.220	0.242
Croatia	0.150	0.091	0.130	0.126	0.117
Zimbabwe	0.148	0.025	0.148	0.148	0.148

Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Ecuador	0.146	0.145	0.146	0.145	0.145
Belarus	0.143	0.137	0.141	0.140	0.139
Serbia	0.137	0.081	0.118	0.114	0.106
Côte d'Ivoire	0.136	0.058	0.110	0.104	0.093
Lebanon	0.133	0.098	0.121	0.118	0.113
Sudan	0.132	0.115	0.126	0.125	0.122
Slovenia	0.123	0.082	0.109	0.106	0.100
Sri Lanka	0.121	0.138	0.127	0.128	0.130
Uzbekistan	0.116	0.115	0.115	0.115	0.115
Tunisia	0.114	0.092	0.107	0.105	0.102
Oman	0.114	0.147	0.125	0.127	0.132
Kenya	0.114	0.097	0.108	0.107	0.104
Myanmar	0.108	0.136	0.117	0.119	0.123
Yemen	0.102	0.064	0.102	0.102	0.102
Dominican Republic	0.100	0.106	0.102	0.102	0.103
Trinidad and Tobago	0.098	0.052	0.083	0.079	0.073
Lithuania	0.093	0.088	0.091	0.090	0.090
Uruguay	0.090	0.073	0.084	0.083	0.080
Guatemala	0.090	0.095	0.091	0.092	0.092
Tanzania	0.083	0.082	0.083	0.083	0.083
Bahrain	0.083	0.065	0.077	0.075	0.073
Azerbaijan	0.082	0.122	0.095	0.098	0.104
Jamaica	0.080	0.025	0.062	0.057	0.049
Panama	0.079	0.087	0.081	0.082	0.083
Costa Rica	0.077	0.074	0.076	0.076	0.075
Uganda	0.076	0.049	0.076	0.076	0.076
Jordan	0.072	0.072	0.072	0.072	0.072
Latvia	0.070	0.053	0.064	0.063	0.060
Afghanistan	0.068	0.042	0.068	0.068	0.068
Senegal	0.068	0.028	0.068	0.068	0.068
Iceland	0.067	0.024	0.053	0.050	0.043
Cyprus	0.064	0.043	0.057	0.055	0.052
Brunei	0.063	0.031	0.052	0.050	0.045
Ethiopia	0.063	0.096	0.074	0.076	0.081
El Salvador	0.060	0.044	0.055	0.053	0.051

Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Cameroon	0.058	0.050	0.055	0.055	0.053
Bosnia & Herzegovina	0.056	0.035	0.048	0.047	0.044
Papua New Guinea	0.055	0.030	0.047	0.045	0.041
Nicaragua	0.055	0.024	0.044	0.042	0.038
Liberia	0.054	0.005	0.054	0.054	0.054
Honduras	0.052	0.036	0.047	0.045	0.043
South Sudan	0.052	0.023	0.052	0.052	0.052
Madagascar	0.051	0.022	0.051	0.051	0.051
Estonia	0.051	0.047	0.050	0.049	0.049
Bolivia	0.050	0.058	0.053	0.053	0.054
Turkmenistan	0.050	0.077	0.059	0.061	0.065
Mozambique	0.048	0.029	0.048	0.048	0.048
Gabon	0.045	0.030	0.040	0.039	0.037
Guinea	0.045	0.012	0.045	0.045	0.045
Georgia	0.044	0.030	0.039	0.038	0.036
Sierra Leone	0.043	0.009	0.043	0.043	0.043
Paraguay	0.042	0.051	0.045	0.046	0.047
Botswana	0.041	0.032	0.038	0.037	0.036
Namibia	0.040	0.023	0.034	0.033	0.031
Mali	0.039	0.023	0.039	0.039	0.039
Bahamas, The	0.038	0.013	0.030	0.028	0.024
Guyana	0.038	0.006	0.027	0.025	0.020
Kyrgyz Republic	0.037	0.017	0.037	0.037	0.037
Cambodia	0.037	0.039	0.037	0.037	0.038
Tajikistan	0.036	0.017	0.030	0.028	0.026
Moldova	0.036	0.016	0.030	0.028	0.025
Malta	0.035	0.037	0.036	0.036	0.036
Haiti	0.034	0.016	0.034	0.034	0.034
Somalia	0.034	0.010	0.026	0.024	0.021
Congo, Rep. of	0.034	0.027	0.032	0.031	0.030
Rwanda	0.034	0.014	0.034	0.034	0.034
Equatorial Guinea	0.033	0.038	0.034	0.035	0.035
Nepal	0.033	0.044	0.036	0.037	0.039
Burundi	0.032	0.005	0.032	0.032	0.032
Togo	0.031	0.009	0.031	0.031	0.031

Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/ (continued)
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Mauritius	0.0298	0.0264	0.0286	0.0283	0.0278
Macedonia, FYR	0.0294	0.0231	0.0272	0.0267	0.0258
Chad	0.0294	0.0232	0.0294	0.0294	0.0294
Albania	0.0292	0.0245	0.0276	0.0272	0.0265
Malawi	0.0291	0.0131	0.0291	0.0291	0.0291
Niger	0.0276	0.0140	0.0276	0.0276	0.0276
Suriname	0.0270	0.0091	0.0210	0.0196	0.0170
Armenia	0.0270	0.0208	0.0249	0.0244	0.0235
Mauritania	0.0270	0.0115	0.0218	0.0206	0.0184
Benin	0.0260	0.0161	0.0260	0.0260	0.0260
Burkina Faso	0.0252	0.0216	0.0252	0.0252	0.0252
Central African Rep.	0.0234	0.0027	0.0234	0.0234	0.0234
Lao P.D.R.	0.0222	0.0230	0.0224	0.0224	0.0225
Fiji	0.0206	0.0083	0.0165	0.0155	0.0138
Barbados	0.0198	0.0073	0.0156	0.0146	0.0128
Kosovo	0.0173	0.0137	0.0161	0.0158	0.0153
Swaziland	0.0165	0.0098	0.0142	0.0137	0.0127
Mongolia	0.0152	0.0260	0.0187	0.0195	0.0211
Lesotho	0.0146	0.0059	0.0117	0.0110	0.0097
Gambia, The	0.0130	0.0022	0.0130	0.0130	0.0130
Montenegro	0.0127	0.0088	0.0114	0.0111	0.0105
San Marino	0.0103	0.0044	0.0083	0.0078	0.0070
Eritrea	0.0077	0.0068	0.0077	0.0077	0.0077
Djibouti	0.0067	0.0030	0.0067	0.0067	0.0067
Guinea-Bissau	0.0060	0.0021	0.0060	0.0060	0.0060
Belize	0.0056	0.0034	0.0049	0.0047	0.0044
Timor-Leste	0.0054	0.0073	0.0060	0.0061	0.0064
Vanuatu	0.0050	0.0013	0.0038	0.0035	0.0029
Cabo Verde	0.0050	0.0036	0.0045	0.0044	0.0042
Seychelles	0.0048	0.0033	0.0043	0.0042	0.0040
St. Lucia	0.0045	0.0024	0.0038	0.0036	0.0033
Maldives	0.0044	0.0067	0.0052	0.0054	0.0057
Solomon Islands	0.0044	0.0020	0.0044	0.0044	0.0044
Bhutan	0.0043	0.0047	0.0044	0.0044	0.0045
Antigua and Barbuda	0.0042	0.0023	0.0036	0.0034	0.0032

Table A21. Illustration of Allocation Mechanisms: Midpoint Approach Set C—By Member 1/ (concluded)
(In percent)

	14th General Review Quotas	CQS based on Midpoint Set C Formula	Overall Increase		
			50%	70%	125%
Comoros	0.00373	0.00128	0.00373	0.00373	0.00373
Grenada	0.00344	0.00155	0.00280	0.00266	0.00238
Samoa	0.00340	0.00139	0.00272	0.00257	0.00228
São Tomé and Príncipe	0.00310	0.00063	0.00310	0.00310	0.00310
Tonga	0.00289	0.00087	0.00222	0.00206	0.00177
St. Kitts	0.00262	0.00156	0.00226	0.00218	0.00202
St. Vincent	0.00245	0.00132	0.00207	0.00198	0.00182
Dominica	0.00241	0.00094	0.00192	0.00180	0.00159
Kiribati	0.00235	0.00054	0.00174	0.00160	0.00134
Micronesia, FS of	0.00151	0.00067	0.00123	0.00116	0.00104
Marshall Islands	0.00103	0.00043	0.00083	0.00078	0.00069
Palau	0.00103	0.00051	0.00085	0.00081	0.00074
Nauru	0.00059	0.00024	0.00047	0.00044	0.00039
Tuvalu	0.00052	0.00011	0.00039	0.00035	0.00029

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members.

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

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
United States	17.398	15.158	16.447	16.223	15.812
Japan	6.461	5.125	6.282	6.239	6.162
China 3/	6.390	13.342	8.561	9.072	10.008
Germany	5.583	4.929	5.392	5.347	5.265
France	4.225	3.230	3.947	3.881	3.761
United Kingdom	4.225	3.438	4.003	3.951	3.855
Italy	3.159	2.395	2.931	2.877	2.778
India	2.749	3.425	2.937	2.981	3.062
Russia	2.705	2.572	2.636	2.620	2.590
Brazil	2.315	2.328	2.299	2.295	2.288
Canada	2.311	2.089	2.266	2.255	2.236
Saudi Arabia	2.095	1.473	1.899	1.853	1.768
Spain	1.999	1.712	1.914	1.894	1.857
Mexico	1.868	1.767	1.823	1.812	1.792
Netherlands	1.831	1.901	1.875	1.886	1.905
Korea, Republic of	1.799	2.150	1.915	1.943	1.993
Australia	1.378	1.461	1.403	1.409	1.420
Belgium	1.344	1.052	1.263	1.244	1.209
Switzerland	1.210	1.506	1.333	1.363	1.416
Turkey	0.977	1.180	1.028	1.040	1.062
Indonesia	0.974	1.401	1.090	1.117	1.167
Sweden	0.929	0.832	0.907	0.902	0.893
Poland	0.859	0.910	0.870	0.872	0.877
Austria	0.824	0.679	0.777	0.766	0.745
Singapore	0.816	1.203	0.929	0.955	1.004
Norway	0.787	0.652	0.759	0.753	0.741
Venezuela, R.B. de	0.780	0.565	0.698	0.678	0.643
Malaysia	0.762	0.746	0.745	0.741	0.733
Iran, I.R. of	0.748	0.741	0.731	0.727	0.720
Ireland	0.723	0.683	0.697	0.690	0.679
Denmark	0.721	0.562	0.677	0.667	0.647
Thailand	0.673	0.935	0.748	0.766	0.799
Argentina	0.668	0.662	0.654	0.651	0.645
South Africa	0.640	0.553	0.604	0.595	0.580
Nigeria	0.515	0.682	0.558	0.568	0.586

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/ (continued)
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Greece	0.509	0.317	0.439	0.423	0.393
Finland	0.505	0.374	0.463	0.453	0.435
United Arab Emirates	0.485	0.851	0.590	0.615	0.661
Czech Republic	0.457	0.464	0.452	0.451	0.449
Portugal	0.432	0.350	0.400	0.393	0.379
Colombia	0.429	0.471	0.434	0.435	0.437
Philippines	0.428	0.488	0.441	0.444	0.449
Egypt	0.427	0.510	0.447	0.451	0.460
Pakistan	0.426	0.434	0.420	0.419	0.417
Ukraine	0.422	0.297	0.375	0.364	0.343
Algeria	0.411	0.420	0.412	0.412	0.412
Hungary	0.407	0.348	0.380	0.374	0.363
Kuwait	0.405	0.307	0.377	0.371	0.359
Israel	0.403	0.429	0.404	0.404	0.405
Romania	0.380	0.341	0.360	0.356	0.348
Chile	0.366	0.402	0.374	0.376	0.379
Iraq	0.349	0.367	0.348	0.347	0.347
Libya	0.330	0.149	0.268	0.254	0.227
Peru	0.280	0.310	0.286	0.287	0.290
Luxembourg	0.277	0.559	0.368	0.389	0.428
New Zealand	0.262	0.244	0.258	0.257	0.255
Kazakhstan	0.243	0.354	0.273	0.280	0.293
Vietnam	0.242	0.454	0.304	0.318	0.345
Syrian Arab Republic	0.233	0.192	0.216	0.212	0.204
Bangladesh	0.224	0.313	0.247	0.253	0.263
Congo, Dem. Rep. of	0.223	0.065	0.223	0.223	0.223
Slovak Republic	0.210	0.231	0.215	0.216	0.218
Zambia	0.205	0.050	0.152	0.140	0.117
Bulgaria	0.188	0.135	0.168	0.163	0.154
Morocco	0.187	0.203	0.189	0.189	0.190
Angola	0.155	0.218	0.172	0.176	0.183
Ghana	0.155	0.086	0.131	0.126	0.116
Qatar	0.154	0.362	0.218	0.233	0.260
Croatia	0.150	0.107	0.134	0.130	0.123
Zimbabwe	0.148	0.029	0.148	0.148	0.148

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/ (continued)
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Ecuador	0.146	0.147	0.144	0.143	0.142
Belarus	0.143	0.156	0.144	0.145	0.145
Serbia	0.137	0.093	0.121	0.117	0.110
Côte d'Ivoire	0.136	0.064	0.111	0.105	0.095
Lebanon	0.133	0.127	0.131	0.131	0.130
Sudan	0.132	0.107	0.122	0.119	0.115
Slovenia	0.123	0.102	0.115	0.114	0.110
Sri Lanka	0.121	0.138	0.124	0.125	0.126
Uzbekistan	0.116	0.120	0.115	0.114	0.114
Tunisia	0.114	0.103	0.108	0.107	0.105
Oman	0.114	0.171	0.130	0.134	0.141
Kenya	0.114	0.099	0.107	0.105	0.103
Myanmar	0.108	0.129	0.113	0.114	0.116
Yemen	0.102	0.066	0.102	0.102	0.102
Dominican Republic	0.100	0.111	0.102	0.102	0.103
Trinidad and Tobago	0.098	0.067	0.087	0.084	0.079
Lithuania	0.093	0.109	0.096	0.097	0.098
Uruguay	0.090	0.081	0.086	0.084	0.083
Guatemala	0.090	0.101	0.092	0.092	0.093
Tanzania	0.083	0.082	0.083	0.083	0.083
Bahrain	0.083	0.080	0.080	0.080	0.079
Azerbaijan	0.082	0.131	0.096	0.099	0.105
Jamaica	0.080	0.030	0.063	0.059	0.052
Panama	0.079	0.104	0.085	0.087	0.090
Costa Rica	0.077	0.081	0.077	0.077	0.077
Uganda	0.076	0.050	0.076	0.076	0.076
Jordan	0.072	0.087	0.075	0.076	0.078
Latvia	0.070	0.065	0.067	0.066	0.065
Afghanistan	0.068	0.046	0.068	0.068	0.068
Senegal	0.068	0.032	0.068	0.068	0.068
Iceland	0.067	0.031	0.055	0.052	0.046
Cyprus	0.064	0.056	0.061	0.060	0.059
Brunei	0.063	0.037	0.054	0.052	0.048
Ethiopia	0.063	0.094	0.072	0.074	0.077
El Salvador	0.060	0.049	0.056	0.055	0.053

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/ (continued)
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Cameroon	0.058	0.052	0.057	0.056	0.056
Bosnia & Herzegovina	0.056	0.040	0.050	0.048	0.046
Papua New Guinea	0.055	0.034	0.047	0.046	0.042
Nicaragua	0.055	0.028	0.045	0.043	0.039
Liberia	0.054	0.008	0.054	0.054	0.054
Honduras	0.052	0.042	0.048	0.047	0.046
South Sudan	0.052	0.025	0.052	0.052	0.052
Madagascar	0.051	0.023	0.051	0.051	0.051
Estonia	0.051	0.060	0.053	0.053	0.054
Bolivia	0.050	0.065	0.054	0.055	0.057
Turkmenistan	0.050	0.092	0.062	0.065	0.070
Mozambique	0.048	0.034	0.048	0.048	0.048
Gabon	0.045	0.035	0.043	0.042	0.041
Guinea	0.045	0.014	0.045	0.045	0.045
Georgia	0.044	0.036	0.041	0.040	0.039
Sierra Leone	0.043	0.011	0.043	0.043	0.043
Paraguay	0.042	0.059	0.047	0.048	0.049
Botswana	0.041	0.039	0.040	0.040	0.039
Namibia	0.040	0.028	0.036	0.034	0.032
Mali	0.039	0.025	0.039	0.039	0.039
Bahamas, The	0.038	0.016	0.031	0.029	0.026
Guyana	0.038	0.008	0.028	0.026	0.021
Kyrgyz Republic	0.037	0.021	0.037	0.037	0.037
Cambodia	0.037	0.046	0.039	0.040	0.041
Tajikistan	0.036	0.019	0.030	0.029	0.026
Moldova	0.036	0.020	0.031	0.029	0.027
Malta	0.035	0.058	0.042	0.044	0.047
Haiti	0.034	0.018	0.034	0.034	0.034
Somalia	0.034	0.013	0.027	0.025	0.022
Congo, Rep. of	0.034	0.035	0.035	0.036	0.036
Rwanda	0.034	0.015	0.034	0.034	0.034
Equatorial Guinea	0.033	0.047	0.038	0.039	0.041
Nepal	0.033	0.047	0.037	0.038	0.039
Burundi	0.032	0.006	0.032	0.032	0.032
Togo	0.031	0.011	0.031	0.031	0.031

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/ (continued)
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Mauritius	0.0298	0.0345	0.0367	0.0383	0.0412
Macedonia, FYR	0.0294	0.0277	0.0283	0.0280	0.0276
Chad	0.0294	0.0258	0.0294	0.0294	0.0294
Albania	0.0292	0.0278	0.0282	0.0280	0.0275
Malawi	0.0291	0.0146	0.0291	0.0291	0.0291
Niger	0.0276	0.0156	0.0276	0.0276	0.0276
Suriname	0.0270	0.0110	0.0215	0.0203	0.0179
Armenia	0.0270	0.0241	0.0256	0.0252	0.0246
Mauritania	0.0270	0.0134	0.0222	0.0211	0.0191
Benin	0.0260	0.0177	0.0260	0.0260	0.0260
Burkina Faso	0.0252	0.0232	0.0252	0.0252	0.0252
Central African Rep.	0.0234	0.0031	0.0234	0.0234	0.0234
Lao P.D.R.	0.0222	0.0242	0.0224	0.0224	0.0225
Fiji	0.0206	0.0105	0.0171	0.0163	0.0148
Barbados	0.0198	0.0095	0.0162	0.0153	0.0138
Kosovo	0.0173	0.0159	0.0165	0.0164	0.0160
Swaziland	0.0165	0.0120	0.0148	0.0144	0.0137
Mongolia	0.0152	0.0298	0.0195	0.0205	0.0223
Lesotho	0.0146	0.0082	0.0124	0.0118	0.0109
Gambia, The	0.0130	0.0027	0.0130	0.0130	0.0130
Montenegro	0.0127	0.0108	0.0118	0.0116	0.0113
San Marino	0.0103	0.0067	0.0090	0.0087	0.0081
Eritrea	0.0077	0.0074	0.0077	0.0077	0.0077
Djibouti	0.0067	0.0038	0.0067	0.0067	0.0067
Guinea-Bissau	0.0060	0.0025	0.0060	0.0060	0.0060
Belize	0.0056	0.0046	0.0053	0.0052	0.0050
Timor-Leste	0.0054	0.0090	0.0064	0.0067	0.0071
Vanuatu	0.0050	0.0018	0.0039	0.0037	0.0032
Cabo Verde	0.0050	0.0048	0.0048	0.0048	0.0047
Seychelles	0.0048	0.0047	0.0048	0.0048	0.0048
St. Lucia	0.0045	0.0031	0.0041	0.0040	0.0038
Maldives	0.0044	0.0092	0.0059	0.0062	0.0068
Solomon Islands	0.0044	0.0029	0.0044	0.0044	0.0044
Bhutan	0.0043	0.0059	0.0047	0.0048	0.0050
Antigua and Barbuda	0.0042	0.0030	0.0038	0.0037	0.0036

**Table A22. Illustration of Allocation Mechanisms: Formula 1.2, Includes 5 percent Ad Hoc Distribution
based on Voluntary Financial Contributions—by Member 1/2/ (concluded)
(In percent)**

	14th General Review Quotas	CQS based on Formula 1.2	Overall Increase		
			50%	70%	125%
Comoros	0.00373	0.00166	0.00373	0.00373	0.00373
Grenada	0.00344	0.00194	0.00299	0.00288	0.00269
Samoa	0.00340	0.00185	0.00285	0.00272	0.00248
São Tomé and Príncipe	0.00310	0.00081	0.00310	0.00310	0.00310
Tonga	0.00289	0.00128	0.00233	0.00220	0.00196
St. Kitts	0.00262	0.00205	0.00248	0.00245	0.00239
St. Vincent	0.00245	0.00169	0.00225	0.00221	0.00212
Dominica	0.00241	0.00122	0.00211	0.00203	0.00190
Kiribati	0.00235	0.00096	0.00187	0.00175	0.00155
Micronesia, FS of	0.00151	0.00103	0.00133	0.00129	0.00121
Marshall Islands	0.00103	0.00068	0.00090	0.00087	0.00081
Palau	0.00103	0.00074	0.00092	0.00089	0.00085
Nauru	0.00059	0.00037	0.00051	0.00049	0.00045
Tuvalu	0.00052	0.00020	0.00041	0.00038	0.00034

Source: Finance Department

1/ All simulations show distributions based on the quota formula (i.e., selective increases) plus ad hoc increases where needed to protect the shares of the poorest members and with 5 percent of the overall increase allocated as ad hoc increases based on voluntary financial contributions.

2/ Voluntary financial contributions are based on VFCS II, which is the weighted average of contribution shares, with weights of 0.3 for NAB, 0.3 for 2012 and 2016 bilateral borrowing agreements, 0.2 for PRGT loans and concessional financing subsidies combined, and 0.2 for capacity development. See Supplement 1, Annex V for details.

3/ Including China, P.R., Hong Kong SAR, and Macao SAR.

September 7, 2017

**The Chairman's Concluding Remarks
Fifteenth General Review of Quotas—Quota Formula and Realigning Shares
Committee of the Whole on Review of Quotas Meeting 17/1
September 1, 2017**

This first Committee of the Whole meeting on the 15th General Review of Quotas follows the work program on the 15th Review that we agreed last year with the aim, as endorsed by the Board of Governors, of completing the review by the Spring Meetings of 2019 and no later than the Annual Meetings of 2019. Today's informal exchange of views covered the quota formula and realigning quota shares, and we will meet in two weeks to discuss the adequacy of Fund resources, also in an informal committee setting. These issues are closely interlinked and will ultimately need to be agreed as a package. Many Directors expressed the view that IMF bodies should lead the process and determine the outcome. Let me offer some brief informal remarks that reflect my understanding of the views expressed in today's discussion.

The 15th Review will continue the process of realigning members' quota shares in line with their evolving relative positions in the world economy, building on the 2008 and 2010 reforms. The quota formula seeks to provide a reasonable measure of members' relative economic positions and thereby serve as a guide to changes in the structure of quotas. I heard considerable support for the view that the principles that have guided previous deliberations on the formula remain valid: namely, that the formula should (i) be simple and transparent; (ii) be consistent with the multiple roles of quotas; (iii) produce results that are broadly acceptable to the membership; and (iv) be feasible to implement statistically based on timely, high quality and widely available data. However, views differed on the extent to which the current formula conforms to these principles. One view is that the formula is working well and continues to deliver higher calculated quota shares to dynamic economies. Another view is that the current formula fails to reflect realities in the global economy and requires a major overhaul toward a GDP-centered formula. Bridging this gap will be a key challenge ahead of us.

In this regard, the formula has already been discussed extensively, including under the 2013 Quota Formula Review (QFR), and I sensed a willingness to build on the progress already made. This includes general support for the view that GDP should remain the most important variable, though views continued to differ on its weight and the composition of the GDP blend. I also heard continued support from most Directors for dropping variability, though for a number of them, this support is conditional on other elements of the reform package, while a few other Directors are still not convinced. Openness remains important for many Directors, but views varied on its appropriate weight and measurement. Views ranged

from increasing the weight of openness and maintaining the current methodology, to lowering its weight, introducing a cap, and excluding intra-currency union trade. Views also remained divergent on whether reserves and compression should be maintained at their current levels, adjusted, or eliminated.

Staff's technical exercise to identify reforms that yield results near the midpoint of those implied by the current formula and a GDP-only formula attracted a range of views. A number of Directors found this a useful exercise to illustrate possible pathways toward a middle ground. Many others, while welcoming staff's attempts to look for areas of consensus, felt that it does not adequately represent the range of views being expressed, gives too much prominence to a GDP-only formula, and, in their view, is not in line with the 2013 QFR.

Views also remained divided on whether and if so how to take account of voluntary financial contributions. Many Directors supported, or were open, to taking account of such contributions in quota adjustments under the 15th Review, with a few preferring their inclusion in the quota formula. Many other Directors continued to oppose or express reservations about such approaches. Clearly, more work will be needed to bridge these different viewpoints.

I welcome Directors' continued commitment to protect the quota and voting share of the poorest members under the 15th Review. Views varied on the precise definition of poor countries to be protected, and many Directors called for protection also for small member states.

We also had a very preliminary discussion of alternative approaches to distributing quota increases under the 15th Review. A few Directors highlighted the importance of selective increases and the possible role for ad hoc increases in realigning quota shares and helping to facilitate a compromise. This is clearly an area where discussions are at a very early stage, and is closely linked with the work on resource adequacy.

To conclude, today's meeting has provided useful feedback and clarifications of views. In light of this discussion, management and staff will reflect on how best to take forward the work on the quota formula and realigning quota shares in the context of the broader discussions on the 15th Review. While there is clearly a lot of work ahead of us, I believe we have made a good start. I hope that, with flexibility, pragmatism, and openness from all sides, we can achieve a compromise that can command broad support consistent with the IMFC's commitment to a strong, quota-based and adequately-resourced IMF at the center of the global financial safety net.