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INTERNATIONAL MONETARY FUND

Minutes of Executive Board Meeting 12/21-2

10:10 a.m., March 7, 2012

2. Quota Formula Review: Initial Considerations

Documents: SM/12/29 and Supplement 1

Staff: Tweedie, Basset, and Kumar, FIN

Length: 2 hours, 58 minutes

Executive Board Attendance

C. Lagarde, Chairman

Executive Directors

M. Majoro (AE)

A. Mac Laughlin (AG)

C. Legg (AU)

W. Kiekens (BE)

P. Nogueira Batista, Jr. (BR)

T. Zhang (CC)

C. Pérez-Verdía (CE)

A. Fayolle (FF)

H. Temmeyer (GR)

A. Virmani (IN)

M. Furusawa (JA)

A. S. Shaalan (MI)

A. Mozhin (RU)

A. Alkholifey (SA)

D. J. Chia (ST)

R. Weber (SZ)

A. Gibbs (UK)

Alternate Executive Directors

R. N'Sonde (AF), Temporary

M. O'Dea (CO)

N. Giammarioli (IT), Temporary

M. Daïri (MD)

Y. Yakusha (NE)

A. Gronn (NO)

E. Meyer (UA), Temporary

J. Lin, Acting Secretary

O. Vongthieres, Summing Up Officer

J. Morco/F. Liu, Board Operations Officers

P. Martin, Verbatim Reporting Officer

Also Present

European Central Bank: W. Coussens, G. Pineau. European Department: W. McGrew. External Relations Department: A. Thomson. Finance Department: S. Bassett, M. Fisher, C. Janada, T. Krueger, M. Kumar, H. Treichel, A. Tweedie. Middle East and Central Asia Department: D. Robinson. Strategy, Policy, and Review Department: S. Tiwari. Statistics Department: P. Cardillo, K. Zieschang. Executive Director: K. Assimaidou (AF), J. Mojarrad (MD). Alternate Executive Director: F. Alshathri (SA), A. Budiman (ST), T. Catsambas (IT), R. Elder (UK), P. Garcia-Silva (AG), S. Geadah (MI), H. Lee (AU), S. Meyer (GR), M. Saho (AE), T. Shimoda (JA), A. Terracol (FF), P. N. Weerasinghe (IN), N. Yambaye (AF), K. Zajdel-Kurowska (SZ). Senior Advisors to Executive Directors: A. Ally (BR), C. Balsa (CE), E. Barendregt (NE), K. Beaton (CO), A. Brunell-Cote (CO), M. Choueiri (MI),

V. Djokovic (SZ), K. Finch (BR), B. Lischinsky (AG), S. Meyer (GR), M. Nomura (JA), L. Palei (RU), M. Patra (IN), M. Peter (SZ), J. Poulain (FF), J. Rolle (CO), S. Rouai (SA), M. Sajkunovic (CO), P. Fachada (BR), K. Todani (AE), U. Uwatt (AE), O. Yalvac (BE), M. Zaher (MI). Advisors to Executive Directors: E. Aparici (CE), M. Ben Hassine (MD), A. Colabella (IT), J. Cova (CE), A. De Lannoy (BE), F. Dlamini-Kunene (AE), C. Eppendorfer (GR), C. Fookes (AU), M. Goldby (UK), I. Hafid (ST), E. Kanaris (NE), S. Keshava (SA), S. Maherzi (MD), R. Mosch (NE), E. Ramos-Murillo (CE), I. Rashid (ST), T. Tlelima (AE), J. Tucker (AE), R. Ward (UK), J. Xia (CC), M. de Las Casas (CE), S. Lee (AU), L. Mansur (BR), W. Orie (BR).

2. QUOTA FORMULA REVIEW: INITIAL CONSIDERATIONS

Mr. Alkholifey submitted the following statement:

We thank the staff for their technical work, as part of the agreed agenda on the quota formula review, and we take note of their simulations of the potential impact of some of the proposed adjustments. While our chair has an open mind regarding further improvements to the formula, we also recognize that the current formula is the result of a difficult compromise and we hope that the institution will not be detracted from the focus on resolving the financial and economic crisis, restoring market confidence, and reviving global growth.

Introduction

Before commenting on the staff proposals, we would like to make the following two general comments:

First, while the Fund should remain a quota based institution, we also recognize the many limitations of quotas and of the quota formula. In this regard, the discussions on the adequacy of Fund resources have shown that, because of the increased importance of spillovers, interconnectedness, and the rapid propagation of shocks, there will be a growing need for the Fund to adjust rapidly and more frequently its resources base by relying on temporary borrowed resources, rather than on quotas increases. On the other hand, permanent quota resources, even if increased regularly, will not keep pace with the rapid trend in global trade and capital flows. Indeed, quota resources should support lending by the Fund during normal times, while borrowed resources should provide a cushion for a temporary surge in Fund lending in extraordinary circumstances.

Second, going forward, the Fund will be confronted with higher and more diverse financing needs from the membership. In this context, and if recent experience is of any relevance, these needs will continue to be fulfilled primarily through voluntary contributions by willing Fund members. Therefore, it is important for the Fund to develop an incentive structure to encourage those countries that are able and, more importantly willing, to finance Fund's diverse activities. A step in this direction is the addition of a new variable in the quota formula to reflect members' actual and potential financial contributions. Another incentive is to increase the weight of reserves in the formula.

Principles Underpinning the Quota Formula

With regard to the principles underpinning the quota formula, we consider that the four principles used in the 2008 reform need to be updated.

Principles (i) and (iv) remain valid; namely that the quota formula should be simple and transparent and also feasible to implement based on high quality and widely available data.

With regard to principle (iii), we agree on the importance of achieving calculated quota shares that are broadly acceptable to the membership. We are concerned, however, if successive changes in the quota formula lead to successive falls in the calculated quota shares (CQSs) of some members. For example, some countries were better off with the old five formulas and they lost CQSs under the new quota formula. These countries will find it extremely difficult to accept another reform of the quota formula, which will lead to another deterioration in their CQSs. For these reasons, we propose to update principle (iii) as follows: “result in calculated quota shares that are broadly acceptable over time to the membership.” The addition of the wording “over time” would suggest that, while the quota formula will result in shifts in CQSs among countries, these shifts will not translate into abrupt reductions in actual quota shares. Put differently, countries would be more willing to accept a decrease in their CQSs if their actual quota shares are protected for an agreed period of time so as to spread the adjustment over time.

Principle (ii) on the multiple roles of quotas needs also to be updated. In particular with regard to the role of quotas in determining the Fund’s financial resources, we continue to disagree with the staff view that GDP is the single most relevant indicator of a member’s ability to contribute to Fund’s finances. In our view, the current formula does not capture the financial strength and, more importantly, the willingness of some members to contribute usable resources. In this connection, it is important to note that, as far as a member’s ability to finance the Fund is concerned, what is relevant is not the total quotas, but the size of quotas of only those members that have strong external positions to be included in the Financial Transactions Plan (FTP) and this is why, in our view, the FTP is relevant for the quota discussion. Here, we would like to note that, in determining which countries are included in the FTP, GDP is not one of the factors considered. Indeed, members are selected for inclusion in the FTP after taking into account “the strength of their external positions (i.e., balance of payments, reserve position, and developments in the exchange markets).” To this end, we suggest to update principle (ii) as follows: “be consistent with the multiple roles of

quotas, appropriately reflecting global economic and financial trends and capturing member's relative positions in the world economy and their ability and willingness to contribute to financing the Fund.”

Quota Formula Variables and a Measure of Financial Contributions

We take note of the staff technical work on the marginal contribution of each variable to the CQS with the objective of further simplifying the formula but we are concerned by its implications and we oppose the removal of any variable from the current formula. We have two major concerns with the staff approach. First, it further accentuates the weight of GDP in the formula and will lead to shifts in CQSs to the benefit of major economies, which is against the spirit of the governance reform. Second, the inclusion in the quota formula of four weighted variables has the advantage of scaling down the impact of each variable, thus offering to each member a relative gain and a strong incentive to support in the end the combined formula. Table 2 illustrates well the balancing effect of the four variables for advanced economies and emerging market and developing countries (EMDCs). It shows that, for many EMDCs, the total impact of incrementally dropping the three variables (reserves, openness, and variability) is lower than that of removing a single variable. Unfortunately, this is not the case for Saudi Arabia and Singapore, the only countries listed in Table 2 who will consistently register a decline in their CQSs, each time a variable is excluded.

On GDP, the excessive weight given to this variable in the formula remains one of our main concerns and we support its reduction. We would like to reiterate that the importance placed on GDP in the quota formula benefits large economies and aggravates the concentration of voting power and, at the end comes at the expense of many EMDCs.

As we underscored in earlier meetings, countries can have systemic importance, even though their GDP may be smaller. Indeed, the ability of a country to safeguard the global economic and financial systems should be considered as a measure of economic weight and needs to be reflected in the quota shares. This is the case of Saudi Arabia, which has acted prudently over many decades to bring stability to the global oil market with the objective of safeguarding the global economic system. This was also demonstrated during various crises when an adequate supply of oil was crucial to avoid global negative repercussions. Therefore, systemic importance of a country in the global economy should also be captured in the quota formula.

We strongly believe that reserves will continue to provide an indicator of a member's financial strength and ability in Fund's operations. Reserves are a major determinant of members' inclusion in the FTP. In addition, a large number of members are included in the FTP but are not issuing international reserve currencies. We continue to believe that reserves accumulated by members are reinforcing global safety nets and are, therefore, a global public good that can be relied upon in exceptional times. This reinforces the view that the weight of reserves should be increased in the formula to encourage members with high levels of reserves to contribute more to the financing of Fund operations. In this connection, we agree with the staff conclusion that "where countries have contributed well above their quota share have generally (though not always) involved countries with relatively large reserves, suggesting that this variable still has relevance to potential to contribute to the Fund's finances, at least for a small but important part of the membership."

We strongly support further staff work on a new measure of financial contributions to be included in the quota formula. In this regard, the staff should conduct further work so that measurement and aggregation issues could be addressed in order to suitably capture members' financial contributions to the Fund. The selected indicators provided in Table 5 offer a good start and we encourage staff to be exhaustive, by including all other forms of financial contributions, in particular bilateral loans, provided to the Fund over a longer period. We even see a strong case for taking into consideration official development assistance provided by member countries.

Mr. Legg, Mr. H. Lee and Ms. Bultitude submitted the following statement:

A credible, robust and broadly accepted quota formula is critical to an effective, relevant and legitimate IMF. For the Fund to be seen as representative, members' relative economic importance (which evolves over time) must be properly reflected in quota shares, determined and allocated through an open, transparent and fair process. While the current formula represents a significant improvement on previous arrangements, further progress is needed to establish a formula that is both widely accepted and reflective of the changing global dynamics.

An open, but pragmatic, approach is necessary to ensure the review's success. The current formula reflects a compromise reached at the end of long and difficult discussions. Moving forward requires willingness on all sides to re-visit these discussions and consider further adjustments. At the same time, to ensure the legitimacy of the revised formula, and to avoid being distracted

by unproductive and divisive discussions, we must focus on those improvements that are likely to be widely supported by the membership.

The initial focus should be on building a robust formula, rather than on the impact on quota shares. First and foremost, the Board needs to reach a consensus on the role of quotas and the intrinsic merits of variables in the formula. These should be based on sound principles and clear empirical evidence. Once this foundation is established, the Board can then consider the implications for individual members' (or groups of members') quota shares, and potential transitioning mechanisms.

Further consideration should be given to the roles of quotas. There are inherent tensions between the roles commonly identified and, as far as we are aware, there isn't an explicit agreement on their relative weighting. We are particularly interested in a thorough conceptual discussion on the importance of the potential use of Fund resources in the quota formula, as quota size has arguably become less relevant over time in determining a member's access to resources.

We should take account of the lessons from previous reviews, including the difficulties encountered, compromises made and success of the revised formula. For example, understanding why past allocations have deviated from the formula—and the principles underlying it, such as simplicity and transparency—might provide some useful insights into the formula's weaknesses or omissions.

Turning to the specific questions raised in the paper:

The principles underpinning the 2008 reforms remain relevant for the current review. In particular, the formula must reflect 'members' relative positions in the world economy,' which we consider could be restated as 'members' relative economic weight in the global economy,' given the roles of quota are strongly linked to relative economic weight. Recognizing that the principles involve some inherent tradeoffs, we should avoid the temptation of making variables excessively complex in an attempt to achieve technical perfection or improved acceptance by a small number of members.

To the four principles already identified we would add that the participation and access of the Fund's smallest members must be ensured. For the Fund to be truly representative all of its members must have adequate voice and access, which requires giving due consideration to the special circumstances of small countries in the design of the formula. Additionally, as

discussed during the 2000 review, formula design ‘should not give incentives to members to adjust their policies adversely to IMF principles or affect their economies in a manner that is not consistent with a sound economic management.’

GDP is the most important variable for determining quota. As the most robust and transparent measure of relative economic weight, GDP is both inherently appealing and the best indicator of a member’s ability to contribute resources to the IMF and potential need for Fund borrowings. Some members of our constituency would support increasing the weight of GDP relative to other variables in the formula, while other members consider the current relative weight is appropriate.

The blending of GDP MER and GDP PPP is appropriate, given both measures are conceptually relevant to the measurement of quotas. We are open to further adjustment in the blend, if warranted, to better reflect relative economic weights, although we recognize that the current blend was the result of a difficult compromise, and it may not be productive to reopen this debate.

Openness is relevant to the multiple roles of quota, but remains subject to measurement challenges. Conceptually, openness embodies a number of considerations not fully captured by GDP, such as potential balance of payments needs and hence demand for Fund resources, and a member’s ‘stake’ in a well-functioning global economy. However, in practice, existing measures are highly correlated with GDP and weak in predicting demand for Fund resources. On balance, we support the continued inclusion of openness in the formula, although some of our constituency members see merit in a reduced weighting. Similarly, while there may be conceptual merit in a differential treatment of intra-currency union flows or the inclusion of financial openness, significant data and measurement limitations suggest these options are not yet feasible or practical.

We would support removing variability from the formula. Variability is a poorer predictor of demand for Fund resources than openness, and is more strongly correlated with GDP, suggesting it contributes little to the current formula. Removing variability would also reduce the complexity of the formula and volatility in calculated quota shares.

We have mixed feelings about the inclusion of reserves and financial contributions. Some in our constituency believe reserves continue to demonstrate the potential contribution to Fund resources, noting that recent discussions on increasing Fund resources have looked to members with large

international reserves to make significant contributions. Others agree with the evidence in the paper that there is no clear relationship between reserves and financial contributions, emphasizing that it is the ability to access or mobilize resources that is more relevant, and that the relevance of reserves has declined over time, particularly with the move to free floating exchange rates. As a constituency, we agree there may be conceptual merit in exploring a measure of actual financial contribution to replace reserves, although it may be challenging to overcome the associated measurement challenges, degree of complexity and concerns about the potential for larger members to ‘buy’ quota share.

Mr. Shaalan and Mr. Geadah submitted the following statement:

In responding to the Board of Governors’ request for a comprehensive review of the quota formula, we would like to start with a consideration of the objectives of the formula. The paper notes that it seeks to “capture members’ relative positions in the world economy, their financial strength and ability to contribute useable resources, as well as the potential need to borrow from the Fund.” It is clear that these objectives are potentially contradictory.

A good starting point may be to examine the background for the quota formula. The Articles of Agreement refer to the role of the quota in voting shares and SDR allocations, but there is no guidance on the elements of the quota formula. There are also no references to the quota formula in the By-Laws. We would therefore suggest that we start with an assessment of the objectives of the quota formula, with a view to ensuring proper voice and representation to the whole membership. We realize that this may not be feasible—especially in the currently envisaged timeframe—as the current formula reflects a difficult balance that was reached after years of adjustments. We also realize that a comprehensive review of the formula would have to consider other aspects of Fund governance. Absent a fundamental reconsideration of the objectives of the quota formula, we are likely to repeat some of the previous discussions on the issue, which were influenced by political economy considerations.

Focusing on the current quota formula, we would be strongly in favor of reducing the overly large weight of GDP in it. The current focus on GDP clearly benefits large economies to the disadvantage of developing and emerging economies. Reducing the weight of GDP would also help to avoid the need for ad hoc boosters to address size-related factors that favor large economies.

It would also be important to keep reserves, variability, and openness in the formula. Reserves have been an important indicator of the ability and willingness to contribute useable resources to the Fund. Openness is important to capture members' integration in the world economy, notwithstanding difficulties in measuring financial linkages among members. We take note of the staff's assessment that there is little connection between variability and members' vulnerability to balance of payments shocks and the need for financing. However, this objective remains highly relevant, and alternative variability measures should be considered rather than dropping it from the formula.

Mr. Grønn and Ms. Pedersen submitted the following statement:

General Remarks

We agree that the principles guiding the 2008 reform remain valid for the current review. Thus, we stress that the quota formula should continue to be simple, transparent and feasible to implement. The 2008 reform represented a clear improvement over previous formulas in this regard.

The quota formula should reflect the broad mandate and work of the IMF. The selection of variables as well as the relative weights assigned to variables should be guided by sound economic reasoning.

It is important for the credibility of a quota reform that the consequent quota distribution is transparent and formula-based, and that the revised formula is the sole basis for future quota realignments. Ensuring broad agreement on the quota formula and the resulting calculated quota shares (CQS) would help facilitate this. If the formula is broadly viewed as misaligned with realities there is a larger risk that metrics outside of the formula will again be employed in future changes in quota distribution.

It is of great importance that the review process is fully anchored in the relevant IMF bodies. Furthermore, negotiations should be carried out and compromises reached by the IMF Executive Board and the IMFC, where all members are represented.

We welcome the staff's analysis and illustration of the implications of different scenarios which allow for a more informed discussion of the way forward. We look forward to assessing the 2010 data and urge the staff to provide data updates as soon as possible.

GDP

We consider GDP to be a central variable in the quota formula as reflected by its large weight in the current formula. GDP at market exchange rates (MER) measures countries' relative size in the world economy. In contrast, GDP measured at purchasing power parities (PPP) is subject to more serious methodological questions and data quality issues.

In 2008, PPP GDP was included in the quota formula on a temporary basis as a measure for countries' expected future growth. As PPP GDP and MER GDP are rapidly converging, and in view of the significant quota realignment agreed in 2010, there is no longer a need for this artificial compensation for future growth. Hence, PPP GDP should be phased out of the GDP blend.

Openness

Economic and financial openness is at the core of the IMF's mandate and should have a prominent role in the formula.

Global developments in the last decade, and especially the financial crisis, underline the importance of cross-border financial flows which should be reflected in the quota formula through inclusion of financial openness. Inclusion of financial openness would give a more comprehensive and correct picture of a country's openness and its vulnerability to cross-border spill-over effects, and in turn its role in the world economy. Moreover, it would be fully consistent with the work already initiated by the IMF on broadening the mandate and scope of the Fund to include financial flows. However, financial openness should not be included at the expense of other openness variables.

We appreciate the work done by the staff on possibilities for better capturing financial openness and note that a viable way forward appears to be increased weight of the investment income. However, we believe that further consideration of other potential variables is warranted, also given the significant improvements in measurements of e.g. IIP in recent years. Including financial openness in the formula could also increase the incentive for dealing with current limitations on country coverage. Could the staff elaborate on the outlook for improving country coverage for IIP data?

The openness indicator should continue to include intra-currency union trade flows in order to apply equal treatment to all IMF members whether part of an economic and currency area or not.

For any measure of financial openness, we are open to finding a mechanism to deal with countries with international financial centers. However, any such mechanism would need to have a strong analytical basis

Variability

We recognize and concur with the difficulties as regards variability, as presented by the staff. Also, it is questionable whether variability actually has a significant predictive power in terms of members' need to use Fund resources. However, there is a need to appropriately include a measure of members' vulnerability and potential needs for Fund resources in the formula; we welcome further considerations on the variable.

Reserves

We agree that reserves are a sub-optimal indicator of a country's capacity to contribute to the Fund's finances. In addition, the reserves variable can provide potential distortions associated with excess reserve accumulation. We, therefore, continue to support further work on ways to include member's actual financial contributions to the IMF in the quota formula.

Mr. Assimaidou submitted the following statement:

We thank the staff for its technical work on preliminary considerations of the quota formula review. We consider this review as part of the agenda to ensure that the institution remains legitimate, relevant and effective in meeting its mandate. The multiple roles of quotas—determining the Fund's financial resources, affecting decisions on members' access to Fund resources, and largely determining members' voting rights—should contribute to meeting this goal.

Guiding Principles for the Review

We share the view that the principles that underpinned the 2008 reform remain relevant for this formula review. (As the paper recalls, these principles include the need for the formula to: (i) be simple and transparent; (ii) be consistent with the multiple roles of quotas; (iii) result in calculated quota shares that are broadly acceptable to the membership; (iv) be feasible to implement based on timely, high quality and widely available data.)

However, there is a fifth principle that underpinned the 2008 reform and is still relevant in the context of the quota formula review but has been

overseen by the staff, namely: the need to prevent the voice of low-income countries from further eroding going forward. Indeed, it was clearly stated in the 2008 reform that "...[the] objectives are: to achieve a significant further alignment of members' quotas with their relative positions in the world economy based on a simpler and more transparent quota formula, and, as an integral part of the reform program, to enhance the voice and participation of low-income countries."¹ This principle was later reaffirmed in the context of the 2010 reform in that "The Executive Board is requested to complete a comprehensive review of the formula by January 2013" and that, under the subsequent Fifteenth General Review of Quotas which is expected to be completed by January 2014, "... Steps shall be taken to protect the voice and representation of the poorest members."² Therefore, it is imperative that the quota formula achieves outcomes that do not depart much from protecting the quotas of those members.

Structure of the Formula and Compression Factor

Regarding the key properties of the current formula that should be preserved in a new formula, we agree with maintaining a linear combination of variables and continuing to express the latter in terms of shares in global totals. As for the compression factor, we understand that the inclusion for a period of 20 years applies to the factor itself—as opposed to its value (0.95). Therefore, we request the staff to run simulations with alternative values for the compression factor (e.g., 0.90) so as to curb disparities in quota shares across members in cases where the high correlation of size-related variables create a significant bias in favor of large economies, and to improve somewhat the representation of the poor members.

Although tentative due to the sensitivity of the results as highlighted in footnote 10 of the main paper, we appreciate the insight provided by exploring the marginal contributions of each variable to calculated quota shares (paragraphs 10-11, Table 2 and Appendix table A3.1). However, we would suggest caution when scaling the significance of the impact of the changes explored. For instance, we do not think that the overall impact on low-income countries of any of the changes presented is "modest" as qualified in the ultimate bullet point of paragraph 11 of the main paper. Not only would the

¹ The Chairman's Summing Up: Quota and Voice Reform—Key Elements of a Potential Package of Reforms. BUFF/08/34 (March 18, 2008).

² Resolution No. 66-2 of the Board of Governors on "Fourteenth General Review of Quotas and Reform of the Executive Board" (2010); and Report of the Executive Board to the Board of Governors on "IMF Quota and Governance Reform—Elements of an Agreement" (2010).

aggregate impact of dropping variability and openness on this group of members represent yet another loss in their quota shares and a further erosion of their voice, such decline of 0.1 percentage points would amount to a 5-percent loss in their quota shares, which is far from being negligible. Moreover, we would appreciate the staff reiterating the exercise of calculating marginal contributions of the variables by using different sequences of dropping variables from the formula, so as to gauge the robustness of the marginal contribution estimations.

Relevance and Weights of the Variables

GDP

We share the view that GDP is and should be an important quota variable and that it is relevant for the various roles of quotas. It should maintain a significant weight (e.g. the current 50 percent) in the formula. Regarding the blend, we agree that both market GDP and PPP GDP each bears benefits for the purpose of determining quotas and both should be part of the GDP blend variable. As the current blend represented a difficult compromise and there are still diverging views on the relative importance of market vs. PPP GDP, we are in favor of considering alternative combinations of the blend weights, notably a balanced 50/50 blend.

Openness

The case for an openness variable in the quota formula remains ambiguous. Indeed, openness is not strongly related to a member's ability to make financial contributions to the Fund; nor is it closely related to its potential need for Fund resources, as many large economies who tend to be more closed have typically made larger financial contributions and some of them have drawn on Fund resources more proportionally than smaller, more open economies. Therefore, we are in favor of reducing the weight attributed to this variable in the quota formula, especially given its significant marginal impact on the calculated quota shares in some cases and even more so in light of its measurement problems.

Regarding the measurement of openness, it is clear that this remains a challenge due to data availability constraints as well as the problem of cross-border flow double counting. However, we are thankful to the staff for exploring the issue of intra-currency union flows which is a source of bias in the openness measurement as it relates to the roles of quotas. Unfortunately, the conceptual and data difficulties regarding the separation of such flows

from other flows preclude a differential treatment and reinforce the case for reducing the weight of the openness variable in the quota formula.

Moreover, as acknowledged in the main paper, the existing openness variable already captures to some extent financial openness through investment income which itself carries some limitations both in terms of measurement and fulfilling the roles played by quotas (paragraphs 25-26 and Figure 4 in the main staff paper). While progress has been made in measuring International Investment Position (IIP) with the inclusion of a broader range of assets and liabilities, the country coverage for the IIP remains limited to barely half of the membership. Whole regions such as Middle East and sub-Saharan Africa lack such coverage. Moreover, stocks of non-residents would be unduly captured in the financial openness measure (as quantified by the IIP) of a country with an international financial center. In addition, the Reserves variable used in the current quota formula already captures a significant amount of IPP on the assets and liabilities sides.

For the reasons noted above, we strongly favor leaving financial openness out of the quota formula, maintaining the current measure for openness while reducing the weight of this variable in the formula.

Variability

A conceptual case can be made for including Variability as a measure of a member's vulnerability to balance of payments as it implies potential need for Fund financing. We note however that the staff's empirical exercises do not give results consistent with a role of variability in the quota formula. For instance, the staff found an insignificant marginal effect of variability on the use of Fund resources. However, we would note that: (i) the fits of the estimated Probit model (Table A2.1 in the Supplementary Appendix) are weak due to the heterogeneous sample; (ii) the robustness of the results has not been tested against changes to the country sample, the period, and the model specification (we note for instance that a number of explanatory variables have insignificant or zero coefficients); (iii) the staff's exercise of exploring swings in variability shares to gauge the instability effect of this variable on the formula results (paragraph 32 and Figure 7 of the main paper) is based solely on countries without Fund programs of any sort.

Given these caveats, we strongly caution against dropping Variability from the formula. We share the view that this variable can be further refined, and we encourage the staff to work on this issue.

Reserves

We share the view that Reserves continue to be relevant in determining quotas as it represents an indicator of a member's financial strength and ability to make contributions to Fund resources. The empirical finding that countries that have contributed to Fund's finances well above their existing quota shares are generally countries with relatively large reserves reinforce the relevance of this variable in the quota formula. Furthermore, we would argue against the premise that the inclusion of a reserves variable in the quota formula would create distortions associated with excess reserve accumulation. It is hard to argue that a member's reserve accumulation decisions are function of the member's desire to see its Fund shareholding increased. In addition, as recalled in the paper, there is no clear, convincing benchmark for excess reserve accumulation, according to the staff's recent work on reserve adequacy. Thus, we favor maintaining the current Reserves variable in the quota formula, with a higher weight than is currently used.

Financial Contributions

We cannot support the inclusion in the quota formula of a separate measure of actual contributions to the Fund. As noted above, this is already captured in the Reserves variable. Thus, we share the view of taking subsidy contributions and contributions to financing TA and training into account outside the formula, for the purpose of providing additional or ad hoc quota increase and/or designing protection mechanisms, as described in paragraph 41.

Mr. Furusawa and Mr. Nomura submitted the following statement:

General Comments

The quota formula functions as a key element of the Fund's governance structure. In order to preserve the legitimacy of the Fund, it is, therefore, crucially important to ensure that the quota formula will appropriately reflect the relative weight of its individual members in the world economy.

The most serious flaw in the current quota formula is that it places an excessively heavy weight on variables that measure individual members' potential need for Fund resources; yet the formula unfairly undervalues individual members' capacity to provide needed financial resources to the

Fund. Leaving this flaw unrepaired would certainly make it difficult for the Fund to satisfy the financial needs of its membership in that it would decrease member countries' willingness to furnish the Fund with necessary resources. Given the increasing size of Fund programs, and that the access level of some programs now exceeds 2000 percent of quotas, in this review of the quota formula, we believe that there is an increasing need for the Fund to attach greater importance to member countries' capacity, and willingness, to make financial contributions to the Fund.

Against this background, we believe that this round of the quota formula review should aim to correct the imbalance between the weight of variables that measure a member country's financial needs and the weight of variables that measure a member's capacity to make financial contributions to the Fund by significantly increasing the weight of the latter. In fact, the World Bank Group has already incorporated financial contributions in the formula it used for the 2010 voice reform. In this sense, we strongly welcome the staff paper's indication of launching work on reflecting actual financial contributions of member countries in the quota formula. Indeed, actual financial contributions would most eloquently reflect a member country's capacity to make financial contributions, and, thus, we believe that the staff provided a good basis for our discussion on how to correct the imbalance in the current quota formula. We would like to encourage the staff to work on this issue and, before our next meeting, propose concrete options that will reflect financial contributions in the quota formula. We would also like to note that reflecting financial contributions in the quota formula would help the Fund's ongoing efforts to strengthen its lending capacity.

To achieve the above-mentioned goal for this round of the quota formula review, we believe that each of the variables in the current quota formula should be revised in accordance with the following directions:

GDP

This variable is intended to measure both the financial needs and the financial contribution capacity of member countries. Given that, as the staff points out, market GDP better reflects both the financial needs and the financial contribution capacity of member countries than the PPP GDP, and that the PPP GDP still suffers from data constraints, in our view, the PPP GDP should be eliminated, and the market GDP should become the sole component of the GDP variable.

Openness and Variability

The aggregate weight assigned to openness and variability, both of which are intended to capture the financial needs of member countries, is too large (i.e., 45 percent) compared with the weight of the variable that measures the financial contribution capacity of member countries (5 percent).

In addition, as the staff points out, openness is still measured on a gross basis of current payments and receipts, not on a value added basis, and this raises the problem of double counting of cross-border flows. This is a serious flaw. Additionally, variability also suffers from a grave flaw. As the staff points out, there is little evidence that the variable for variability is capturing what it is intended to capture. In addition, empirical studies show that variability is adding significant instability to the formula results.

Against this background, we believe that a significant portion of the weight assigned to the variables of openness and variability should be decreased and transferred to the variable that measures the financial contribution capacity of member countries.

Reserves and Financial Contributions

In the current quota formula, an extremely small weight is assigned to the variable that measures member countries' capacity to make financial contributions to the Fund, i.e., 5 percent on reserves. Given the above-mentioned importance of correcting the imbalance in the current quota formula, the weight assigned to the variable that measures member countries' capacity to make financial contributions needs to be significantly increased.

At the same time, it should be noted that, as the staff points out, the variable of reserves does not very accurately reflect a member country's capacity to make financial contributions to the Fund across all members. One way to improve the current measurement of member countries' capacity to make financial contributions within the formula would be to use the financial contributions of member countries instead of, or along with, reserves.

We understand that some issues need to be resolved in order to actually include member countries' financial contributions to the Fund in the quota formula. In this sense, we strongly support the staff's proposal to work on these remaining issues and propose some options before our next meeting. In the actual design of such options, it might be useful for the staff to consider the following points:

First, regarding the specific indicator to be used to measure member countries' financial contributions, given the difference between grants and loans, and the differences in size across a variety of forms of financial contribution, it would be useful to focus on member countries' share in each form of financial contribution, so that the quota formula can reflect diverse forms of financial contributions in a fair manner.

Second, it would be useful to differentiate between the treatment of advanced economies and EMDCs. In fact, the formula used by the World Bank Group for the 2010 voice reform differentiated between the treatment of advanced economies and EMDCs. The Fund might well consider, for example, adopting a framework that would shift quota shares of advanced economies, with a track record of relatively small financial contributions, to EMDCs, with a track record of financial contributions regardless of size, and to advanced economies with a track record of relatively large financial contributions.

Financial Openness

As the staff indicates, both the International Investment Position (IIP), on a gross basis, and Investment Income (II), present some technical problems when used as variables to measure the financial need of member countries. It might be useful to reflect on considering the use of the IIP on a net basis, as a measurement of member countries' capacity to make financial contributions, rather than as a measurement of member countries' need for Fund resources.

Mr. Weber submitted the following statement:

The current quota formula occupies a very narrow zone of mutual agreement that in 2008 was acceptable to the broad majority of members—even if not for all. We accepted this momentous outcome for the sake of the improvements achieved in transparency in the way that members' individual quotas are calculated—even if substantial shortcomings have not found resolution. The current formula has proved to be a practicable basis for the 14th quota review—even if this practicability was ultimately undermined by the various ad-hoc elements introduced.

We consider it indispensable that the outcome of this quota formula review will reflect and fulfill the established principles reiterated in paragraph 5 of the staff paper. The formula must be consistent with the multiple roles of

quotas, which in turn should emulate the Fund's core mandate and activities, in particular its enhanced financial stability role.

We do not consider it useful or necessary to classify countries into—static—groups for the purpose of the quota formula review. We vehemently reject any notion that the review should target an outcome in terms of an aggregate quota shift between subgroups of members. Tables 6 to 8 thus do not serve a useful purpose and should be dropped in future staff papers. A more disaggregated and therefore transparent presentation of members along the lines of Table 2—but using the latest WEO classification as the organizing principle—would be preferable.

As to the variables that enter the formula, our views can be summarized as follows:

We maintain that GDP must not be the predominant variable, although we can accept for it to be the most important variable. The PPP-GDP component of the GDP blend variable should be removed.

The current formula's largest deficiency—especially highlighted since the onset of the global crisis—is its underweighting of financial interlinkages and cross-border financial flows and, thus, also members' relative importance from a systemic stability perspective. The financial openness component must be enhanced to remedy this flaw.

As highlighted by the global crisis, the Fund depends on members' voluntary financial contributions in various areas to be able to fulfill its mandate and serve its membership, such contributions need to be accounted for in quotas (and, thus, the formula). If this provides members who are able and willing to contribute an incentive to do so, the Fund membership at large will benefit.

We consider that for variability, there is no better way to design a single measure that is appropriate under all circumstances. We favor keeping the variability variable and maintaining its current small weight unchanged.

We see the compression factor as an important corrective that currently provides a limited amount of de-concentration of voting power, given the importance attributed to GDP that favors large economies over smaller ones.

We offer the following additional, more detailed comments on selected points of key importance for our chair.

Financial Openness

Financial openness should receive a larger weight in the openness variable to better capture financial interlinkages. The conclusion from the analysis in paragraph 26—showing that financial openness had no significant predictive power in explaining a member’s potential need for Fund resources—should be drawn with great caution. The results mentioned in Appendix II show that, based on the available dataset, it is in fact difficult to find any significant empirical predictive power. These major limitations highlight the necessity of relying on best assessments in mirroring resource demand and systemic threats. Recent Fund program involvements are living proof that financial openness, rather than trade openness or the size of GDP, should be considered the key drivers of spillovers. Such systemic considerations have guided recent financial support packages with exceptional access. Adequately reflecting financial openness in the quota formula would ensure consistency with the overwhelming rationale—namely financial interconnections and spillover risks—that has motivated the recent reforms of surveillance, the establishment of insurance-type instruments as well as the call for revisiting the adequacy of Fund resources.

We do not consider that data limitations can be, nor should they be, a sufficient reason to avoid better reflecting financial openness in the formula. A practical way to achieve this improvement would be to assign a larger weight to the investment income (IC) component included in the openness variable. The strong correlation between IC and international investment position (IIP) data³ as well as the largely similar ranking shown in Table 4 for those countries for which both data sets are available, suggest that the measurement issues mentioned in paragraph 25 are not material enough to prevent IC from being an adequate proxy for IIP. We note the point made by the staff that a few members have large financial centers also because of their role as conduits but argue that this is neither a valid argument nor a priori a problem. First, a member can only act as a conduit for income originating from non-residents’ capital stock if the country is financially interconnected with the rest of the world. In other words, these types of cross-border financial transactions are a reflection of the financial interconnectedness that the formula should capture. Second, the alleged problem that a few countries would “benefit” excessively from the size of their financial centers can be

³ See SM/09/227, paragraph 25.

addressed by adequately calibrating the weight of the financial openness component relative to trade openness.

Voluntary Financial Contributions

Actual voluntary financial contributions should become an explicit component in the quota formula. Such bilateral contributions—in many cases substantially above a member’s quota share—allow the Fund to fulfill its core mandate and activities. Reliance on them has significantly increased in recent years. Three types of contributions are most pertinent and should be in focus: (i) bilateral loans and the participation in the expanded NAB allow the Fund to play its financing role during extraordinary and critical phases for the global economy; (ii) loan and subsidy contributions to the PRGT are indispensable to ensure that the Fund has sufficient resources to provide concessional financing for its most vulnerable members; and (iii) the external financing of technical assistance (TA) to the extent of roughly 40 percent has become part of the Fund’s TA strategy as endorsed by the Board late last year. The fact that the World Bank already takes into account members’ financial pledges in realigning its shareholdings suggests that this should also be feasible for the IMF. We thus call on the staff to develop a transparent, rules-based way to capture voluntary financial contributions in the formula. Actual voluntary contributions could complement the reserve variable, thereby helping to address the limitations of the latter.

GDP at Market Exchange Rates

We see no merit in keeping the PPP-GDP component in the GDP variable. The inclusion of PPP-GDP was already highly controversial during the 2008 reform, which is why it is subject to a sunset clause. First, PPP-GDP is not the appropriate measure of countries’ innately financial relationship with the Fund as creditors or borrowers. It is GDP at market rates that is the relevant measure of both the ability of members to contribute to the Fund and their potential need for resources—a balance of payments or financial crisis may occur precisely because foreign exchange debt has to be paid back at market exchange rates. Second, using PPP-GDP still suffers from several important and unresolved methodological and quality issues, as emphasized for example in Deaton and Heston (2010).⁴ PPP adjustments are based on arbitrary assumptions. For instance, the price of public services cannot be estimated without arbitrary assumptions with respect to the underlying

⁴ Deaton, A. and A. Heston (2010). Understanding PPP and PPP-Based National Accounts. *American Economic Journal: Macroeconomics* 2010, 2:4, 1-35.

productivities. The different methodologies used to compute PPP adjustments imply that the computation of PPP-GDP can substantially differ across countries, significantly penalizing some countries. Even if the ICP project mentioned in paragraph 16 may eventually remedy some of these shortcomings, which is unclear, its results will only be available after this review is completed.

Review Process

The quota formula review must be conducted within the decision-making structures of the IMF. We welcome the initiative of the IMFC Chairman to open a workstream that, incidentally, also includes non-IMFC G-20 members.

Mr. Sadun and Mr. Giammarioli submitted the following statement:

The Board of Governors requested the Executive Board to complete a comprehensive review of the quota formula by January 2013 and to advance the timetable for completing the 15th quota review to January 2014. It is therefore the right time to start discussing the issue, and we thank the staff for having prepared the very useful initial considerations and background material.

The current formula was established after a lengthy and contentious discussion in 2008. Despite the professed dissatisfaction of many, the formula has nevertheless provided the basis for two rounds of quota adjustments in 2008 and 2010, which are delivering major quota shifts enhancing the voice and representation of dynamic emerging and developing countries, including the poorest. These results have been possible because the formula is based on sound principles; it broadly reflects relative economic weights; and it has been applied flexibly to adjust unwarranted outcomes, inevitable with a rigid application of a single criteria for 186 members. Accordingly, while we believe that adjustments and improvements are possible, starting a debate on an entirely new formula would be excessively time consuming, would be distracting from more pressing issues, and would most likely be counterproductive.

We concur with the staff that the principles underpinning the current formula remain valid. Indeed, the formula should be simple and transparent; it should be consistent with the multiple roles of quotas, leading to calculated quota shares that are broadly acceptable to the whole membership; and it should be based on timely and high-quality data.

Against this background, we believe that the review should focus on determining the scope for the current formula to better capture a member's relative position in the world economy, their financial strengths and abilities to contribute usable resources, and, at the same time, their potential needs to borrow from the Fund. In this respect we reiterate our support for the GDP to play the most important role in the formula, with a predominant role of market-based GDP. The current blend is already giving PPP-GDP a prominent role, and we do not favor any increase of its weight going forward.

With respect to the possibility of improving the definition of the other variables of the formula, it is clear from the staff report that data limitations and technical difficulties prevent any significant changes.

With regard to the openness variable, continued data availability constraints suggest the impossibility of shifting from gross basis to value-added measures in the near future. Similar data problems also prevent the inclusion of measures of financial openness, as it would be advisable. On the inclusion of intra-currency union flows, we reiterate our position that those data are essential for the correct evaluation of individual country situations, as the current crisis clearly shows. The staff seems to have no reservation on this point and we strongly concur with this position.

On variability, we believe that any measure should relate to the size of potential need and should be consistent with the rights of all members to draw on the Fund in the case of balance of payment needs. The staff seems to provide evidence that the current measure hardly captures what is intended and, in addition, the current variable displays a high degree of volatility. This suggests that further reflections are needed and we encourage the staff to investigate the issue in depth before reaching a firm conclusion.

Finally, we see the need to understand better the potential role of including explicitly financial contributions in the formula, as finding an appropriate definition and the time span against which determine the variable might prove to be challenging.

Mr. Saho submitted the following statement:

Concern about Late Start

While we welcome the opportunity to engage in a discussion of the review of the quota formula, we are concerned about the late start of formal

Board work on this issue given the January 2013 deadline established by the Board of Governors.

We, in this regard, reiterate our September 2011 request to management and the staff, to propose a streamlined work program for this review that takes into consideration the tasks ahead and the institutional capacity to deliver. We had anticipated a work program that would schedule formal and informal Board discussions on the subject at least once every six weeks.

Objectives and Content of Quota Formula Review

In the context of the 2010 quota and governance reforms, of which the quota formula review is an integral part, the Board of Governors highlighted the need to align the quota shares of dynamic economies with their relative weight in the world economy whilst taking steps to protect the voice and representation of the poorest members.

During the 2008 quota and voice reforms, there was broad consensus that a new quota formula should be guided by a number of principles: i) it should be simple and transparent, ii) be consistent with the multiple role of quotas, iii) be feasible to implement statistically, and iv) produce results that are broadly acceptable to the membership. These principles are still valid, and should guide the review process.

However, we wish to reiterate our earlier position that protection of the quota shares of the poorest members should remain a target outcome of quota reform. The formula should take this into consideration. The quota formula should not only seek to reflect economic realities but enhance voice and representation of small and low income members and also ensure that the role and needs of all members with emphasis on the small and poor members are met. Additionally, the formula should be used as a guide and not a definitive determinant for quota distribution.

At present, the quota formula aims at fulfilling three purposes: i) determine voting weight, ii) form the basis for contribution to the Fund's resources and iii) determine access limits. A single instrument cannot effectively or efficiently meet all three of these goals, and may not even successfully allow representation given the diversity of the Fund's membership.

The Quota Formula Variables

GDP

GDP remains the most relevant variable in the quota formula that indicates economic size, is widely used and reported across the membership, and is quite relevant for the multiple roles of quotas—including members' abilities to contribute to and potential demand for Fund resources. PPP GDP is a relevant measure of members' weights in the global economy from the perspective of the Fund's non-financial activities, and thus a better reflection of the growth contribution of developing countries to the global economy.

On this basis, GDP blend was agreed upon in the 2008 reforms to constitute a variable that appropriately captures dynamism. The staff simulations also reveal that with a 50 percent PPP blend, the share of developing countries begins to approach their share in actual quotas, suggesting that this is the minimum blend needed to produce a quota formula consistent with the reform objectives. We thus see merit in retaining the GDP blend as the main variable in the quota formula.

Openness

Openness as presently defined on a gross basis remains a biased measure due to the double counting effect. We also take note of the staff's findings that the 2008 agreed path for further work to facilitate a shift of measuring openness from gross to value added basis is not feasible in the near term due to data availability constraints. In light of these conceptual and, especially, data availability constraints, the proposal to extend openness to incorporate a measure of financial openness would simply exacerbate the biases in the simulation results. In that regard and taking note of the staff illustrative simulations, we see room for more analysis with the possibility of reducing the weight of the variable in the formula.

Variability

There is some merit in the argument that at present, the variable no longer serves the intended purpose—an indicator for vulnerability to balance of payments shocks and potential need for Fund resources. The staff simulations including recent use of Fund resources do not adequately address the conceptual and measurement issues with variability. On the other hand, it remains critical to have a measure of vulnerability and potential use of fund resources in the formula that better captures the situation of Fund members

especially those that continue to use Fund resources. On this account we would welcome further work to refine the variable and to find a better proxy.

Reserves

We consider reserves as relevant for the multiple roles of quotas especially as an indicator of the capacity to provide resources to the Fund. Reserves also show the external strength of countries. Taking note of the conceptual and measurement issues raised in the staff paper, we can go along with the proposal for further work on this variable as part of the work program for the comprehensive review.

Toward a Simpler and Transparent Quota Formula

In light of the above, we request the staff make the following illustrative simulations:

- Using the current formula with GDP blend variable under a (i) 40/60 blend and (ii) 30/70 blend;
- Using the GDP-blend only quota formula. Taking note of the staff's illustrative simulations under the current (60/40) blend, we request additional illustrative simulations under (i) 40/60 blend and (ii) 30/70 blend.;
- To further disaggregate the classification to capture the dynamics in each constituency and to enhance a clear assessment of the balance in the quota formula.

We believe that these additional illustrative simulations will give the Executive Board additional tools to make progress in the comprehensive review of the quota formula in line with the stated objectives.

Mindful that the quota formula has traditionally served as a guide to quota adjustments, we urge the Executive Board to remain focused on the larger objective of the comprehensive review of the quota formula while strengthening the spirit of compromise during the review process. To that end, we propose that an appropriate increase in the proportionate share of basic votes be included as part of the comprehensive review.

Mr. Fayolle submitted the following statement:

We thank the staff for their useful set of papers. These initial considerations provide a helpful basis to work from on how to refine the

current quota formula so that it provides a better picture of relative economic weights.

Reviewing the quota formula is a first step in the quota review that is due by January 2014. We should not prejudge the outcome of the general review and keep in mind that reviewing the formula should not be guided by some kind of predetermined expected result, but rather by a fruitful discussion on how to adequately measure economic weights in a way that is pertinent for the Fund's nature, role and mandate. A good formula is one that is able to naturally allow for increases over time in the quota share of countries whose weight in the world economy will continue to grow. With this in mind, we would like to offer the following specific comments on the current variables in the formula and the issues for discussion raised by the staff.

We agree that GDP is the most important variable in the formula to capture the economic weights of member countries. Not least given the financial nature of the institution and the central role of quotas in the Fund's financial operations, we strongly believe that market GDP is the most relevant indicator to determine GDP. In this regard, it should be reiterated that including PPP GDP in a blend GDP formula, together with a compression factor, represented a difficult compromise in 2008.

In an increasingly interconnected global economy, the openness variable remains fully relevant. We are open to exploring ways of better refining this variable so that it can better reflect the stakes of member countries in the global economic and financial system. We also fully echo the staff's view that recent developments underscore that belonging to a currency union was not linked to insulation from the risk of experiencing balance of payments pressures that can lead to requests for the use of Fund's resources: we therefore see no economic ground to treat members of currency unions differently from other members.

We share the staff's view that there is a case to drop the variability from the formula. This variable is very volatile and often causes unexpected and sizable shifts in both directions in members' calculated quota shares. More importantly, we draw from the staff's analysis that it does not deliver on its main purpose of identifying potential borrowers, a drawback that is not likely to be solved by tweaking the way the variable is computed.

If maintained, the reserves variable should not see its weight increase. We continue to question the wrong incentive associated with rewarding excessively large reserves and we note from the staff that except in a handful

of cases, reserves are not correlated with contributions to the Fund's resources. We have difficulty seeing the rationale of maintaining this if it were not complemented by a new variable aimed at measuring actual financial contributions. We believe that the data computed by the staff in Table 5 provides a good basis to do so. We ask the staff to further work on how to design such a variable.

Finally, we are worried that all the work on a new formula and subsequent quota review could be undermined if the last quota reform agreed in December 2010 by the Board of Governors is not effective and implemented by the end of the year as expected by the membership. We therefore strongly urge members who have not done so yet to timely ratify the last quota reform.

Mr. Snel and Mr. Mosch submitted the following statement:

The staff's paper forms a solid base for a continuing discussion on the quota formula review (QFR). The simulations are informative. We recall that the current formula is a product of intensive deliberations and considered a difficult compromise. This being said, we consider that there is no perfect formula, but that a better formula that closely relates to the purposes of the Fund is possible.

In this respect, it is not helpful that the paper frames the discussion as an 'AEs versus EMDEs'-event. The currently used classification appears arbitrary and outdated at best. More important, the formula should strive to reflect countries' weight and integration in the world economy as best as possible, and not try to capture presumably desired political outcomes. A better formula would, by enjoying broad legitimacy by itself, minimize the need for ex-post tweaks, horse trading and reverse engineering. Moreover, shifts toward emerging economies take place automatically by using the formula as it is, as is shown by the update on the basis of the 2009 figures. In this light, we are interested in an update of calculated quota shares going forward, e.g. based on WEO projections.

As a constituency consisting of thirteen middle—and small-sized open economies from inside and outside of Europe, we see room for improvement of the formula on two important aspects.

First, we strongly support improving the current openness variable by including an appropriate measure of financial openness, for example based on gross IIP data or investment income. This would be in line with the increasing

prominence of the Fund's work in the area of financial stability and capital flows. Moreover, the current crisis has again proven that integration in global capital markets is a defining trend with clear stability implications. We consider IIP a promising candidate for measuring financial openness. The staff mentions data gaps as a challenge to use IIP. We would appreciate if the staff could explore more ambitiously how these gaps could be filled. We note that important data issues also exist for GDP PPP. When IIP data is missing for just 8 percent of quota shares, we could imagine that there are pragmatic ways to deal with this. We do not feel convinced yet that the staff does not reject the Lane and Milesi-Ferretti dataset too easily. The staff presents work on measures of interconnectedness. We find these first explorations very promising and would like to stimulate the staff to elaborate how this type of measure could be included in the formula, and how data gaps could be filled.

Second, the staff argues that the variable 'reserves' is a troublesome element of the formula. It seems to have no correlation with actual contributions to the Fund financing or to the need to access the Fund. In this respect, 'financial contributions to the fund' would be a better alternative. Especially in the light of the upcoming resource increases, it is helpful to provide the right incentives to do so. We welcome further work on this.

With reference to the questions by the staff at the end of the paper, our position can be summarized as follows:

The four principles that underpinned the 2008 reform of the quota formula remain relevant for the current review.

GDP should remain a relevant variable in the formula and should be mainly calculated on the basis of market prices.

Openness should remain an important variable in the formula and should be improved by including an appropriate measure of financial openness.

Trade flows within economic or currency unions should not be excluded from the openness variable. The recent crisis has shown quite convincingly that members of a currency union can experience BoP pressures that might lead to requests for Fund resources.

We support work on including 'financial contributions to the fund' in the formula.

We are supportive of a variability measure in the formula that reflects idiosyncratic risks of countries over the business cycle.

Finally, we welcome that the QFR is on the agenda of the upcoming IMFC (Deputy) meetings, in Singapore and during the Spring Meetings. Keeping the initiative for discussions on the QFR in the IMF Board and at IMF meetings will help ensure the legitimacy of the outcome.

Ms. Lundsager and Mr. Norton submitted the following statement:

This review provides an opportunity to make fundamental and comprehensive revisions to the quota formula, which remains opaque and complex. Unfortunately, the staff report suggests an approach that merely tweaks the current formula. We should undertake a more complete overhaul that starts from first principles. The new formula should be simple, transparent, linear, and yield calculated quota shares (CQS) that mirror members' relative weights in the global economy.

In our view, the new formula should be based solely on GDP—either fully market-based GDP or a blend with PPP measures of GDP. GDP is the most robust variable in the current formula, and we should focus on this. Such a formula would be simple, linear and transparent, and it would increase the voice of dynamic economies. This latter point is critical to the continued legitimacy of the IMF.

Aside from GDP, the other variables in the existing formula are questionable and have limited value-added.

The premise of openness is that countries with greater trade and financial flows have a greater stake in economic and financial stability. However, every Fund member has a critical stake in global economic stability, so this rationale is difficult to justify. Openness is also highly correlated with GDP, but it is a less robust measure of relative weight. It double counts cross border flows since they are measured on a gross basis. And, since it is computed at the national level, it effectively raises the CQS of currency union countries significantly above their GDP weight in the global economy. There is also no justification for counting trade among members of a monetary union. Simply put, the openness variable should be dropped entirely.

The inclusion of variability is intended to represent members' potential need for Fund financing, but the staff analysis clearly demonstrates that this has poor predictive power. Like openness, variability is also highly correlated

with GDP, and can be quite volatile, resulting in large swings in CQS over time. There have been lengthy debates on how to calculate variability, but these have failed to devise a better measure, as was shown in the last quota review. Therefore, variability should also be dropped from the formula.

We also do not believe that including reserves or financial contributions to the Fund is appropriate. The reserves variable is meant to capture financial strength, but absent a consensus on a measure of optimal reserve holdings, this variable rewards countries for excess reserve accumulation. Financial contributions are also not a proxy for financial strength, but rather reflect a policy decision by members. We therefore cannot support further the staff efforts to explore adding a measure of financial contributions to the Fund to the formula.

The compression factor introduces non-linearity and thus moves further from a formula that reflects countries' weights in the global economy. At its most basic level, it raises the quota shares of some over-represented countries, just because they are smaller. There is no justification for including it, and it too should be eliminated as part of this comprehensive review.

We continue, however, to support efforts to protect the voting shares of low-income countries. We therefore agreed during the last review to triple basic votes to boost the voting power of low-income countries, as well as to include an adjustor to maintain the share of basic votes in total voting power to protect the Fund's smallest and poorest members.

We urge the staff and Board colleagues to revisit the quota formula from a ground-up approach. By building a foundation based on clear, transparent, and readily identifiable elements—of which GDP is the clearest and strongest—the quota formula can and should serve as a means to boost the legitimacy of the Fund. Given the attention to the quota formula at this time, we must ratchet up our efforts to introduce a formula that truly reflects global economic realities.

Mr. Temmeyer and Ms. Meyer submitted the following statement:

We thank the staff for the stocktaking of the most important issues related to the quota formula review. In discussing the quota formula, we should remind ourselves that the current quota formula reflects not only difficult negotiations, but also the capacity for compromise and agreement among the IMF membership in 2008.

As a general rule, the quota formula should be based on verifiable and clear economic criteria and the variables used in the formula should have a close link to the Fund's mandate and its character as a monetary institution. Members' role in the world economy and thus their capability to provide resources to the Fund should figure with a substantial share in the quota formula. Such quota formula should continue to be simple and transparent and be the sole basis for determining out-of-lineness in future quota reviews.

Most Important Formula Variables

MER GDP and openness should remain the key variables in the quota formula.

As MER GDP is the best variable to catch members' ability to contribute to the Fund and to reflect the international market value of resources generated by an economy, it should continue to play a crucial role. By contrast, the weight of PPP GDP in the blend variable and the overall formula should be kept small due to conceptual and measurement issues that could have been better outlined by the staff. The current PPP GDP weights are already on the high side and should not be augmented.

Openness should play a stronger role in the quota formula as it reflects members' integration in the world economy and is thus central to the Fund's mandate. It gives a bearing on countries' ability to contribute to the Fund's finances and it can also serve as an indicator of potential demand of Fund resources. We agree with the staff's findings that due to present day data limitations there is no scope to move towards a value-added based measure of trade openness. We do also not see a rationale for excluding trade flows within an economic or currency union since a high degree of specialization with large shares of imports that are processed for re-exports is a phenomenon that is not confined to currency unions, but rather a phenomenon of globalization.

We are generally open towards the idea to include financial openness in the openness variable. This would account for the increased role of global financial integration and for the role of financial flows in the recent crisis. At the same time, we acknowledge the objections brought forward by the staff concerning conceptual and data availability issues. Against this backdrop, additional work is needed to improve the data base in order not to make calculations arbitrary. Further analysis of conceptual shortcomings and data availability seems warranted until a more robust measure of financial openness in the quota formula is feasible. Nevertheless, the modified formula

provided by the staff based on trade openness and investment income might merit further consideration.

Other Variables

As the openness variable, variability is closely related to the Fund's mandate and has thus always been part of the quota formula. While a critical assessment of its considerable fluctuations and the risk of possibly rewarding poor policies is warranted, we are not convinced by the staff's assessment to drop this variable altogether. There may, however, be a case for increasing the weight of openness at the expense of variability.

As the case may be, reserves should only play a very minor role in the quota formula. Reserves have become less meaningful as a proxy for capital and the capacity to provide financing, particularly for countries with access to international capital markets and floating exchange rates. Key reserve currency issuers do not hold significant reserves and therefore suffer from being somewhat underweighted by the reserve component of the formula. In some other countries, a high level of reserves can be the result of potentially distorting exchange rate interventions. Solving the problem of extremely large reserve holdings by introducing a cap on this variable does not seem to be a feasible option. The level of reserves is a decision made individually by countries' authorities based on their specific cost-benefit considerations.

The Fund is—and should remain—a quota based institution where quotas indicate, as close as possible, the role of a member country in the world economy—and accordingly a member's capacity to contribute to the Fund. Thus, members' financial contributions should be derived from their quota shares and not vice versa. Furthermore, against the backdrop of manifold possibilities for members to contribute to the Fund it seems quite challenging to us to adequately include them into the quota formula.

Further Remarks

We thank the staff for its helpful set of illustrative calculations. In this context, we are skeptical whether an even distribution of the weights of dropped variables among the remaining variables as practiced in some calculations represents a sensible option. It tends to strongly overvalue remaining variables with a smaller weight and is thus inappropriately distorting the formula. Furthermore, some options like completely dropping the openness variable seem very far reaching and could massively undermine

the formula's capacity to adequately reflect members' relative role in the world economy.

A shift to current WEO country classification in the framework of this quota formula review would undermine the basis on which the recent compromise on quota issues was built. In general, there is a case for abandoning the use of country classifications for quota purposes since quotas are set for the individual member country and the main country groups are becoming increasingly heterogeneous.

Mr. Gibbs and Mr. Perks submitted the following statement:

This quota formula review is an integral part of the historic quota and governance reform package agreed in 2010. Taking its elements together, this package represented a significant overhaul of IMF governance and a shift of quota share towards dynamic emerging market and developing countries, recognizing their growing weight in the global economy. Nevertheless, its timely implementation is not yet assured.

At the outset it is worth recalling that the current quota formula is a major improvement on the previous complex set of formulae and represents a difficult compromise agreed by the Membership as recently as 2008. The current formula is simpler and more transparent than its predecessors, calculated quota shares are now closer to actual quota shares and the formula is already facilitating the shift in quota share towards dynamic EMDCs as their role in the global economy increases. Although many argue that the formula is flawed, we suspect they see its flaws from very different perspectives. To some extent, criticism of the formula reflects the difficulty of its negotiation and the balance of the compromise that was reached.

However, we agree that further refinements can be made. A number of issues were left unresolved by the previous quota formula review. We suspect this review will have a greater prospect of success in reaching agreement among the broad Membership if it aims at refinement rather than a major overhaul.

We agree that the established principles underpinning the formula remain appropriate and should be the basis of this review. Despite the recent use of bilateral lending and the New Arrangements to Borrow, the Fund remains a quota-based institution and it follows that the quota formula should adequately reflect the multiple roles of quotas. We suggest that future staff work should focus on how well potential changes to the formula meet the

established principles. A focus on the relative position of different country groups as an implicit objective would make for a divisive debate.

GDP is the most important variable as its current weight implies, but it needs to be supplemented by openness. GDP best captures the relative size of members' economies and provides the basis for adjusting quota to reflect changes in relative size that follow from different degrees of dynamism. However, for the formula to adequately capture "weight" in the global economy, GDP needs to be supplemented with openness, to reflect a member's integration and stake in the global economic and financial system. We think that the two variables together should have the greatest weight overall.

We continue to believe that GDP should be measured at market exchange rates, but we do not think it would be productive to reopen the 2008 agreement. Nevertheless, many of our current debates around programs, their financing and the resourcing of the institution as a whole act as a continuing reminder that the IMF is a financial institution disbursing real resources and reliant on the financial support of the Membership. We agreed reluctantly in 2008 to include PPP in a GDP blend for a trial period with a ratio of 60:40 MER to PPP and see little to be gained from reopening any aspect of that agreement.

Ensuring that financial openness is adequately captured in the quota formula should be a priority for this review. The global crisis and the Fund's recent work on spillovers have demonstrated the important role of financial interlinkages in the global system. We know more about these linkages than we did in 2008 and adequately capturing financial openness is therefore a priority. At our last meeting in September, the Board asked the staff to further explore and develop options. We welcome the analysis in the latest report as a start and call for further work to develop options for the inclusion of IIP and investment income variables. We would also propose considering how the weight of the latter could be increased within the existing openness variable. While we accept that there are data limitations, these should not be overstated. We note the limitations with other indicators that are already included in the formula including GDP-PPP.

The analysis suggests that the issues with the current measure of variability require further consideration. We broadly agree with the staff that the current measure is not capturing the probability of the need to draw on Fund resources. Perhaps of more concern is that it appears to introduce significant instability into the formula. Arguably, the more important element

that the formula should capture is the scale of potential required access to Fund resources, which is already captured to an extent by the openness. If variability was to be dropped we would expect to see a corresponding increase in the weighting of the openness variable to maintain the broad balance that the current formula is meant to achieve. However, we would also be open to considering alternative, more intuitive, measures of volatility.

We consider the relatively low weighting given to reserves in the current formula appropriate. We would support further work to capture ‘actual’ financial contributions. It is not clear that a member’s level of reserves is a good indicator of its readiness to contribute to the IMF’s resources. The Membership has since 2008 had opportunities to contribute in many different ways, and a further resource raising effort is underway now. In seeking to develop the formula it seems sensible to focus on observed contributions rather than an incomplete proxy for them in the form of reserves. Although we recognize that there may be a number of issues in developing a single measure, they do not strike us as impossible to overcome. We therefore encourage the staff to press ahead with their work on this issue to refine what is so far available into options for the Board to consider at a future meeting.

Mr. Mac Laughlin, Mr. García-Silva and Mr. Lischinsky submitted the following statement:

We thank the staff for their additional work on reviewing alternatives for the quota formula. It is too early in the debate so only limited progress has been made, and we should be realistic that consensus will remain elusive on this difficult and contentious issue. In this regard, we look forward to a candid debate on the limitations of the current quota formula.

Gross Domestic Product

The paper notes that GDP is the most important and relevant variable, and the quota formula should ratify this. The staff presents an analytical case for including both GDP at market prices and Purchasing Power Parity (PPP), although how to weigh them is a matter of judgment. For that reason, we would to emphasize at the outset that the use of GDP at PPP exchange rates is justified in more dimensions than what the staff presents in this and previous work. Indeed, the significant sensitivity of market exchange rate measures of GDP to swings in nominal and real exchange rates should be considered, as it will under weigh the quota of economies undergoing external adjustment, while at the same time over weigh economies with gradually appreciating

nominal exchange rates and healthy external accounts. We elaborate on this point below.

It is a fact that economies undergoing significant rebalancing of their external accounts and macroeconomic adjustment have to implement real exchange rate depreciations. These movements in exchange rates, are not only large (sometimes leading to overshooting) but also persistent, so as to achieve the required shift of production and consumption patterns that are consistent with enhanced competitiveness. It is also reasonable that countries that engineer this macroeconomic adjustment are likely to require financing through IMF programs. However, the exchange rate shifts will tend to exacerbate the economic contraction if measured at market prices, and thus will reduce their quota shares compared to PPP measures of GDP.

The magnitudes can be large. A 20 percent to 40 percent persistent real depreciation, not unlike those seen in historical adjustment processes, could easily be accompanied by an even larger nominal exchange rate depreciation, contracting GDP at market prices compared to PPP-GDP by relevant magnitudes over several years. This will have material effects on the quota share even with the use of multi-year moving averages, as these processes of adjustment are likely to be protracted. Moreover, the opposite is also true. An economy that enjoys healthy external accounts and is experiencing a gradual nominal and real exchange appreciation, vis-à-vis the rest of the world, will have its quota share boosted over and beyond its growth in GDP-PPP by the use of GDP at market prices.

Although it can be argued that the magnitude of these shifts depends on the vulnerability of the economy to external shocks, that dimension should be captured by other variables in the quota formula and not by GDP at market prices, or else the risk of “double counting” that we highlighted in our previous gray will be present. Comments from the staff on how to discuss shifting the weights between PPP and market measures of GDP would be welcome.

Variability and Openness

Variability is intended “to capture members’ vulnerability to balance of payments shocks and potential need for Fund financing.” However, the lack of correlation between the measure of variability and likelihood to access the Fund’s resources starkly shows the weakness of the current measure in the quota formula. The lack of strong evidence linking macroeconomic variables with the likelihood of external crises also highlights the difficulty in finding

simple and transparent indicators that could be of use. As it is evident that the current measure of variability fails “to capture members’ vulnerability to balance of payments shocks and potential need for Fund financing,” we support the view that a case could be made to drop variability from the formula. However, how to distribute its weight to other variables should be discussed carefully to avoid unintended consequences, such as damaging small and vulnerable countries.

Although financial openness poses both conceptual and measurement problems, and it displays a weak correlation with the use of Fund resources, we understand the case for including it in the formula. Indeed, the Fund should not be indifferent between a world of totally autarkic economies and one of financially integrated economies, bearing in mind a proper consideration of innocent bystanders to the severe global financial turmoil. How to strike the right balance, however, between appropriate data measurement and preventing the overrepresentation of financial centers is difficult. On this variable, the staff has not presented changes so we encourage them to explore alternatives, including the important need to measure openness on a value added rather than gross basis.

On the issue of intra-currency flows, it is true that recent experience has shown that members of a currency union are not immune to balance-of-payments tensions. However, on the same token, this evidence has also shown that the bulk of the financing needs to confront those tensions originated from within the currency union. This should be taken into consideration when discussing the weight given to openness for members of currency unions.

Reserves and Financial Contributions

Regarding reserves, we concur that they are a useful indicator of the financial strength and ability to contribute to the Fund by members that are not issuers of reserve currencies. We are concerned that a discussion on using a cap on reserves is presented in paragraph 36 of the staff report. On the one hand, it is logical to expect that the ability and willingness to contribute to the Fund is increasing with the level of reserves, and thus a cap would go opposite to the stated purpose of including reserves in the formula. It would actually be more logical in this regard not to count reserves below a certain minimum. On the other hand, we do not see why if a cap is established in one variable it should not also be used in others, such as openness, reflecting the concerns about overrepresentation of international financial centers. The staff’s

comments are welcome. In general, we support maintaining reserves in the formula.

On the use of actual financial contributions to the Fund in the quota formula, we see a certain inconsistency. Indeed, if we were to determine the members' stakes in the IMF, which is then materialized by quota, by direct financial support distinct from quota contribution, we feel the principle that the Fund is a quota-based institution could be weakened.

Concentration of Voting Power

A feature which is a concern to us is the increasing concentration of the quota share in the largest members of the Fund. (See chart below) This not only presents an equity challenge, but also reflects a concrete weakness in the governance of the Fund, if the final decisions on quotas could continue to be made outside of the Executive Board. We ask the staff to assess the implication on concentration of quota shares of different compression parameter assumptions.

Mr. Pérez Verdía and Ms. Balsa submitted the following statement:

At the outset, we reaffirm our conviction that the Fund must remain a quota-based institution. The relevance of a strong capital base for the IMF is highlighted by the Board's current discussion on IMF resources. Protecting the Fund's capital base is necessarily related to the willingness of members to contribute and this, in turn, is related to their conviction that the quota formula is fair and unbiased.

Staff tackles a difficult issue on the nature of the quota formula. While it has de facto been a guide to quota adjustments, (ad hoc) exogenous factors have also frequently played a role. While this is an honest assessment of the process, the Board must nonetheless consider whether this is indeed the most favored way to proceed or whether other means to limit ad-hoc changes can be incorporated to quota formula calculations. We reaffirm our conviction that the same principles that led to the 2008 reform should continue underpinning the current review. The calls from the G20 and the IMFC for a revision of the formula to better reflect countries' economic weights should guide this process.

The staff has presented the Board with a detailed analysis of many of the flaws that have been pointed out in past discussions. As a starting point for our debate, we found of particular value the cross-correlations analyzed for

the variables that comprise the quota formula and their marginal contributions to the Calculated Quota Share (CQS). Our perception is that the current formula results in dissatisfaction when it produces “extreme” results that are counterintuitive to expectations.

We continue to believe that GDP remains the most important formula variable. Measuring GDP by PPP helps to level the playing field when measuring non-financial weights in the world economy. At the same time, we believe that changing the current blend mix would distract our focus from other, more promising, compromises. In this respect, the staff’s report rightly concentrates on analyzing the benefits and limitations to the openness, variability and reserves variables.

We would have hoped for this review to have advanced more on better openness measures. In particular, a reliable measure of trade on a value-added basis would have been most welcome. We encourage the staff to give further thought to identifying variables that can proxy for value-added trade which, at the very least, could be used to set a cap on the openness variable. Would, for example, a measure of the index of domestic industrial production relative to a country’s exports of manufactured goods give us an idea of value-added in trade? Absent such indicators and limits, we fear that the quota formula will remain perceived as biased. We do not see any merit in considering excluding intra-currency union flows.

We appreciate the staff’s analysis on financial openness variables. At this point, we believe the study underscores the difficulties of further increasing financial openness in the formula (given that it is to some extent already incorporated in the openness variable); including measures of interconnectedness would also seem, at this moment, to be complex.

The 14th general quota review highlighted the erratic shifts that the variability variable induces on the CQS. As the report finds, the variability measure is fraught with conceptual and measurement issues and, more to the point, it is not clear that it captures what it is intended to do. We take note of the staff’s inclination to dropping variability from the formula and see it as a promising improvement for this review. Having said that, the quota formula must ensure the needs of all members are recognized and the effect on the smallest and poorest countries of dropping variability must be further analyzed. We note the high significance of GDP volatility on the probability of having a Fund arrangement (Appendix II) and would encourage it as a way forward to achieve this objective.

We are more ambivalent about the role that reserves and financial contributions should play. From a theoretical and principles perspective, we believe that including reserves in some way goes against the risk-pooling nature of the Fund and the objectives of lowering the costs of self insurance. At the same time, as recent crises have shown, financial contributions play a role in satisfying short-term or temporary needs. We therefore support further exploration by the staff as part of the work program for the Quota Formula Review.

Mr. Virmani submitted the following statement:

We welcome the lucid and comprehensive review by the staff of the quota formula which is an important component of 2010 quota and governance reforms. We acknowledge that the staff has tried to broadly reflect the issues and concerns about the formula reflected at various forums. At the same time, it is useful to start the discussion by reminding ourselves that reform of the quota formula is necessary for restoring and enhancing the credibility and legitimacy of the Fund in a world that is transforming more rapidly than imagined even a decade ago, an interdependent world in which the Fund seeks to play a bigger role. It is also better to acknowledge up front that the distribution of power within the Fund, the way it is governed and the rules, regulations and policies that it follows and/or recommends and the way these are applied depends, directly or indirectly, on the distribution of quotas and the corresponding vote shares. The IEO report on the global financial crises documents this in fair detail! Unless the power structures in the Fund are re-aligned with the changing global realities, the Fund cannot have the credibility and legitimacy to play a greater role in managing the global economy.

Arguably, the other objectives of the quota formula—financial contribution and access to loan funds—have become much less relevant as separate objectives. The IMF is by design and as per its Articles of Agreement a quota-based institution and must remain so. The quota formula determines the distribution of quotas and votes (except basic votes), not the level or scale of the total quota allocation and the total quota contribution. These are entirely separable decisions, both philosophically and logically. The level of the total quotas and therefore the resources available to the fund can and should be made on the basis of global needs and the role that the membership wants the Fund to play in addressing these needs. It does not and should not determine the quota formula or be determined by it! With perhaps one or two exceptions, all members of the Fund are willing and able to subscribe to any level of quota collectively determined by the membership as long it is accompanied by the

corresponding voting rights. The resource objective is therefore much less relevant to the determination of the formula.

The ‘access’ objective was earlier defined in terms of levels of conditionality for different tranches of borrowing from the Fund, depending on the proportion of quota used and most importantly, the upper limits to this borrowing (even with the highest conditionality). Under the new access policy, these limits have routinely been ignored and are expected to continue to be loosened. They have thus borne little relation to actual practice, creating ‘cognitive dissonance’ with rules. Paradoxically, minimizing the role of this objective and the variables supposedly designed to capture it will actually help close the gap between the ‘rules’ and the reality, which is that actual borrowing has become closely linked to GDP. Thus we are left with one predominant objective of quota, to determine voting shares. The best variable to reflect this, namely GDP will, as an incidental benefit also help realign the access rules with borrowing reality.

It is also important to keep in mind that the reform of the quota formula is designed to set in place a simple, transparent and credible method for determining the distribution of votes, which will prevail in the medium-long term. It must continue to reflect the changing economic reality for decades. It should not be viewed solely in terms of short term gains and losses. In principle, there could be a transition process which eases the adjustment from the current distribution to a distribution determined solely by the new formula. During this transition a certain amount of ad hoc adjustment may still be necessary and helpful.

The Role of GDP

An essential feature of global economic governance is that it involves the partial surrender of economic sovereignty or power over economic decisions. The autonomy a country enjoys in the global economic arena directly determines the sacrifice it makes in subjecting itself to any global rule that curtails/limits its sovereign decision making power. Therefore, if countries are to surrender any part of their decision making power to collective decision making power to a global institution, they must be convinced that they have objectively fair share in the quota and governance of the institution. A country’s size is the most important natural determinant of the economic power and autonomy of economic decision making in a global context. Accordingly stake in the global economy is closely related to its share of global GDP. Thus, a global institution can only be legitimate and credible if its vote share and governance structure reflects each countries’ share in the

world economy and it applies its rules (accepted globally) evenhandedly and transparently to all countries, big and small, rich and poor. It is in this context that we strongly believe that GDP should have predominant weight in the quota formula as it is the most robust measure of relative economic weight and stake in the global economy. As the staff points out “It provides a comprehensive measure of economic size and is a widely reported and used measure that is available on a timely basis for the vast majority of the membership” (paragraph 13).

Furthermore, the most appropriate way to measure the real size of an economy is in terms of purchasing power parity. The difference between comparing different economies in terms of market prices versus comparing them in terms of PPP is equivalent to comparing a single country in different years in terms of current prices versus comparing it in terms of constant prices—violating the basic premise of macroeconomic comparisons. If a case has to be made for using GDP at market prices in GDP blend it must be done on other grounds than precedent. It also must be clearly recognized that the practical impact of a higher share of market GDP in a GDP blend is to favor the high income countries (HICs) at the cost of low income countries (LICs), lower middle income countries (LMICs) and upper middle income countries (UMICs). In our view, therefore, the share of GDP PPP should be increased from the current 40/60 ratio in the GDP variable. This will imbue it with stability—obviating the need for averaging—and impart a forward-looking character to the quota formula that takes into account the dynamic nature of the changing global economy. While we find the staff’s calculations with a 50/50 blend encouraging and a step in the right direction in correcting the imbalances in the Fund’s governance, we look forward to scenarios that comprise a 70 (GDP PPP)/30 (GDP MER) blend.

We would also urge a change in the past practice of (1) using the data available at the time of the Board paper to one of using the latest available data at the time of implementation; and (2) from three-year averaging of GDP to one of using the higher of (a) GDP for the latest year, or (b) GDP of previous two years.

Variability and Openness

Technical work done by the G24 Secretariat (2008, 2010) has shown that the existing index of variability is a highly flawed measure of the demand or borrower side of the IMF member ship, as it does not capture the potential demand for BOP financing by developing countries. Moreover, variability shares, as currently expressed, do not seem to be amenable to aggregation to

obtain a measure of total global variability, and therefore it is unclear what meaning is conveyed by country shares in this global total (given that the quota formula and its components are expressed as shares in global totals). Scaling by mean of the series can be an improvement on the existing variable, because it makes it more amenable for cross-country comparison. Overall, we are inclined to agree with the staff that there is a case for dropping variability from the formula. As indicated by the staff, “There is little evidence that the current measure is capturing what is intended, and it also appears to add significant instability to the formula results. Given the changing nature of balance of payments crises, it is difficult to design a single measure of variability that would be appropriate under all circumstances, and previous efforts to identify a superior measure have not been successful. Also, as noted, the Fund has recently demonstrated considerable flexibility in access levels relative to quotas when lending to members, such that the case for including a separate measure in the quota formula may have further diminished” (paragraph 33).

The openness variable, which plays an important role in the quota formula, may have been relevant in the post-war world of trade barriers and trade disruptions, but has little or no traction in a globalised world economy in which 80 percent of countries are members of the WTO and most of the important remaining countries are interested in or trying to join. Such a globalised world, assuming a neutral tax-subsidy policy regime with respect to trade, would be characterized by varying ratios of trade to GDP, depending on resource endowment, geographical location and natural comparative advantage. For instance, large economies would have smaller ratio of trade to GDP than smaller ones. There is no logical reason to give a higher quota to countries with higher trade ratios and vice versa. Doing so would reward countries for distorting trade by giving export subsidies and/or taxing imports or keeping their currency undervalued. It also produces anomalies in the context of a country (e.g. Yugoslavia) that breaks up into two or more independent countries—part of what was earlier internal trade would now be classified as external trade, resulting in an increase in quota share! If the opposite happens and two or more independent countries combined to form a single country their aggregate quota share would decline! Furthermore, besides the problems of double counting of cross border trade flows when measured on a gross basis, isolating value added flows and the appropriate treatment of intra—currency union flows, the openness variable as it stands, can be conceptually argued against for the deleterious effects that some of the components of cross—border flows have had on the world economy. Therefore, we strongly believe that the openness variable should be dropped from the formula.

The arguments against inclusion of trade or current account openness in the quota formula also apply to openness with respect to capital or financial flows and stocks. Deviations from a neutral benchmark can be a positive or negative factor for stability depending on source and host country conditions (global monetary conditions; exchange regulations; fiscal situation; external and domestic shocks). As the recent global crisis has clearly demonstrated, unregulated or laxly regulated financial flows can result in financial bubbles and busts, cross-border surges and sudden stops and can have devastating consequences on financial stability and the real economy. The externalities that they produce must be addressed through (Pigouvian) taxes and related counter-measures so as to internalize these externalities. It would be a complete contradiction of these lessons to reward countries for these negative spill-over effects through a quota formula that entitles them to a higher quota. As mentioned by the staff, the rates of return on similar investments vary substantially across countries arising from a lack of congruence between stocks and flows because of exchange controls, domestic legislation making it an imperfect substitute for the underlying stock measure. There is an under recording of investment income receipts as well as recording of credit and debit components on a net rather than on a stock basis. Also these variables are heavily biased towards international financial centers. Besides these methodological and availability gaps in variables representing financial openness, the staff also correctly finds very little predictive power for financial openness (or the current openness variable) in terms of members' need to use Fund resources (paragraph 26).

The Role of Reserves

Conceptually there are alternate ways of looking at reserves as a variable in the formula. For one, it appears to have the least amount of correlation with Market or PPP GDP for all countries, as shown in Table 1. Furthermore, the recent crisis, and the ongoing discussions on the global financial safety net have underscored the role of reserves not only in dealing with unforeseen shocks but also in bolstering the financial firepower of the Fund when needed the most. This makes a case for retaining it in the formula with its small weight. Reserves can be looked upon as a measure of potential contribution to the Fund. Replacing it with non-quota financial contributions, as a variable, brings forth a host of issues, including ethical ones.

Financial Contributions

As regards the issue of whether financial contribution made by members should be reflected in their quota and vote, it is important to

recognize that the Fund is neither a limited liability company nor a development organization like the World Bank/IDA. It is a quota based institution in which the equity resources are supposed to be contributed by members. The level of aggregate quota contribution can be adjusted to the resource needs of the Fund, but should not affect quota shares or the formula for determining them. If some countries do not have the resources to subscribe up to their eligible contribution, they can choose not to do so, thus reducing their vote share relative to all those who contribute up to the extent of their eligible share allocation. Besides the fact that financial contributions come in a wide variety of forms, how far back is one prepared to go while calculating contributions? Will the entire period from the first Bretton Woods Conference be taken into account? What about contributions in kind including for example the storing of the Fund's gold assets? Why are Note Purchase Arrangements not indicated in Table 5? Does not an inclusion of bilateral contribution in the formula give them more importance than General Quota Contribution? There is no case for inclusion of past financial contributions to the IMF in the quota formula.

Conclusion

We reiterate our position in the September 2011 discussions that the best way to secure the role and needs of all members, especially the small, the poor and the vulnerable is by a variable that directly reflects their underlying economic conditions and core interests. This suggests consideration for variables such as population, number of poor, poverty ratio, and even a compression factor that flattens out the distribution of quota shares that would accrue through the formula.

To sum up, the quota formula should be streamlined to a blended-GDP variable, while increasing the share of GDP-PPP. It should also have a component that captures the voice of the poor, the small and the vulnerable in a simple but robust way.

Finally, we continue to favor the highest standards of transparency and public disclosure of all Executive Board discussions related to the Quota issue. We hope that papers, including the corresponding database, are made available to the public as soon as each paper has been discussed in the Board. This would favor an informed public discussion and allow experts across the world to contribute to the analysis and debate of the IMF quota and governance reforms.

Mr. Hockin and Mr. Sajkunovic submitted the following statement:

We thank the staff for their report and welcome the opportunity to continue our work towards completing the review of the quota formula. At the outset, we recognize that while the current quota formula has many problems it does reflect a delicate compromise among widely divergent views. Therefore, we start from the position that there must be willingness at this initial stage to explore various ideas, but eventually, compromise on all sides will be needed. With this said, we will turn to the questions posed by the staff and highlight our preliminary views on these issues.

Principles

We agree that the principles that underpinned the 2008 reform remain appropriate for the current quota review exercise. As we noted during the last discussion, we continue to favor an outcome that will result with a simple and easy to understand formula that could allow for some automaticity in the quota review process. We should strive to avoid an outcome that will require significant ad hoc fixes during general quota reviews, which can undermine the transparency of the process.

Formula Variables

GDP

We believe that GDP should continue to play the predominant role in the quota formula. We also continue to feel that market GDP remains the most appropriate measure. Market GDP is most closely tied to the Fund's core mandate of promoting global economic and financial stability and represents a reasonable measure of both potential financing needs as well as a country's capacity to contribute to the Fund. With respect to the GDP blend, we found the simulations of various compositions informative. We do not see a strong case to increase the relative weight of PPP GDP beyond the current 40 percent now set out in the measure. Rather, if there is indeed a desire to change the composition of the GDP blend variable, we could see a case for a gradual phasing out of PPP GDP over time.

Openness

After GDP, we feel that openness remains the second most important variable in the quota formula. We recognize that it is not a universally held view. However, we see openness to trade and financial flows as an important

indicator of members' stake in promoting economic and financial stability and vulnerability to exogenous shocks. We would also note that a focus on openness is consistent with the Fund's purposes as set out in the Articles of Agreement, which includes an emphasis on facilitating the expansion and balanced growth of international trade.

In terms of the make-up of the variable itself, we agree with the staff's assessment that data challenges make measurement of cross-border flows on a value-added basis difficult, with spillover effects as it relates to measuring intra-currency union flows. Obviously, measuring openness and intra-currency union flows on a value-added basis would be preferable. As such, we would welcome the staff's comments on whether we can be more proactive and develop a clear work plan that would lay out a process and timeline for closing data gaps in the coming years as it relates to openness and other quota variables.

We also appreciate the efforts to explore whether financial openness could be better captured in the formula, especially as the Fund's work in the area of financial stability and capital flows is increasing. Conceptually, we see the case for a stronger role, but acknowledge that important data and methodological issues remain unresolved. However, at this early stage, it would seem premature to close the door completely so work should continue. As a minimum complement, a clear plan should be formulated to guide work on closing the data and methodological gaps in the coming years.

Variability

We agree that there are important questions around the stability of the measure and whether it is indeed effectively capturing vulnerability to balance of payment shocks and potential Fund financing needs adequately across the membership. At the end of the day, the most important thing is that members' vulnerabilities and potential financing needs are well captured. Guiding any changes to this variable should be an understanding that the formula and lending structure need to ensure that members have adequate access to Fund financial support at appropriate pricing. Should there be a reduction in the share of this measure in the formula the corresponding weight would be best allocated to openness.

Reserves and Financial Contributions

We continue to be skeptical about the relevance of reserves in the quota formula. We worry about the incentives and signaling effect as it relates

to excessive reserve accumulation and policy misalignment. In addition, the assessment of actual contributions to the Fund outlined in the staff report and the weak predictive power of the measure raise serious questions. As such, we see a case for removing reserves from the formula or reducing its weight.

We agree that further work on actual financial contributions should go forward. However, we would note that there is a difficult set of considerations and judgments that would go along with the design of such a measure. It is also important to be mindful of the incentives or disincentives that could be created along with the optics attached to the inclusion of such a measure. More broadly, rather than contributions driving quota shares, we see financial contributions to support the Fund's key activities (GRA, PRGT, technical assistance) as the responsibility of major shareholders, both AEs and major EMEs.

Protecting the Voice of Small Members

Finally, we would reiterate the need to be cognizant of the impact of formula adjustments on the Fund's smallest members. There is a need to safeguard a minimum level of voice and financing access for small vulnerable members. Obviously, compression is important in this regard and should be maintained. However, we would also encourage the staff to think about other avenues both as it relates to the quota formula and the lending framework.

Mr. Mozhin and Mr. Lushin submitted the following statement:

We thank the staff for an informative report that has a few interesting proposals. The "compromise" reached on the quota formula back in 2008 (which this Chair did not support) fell considerably short of producing a formula that would adequately reflect members' relative positions in the world economy. As we observed in our statement of March 11, 2008, the adopted formula "contains the variables that in their current form are either senseless (variability) or explicitly distortional (openness)." We are satisfied that in their most recent analysis the staff has confirmed our position on variability, and has gone some way towards sharing our position on openness.

On the substance of the staff paper we have the following comments.

We believe that time has come to revisit the so called "multiple roles of quotas" whereby they should reflect both contributions to the Fund's financial resources as well as members' access to the Fund's financing. The latter role has been growing increasingly problematic over the past years when

the sizes of the latest bailout packages made joke of the established “access norms.” “Exceptional access” has recently become not an exception but a rule, with access of 2000 plus percent of quota being routinely approved with little if any regard to the so called “exceptional access criteria.” This suggests that access would be better calibrated in terms of a GDP share, and not as a multiple of quotas.

From this it follows that we should also abandon attempts to make the quota formula reflective of members’ potential need for the Fund’s financing⁵. After all, the staff report before us today has proved empirically that none of the variables destined to reflect the need for the Fund’s resources (variability, openness) has shown any correlation with actual use of these resources for the period of 1990-2009 (see paragraph 26 and 30) on top of the impact exerted by GDP. In other words, economic size (measured by GDP) largely determines the size of access, while openness and variability add nothing on top of GDP in explaining members’ actual use of IMF financing during the above mentioned period. This very important conclusion made by the staff should be fully taken into consideration in the current round of the quota formula reform.

It is abundantly clear that GDP “is the most important quota variable,” as stated by the staff in paragraph 13. GDP measures economic size and in this capacity reflects both the potential to contribute to and the possible need for the Fund’s finances. There is a big ongoing debate as to what measure of GDP should be used in the formula, the one based on market exchange rates or PPPs. We favor the PPP GDP indicator as more reflective of economic size. This said, we are aware of a strong view that only market GDP is the most relevant indicator of the Fund’s financial operations. We see it as a deeply entrenched dogma, which is repeated time and again, but lacks conceptual and empirical evidence. In any case, the current GDP blend variable is an indicator that we all will have to live with, the weights for market and PPP-based components being a matter of discussion and compromise.

We fully support the staff that variability should be dropped from the formula. This is the third indicator of economic size in the current formula (after GDP and openness, with which it is strongly correlated) and it reflects very many things except for the potential need in the Fund’s resources. It is highly volatile and may change for the reasons that have nothing to do with

⁵ The principles that underpinned the 2008 reform could be adjusted correspondingly.

the IMF financing. We may only wonder why it took so long for the staff to reach such an obvious conclusion.

Openness is another tricky indicator that, in our view, should also be dropped from the formula. Openness is currently included because “countries that are relatively more open to trade and financial flows may have a greater stake in promoting global economic and financial stability” (paragraph 17). This assertion is meaningless at best and wrong at worst. If anything, the latest developments have demonstrated that countries “more open to financial flows” have more capacity to trigger a financial and/or debt crisis than to “promote financial stability.” As far as trade is concerned, one may wonder why this particular indicator is being used in the formula to reward countries with relatively larger trade shares. Why, for example, not to use population, territory or endowment with natural resources as criteria to single out certain members and award them with larger quota shares? The answer to this question is simple: openness has been introduced long ago as a way to achieve a pre-determined outcome of larger quotas for some members that were deemed important at that time. Since then many things have changed, but privileges once rewarded are very difficult to take back.

We see no scope for giving any weight to financial openness in the quota formula. As we noticed above, large financial centers are more likely to create problems for the global economy than to promote stability and it is not clear why they should be rewarded for that. Moreover, data for the IIP, suggested as the best indicator of financial openness, do not exist for all Fund members and will not exist in the foreseeable future. But even if such data existed, it is incomprehensible that an indicator where advanced economies have an overwhelming stake (about 85 percent of the global total) could be introduced into the quota formula given the political impetus behind the ongoing quota and voice reform. Financial openness will only exacerbate further the distortions already created by the “regular” openness. For this reason, we suggest that work on financial openness be discontinued and the freed the staff resources be put to better use.

The reserves indicator has often been criticized as largely irrelevant in the times of financial globalization. This may have changed as a result of the crisis, which demonstrated that only countries issuing reserve currencies or possessing reserves have a better chance to withstand a financial turmoil and to contribute to the Fund in the times of need. The list of potential contributors to the GRA in the context of the ongoing fund-raising campaign includes countries with relatively large reserves. Therefore, reserves are still relevant as an indicator to contribute to the Fund’s finances, and as such should be kept in

the formula. This would also help some systemically important countries (like large oil exporters with small economies) that justifiably want to sustain their quota shares above their shares in global GDP.

Mr. Kiekens submitted the following statement:

Below are our preliminary replies to the issues raised in paragraph 48 of the staff report.

Quotas should be calculated according to the economic parameters that are relevant for the mandate of the IMF. The Fund's mandate concerns the international monetary and financial relations among its members, which are also relevant for their international trade relations.

In calculating quotas, priority should be given to a fair and balanced solution over one that would be simplistic. A formula which captures in a comprehensive manner all relevant parameters must not necessarily be seen as lacking transparency.

The most important role of the quotas is determining countries' financial support to the Fund and their voting power. Quotas as a measure for access to Fund resources is only a secondary objective. If the latter conflicts with the primary objectives, the quota formula should avoid compromises. Access policy is already largely independent from quotas. This policy can be further expanded if needed.

The availability of data needed for calculating quotas should not, in principle, be a hindrance for adopting a more adequate quota formula. Countries should put reasonable efforts to collect in a timely manner high quality data that are considered relevant.

GDP is an economic parameter less relevant for the Fund. A completely autarchic economy would be irrelevant for the Fund, irrespective of its annual income. We believe that GDP could be eliminated from the quota formula. However, if this parameter remains, it should be based on market exchange rates which better reflect the international relations among economies than a PPP-based GDP.

Of course, the size of an economy is not irrelevant for the mandate of the Fund, provided the economy is integrated with other economies. The stronger this integration the more relevant is the Fund for this economy.

Parameters that capture international trade, flows of workers' remittances and international financial flows and stocks, are by far more relevant than GDP.

While international capital flows were largely absent when the Fund was established, today, the size of international capital flows and of stocks of trans-border financial assets and liabilities are probably the most important factors which capture the mandate of the Fund to help preserve international financial stability. Any new attempt to adjust the quota formula in light of the changing structure of the world economy should give priority to capturing the relevance of international financial relations among the IMF members.

International (public) reserves are part of a country's international investment position. Rather than limiting the formula to only one, often marginal, component of a country's IIP, an updated quota formula should include all relevant components of countries' IIP.

Variability should capture countries' vulnerabilities that accompany its integration in international economic and financial relations. The more vulnerable an economy is to shocks elsewhere in the system, the more relevant is the functioning of the Fund for such an economy. We could adapt the variability parameter to better capture the objective described above.

As the crisis in the euro-area shows, members of a monetary union are more exposed to shocks elsewhere in the union than countries outside the union. Thus, the quota formula should not reduce the relevance of the interrelations of IMF members that are also members of a monetary union.

Countries' participation in the decision making of the Fund could also depend on the relative size of their financial contribution to the functioning of the Fund. We agree with further work on this topic.

Discussions and decisions on a new quota formula should take place in the decision making bodies of the IMF.

Mr. Zhang and Mr. Xia submitted the following statement:

We thank the staff for their report. It is a crucial step forward to implement the decision made by G20 leaders and IMFC meeting, which aims to enhance the voice and representation of emerging market and developing countries, including the poorest, through a comprehensive review of the quota formula by January 2013 to better reflect the economic weights; and through completion of the next general review of quota by January 2014.

We took note of the impacts on calculated quota shares (CQS) brought by different simulations illustrated in the report. We are convinced that there is room for improvement though we admit the current formula is the result of a difficult compromise. The adjustment of quota formula per se is to reflect the changing realities of the world economic landscape, which should underlie and guide further discussions.

While we stick to the above-mentioned principles, we adopt an overall open stance to discuss the quota formula, and would like to raise the following for emphasis.

We find the principles underpinned the 2008 reforms will continue to be relevant to the current review. The quota formula should capture members' relative economic weights in the global setting, on which the efforts to streamline the calculation in a simple, transparent and fair manner are based. Against this background, the overall shares of emerging markets and developing countries (EMDCs) should follow an upward track. In our view it is not visualized, however, in most of the scenarios in the report. Besides, interests of low income countries should be respected to ensure their proper representation at this stage.

GDP is the most important quota variable, comprehensively revealing members' economic positions. We support raising the weights of GDP Blend in the formula as it also remains highly correlated to potential contributions to the Fund resources and other variables. We also support an upward calibration of PPP GDP weights in the formula accordingly.

Since the alternative approach is intended to assign Investment Income a 50 percent weight in the Openness, we hold a view of caution that it could distort the outcomes by overstating the financial influences, as double counted in the Trade Openness. In addition, we tend to agree with the staff that necessary revision is needed given the conceptual and practical data difficulties in terms of the intra-currency union flows.

We perceive the Variability is no longer to serve its original mandate to mirror members' BOP vulnerabilities and potentialities for Fund programs. We advocate dropping this variable if there is no better replacement.

Reserves, to a large scale point to members' economic strength, should have played a greater role. As reflected in the context of the current financial crisis, it is obvious that those countries with large reserves are considered important potential partners in the efforts to contribute to the Fund resources.

As a quota-based institution, we believe members' contributions to the Fund should be properly respected and reflected.

For further remarks, we would like to invite the staff for more future actions to access timely, complete and high quality data to ensure a most updated outcome of the CQS. The current use of 2009 dataset is inappropriate to this end.

Last but not least, before our further deliberations over the quota formula, we would like to accentuate that it serves as a must to conclude the 14th General Review in line with the agenda as agreed. In this regard, we also thank MD and the management for their proactive involvement to press ahead the procedures.

Mr. Daïri and Mr. Maherzi submitted the following statement:

We thank the staff for a concise and candid paper and welcome this initial discussion in the way toward a comprehensive review of the quota formula and an outcome, it is hoped, which will meaningfully address the democratic and the resulting legitimacy gaps and strengthen the effectiveness of the Fund. While we agree with the staff that there is no perfect formula and that it may not be possible to capture all relevant considerations, it remains crucial for the achievement of these objectives that the dissatisfaction with the current formula be significantly addressed, including through a strong political will on the part of the advanced countries.

The staff makes a case for dropping variability from the formula, arguing that it does not appear to deliver on what it was intended to do, namely capturing members' vulnerability to balance of payments shocks and potential need for Fund financing, in addition to conceptual and measurement issues. Although we would welcome further work to address these shortcomings, we could go along with the staff's suggestion, provided the same applies to openness, including financial openness, for much similar reasons. In particular, further work is needed on the still-standing, heavily distorting issue of double counting cross-border flows. Moreover, through its world-wide impact, the global crisis has demonstrated that increasingly high interconnectedness of the world economy leaves little space to the relevance of openness in reflecting the integration of individual economies in the world economy. The relevance of the variable as it stands is further questioned by the staff's findings that "it does not appear that financial openness (or the current openness variable) has significant predictive power in terms of members' potential need to use Fund resources."

This being said, we have already spent a huge amount of time trying to improve the formula and have relied on a number of gimmicks to achieve a negotiated outcome, which unfortunately have led to a complex and nontransparent process even if, in the surface, the new most recent formula seems simpler than the previous combination of 5 formulas. We may spend a lot more time discussing how the various variables can be combined, with the appropriate definitions and weights, notwithstanding severe data shortcomings. What is needed most at this stage is a real and clear commitment to the ultimate purpose of the exercise, which is to increase the legitimacy of the institution by giving all members a fair share in the voting power to allow for genuinely shared ownership of the institution and commitment to furthering its purposes. We are skeptical of the possibility of reaching this balanced formula by using several variables, which are closely correlated, creating a size bias and further marginalizing the smallest and poorest countries. Under these conditions, we propose the following:

Members size is better measured by GDP, provided an adequate compression factor of much less than the 95 percent used in the latest round is applied to reduce the gap between small and large quotas. This would protect the principle that quotas should reflect the relative size of members, except that differences in GDP do not need to result in 100 percent proportional differences in quotas. In this scenario, there is no need for any other variable, and GDP alone can represent the various functions of quotas. There is enough evidence that other variables, in particular, openness and variability, are fraught with severe shortcomings and do not meet the objectives for which they have been included in the formula.

Dynamism can be reflected by using PPP GDP exclusively or in much higher proportion than the current 40 percent, and by using the most recent GDP data.

Strengthening the voice and participation of LICs would be better served by further increasing basic votes to bring them closer to where they were at the inception of the Fund.

One remaining issue in our view would be how to recognize the role of financial contributions outside those imposed on membership. We have in mind here the contributions in terms of concessional financing whether for LIC lending or for technical assistance. But this is not an issue that should affect the quotas of all members but only those that have the capacity to contribute. In this connection, we support Mr. Furusawa and Mr. Nomura's suggestion of "adopting a framework that would shift quota shares of

advanced economies, with a track record of relatively small financial contributions, to EMDCs, with a track record of financial contributions regardless of size, and to advanced economies with a track record of relatively large financial contributions.” We also agree with them that “in the current quota formula, an extremely small weight is assigned to the variable that measures member countries’ capacity to make financial contributions to the Fund,” and would therefore suggest retaining the reserves variable in the formula, with a higher weight than the current 5 percent, to reflect members’ capacity to make financial contributions to the Fund.

Mr. Chia, Ms. Yeo and Ms. Hafid submitted the following statement:

We agree that GDP is the most important variable in the formula as it provides a comprehensive measure of economic size. Indeed, this is reflected in it being the anchor variable with the largest weight in the formula. Within the GDP blend, we support a higher weight for GDP PPP as we believe it better captures the real size of an economy and better reflects the growing economic importance of EMDCs.

However, GDP alone would not be able to fulfill the multiple roles of quotas discussed in paragraph 5 of the staff paper. An all-GDP formula also goes against the grain of recent governance and quota reforms. By our estimates, EMDCs would suffer a net loss of 0.8 percent-pts in their aggregate calculated quota shares, with about three times as many EMDCs losing calculated quota shares as those which gain from such a move. Indeed, we find that there are significantly more EMDCs that lose shares compared to those that gain in the scenarios where non-GDP variables are incrementally dropped, except for reserves where the effects of dropping are more evenly divided. The proposals for the quota formula review need to be assessed against the effects it has on the entire membership. Therefore, it is important to maintain a balanced formula that preserves an adequate and meaningful role for non-GDP variables.

Openness remains an important indicator of a member’s integration into and stake within the global economy. It has bearing on both the ability to make financial contributions to the Fund as well as potential borrowing needs. Further, it bears recalling that the IMF was founded to facilitate the growth of international trade and current account liberalization. Indeed, Article I of the Articles of Agreement states that the IMF’s purposes are to, amongst others, “facilitate the expansion and balanced growth of international trade, and to contribute to... employment and real income and to the development of the productive resources of all countries...” Trade-based indicators have always

been part of the quota formulas used since the original Bretton Woods Conference, notwithstanding methodological issues, and we consider that the Openness variable remains relevant and central to the IMF's purpose and mandate, and should receive a significant and meaningful weight. We see no scope for any erosion of the weightage assigned to Openness. We would point out that the staff had in its paper of January 5 2012 on "Adequacy of Fund Resource" commented that "...the potential needs of the membership for Fund financing depend on many factors, including the overall size of the global economy as well as international trade and capital flows...the doubling of quotas agreed in the 14th General Review would, once it becomes effective, broadly restore the relative size of the Fund in relation to global GDP, but quotas would remain well below earlier levels in relation to trade and capital flows." Clearly, if international trade and openness are important to Fund resources, they must similarly be important to quotas. Having said that, we note that the staff intends to continue to work on improving the data and methodology. In this respect, recent staff work on Interconnectedness seems a potential avenue for taking this work further.

We would not support dropping Variability from the formula. It bears noting that it is a country's susceptibility to the vagaries of trade and financial flows which gives rise to potential demands for IMF financing. Dropping Variability also seems to primarily benefit large economies as could be seen in Table 2, and could unduly magnify the role of economic size which, to a large extent, is already captured in the GDP variable. Given the continued relevance of this indicator, we call on the staff to continue to explore ways to improve the measurement of Variability. The staff, for example, could consider expanding its empirical analysis to go beyond the use of a binary variable of actual "approval of fund arrangement" and explore the effects of explanatory variables on balance sheet pressures, that if prolonged could have led to the "approval of fund arrangement."

We consider Reserves a useful indicator of a member's ability to contribute to the Fund's resources. Its weight is already small and should not be further reduced. We have a more optimistic reading of the staff's findings in Figure 8. We note the broad participation of a growing number of countries, including smaller economies, in the NAB, borrowing agreements, and PRGT contributions. That these countries are contributing is an encouraging development, and that they are contributing in proportion to their quota share is unsurprising as the Fund should remain a quota-based institution. As to Financial Contributions, while noting staff's caution on the measurement issues relating to this variable, we are open to staff doing further work in this area to explore possible incentives and recognition to members that make

significant contributions, including through embedding a variable in the formula.

In addition, we support retaining the Compression Factor and would favor a greater use of compression for example through a factor of 0.90 in the formula. Its role should be safeguarded and augmented to address the concentration of voting power and accord protection to small members and LICs, consistent with the inclusive character of this institution.

In relation to country classification, we support a continuation in the classification used in the 14th Review as we consider the quota formula review and the 15th Review to be part of the 2010 agreement on governance and quota reform as well as part of the broader process of governance reform since the Annual Meetings in Singapore.

As a general point, we consider the various technical and methodological difficulties raised in the staff paper clearly as an argument for improvement over time and not a relevant basis on which to exclude any variable in the formula, nor should it preclude further staff work to advance promising new ideas.

In closing, we agree that the four principles which underpinned the 2008 reform remain relevant for the current review. To be clear, our understanding of principle (ii) is that while it is appropriate to have multiple roles, we note that economic weight has been given greater importance through the higher weight assigned in the formula. We consider this appropriate, but would recall the multiple roles of the quotas and therefore highlight the need for a quota formula that while anchored by GDP should have multiple variables that balances the broad and diverse needs of the Fund membership.

Mr. Nogueira Batista, Mr. Fachada and Mr. Mansur submitted the following statement:

We thank the staff for the paper, undoubtedly a very useful contribution to the review of the quota formula. As we all know, the comprehensive review of the formula by January 2013 is an important element of the 2010 quota and governance agreement.

The staff reminds us in the first paragraph of the paper that this agreement includes as one of its key elements: “Continuing the dynamic process aimed at enhancing the voice and representation of emerging market

and developing countries, including the poorest, through a comprehensive review of the quota formula by January 2013 to better reflect the economic weights; and through completion of the next general review of quotas by January 2014,” as stated by the G20 Leaders in their Seoul communiqué. Some Executive Directors seem anxious to stress that we should not prejudge the outcome of these reviews. It is undeniable, however, that the Board is not starting from a clean slate. We are obliged to abide by the commitments our authorities have signed up to.

The G20 and the IMFC have also agreed, and reiterated this guidance more than once, that the distribution of quota shares should reflect relative weights of Fund members in the world economy. Lest this be misinterpreted, we draw attention to the fact that the link between quota shares and relative weights is invariably accompanied by the observation that these relative weights “have changed substantially in view of strong growth in dynamic emerging market and developing countries.” Thus, there is only one way to understand the commitments made by Leaders, Ministers and Governors: quota shares should be derived from relative economic weights with the latter corresponding to shares in world GDP. We attach to this statement the language on quotas and quota formula agreed to by the G20, the IMFC and the Board of Governors since the last review of the quota formula in 2008.

Based on these commitments, GDP should be at the center of the review of the quota formula. In our view, which is close to the one expressed by the Russian and U.S. chairs in their statements, the quota formula should be streamlined so as to basically retain a compressed blend GDP variable. This would align the ranking of calculated quota shares with the ranking of economies by size, i.e., by their relative weights in the world economy, while providing at the same time some protection to the small countries. We could also consider raising the share of GDP-PPP in the blend from the current 40 percent. The compression factor should be maintained in the formula, and possibly increased, to reduce the dispersion of quota shares and especially to favor the smaller members.

At this stage, the Fund should discontinue work on variability and openness. These are fundamentally flawed variables and their weaknesses have been widely recognized inside and outside the IMF. We favor dropping both from the quota formula and increasing pro tanto the share of GDP.

Variability is supposed to be a measure of the potential need for Fund resources. In the current report, the staff recognizes the many conceptual and measurement flaws of the variable. In recent years, several attempts to

redefine variability have led us nowhere. Moreover, the relation between quotas and access to Fund resources became tenuous. Last year's paper on the Quota Formula Review—Data Update and Issues (SM/11/226) showed that GDP, rather than quota, has been a better gauge of potential access to Fund financing in exceptional access cases since the Mexican crisis in 1995. More recently, evaluations by the staff on the alternative levels of access for Greece's proposed new extended arrangement with the IMF have been based essentially on credit exposure relative to GDP. For these and other reasons, we welcome the staff's appraisal that there is a case for dropping variability from the quota formula.

Unfortunately, the staff falls short of making the same appraisal regarding openness, despite similar or even worse problems. As currently measured, openness results in double or multiple counting because of the use of a gross measure. This problem is increasing over time reflecting greater vertical integration and trade in intermediate goods. Measuring openness on a value-added rather than gross basis could, in theory, mitigate double counting. However, the staff indicates, once again, that this is not feasible due to data availability constraints.

The traditional rationale for including openness in the formula is flimsy. Presumably, countries that are more open to trade and financial flows have a greater stake in promoting global economic and financial stability and should, therefore, be rewarded with higher quotas. As the staff notes, however, some have argued that larger economies tend to be more closed but still have a major stake in international stability. The whole reasoning is essentially arbitrary. It could also be said, for instance, that open economies more easily "export" their domestic imbalances and shocks, especially through financial channels, and should thus be punished with lower quotas. If we continue down that route, we will find all kinds of sophistic propositions to justify our preferred quota variables.

We see little value in further discussing alternatives ways of measuring financial openness and including it directly in the formula. The staff paper shows abundantly that there are several obstacles to moving in this direction. Including financial openness as a separate variable or increasing its weight inside the openness variable would distort the distribution of quota shares, favoring a few international financial centers, tax havens and jurisdictions with lax regulatory frameworks. Severe data availability constraints stand in the way of using the International Investment Position (IIP) as a way of measuring financial openness. The existence of large data gaps and significant measurement challenges, partly due to the complexity of international

financial transactions, lead the staff to conclude that on balance IIP is not suitable for inclusion in the quota formula.

As a proxy for financial openness, investment income also presents significant measurement issues, as explained by the staff, and is already included in the openness variable as currently defined. The use of investment income flows would leave unaddressed the issue of how to treat international financial centers. Indeed, the presence of financial openness in the quota formula tends to reward countries that have large international financial centers relative to their size, including those that attract financial institutions by adopting low taxes or soft regulation and supervision.

Similarly, the discussion on ways to capture financial contribution in the quota formula can be seen, at best, as a mere distraction. Staff highlights one key difficulty: financial contributions to the Fund come in many different forms (bilateral lending, participation in the FTP and NAB, funding of the PRGT, funding of technical assistance, and charges and fees associated with borrowing from the Fund, among others). Any attempt to aggregate these different types of contribution would be arbitrary.

There is, however, a more fundamental issue. Including financial contributions in the quota formula would amount to putting up quotas for sale. We might as well auction off quotas going forward. Is it not obvious that this approach would tend to crystallize the institution as a “rich man’s club?” High-income members would gain automatic advantage vis-à-vis the rest of the membership, especially the poorer countries. Therefore, and given the arguments that the staff itself presents in the report, we see no reason to continue to explore the inclusion of financial contributions in the quota formula. This sort of proposal flies in the face of the commitment to reform the institution and make it more credible, legitimate and representative.

We continue to support the update of the classification of advanced and emerging market and developing countries to mirror the World Economic Outlook.

Finally, it would be useful if management and staff could provide information on the next steps of the review, considering the deadline of January 2013.

Annex

G20, IMFC and Board of Governors

Agreed Language on Quotas and Quota Formula Review

September 25, 2009, G20 Leaders, Pittsburgh

“Modernizing the IMF’s governance is a core element of our effort to improve the IMF’s credibility, legitimacy, and effectiveness. We recognize that the IMF should remain a quota-based organization and that the distribution of quotas should reflect the relative weights of its members in the world economy, which have changed substantially in view of the strong growth in dynamic emerging market and developing countries.”

October 4, 2009, IMFC, Washington DC

“Quota reform is crucial for increasing the legitimacy and effectiveness of the Fund. We emphasize that the IMF is and should remain a quota-based institution. We recognize that the distribution of quota shares should reflect the relative weights of the Fund’s members in the world economy, which have changed substantially in view of the strong growth in dynamic emerging market and developing countries.”

June 27, 2010, G20 Leaders, Toronto

“We recognize that the IMF should remain a quota-based organization and that the distribution of quotas should reflect the relative weights of its members in the world economy, which have changed substantially in view of the strong growth in dynamic emerging market and developing countries.”

October 23, 2010, G20 Ministerial, Gyeongju

[The IMF quota and governance reforms include:] “Continuing the dynamic process aimed at enhancing the voice and representation of emerging market and developing countries, including the poorest, through a comprehensive review of the quota formula by January 2013 to better reflect the economic weights; and through completion of the next general review of quotas by January 2014.”

November 10, 2010, Board of Governors Resolution submitted to the BoG by the IMF Executive Board

“The Executive Board is requested to complete a comprehensive review of the formula by January 2013.”

“The Executive Board is requested to bring forward the timetable for completion of the Fifteenth General Review of Quotas to January 2014. Any realignment is expected to result in increases in the quota shares of dynamic economies in line with their relative positions in the world economy, and hence likely in the share of emerging market and developing countries as a whole. Steps shall be taken to protect the voice and representation of the poorest members.

November 12 2010, G-20 Leaders, Seoul

[Consistent with our commitments at the Pittsburgh and Toronto Summits, the IMF quota and governance reforms include:] “Continuing the dynamic process aimed at enhancing the voice and representation of emerging market and developing countries, including the poorest, through a comprehensive review of the quota formula by January 2013 to better reflect the economic weights; and through completion of the next general review of quotas by January 2014.”

The Chairman made the following statement:

This is the Board’s first formal meeting on the quota formula review, but it follows an informal meeting in September 2011. The review of the formula was an important element of the quota and governance reform that was agreed to in 2010. From reading the gray statements it is clear that there is a wide range of views on what works well within the formula, what does not work well, what should be increased, what should be decreased, what should be removed, what should be added, and how the Board should go about this.

It will be a challenge to complete the exercise, and yet there is a January 2013 deadline. It is important that the Board spend enough time, and the staff performs enough additional work and technical research on some of the criteria, combination of criteria, and possible subsets of criteria. It is critically important, and not a trivial discussion.

I would like to thank Mr. Tweedie and the entire Finance Department as well as those other departments that have contributed to the work.

I ask Directors to listen to each other and have an open mind, because there are different views. This process is predicated on the respective positions

and political approach that one has—although the formula in and of itself is not based on political considerations. Rather, it is based on economic considerations.

Mr. Daïri made the following statement:

Our chair reiterates our call for a simple and straightforward formula that reduces the need for ad hoc adjustments. We agree that the formula should lead to a calculated quota that reflects the relative size of measures. However, the formula in and of itself—as called for by the IMFC and the G-20—should lead to an increase in the share of emerging markets and developing countries as a whole, including the poorest countries. Quotas need not be calculated exactly in proportion to the size of member countries.

We proposed in our gray to make GDP the only variable—with a higher share of purchasing power parity (PPP) GDP, with higher compression factor (less than 95), and a small weight for reserves. We also proposed to drop openness and variability in light of the many flaws of the two variables. Additionally, we believe there is no benefit from further work on inclusion of financial openness, which would only create more size bias in favor of countries with international financial centers and with oversized banking sectors.

Although we have reservations regarding the proposal to include financial contribution, which could also increase the size bias, we would support Mr. Furusawa and Mr. Nomura's call for introducing an adjustor in quota calculations in favor of members that contribute the most relative to their quota shares, particularly in terms of financing LIC lending and technical assistance. However, this adjustment should occur only among advanced economies, and should not affect the quotas of Emerging Markets and Developing Countries (EMDC).

We would be open to further work on variability, provided it is meant to measure potential needs for Fund resources. In this regard, the G-24 Secretariat has made some proposals that deserve consideration. We can also support Mr. Virmani's proposal to include GDP variability as a measure of potential need.

Mr. Virmani made the following statement:

Theoretically Directors all agree that a formula revision must be based on a combination of principles, logic and economic reality. One's first

impression is that the Board is not moving in that direction at present. Based on that, I will react to some of the logical reality of the variables.

First, what is the economic reality? What reality does openness reflect? That is one of the contentious variables and a number of Directors want to maintain the status quo on this issue.

However, openness primarily reflects the accidents of geopolitics, geography and history. I will provide two examples from geopolitics. One example is Yugoslavia, which broke up into several different countries. When a country breaks up, the trade that those new entities do with each other becomes international trade. Those countries' share of international trade rises. What kind of reality does that reflect? There is a more recent example of Sudan, which has broken into Sudan and South Sudan. Immediately, the total international trade goes up and the share of these taken together rises. Is that the economic reality that the Fund is trying to reflect?

What about the accident of geography? The greatest increase in international trade occurred because of the development of sea transport. The coastal countries and regions had more trade, while the inland countries had less. This was purely an accident. Should that be reflected? What is the reality the Fund is trying to reflect in the quota formula?

What about history? The colonial powers were the greatest expanders and proponents of international trade. They would have loved to have openness as a single variable. That is an accident of history. I would be happy to see the staff take these three variables and prove or disprove my point that these accidents determine openness.

This does not have much to do with the IMF. The organization with the highest stake in the issue is the WTO. The WTO has to ensure that the rules on open trade are enforced fairly and effectively. Is it the IMF's business to do that? Frankly, I don't see the logic.

The business of the IMF is external balances—the net contribution of countries to global demand that props up the global economy. Yet this economic reality is not reflected anywhere in the grays or the staff papers.

Progress will not be made unless the Board focuses on those three things: principles, logic and economic reality.

Regarding the second variable, variability, I have not seen a single argument that shows that this variability reflects any economic reality. Yet we speak about a variable in the abstract. I cannot see what I am discussing, unless those who want to discuss variability put something on the table. How can Directors apply any principle or logic or reality if the variable has no connection with any of these? No one has disputed that in the grays.

I request that the Chairman guide the discussion toward these three aspects, rather than just restating Directors' positions, which are well known.

Mr. Weber made the following statement:

Like colleagues, I have submitted a written statement. I will try to treat the issue here as a factual matter, despite its divisive nature. For this purpose, I will distribute my oral statement to colleagues after the meeting.

It is entirely appropriate and desirable that members' quotas are calculated based on a set of relevant components rather than in a one-dimensional fashion based predominantly on GDP.

Correlation may be high between some variables. However, as long as these correlations are lower than one, which they clearly are, each variable adds information into the value. And the value added of a multidimensional formula lies in being better able to capture the multiple roles of quotas, as well as a range of Fund activities as mandated by membership.

A multidimensional quota formula balances the broad and diverse needs of the membership better than a one-dimensional formula. With this, I echo Mr. Chia's statement. Like other mixed constituencies, our chair deals with diversity. The emerging-market members of our chair would likely benefit from a stronger reliance on GDP, and in particular the PPP-GDP component. However, these members support maintaining a multi-component formula in which openness has a significant weight.

Mr. Nogueira Batista has submitted an interesting statement in which he insists on prior commitments made by the G-20 that would naturally lead to a GDP-only formula. I contend that the quotes provided predate the 2010 quota and governance package and have been responded to substantially in this package. There is also no language on expected outcomes of the quota formula review, but purely on timing.

If Directors are looking for quotes that can guide the quota formula review process, they are not in these general declarations. The relevant passage would be found in paragraph 6 of the report of the Managing Director to the IMFC, on IMF quota and voice reform of April 2008. This is the report that accompanied the Board of Governors resolution 63/2.

This reform package in April 2008 received barely more than 85 percent of the Board's voting power, with five chairs either opposing or abstaining. Brazil was not among these five objecting chairs, as were other large countries around the table.

The April 2008 report specifies the areas in which further work on the quota formula will be called for going forward. Notably, GDP is not among these areas. Instead, all areas mentioned are broadly related to enhancing, modifying or refining the variable and variability of the multiplier. The ensuing global financial crisis has made the relevance of financial openness or financial interconnectedness for the Fund's mandate abundantly evident.

Mr. Virmani just made a powerful case for financial openness, which is clearly the Fund's business and not the WTO's business. The resulting demand for Fund lending and services have made apparent another urgent need, namely to better reflect the external contribution and extraordinary lending to the Fund in the formula.

I reiterate that the two aspects just mentioned should be weighted higher in the formula.

The first aspect of financial openness reflects a member's importance from a stability perspective. Recognizing such interconnections more strongly is a matter of achieving consistency with the Fund's strategy that highlights the crucial importance of financial interconnections, designing effective instruments for surveillance, and lending. These interconnections are also used to justify the Fund's need to enhance its firepower at the current juncture.

The second aspect is a member's willingness—and also the political support it has to muster—to voluntarily contribute to core mandate tasks. To those that consider such contributions irrelevant, I would reply that such commitments have become a mainstay to maintaining the current level of the Fund's services to its members.

I also beg to differ with those who see contributions as a means for members to buy quota share. Such contributions are supposed to be fully

demand-driven, and the Fund requests them on behalf of the membership. I reject the notion that those members who respond favorably to such requests are pursuing ulterior motives.

Reforming the quota formula is not a win-win proposition, and there should be sufficient transparency about the likely distributional effects. Transparency could be achieved not by displaying aggregate shifts between country groupings, but by showing the likely outcome for all larger members, with the regional classification of these members used as the organizing principle. This would better allow for tracking the concentration effect that Mr. Mac Laughlin and Mr. García-Silva and others have highlighted.

Finally, I concur with Mr. Fayolle's characterization of a good formula as one that allows for increases in quota shares over time to those members whose role in the world economy is progressing. To this I would add those members who are thereby called upon to shoulder commensurate responsibilities. The current formula can be expected to perform reasonably well in this respect. Any adjusted version should do likewise.

Mr. Nogueira Batista made the following statement:

Mr. Weber was kind enough to quote our statement but he misquoted us. We did not say that the commitments made by the G-20 led to the conclusion that we would have to have a GDP-only formula. We wrote that there should not be an assumption that the Board is starting from a clean slate. The Fund has commitments and the review of the quota formula must be consistent with those commitments. It is consistent with these commitments to increase the weight of GDP or even to have GDP as the only variable. It is not consistent with these commitments to increase the weight of openness.

Mr. Weber's argument about the correlation of variables is a bit strange. Table 1 on page 7 of the staff report shows that the correlation between openness and variability is 0.96. This means the presence of these two variables in the formula adds very little information. More important, I strongly object to Mr. Weber's statements about the commitments I quoted. These are not only G-20 commitments, but also IMFC commitments, they predate the 2010 agreement. All the commitments quoted in our gray are commitments made by the G-20, IMFC, and Board of Governors since the last review of the quota formula. They are entirely relevant to this discussion, and I cannot accept that any IMFC member should try to avoid taking these commitments into account. They are the guidelines that we must follow.

Mr. Weber is a strong defender of ministerial engagement. One cannot make a mockery of ministerial engagement by ignoring the guidance of ministers and leaders when discussing G-20 Leaders' communiqués.

Mr. Virmani clarified that he had been speaking about current account balances.

Mr. Weber noted that his point was intended to identify what should guide the review of the quota formula. He did not recall any time when Directors or ministers provided guidance on the quota formula review after April 2008. Instead, guidance was provided on the timing and that the formula should be comprehensive. There was a broader commitment that referred to the governance umbrella as a whole.

Mr. Alkholifey made the following statement:

In our gray our chair emphasized the importance of reviewing the principles underlying the quota formula. We are glad to note that similar suggestions were made by a number of Directors, including Mr. Legg and Mr. Shaalan. We look forward to a reassessment of the role of quotas in determining the Fund's financial resources in view of the growing role of those resources, and in setting access levels given the increasing reliance on exceptional access. Our gray detailed the need to reduce the excessive weight given to GDP to maintain the current variables in the formula, while increasing the weight assigned to reserves. Our gray also highlighted the need to introduce in the formula a new variable on voluntary financial contributions.

Regarding reserves, they provide an indicator of a member's financial strength and ability to contribute to the Fund's finances.

On GDP, we agree with Mr. Kiekens that it is an economic parameter that is less relevant for the Fund. As far as a member's ability to finance the Fund is concerned, GDP is not relevant. What is important is that members with a strong external position are included in the financial transactions plan (FTP). This is why the FTP is relevant for the quota discussion. In determining which countries will participate in the FTP, GDP is not one of the factors considered.

As was underscored in earlier meetings, countries can have systemic importance even if their GDP is small. The ability of a country to safeguard the global and economic financial system should be considered as a measure of economic weight and needs to be reflected in the quota shares. This is the case of Saudi Arabia, which has acted prudently over many decades to bring

stability to the global oil market with the objective of safeguarding the global economic system. This was also demonstrated during various crises when an adequate supply of oil was crucial to avoid negative global repercussions. Therefore, the global systemic importance of countries should be captured in the quota formula. The importance placed on GDP in the current quota formula benefits large economies and aggravates the voting power, which is contrary to the spirit of the quota and governance reform.

As it comes at the expense of smaller emerging market and developing countries, we support a reduction in the compression factor, as do Mr. Assimaidou, Mr. Daïri, and Mr. Nogueira Batista. We emphasize the critical role of voluntary financial contributions in Fund financing operations, and we join Mr. Furusawa, Mr. Weber, and other Directors in calling for an explicit variable in the quota formula. The World Bank's experience of taking account of members' financial pledges serves as an example in designing a rules-based measure for the next round of quota formula discussion.

Finally, it is important for the legitimacy of the Fund that the formula be agreed on by the IMF Executive Board. In this regard, and like Mr. Grønn, Mr. Snel, Mr. Weber, and Mr. Kiekens, we welcome the involvement of the IMFC in the quota formula review discussions.

Mr. Grønn made the following statement:

We know the 2008 quota formula was the result of a difficult compromise. There was a wide range of views in the grays, but Directors are mandated with reviewing the formula, so it is important that we proceed and convey our principle views on the initial considerations paper.

With regard to Mr. Alkholifey's comments, we welcome that the IMFC chairman has initiated a work stream on the quota formula led by the IMFC Deputies. Our chair strongly supports a transparent negotiation process that is fully anchored within the IMF bodies. Generally, like Mr. Weber, we support continuing with the multidimensional formula, balancing various considerations. Specifically, this chair first called for a phasing out of the GDP measured by PPP; GDP at PPP is an indicator of comparison in real terms. A country's relative size in the global economy depends on market GDP; PPP also does not indicate the country's ability to contribute financially to the IMF. As noted by the staff, market GDP is the most relevant indicator for the Fund's financial operations.

Additionally, PPP was included in the formula on a temporary basis as a measure of a country's expected future growth. As PPP and the market exchange rate (MER), or GDP at MER, are rapidly converging, there is no longer a need to compensate for future growth.

Second, we call for the inclusion of financial openness. The increased weight of investment income could be a way forward, and we encourage the staff to also consider other indicators, not least international investment position (IIP).

Third, we recognize the difficulties in terms of the variability variable, and we welcome further work on this issue. There is a need to include a measure of a member's vulnerability and potential needs for Fund resources in the formula.

Fourth, we support further work on ways to include a member's actual financial contributions to the IMF in the quota formula, as mentioned by previous speakers today.

I would also like to comment on issues not mentioned in our gray statement.

First, the degree of compression at a minimum should be maintained at the current level as it ensures a coherent and inclusive IMF. The compression factor provides small members with a quota that is actually relevant, should access to the Fund facilities be necessary. It also contributes to providing the smallest members with a meaningful voting share.

Second, the outdated country classification presents an opportunity to review more broadly how changes in member quota shares are reported. We prefer to terminate the practice of classifying countries into advanced and emerging markets when reporting quota shares. The classification of countries is subject to changes over time, and it bears little or no relevance to members' actual contributions or demand for IMF resources.

Finally, it is crucial to the IMF's legitimacy that the quota distribution is transparent, and that the formula is the sole basis for future quota realignment.

Ms. O'Dea made the following statement:

As this is the first formal discussion of the review, the process will likely continue for a bit. At this early stage, openness in exploring various ideas and a sense of compromise is very important if the process is to be completed in less than a year.

Colleagues' grays generally give the staff a solid sense of the starting positions of the Board and the membership with respect to the various issues. There were not many surprises that emerged, even if the views were quite divergent in most areas.

I do not want to dwell on the initial views set out in our gray. We were clear on the questions of the central importance of market-GDP and openness in the formula. Instead, I would like to pick up on three issues highlighted by others.

I agree with those that have highlighted the desirability of adequately capturing financial openness. The conceptual case and importance of financial interconnectedness is well established. We recognize the data and methodological challenges, but financial openness is not alone in this area. I encourage the staff to continue to explore various alternatives and, at a minimum, identify a concrete strategy that could be led by the research and statistical departments to close the data gaps more quickly.

Second, I add my voice to those who have highlighted the importance of ensuring sufficient voice and access for the Fund's smallest members. This is very important. It is an issue that should be looked at from a comprehensive perspective, encompassing not just the quota formula review, but also with a mind to the next general quota review and our financial access policies.

Finally, this chair has sympathy with the view expressed by Mr. Legg and others that we may be asking the quota formula to do too much. Given the degree of divergence seen in the grays, it may be necessary to discuss the role of the quotas to avoid getting bogged down into entrenched positions.

Mr. Furusawa made the following statement:

I am happy to discuss this issue before the memory of the previous review fades away. The staff paper provides a good basis for discussion. I will not repeat my gray, but I reiterate our strong support for including the financial contributions in the quota formula.

The Fund is a quota-based institution. But given the long time needed to actually increase the quota resources, and the unpredictability of the crisis, in reality the Fund has to rely on borrowed resources for its operations. Like Mr. Alkholifey and others stated, it is important to develop an incentive structure to encourage contributions to those resources.

It is encouraging to hear that many member countries, including emerging economies, intend to make financial contributions to the ongoing fundraising. These efforts should be appropriately respected and reflected.

In addition, it should be noted that significant activities of the Fund, such as PRGT and technical assistance, are largely financed by nonquota resources. There are technical issues to resolve in developing a single measure to capture the financial contributions that have already been included in the formula used by the World Bank. In designing the actual methodology to reflect them, there are a number of possible options, including the protection of the voting share of the emerging market and developing countries, as is the case with the World Bank's formula. As Mr. Gibbs stated in his gray, we can overcome the technical issues, and I join most of my colleagues in supporting further work by the staff to include the financial contributions in the formula.

I am confident that the staff can provide possible options for the Board to consider at its next meeting.

Mr. Majoro made the following statement:

We are concerned about the late start to this process, but hope for more frequent meetings in the future to meet the deadline that has been set. We broadly concur with the objectives of the review and remain open to a more representative, transparent, durable and simple formula that enhances the voice and representation of all members of the IMF. In this respect, we are concerned that in recent reviews the quota share of Africa in general, and our constituency in particular, has continued to decline, thus undermining the voice and representation of countries that are the most numerous borrowers of IMF resources in terms of head count.

As indicated in our gray, we consider several issues to be critical elements of this comprehensive review: GDP blend with a higher PPP share, that represents borrowers and perhaps through an improved measure of variability; compression factor; and appropriate increase of the share of basic votes.

We remain committed to the broad objectives of the comprehensive review.

Mr. N'Sonde made the following statement:

We adhere to the belief that the full guiding principles laid out in the paper are relevant to the current review. However, as was noted by many other Directors in their grays, and again by Mr. Daïri and others this morning, we highlight the principle of taking steps to protect the voice and representation of the poorest members.

This principle was introduced in the 2008 reform, and reaffirmed in subsequent IMFC communiqués, G-20 Leaders statements, and the 2010 Board of Governors resolution that called for the current quota formula review. It would be difficult to support a new quota formula that departs from this principle.

We acknowledge that GDP is the most relevant variable for what the quota formula seeks to achieve. We continue to favor a blended GDP variable with a greater weight for PPP-GDP than is currently used.

Third, regarding the compression factor, could the staff confirm our understanding that the inclusion in the formula for a period of 20 years before a review applies to the factor itself, and not to its current value?

If that is the case, one cannot withdraw the compression factor from the formula under the current review. However, one can open the discussion on the value given to the factor.

The presence of a compression factor in the formula does not make the latter significantly more complex, nor does it undermine the desired objective of ranking members according to their relative weight in the global economy. A compression factor—particularly if given a lower value than currently used—contributes to reducing a bias in favor of the large economies. This helps reduce the huge quota disparities that exist across members and that undermine the legitimacy of the current quota system.

Finally, we call for further simulations using a lower value for the compression factor.

Mr. Yakusha made the following statement:

One of the goals of the exercise is to enhance the representation of emerging market and developing countries, but the wishes of our governors have already been satisfied even without changing the quota formula. Shifts to emerging economies take place automatically by using formula as it is, because the economies tend to grow faster than advanced economies. Related to this, the classification of countries should represent the actual state of affairs instead of serving as a history lesson. This interferes with assessing progress on shifts between categories, but as more countries become advanced economies over time, there would be practical limits to measuring such shifts.

It is with some hesitation that we enter the discussions on the new review. The 2010 review required substantial pain and effort to come to an agreement and resulted in a difficult compromise. From the perspective of a constituency comprising 13 mostly small, open economies inside and outside Europe, there is room for improvement in the current formula. There could be more work on financial openness and on financial contributions to the Fund, and we note that about 13 chairs are supportive or at least open to further work in this area. However, after reading the papers and listening to discussions today, it is unclear whether we can come to a formula that would gather more support from the Board than the current formula does.

On the points made by Mr. Virmani, openness is very relevant in my own constituency, whose exports exceed 50 percent, 60 percent, sometimes 70 percent of GDP. Moreover, there have been double-digit drops in GDP in response to global external demand shocks, as well as strong double-digit recoveries, especially in the smaller countries in my constituency. It is very different from countries whose trade to GDP is about 15 percent. Moreover, variability is also quite relevant for some of the countries in our constituency. My own country has seen fluctuations in the current account balance from plus 12 percent to minus 8 percent in the course of one decade. There are quite a few reasons why the Board should not be too afraid of an unchanged formula. As we pointed out earlier, the formula itself works in the right direction.

Second, why should the Board question the wisdom of previous rounds of quota formula reviews? Many people have spent a lot of time thinking and arguing about an appropriate quota formula in the past. The

current formula is basically the result of this. The arguments that were valid enough to lead to this result have not changed that much over the last two years.

Third, some Directors seem to desire a much simpler formula and propose to remove variables. This seems to be for the sake of simplicity itself, which is obviously not a good reason at all. To paraphrase Albert Einstein, we agree that this formula should be as simple as possible, but not simpler. Given the complexity of the world and the various aims the formula serves, the formula is already quite simple. The only thing about this review that is not simple or transparent is the practice of the second round, in which the political refinements are made to the calculated quota shares.

Finally, we welcome that quota formula reviews are on the agenda of the upcoming IMFC and Deputies meetings. Keeping the initiative for discussion on the quota formula review in the IMF Board and the IMFC will help to ensure the legitimacy of the outcome.

We understand motives of larger members of the Fund to plead for shifts in power toward larger countries to the detriment of smaller countries. We should not forget that all countries have a stake in the Fund and all countries are expected to ratify changes in governance to ratify quota revision, for which the consent of a double majority of about 113 countries is needed, including many of the smaller countries.

In this light, compression is also quite a relevant factor if one wants to keep those smaller member countries from feeling disenfranchised.

Mr. Temmeyer made the following statement:

Grays from Board members clearly indicate that there is a wide range of views on almost every aspect of the quota formula. Most chairs are disappointed with the present formula but certainly on different or even conflicting issues. Efforts to improve the formula are also targeted at different and conflicting directions. While the current quota formula might have flaws, one cannot deny that the development of the resulting calculated quota shares since 2008 appropriately reflects global economic trends, and thereby captures economic dynamism. Hence, the compromise and agreement among the IMF membership in 2008 should not be disrespected.

It is well known that the most controversy is related to GDP and openness. I would suggest that a compromise can only be found by

maintaining an important weight for both elements—GDP and openness. As has been highlighted by others, including by Mr. Weber and Mr. Yakusha recently, because of the diversity of the IMF membership, and the complexity of the world, each variable should add some value to the overall formula. In that regard, while welcoming the staff's calculation on correlations between need for Fund resources and various approaches on measuring openness and variability, a similar approach to GDP is missing. Can the staff provide Directors with information on the relationship between various measures of GDP and the need for Fund resources?

A well known area of disagreement is related to GDP measured at market exchange rates and at purchasing power parities. Although the staff has mentioned data and conceptual problems with regard to openness, similar information with regard to GDP at PPP is missing. Some meager information about the international comparison program is not sufficient. Can the staff acknowledge that there are substantial data and conceptual problems with using GDP at PPP?

Finally, the guiding principle in terms of the quota formula is the name of our institution: International Monetary Fund. Hence, having a formula without openness and heavily relying on a questionable concept of PPP would be contrary to the Articles of Agreement. This is not a domestic non-monetary fund.

Mr. Nogueira Batista made the following statement:

I welcome this first round of formal discussions on the quota formula. However, like other Directors, I am concerned about the late start of the formal discussion given the January 2013 deadline established by the Board of Governors. I ask colleagues' indulgence to speak a little longer, not only because the matter is important, but also for practical reasons. These meetings have been very infrequent; the last informal meeting occurred in September 2011. I expect there will be greater frequency from now on. This will allow me to make shorter interventions and shorter grays.

In terms of the guidance received from the G-20, the IMFC and the Board of Governors, our chair went to the trouble of attaching this guidance to our gray. Perhaps Mr. Weber might want to look at our attachment again because then he will not need to rely on his memory. He can go directly to the agreed language from the G-20, the IMFC and the Board of Governors.

I am concerned with the impression I receive from the discussion today and from reading the grays, that Directors are not really attached to the commitments their authorities have made. Mr. Temmeyer, for example, just now said the Board must respect the compromise made in 2008. However, he also said he is opposed to PPP GDP. That is part of the compromise in 2008. There is a more recent compromise, the 2010 compromise, which adds information and commitments which cannot be ignored. The Chairman was part of that negotiation and knows the compromise that was reached in Korea in the G-20 ministerial meeting and then reiterated at the Leaders level. Germany is a member of the G-20, so Germany cannot make proposals that are inconsistent with these agreements. For example, Mr. Temmeyer in his gray suggests increasing the weight of openness. This is inconsistent because one of the many aspects of the commitments is enhancing the voice and representation of EMDCs. The increase in the weight of openness, especially financial openness, goes against that.

It seems clear that the review has to involve substantial change to the quota formula, not simply tinkering at the margins. The direction of this change has been clearly indicated on several occasions since the Board last reviewed the quota formula in 2008. There are three fundamental aspects to the guidance received. If Directors are serious about taking ministerial guidance, or leaders' guidance, we must respect, first, that quota shares should reflect relative economic weights; second, that the next quota review, what we are discussing now, should enhance the voice and representation of dynamic EMDCs; and third, that the quota formula is a means to achieve this end by better reflecting economic weights.

There is no going around this. Our chair, along with many others, agreed very reluctantly that we would retain the quota formula in the 2010 quota review—a formula we saw and continue to see as flawed. However, we agreed to that only because there was a clear commitment that the formula would be comprehensively reviewed ahead of the next general quota review—and that the review would take place according to specific guidance, which I just mentioned. The staff has provided a good analysis of many of the shortcomings of the current quota formula, especially the most likely incurable weaknesses of openness and variability.

I cannot understand why Board members would try to walk away from commitments their authorities made in the IMFC and in the G-20. Any sign that chairs are unwilling to live up to past agreements and commitments will have a disruptive effect on the institution, and on the collaborative effort necessary to face the current challenges of the world economy.

Like the U.S. chair, and the other BRIC chairs, we emphasize the crucial role of GDP. Most chairs agree with this, at least to some extent. A streamlined formula with a single variable may be the best option. As indicated in our gray, this variable could be a GDP blend with a compression factor to protect smaller members.

I will not miss the opportunity to note—since it is not often that I can say it—that if the U.S. chair removed the critical references to the compression factor, we could write a joint gray with the United States on this matter. Maybe we could do that going forward. I have never done that and it would be a new experience. However, the United States is such an important country that it is difficult to work with them, even when there is full agreement on the issues.

We oppose including financial contributions in the quota formula for the reasons explained in our gray. If we go down that route of trying to put financial contributions in the formula, we risk very seriously crystallizing the Fund as a rich man's club. This sort of proposal flies in the face of commitments to make the institution more credible, legitimate, and representative.

There is one important statement made by Mr. Virmani among others in his gray, which I think deserves to be quoted. He says, "The reform of the quota formula is necessary in a world that is transforming more rapidly than imagined even a decade ago." I would say even five years ago. When I arrived in the Fund, I did not imagine that the world would change so rapidly in such a short period. And it has. The institution is having considerable difficulty adapting to this change.

As Mr. Virmani observes, the 2010 reform was based on 2006-08 data, so it was already outdated when it came into force. A more ambitious and forward-looking approach must be adopted in the next quota review. The proposals of Mr. Virmani should be considered, and maybe others. I would like to ask Mr. Tweedie what changes he would consider to attempt to avoid this lag between the Fund's actions and the rapidly changing reality of the world economy.

I am a bit uneasy about the way the staff is proposing that the Board address the issue of the principles underlying the quota formula—the principles from the 2008 reforms. For example, compare the staff paper with the Main Themes in Grays, which tend to foreshadow the summing up. The

Secretary knows my concerns about the summing up. There is a shift in language from the staff paper to the Main Themes in Grays, and there is a shift in language from the paper, compared to the document that Mr. Weber just quoted, which is the report from the Executive Board to the IMFC in April 2008. I want to hear the staff's opinion on that. However, I submit that we must stick to the language used in that report to the IMFC, and not try to introduce elements to the language without careful consideration. I want to avoid legislative creep. I would appreciate if the staff could clarify the principles that we agreed upon in 2008.

Mr. García-Silva made the following statement:

There is much diversity in the different opinions in the grays. However, I am somewhat optimistic that we can reach a consensus on this matter. In our experience as a multi-country chair, the positions were also quite different. This did not prevent us from reaching an agreement on our chair's position on this matter.

I would like to address four points to complement what was said in our gray.

On the role of financial contributions in the quota formula, I tend to agree with Mr. Nogueira Batista that this is somewhat contradictory to the principle of the Fund being a quota-based institution. I would like to interpret this principle not mechanically as simply saying that leverage should be kept low. Instead I would interpret this principle as the size of the balance sheet of the Fund should result from a collaborative and multilateral dialogue at the Board and with the governors. Moving to basing quotas on actual financial contributions is tricky on two grounds. First, this is essentially a voluntary decision by a member and therefore more unilateral than multilateral. Second, it is a policy decision unlike other variables in the formula that are a result of environment, and not changed by policy decisions. I would not go as far as Mr. Weber's suggestion that this implies that members are "buying" on their quota. The incentives would go somewhat beyond the principle that the Fund should be a quota-based institution.

Second, on openness, Mr. Virmani made very good points and they are very transparent. However, they tend to support the opposite position, especially regarding protecting or supporting the role of smaller countries in the Fund, in terms of the quota and representation. The evidence is that smaller countries tend to be more open, and that openness provides a good

path for development for smaller countries. Therefore, openness is an important variable.

As a matter of principle, I find it hard to believe that the Fund could be indifferent between a world of autarky economies and a world of integrated economies. The Fund would prefer to be in a world of integrated economies, with aggregate protections to adhere to bank standards and preserve financial stability. Therefore striving for openness, and measuring it in a more accurate way, could be a way forward to support that principle.

Third, there is a debate about GDP at PPP and market prices. We made a point in the gray that unfortunately was not answered in the staff's responses to technical questions. Our gray noted that measuring GDP at market prices tends to depress the quota of countries that engage in significant external adjustment and therefore have to depreciate their currencies substantially. Given that this tends to be a protracted process, it will have a bearing on the measuring of the quota, and therefore the discussion on the scale of Fund financing to these countries precisely when they are undergoing this exchange rate adjustment.

This is not only theoretical but also very practical. A few weeks ago the Board debated access on a second program for Greece and one of the countries in our constituency was cited in a discussion of evenhandedness in the context of whether the program for that country was comparable to the second program for Greece. There was a discussion about the figures, and the key difference was whether the denominator for the size of the program was GDP post-devaluation or pre-devaluation. Using GDP at market prices in the quota has an unintended effect of reducing the representation and role of economies that need financial support precisely because they are undergoing significant external adjustment. This is a powerful argument for keeping GDP at PPP in the formula.

Related to this issue, there is a concern about compression and the increased concentration in voting power in the largest economies. I would like the staff to evaluate the effect of different compression parameters.

Finally, I support many Directors such as Mr. Weber, Mr. Alkholifey, Mr. Grønn, and Mr. Kiekens and others, in using the discussion of the quota formula as the main input for future quota reforms. This would avoid the unfortunate situation of ad hoc adjustments that tend to be discussed and decided outside of the Fund, and therefore tend to distort the significant effort that will be put into this discussion on the quota formula.

Mr. Mozhin made the following statement:

We have issued our gray. In fact, our chair has issued so many grays on this subject over the course of the last decade that I feel as though I have already made every argument possible. But there is one argument I want to repeat. The most fundamental principle behind devising the quota formula is that the application of this quota formula should not produce glaringly absurd results. I would challenge anybody to go outside of this building and explain that Luxembourg should be two times Pakistan, and that we have a scientific formula that is entirely objective, and that anybody who does not see that Luxembourg is two times larger than Pakistan is blind.

There is no end to this type of absurdity under the current quota formula. Luxembourg is one-quarter of India, or Luxembourg is one-sixth of France. Any normal person would know that Luxembourg is perhaps one-twentieth of the city of Paris. But our formula knows better and is so scientific that we know Luxembourg is one-sixth of France. How would one explain that?

Perhaps the explanation is that France is such an autarkic economy and has so little interest in the development of the global economy that it has to be punished severely by making France only six times Luxembourg.

The main risk is that a significant part of the membership will simply be unable to take the Fund seriously. The Fund is already in this situation. The risks are obvious when a significant portion of the membership does not take the Fund seriously. There are many initiatives that require member participation, and they will participate only if the Fund has credibility.

Mr. Meyer (UA) made the following statement:

I join other Directors in thanking the staff for their work, though I wish it was more far reaching in some respects. However, I recognize that this is an initial discussion and, as Ms. O'Dea said, there are no big surprises in these starting points.

Picking up on Mr. Mozhin's comment, most Directors have raised the issue of legitimacy and using the formula to underpin legitimacy. A number of people have highlighted that a transparent formula is necessary to do so. The examples Mr. Mozhin just gave underscore why the current formula is not truly transparent and why it needs significant review. It is almost impossible

to explain countries' relative quota shares to outside groups. Like Mr. Mozhin, I would challenge anyone to provide a clear explanation that a rational outside observer could accept. This underpins the need for a comprehensive review. We agree with Mr. Nogueira Batista that this should be a comprehensive review and not a tinkering exercise. In April 2008 there were charges made for a future review. Since April 2008, there have been other developments, including and most importantly the agreement on the 2010 quota and governance reforms. This review of the quota formula takes us back to that starting point, and does not necessarily go back to previous changes.

The Board needs to be bolder and more open to considering bigger changes. This should be a simpler formula. A simpler formula is more transparent. It is more easily measurable. It is more easily justifiable. The key criteria should be the relative economic weights of members, of which GDP is by far the best measure. It is the one measure that is most readily available, and it is more widely used for a wide range of other purposes in the Fund. It remains the best measure and the Board should focus its attention on it.

We can debate whether it should be PPP GDP or market GDP, or the weight of the blend, but the focus on GDP and its preeminent role in any quota formula is absolutely paramount.

We associate ourselves with Mr. García-Silva's comments on financial openness. He was eloquent in describing the shortcomings of trying to include financial openness in the formula and I wholeheartedly agree with him.

Our chair's views on variability, or openness more generally, were highlighted in our gray. I cannot elaborate any further except to say that there are serious shortcomings and we would fully favor dropping them.

Turning to compression, Mr. Nogueira Batista probably hopes he could change our view so we could issue a joint gray. I regret to inform him our chair is not planning on doing that any time soon. I am not sure that he would find writing a joint gray with us a pleasant experience.

On compression, there has been a call for a comprehensive review. It is true that in 2008 there was a notional agreement that compression would remain in the formula. The call for a comprehensive review does not mean that the Board absolutely has to abide by this notional agreement. The compression fundamentally distorts other variables in the formula. It is true that compression can help small economies. It can help low-income economies, but there are other ways of doing that, including through an

increase in basic votes, as Mr. Majoro noted. At the last review, the Board agreed to triple basic votes. Our chair stands by that agreement as a means of protecting small—and low-income countries, which is a key objective.

Compression also benefits many advanced, wealthy, open economies. That is not the objective in this formula, nor is it the objective of the quota review. In that review, compression should be dropped completely so that the formula clearly reflects relative economic weights.

Mr. Kiekens made the following statement:

Directors were asked to discuss principles. I have made it very clear what the principles are. The quota share must reflect the relevance of the Fund for a country, not economic weight. If this institution is in charge of financial stability, it should be the case that the more relevant the good functioning of the Fund is for a member, the more votes that member should have. For whom is the Fund most relevant? Those countries that have no international relations or those that are heavily dependent on the vagaries of external events.

Mr. Yakusha made a very compelling statement in which he noted that many of the poor countries in his constituency are heavily affected by external developments. Shifts in the current account and in their income occur on the basis of events elsewhere in the world. That is precisely why the Fund has been created, to have a disciplining effect on countries so that their economic behavior benefits rather than harms other countries. The more a country depends on other countries, the more it is interested in the good functioning of the Fund, and the more interest it has in the decision making of this institution.

That is my basic principle.

Mr. Nogueira Batista was kind enough to give us six quotations of guidance for today's discussions. Of these six, only one comes from a decision-making body of the Fund, which is the Board of Governors on November 10, 2010. With all due respect to the G-20, I pay more attention to the decision-making body of the IMF when it gives guidance. All the other statements are from the G-20, except for the IMFC, which is an advisory body of the IMF.

The Board of Governors has asked us to bring forward the completion of the 15th General Review of Quotas and stated that “any realignment is expected to result in increases in the quota shares of dynamic economies”—it does not say “emerging market or advanced dynamic economies”—“in line

with their relative positions in the world economy”—it does not use the word “weight”—“and hence likely in the share of emerging market and developing countries as a whole.”

I agree with that. That was the outcome of a debate in the Board. We recommended that to our Board of Governors, and the Board of Governors has accepted that; relative positions, not relative weight.

Mr. Nogueira Batista gave his interpretation of all this guidance. He said quota shares should be derived from the relative economic weights. That word was not used. Mr. Nogueira Batista said the relative economic weights correspond to shares in world GDP. I disagree. We agreed on positions, including the share of a country in international financial flows, and international trans-border assets and liabilities, including maybe GDP, but not weight in the world economy.

Mr. Virmani observed that the world has changed dramatically, to an extent that was not foreseen even five years ago. The component of the world economy that has been changing most dramatically is the stock of trans-border financial claims and assets. For emerging-market countries, like India and China, if one analyzes their change in the global share of GDP and in the global share of world trade, trade has changed most dramatically, not GDP. The dynamic emerging market countries grow even faster in trade than in GDP. I do not have the data or tables with me that describe these countries’ share in IIP. However, I am fairly convinced that the increase in their share in the stock of trans-border claims and assets—which remains relatively small—will increase faster than their share in world GDP.

Let us be open minded in examining the relevant factors for the functioning of the Fund. What do we expect the Fund to care about? Annual income? The preservation of the financial assets of a country? We are in a porcelain shop and it is very delicate to come to an agreement. Mr. Yakusha was on the mark when he said the Board must decide on a formula that can command more support than the existing one. That is the challenge. The single most important member of this Board said that the formula should look at GDP only. To be frank, this is the stuff of provocation. How can the Board ever come to an agreement on the basis of such a statement. It is impossible. We should come to more nuanced opinions.

Mr. Meyer (UA) said the Fund cannot explain this formula, which is slightly more complex than GDP, to intelligent people outside this Board. If the Fund is in charge of financial stability at the global level, consider these

two scenarios. A supervisor in a country gives voting power to the citizens regarding how the Board is elected. There are two families with the same income, or GDP, say US\$ 100,000 annually. One household had US\$ 1 million in deposits in the banking sector and the other household had no deposits in the banking sector. Which of the two families should get the most voting power? Voting power should be given to those that are dependent on the good functioning of the prudential supervisor, according to their interests in the functioning of the supervisor. Both families have US\$ 100,000 in income, but one family has no assets while the other family has 1 million in assets. The answer is very clear.

Do Directors recognize that the Fund is a financial supervisor that needs to promote stability in the world economy? We do.

Mr. Mozhin called the position of Luxembourg in this institution absurd. Luxembourg had an international investment position, at the time Mr. Mozhin first made this point, seven times larger than that of Russia. One could argue that Luxembourg deserves, based on that function, a quota share seven times larger than that of Russia. Why is that not absurd? Of course, these are not the assets of Luxembourg citizens alone, but also of many Russians. Other nationalities and residents have given confidence to the jurisdiction of Luxembourg for the management of their assets. If that is true, why should representatives of Luxembourg not have a say in this institution, in light of the confidence that Russians and Brazilians and other citizens of the world have given to the jurisdiction of Luxembourg? That is not absurd.

Does the Board have an idea of how the foreign assets of a small country such as the Netherlands—EUR 4 trillion—compare to the foreign assets of Pakistan? My guess is that it is a tiny fraction of that. What are the international public reserves of the Netherlands? They are EUR 30 billion, a tiny fraction of that. Why does the formula give a weight only to international public reserves and not to all international assets abroad? We need to reflect on that.

I was not surprised that Mr. Nogueira Batista offered to write a common gray with Mr. Meyer (UA) and Ms. Lundsager. The debate on the quota formula is not a debate between poor countries and rich countries, or emerging markets and rich countries. The real debate is between relatively large closed economies and relatively open economies, irrespective of whether these countries are rich or poor. From that perspective, Brazil and the United States are the most closed economies in the world. Even if they are not at the

same level of income, they have a largely common position, because they prefer that the formula recognizes GDP above all else.

TAs I said last time, the key political factor in this debate is how to preserve the veto power of the United States. Given that the calculated quota of the United States is dropping dramatically while the calculated quota of China is increasing, in seven years' time the calculated quota of China is likely to overtake that of the United States and by then the 15 percent will easily be breached downward.

I have made a proposal that will make our debate more rational, which is to strike a political deal before any other discussion. Someone said that the quota formula is not political and is objective. I do not believe that; just read the U.S. statement in that respect.

My proposal is to fix the actual quota of the United States at the present level for the next 20 years. With that settled, let the Board then fix and agree on a quota formula and agree to apply that formula 20 years from now. The existing formula, perhaps with marginal changes, should be applied for the next 20 years.

Mr. Virmani proposed that all Directors' grays and statements be made public so that the public could judge the merits of the arguments.

Mr. Meyer (UA) made the following statement:

I wanted to correct one comment by Mr. Kiekens. I did not say that explaining a quota formula that was more complex than just GDP would be impossible. I said explaining the current quota formula to the outside world would be impossible. There is a substantial difference because there is a long range between a GDP-only formula and the current formula.

The other thing to which I take exception is that the Fund is not a financial supervisor. It never has been and never will be. It has a role in financial sector stability, but that does not make it a supervisor.

I am sorry that Mr. Kiekens sees political machinations in our position. If, as he suggests, the United States is trying to maintain a blocking power here, then it is not clear why we would advocate a GDP-only formula if China's weight in the global economy would, as he points out, surpass that of the United States in a relatively short period of time. It seems counter-intuitive.

Since I have the floor, let me correct one area where I misspoke. When I referred to Mr. García-Silva's comments earlier, they were with respect to the role of financial contributions. Mr. García-Silva reminded me that I actually misspoke and said financial openness. On financial openness, I regret to say that I disagree with Mr. García-Silva.

Mr. Nogueira Batista made the following statement:

Regarding one of the points made by Mr. Kiekens, I know he is unhappy about the role the G-20 has played. However, in the period between the conclusion of the 2008 reform and the completion of the 2010 reforms, the engagement of capitals in this discussion was principally done through the G-20. That is the reason why in our annex to our gray we quote mainly G-20 statements; the role of the IMFC was relatively diminished in this period. A subset of the membership had a leading role in this discussion of quotas and quota formula in the run-up to the 2010 reforms. That being said, Belgium is a member of the IMFC. Mr. Kiekens should not ignore that his minister in October 2009 signed the statement which said: "We recognize that the distribution of quota shares should reflect the relative weights of the Fund's members in the world economy, which have changed substantially in view of the strong growth of dynamic emerging market and developing countries."

This statement, which Belgium signed on to, says two things. First, it says that quota shares should reflect relative weights and that relative weights have changed in light of growth. My interpretation, which Mr. Kiekens correctly summarized, is quite correct from relative weights to quota shares and from GDP to relative weights. We should make our lives simpler by sticking to the commitments that our authorities made since the last time the quota formula was reviewed. This is not selective quotation. We attached to our statement all the relevant statements made by the G-20, the IMFC and the Board of Governors since the Board last reviewed the quota formula. If we do not want to disrupt the credibility of the institution, and the possibility of acting cooperatively on a number of fronts, we must abide by the commitments that we have signed up to.

Mr. Kiekens noted that it was often the case that legal instruments contradicted each other. In this case the most recent and highest ranking instrument prevailed. The highest ranking was the Board of Governors and not an advisory given by the IMFC. The Board of Governors provided a resolution in 2010, while the IMFC guidance that Mr. Nogueira Batista quoted was given a year prior to that. The Board debate found that the quota formula should

take into account the relative positions, and the Board of Governors endorsed this. The word “positions” was chosen deliberately by the Board and the Board of Governors.

Mr. Fayolle made the following statement:

We will have an opportunity to come back to our position, I do not feel obliged to comment today.

I thank Mr. Mozhin for advocating a stronger and higher quota share for my country. I hope he keeps this position for a long time in this debate.

What was said about the formula and countries is to some extent true and to some extent a bit exaggerated. The revision to the formula has improved the visibility of the formula. Four or five years ago, it was a complete black box to the extent that nobody could understand even the components of the formula. But one can understand what is in the formula. The same is true for the examples of countries. The examples that were given this morning are certainly a cause for concern, but much less shocking than the examples given during the 2008 and 2010 quota discussions. I am less convinced that there is a fundamental problem with the formula. The situation has improved over the last years.

That being said, the mandate of the Fund, the increasing interconnectedness of the global economy, and the recent work of the Fund on the latter issue strongly advocates that the two most relevant parameters to assess a country’s relative weight are its size and interconnectedness. Therefore, we support a stronger combined role for GDP and openness in the formula.

Some chairs discarded openness, mostly on the ground of data issues. Frankly speaking, if we discard variables because of data issues, there is one obvious candidate: PPP GDP. If variables need to be taken out of the formula because of methodological problems, PPP GDP seems the most obvious candidate.

The work on the formula is certainly going to be extremely important for the Board this year. If we are not able to collectively implement the 2010 quota and governance reforms, it will become an increasingly theoretical exercise for our ministers and it is a challenge to convince a minister to consider that a theoretical exercise is important.

Mr. Pérez-Verdía made the following statement:

I agree with others that have pointed out that the staff put out a very good paper. The current formula is the result of a difficult compromise, but the staff does a very good job in proposing ways to improve it. Parallel work on the use of Fund resources, and access policy, should also be carried out, which Mr. Kiekens noted in his gray.

In his gray, Mr. Grønn alerted us to the risk that exists if the formula is viewed as being misaligned with reality. The electric filing debate we just witnessed lies at the last of the “emperor has no clothes” moment. In our gray we pointed out that it is the extreme results that are counter-intuitive and perhaps lead to dissatisfaction. As Mr. Fayolle points out, tremendous improvements have been made to the formula. Most countries would say they are happy with their quota share, but unhappy with another member’s quota share. It is a relatively small group of quota shares that result in dissatisfaction. It is not the right strategy to start looking at caps again, thinking about openness to GDP, or variability to GDP, etcetera. However, if one perceives a glaring deviation, as Mr. Mozhin called it, it should be looked at and corrected.

In future papers, we look forward to more in-depth discussion on how to safeguard the advice and financing access for small and vulnerable members. Mr. Hockin mentioned this issue in his gray and Ms. O’Dea reminded us of it. Mr. Meyer (UA) also talked about the basic votes. That needs a little bit more work.

Finally, buried deep in the appendix was the question on whether to move to the latest WEO classification as an organizing principle. Redistribution is not the objective per se, but we do need to minimize doubts about the legitimacy of the formula, even if it is only perceived and not de facto. We would support very much moving to this new classification—at some point we have to do it. This debate is going to continue beyond this current review.

Mr. Gibbs made the following statement:

At this stage, there is a great deal of work to do. The staff has my sympathy. It would be a mistake to narrow the options too quickly. There is quite a dispersion of views on the various issues and options should not be taken off the table at this point. In general, the right methodology to follow is

that the focus of work should be on areas in which Directors have issues with variables. The variables should be strengthened rather than quickly set aside.

Looking to the end of the process, the aim has to be to agree upon a formula that fully reflects the multiple roles of quotas, and the Fund's mandate. As a practical reality, the current multiple role of quotas should be a given for the review. We cannot set aside part of that role without a much more fundamental debate about the whole basis for the finances of the Fund and what it means to be a quota-based institution. Frankly, Directors do not have the time to have that sort of discussion and complete this review in time.

When one considers the complexities involved, a formula that is stripped down to some measure of GDP cannot achieve that rather complex task. I hear colleagues advocating that, but I also take note of the adverse effect that approach would have on a large number of emerging markets and developing countries, as Mr. Chia pointed out. That seriously undermines the prospect of broad agreement on that sort of approach. It is not very attractive to this chair.

In thinking about how to improve the formula, Directors must reflect on what we have learned about the world and the Fund's role in the world since the formula was first agreed upon. One thing we have learned is that the Fund increasingly relies on financial support from members for its crisis response, but also for much of its ongoing work on technical assistance and for providing affordable finance to low-income countries. We have a much better understanding of the role of financial flows in the international system. Our surveillance is increasingly addressing this issue. Financial sector work is clearly central to the Fund's mandate. Capturing this work in the formula raises difficult issues, but the time has surely come for a sustained effort to resolve the technical issues so the membership can try to reach a consensus on how to proceed based on the merits of the issue, without data issues clouding the judgment. As far as the financial sector issue is concerned, this is an issue that goes back to several previous rounds of quota formula discussions.

Mr. Weber has made some practical proposals on financial sector data, including how to address the position of financial centers. I encourage the staff to consider those further. I am sure they also can make some practical suggestions of their own. Several more meetings will probably be needed to talk these through.

Mr. Zhang made the following statement:

I join others in thanking the staff for this excellent paper on initial considerations. These are very good initial considerations that have stimulated further discussions like we have seen this morning. This chair has also issued a gray and I do not want to repeat those points, which are still valid. I just want to draw a few implications from the gray.

This chair would like to stress the common ground on the starting points, because without this common ground it is very hard to move forward. The timetable is for early next year, and we understand this has to be done step by step, but the issue must be resolved at the right stage, at the right time. At this very early stage, the Board needs to find a common ground on the starting points.

The starting point seems to be that focus should be paid to the formula. What is the formula? The formula to calculate the quota. What is the principle for this formula? What is the formula trying to reflect? What is the guidance of the formula? What role should the formula play? What are the weaknesses of the current formula? These kinds of things need to be at least put on the table first. If nothing is wrong with the quota formula, we can go ahead with the old one. If something is wrong with it, we have to correct what is wrong.

The background in most recent years shows that the formula review comes up because the Fund has internal procedures that require a review every few years. On top of that, the Fund has experienced the financial crisis in the last few years, particularly since 2008. That is why this issue has come to the table more frequently. The Fund cannot exist in a vacuum. The Fund is trying to respond to the world, to the global financial economic situation. The Fund tries to be relevant. The starting point is that the Fund has to be relevant for its involvement in achieving its mandate. Meanwhile, the Fund's mandate is evolving, more dynamic, trying to adapt to the current global situation.

I heard various editions of the wording of the legal document. Directors must look beyond that—to the spirit of the document. The Board must reflect on the current global financial and economic situation. One can use different wordings like “relative positions,” “relative weights,” etc. However, in terms of the spirit of the document, Directors must hear more clearly the voice of the dynamic emerging markets, and developing countries. That is a key point. That is very clear.

No matter where it comes from—the G-20, the IMFC, the Board of Governors, even from ourselves—we all agree that it is up to the staff and Directors to find the most appropriate measures to reflect that. Whatever the result will be, the formula should not run against this spirit.

The previous round of quota review correctly went in that direction. That direction should not be reversed. This is the bottom line.

Most Directors agreed that the formula should be simple and transparent. I add that the formula should be supported by timely and high quality data, because this formula has to be calculated based on the most recent information.

No matter what formula is eventually agreed upon, we should decide upon it in the spirit of cooperation, as was the case the previous time. Directors may have different concerns and ideas, but we should continue along this starting point.

There should be some guidelines between the relationship of the formula itself and the quota distribution decisions. These might be the same thing, or different things. There might already be some existing guidelines to starting from the formula, to actual distribution, but we should clarify the procedure once again at this stage.

Finally, unless there is a better measurement, GDP is essential, or at least significant, to reflect the current economic and financial situation. You can measure it in PPP GDP, market GDP, or a blend, which can be discussed. But the bottom line is that the Board will set up the platform to reflect what the world looks like right now.

Mr. Giammarioli made the following statement:

Before coming to my remarks, I would like to make a few preliminary considerations.

The first consideration is that the current formula was a result of a compromise, after a protracted and contentious debate. This occurred when Directors had the luxury of time, because the core business of the Fund was at a very low level. We do not have this luxury, because there are a lot of open fronts. There is also quite a tight schedule to complete this review. This consideration is not meant to underplay the importance of the review, but rather to put the review in the right context.

The second consideration is that the current formula seems to attract much dissatisfaction, but unfortunately this dissatisfaction comes from opposite fronts, making it difficult to move in any direction. In this context, the formula seems to strike a balance among these different positions. There is plenty of scope to improve it, but we do not advocate radical reform.

Given these considerations, we share the pragmatic approach adopted by the staff in the circulated paper. In other words, it is right to start from the basic principles, and then assess how the formula can be improved, given multiple constraints.

We reiterate our support for those principles underpinning the formula. However, one should admit that those principles entail trade-offs. For example, simplicity and transparency, principles that Mr. Meyer (UA) underlined, would call for a formula based on just one variable, for example GDP. However, acceptance of the whole membership of the extreme case would entail a formula with 187 or 188 variables. The right balance should be found to define a compact set of variables for the formula.

The most prominent path is to start from the current formula, with its set of variables, and make improvements mainly in three areas.

The first area is the definition of variables, examining the current variables to see if they capture what they are supposed to capture. The second area is to improve on data, as much as possible. The third area is to determine if the current weights are the most appropriate. There is scope for the staff to work on these three main areas in further papers.

Our chair's preliminary assessment is that GDP—in particular GDP at market exchange rate—should be the core of the formula. Openness is also a very important variable. Further efforts should be made in trying to improve the measurement of openness.

Variability is a bit more problematic; this is clear from the paper. More work should be done to determine if the variable actually captures what it is supposed to capture and determine the weight given to this variable.

Mr. Chia made the following statement:

I shall follow the script of a typical Hollywood film. The movie usually starts with an action sequence to set the tone; it was quite exciting

when Mr. Weber started off. And then toward the latter half of the movie, toward the end, there is another major action sequence that is usually very exciting—and we just saw some elements of that. Toward the end, the movie brings down the tone a bit. I am happy to provide some of the anticlimax to this discussion. I shall make two purely technical points.

In our desire to avoid Type 1 errors, maybe even eliminate them—there was a vivid description of this in the example of Pakistan and Luxembourg—two mistakes should be avoided. One mistake is to not give due regard to exceptions that prove the rule. The second, and more important mistake, is to rush head long into Type 2 errors, such as, if we move to an all GDP-blend formula, Pakistan would be half of Saudi Arabia. I wonder if that is the result that would make sense outside the Board.

The second purely technical point is that there are three concepts that various chairs have cited as relevant to the quota formula: GDP, balance of payments (BOP) related concepts, and resources and contribution.

Much has been said about GDP, and the issue already carries the largest weight. In fact, the debate has largely been won by countries that see this as the most important. Indeed, it is the most important factor.

Turning to the issue of BOP, the Fund is not a prudential supervisor. The Fund is a balance of payments supervisor. It supervises the external balance of economies. The openness and variability, the variables, reflect these balance of payments concepts. The staff has highlighted the methodological issues and the respective technical solutions have been identified. This is hampered by data issues, but when the staff reviews this they should be careful not to transform balance of payments concepts into GDP concepts. Value added is a GDP concept. The Fund is a BOP supervisor, BOP concepts must remain relevant to the Fund and to its membership, and therefore to the quotas.

Economic weight is largely manifested through the balance of payments. Consider Southeast Asia. What are the large economies that matter to the region? It is the United States, Japan, and China. Does it matter to Southeast Asian countries that they have large economic activity in their domestic territories? Not really. Their economic weight is manifested in Southeast Asia through U.S. FDI and U.S. trade. In the case of Japan, it is manifested enormously through Japanese FDI. In the case of China, it is manifested increasingly through trade and imports from Southeast Asia. These are gross concepts of BOP.

Underscoring all of this, Directors can debate the relative weights and how much shifts there should be, and which are more important than others. But that discussion has largely been won. It is a matter of the victors pushing the point to the logical conclusion. For that, the relevant consideration is political; we have to be careful to maintain the democratic dividend out of our exercise.

The interest of the large needs to be served. There was some misalignment in the past; this needs to be corrected. A large part of that has been corrected. There can be ongoing correction. However, the needs of the diverse membership must be considered so that we do not step into type two errors, and erode the interests and stake, and affiliation of the larger diverse membership with the Fund.

The Director of the Finance Department (Mr. Tweedie), in response to questions and comments from Executive Directors, made the following statement:⁶

Mr. García-Silva mentioned the issue of market GDP and the impact of exchange rate fluctuations on market GDP.

It is certainly true that if a country has a balance of payments crisis, and its exchange rate declines sharply, that would feed through into the GDP data. In picking up that data for the market GDP component of the quota exercise, it would affect the data used in the quota formula. That can last for several years. That is certainly true and has always been the case.

It was one argument, not the predominant argument, but certainly an argument for PPP-GDP. Obviously, there are also arguments for market GDP. It was a key reason why in 2008 the staff proposed and the Board agreed to move to a three-year moving average for GDP rather than a single year. This does not avoid the problem, because exchange rates can depreciate and stay depreciated for some time. However, it reduces the possibility that in a single year one might have a large temporary movement and its impact through the formula will continue for a long time. The three-year moving average proposal, which was agreed upon, was intended to address that.

At the time, a five-year average was also discussed, as were different combinations, but the judgment was that the three-year average struck a

⁶ Prior to the Board meeting, SEC circulated the staff's additional responses by email. For information, these are included in an annex to these minutes.

balance between the goal of making sure that data capture the latest and current trends, while having some smoothing element.

The staff was asked to confirm if there are substantial data problems with PPP-GDP. I am not sure I am the best person to characterize the data quality of PPP-GDP, but I can give a general assessment—and this was discussed in Box 3 of the paper. In the past, data quality has certainly been a major issue with PPP-GDP. There was a very large exercise that was undertaken in 2005 to improve the data, which was coordinated by the World Bank but also involved statistical agencies globally. The International Comparison Program substantially improved the quality of the data, certainly relative to what existed before. That was a sufficient basis for using the data, and that was the judgment that the Board reached at the time. This is not to say that there are no more issues with the PPP-GDP data. There is a new exercise currently underway which will involve further improvements. It is unclear whether that data will be available in time for this quota review, given that it is not expected to be available until the end of 2013. The general expectation from our colleagues in the Statistics Department is that this will represent a further improvement. However, it will not be a dramatic improvement or result in dramatic changes in the way the 2005 exercise did.

However, we do have an established database from that exercise, and we do have data covering most of the membership. There is some gap-filling for a few countries that is done largely in the context of the WEO.

There was a question about the compression factor, and whether the agreement that was reached to maintain compression in the formula was related to the compression element, or to the specific level of compression, which is currently 95. The wording in the Board's report to the Board of Governors was that these elements would be retained for 20 years, and that referred to PPP-GDP and the compression factor. That does not specify a level. Our interpretation has always been that it referred to the compression factor, the existence of compression, not the specific level; similarly for PPP-GDP, it does not refer to a specific weight.

Mr. Nogueira Batista asked what can be done to shorten the long-standing issue of data lags. I am not sure there is much that can be done to improve the process, as long as official data reported to IFS continues to be used. The staff relies on official data that is submitted by members to IFS for the quota database. That data is submitted over a period of time, so the staff has to be sure there is sufficient coverage. There is never complete coverage, but the staff needs sufficient coverage in IFS to move ahead with the data.

Unfortunately, that takes some time. The staff works as quickly as possible after reaching that point. The staff has in recent years applied a data cutoff of January for submissions to the IFS each year. Once the data cutoff is reached, we work with colleagues in the Statistics Department to compile the database, to check for anomalies, to check whether there are gaps, and to fill in the gaps. We then work with colleagues in the area departments to make sure they are comfortable with the data, and then we issue the data as quickly as possible, which typically takes about five or six months. The typical cycle is to cut off the data in January and issue the paper in July.

The only thing that could be done to shorten this procedure would be to use the staff estimates, which was the practice a long time ago. Country desks have estimates of GDP, and other variables that could be used almost on a real time basis. However, these are estimates. They are not submitted by the country authorities and are open to question. I was involved in this exercise many years ago when this database relied purely on the staff estimates. There was significant dispute about the data, and a big advantage of the current approach is that there is data submitted by the authorities and a standard cutoff applied uniformly. This essentially takes the debate about the data out of the exercise and I would caution against using estimated data.

The staff is constantly seeing what it can do to improve data and shorten the lags, and will continue to do so. But it will be difficult to do much in this regard as long as IFS data is relied upon.

Mr. Nogueira Batista also raised a question about the consistency of what the staff listed as the principles with previous discussions. The principles laid out in the paper are consistent with the Board's previous guidance, and I would quote from the Board's resolution on the 2008 reform to the Board of Governors. It said, "In considering the new quota formula, the Board is being guided by the request from the Board of Governors that the new formula provide a simpler and more transparent means of capturing members' relative positions in the global economy. In addition, the Executive Board has taken into account the need for the new formula to be consistent with the multiple roles of quotas, to be feasible to implement statistically, and to produce results that are broadly acceptable to the membership."

Mr. Nogueira Batista suggested that the Board stick to the language in the passage Mr. Tweedie had just read, rather than to the variations seen in the paper and the Main Themes in Grays—particularly if the issue would be addressed in the summing up.

The Director of the Finance Department (Mr. Tweedie), in response to further questions and comments from Executive Directors, made the following additional statement:

The paper has four principles that are consistent with what was discussed. It is summarized in the report to the Board of Governors, and was elaborated in previous papers, but it is the same. As far as the paper is concerned, there was no intention to depart from previous discussions.

Regarding Mr. Nogueira Batista's question in his gray on next steps, the staff needs to digest the views that have been expressed today. There were a number of requests for further work, which the staff will take on board. Some of this will take time. There was a request to continue to work on financial openness, and there were requests to work on ways to capture financial contributions. Some of the issues related to those requests were discussed in the paper. They are complicated requests, and the staff will need to reflect on them. A number of chairs asked the staff to look again at how to improve the variability measure. This is something the staff has looked at in length in the past, as far back as the 2008 reform. The staff updated that work in the 14th Review and now with this paper. I am not overly optimistic that a new magic solution will be found that overcomes the problems that we have identified in the past. The staff will continue to work on it, but it will take some time. We propose to come back to the Board in the period after the Spring Meetings. One possibility is to come back at the same time that we issue the next data update, which will cover the period through 2010. The staff will try to do that as quickly as possible. I cannot promise it will be much earlier than it has been in the past, but the staff is on schedule. The staff would aim for early July.

Mr. Daïri made the following statement:

There is a common view that PPP—and MER-based GDP are converging. If that is the case, is it true for all members or just the largest, most dynamic countries? What happens with the other countries?

If that is the case, why would there be resistance to immediately going to a much higher share of PPP GDP, or even going full PPP GDP? If the Fund was to be forward looking in the quota realignment exercise, the resistance is less understandable.

In addition, many of the problems that are faced in PPP GDP calculations occur in countries with weak statistical systems. Many of these countries are LICs and are already protected under the existing arrangement.

Their quotas will not be affected by the quota calculations, but by a well deserved political protection. I do not see the point of raising the data issue on PPP calculations for these countries. The same is true for calculation of GDP on a more up-to-date basis, as suggested by Mr. Nogueira Batista.

On variability, I would appreciate the staff's elaboration on the G-24 secretariat proposal on the definition of variability.

Mr. Nogueira Batista made the following statement:

The lag is five years between the midpoint of the data we use for GDP—which was 2007 the last time—and the entry into force of the 2010 reform, assuming that it would enter into force by the agreed date. I urge Mr. Tweedie to use his creativity to try to bridge this gap. I hope this gap can be reduced, given the velocity of global change, as mentioned by Mr. Virmani.

Mr. Tweedie explained the improvements in the quality of PPP data in recent years. However there is a serious measurement problem for openness. In 2008 we decided to explore the scope for measurement of openness on a value added rather than a gross basis. Four years later, the staff tells us, again, that this shift to measuring openness on a net basis does not seem feasible in the near term due to continued data availability constraints. I accept that. The staff has informed the Board about this several times. We must take the conclusion that the basic weakness that was pointed out in the 2008 reform is not solvable in the time horizon before us. We must conclude that this variable cannot be used. I ask Mr. Tweedie to confirm that the weakness of openness in that respect is more severe than the weakness of GDP, PPP, and other variables used in the formula.

The Director of the Finance Department (Mr. Tweedie), in response to additional questions and comments from Executive Directors, made the following further statement:

On the last point, from what I understand from colleagues in the Statistics Department, there will not be data on value added any time soon. This is, in some ways, a conceptual issue on which views differ. One of the early arguments that openness should be measured on a value added basis came from the Cooper Group, the external group which looked at the quota formula going back more than 10 years. However, this view has not been accepted by all of the members. There is a view among a significant part of the membership expressed in the grays and in today's discussion, that the

current account data, which clearly exists, are fine for the quota formula. There are different views on this.

Value added has been raised as an alternative way of measuring the balance of payments flows. However, there is not a data issue with the current account data. The question is, does it measure what is intended for the quota formula? That is a different issue than the quality of the data on PPP GDP, which applies in other areas and has applied in the past.

Mr. Nogueira Batista asked whether the fact that a measurement of openness on a value-added basis was not possible any time soon—despite the Board’s request four years earlier that the staff explore the issue—was a strong argument for dropping the use of the variable altogether.

The Chairman remarked that Mr. Nogueira Batista might be jumping to conclusions.

The Director of the Finance Department (Mr. Tweedie) responded that he could only state that the prospects of having value-added data any time soon were basically zero.

The Chairman made the following statement:

I would like to thank Directors for the quality of the discussion. I know that Mr. Virmani would probably think that all of it has been totally irrelevant and Byzantine and would make people laugh outside this room. But for me, who has not been a veteran of these discussions, it has been extremely informative, extremely educational, and of excellent quality, in terms of dissecting the elements of our current formula and examining how they can be improved going forward. I am sure, as Mr. Zhang said, that it is a step in the process and the process will have to continue.

Directors asked about the combined process of the formula review and the quota review. They have different deadlines. The formula review has a deadline of January 2013; the quota review’s deadline is one year later. Let us hope we can do the job. I know some have doubts, but nothing is impossible.

I also note that the staff paper will not be published, contrary to what it says on the cover note. It will be published much later in the process.

Mr. Nogueira Batista asked why the paper would not be published as it contained no market-sensitive information. The Board should provide this record to outside experts to make their own assessments of this issue, as it related to distribution of decision making in the Fund. It was not acceptable that this record should not be released for one year.

Mr. Virmani made the following statement:

Mr. Nogueira Batista has already made my point for me. In the last review, the last few discussions and again in this discussion, I have repeatedly said that if people are so confident of the logic of their views, why are we afraid to publish these papers? Let it be out there in the open. Let people judge. Are we so confident or is it just a political game? Do Directors want to preserve their vote shares and that is all there is? If there is more, let the public judge.

I insist on pointing out my last paragraph. Everything should be put in the open, but at the very least, the paper should be put out. Let those who oppose doing so state very clearly that they disagree with this. Let it not just be by so-called practice. Let people come out, take a stand. Are we afraid to expose our views, logic, and reality to the public? I am constrained from doing this. The rules of the Board dictate that I cannot go out and say what I think or what I said in the Board. I can do it indirectly by not mentioning the Board, but that is not the way to get an agreement.

Let people criticize the logic and the reality of whoever is wrong. I could be criticized, I am open to criticism. The Fund will not move forward, not achieve its goals unless Directors are prepared to do this. If there is to be a stone wall and at the end an implementation of minor changes, that is fine if that is the objective. However, there are two people who say that it should be more transparent.

Mr. Alkholifey supported the decision to not publish the paper at this stage.

Mr. Temmeyer raised the issue of the quality of the data—both on openness and PPP. He preferred that the box on PPP and the ICP program be revised to include a statement that quality issues remain with regard to PPP.

Mr. Pérez-Verdía noted that the staff had drafted a very good paper and that outside observers should see that the Fund was engaged in serious discussions. He supported publishing the paper.

Mr. Mozhin indicated that he was in favor of publication.

Mr. Lischinsky supported the publication of the paper.

The Director of the Finance Department (Mr. Tweedie) noted that publication was an issue for the Board to decide. However, the staff's position was not to publish the paper. It was the practice used in previous exercises—including the 2008 reform and the 14th General Quota Review—to publish all the papers at the end of the process.

Mr. Virmani noted that there was a fundamental difference between a formula review and a quota review. This was different from the normal quota review. The last time that fundamental changes were made, there was a full committee and an outside expert, which was not the case in the current discussions. If the formula was to be changed permanently, it was important to know global opinion.

Mr. Daïri noted that his first preference was to publish the paper. However, if there was opposition to this, there should at least be some efforts on outreach. There should perhaps be consultations with those with a wide diversity of views on the issue as soon as possible.

Mr. Majoro said his preference was to publish the paper. He noted that the staff had prepared this paper without intending to immediately publish it. He asked whether it would have affected the staff's candidness if they knew the paper would be published immediately.

The Chairman made the following statement:

My views very much echo the comment Mr. Majoro just made. Because one works in a circle of insiders, the way in which one drafts a paper and the content that is included are likely to be slightly different from what one wants to release to the outside world.

I would certainly be open to the idea of publication, provided that the staff has a chance to look at the paper with the view that it will be published. Directors have complimented the staff on the quality of their, yet have had reservations on some of the calculations, particularly about PPP GDP—which is understandable and needs to be respected. The least we can do for those that produced the paper, which is complemented by appendices and charts and tables, is to give them a chance to review it before it is published. I do not want to rush into a decision that would eventually compromise the prior review of information that we may think, to give one example, is market sensitive.

That is my humble view. It respects our staff, and also respects the desire that many of us would like outsiders to participate in this debate. That is what I propose.

Mr. Nogueira Batista made the following statement:

If we accept the argument that publication affects candidness, and therefore should be avoided, this would change the whole approach to the transparency policy that the Fund has been following in recent years. Because the same applies to any staff report on countries.

I would caution against going down that route, unless we want to propose an overhaul of the transparency policy.

The staff paper is informative; it does not make proposals. It is rich in information. I submit that the summing up published in isolation is hardly comprehensible without access to the staff paper. Past practice is not a sufficient argument. Past practice can be changed, if we can improve it. I will provide a concrete example of the importance of publication.

There was a Brookings seminar in January, with a number of outside experts interested in Fund issues, mostly from U.S.-based universities and think tanks. One thing that struck me in that debate was that the participants, although specialized in these issues, were completely outdated in terms of information. These experts had a difficult time making an effective contribution because they did not have access to the September paper, which we discussed informally in the Board, and which was not published. People like Mr. Tweedie, Mr. Virmani, and myself—who were participating in that seminar with the knowledge of those papers—had an advantage over the outside experts. This is uncalled for; outside experts need to contribute to this discussion as much as possible.

The Chairman maintained her proposal that the staff have another look at the paper, given that the paper was not prepared with the expectation of immediate publication. However, this would be done strictly in accordance with the policy on transparency.

Mr. Weber noted that he had no objection to the Chairman's proposal.

The Chairman suggested that the paper be revisited in accordance with the transparency policy, and, if needed, be re-circulated to all Board members. That procedure would allow any Board member to voice concerns about data, charts, or figures before publication.

Mr. Virmani agreed to the Chairman's proposal.

Mr. Nogueira Batista cautioned that the Legal Department should be consulted about whether circulating the staff paper to Directors for comment before publication was consistent with the transparency policy. He noted that he had seen enormous resistance on the part of the staff and management to even minor changes in reports to the Board before publication. This resistance was on the basis of defending the staff's autonomy and independence. Mr. Nogueira Batista noted that he did not believe the approach suggested by the Chairman was consistent with the legal structure on publication.

The Chairman noted that the Legal Department would be consulted and that the exact position would be verified.

Ms. O'Dea very much supported publication as the Chairman suggested, noting that it was consistent with the policy.

The following summing up was issued:

Executive Directors welcomed the opportunity to initiate discussions on the quota formula review, which is to be concluded by January 2013. They recalled that the agreement to conduct a comprehensive review of the formula was an integral part of the quota and governance reform agreed in 2010. Directors stressed the importance of agreeing on a quota formula that better reflects members' relative positions in the global economy for future discussions on the 15th General Review of Quotas.

Most Directors agreed that the principles that underpinned the 2008 reform of the quota formula remain broadly relevant for the current review. These are that the formula should be simple and transparent, consistent with the multiple roles of quotas, produce results that are broadly acceptable to the membership, and be feasible to implement statistically based on timely, high quality, and widely available data. A few Directors suggested that these principles be reviewed, and updated as necessary. Directors also highlighted the need to ensure adequate voice and representation for the poorest members. A few urged consideration of a further increase in basic votes to protect the voice of smaller members. A number of Directors considered it important that the quota formula be sufficiently robust in order to minimize the need to rely on ad hoc mechanisms for determining quota shares, and a number viewed the Fund's mandate as a guiding principle in designing the formula. Some Directors noted a decreasing relevance of quotas for access decisions.

Directors generally concurred that GDP is the most comprehensive measure of economic size and should continue to have the largest weight in the quota formula. A number of Directors held the view that this weight should be increased, with a significant minority of the Board favoring a formula with GDP as the only variable. While a few expressed a preference to keep the weight of the GDP variable in the formula unchanged, a few others felt that it should be reduced. A range of views were expressed on the relative importance of market versus PPP GDP in the GDP blend variable. While a number of Directors noted that the current weights reflect a difficult compromise and should not be reopened, others argued in favor of either increasing or reducing the relative weight of PPP GDP. Those supporting a greater role for PPP GDP argued that it better captures the dynamism of emerging market and developing countries and is a more relevant measure of members' weights from the perspective of the Fund's non-financial activities; on the other hand, those supporting a higher weight for GDP at market exchange rates argued that PPP GDP continues to suffer from conceptual and methodological problems.

Many Directors noted that openness is a measure of members' integration into the world economy and should remain an important variable in the quota formula, with a few favoring an increase in its weight. Many of these Directors saw merit in further exploring options for better capturing financial openness, with some also preferring an increase in its weight. Others noted that the existing openness variable overstates members' integration into the global economy and is highly correlated with the GDP variable. They also pointed to data availability constraints and measurement difficulties, which hinder efforts to develop a better measure of openness in the near term. Some of these Directors therefore suggested that the openness variable should be dropped from the quota formula altogether, while a few suggested reducing its weight, and these Directors expressed doubts about the benefits of continuing work on financial openness.

Directors took note of the staff's finding that there is little empirical evidence of a relationship between variability and potential demand for Fund resources. Many saw a case for dropping variability from the quota formula, while a few were of the view that its weight should be significantly reduced in favor of the openness variable. However, others continued to see an important role for variability in the formula, and asked the staff to further explore measures that might better capture members' underlying vulnerability.

Most Directors considered that reserves remain an important indicator of a member's financial strength and ability to contribute to the Fund's

finances, with some calling for an increase in its weight. However, a significant minority of the Board favored dropping reserves from the formula or reducing its weight, noting that this variable does not accurately reflect members' ability or readiness to contribute to the Fund's finances and could also reward excessive reserve accumulation.

Many Directors supported, or could support, further work on the scope for capturing members' financial contributions to the Fund in the quota formula, either instead of, or as a complement to, reserves. A few noted in this regard that the current resource mobilization effort highlights again the importance of members' financial contributions. Other Directors viewed the inclusion of voluntary financial contributions in the formula as inconsistent with the Fund's role as a quota-based institution, with a few considering that such contributions should be taken into account, if at all, outside of the quota formula, as has been done on occasions in the past.

Recognizing the difficult compromise in 2008 on the use of compression to moderate the role of size in the formula and better protect the voice of smaller members and low-income countries, many Directors supported retaining the compression factor, with a number seeing scope for increasing its role. On the other hand, a view was expressed that compression distorts countries' economic weights and thus should be eliminated.

Looking forward, Directors called on the staff to reflect on the views expressed today as it prepares a follow-up paper for discussion in the period after the Spring Meetings. This paper should also report on the results of the next quota data update through end-2010.

APPROVAL: October 11, 2012

JIANHAI LIN
Secretary

Annex

The staff circulated the following written answers, in response to technical and factual questions from Executive Directors, prior to the Executive Board meeting:

1. Could staff elaborate on the outlook for improving country coverage for IIP data?

- The current quota database includes IIP data for 102 members that reported 2009 IIP data to the Statistics Department (STA) for *IFS* by the data submission deadline of end-January 2010. Official coverage is expected to increase in coming years.
- STA is continuing its efforts to increase the number of countries reporting IIP data through its *IIP Pipeline Project*. This is an initiative to assist a subset of countries in compiling IIP statistics, notably those that STA considers could potentially develop such data in the near future.

2. Would a measure of the index of domestic industrial production relative to a country's exports of manufactured goods give an idea of value-added in trade?

- Staff is not aware of a high-quality indicator that could serve to approximate external trade on a value added basis. With respect to the specific question, several difficult issues arise in using domestic industrial production relative to a country's exports of manufactured goods as a proxy for value-added in trade. One of the key issues is that value added is an establishment concept—value added is computed at the level of a firm—while exports and imports are in terms of product categories. Given that establishments generally produce multiple products that are classified in more than one trade category, there is the problem of allocating imported intermediate inputs to each product in order to arrive at their imported content. This is in addition to the problem of allocating the imputed rental cost of assets owned by enterprises, first to their establishments and then to the products of those establishments. Thus in the absence of detailed input-output tables it is very difficult to link domestic industrial production and value added in trade. While there are some data on imported content (some countries—United States, for example—require producers of cars to report the percentage cost of imported content), the coverage of these data on traded products and services is far from universal and many countries do not have the requisite indices.

3. Is there a way to be more proactive and develop a clear work plan that would lay out a process and timeline for closing data gaps in the coming years as it relates to openness and other quota variables?

- The main data gaps in the quota variables currently relate to the openness variable, in particular financial openness and value added in trade. On the former, there has been some progress over time in filling some of the data gaps, and coverage is steadily improving.

- In particular, as noted above, STA has been able to increase the number of countries reporting IIP data through provision of technical assistance and through its IIP Pipeline Project. The timeline for countries that are likely to be able to provide data is difficult to pin down and will depend on countries' institutional and resource constraints.
 - Regarding the measurement of trade openness on a value added basis, data availability constraints continue and there is little prospect that this situation will change soon. Although the new statistical standard, *BPM6*, will introduce changes to the treatment of goods for processing to capture only the explicit fees in the cases where goods do not change ownership, it will take many years before these changes can be fully implemented. Even then, they will not eliminate all cases where trade is double counted.
4. *Can the staff comment on using a cap on reserves? On the one hand, it is logical to expect that the ability and willingness to contribute to the Fund is increasing with the level of reserves, and thus a cap would go opposite to the stated purpose of including reserves in the formula. On the other hand, why is a cap established in one variable but not in others?*
- The idea of capping reserves for the purposes of the quota formula was suggested in the past as a means to avoid rewarding excessive reserves accumulation. As discussed in the Board paper (SM/12/29, 2/10/12), there is no single measure of reserve adequacy that fits all countries, and recent staff work has emphasized the need to take into account country-specific characteristics. As a result, there is no clear benchmark as to what level of reserves can be regarded as “excessive” and it is thus very difficult to design a workable cap for foreign reserves for purposes of the quota formula. Similar conceptual and practical difficulties would arise in considering caps on some other variables as well, given that economic theory provides little guidance as to what would constitute “excessive” levels for these variables.