March 27, 2013
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INTERNATIONAL MONETARY FUND

Minutes of Executive Board Meeting 12/73-1

10:30 a.m., July 19, 2012

1. Quota Formula Review—Data Update and Further Considerations

Documents: SM/12/163 and Correction 1, and Supplement 1, and Supplement 2

Staff: Tweedie, Kumar, and Bassett, FIN

Length: 2 hours, 49 minutes

Executive Board Attendance

C. Lagarde, Chairman

Executive Directors	**Alternate Executive Directors**
M. Majoro (AE)	
K. Assimaidou (AF)	
	P. Garcia-Silva (AG)
C. Legg (AU)	
W. Kiekens (BE)	
P. Nogueira Batista, Jr. (BR)	
T. Zhang (CC)	
	C. Balsa (CE), Temporary
T. Hockin (CO)	
	A. Terracol (FF)
H. Temmeyer (GR)	
A. Virmani (IN)	
	N. Giammarioli (IT), Temporary
M. Furusawa (JA)	
J. Mojarrad (MD)	
	M. Choueiri (MI), Temporary
M. Snel (NE)	
B. Andersen (NO)	
	A. Lushin (RU)
A. Alkholifey (SA)	
D. J. Chia (ST)	
R. Weber (SZ)	
M. Lundsager (UA)	
A. Gibbs (UK)	

J. Lin, Secretary
O. Vongthieres, Summing Up Officer
F. Liu/J. Morco, Board Operations Officers
P. Martin, Verbatim Reporting Officer

Also Present
European Central Bank: G. Pineau. European Department: J. De Vrijer. Finance Department: S. Bassett, M. Fisher, S. Khan, T. Krueger, M. Kumar, S. Prowse, M. Rossi, A. Tweedie. Institute for Capacity Development: X. Li. Middle East and Central Asia Department: J. Dunn. Research Department: J. Ahn. Strategy, Policy, and Review Department: D. Robinson, S. Tiwari. Statistics Department: A. Burgi-Schmelz, P. Cardillo, Q. He, K. Zieschang. Western Hemisphere Department: N. Griffin. Alternate Executive Director: R. Elder (UK), A. Gronn (NO), H. Lee (AU), M. O'Dea (CO), M. Saho (AE), T. Shimoda (JA), P. Sun (CC), Y. Yakusha (NE), N. Yambaye (AF). Senior Advisors to Executive Directors: A. Brunelle-Cote (CO), E. De Leon (ST), K. Eapen (IN), B. Lischinsky (AG), E. Meyer (UA), S. Meyer (GR), A. Ndyeshobola (AE), R. N'Sonde (AF), M. Peter (SZ),

J. Poulain (FF), T. Reeve (UA), J. Rolle (CO), S. Rouai (SA), M. Sidi Bouna (AF), P. Fachada (BR), K. Todani (AE), M. Zaher (MI). Advisors to Executive Directors: S. Alnefaee (SA), Q. Chen (CC), A. Colabella (IT), A. Conceicao (AE), J. Cova (CE), C. de Resende (CO), F. Dlamini-Kunene (AE), C. Fookes (AU), B. Jajko (SZ), E. Kanaris (NE), M. Kapur (IN), S. Keshava (SA), V. Khramov (RU), S. Maherzi (MD), R. Mosch (NE), R. Ngugi (AE), L. Norton (UA), M. Perks (UK), R. Pokharel (ST), E. Ramos-Murillo (CE), I. Rashid (ST), S. Ridzam (ST), A. Rodriguez Alberti (BR), S. Thamnuvong (ST), J. Duperrut (SZ), P. Garcia-Martinez (FF), G. Pedersen (NO).

1. QUOTA FORMULA REVIEW—DATA UPDATE AND FURTHER CONSIDERATIONS

Mr. Nogueira Batista, Mr. Zhang, Mr. Virmani and Mr. Mozhin submitted the following joint statement:

> We thank staff for their diligent efforts to respond to Executive Directors' requests. However, the results of the illustrative calculations are not satisfactory. In particular, the inclusion of financial openness and financial contribution in the quota formula would even reduce the calculated quota shares of emerging market and developing countries. This goes against commitments reached at the IMFC and the G20.
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> The 2010 quota and governance 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 reiterated by the G20 Leaders in their Seoul communiqué. G20 Board members have of course to follow the directions provided by their Leaders. But we call on all IMF members to cooperate so as to facilitate the timely completion of the quota formula review in line with the G20 Leaders' Communiqué in Los Cabos and the IMFC Communiqué in April 2012 and previous guidance received from the G20, the IMFC and the Board of Governors.
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> The proposal to include Financial Openness in the quota formula is based on the highly questionable assumption—especially in light of the current crisis—that more financially open countries may have a greater stake in promoting global economic and financial stability, and would hence deserve higher quota shares. The solutions proposed by staff to correct distortions associated with large international financial centers—a problem that, we recall, already exists in the current openness variable—are neither simple nor transparent. If adopted, financial openness would end up reducing the quota shares of emerging market and developing countries while increasing the quota shares of a few tax havens and countries housing over-developed financial sectors that can be a danger to their own as well as to global macroeconomic and financial stability.
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> The inclusion of Financial Contributions in the quota formula is also extensively discussed by staff. None of the measures of financial contribution presented in the paper is persuasive. As staff observes, in general these measures tend to heavily favor advanced economies and reduce further the

quota share of emerging market and developing countries. We do not support such result, which would go against the commitment to make the Fund more credible, legitimate and representative.

We agree with staff that the shortcomings in the current variability measure and the difficulties in defining a better alternative call for its elimination from the quota formula. Since the link between quotas and access has been resolutely broken in the current crisis, we do not need a variable in the quota formula that would reflect a country's potential demand for IMF resources.

Openness is also a flawed variable. It is unclear what exactly it should reflect in the quota formula since economic size is already captured by the GDP variable, while the concept of "a stake in the global economy" is basically meaningless. Moreover, measured on a gross basis, it entails double or multiple counting. As staff recognized in the March paper, this problem is becoming worse as the share of cross-border trade in global value added increases due to greater vertical integration and trade in intermediate goods. Measuring openness on a value-added basis could mitigate double counting. However, staff has indicated that this is not viable in the near-term because of data availability constraints.

We reaffirm our strong preference for a quota formula based essentially on a compressed GDP blend variable, with a larger weight for GDP PPP. The best indicator of relative weights in the world economy is the share of each country in world GDP. The only way to produce a quota formula that is consistent with the realities of the world economy is to scale-up considerably the weight of GDP in the formula. We remain committed to protecting the voice and representation of the poorest members of the IMF, a principle reiterated in the G20 Leaders' Los Cabos Communiqué.

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

General Comments

As we have repeatedly pointed out, 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.

The recent experience of the global financial crisis and the ongoing sovereign debt crisis in Europe underscore the importance of individual members' capacity to voluntarily provide financial resources to the Fund. Leaving unrepaired this flaw of undervaluing individual members' capacity to make financial contributions to the Fund 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.

While we all agree that the Fund is a quota-based institution, this does not necessarily mean that all Fund activities are financed by quota resources. In fact, given the long time needed to actually increase quota resources and the unpredictability of crises, the actual operation of the Fund's lending activities has nothing but to rely on non-quota borrowed resources. In addition, we should recall the fact that other critically important activities of the Fund, such as the PRGT and technical assistance, are now largely financed by non-quota resources. This reality underscores the need to develop a structure of incentives to encourage member countries to provide financial resources to the Fund.

Moreover, it should be noted that there is also an urgent need to fix the distortion in the current allocation of quotas that have been created by a long history of undervaluing individual members' capacity to make financial contributions to the Fund.

Against this background, we believe that this round of the quota formula review should primarily 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.

As the first step to fix the undervaluation of individual members' capacity to make financial contributions, we strongly welcome today's epoch-making staff paper that presents concrete options toward reflecting individual members' capacity to make financial contributions in the formula.

Financial Contributions

Regarding the specific indicator to be used to measure member countries' capacity to make financial contributions, given the difference between grants and loans, and the differences in size across a variety of forms of financial contributions, as the staff indicates, 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.

Of the five options presented in today's staff paper, we believe that the FCS I would best serve to reflect individual members' capacity to voluntarily make financial contributions to the Fund within the quota formula. At the same time, for the purpose of building a broad consensus, we are prepared to join the discussions on the selection of the specific indicator to be used for the new variable that would reflect financial contributions in a flexible manner.

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).

As has been pointed 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 the double counting of cross-border flows. This is a serious flaw. Variability also suffers from a grave flaw as it is not capturing what it has to capture. Today's staff paper reconfirmed the difficulties in overcoming these problems.

Against this background, we believe that both the variables of openness and variability should be eliminated, and the weight currently assigned to these two variables, i.e. 45 percent, should be transferred to a new variable that will measure the financial contribution capacity of member countries.

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

We thank staff for the data update which, once again, clearly illustrates that the quota formula is dynamic and able to capture countries' changing positions in the world economy. We note that applying the current formula would entail a shift in quota shares of more than 6½ percent from overrepresented countries to underrepresented countries.

We welcome staff's additional technical work and illustrative calculations of the implications of different scenarios which allow for a more informed discussion of the way forward.

GDP

We consider GDP to be a central variable in the quota formula as reflected by its large weight in the current formula. Nonetheless, to ensure that the quota formula fully captures and maintains a balance between the multiple roles of quotas, the weight of GDP should not be increased relative to the weight of openness.

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.

PPP-GDP should be phased out of the GDP blend. 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.

Openness

Economic and financial openness is at the core of the IMF's mandate and should have a more 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 appropriately reflected in the quota formula. Increased weight on financial openness should more comprehensively and correctly reflect a country's openness and its vulnerability to cross-border spillover effects, and in turn its role in the world economy. However, the weight on financial openness should not be increased at the expense of trade openness.

We appreciate the further work done by staff on presenting different options for better capturing financial openness. For any measure of financial openness, we are open to finding a mechanism to deal with countries with international financial centers. Such a mechanism would need to have a strong analytical basis.

Variability

We appreciate staff's analysis on ways to improve the variability variable. We recognize and concur with the difficulties regarding variability, as presented by staff. If the weight on variability is to be reduced, the weight on openness, and especially financial openness, should be increased as this variable also aims to capture countries' vulnerability.

Reserves

Reserves are a sub-optimal indicator of countries' capacity to contribute to the Fund's finances. In addition, the reserves variable can provide potential distortions associated with excess reserve accumulation. Therefore, we appreciate staff's work on ways to include member's actual financial contributions to the IMF in the quota formula, which could replace the reserves variable in the current formula.

Country Classifications

We note that staff continues to assess possible alterations to the formula based on the impact on various country groupings. We recommend that staff discontinues the use of country classifications for quota and governance related issues as such classifications are artificial and are bound to change over time in line with countries' changing positions in the world economy.

Mr. Alkholifey and Mr. Keshava submitted the following statement:

General Comments

We thank staff for the follow-up paper on quota formula review that presents results of updating the quota database through 2010. While our chair continues to have an open mind regarding further improvements in the formula, we also recognize that the current formula is the result of a difficult compromise. In this context, we are pleased to note that the calculated quota share (CQS) of emerging market and developing countries (EMDCs) as a whole has increased further after the data update. Compared with the data used for the 2008 Reform (data through 2005), the aggregate CQS of EMDCs has now risen by 7.7 percentage points. Given these positive trends, the planned data update in mid-2013 for the 15th General Review will most likely result in further gains in the CQS of EMDCs as a whole. We therefore feel that this natural evolution in favor of EMDCs weakens the case for a radical reform of the current quota formula, based on a scaled up weight of GDP.

GDP

We continue to remain concerned about the excessive weight of GDP variable in the current formula, which negatively impacts smaller EMDCs. This aggravates the concentration of voting power, which is against the spirit of quota and governance reform. We would therefore urge a reduction in the weight of GDP variable, which would also provide an opportunity to accommodate inclusion of a measure of members' financial contributions to the Fund and to increase the weight assigned to Reserves while maintaining the weights of Openness and Variability variables. As we underscored in earlier meetings, economic size should not be the main criterion for quota allocations. Some countries with smaller GDP do have systemic importance through their ability to safeguard the global economic and financial system. This is the case with Saudi Arabia, which has been acting responsibly over many decades to bring stability to the global oil market with the objective of safeguarding the global economic system. This role has been demonstrated time and again during various crises, including at the current juncture when an adequate supply of oil has supported global recovery.

Financial Openness

On Financial Openness, additional work presented in the paper does not alleviate concerns about data availability constraints and measurement difficulties. Data on International Investment Position (IIP) were available for only 109 members as of the cut-off date for the latest data update. It has also been acknowledged by staff that other approaches presented in the paper require somewhat arbitrary assumptions and are not totally satisfactory. In addition, we would like to observe that the recent global financial crisis has shown that a disproportionate size of the financial sector as compared to the size of the real sector could aggravate not only a country's own vulnerabilities, but also the stability of the global financial system. Against this background and given that one of the principles underpinning the quota formula, namely, the feasibility to implement the formula based on timely, high quality, and widely available data is unlikely to be met, we do not support an increase in the weight of financial openness beyond what is already captured in the Openness variable.

Variability

On Variability, we note the staff conclusion that it is difficult to design a measure which fits all members, performs well under a wide range of circumstances, and is simple and transparent. Therefore, according to staff, it has proven difficult to identify a superior measure of members' potential demand for Fund resources. Here, we would like to underscore that Variability has always been part of the quota formula in line with the Fund's mandate and we are not convinced by the staff's recommendation to drop it from the formula. We would urge further reflection by staff on possible alternative measures. In this context, we would be interested in hearing from staff if they have looked recently at "Scaling variability to GDP and capping it at some reasonable level" as a potential measure, which would help EMDCs, especially small and poor countries, susceptible to shocks.

A Measure of Financial Contributions in the Formula

We welcome the staff work on possible ways of capturing in the quota formula members' financial contributions to the Fund. We agree with Mr. Furusawa and Mr. Nomura that there is a need to increase the weight of variables that measure a member's capacity to make financial contributions to the Fund, as the recent experience has clearly shown the importance of such contributions by members. We therefore consider that this should remain the focus of quota formula review. However, the staff's approach of covering contributions mainly over the past two decades is somewhat arbitrary and we would urge staff to include pre-NAB contributions in the aggregate measures. We also cannot support two aggregate measures, FCS IV and FCS V, as they treat some members who have contributed on the same footing as other members who have not contributed. We would also urge staff to develop a plan similar to that of the World Bank to encourage future financial contributions through protecting voting shares, as noted in Box 3 on "Alternative Approaches to Capturing Financial Contributions."

Reserves

We are of the view that the existing Reserves variable should continue even if a measure of financial contributions is included in the quota formula. Reserves will continue to provide an indicator of a member's financial strength and ability to support Fund's operations as the level of reserves is the major determinant of inclusion in the Financial Transactions Plan (FTP) of members who are not issuing global reserve currencies. We continue to hold the view 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 strengthens the case that the weight of Reserves variable should be increased in the formula in the interest of enhancing global financial stability. Furthermore, EMDCs as a whole would gain from increasing its weight.

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

We thank the staff for further work on the quota formula review. However, it is difficult to consider that the paper serves well the objective of strengthening the legitimacy of the Fund by giving all members a fair share in the voting power, which entails that the current quota formula review results in a meaningful increase in the quota shares of EMDCs without such an increase coming at the expense of other EMDCs.

We note that no further work has been done to address the substantial shortcomings of the openness variable, including the issues of intra-currency union trade and double counting. Unless its weight is reduced and its definition reviewed, keeping this variable in the quota formula would remain highly distortive.

Moreover, as could be expected, including the highly biased financial openness variable results in higher calculated shares for advanced countries despite staff's efforts to contain this outcome, which runs opposite the objective of enhancing voice and participation of EMDCs. Inclusion of financial openness would reward members that may be putting the international monetary system and the global economy at risk through oversized banking and financial systems by granting them higher quotas. We do not support such an inclusion and, consequently, do not see the need to explore the issue further.

We appreciate staff's efforts to explore ways of further refining variability. While we could go along with the suggestion of dropping this variable from the formula, provided the same applies to openness, including financial openness, it remains that members' vulnerabilities need to be accounted for and we call on staff to explore further ways to address this issue, such as the approach suggested by the G24 Secretariat.

We do not support rewarding financial contribution to the Fund by quota increases as this would come at the expense of countries that may not have the capacity to contribute, including the poorest countries. As the staff notes, the inclusion of financial contributions would heavily favor advanced countries.

The staff's illustrative calculations based on a higher weight for PPP GDP in the formula confirm the key role such a revised variable could play in better capturing the increasing dynamism of EMDCs, which need to be reflected in the new formula along with an appropriate compression factor to reduce the size bias. Moreover, enhancing the voice and participation of the poorest members would be better served by increasing basic votes to their relative level at the inception of the Fund.

Ms. Lundsager, Mr. E. Meyer and Mr. Norton submitted the following statement:

We continue to believe that this review of the quota formula should be based on a complete overhaul of the formula. The new formula should be simple, transparent, linear, and yield calculated quota shares (CQS) that mirror members' relative weights in the global economy. The current formula deviates from this basic principle, yielding arbitrary results. In short, the staff paper reminds us that GDP is the only robust variable in the current formula and that a new formula should be based entirely on GDP.

New Variables

At the request of some Directors, the staff provides an analysis of two potential new variables: financial openness and financial contributions. The staff report, however, documents several problems with both of these. Financial openness suffers from data limitations, requires arbitrary assumptions, and results in excessively large shares for financial centers. The financial contributions variable also would require numerous arbitrary assumptions, including the time horizon and types of contributions to include. In addition, financial contributions are not a proxy for financial strength. Rather, they reflect a policy decision by members, and some members may choose to utilize their financial strength to bolster global stability through channels outside of the IMF. As some have noted, this could be interpreted as yielding an incentive for a country to “buy its way” to a higher quota share. And, this can be a result of policies that lead to excessive accumulation of reserves. Both of these variables also largely reward advanced economies at the expense of emerging markets. This runs counter to the principle endorsed by the IMFC as recently as April 2012 that “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.” On balance, adding such new variables would make the formula even more complex and arbitrary.

Current Variables

The staff documents significant flaws with “variability,” and we support the recommendation that it be dropped from the formula. However the “openness” variable suffers equally from many of the same flaws as variability, as well as some others. We therefore believe there is an equally compelling case for the elimination of openness from the formula. As clearly documented in the staff paper in March, openness is a poor proxy for use of Fund resources. In addition it is highly correlated with GDP, but it is a less robust measure of relative weight, and it double counts cross border flows as it is measured on a gross basis. Furthermore, as it is computed at the national level, it effectively raises the calculated quota share of currency union countries significantly above their GDP weight in the global economy. We have objected to the openness variable for several years, both because it moves us away from our agreed principles, and because its outsized weight magnifies the impact of using gross flows. We have proposed utilizing net data on many occasions but remain disappointed by the staff’s replies that this is not possible. If that is the case, we should simply drop this flawed variable.

The reserves variable is meant to capture financial strength, but this variable serves to reward countries for excess reserve accumulation. This is in direct conflict with the IMF’s core mandate.

The compression factor introduces non-linearity, moving further from a formula that reflects countries’ weights in the global economy. It also reduces the simplicity and transparency of the formula, undermining its legitimacy. At its most basic level, compression raises the quota shares of some already over-represented countries just because they are smaller. This is unjustified as well and should be eliminated as part of this comprehensive review.

Outcome

We urge the staff and Board colleagues to revisit the quota formula from the ground-up. By building a foundation based on clear, transparent, and readily identifiable elements—of which GDP is the strongest and only defensible variable—the quota formula can and should serve as a means to boost the legitimacy of the Fund. A formula based entirely on GDP is the only one that would be fully consistent with the principles endorsed by both the IMFC and G-20 Leaders.

We are disappointed that the staff report did not document the flaws in reserves, compression, and most particularly openness, given the widespread view that has repeatedly been put forward by a large number of Board members that openness suffers many irremediable flaws as discussed above.

Finally, we maintain our good faith commitment to work to reach a decision on a new quota formula by the end of the year, as agreed by the G-20 and the IMF Governors. However, the lack of progress reflected in the staff paper suggests that some may not be prepared to relinquish what clearly are sub-standard variables in the formula. While we will strive to meet the deadline, reaching agreement on a significantly-improved formula remains our primary objective.

Mr. Legg and Mr. Fookes submitted the following statement:

The importance of gaining early agreement on a credible, robust, and broadly accepted quota formula cannot be understated. The IMF's governance arrangements need to respond to change in the global economy if the institution is to remain representative, legitimate and effective. The credibility of the membership's commitment to reform the quota formula to this end requires an effort to resolve outstanding issues on time through an open, transparent, and fair process. A divisive and protracted negotiation will weigh on the organization's perceived legitimacy, detracting from the Fund's effectiveness at a time when we can least afford such an outcome.

The deadlines set by the Board of Governors are rapidly approaching and if negotiations around the 15th Quota Review are to proceed smoothly, and on schedule, there can be no slippage in the January 2013 deadline for concluding this review. The importance of this deadline has only been further heightened by the recently announced bilateral loans that are purposefully structured to provide a time bound form of bridging finance.

While we see merit in starting from a re-examination of 'first principles,' in terms of the multiple role of quotas, it is nonetheless the case that timely progress will require participants to approach discussions pragmatically and in the spirit of compromise. We all know that the current formula was itself the product of difficult and protracted negotiations. Thus, staying on track will require a degree of flexibility from all members. We need a degree of realism about the potential for reaching agreement on radical changes to the existing formula, given little change in either the technical options available to us or the divergence of views on the conceptual issues at the core of the formula. We appreciate the staff's hard work and simulations, and think it important that the membership starts to narrow down consideration to a few key variables. It would be good to get from staff and management a sense of how they see the process from here to bring the review to conclusion. In particular, as the Board remains the final decision making body, it could be useful to consider the specific issues on which we would like the IMFC Deputies to focus in their complementary process.

We continue to support the multiple roles of quota. However, the inherent tensions between the various roles complicate discussions. With this in mind, we should be clear on how governance changes interact with other policy settings. Governance reform is the only mechanism we have to ensure that fast growing emerging markets gain fair representation, and to enhance the legitimacy and effectiveness of the Fund. In contrast, while access to resources remains important, it could potentially be affected through a range of channels notably through program design and the design of access limits. For this reason, a negotiated compromise may require us to look for complementary ways of addressing some issues outside of the formula alone. For example, access for our smaller members is disproportionally affected by some of the reform options—by way of illustration, under some scenarios, Tuvalu's access to finance could fall by as much as 70 percent. In this context, we attach particular importance to the G20 recommendation that we protect the shares of our smallest members, whether we achieve this directly through the formula or through alternative channels. We encourage staff to examine the full range of levers we have available for this purpose.

Turning to the specific questions raised in the paper:

GDP and Possible Options to Simplify the Formula

While we would not necessarily argue for GDP as the sole variable, we continue to see it as the most robust and readily available measure of relative economic weight. Thus, we are open to considering an increase in its weight. While we question the merit of re-opening debate on the appropriate balance between MER and PPP rates in this process, if there were a strong push by others to do so, in the spirit of compromise, we could support a small shift towards PPP based GDP.

Increasing the Weight on Financial Openness

Openness remains relevant to the multiple roles of quota. But, while the current measure is subject to several measurement challenges, it does embody a range of considerations not fully captured by the GDP variable. We accept that the current measure may overemphasize the role of trade, and would be open to exploring options for revisiting how it is defined. Nonetheless, we do not support suggestions that the variable should be removed. Trade provides a member with a stake in a well functioning global economy. Our first preference would be to retain the current weight on openness.

We thank staff for their work on a financial openness variable, which confirms our judgment that neither the data limitations, nor the conceptual issues, have yet been sufficiently resolved to allow us to support inclusion at this time. The new metrics remain subject to data limitations with many smaller members not represented in the dataset. Only 109 of the 188 members currently release this information. Options put forward for addressing the overrepresentation of financial centers would themselves introduce a strong and unacceptable element of arbitrariness into the formula.

Variability

As we have previously indicated, we would support removing variability from the formula, given its very limited value as a predictor of demand for Fund resources. Nevertheless, we would call on staff to examine ancillary options for addressing the genuine needs of those small vulnerable Island states which, as we have already noted, would likely face severe cuts in their access to resources. We would also emphasize that recent doubt has been cast on efficacy of traditional benchmarks for considering smallness and vulnerability, such as PRGT eligibility. For this reason, if we are to consider ‘protection’ for vulnerable countries, this would need to be carefully targeted to benefit the most disaffected nations.

Financial Contributions

The staff's analysis has highlighted the difficulties in recognizing actual contributions to the IMF. Weighting or aggregating contributions is likely to prove contentious as different members contribute to the Fund in a variety of different ways. While a number of members, including three from this constituency, have generously signed up to provide bridging finance to the IMF, these loans remain temporary and are not expected to act as a replacement for quota resource. The question of resource adequacy will be addressed at the time of the 15th Review, and an increase in quota at that time will share the financing burden more equitably across the membership. Certainly, it should also provide a significant dividend for bilateral contributors that have experienced strong growth in recent years.

Some of the members of our constituency support retaining the reserves variable. Reserves are clearly one measure of financial strength. Conceptually, inclusion of the reserves variable—a variable which is subject to considerable discretionary policy control by members in the context of their choice of exchange rate regime—has the potential to distort policy choices and send mixed signals about optimal reserves holdings. In practice, however, such concerns are likely to be overstated. Nonetheless, we see no case for increasing the current small weight given to this variable in the formula.

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

We thank the staff for the updated calculations, its deliberation on the variables and the provision of illustrative calculations. Our discussion should be guided by the 2008 principles according to which the quota formula should be simple and transparent, consistent with the multiple roles of the 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. On that basis and with the Fund's monetary mandate in mind, we comment on the staff's issues for discussion as follows.

GDP

GDP MER is the best variable to capture members' ability to contribute to the Fund and should continue to play a crucial role. It reflects the international market value of resources generated by an economy and also provides a better measure of a member's potentially needed access and its repayment capacity than GDP on a PPP basis. We continue to have reservations as to the latter and emphasize that the current 20 percent weight in the formula is already on the high side. Furthermore, GDP PPP is subject to extensive data and conceptual issues and difficult to align with 2008 principles. Overall, it should be acknowledged that its inclusion in the current formula in 2008 constituted a difficult concession in the understanding it being done on a trial basis only. Against this background, we would see no room to an increase of the PPD GDP share in the blend variable or overall formula; rather the MER share in the GDP blend should be increased. Overall, GDP alone is clearly not sufficient to capture the multiple roles of quotas.

Openness/Variability

Indeed, openness has a very important role in the quota formula as it reflects members' integration in the world economy and is thus central to the Fund mandate, which argues for a stronger role of the openness variable in the quota formula. We caution against illustrative scenarios that completely drop the important openness variable since they would massively undermine the formula's capacity to adequately reflect members' relative role in the world economy. Against the background of the staff's finding regarding the weakness of variability as a measure for the potential financing needs of a country, the case could be made to redistribute the current weight of the variability variable to the openness variable.

We would be generally open towards the idea of including financial openness with a larger weight in the openness variable to account for the increased role of global financial integration. The staff's deliberations on this issue provide a good starting point and merit further consideration. Both approaches proposed by the staff (gap-filled IIP and Investment Income) should be further examined, particularly with a view to conceptual and data issues. However, we would also see a strong rationale to limit the influence of large financial centers in this context to avoid distortions. As the ratio of IIP to GDP can be exorbitantly high compared to the average, capping seems to be the most promising way forward as it would specifically target, unlike compression, extreme outliers.

Reserves/Financial Contributions

The staff observes that 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. If a variable that captures financial contributions to the Fund is considered to complement or replace reserves, the emphasis with regard to financial contributions should lie on bilateral and NAB credit lines to the

GRA as these bear the closest relation to the Fund's mandate and financing structure.

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

We thank the staff for their additional work on reviewing alternatives for the quota formula. We know that it will not be easy to reach a consensus on this difficult and contentious issue. We therefore encourage the staff to persevere and focus on those issues which garner more support. The limited time left should be efficiently used

In this regard, we are of the perception that significant support can be found for outright dropping the variability measure from the quota formula. Although a number of indicators can be used to predict the need for Fund resources, introducing such a procedure into the formula would be at a considerable cost of transparency. Therefore, the discussion should focus on how to redistribute the current weight of variability between the rest of the variables, and whether the weights of the rest of the variables could be reviewed.

Gross Domestic Product

GDP is the most important and relevant variable, and the quota formula should ratify this by increasing its share in the formula, both GDP at market prices and Purchasing Power Parity (PPP). Although how to weigh them is a matter of judgment, we have already emphasized that the use of GDP at PPP exchange rates is justified in more dimensions than what the staff has presented in previous work. We continue to believe that the significant sensitivity of market exchange rate measures of GDP to swings in nominal and real exchange rates creates biases against countries undergoing external adjustment. Shifting the weights between PPP and market measures of GDP in the blend, beyond 50-50, could be considered. We also believe that it is important to preserve compression, so as to secure an adequate representation for medium and low-income countries.

Trade and Financial Openness

We understand the case for including openness (both trade and financial) in the formula. The Fund's governance should not be indifferent from an integrated world and one which is composed of autarkic economies. Striking the right balance between this principle, while avoiding overrepresentation of financial centers and economies within a currency union, is difficult however. Moreover, the Fund has recently acknowledged that certain limits to financial integration could be warranted, in country specific circumstances, to preempt financial instability and provide correct incentives. This criterion should be considered when discussing the introduction of financial openness in the formula. The staff's presentation of caps, or specific compression factors, is a correct step in this direction, and we encourage further work in this area. In particular, this could be applied also to trade openness. Given data limitations, it appears that investment income is a more transparent variable, and avoids the required "gap filling" of IIP data.

However, we still miss further work on broad measures of value-added rather than gross basis for trade flows, as well as the impact of a currency union in cross-border financial flows. Indeed, as highlighted by the G24, measured by openness Europe's weight is more than three times that of the United States, which reflects increased European integration and not a greater role in the world economy. Although data limitations would preclude precise calculations, we wonder if rough measures could be used to get a sense of the degree to which these data issues bias the measurement of openness. These rough estimates could then be used for the distribution of quotas to specific currency unions. Comments from the staff would be welcome.

Financial Contributions

We strongly commend the financial contribution of countries, such as Japan and others, showing their disinterested support of the international financial community. However, we continue to believe that, being a quota-based institution, the IMF should not use measures of financial contributions to define the distribution of equity (quotas) between stakeholders. On the one hand, there should be a precise distinction between equity stakes and liabilities. Including the later in the distribution of the former would blur this distinction. On the other hand, as we have emphasized on other occasions, the distribution of quotas is an eminently multilateral process, which strikes a different tone than the (mostly) bilateral discussion between members and the Fund regarding financial contributions. Moreover, the staff should separate between one-time contributions, which do not yield interest such as grants, and borrowing by the Fund, which yields interest and is finally repaid. We do not support, in general, introducing financial contributions explicitly in the formula. However, as Box 2 shows, there is a long tradition for ad-hoc quota increases for countries that that have supported the Fund's liquidity.

Reserves

Regarding reserves, we concur that they are a useful indicator of the financial strength and we support maintaining reserves in the formula.

Mr. Hockin and Mr. Brunelle-Coté submitted the following statement:

We very much welcome this discussion on the quota formula. The well-researched staff paper provides us with a solid basis for making essential progress toward fulfilling the explicit commitment made in several occasions by Governors to come to an agreement on a new quota formula before January 2013. Consensus on a new formula will require flexibility on the part of members and willingness by some to make sacrifices. The final outcome of this exercise should be viewed as a "positive sum game" because the whole membership will benefit from a quota formula that will contribute to enhance the legitimacy and relevancy of the Fund.

While the analysis presented by staff is interesting, we are not convinced that the options presented satisfy the four principles which have been accepted as the basis for the formula review namely, simplicity and transparency; consistency with the multiple roles of quotas; results which are broadly acceptable to members; and feasible statistical implementation. In particular, we think that the options presented by staff fail to address the need to have a simple formula.

One of the clear objectives of this whole review exercise should be on building a simple and transparent formula rather than analyzing the potential impact of the formula on quota shares. While we recognize that the current formula is the product of a long and delicate negotiation, we think that it remains unnecessarily complex and that there would be merit in dropping some variables rather than adding new variables, which make the formula even more complicated. A simpler and more transparent formula would provide the objective criterion to establish the quota scale and facilitate the automaticity of its implementation, thus avoiding protracted negotiations to determine the scale, as it has been the case since 2008. With these general comments in mind, let us turn to some specific comments on each of the variables currently under consideration.

On the weight and composition of the GDP variable, the staff paper did not alter our views on this issue. We continue to believe that GDP should play a predominant role. More specifically, we are of the view that GDP deserves a greater weight in the formula because of its simplicity, transparency, reflection of members` relative positions in the world economy, and feasibility to implement. As we stated before, we think that GDP valued at market exchange rates is the most relevant measure to the functioning of the Fund because international lending and borrowing is valued at market exchange rates. That said, we recognize that the current blend was the result of a long and difficult compromise and we do not see a lot of advantages in reopening this debate.

We continue to see openness as the second most important variable. The inclusion of openness in the formula is fully consistent with the Fund's mandate as set out in the Articles of Agreement, which put an emphasis on the role of the Fund in the facilitation of expansion and balanced growth of trade. On the composition of this openness variable, we would like to first thank the staff for their detailed technical work on financial openness. The staff's work on financial openness is promising, especially with respect to the gap-filled international investment position (IIP) measure. However, as noted in the paper, important data and methodological issues, such as how to deal with large financial centers, remain unresolved. The options presented in the paper to dampen the impact of large financial centers are unsatisfactory as there appears to be some perverse results for small open economies with financial sectors. A solid analytical underpinning is needed and in this regard the treatment of financial openness in terms of its transformation is not consistent with the treatment of other variables. Moreover, the inclusion of financial openness, in the form envisaged by the staff in their paper, raises important questions about the impact such an inclusion would have on the simplicity of the formula, especially if some statistical techniques need to be applied to deal with the specific case of international financial centers. This is an important concern that needs to be taken into consideration when discussing the possibility of modifying the current openness variable, which is relatively simple, by adding more weight to financial openness.

On variability, we wish to thank the staff for their efforts to explore how to best incorporate a variable that would better reflect a member's potential need for Fund resources. The staff's work shows that important questions remain around the stability of the measure, even when a range of different measures of dispersion are taken into account. Also, while intellectually attractive, the possible addition of a composite indicator that would better capture vulnerabilities is fraught with difficulties. We also note that the addition of such an indicator would add to the complexity of the formula, which would go against the commitment made by IMFC Governors to agree on a "simple and transparent" formula. While our chair has pushed for work on this variable in the past, we recognize that, in light of the evidence presented in the staff paper, it is now time to consider dropping this variable from the formula. The share of this variable in the formula should be allocated to openness.

We still need to be convinced that the inclusion of financial contributions to the formula is a good idea. As we expressed before, rather than contributions driving quota shares, we consider that financial contributions to support the Fund's activities are the responsibility of major shareholders. That said, if a consensus is forming in support of the addition of such a variable, it is our view that such a variable should replace reserves as we continue to be worried about the incentives and signaling effect induced by the inclusion of reserves into the formula. Also, if consideration is given to financial contributions, we should avoid placing higher weight on NAB/bilateral resources and the FTP, as it is the case with the third aggregate measure of financial contributions presented in the staff paper. Other forms of contributions (PRGT loans, PRGT subsidies and TA activities) have real budgetary impact on the members that provide them and, in our view, this reflects a greater willingness to contribute than the provision of temporary loans, which are not necessarily drawn and for which the contributors receive the SDR interest rate.

Finally, as we also mentioned in previous discussions, we cannot ignore the potential impact of formula adjustments on the Fund's smallest members. In that spirit, we encourage the staff to consider whether it would be possible to introduce a floor below which the calculated quota share of the smallest members could not fall under (for example 0.010 percent of the total calculated quota shares). Of course, compression is important but the addition of a floor would safeguard a minimum level of voice for the smallest members.

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

We thank staff for their work on the quota formula review. The analysis, data update and simulations with modified variables form a solid base for a continuing, informed discussion on the quota formula.

The data update with 2010 figures confirms that the current formula leads to outcomes that are in line with the IMFC's repeated statement that the review is 'expected to result in increases in the quota shares of dynamic economies.' The aggregate calculated quota shares of EMDCs have been increasing with more than 1½ percentage points yearly between 2005 and 2010 and there is no reason to assume that this trend will decelerate. The trend is even more impressive for countries like Brazil, China, India and Russia, which may expect to see their calculated quota shares rise with about 50 percent in ten years time.

From this perspective, it is surprising to read the joint statement of Messieurs Mozhin, Nogueira Batista, Virmani and Zhang who plead in favor of a GDP-only quota formula. Such an abrupt modification of the formula would favor a few dozens of relatively large and closed economies at the detriment of a large number of relatively small and open economies. This is hard to reconcile with both the purpose of the Fund, as prescribed by Article I of the Articles of Agreement, to facilitate the expansion and balanced growth of international trade, and the need to find a compromise on the quota formula that is broadly acceptable to the membership. There is virtue in promoting ownership of the Fund to all members.

Furthermore, we recall that the current formula is a product of intensive deliberations and regarded a difficult though well-considered compromise. Although it may not be impossible to come up with a better formula, it is hard to see how radical deviations from the current formula would be greeted by broader support of the membership than the current formula.

With regard to the specific variables, we reiterate our view that GDP and openness should remain the main variables in the formula. The weight of PPP in GDP should remain small.

Given the raison d'être of the Fund and the great impact of openness on the global economy and financial stability, the openness variable is essential to the formula. The current weight of 30 percent should be considered an absolute minimum. Financial openness in particular is an important indicator of a member's stake in global financial stability and its interconnectedness. Integration in global capital markets is a defining trend with clear stability implications. Furthermore, better capturing financial openness would resonate with the increasing prominent role of the Fund's work in the area of financial stability. With regard to the different options presented in the staff document, increasing the investment income component in openness would be the simplest and most straightforward way to better capture financial openness.

In a different way, variability also seeks to fill an important gap by reflecting the need for dealing with the vulnerability of small open economies for external shocks. Over the past decades, we have seen many countries of our constituency being prone to disruptive volatility in trade balances, with swings of over 10 percentage points of GDP in a matter of a few years. This potential need for Fund's resources deserves to be kept taken into account by the formula.

The weighting of the reserves variable should be small at most. The level of reserves is neither indicative of the ability to finance or need to access the Fund, nor related to members' willingness to contribute to Fund resources. Excessive resource accumulation is one cause of global imbalances and hence should not be rewarded in the formula. The reserves variable could be replaced by voluntary non-quota contributions to the Fund. Although the Fund should remain a quota-based institution, the Fund relies substantially on voluntary contributions. It is helpful to provide the right incentives to do so.

Mr. Majoro submitted the following statement:

Welcome the opportunity to consider data updates and further consideration of the comprehensive review of the quota formula. While we thank staff for the new datasets, like Messrs. Mozhin, Nogueira Batista, Virmani and Zhang, we are disappointed with staff's imbalanced approach to the review process. The amount of resources expended on financial openness and financial contributions does not match the collective ambition to agree on a quota formula that can deliver an equitable representation of all members of the Fund and, thus redress the imbalances in membership representation. To that end, we strongly urge that the Board's work plan retains the balance that is reflective of the objective and intended results of the review of the quota formula.

Quota Formula Review Process

We are aware that the IMFC Deputies' work stream on the quota formula review has been advanced to July 26 and September 11-12. While it is stipulated that the July 26 meeting will build on the discussions of the Executive Board of July 19, it is not immediately clear as to what the Board's inputs into the Deputies' meeting will be and, retroactively, the expected feedback. At our June 13 informal meeting we proposed to compile a matrix of convergences and divergences along the lines of the key issues of the quota formula review. We still think this matrix is the best way to shape the Board's interaction with the IMFC Deputies, and ultimately our IMFC Governors.

Substance of the Quota Formula Review

We want to restate our position that the current quota formula is seriously flawed and should be comprehensively reviewed, enhancing the voice and participation of the poorest members, as per the commitments of the Fund's Governors, the IMFC and G20. Like Messrs. Mozhin, Nogueira Batista, Virmani and Zhang, we urge that the key elements of the 2010 quota and governance agreement, especially, "continuing the dynamic process aimed at enhancing the voice and representation of emerging market and developing countries" guide the work of the Board on the review of the quota formula in an inclusive manner. To that end and like Mr. Assimaidou, we further reiterate that Africa's strong growth and, thus, its steady increase in its share in the global economy over the past decade should qualify the region's economies into the category of dynamic economies. Accordingly, Africa's quota shares and voice should increase proportionate to its growing share in the global economy.

On the quota variables, we are of the view that:

The GDP variable should retain its importance in the quota formula; but the blend should improve in favor of GDP PPP with the target of 30/70 blend; it is in that vein—of increasing the share of GDP PPP in the blend—that we are prepared to consider an increase in the weight of GDP in the formula. We are, however, disappointed with staff's imbalanced simulations of the blend combinations in favor of GDP MER. While staff provides simulations for 70-30, 60-40 and 50-50 blend, they regrettably ignored the 30-70 and 40-60 blend. At our March meeting we expressly requested for the latter simulations to appropriately equip the Board to enable it to reach an informed decision on the review outcome.

On the Variability variable, while we continue to share the not-so positive assessment of the variable as currently defined, we were looking forward to an improved and much less complex measure of variability—in terms of vulnerability to shocks measured in terms of volatility of GDP growth and, thereby, capture the possible demand for resources. We earlier requested staff to also base their analysis on the proposals advanced by the G24 Secretariat on the variability variable. The staff's latest analysis works against the stated objective and outcome of the review—to agree on a simple and transparent quota formula.

The Openness variable—we wish to reiterate that the current measure—on gross basis—remains very distortionary especially the double counting of cross-border flows. In the same tenet, and like Messrs Mozhin, Nogueira Batista, Virmani and Zhang, we are of the view that extending the openness variable to include financial openness will exacerbate the deep flaws inherent in this quota variable. The staff's proposed solutions to correct the distortions—especially those associated with large financial centers—are neither simple nor transparent. In the same tenet, we do not support the inclusion of the financial contributions in the quota formula.

A new variable—Population—as stated in our June 13 meeting, this variable was part of the matrix of variables considered during the 2008 reform process. We propose that the key weaknesses of this variable—the strong bias in favor of EMDCs—be addressed by using an appropriate compression factor. We are aware that adding a new variable may be construed as contradicting the objective of reaching agreement on a simple and transparent quota formula, but we are confident that extensive and high quality data availability for all members would eliminate any perceived technical constraints and, thereby, enhance the transparency of the eventual quota formula.

Towards a Simplified Quota Formula

While we would have preferred a simplified measurement of variability in line with our proposal in paragraph 4 above (bullet 2), in the absence of that simplified measurement and given the high correlation between the four variables, we foresee a quota formula that is significantly streamlined and meets the transparency objectives along the following three options in order of preference: first option is the quota formula with three variables—GDP blend, reserves and population—and the respective compression factors. We could consider supporting this option only with a higher share of GDP PPP in the blend.

Second option is a quota formula with two variables—GDP blend and reserves—and the compression factor. We could also consider supporting this option only with a higher share of GDP PPP in the blend.

Third option is the GDP-blend only quota formula. In light of the measurement challenges and significant correlation of openness and variability to GDP, going forward and in the spirit of a simple and transparent formula, we could consider supporting a GDP only formula with a strong bias in favor of GDP PPP.

Basic Votes

We remain mindful that the quota formula has traditionally served as a guide to quota adjustments. At the same time, and consistent with the broader focus of a comprehensive review of the quota formula and in the spirit of ensuring voice and representation, and like Mr. Mojarrad and Mr. Maherzi, we restate our proposal for an appropriate increase in the proportionate share of basic votes to their relative level at the inception of the Fund as part of the review.

Mr. Fayolle submitted the following statement:

We thank staff for their paper and the useful analysis shedding some interesting lights on the pros and cons of the different current or potential new variables.

At the outset, it is interesting to note that the updated data shows that the current quota formula is allowing a shift in calculated quota shares (CQS) of 7.7 percentage points between advanced economies and EMDCs since 2008. This shift is higher than the actual shift that occurred over the same period in GDP shares (5 percentage points according to the WEO database). The same data project that the weight of EMDCs in world GDP in 2017 (the end of the WEO forecast horizon) will remain below their current CQS based on the current formula (42.5 percent versus a CQS of 43.9 percent). The formula is therefore already offering a significant down-payment on future growth to many faster growing countries, mostly because of the excessive share of PPP-GDP in the GDP blend variable. Including this variable in 2008 was a difficult concession we agreed to in order to reach a compromise.

With this in mind, we agree that there are ways, in line with the mandate and nature of the Fund, to further enhance the current quota formula so that it better reflects the member countries' relative economic positions:

We would support an increase in the weight of GDP at market exchange rate in the GDP Blend, which is the best indicator of a member's economic position in the global economy and ability to financially contribute to the Fund's resources. We will not support any increase in the share of PPP-GDP given its well-known conceptual and methodological problems.

We would support an increase in the weight of the "GDP Blend" and "openness" variables, consistent with the importance of size and interconnectedness to assess a country's position and with the Fund's recent work and analysis. We appreciate the Fund's work on ways to appropriately measure and take into account financial openness in the formula.

We agree that there is a case for dropping the "variability" variable. The staff's analysis shows that it has very little correlation with potential demand for Fund's resources and that there is no credible substitute to the current way of computing it.

We continue to view the "reserves" variable as a wrong incentive and we note that except in a handful of cases, it is not correlated to the capacity to contribute to the Fund's resources. Hence, we could only go along with maintaining this variable in the formula if a new variable measuring financial contribution is added to the formula. We welcome the staff's work on the latter, which highlights that there are no significant challenge to the computation and the inclusion of such a new variable.

Accordingly, we believe that the current set of simulations presented in the paper is too narrow and we strongly encourage staff to offer more simulations based on the above proposals, with different allocation of the share freed by the deletion of the "variability."

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

We thank staff for a paper that presents good analysis and which advances the work that Directors have called for at the last meeting. This chair has previously supported a formula that affirms GDP as the most important variable as it provides a comprehensive measure of economic size, and should correspondingly be accorded the largest weight in the formula. Within the GDP Blend, we had supported a higher weight for PPP GDP as we believe it better captures the real size of an economy and better reflects the growing economic importance of EMDCs. Concurrently, we also advocated a meaningful role for non-GDP variables in the formula, in accordance with the multiple roles of quotas and in keeping with balancing the diverse needs of the Fund's membership.

We do not support an all-GDP formula. A balanced formula with multiple variables serves to preserve the interests and stake of EMDCs in the Fund. Our analysis shows that an all-GDP formula results in EMDCs losing quota share as a whole, even after accounting for the gains of the largest EMDCs. The benefits are concentrated amongst large economies, with more than 1.5 times as many EMDC losers as there are gainers. Regions such as

Africa, Middle East, transition economies and Southeast Asia all suffer considerable losses. As we highlighted at the last informal session on the quota formula review, the democratic dividend of an all-GDP formula is seriously questionable.

We also do not support increasing the weight of financial Openness. Country coverage of financial openness indicators remains partial, and whilst we appreciate staff's attempts to dampen the impact of large financial centers, the approaches are somewhat arbitrary. We also note that inclusion of a financial Openness variable in the formula would result in a shift of quota shares away for EMDCs—with most EMDCs losing shares compared with their CQS, as shown in Table 12. We do not consider this a desirable result.

Further, we are not in favor of incorporating Financial Contributions into the formula. The Fund should remain a quota-based institution. Whilst we recognize the significant contributions of some members to meeting a wide range of the IMF's resource needs, their numbers are small relative to the entire membership base to which the quota formula needs to remain broadly relevant. Financial Contributions may instead feature in ad hoc quota adjustments outside the formula, so as to recognize those members which have made significant contributions to the IMF's fund-raising and other efforts.

As GDP is the most comprehensive measure of economic size, we see scope for some increase in the weight of the GDP Blend variable, whilst maintaining a balanced formula with multiple variables. The shift towards the GDP Blend should be done in a moderate way, as a large move is not in the interests of many EMDCs. Within the blend variable, we would also favor some shift towards PPP GDP as we believe it better captures the real size of an economy and better reflects the growing economic importance of EMDCs.

We agree with staff that there is scope to reduce the weight of Variability, but deem it premature at this stage to eliminate it entirely. The staff has explored alternatives to the current Variability indicator, but has not found one with better predictive power and has suggested that Variability be dropped from the formula. We however feel that whilst the composite variability indicator that staff is working on may not be ready for inclusion in the formula at this stage, it holds some promise of an improved measure of Variability in future. At this time, we would therefore favor retaining Variability in its current form, but with a smaller weight.

We consider Openness and Reserves as remaining relevant for the purposes of the quota formula and see no scope for reducing their weights. Openness is an important indicator of a member's integration into and stake within the global economy, and has bearing on both the ability to make financial contributions to the Fund as well as potential borrowing needs. As for Reserves, it remains relevant as a proxy for members' ability to contribute in the absence of a definitive indicator for actual contributions. Its weight is already small and should not be further eroded.

We support the retention of the Compression factor in the formula and would argue for a modest reduction in its weight (i.e. modest increase in compression). Taking the foregoing paragraphs, we note that a shift in weight from Variability to the GDP Blend, even with a greater share of PPP GDP, results in losses relative to the current CQS for a few EMDC regions including our own. Taking this scenario but slightly decreasing the Compression factor by two or three percentage points helps mitigate the negative impact on small and mid-sized EMDCs of the shift towards the GDP blend, without a large impact on the biggest economies.

In sum, we can agree with some increase in the weight of PPP GDP, redistributing some weight of Variability to the GDP Blend but not eliminating it altogether, and a small decrease in the Compression factor whilst maintaining the weights of Openness and Reserves. In this scenario, we see meaningful gains for the largest EMDCs, slight declines for Advanced Economies, and about four times as many small and mid-sized EMDCs gaining as those losing. We also see gains across all EMDC regions.

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

We welcome staff's efforts and reaffirm that this review should result in a simplified formula that addresses the distortions created by the current formula. In particular, and as detailed below, we believe that it is the extreme values produced by some of the quota variables that are the main source of dissatisfaction with the current formula.

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. We also continue to affirm that changing the current blend mix would distract our focus from other, more promising, compromises.

We appreciate staff's analysis on financial openness variables. In this regard we do not see sufficient consensus for incorporating the proposed variables in their present form.

In the case of Option 1, as highlighted by the document, investment income flows are imperfect substitutes for underlying IIP stocks, given that return rates on similar investments can vary substantially across countries. Furthermore, this same reason becomes a warning argument for their usage to estimate the gap-fill IIP series (Option 2).

Simultaneously, these two options leave unresolved the handling of financial centers unless further complications are introduced to compute the formula. This seems at odds with the argument outlined in paragraph 28 for the case of the variability measure: a "composite variability indicator along the lines discussed above appears difficult to reconcile with the principle of simplicity and transparency." We believe the simplicity criteria and equal treatment should be given to both variables.

Option 2 (IIP series gap-fill) is presented with different options such as compression and capping once the variable is estimated. It is important to note that for this variable estimation data is still missing for around 40 percent of the countries and this poses a challenge for its legitimacy and widespread acceptance. Once more, we would like to see an equal usage of arguments since lack of data is mentioned as an obstacle for improvements in the current variable of openness while not being a restriction for the gap-filling proposal. One example of this is potential proxy measures for trade on a value-added basis.

In light of absence of a direct suggestion for improvement of the current openness variable and some of its shortcomings, we are open to reconsider its weight.

We support staff's inclination to drop variability from the formula and would only advocate that if further analysis is carried out, composite measures of variability should preferably take into account only variables that are not in direct and immediate control of country authorities. It could seem counterintuitive if high levels of debt (which can be highly correlated with a need for Fund's assistance) stemming from budget mismanagement result in higher quota shares through a variability channel.

We welcome the analysis on financial contributions as suggested in the March meeting and would appreciate additional work to refine this measure.

However, we are of the view that the potential variable should take into account a weighted average of members' contributions to account for size differences.

Mr. Sadun, Mr. Giammarioli and Ms. Quaglierini submitted the following statement:

We thank staff for the well-documented paper, which provides a good basis to make progress and complete the quota formula review by January 2013. In this respect, we want to reaffirm our engagement and commitment to this process. We also like to reiterate our support for a quota review aimed at better reflecting the IMF members' relative positions in the world economy, their financial strengths and abilities to contribute usable resources as well as their stake in promoting global economic and financial stability.

We continue to support the four principles which underpinned the 2008 reform of the quota formula: the formula should be simple and transparent, consistent with the multiple role of quotas, result in calculated shares that are broadly acceptable to the membership and be feasible to implement based on timely, high-quality and widely available data.

Openness

Along these lines, we wish to point out that the formula review should be primarily based on both GDP and openness, as the most relevant measures of the relative size of economies and of their integration into the world economy. In addition we believe that openness should play a greater role in the formula. Accordingly, we see merits in increasing its weight.

Financial Openness

As regards financial openness, we appreciate the Fund's work in this area but also acknowledge, as underlined by staff, the challenges related to data issues and to the treatment of international financial centers which require somewhat arbitrary assumptions. On balance, it appears that introducing a measure of financial openness at this stage is rather premature.

GDP

On GDP, we would not favor increasing its relative weight in the formula. In the blend GDP formula, we maintain that market-based GDP should have a predominant role whereas we do not support an increase in the weight assigned to PPP GDP, as this was the outcome of a compromise and accepted only on a trial basis. In any case, we would not support a GDP-only based formula.

Variability

In order to simplify the formula, we concur with staff on the opportunity to drop variability, due to possible measurement errors and source of instability in the calculated quota shares.

Reserves and Financial Contributions

As far as the role of reserves is concerned, we agree on the need to keep it low as reserve levels seem to be only weakly correlated with contribution to Fund's resources. Instead, some direct measures of financial contributions to the Fund appear to be more relevant in the quota formula context.

Mr. Virmani submitted the following statement:

The staff's analysis presented in Quota Formula Review—Data Update and Further Considerations—along with the supplementary information and the statistical appendix—shows the usual hallmark of professional competence through rigorous analysis that staff normally exhibits on such occasions. What concerns us—and leaves a number of unanswered questions in its wake—are the subtle pointers in emphasis, tone and direction arising from the analysis.

The primary inspiration for the present paper seems to be the Board meeting of March 7, 2012, with its focus on the analysis of three issues—financial openness, variability and financial contributions, to the apparent neglect of the overarching objectives with which the comprehensive review of the formula was taken. Thus very little attention has been paid to the IMFC and G20 directions of April 2012 and June 2012 that work should proceed on simple and transparent quota formula that better reflects members' relative positions in the world economy and that any realignment is expected to result in the 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 EMDCs as a whole; and that steps should be taken to protect the voice and representation of the poorest members (IMFC, April 2012-emphasis ours). The elaboration of this message in the G20 Leaders summit declaration at Los Cabos which stated that "the distribution of quotas based on the formula should better reflect the relative weights of IMF members in the world economy, which have changed substantially in view of the strong GDP growth in dynamic emerging markets and developing countries" and emphasized "the importance of protecting the voice and representation of the poorest members" seems to go unheard.

Financial Openness (FO), Variability (Var) and Financial Contributions (FC)

Our views on the above, per se, are conveyed in the joint statement which we have issued together with three other colleagues. In brief, we do not see the need to include FO and FC as new variables in the formula and we support the elimination of Var.[1] Our views on FO and FC from a policy point of view have been given in our gray dated March 7, 2012 particularly in paragraphs 10 and 12. The staff's further analysis regarding measuring the FO and FC has only reinforced our earlier stated position that these do not warrant a place in a new quota formula.

The openness variable has been justified mainly on the grounds of a measure of interconnectedness and the stake of countries in the global economy. Much of the 'interconnectedness' that this measure captures is the interconnectedness of countries within the euro area/European Union. It is not clear, however, whether intra-EU interconnectedness has significant relevance to the rest of the world. To the extent that interconnectedness implies a stake, it only mirrors the European countries stake in the euro and the EU. Thus intra-European 'openness' may be relevant for the ECB or a "European Monetary Fund" but appears to have little relevance to an 'international' institution. The limited relevance for the rest of the world becomes starkly apparent when we compare the share of 'openness' of the EU-27 with that of the United States. The United States's 13.1 percent share of the 'openness' variable is less than one-third of the 41.1 percent share of the EU-27. The argument for 'openness' implies that the EU has more than three times the U.S. stake in, or commitment to, the world economic or monetary system. This defies both reason (logic) and common sense.

We find financial Openness even more problematic. Besides sharing the anomalies and biases of the current openness variable, it has additional problems. The problem of tax havens has already been noted (by definition tax havens imply openness to tax evaders and avoiders). More relevantly, the large financial sectors of the 'financially open' economies are a threat not only

[1] In the case of Var elimination we are assuming that it is not used to undermine the objectives in paragraph 2, by allocating its weight to variables biased in favor of the AEs.

to their own economies and people, but also to the growth and well being of the rest of the world. This has been amply demonstrated by the continuing financial crisis. The inclusion of financial openness in the quota formula would be analogous to appointing financial capitalists (as against real entrepreneurs) as financial regulators. The consequences of regulatory negligence and capture are still being exposed: namely, (a) government bailouts paid for by the general public (a moral hazard); (b) exorbitant profits and salaries attained by exploiting asymmetric information and cozy monopolies, through action bordering on, or crossing into, fraud; (c) Dutch disease, sudden stops and periodic liquidity freezes in the rest of the world (negative externalities). If we have learnt anything about moral hazard, asymmetric information and negative externalities, it is that external risk creating economies, with large open financial sectors, should actually be penalized and not rewarded with quotas.

Financial contribution in an equity based organization must be related to the quota formula, which simultaneously determines vote share and contribution share. Foreign aid is an obligation of the rich countries, accepted by the people of these countries since World War II. Consequently, any reward for rich contributors to subsidy programs for the poorest (e.g. PRGT) must come at the expense of rich non-contributors.[2] Temporary funding, in the form of unsubsidized loans from member governments to the IMF cannot be equated to permanent equity funding and permanent vote share. The rules for temporary funding and its use can be framed to give a greater say in the use of these specified funds to the contributors, without permanently distorting the formula. An alternative, even better solution would be to raise such temporary debt funds directly from global financial markets, in which case the issue is moot.

Simulations

Regarding staff's analysis of FO and FC, we note that even the variables devised to represent FO (e.g. gap-filled IIP), increase the euro currency union/intra-European bias.[3] Similarly, the alternative measures for FC (Table 9) mostly favor a few Advanced Economies (AEs). It is clear that not a single EMDC including oil rich countries gains from FC as compared to

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[2] A transfer of these obligations from the high income to the middle and other low income countries through the quota formula is unacceptable.

[3] The IIP is available for only 109 countries and gives 77.6 percent share to AEs even after compression and capping. The proposal to divide 'openness' into two variables, so as to give even more weight to the capital account part of this variable is positively, brilliantly 'Chanakyan.'

Reserve shares. We do not support staff examining these FO and FC measurement options further.[4]

A disproportionate part of time and effort seems to have gone into examining variables and simulations designed to raise the share of rich countries/AEs to the neglect of variables and simulations to provide voice and representation to the poor countries. This is exhibited, for instance, in the fact that out of a total of 19 simulations in Section IV, 14 (three-fourths) raise the share of AEs/rich countries and only 3 raise the share of the EMDCs. In contrast, there are no simulations designed to give voice and representation to poor developing countries, for instance by simulating either a compressed population variable (suggested by Ralph Bryant), the share of the poor or a weighted poverty ratio (suggested in WP/11/208), or a scaled and capped variability measure (suggested by the G24 Secretariat) and supported in several earlier grays.[5]

Even the single simulation with a marginal increase in weight of GDP-PPP is offset by another simulation with a 70-30 blend. We invite staff clarification on which countries asked for the latter simulation. Genuine evenhandedness would require that the compression and capping used in this staff paper to make technically questionable variables palatable,[6] be also applied to the 'openness' variable to eliminate anomalies (a la Luxemburg), which has been pointed out by several board members for a decade. Perhaps we can even see a simulation with a modified openness variable that favors small open middle income economies, without giving almost half the share (43.3 percent) to Europe (excluding CIS).

Earlier, board members had suggested a re-examination of the practice of averaging, which delays adjustment of CQS to economic changes. In our earlier grey we had made specific suggestions regarding the use of data/averaging (paragraph 7). We are waiting patiently to see a simulation suggesting the application of time and effort to this issue.

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[4] The case for FC is further weakened by the numerous questions that arise from attempts to measure it: (i) what is the logic of starting pre-NAB commitments from 1974 and 1975 oil facilities in contradiction of paragraph 33 stating that focus will be on last 20 years? (ii) why are 'pledges made' being considered under NAB, proposed NBA and PRGT, but not under TA? (iii) is there not a conceptual problem in comparing commitments made under PRGT aimed at a sub-set of membership with that made under NAB, TA and FTP for the entire membership? (iv) what is the logic for weights of 0.3 to NAB/bilateral resources and FTP and 0.2 for PRGT and TA? Does not a long-term program like FTP require a higher weight than recently launched programs like PRGT or NAB?

[5] Another instance of the underlying theme is the fact that a new simulation for the last variable is dismissed summarily (with a reference to the 14th Review) in footnote, while an old 14th Review suggestion of one director regarding financial contribution is given pride of place in Box 3.

[6] Applied to elusive variables that are available for limited countries.

Publication of the Report

Since we expect this analysis to be put in the public domain after the Board discussion, we are constrained to point out another aspect, the stress in favor of the large AEs vis-à-vis large EMDCs. Scattered through the paper, are mentions on the gains to larger EMDCs like China, India or Brazil but we note no references to the gains to large AEs like the United States, Japan, Germany, the United Kingdom and France. Examples of the former are (i) in Section II relating to the 2010 update of CQS, (ii) in a GDP only formula (Table 10 in paragraph 36, Section IV) and (iii) in a simulation with higher weight of GDP-PPP (Table 11, in paragraph 37, Section IV). In contrast, no mention is made where it could have been (as for example in paragraphs 38 and 39), specifically to the gains made by large AEs like the United States, France and the United Kingdom by introduction of financial openness (Tables 12 and 13) or financial contribution. Can this bias in emphasis be addressed before final publication as we feel that for many non-technical or general readers the impressions conveyed can be altogether different?

Conclusion: A Simple Formula

The only conceptually sound measure of the real share of an economy in World GDP is its GDP measured in purchasing power parity prices. Thus, this variable best captures a country's contribution to and its stake in the global economy. It must, therefore, be the core variable in the quota formula, with a dominant weight. It has been clearly shown in numerous simulations that the greater the weight of this variable in the quota formula, the higher the CQS of the low and middle income countries. However, because of the long history of the use of GDP at market prices and as a possible indicator of that part of the IMF's mandate that is not already captured by GDP PPP, the GDP blend has been accepted as a compromise by a plurality of IMF members. It still remains as a potential consensus candidate for the simplest, most transparent (two variable) formula.

Mr. Weber and Mr. Peter submitted the following statement:

We strongly believe that the revised quota formula must continue to be multidimensional to reflect the various functions and activities of the Fund, as mandated by the membership, and capture the multiple roles assigned to quotas. Such a multidimensional formula, including the current one, well serves the interests of a large majority of members. Preserving the voice of this large majority is essential to making the formula broadly acceptable.

Along the same lines, the process of reviewing the current quota formula and any decision on it must be inclusive and take place within the Fund, consistent with the rules-based character of the institution. Broad acceptability and inclusiveness are what ultimately strengthens legitimacy. We are ready to engage in the workstream of the IMFC Deputies with a view to completing this review by January 2013.

The additional data and analysis provided by staff on financial openness and financial contributions, and the options for the inclusion of these two variables, are much welcomed. We consider them as indispensable components in a revised formula. The current formula's largest deficiency—especially highlighted in the global crisis—is its underweighting of members' financial interconnectedness and cross-border financial flows and, thus, also of the relative importance of members from a systemic stability perspective. The global crisis—and even more so the recent efforts to augment IMF resources—have underscored that the Fund depends on members' voluntary financial contributions in various forms to be able to fulfill its mandate and serve its membership. The following comments elaborate on these and other issues raised in the staff paper.

Financial Openness

As just noted, the most important deficiency of the current formula is its insufficient recognition of financial interlinkages and cross-border financial flows. To address this flaw, the openness variable should be constructed as a weighted average of trade and financial openness, with a weight for financial openness of at least 50 percent. In the current formula, financial openness has an implicit weight in the openness variable that is less than 16 percent on average. This implies that the weight of financial openness is on average only about 5 percent of the calculated quota share. A weight of 5 percent is clearly too low to reflect the prominent role that financial interlinkages have played in recent years. Moreover, such a small weight is inconsistent with the evidence that financial openness, rather than trade openness or GDP, has been the key driver of spillovers. This small weight is also not consistent with the emphasis given by the Fund elsewhere to financial openness, notably in the context of the recent reforms of Fund surveillance as well as in the context of the recent decisions about the activation of the NAB and the extraordinary increase in Fund resources.

We agree that the gap-filled international investment position (IIP) would represent a valid alternative to investment income as a measure of financial openness. In any case, a correction to this variable to limit the impact of outliers should be considered cautiously. In either the cap or the compression approach only limited adjustments would seem warranted, such as a compression factor of 0.95 or the cap at the 95th percentile, avoiding unwarranted distortions.

Financial Contributions and Reserves

Financial contributions to the Fund should become an explicit component in the quota formula. We consider that the concrete proposals for an aggregate measure of members' most important voluntary contributions to the Fund are feasible and implementable. We agree with the proposed inclusion of such contributions on a commitment basis. To avoid starting a discussion about the appropriate weights of the various forms of contributions, a simple average like FCS I should be used.

Conceptually, the best way to integrate financial contributions into the formula would be to include them—as a proxy for members' willingness to contribute—alongside reserves as a proxy for members' ability to contribute. The new combined variable could be constructed as a simple average of reserves and financial contributions, with equal weights to avoid undue complexity.

Variability

In light of the shortcomings of this variable, we are ready to consider a reduction of its weight in the formula provided that (i) the weight thus freed up is evenly distributed to the remaining variables and (ii) the openness variable is modified as specified above. The analysis provided by staff points out once more that both the current measure of variability as well as other alternatives have important limitations in achieving the intended objective, namely to capture members' potential need for Fund resources. The weight freed up by reducing that of variability should be evenly redistributed to the remaining variables (rather than by preserving relative weights) in order to avoid unduly expanding the already very large weight accorded to GDP. Such a redistribution of weights could be agreeable, although we see in principle no case for increasing the weight of GDP beyond the current 50 percent.

GDP

The weight of GDP in the formula is already the largest by far. This overemphasis implies that more than enough has been done to ensure that members' relative weights in the global economy are captured in the formula.

Moreover, as we have reiterated on many occasions, the PPP GDP component of the GDP variable should be removed for the reasons we have elaborated upon extensively in our last statement on this issue (GRAY/12/676).

There is a diversity of views on the quota formula review within our mixed-constituency. The emerging market members of our chair support a multidimensional formula in which openness has a significant weight. They express a somewhat higher preference for PPP GDP and a lesser preference for financial openness.

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

We continue to see the quota formula review as one element of the historic 2010 quota and governance reform package. Taken together the elements of this package should ensure that quota reflects the positions of members in the global economy and that the Fund becomes a more effective and representative institution. The United Kingdom is committed to the full and timely implementation of all the elements in the package and we would just reiterate that significant progress is still needed in a number of areas if this is to be achieved.

The evidence from the latest data update supports the view that the current quota formula needs refinement rather than a fundamental overhaul. The calculated quota share (CQS) for EMDCs has increased by 1.4 percent with the 2010 data update, providing yet more evidence that the current formula is already delivering the shift in quota shares towards dynamic EMDCs to reflect their relative positions in the global economy. All told, the CQS of EMDCs has increased by 7.7 percent since 2008 when the current formula was introduced.

The formula review should continue to be underpinned by all four of the agreed principles. The formula should be simple and transparent, but it also needs to be consistent with the multiple roles of quotas, produce results that are broadly acceptable to the membership and be feasible to implement.

For that reason, we remain firmly of the view that both GDP and openness need to remain in the formula. A GDP-only formula would be unacceptable. GDP and openness continue to be the most important variables, capturing both a member's economic size and its level of integration and stake in the global economy. Both these factors need to be reflected to truly capture a member's relative position in the global economy and to capture the multiple roles of quota. We note from the latest data that moving to a

GDP-only formula would still result in a loss of CQS for EMDCs at an aggregate level. This option is not consistent with the agreed principles and would not be in the interests of the broader IMF membership. Could staff provide more granular analysis of the impact of a GDP-only formula on EMDCs and the LICs?

We thank staff for a very good paper. In our view, staff has made some real progress with their analysis and this should now act as a good basis upon which to move the review forward. With regards the analysis of specific variables, we would limit ourselves to the following comments:

GDP

We continue to believe that GDP should be measured at market exchange rates (MER), but in the interests of facilitating a constructive review we do not think the blend agreed in 2008 should be reopened. We remain skeptical of GDP purchasing power parities (PPP)—given that the IMF's international financial interactions take place on the basis of market exchange rates, the relevance of PPP is not at all clear. However, we recognize that the 2008 agreement to trial the MER:PPP blend represented a difficult compromise and we think there would be limited value in reopening the issue now.

Financial Openness

We welcome the progress made by staff in developing options to better reflect financial openness in the formula. This has been a longstanding ambition that precedes the recent crisis, but the crisis has demonstrated the importance of financial linkages and spillovers. These are intrinsically relevant factors in determining a country's relative weight and position in the global economy. The failure to adequately capture financial openness is a key flaw in the current formula and addressing this should be a priority of the current review.

In previous reviews, data issues have prevented this. However, the latest analysis demonstrates that it is possible to develop a robust measure of financial openness and we would encourage staff to continue refining options ahead of our next meeting. The staff's analysis proves that the data limitations with developing a measure of financial openness are not insurmountable. While it is too early to take a definitive view on the relative merits of the two proposed approaches, 'Option 2'—gap-filling IIP data with investment income data—looks particularly promising. As staff note, it is relatively transparent, easy to replicate and will likely involve minimal distortions given that 98.5 percent of the global IIP total is covered by reporting countries. It is clear that a cap of some description will also be required to dampen the impact of international financial centers and focusing on ways to limit the impact of IIP to GDP ratios seems appropriate. More generally, we think the staff approach in the illustrative scenarios of incorporating this new measure into the existing openness variable (on an adjusted 50:50 blend basis with trade openness) looks like a sensible and straightforward approach. We strongly encourage staff to continue developing and refining the various options set out in the report.

Variability

We still think that the quota formula should include a variable that captures members' underlying vulnerabilities and their potential need for Fund resources. In that respect, staff analysis has convincingly shown that the current measure of variability is not performing well. Furthermore, it has also become a significant source of instability in the formula. The staff has explored the potential to improve the existing measure or develop alternatives. Their failure to identify an option that significantly outperforms the current measure demonstrates that capturing the 'likelihood' of needing to use Fund resources is fundamentally a difficult task. That said, we still think that the formula needs to reflect the potential need to use Fund resources in some shape or form. We remain to be convinced that variability should be dropped, but if it was to be removed we would expect an offsetting increase in the weighting of openness to ensure that the formula continues to at least reflect the 'scale' of any potential need for resources. In that scenario, enhancing the current openness variable to better reflect financial linkages would be even more important.

Financial Contributions

We welcome the initial staff work to explore options for a variable that captures 'actual' contributions to IMF resources. Given that reserves are not a particularly good indicator of a member's willingness to contribute to Fund resources, we support the work to develop a measure that captures actual contributions. The five options set out by staff are a good start and we would encourage staff to undertake further work in this area ahead of our next meeting. This work is still in its very early stages and we remain open-minded about how exactly this is delivered, both in terms of how the measure is calculated and on how it is incorporated into the formula, whether as a new stand-alone variable or an augmentation to the existing reserves variable.

Having said that, we do think that any variable should aim to capture the full range of financial contributions that members make to the Fund.

Mr. Assimaidou submitted the following statement:

We welcome this Board discussion on the quota formula reform and thank staff for the data update and further simulations on possible formula variables. As rightly reminded in the main paper, the ongoing quota formula review is an important part of the quota and governance reforms agreed in 2010 and is to be completed by January 2013. As this deadline is approaching fast now, it is crucial to start making significant progress to report to the IMFC by the 2012 Annual Meetings next October.

Important in the current endeavor for a new quota formula are the agreed guiding principles, notably that the formula should be simple and transparent; be consistent with the multiple roles of quotas; result in calculated quota shares that are broadly acceptable to the membership; and be feasible to implement based on timely, high quality and widely available data. The choice of the quota variables, their measurements, their weights in the formula as well as the value of the compression factor—compression agreed for at least the next 20 years—should be decided on the basis of these principles.

In moving ahead with proposing a new quota formula, it is also critical to re-emphasize the widely agreed expected results of the 15th General Review of Quotas which will be based on the new quota formula, that is "any realignment is expected to result in increases in the quota shares of dynamic economies… and hence likely in the share of emerging markets and developing countries as a whole" and " steps shall be taken to protect the voice and representation of the poorest members." Since quota shares and basic votes serve as the main determinants of a member's voting power—and hence voice—ensuring that the voice of the smallest members is protected would require a significant upward adjustment in basic votes. Therefore, like Messrs. Mojarrad and Maherzi, and Mr. Majoro, we strongly advocate for an appropriate increase in the proportionate share of basic votes as part of the agreement on the new quota formula.

Updated Quota Calculations

The increased out-of-lineness noted in paragraph 9 of the main paper further argues in favor of reforming the quota formula which, in spite of improvements achieved under the 2008 quota and voice reform, remains flawed.

We welcome the calculated quota shares based on data updates through 2010. These show the economic dynamism of EMDCs which make important gains (1.4 percentage point) over a year span. In particular, Africa has shown considerable dynamism in recent years which translate into strong economic growth. One should therefore expect that African economies as a whole—in line with other dynamic economies—benefit from an increase in their quota shares that would result from applying the new quota formula in the context of the next (15th) general review of quotas.

The Directions of the Simulations

We appreciate the technical work undertaken by staff in response to requests made by Directors at the March 2012 meeting and June 2012 informal session. Nevertheless, we are puzzled with the imbalanced approach taken in this endeavor. While further work was requested in relation with financial openness, variability and financial contributions as a possible variable for the quota formula, we are surprised that considerable resources have been almost exclusively used for simulations in connection with these three variables, in spite of the fact that there have been consistently diverging views on the relevance or usefulness of these variables for the quota formula.

In our recollection, Directors also requested further technical work on different sequences of dropping variables to test the robustness of results presented in the paper discussed in March; on simulations with a weight of PPP GDP that is larger than the weight of market exchange rate GDP in the GDP blend; on simulations with alternative values of the compression factor (lower than the existing 0.95); etc. We would appreciate staff's comments on these unanswered requests. In any case, like other Directors, we call on a more balanced consideration of all Directors' views.

Variables Simulated in the Current Staff Paper

Openness and Financial Openness

The case for an Openness variable in the quota formula remains ambiguous. Indeed, as evidenced in recent staff analyses, 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. In addition, the measurement of openness remains a challenge due to data constraints as well as the problem of cross-border flow double counting. Therefore, we are in favor of reducing the weight attributed to this variable in the quota formula.

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. While progress has been made in measuring International Investment Position (IPP) with the inclusion of a broader range of assets and liabilities, the country coverage for the IPP remains limited to less than 60 percent of members. The options presented in the paper aimed at addressing this data limitation (gap filled IIP data, use of cross border investment income flows, paragraph 13) as well as the options aimed at dampening the impact of large financial centers (compressed or capped IIP-to-GDP ratio, paragraphs 15 through 18) require arbitrary choices and all fail to pass the test of simplicity and transparency. For all these reasons, we strongly favor leaving financial openness out of the quota formula, maintaining the current measure of 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 resources. We acknowledge however the empirical limitations of the current Variability measure and the proposed alternative measures as evidenced in staff analysis (paragraphs 19 and 26-27). Therefore, we can go along with reducing the weight of Variability in the quota formula.

Financial Contributions

We greatly appreciate the efforts made by members in making voluntary contributions to Fund resources, notably under the Fund liquidity support, SDR trading arrangements, the PRGT, and technical assistance and training. However, including in the quota formula a separate measure of voluntary contributions to the Fund would be inconsistent with the role assigned to quotas. In addition, the "practical way" proposed by staff to include contributions—on a commitment and pledge basis rather than effective contributions—is questionable. Finally, as acknowledged by staff, all proposed financial contribution measures heavily favor advanced economies, which is contrary to the expectations of the review as highlighted above. Therefore, we cannot support such inclusion in the formula but remain open to taking voluntary contributions into account outside the formula for the purpose of providing ad hoc quota increases and/or designing quota protection mechanisms.

Other Variables

We see great merits in the options of simplifying the quota formula, with a strong preference for a formula limited to GDP and Reserves variables and provided that the GDP variable is a 50/50 blend as explained below.

GDP

We continue to share the view that GDP is and should remain the most important quota variable as it is relevant for the various roles of quotas and meets all the guiding principles of simplicity, transparency, data quality and availability. It should maintain a significant weight (at least the current 50 percent) in the formula. Regarding the measurement of GDP variable, we agree that both market exchange rate-based GDP and PPP GDP each bears benefits for the purpose of determining quotas, and both should be part of the variable. Based on this, and given that the current blend represented a difficult compromise and there are still diverging views on the relative importance of market vs. PPP GDP, a balanced 50/50 blend should be the solution of compromise.

Reserves

We share the view that Reserves continues 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 in the March paper that countries that have contributed to Fund's resources well above their existing quota shares are generally countries with relatively large reserves reinforce the relevance of this variable in the quota formula. We therefore favor maintaining the current Reserves variable in the quota formula, with a higher weight than is currently used.

Mr. Kiekens submitted the following statement:

Legitimacy of the Fund and fair representation of its members are critical because of the Fund's central role in global economic governance, of which Fund surveillance and Fund financial assistance are central components.

The staff paper and the update of relevant data should help advance the Board's work on the review of the quota formula.

The staff's calculations clearly show there is no case for a GDP only formula. Such a formula would leave the total quota shares of advanced economies and EMDCs broadly unaffected. However, it would result in a significant shift towards a relatively small group of larger more closed, both advanced and emerging, economies. This would come at the expense of the rest of the membership. It would further concentrate voting power of a limited group of countries that are relatively less integrated in the global economy while weakening voice and representation of the larger group of countries that are more integrated in the world economy. Such developments would be a setback and are unwarranted.

As we have observed during the Board meeting of February 27, 2012, GDP is an economic parameter less relevant for the Fund. Since the Fund's mandate concerns the international monetary and financial relations among its members, which are also relevant for trade relations, it could be argued that GDP could be eliminated from the quota formula. 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 the integration, the more relevant is the functioning of the Fund for a given economy Therefore, parameters that reflect both a country's size and integration with other economies, such as international trade and stocks of transborder financial assets, are far more relevant than annual income.

The current 50 percent weight of GDP in the quota formula should therefore not increase further. On the contrary, there is a strong intellectual case for the weight of this parameter to be reduced, if not eliminated entirely.

Openness is a measure of a country's integration in the world economy. Financial openness is an important element of this as the global financial crisis has shown, and should therefore be taken into account in the formula. Like the staff, we are of the opinion that the International Investment Position (IIP) is a parameter that can be usefully integrated in the quota formula. We agree that a cap at the 95^{th} percentile seems reasonable and should be further explored. We recognize that IIP has the advantage to be a stock variable, while International Income (II) is a flow variable, which could result in a higher fluctuation of the variable.

The staff makes the case for dropping variability. If variability is dropped, its 15 percent weight in the quota formula should be added to the openness factor.

We see no case for increasing the current 5 percent weight of public international reserves.

We support further examining on how to capture members' voluntary financial contributions to the Fund in the formula.

The Turkish authorities would like to stress that the significant flaws in the current quota formula cause EMDCs' underrepresentation in the Fund, when compared with their relative positions in the world economy.

For the Turkish authorities, the main flaws in the formula are an insufficient weight of GDP and shortcomings in the definition and measurement of other variables. For example, the openness variable double counts cross border trade flows when measured on a gross basis, and does not take into account appropriate treatment of intra-currency union flows. With its current calculation, this variable gives unreasonable results. This is especially the case for the countries acting as a commercial hub in their regions. For some small economies, their openness share is three, four, even six times larger than their GDP share. These results significantly distort the calculated quotas and therefore, this variable should be corrected to yield more acceptable results, or its weight should be reduced.

The Turkish authorities disagree with the inclusion of other openness measures, such as financial openness or international investment position. These variables have significant statistical problems associated with them and their inclusion would be distortionary.

The Turkish authorities are of the view that financial contributions by countries are mostly temporary and should not be included in the quota formula. The quota formula should reflect countries' relative positions in the world economy and including financial contributions is not compatible with this principle. Moreover, this will also contradict with another principle that the Fund is a quota-based institution.

In sum, the Turkish authorities are in favor of a significant increase of the weight of GDP in the quota formula, and to increase the weight of GDP, measured in PPP terms, in order to increase the quota share of EMDCs. Market-based GDP is prone to exchange rate fluctuations while PPP-based

GDP is a more robust indicator of countries' relative positions in the world economy.

As we have observed earlier, differences among the membership are also reflected in our mixed constituency. The membership will only be able to reach a satisfactory conclusion if the Board works constructively and with realism towards a balanced outcome that commands the support of the broad membership.

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

We thank staff for their work, and hope that it will provide a sufficient basis to advance the discussion on this subject. While our aim has been to have a transparent and simple quota formula that reflects its multiple objectives, the formula review should result in a fair and equitable representation of all members of the Fund. We note that the functions of quotas have expanded beyond those envisaged by the Article of Agreement, including the setting of Fund staff diversity benchmarks. Our preference is therefore to re-examine the objectives of the formula, to see whether there is scope to reduce its potentially contradictory objectives.

We focus the rest of our comments on the issues that were raised in the paper.

Financial Openness

We agree that financial openness reflects integration in the world economy, and should remain an important variable in the formula. However, neither of the two indicators presented in the paper—cross border financial flows and gap-filled IIP series—are satisfactory for the reasons given by staff. Our preference is therefore not to change the current measurement of openness, and not to increase the weight of openness in the formula.

Variability

The staff paper provides convincing evidence that there is no correlation between the existing variability measures and potential use of Fund resources. While we appreciate the work on potential variability measures, we would be grateful for additional staff analysis on other potentially useful indicators. Specifically, we would be interested in a consideration of the variability of major items in members' balance of payments, such as commodity exports and worker remittances. The G24 has suggested a measure of variability (scaled by GDP and capped at 500 percent of post-Singapore quota shares) that is also worth considering. We do not yet see a strong case for dropping variability from the quota formula.

Financial Contributions

The inclusion of voluntary financial contributions in the quota formula is inconsistent with the Fund's role as a quota-based institution. It is also not consistent with the IMFC guidance for the formula to "better reflect relative positions of IMF members in the world economy."

Besides variability and openness, we are strongly in favor of keeping reserves in the formula without a reduction in the weight of these three variables relative to GDP.

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

The July staff paper on the quota formula review is to a large extent a step backwards. Precious time has been wasted with new variables—financial openness and financial contribution—that benefit mostly the calculated quota shares of advanced economies. This goes against commitments reached at the IMFC and the G20 and defeats the whole purpose of the exercise.

We reiterate that the quota formula review is not starting from a clean slate. To refresh staff's, management's and colleagues' memories, we attach to this statement, as we did in March, the commitments on quotas and quota formula review agreed to by the G20, the IMFC and the Board of Governors since the last review of the quota formula in 2008. The attachment has been updated to include the relevant paragraphs of the communiqués of the G20 ministerial and the IMFC meetings in Washington in April, as well as of the G20 Leaders' Summit in Los Cabos in June.

In our joint statement with the Russian, Indian and Chinese chairs, we reaffirmed our strong preference for a quota formula based essentially on a compressed GDP blend variable with a larger weight for GDP PPP. There is no doubt that GDP is the most robust measure of relative weights in the world economy, "which have changed substantially in view of strong GDP growth in dynamic emerging market and developing countries," as stated in the G20 Leaders' Los Cabos communiqué. GDP is widely understood, transparent and readily available.

We also favor that GDP be measured using more recent data, as proposed in the Indian chair's recent statements. Given the rapid transformation of the world economy, this would allow quota shares to reflect up-to-date relative economic weights.

With advanced economies having a share above 80 percent in staff's calculated measures of financial openness (Table 5), we cannot take seriously any proposal to increase its weight in the quota formula. Time has already been wasted even before the 2008 quota formula agreement in exploring the inclusion of financial openness in the formula, and we fail to understand why this proposal is still on the table. If financial openness were ever to be introduced as a separate variable in the quota formula, staff would have to find a convincing way to measure it. The alternative considered by staff to be "most promising"—the use of the International Investment Position (IIP)—suffers from very insufficient country coverage. The use of IIP increases disproportionately the quota share of a few tax havens and countries with lax regulatory and supervisory frameworks. The alternatives proposed in the report to fill data gaps and address the treatment of large international financial centers are arbitrary, as admitted by staff, and run counter to the commitments of the G20 and the IMFC to agree on a simple and transparent quota formula.

Of course, inclusion of financial openness in the quota formula would be based on the same faulty rationale that is used to justify the presence of the openness variable: the flimsy assumption that countries that are relatively more open to trade and financial flows have a greater stake in international economic and financial stability and deserve, therefore, a higher quota share. This so-called principle is simply meaningless and should be abandoned for good. Why on earth should we assume, for example, that Luxemburg has a greater stake in international stability than Brazil, Saudi Arabia or Turkey? Why should we assume that the United Kingdom has a greater stake in international stability than Japan? Or that the Netherlands has a greater stake than Russia? Luxemburg, the Netherlands and the United Kingdom have considerably larger shares in the openness variable than the countries we have compared them with (see Table A2 of the Statistical Appendix).

Moreover, as the Russian chair noted in recent discussions among the offices of BRICS countries, the current crisis vividly demonstrates that financial openness can have important negative externalities and often leads to debt crises and asset price/credit bubbles. Should we then argue that financially open countries deserve lower quota shares? Needless to say, this whole discussion is completely off the point. Indeed, the discussion of financial openness is diverting attention from the fact that the current openness variable is itself deeply flawed. Its drawbacks could be somewhat lessened if it were possible to measure openness on a value-added rather than a gross basis, as requested by the Executive Board and endorsed by the Board of Governors in 2008. Four years later, staff has informed the Board that measurement on a value-added basis is not possible anytime soon. Thus, there is no alternative but to simply eliminate openness from the quota formula.

The proposal to include financial contributions in the quota formula is another red herring. As staff recognizes, the inclusion of financial contributions would raise a number of issues, including the relevant time frame, the types of contributions and how to aggregate them. Any aggregation would be essentially arbitrary. Moreover, this would also add complexity and opaqueness to the quota formula, again violating G20 and IMFC guidance. Why in the world, we ask, is staff so inclined to deviate from this guidance? And why is management allowing these deviations to prosper?

All the alternative measurements of financial contributions presented in the staff paper, for illustrative purposes, heavily favor advanced economies (Table 9). One reason is that charges, surcharges and fees, historically the main source of income to the Fund, are inexplicably ignored. In any case, we continue to see the inclusion of financial contribution in the quota formula as akin to selling quotas and detrimental to making the Fund more legitimate, credible and representative.

The intractable problems with the current variability measure constitute sufficient reason to exclude it from the quota formula, a proposal already accepted by staff. We are not impressed at all by the options presented in the staff paper for reducing the instability of the current variability measure. Likewise, we see little value in trying to develop new variables aimed at better capturing members' vulnerabilities and potential need for Fund resources.

Finally, we urge staff to update the classification of advanced and emerging market and developing countries used for quota purposes, aligning it with the one used in the World Economic Outlook and other multilateral publications. This would better reflect current economic realities and facilitate communication and transparency.

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, D.C.

"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, G20 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."

April 20 2012, G20 Ministerial, Washington, D.C.

"We will continue to contribute towards a comprehensive review of the IMF quota formula by January 2013 and the completion of the next general review of quotas by January 2014, fulfilling the commitments made in Seoul and Cannes. We reaffirm that the distribution of quotas should better reflect the relative weights of IMF members in the world economy which have changed substantially in view of strong growth in dynamic emerging markets and developing countries."

April 21 2012, IMFC, Washington, D.C.

"We look forward to an agreement, by January 2013, on a simple and transparent quota formula that better reflects members' relative positions in the world economy. We reaffirm our commitment to complete the Fifteenth General Review of Quotas by 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."

June 19 2012, G20 Leaders, Los Cabos

"We are committed to completing the comprehensive review of the quota formula, to address deficiencies and weaknesses in the current quota formula, by January 2013 and to complete the next general review of quotas by January 2014. We agree that the formula should be simple and transparent, consistent with the multiple roles of quotas, result in calculated shares that are broadly acceptable to the membership, and be feasible to implement based on timely, high quality and widely available data. We reaffirm that the distribution of quotas based on the formula should better reflect the relative weights of IMF members in the world economy, which have changed substantially in view of strong GDP growth in dynamic emerging markets and developing countries. We reaffirm the importance of continuing to protect the voice and representation of the poorest members of the IMF. We ask our Finance Ministers and Central Bank Governors to review progress on this issue when they meet in November."

The Chairman made the following statement:

Directors have issued gray statements, and I appreciate that the statements were all direct and frank in setting out Directors' positions. The gray statements represent Directors' respective views, and the issues that matter to Directors and their constituencies. When reading these statements, one can see that there are very different views on the quota formula. We are not yet at the stage where we can bring these different views closer together and clearly identify the path to move this agenda item further, deeper, and more productively.

We need to begin to make some progress soon. The clock is ticking and we have to meet the deadline of January 2013. My sense is that it will require some give and take, and a spirit of compromise. Mr. Hockin put it nicely when he noted that the final outcome of the exercise has to be viewed as a positive sum game. A positive sum game within the parameters of 100 percent will be tough, but that is what we will have to try to achieve.

We all would have much to gain from an institution that would be made more legitimate, because it better represents the constituency of the Fund at large.

I will address one point that was raised in some of the gray statements regarding the next step. Given that time is passing quickly, after we have collected Directors' views and shifts in position in this meeting, I will ask the staff to produce another paper that will be ready when Directors return from the Board recess, or in early September. There can be another formal Board meeting on this issue before the Annual Meetings in Tokyo, so that the Board has another occasion to hammer out differences and attempt to better identify the path forward.

The IMFC chair has also circulated the work plan for the IMFC Deputies and Mr. Chia will share more about that.

Mr. Chia made the following statement:

The letter from the Chair of the Deputies was circulated last week, and the IMFC Deputies will meet via teleconference in the morning of next Thursday, July 26. They will then meet in person on September 11-12 in Europe. The location will be firmed up soon. The purpose of the Deputies' meeting is to continue to give momentum to this important issue, which is relevant to the entire membership. Today's Board meeting will be an important milestone. We hope the IMFC Deputies process will continue to build on that momentum and contribute to a productive Board meeting, which the Managing Director will call in September.

I also call Directors' attention to a good proposal from Mr. Majoro on how to shape the Board's interaction with the Deputies and what input the Board can give to the Deputies so we work collaboratively toward a positive outcome. Mr. Majoro proposed compiling a matrix of divergences and convergences on the key issues of this review. That is a good idea that the Board and the staff can consider.

Mr. Lushin made the following statement:

Because our chair has already expressed its views on the latest staff paper in the joint BRIC statement, we will offer a few observations inspired by Directors' gray statements.

On financial openness, our chair was surprised to find references in some gray statements to the current crisis as evidence that financial openness should be included in the quota formula. The crisis has shown the opposite: financial openness is a major source of vulnerability. For that reason, financially open countries are potentially dangerous for the global economy because they can either generate a crisis or spread it through financial sector contagion. In this context, our chair does not understand why financially open countries should be rewarded with a higher quota. If the Board is serious about properly reflecting financial openness in the quota formula, it must be included with a negative weight.

On openness in general, it is often said that openness reflects a country's integration with the global economy, or a country's stake in the global economy. Although our chair has never understood what this stake is, it has been explained to us that more open countries are more involved in ensuring global economic and financial stability, and work hard to guarantee it. However, one must look at figures and facts.

The combined EU share in the openness variable is 41 percent, which is three times larger than that of the United States and three times larger than that of the BRICs. Following the above logic, Europe should be a major guarantor of stability in the world. This assertion is difficult to reconcile with the devastating crisis now raging in Europe, which may bring the global economy to its knees.

Another argument cited in favor of the openness variable is in reference to Article I of the Fund's Articles of Agreement, which states that one of the purposes of the IMF is to facilitate the expansion and balanced growth of international trade. Nobody questions this purpose. However, it is wrong to link it to a relative share of trade in the economy, as our European colleagues routinely do. The exports-to-GDP ratio of an economy is directly connected to its size, because with a progressively international division of labor, the smaller the economy is, the more it has to trade with the rest of the world. There is absolutely no merit in a small country being more open than a larger one, as there is no merit in being blonde rather than being dark haired. In its current form, openness is a premium for smallness, and not for any specific virtues of countries with a larger trade share.

If one applies common sense to interpreting Article I.2, then a country should be rewarded not for its trade size, but for the openness of its trade regime, for which there are a number of good indicators. Trade regime is a policy instrument that the country authorities can explicitly employ to fulfill the IMF's mandate of facilitating the expansion and growth of international trade. The degree of that trade regime openness would be a fair reflection of the efforts to follow the IMF's mandate specified in Article I.2.

There are two additional well known methodological problems with openness. The first one relates to its measurement. The GDP component in the quota formula, which is more advantageous to the larger economies, is calculated on a net basis. Meanwhile, trade in the openness variable, which benefits smaller economies, is calculated on a gross basis, and includes double or multiple counting.

This puts these two groups of countries in an equal position. The following analogy can be made. Two athletes are competing in the long jump and the results for one are measured in inches and in centimeters for the other, and then the results are compared directly. When the athlete being measured in inches complains that his underperformance is unfair, he is told that science has not yet found a reliable way to convert centimeters into inches, and that he has to live with this. This is the same as the current situation with openness.

The second methodological problem has to do with trade within currency unions, and more specifically in the euro area. This type of trade has more characteristics of domestic rather than international trade. This is especially true today, when the euro area countries have embarked on further rapid economic and political integration. If intra-euro area trade continues to be counted in the openness variable, then the variable should also include trade between the U.S. states or Chinese provinces.

For that reason, our chair requests that the staff update for illustrative purposes the estimates of the overall quota of the EU and the euro area calculated on a single-country basis.

I am spending so much time on openness because it is a distortive variable that gives unjustified advantages to smaller economies, and makes the quota formula produce ridiculous results. It is highly regrettable that some Directors continue to deny the obvious, and even insist on a larger weight for openness in the quota formula, which our chair interprets only as an attempt to stonewall governance reform at the IMF.

I have a few words on reflecting a member’s financial contributions in the quota formula. This idea is wrong, not only because of problems with selecting appropriate types of contributions and their aggregation, but because it may create wrong incentives for members and the IMF itself. Members could be tempted to buy quotas if the other quota variables perform poorly, while the IMF could find it easier to solicit bilateral contributions instead of undertaking the hard work toward increasing its capital through a regular quota review process.

Our chair is particularly perplexed by the proposal from some Directors to replace reserves in the quota formula with financial contributions, on the grounds that the reserves do not reflect a country's capacity to contribute to the IMF's resources. If so, why have so many countries with lush reserves been approached by the Fund in the current round of fundraising for the IMF?

Finally, our chair would like to share our preliminary assessment of the views on the current proposals aggregated across all Board members.

The proposal to increase the weight of financial openness in the quota formula was supported by only eight chairs, mostly Europeans, representing 33.7 percent of the voting power. This work stream should not be pursued further as it evidently lacks the support of the Board. The proposal to drop variability received support from 17 chairs, representing about 75 percent of the voting power. The Board should proceed with that course of action.

The increase of GDP's weight in the formula was supported by 13 chairs, representing 54 percent of votes. Therefore, this should be seriously considered, in particular by shifting the weight from variability to GDP.

In regard to including financial contributions, the Board split about evenly, even though the supporters of this measure are in a slight minority with 11 chairs representing 49.5 percent of votes.

Mr. Virmani made the following statement:

Given the precise mathematical statement of Mr. Lushin, my statement will be a bit light. I have talked about movies in previous statements, and I will start in a similar way by mentioning the film Dr. Jekyll and Mr. Hyde.

Where did I come up with this odd analogy? After attending the G20 technical group discussions a few months ago, I was discouraged by the completely negative attitude of the European representatives present at the discussions. That is Mr. Hyde. Then good progress was made at the Los Cabos Summit and I was uplifted. That is Dr. Jekyll.

After reading Directors' statements, I am back on the other side with Mr. Hyde. I wonder, is there a communication gap somewhere, perhaps between the prime ministerial offices of some countries, and their treasury departments? I have asked European experts at U.S. think tanks in

Washington, D.C. and experts in Europe and they have told me that sometimes there is such a gap.

The discussion so far gives me echoes of the euro crisis. A similar gap seems to exist between the political economy of the euro area and the treasury departments. This echo is the lack of a shared, clear view of the global reality, a lack of understanding or a refusal to understand. The euro area is also lacking a clear professional understanding of a consensus of what needs to be done. The current process deals with each problem, each country, and each crisis one summit at a time. It reflects a narrowness arising from the political economy, not the economics of the problem.

What is the issue in terms of reform at the Fund? Statesmanship is needed on the issue of the quota and quota formula reforms because the world has changed. The world will be completely transformed in the next 10 to 15 years.

I had written several papers on this transformation before I joined the IMF, so I am not raising the question just to prove my point. This is an issue that I have been working on for at least seven years. In one of my papers I showed the structural change of the world economy by averaging the contribution of growth of important economies over the last three decades. These numbers are amazing and worth looking at. This is a message to the treasuries of my European colleagues.

In the decade of 1981 to 1991, the United States represented 21 percent of global economic growth. In the decade of 2001 to 2011, the United States contributed 9.6 percent of global growth. The euro area plus the United Kingdom contributed approximately 21 percent of global growth in 1981 to 1991, more or less the same as the United States. In the latest decade ended in 2011, the euro area and United Kingdom contributed 6.4 percent. Japan accounted for 11 percent of global growth in 1981 to 1991, but contributed only 1 percent in 2001 to 2011.

China contributed a little less than 10 percent of global growth in 1981 to 1991, but represented 30 percent in 2001 to 2011. India contributed 4.4 percent in the first decade and now contributes 10 percent. The rest of the world saw its contribution rise from about 33 percent in 1981 to 1991 to 43 percent in the decade ended 2011.

There is a complete inversion of the contributions. Any reasonable projection will conclude that this is a fundamental structural change in the global economy. How long will the Fund continue to ignore this change?

I have met with many European Directors individually but I cannot get my message through, which is why I am making the statement in the Board for the record. The Fund needs a strategic vision to build the institutions to deal with this coming world. Directors have an opportunity to do this now. When the world has changed, the people who are on top—maybe the Chinese, maybe the Indians—may not listen. That is the plea our chair made the first time the quota reform started. I individually met with Directors and encouraged them to think about building the institutions to deal with this new world. What does that entail? Institutions are about rules, regulations, and governance. Directors need to do that now; it may be too late 10 years from now.

The third element is the actual path. There must be a vision and the Fund must work toward it. It does not happen automatically. I fully agree that the Board must be practical while changing the institutions and rules in this transition to the future world.

However, if there is not a shared understanding, one finds himself in a similar situation as the euro area. There are disagreements over geopolitics and each individual country's interests—there is a German view and a Greek view. A shared view is needed to save the euro, and a similar shared view will be needed in the IMF for the next 20 years.

I will end on a slightly hopeful and lighter note. About six months ago my grandson started speaking. He responded "no" to everything that was asked of him. When I saw him two weeks ago he was responding "yes" to everything we said. In six months he has gone from saying no to everything to saying yes to everything. I hope this is a precursor of what will happen in the Board discussions.

Mr. Andersen made the following statement:

I thank the staff for the hard work they have done on the simulations—including those on financial openness, financial contributions, and variability—and for clearly responding to the conclusions from previous meetings.

The current formula is a result of difficult and protracted negotiations, and it is therefore not surprising that all Directors see room for improvement. At the same time, I note with interest that the current quota formula actually captures the changes in the world economy. Looking at the latest update, there is a shift of close to 7 percent of quotas from overrepresented countries to underrepresented countries compared to the Fourteenth Review. When one compares the latest update to the 2008 reform, the calculated quota share of emerging markets has increased by close to 8 percent—about 1.5 percent of which was due to the emerging market and developing countries (EMDC) as a group.

The world is changing, as Mr. Virmani noted, but this change is captured by the present formula. As noted by Mr. Fayolle, the current formula already offers a significant down payment on future growth to many fast-growing economies. As mentioned by Mr. Gibbs, the latest update supports the view that the current formula needs refinement rather than a fundamental reform.

I will not repeat the points made in our gray statement, but on the issue of openness, our chair's views are much closer to those of Mr. Snel and Mr. Kiekens than the position taken by Mr. Lushin.

I noted from the gray statements that several Directors have stressed the importance of protecting the smallest members of the Fund. Our chair strongly supports the compression element as it ensures a coherent and inclusive IMF. It is clear from the gray statements that the vast majority of Directors do not question the compression element. Many Directors have quoted various parts of previous communiqués and political guidance from the Board of Governors, the G20, and the IMFC. I attach the most value to the guidance the Board receives from our Board of Governors and from the IMFC. I note that sometimes the quotes are made with emphasis on selected parts of the guidance.

Mr. Hockin and several others have cited the four important principles from 2008 that should guide our work. Those principles were also included by G20 Leaders in their statement from the Los Cabos Summit. Those principles include that the formula should result in calculated shares that are broadly acceptable to the membership. This clearly excludes a GDP-only formula as also highlighted by Mr. Chia and other Directors. Broad acceptance is also key to support traction of Fund surveillance, and thereby benefits fully from the milestone in advancing the Fund's surveillance agenda that the Board agreed upon in yesterday's Board meeting.

As noted by Mr. Weber, broad acceptability and inclusiveness are what ultimately strengthens the Fund's legitimacy. It is crucial for the IMF's legitimacy that the formula is the sole basis for future quota realignment.

In conclusion, I thank the staff for the important and comprehensive analytical work. The discussion so far, together with the telling Main Themes in Grays document, shows that there is still some way to go.

Our chair looks forward to engaging in the work stream of the IMFC Deputies to bring us closer to a completion of this review by January 2013. I welcome the Chairman's indication that there will be a further chance to discuss this in the Board shortly after the recess.

Mr. Snel made the following statement:

The discussion should be guided by the 2008 principles, which call for the quota formula to be simple and transparent, consistent with the multiple roles of the quotas, and to produce results that are broadly acceptable to the membership. This last point has been the crucial factor for the position of this chair.

After reading the conflicting positions on every variable in the gray statements, as Mr. Andersen said, there are more diverging views than emerging views, and I am not happy that this is the case. Our chair is not sure that a formula could be devised that would gather more support from the Board than the current formula does. This should not be so troublesome because there are good reasons why a refinement of the current formula should not be feared.

First, the formula itself already works in the right direction. Mr. Andersen, Mr. Virmani, and several Directors' gray statements have noted that the world is changing. Shifts toward emerging market economies take place automatically by using the formula as it is. The growth of these economies tends to be much higher than that of the advanced economies, and their integration in the world economy increases more quickly.

The calculated shares of the EMDCs have been rising, with 1.5 percentage points gained yearly since 2005. The trend for the larger dynamic economies is even more impressive. If one extrapolates the trend in calculated quota shares between 2005 and 2010 forward for another 10 years, Brazil and India's calculated quota shares would rise about 90 percent between 2005 and 2020, and Russia's calculated quota share would rise 70 percent. Even with an unchanged formula, China's calculated quota share will grow by a non-negligible 140 percent in this period. China's absolute quota share will easily surpass the 15 percent mark before 2020. One may conclude that the enhanced voice and representation of the EMDCs comes more quickly than some would have us believe.

Second, the formula should be a stable factor in this organization and should not be used as a political toy. The world has not changed that much since the last quota review, which has unfortunately not been ratified by all members. Why should the wisdom of the previous rounds of the quota formula reviews be completely questioned? The arguments that were valid two years ago are still valid today.

Third, although some chairs seem to aspire to an even a simpler formula for the sake of simplicity itself, our chair does not see the reasoning behind it. Our chair agrees that the formula should be as simple as possible, but certainly not simpler. Directors should keep in mind the purpose of the IMF. Mr. Lushin mentioned Article I, which defines the purpose of the IMF as promoting international monetary cooperation and facilitating the expansion and balanced growth of international trade.

From this perspective, some Directors plead openly for a GDP-only formula. A move in this direction would benefit the more closed economies to the detriment of the open, small economies. That is hard to reconcile with Article I. Moreover, it would induce an unwanted shift in quotas to the larger economies to the detriment of many smaller economies. It would lead to an increase in voting power for the largest countries, only benefiting 51 out of 188 members, as Mr. Fayolle pointed out in his gray statement.

This is an anomaly. Small, open economies would pay for the large, closed economies. I deliberately use the phrase "unwanted shift" because pursuing such an outcome would make it hard to find a new quota reform that would be acceptable by a necessary majority of countries. Proposals that are broadly acceptable to the whole membership are needed.

The IMFC Deputies should play an important guiding role. If the Board is willing to shift toward a compromise, and our chair sees reasonable room for some improvement in the formula which takes into account some of the aspects already mentioned in our gray statement.

For the record, our chair supports the compression factor as protection for the smaller economies; the weight of the GDP variable should not be increased relative to the weight of openness; and the weight of PPP GDP should remain small.

Mr. Furusawa made the following statement:

I am grateful to the staff for presenting the concrete options to capture members' financial contributions in the quota formula. Like Mr. Gibbs, I also believe these options are a good start. Directors all agree that the Fund is a quota-based institution. However, in reality most of the core activities of the Fund now rely on non-quota resources. Mr. Virmani mentioned the importance of the reality of GDP growth. The financial contributions of members should be also reflected in the formula.

I understand the concerns expressed by several Directors that reflecting financial contributions could benefit only advanced economies at the expense of the EMDCs. However, this problem can be resolved by introducing a mechanism that will protect the quota share of EMDCs at the expense of a reduced quota share for advanced economies that make a relatively small financial contribution. Introducing such a mechanism can strengthen the Fund's ability to raise the financial resources, including those of the Poverty Reduction and Growth Trust (PRGT) and technical assistance (TA), which are beneficial for developing economies, without sacrificing the quota share of EMDCs. I encourage the staff to undertake further work to reflect financial contributions in the quota formula, including a mechanism to protect the quota share of EMDCs, and to propose concrete options for the next meeting.

Mr. Nogueira Batista made the following statement:

Our chair issued a joint gray statement with the Russian, Indian, and Chinese chairs, and also an individual gray statement. My observations are in addition to those two documents, and are mostly prompted by reading Directors' gray statements. Mr. Lushin has already made many of the points that I intended to make. I ask Mr. Lushin to circulate his statement to Directors, because it makes many useful points.

I add my voice to his request for a simulation for illustrative purposes of the calculated quota share of the European Union and euro area if they were considered to be a single entity.

This request is related to the widespread perception inside and outside the Fund that the crux of the matter being discussed today is the over-representation of Europe. If the Board does not face up to that, it will not solve the problem of the imbalance in the institution.

I join other Directors in deploring the staff paper's lack of balance. Our chair's individual gray statement asked why the staff is apparently inclined to deviate from guidance received from the G20 and the IMFC, and also why management is allowing this to occur. We have only a few months before the deadline. This is not acceptable.

Why do I say that the staff is deviating from guidance received from the IMFC and the G20? Since 2009, most of the engagement from capitals on this issue—not only on the quota formula issue, but also on the issue of raising Fund resources—has been done fundamentally through the G20. Consequently, most of high-level commitments are G20 commitments. Even if one looks at the IMFC commitments or, for example, the Board of Governors resolution, one fails to understand why the staff is dedicating so much time to work that increases the calculated quota shares of advanced economies, that makes the formula more complex, and to the inclusion of variables—namely financial openness and financial contribution—that are rejected by a large part of this Board. There is no broad acceptance of the inclusion of financial contribution and financial openness. As Mr. Lushin has mentioned, the majority of chairs oppose further work in this area.

I hope this will be precisely reflected in the next steps and in the summing up of today's meeting. If it is not done so, I fear that the point made by Mr. Legg will become reality, that "we will face a divisive and protracted negotiation that will weigh on the organization's perceived legitimacy, detracting from the Fund's effectiveness at a time when we can least afford such an outcome."

Mr. Snel's statement contains an incorrect reference to the proposal made in the statement of the Brazilian, Russian, Indian, and Chinese chairs; he attributes to us the support of a GDP-only formula. This is not true. What we said in our joint gray statement is that we favor a formula essentially based on a GDP blend, with a compression factor, and with an increase in the blend of the weight of PPP GDP. I personally favor retaining reserves with a small weight, and if the staff were to simulate such a proposal, this would show clearly that it would increase the weight of EMDCs as a whole, consistent with our commitments. It is simple and transparent, and could hopefully command broad support.

Mr. Lushin has already said everything that I wanted to say on openness, as did Mr. Virmani in his good individual statement. I have two final points.

Mr. Virmani in his statement repeated a request to which the staff did not respond. The staff is apparently selective in the requests it listens to and the ones it ignores. He requested that the staff explore the possibility of using more recent GDP data in the simulations. To illustrate the lag in the data, in the 2010 reform, the Board agreed to a quota increase that hopefully will be implemented in 2012, based on an average GDP for the period 2006 to 2008. The average lag is at least five years, from 2007 to 2012, assuming it will come into force in 2012.

When the quota increase comes into force, it will be based on GDP data that is largely outdated. I suggest the Board carefully consider the suggestion of Mr. Virmani to move to a GDP variable based on more recent information, perhaps a weighted average of two years, with a larger weight for the latest year.

Finally, I have heard frequent references to the IMFC Deputies. There will be a teleconference call and then the normal Deputies meeting in September. Directors seem to have forgotten another work stream—a G20 working group co-chaired by Australia and Turkey. Perhaps Mr. Legg can add information on that. This G20 working group will be shortly circulating a proposal for a work program in the second half of the year, leading up to the November meeting of the G20 Finance Ministers and Central Bank Governors.

The Chairman noted that the G20 working group had not circulated a work program.

Mr. Zhang made the following statement:

I share the remarks the Chairman made at the opening of this session. She noted that there was a sense of urgency, that time is passing and the clock is ticking. Directors have this major work before them, and they need to address this work. The Board needs to find a solution.

I share many of the views expressed by the Directors who have spoken this morning. Mr. Lushin provided the mathematics and Mr. Virmani provided the philosophy on the view of changing. I share all of that. I would prefer to be on the practical side. In its paper, the staff asks the Board to provide guidance to move forward, and to narrow the options for the review. I invite Directors to find a way to move forward with agreed principles. If we get stuck on the choices of the variables, we will end up with more diverging views than emerging views.

We have to try to move forward. We have to prepare ourselves. As Mr. Hockin said, this is a positive sum game in the sense that once the work is done, the institution gets more credit and becomes more effective. That is a positive thing. Numerically speaking, as Mr. Hockin also pointed out, there is only 100 percent to share, so when one chair increases its share, another's share has to decrease. We have to face that fact.

How should this be done? Fortunately or unfortunately, we have some guidance. As a G20 member, our chair has to implement what the Leaders say. The most recent Los Cabos statement is clear. It reflects the changing world. The share of the EMDCs has to be increased. In practical terms, I urge the staff to look at the choices—whatever the combination of the variables—that will yield the result of increasing the share of the EMDCs. That is our task.

Directors can argue over the combination of variables, or what kind of formula could best capture or achieve that target. However, from the outset, the Board should not consider any combination of variables that yield a lower share for the EMDCs. That is my bottom line.

In terms of narrowing down the options, those options that decrease the share for EMDCs should be passed up. They should not be discussed, as Mr. Nogueira Batista mentioned. He was surprised that the staff provided results that would decrease the share of EMDCs and I share his surprise. As a G20 member, I support moving in the direction provided in the G20 guidance. I feel compelled to do it, and it is the right move for the institution. Like Mr. Virmani argued, it is a changing world.

My suggestion is to narrow down the options, to look at the formula with whatever combination of variables so long as it is simple, and corrects the current deficiencies and weaknesses. Without that, this process cannot move forward.

I hope in the next round of discussions we can come back with options, all of which lead to a positive result for the EMDCs. At that point the Board can decide which one is best based on the principles of addressing the current weakness, being simple and transparent, using credible and updated data, and also giving due consideration for the poorest countries in the Fund.

Mr. Alkholifey made the following statement:

Our chair emphasized that the calculated quota share of EMDCs as a whole has increased further after the data update. Compared with the data used in the 2008 reform, the aggregated calculated quota share for EMDCs has risen by 7.7 percent. Given these positive trends, the planned data update in mid-2013 for the Fifteenth General Review will most likely result in further gains in the calculated share of those countries.

I also note in the staff's responses to technical questions that under a GDP-only formula, using the current blend, over two-thirds of EMDCs would lose share compared with the current quota formula. A broadly similar proportion of low-income countries would also lose share. The natural evolution in favor of EMDCs under the current formula weakens the case for a radical reform based on a scaled up weight for GDP in the formula, which will be detrimental to the interest of an overwhelming number of member countries.

Our chair's gray statement also emphasized the importance of financial contributions in the quota formula. Like Mr. Furusawa and Mr. Nomura, I consider that the current formula undervalues individual members' capacity to provide financial resources to the Fund, and the review should correct this deficiency.

On reserves, our chair continues to hold the view that reserves should be looked at as reinforcing the global safety net, and are a global public good that can be relied upon in exceptional times. The existing reserves variable should continue to play a role in the quota formula, in addition to a major financial contribution.

Finally, our chair supports keeping the compression factor as is.

Mr. Garcia-Silva made the following statement:

After listening to Directors and reading the gray statements, it is easy to be discouraged, and in that sense consensus is not apparent.

I will return to the principles that focus on a formula that is transparent, simpler, and that also commands broad support from the membership. Looking at those criteria, there is some ground for optimism based on the results of the gray statements and the work that the staff has done by compiling all the answers.

Looking at the diverging views, there is one view that is actually not very divergent. There is strong consensus for dropping variability, except for a few Directors. I suggest dropping variability once and for all and focusing the discussion on how to reallocate the weight of that variable within the rest of the variables that are presents in the formula. As Mr. Zhang noted, the Board should look at practical initiatives. Directors have already stated their principles in this matter. It is highly unlikely that we will convince others about our principles, so moving forward on a concrete proposal is the way to go.

Mr. Alkholifey's question, which was answered in the written responses, relates to the third principle of commanding broad support among the membership. The Board should be wary of making changes that end up further concentrating the voting power in the largest economies. That would go against the idea of broad support and would undermine the legitimacy of the Fund's governance. Different choices of variables and different weights can lead to that concentration. We should keep track of how the different alternatives suggested by the staff shift voting power within country groupings. For example, we should keep track of the idea that under a GDP-only formula or other alternatives, two-thirds of EMDCs lose share compared to the current quota formula. This is a striking finding and we should keep track of those calculations.

Regarding openness, there is the risk of throwing out the baby with the bath water. There are two separate issues. One is whether openness is an appropriate variable to include in the formula, and the second is what this implies for currency unions.

Mr. Nogueira Batista asked for some estimates from the staff. Some rough numbers in the staff's responses indicate that the European Union quota would decrease by about 2 percentage points if the intra-currency union trade was excluded.

The figure has been repeated a number of times and used in the previous calculations. It could be updated, but it provides some rough numbers to work from, if one believes that the role of regional arrangements and their implications for intra-currency union trade do not have much to do with the IMF governance. Directors can agree on that. That would be one way of working with the simple, practical alternative, without dropping the principle that openness is important to keep in the formula.

Mr. Majoro made the following statement:

I join Directors in welcoming this formal discussion of the comprehensive review of the quota formula. As I stated at the June 13 informal meeting, our chair is hopeful that today's deliberations will take us a step further toward narrowing down the areas of divergence. Our chair's gray statement pointed out the positions that should guide the work going forward. I will point out a few issues on which Directors' positions must converge, possibly by the end of today's meeting.

Regarding the process, through the IMFC, we agreed to the IMFC Deputies' work stream on the quota formula review. We earlier proposed that this work stream should start at a much later stage in the review process. However, the decision is already made for that work stream to commence on July 26. Like Mr. Weber, Mr. Peter, Mr. Legg, and Mr. Fookes, our chair reiterates the process of reviewing the current quota formula and the ultimate decision on it must remain within the Fund. To that end, and as others like Mr. Legg have emphasized, we need to consider the specific issues on which we would like the IMFC Deputies to focus in their complementary process. Our chair proposes, and also as Mr. Chia suggested, that a table outlining areas of convergence and divergences be produced to serve as a guide to our interaction with the IMFC Deputies.

Our chair expected equal treatment for the additional simulations called for in the March meeting. Our chair had specifically called for simulations on a 40/60 and 30/70 blend as well as the GDP-only simulation relating to these blends. The staff's work has not honored this request, while those requests for work on financial openness and financial contributions have been responded to exhaustively. Like Mr. Virmani, Mr. Hockin, Mr. Kiekens, Mr. Assimaidou, Mr. Weber, and Mr. Peter, our chair strongly believes that evenhandedness and fair representation of the Fund members would underlie the legitimacy and acceptability of the outcome of the work at hand.

To that end, our chair urges that our work and that of the staff on this review remain focused on the overarching objectives for which the comprehensive review of the quota formula was taken.

The key principles governing the ambition to agree on a simple and transparent quota formula are well captured by many Directors in their respective statements. At this stage there are no ambiguities about these principles. That being said, and also as emphasized by Mr. Hockin, Mr. Gibbs, Mr. Mojarrad, Mr. Kiekens, Ms. Lundsager, Mr. Legg, Mr. Virmani, and Mr. Nogueira Batista, our chair would expect the staff's contribution to this work to align to this key principle, and therefore move away from the highly improvised and complex simulations that failed to address the need to have a simple and transparent formula.

The many proposals by Directors for simplifying the quota formula constitute a strong basis for narrowing the options. To that end, I propose that the options at hand could be structured in a pyramid format. The current formula would be the bottom of the pyramid and the GDP-only formula would be the apex of the pyramid. We would then move from the bottom of the pyramid and eliminate variables and then probably end up somewhere in between the bottom of the pyramid and the apex of the pyramid. I hope that is the direction this process would move in.

Directors noted the commitment by members and the G20 Leaders to protect the voice of smaller members, both directly through the quota formula and through other alternative channels. To that end, and like Mr. Mojarrad and Mr. Assimaidou, our chair proposes an increase of basic votes to the relative level at the inception of the Fund, which was about 11 percent. This should be part of the comprehensive review of the quota formula. It is in line with the part of the resolution adopted by Governors in 2010 aimed at enhancing the voice and representation of EMDCs. An increase in basic votes will protect the erosion of voting power for smaller members, thus enhancing their voice and representation. We urge the staff to advance some options for consideration at the next meeting.

Mr. Chia made the following statement:

I agree almost completely with everything Mr. Garcia-Silva said in his remarks, and I agree with practically everything that Mr. Legg said in his gray statement. I am tempted to invite the two gentlemen out for a beer once the Board concludes its discussion on the matter.

I concur with Mr. Legg's point that Directors all agree that timely progress should be made. This would require all chairs to approach the discussions pragmatically and in the spirit of compromise. Implicit in this is the elimination of extreme positions. The ills of the world will not be changed in one or two steps.

The positions of Mr. Garcia-Silva, Mr. Legg, and our chair, were made with broadly similar directional proposals. They are not too ambitious, but they indicate a directional shift. Why the lack of ambition? I suspect it may have to do with the fact that the three of us represent relatively diverse constituencies. We have been forced to come to some compromises already within our constituencies.

We may have run ahead of the Board in trying to reconcile the diverse interests of its membership, which in my constituency are very diverse, and in some sense a microcosm of the membership at large. Our constituency has members that benefit from a GDP-only formula. We have members that benefit from openness. We have members who favor variability. Our constituency has had hard discussions. Our gray statement has made specific directional shifts. In doing so, in the back of our minds has been the recognition that there should be a shift toward the EMDCs.

Second, our chair wants to avoid the outcome of the 2010 process which resulted in a loss for many EMDCs. The result is that our constituency is not looking for any gain in shares. The proposal we have made does not benefit our chair. We are looking to mitigate the fallout of being collateral damage in this process. In the proposal outlined in our gray statement, Singapore loses more than 10 percentage points in calculated quota share. That is Singapore's down payment in the spirit of compromise.

I want to highlight these features of our directional shift. Regarding an increase in the weight of the GDP blend, I counted 12 Directors in favor. There seems to be substantial momentum on that issue. In terms of reducing or eliminating variability, I counted 15 Directors in favor. There is a division between those Directors about where that weight should go. Eleven Directors are in favor of maintaining or increasing the weights of openness. Regarding maintaining the weight of reserves, I counted 11 Directors in favor. Ten Directors are in favor of increasing the weight of PPP GDP. Unfortunately, I seem to be the only Director proposing more compression. I am happy to drop that in the spirit of compromise.

The results are unambitious, but they achieve the directional shifts that we are seeking. This chair hopes that we can make some progress in this discussion.

The Chairman welcomed the spirit of compromise Mr. Chia had displayed in his comments and in his constituency.

Mr. Nogueira Batista appreciated Mr. Chia's gray although he did not agree with many of his points. He asked Mr. Chia to circulate his comments to the Board after the meeting. Mr. Nogueira Batista remarked that he had been at the IMF long enough to know that the "spirit of compromise" was coded language for the status quo.

Mr. Temmeyer made the following statement:

> I fully share the views expressed by Mr. Snel at the beginning of this meeting. He made a convincing case that the current formula is working, and that it reflects the different changes in the world economy. I assume that will happen also in future times. My most important point is about consensus and cooperation. Consensus and cooperation is needed to move ahead and also to come to a solution that is broadly acceptable for the broader membership.
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> There will be no consensus if the formula does not maintain the strong weight of both GDP at market exchange rates and openness as the most important variables. This implies that if variability will be used or dropped, its weight has to be shifted to openness to retain this appropriate balance.
>
> I have a few comments on openness. There is a close link between openness and the IMF mandate. The IMF has focused in recent years on international spillovers, on interconnectedness, and on cross-border issues. Dropping this variable or reducing its weight would be inconsistent with the Fund's work and mandate.
>
> By contrast, pursuing extreme solutions will not be a constructive way forward. With regard to a GDP-only formula, the staff's analysis indicates that almost every Fund member, except the 20 biggest members, would lose share in a potential GDP-only formula. There is no convincing case for going further in that direction. This applies also to other options, such as dropping openness, including population in the formula, or increasing the PPP GDP weight. In this regard, I share the views just mentioned and am happy to speak after Mr. Chia, who made a constructive statement. The Board should consider moving in that direction, as pointed out by Mr. Chia, Mr. Garcia-Silva, and also Mr. Legg. Extreme solutions are detrimental to reaching an agreement by January 2013.
>
> I have a final comment on suggested new variables. On financial openness, there is a convincing theoretical and conceptual underpinning for financial openness, but at the same time, I understand the concerns expressed by Mr. Hockin, Mr. Legg, and Mr. Pérez-Verdía. Adding this variable to the

formula might add some complexity or arbitrary elements, and the Board should be careful in its considerations.

Regarding financial contribution to the Fund, our chair is open to further discussion to complement or replace reserves. However, there are some significant problems with this approach, so we should be careful.

Mr. Weber made the following statement:

Our chair thanks the staff for the further considerations presented with this paper. All the elements that should be included in the formula have now been laid out. Our chair has forcefully expressed its view that by counting for financial openness and financial contributions, the Fund's diverse functions and activities, and individual members' relative importance for the fulfillment of these functions will be adequately captured.

Our chair considers the options presented for inclusion of these two elements feasible, and the case for doing so compelling. I fully associate myself with the statement by Mr. Furusawa, who emphasizes that financial contributions over and above quota resources have become a mainstay to sustain a range of core Fund activities. There are many members that have consistently and reliably made the political effort at home to attain political support for such financing.

If the Fund is to continue to meet the demands of its membership, it is only reasonable to acknowledge those members who provide the supplementary resources that allow the Fund to meet these demands. I welcome that the pertinent facts will be in the public domain and note that not all of the largest shareholders are also large contributors. I fully concur with Mr. Mac Laughlin and Mr. Garcia-Silva that Directors should now focus on narrowing down the broadly acceptable options for a possible revised formula. Our chair has stressed in the written statement that this broad acceptability, together with an inclusive review process, are what will instill legitimacy into the outcome of this formula review.

The outcome may well be that the Board ends up confirming the difficult compromise that the Board was able to strike in 2008. In any case, it will be highly challenging to improve on this compromise. Status quo on the formula does not mean status quo on calculated quota shares. In this spirit, the GDP-only formula proposed by some, even if combined with some protection features, would lead to an unacceptable outcome for an overwhelming majority of the membership. This proposal also leaves no zone of potential agreement. It is simply off the charts, and cannot be considered. As Mr. Chia and Mr. Garcia-Silva have pointed out, a GDP-only formula shows disregard for the majority of the membership for the benefit of a few large countries—emerging and advanced alike—and this is stating it politely.

I fully agree with Mr. Gibbs that the current formula needs refinement rather than a fundamental overhaul. Although the concerns that led to GDP becoming the dominant variable have been dealt with in the last round of quota reforms, this refinement in the sense of a remaining work agenda must now focus on the other half of the formula. This is where the variables presented in this staff paper are relevant.

These variables have their place as a remedy to the shortcomings not dealt with in the 2008 formula revision. A de facto average weight of 5 percent for financial openness does not do justice to the importance of member's financial relations today. Financial contributions could be combined into one variable together with reserves at equal weights.

I acknowledge that if one focuses primarily on a shift in quota shares from one particular subgroup of members to another, accounting for these additional elements is an inconvenience. This does not render their inclusion unwarranted. It merely proves the division of the membership into subgroups for the purpose of this review is artificial and should not serve to define a target outcome. Mr. Andersen made this point in his gray statement.

Regarding the way forward, our chair dares to hope for some common ground, and we will be engaged in the IMFC work stream that the G20 members are also invited to join.

The Chairman noted that Mr. Weber's chair should be commended for the efforts to accommodate the other portion of the reforms, and to create space for others in the Board. She added that some other chairs had also done so.

Mr. Legg made the following statement:

Our chair's position on the various issues before the Board is fairly clear from our gray statement. Our chair is in the camp that would prefer a solution with a focus on GDP, but not one solely based on GDP, for reasons many other Directors have expressed. Our chair has mixed views on the issue of reserves. On balance, it is less harmful than some of the suggestions being made about financial contributions, which we feel have both technical and conceptual problems. Reserves are at least something that members are comfortable and familiar with, and in practice it will probably have little downside in terms of the way it is currently structured.

A more important issue is the variability variable. Our chair is prepared to accept the staff's judgment that there is little justification for variability as currently structured and indeed alternatives offer little better. It is a difficult issue for our chair. Our constituency includes a number of small countries for whom variability is an important consideration. Our chair is not yet prepared, as some have suggested, to completely dismiss the link between access and quotas. Access issues for these vulnerable countries subject to external shocks are important and ultimately will come back to their quotas, notwithstanding the fact that access limits have been stretched beyond the breaking point in a number of high profile cases recently. I never see them being stretched in those ways for Kiribati and Samoa, it is politically not going to happen. We have to be prepared to explore other ways of dealing with that issue. However, our chair is prepared to agree that this may need to be dealt with outside of the formula.

As we made clear in our gray statement, the formula is the key and only tool the Fund has to ensure legitimacy in terms of governance and voice. There are other tools of dealing with access. To the extent that we go down the path of dismissing the variability variable, we need to be prepared to look hard at access issues for these very small countries.

In terms of smallness more generally, we support Mr. Hockin's suggestion to consider a floor for some of these very small countries.

The most problematic variable to agree upon is openness. Mr. Lushin was entirely right to start the discussion by focusing on that issue, even if I do not entirely accept all of his points, despite the colorful analogies. Our chair is not ready to reject the relevance of openness. It still adds value and has conceptual legitimacy for reasons other Directors have noted. However, it is also obvious that the current variable is the source of a number of the more anomalous results that give many Directors pause. It is also at the heart of the political economy challenge we will face if we are to achieve an outcome that is broadly acceptable.

I expect that what will be broadly acceptable will not be a huge restructuring of the formula. I hear Mr. Nogueira Batista's point about compromise being coded language for the status quo. I am not certain that is entirely surprising, given that compromise means that more extreme ambitious agendas have to come back to meet the mainstream. Additionally, the current formula is not that old, and was itself a significant improvement on what had been in place before. The current formula itself involved many difficult steps for some Directors.

Having said that, our chair sees that there are problems with the formula and progress has to be made through this review process. I say to Directors, including my European colleagues, if we want the formula that comes out of this process to be, as Mr. Andersen suggested, the sole basis on which we allocate quotas at the next review, they will have to be prepared to find ways to tackle some of those anomalies via the way openness is constructed. If this cannot be done, then I expect these political economy challenges will have to be tackled by ad hoc adjustments, which will have a dubious foundation.

Perhaps that is the right way to tackle political economy issues, but the Board needs to be clear that this would be the result if we cannot find an agreeable, technical, conceptually sound fix to the way the openness variable is designed.

In terms of the way forward, I did not have a sense that the Board was getting much closer to reaching an agreement, although I am prepared to accept the optimism suggested by Mr. Garcia-Silva. There is still a long way to go.

Mr. Lushin is right in terms of the quantification of where the votes lie on the various issues, but a stronger consensus is needed around many of these issues. The views of those that represent 30 percent of the voting power cannot be rejected if we are to garner broad acceptance.

In terms of the IMFC Deputies process, I hear what Mr. Chia said and I agree with Mr. Majoro's suggestion of a matrix tool. However, I would suggest drawing Deputies' attention to finding a pragmatic and defensible solution to the issue of openness.

In terms of the G20 process, unfortunately I do not know what the working program will suggest. My colleagues in Canberra are working on that with their Turkish co-chairs, also in consultation with the Mexican chair of the G20. I hope to come out with a paper on a work program for the working group soon. Up to now, the working group and the co-chairs have been keen for the G20 working group not to buy into the technical issues that should be done closer to the heart of the Fund and the IMFC Deputies.

Mr. Hockin made the following statement:

Directors' gray statements generally give the staff a solid sense of the positions of the Board and the membership. I was struck by the fact that these views do not seem to have evolved since the March discussion in the Board.

I did not expect a major breakthrough, but I do not find it reassuring that the views remain divergent, and so entrenched in most areas. This does not bode well for the Board's ability to collectively deliver on the commitments made by our Governors to agree on a new quota formula by 2013. As I said before, and as the Managing Director has said, consensus on a new formula will require flexibility and willingness to make sacrifices, not to entrench the status quo, but to be flexible.

I will focus my comments bluntly on a few areas on which most Directors agree. My hope is that by focusing on these areas, progress can be made toward moving this discussion forward.

There seems to be broad support for the four principles underpinning the formula review, as Mr. Garcia-Silva has said. In discussing some of the specific variables, Directors seem to overlook these principles—in particular, the need to have a simple, transparent formula that would be easy to implement. I hope the Board does not forget that.

If we abide by the principle that the formula should be simple, variables should be dropped rather than added. The new variables make the whole formula more complicated. In that spirit, Directors clearly expressed in their gray statements that the current variability variable is inadequate for its intended purpose, and there is now a sufficiently large consensus to drop it.

The discussion should focus on where to allocate this weight that is set aside for variability. As I noted in our gray statement, this weight should be allocated to openness. I was struck by the interventions of Mr. Virmani and Mr. Lushin. I always learn from them. My teenage grandson recently asked me about Brazil, India, and China. He asked the basic question: How have these countries grown so fast and why are they so successful? I told him that they are big countries. He asked me what had changed, because they had always been big countries. I responded that these countries had opened to the world economy. That is what has changed. We must maintain the openness variable. It is part of the life blood that these giants breathe.

However, it is not perfectly clear how the inclusion of financial openness is consistent with the principle of a feasible statistical implementation. I wish it was, but it does not seem to be. Therefore, I would argue that under the formula envisaged by the staff, the measure of financial openness is not ready for inclusion.

A second area of agreement seems to be on the important role that GDP has to play in the formula. I fully recognize that the Board is far from a consensus on the composition of this variable. That being said, maybe this is what Directors have to recognize. An agreement on the composition of GDP remains elusive and divergent views on PPP versus market GDP are too entrenched to be resolved. If this is the case, there may be strong merit in seriously considering keeping the current blend, which was the result of a long and difficult compromise itself.

As Mr. Zhang and Mr. Legg have mentioned, the third area of general agreement seems to be on the importance of protecting the share of the Fund's smallest members. Whether this is achieved directly through the formula or through alternative channels, I am open to either approach. In our gray statement, I suggested introducing a floor below which the calculated quota share of the smallest members could not fall. I hope this proposal will be considered.

Although these areas of agreement do not appear to be substantial, they offer some momentum to move toward a basis for discussion. Perhaps by resolving a few of these issues, space will be created to make progress on other elements of the formula. I envisage a final decision that will make all Directors equally unhappy, but one in which no one believes a grave injustice has occurred. That is probably where this process will end up, and that is probably the best solution.

Mr. Assimaidou noted that his chair continued to adhere to the four guiding principles as being relevant to the current review. However, like Mr. Majoro and Mr. Andersen, his chair continued to highlight the principle of protecting the voice and representation of the poorest members. This principle was introduced in the 2008 reform, and reaffirmed in subsequent IMFC communiqués, G20 statements, and the 2010 Board of Governors resolution that called for the current quota formula review.

Mr. Kiekens made the following statement:

The membership will only be able to reach a satisfactory conclusion if the Board works constructively and with realism toward a balanced outcome that commands the support of the broad membership. This has been stressed by Mr. Snel and many Directors, including Mr. Chia.

I will inject realism into this debate. I would suggest that from now on, when a Director starts to speak, a screen portrays the relative share of his country in global GDP, trade, variability, and reserves. Then all Directors can check the consistency between his country's numbers and his advocacy.

Directors have all captured the essence and the realism of today's debate. Directors advocate what is most favorable for their own country. It is human nature, but if Directors continue to do that, it will be difficult to come to a compromise. All Directors have understood that the most fundamental divergence in our debate is between those who advocate more weight for GDP—in an extreme case, only GDP—and those who stress the mandate of the Fund, which is to regulate, supervise, and help ensure orderly international economic, financial and trade relations. I am one of the latter.

My favorite formula would be simple and have only two parameters with equal rates: trade and the international investment position. I admit this is not realistic, given the political realities. Nonetheless, there are convincing arguments in favor of such formula, given the mandate of the Fund. Mr. Virmani should be reminded that there is not just one unrealistic proposal on the table—which is the U.S. proposal of a GDP-only formula. Today there is another proposal of a formula with 50 percent trade openness and 50 percent international investment position as parameters.

Mr. Chia gave a tally of the positions of Directors in today's meeting. According to Mr. Chia's tally, there is a majority of Directors in favor of maintaining or increasing the weight of GDP. This is not an entirely correct picture. My tally looks realistically at the numbers for individual countries. If one compares countries with a larger share in global GDP with countries with a larger share in world trade, one can classify countries as more closed or more open. The majority of the membership is more open than closed. By this measure, 96 members have an objective interest in seeing the weight of openness in the quota formula increased, while 82 members are in the other camp. In terms of calculated quota, on the basis of the latest numbers, both country groupings have almost equal quota shares. Based on individual interest, the membership is equally split in a camp favoring openness and a camp favoring GDP. However, all G20 members, except seven, are in the camp of more closed economies. Only the four European G20 countries, plus Korea, Saudi Arabia, and Canada are the more open countries in that group.

Mr. Lushin was not entirely correct when he spoke about 75 percent of the voting power in favor of more GDP.

Which are the most closed economies in the world? I limit my tally to the 50 or 60 largest countries. Among them are Pakistan, which is on top, followed by India, Iran, Brazil, Colombia, Egypt, Peru, Indonesia, China, Turkey, the United States, and Russia. Which countries are the most open economies? Not surprisingly these are Luxembourg, Ireland, Singapore, Switzerland, Belgium, Netherlands, Denmark, United Arab Emirates, Sweden, Austria, Norway, and Hungary.

Since I arrived in the Fund in 1994, dramatic changes have occurred in the relative positions of countries in the global economy. There are countries that have significantly increased their share in global GDP. There are countries that have seen their share in global GDP drop significantly. Let me provide a few striking numbers. The country with the most stellar growth performance since in 1994 (the year in which the 11th General Review of Quotas, agreed in Hong Kong in 1997 was based) is Kazakhstan. Its share in world GDP increased 4.59 times. China is the second. Its share in GDP increased 4.2 times. The third is the United Arab Emirates, whose share increased 3.3 times. There are a number of stellar performers that more than doubled their share in global GDP. These are mainly the transition countries in central Europe, including Poland, the Czech Republic, the Russian Federation, Romania, among others. India barely doubled its share in global GDP, certainly also a stellar performance. Among the BRICs, Brazil's performance is less than average, as the country increased its share of global GDP 1.35 times, or by 35 percent.

I hesitate to identify the least well-performing countries. Japan saw its GDP share declining to only 46 percent of its share in 1994. Argentina dropped by 50 percent; even Germany dropped to 70 percent (a decline by 30 percent). Almost all advanced countries had their share decline towards 80 to 85 percent of their 1994 level, including the United States, and my own country—Belgium. The Netherlands is an exception among the advanced countries: its share in global GDP since 1994 increased by 3 percent.

These dramatic changes in world GDP ranking have gone in tandem with equally dramatic changes in quotas, but not always in the way one would expect. Many countries that have seen a stellar growth performance have not seen that performance rewarded in calculated or actual quota formula increases, because the compromise made in Singapore was to shift significantly the quota formula toward GDP. I would like to illustrate what a change that has been for countries. Let me identify some of the countries that have seen much of their calculated and actual quotas sacrificed in relation to GDP.

As I said, the Netherlands increased its share in global GDP since 1994 by 3 percent. However, its latest calculated quota share dropped to 71 percent of its level under the 11th General Quota Review in 1997. The reason is clear; it is mainly due to the compromise made in Singapore. Kazakhstan, the best performer in terms of GDP with an increase of more than 460 percent of its share in global GDP, saw its quota share increased by only 76 percent. Again, because of the compromise in Singapore, favoring the more closed economies. The Czech Republic increased its share of global GDP by 232 percent, but its calculated quota share increased by only 66 percent.

These were all more open economies. Let me now come to the more closed economies, both poor and strong performers in terms of GDP. Argentina's share in global GDP dropped by half, but its latest calculated quota is still 93 percent of its 1997 level, a drop by only 7 percent. India, indeed a stellar growth performer, doubled its share of global GDP, while its calculated quota increased 3.4 times. Brazil's share in global GDP increased by 35 percent, but its quota increased by 60 percent. Japan dropped to 46 percent of its 1994 share of global GDP, but its quota dropped to only 60 percent.

The Board agreed on this in Singapore, with a clear understanding—I was part of that compromise—that the new quota formula would last in its structure for the next 25 years. I am not so unrealistic as to believe that a quota formula of 50 percent trade and 50 percent international investment position is politically feasible. However, here is my most important message today: I do not see any room for increasing further the share of GDP in the quota formula.

The Board should discuss how openness is constructed with at least 50 percent weighting. Openness includes trade, variability, and international reserves. International public reserves are a tiny fraction of the international investment position of a country. I see no reason not to broaden that component to the entire international investment position. Mr. Hockin argues that data on the IIP are missing. If so, let us agree to include the IIP in the formula five years from today. Countries have to report the relevant date to the Fund. For countries that would not do so, their date would simply not be included when quota shares are calculated.

During our last World Economic and Market Developments (WEMD) discussion, Mr. Blanchard, was strikingly accurate when he observed how trade has become much more relevant than before in the transmission of shocks, and the behavior of GDP across the world. In this connection, I recommend reading the paper from a staff team of the Strategy, Policy, and Review Department (SPR) entitled "Changing Patterns in Global Trade." In that paper, and not related to discussions on the Fund's quota formula, the staff ranks the most important trading countries in the world. According to a methodology based on value added and interconnectedness, China is at the top of the list of systemically important trading countries, followed by the United States, Germany, The Netherlands, Japan, France, Italy, the United Kingdom, Belgium, and Korea (see Table 2 of this staff paper). The quota formula should recognize the systemically important trade countries in the world.

Mr. Virmani made the following statement:

I actually support Mr. Kiekens. From the first debate on this issue, I have said that all discussions—not just the papers, but all statements of Directors—should be made public, so the general public can match their interest with their statements. I had made this point two years ago, and Mr. Kiekens is making it now.

I would suggest going even further. Why make the proportion 50/50? Make it 25/75, and have the Board reflect that composition. I will be happy to vacate this chair and leave it to the rich countries.

There is a forthcoming staff working paper which shows that most of the growth rates for Eastern European countries depend on the timeframe of the data. If one measures from the bottom to the top, there is huge growth. However, if one goes one, two, or three years back in most of these countries, the growth rate becomes a quarter of what it is.

Mr. Zhang expressed confusion over Mr. Kiekens's assessment of the most open countries and the most systemically important countries to global trade. According to Mr. Kiekens, China was among the least open economies in the world. China was also among the most systematically important countries in terms of global trade. He had a problem reconciling those two definitions. He asked the staff to clarify whether it used a ranking of openness in the quota formula.

The Chairman suggested that detailed discussions could take place at a later stage.

Ms. Lundsager made the following statement:

Our gray statement details the reasons why a GDP-only formula is best, and the problems with the other variables. I will pick up on comments made by Directors. Mr. Legg noted that the discussion needs to focus on openness; I completely agree. The question is, can the variable be fixed? Can it be made a better variable in terms of helping us achieve our objectives? Mr. Garcia-Silva picked up on the staff's answer about netting out intra-currency union trade, which yields approximately 2 percentage points reduction in the calculated quota shares for the euro area.

Directors need to see that data. I have been asking about it for years, in the earlier paper I recall very well the staff's explanations for not providing that data to Directors. Nonetheless, the staff has been able to do it in various ways. In the recent euro zone discussion in the Board, the staff netted out the trade when calculating the real effective exchange rate. That was in the staff's responses to technical questions that Directors received ahead of the Board meeting. The staff can do this kind of work and Directors need to see it.

The bottom line is, if netting out intra-currency union trade results in reductions in calculated quota shares, then why should those reductions not go to the countries perceived to be most deserving or to achieve the principles that we have agreed to in the IMFC and the G20? Why not shift those reductions to the EMDCs? There can be those kinds of agreements. Mr. Hockin mentioned that there could be a situation in which the formula produces results and then we can use some of the shift in a targeted way, if that is where the remedy is most needed. We should keep those options open. That would help us achieve our objectives.

Mr. Fayolle made the following statement:

Directors have already made many points. I would like to raise three issues.

First, I am a bit surprised that there is a divergence in the Board on the fact that our current formula is not dynamic. When one looks at the figures, including the latest World Economic Outlook (WEO) projections, the weight of EMDCs in global GDP in 2017 will remain below their calculated quota share based on the current formula. One could argue that the formula needs to be changed to make it simpler. However, one cannot say that it is not already achieving this kind of shift that started years ago.

Second, we want to make the formula simpler. Do we need to make it simplistic? The formula of an institution as complex as the IMF cannot consist of just one variable. The formula that prevailed before the latest change was incomprehensible. We moved to an understandable formula. There is a case to be made that it should be better understood, and that it probably makes sense to drop variability from the formula. This would be a big change in the formula and it should not be underestimated. That is why we need to consider this change for its value. Our chair would favor a stronger combined role of GDP and openness.

Finally, is there a way to recognize what the members do in terms of helping the Fund manage its duties, in particular supporting technical assistance to its entire membership and especially to low-income countries? There is certainly a way to do that. Mr. Furusawa referred to what was done at the World Bank. I do not know if it is a model to follow, but at least it shows that it can be done, and helps the legitimacy of the formula.

Ms. Choueiri made the following statement:

Being in the minority of chairs who favor maintaining variability, I would like to follow up on what Mr. Legg said with a few comments.

The principle underlying variability, which is the potential need to borrow, is valid. Many of our members, particularly the smaller members of our constituency, highly value this feature. Although the current measure does not adequately convey the need, as the staff finds and as Mr. Chia noted in his gray statement, the staff's work on a composite variability indicator could be promising, as to better reflect the role of variability in the formula.

I appreciate the comments by Mr. Legg and Mr. Hockin on the need to deal with variability outside of the formula, but if it could be done within the formula, it would enhance the transparency and the simplicity of the formula. Following up on Mr. Kiekens's comment, if we were to add to the proposals that were on the table, perhaps we could consider having one chair, one voice, like the IMFC.

Ms. Balsa noted that Mr. Chia had expressed well the challenges in multi-country constituencies. She supported the comments by some Directors that simplicity was a good principle, but that it should not be the only goal. With regard to narrowing down options, she requested the staff to remind Directors about the compromise achieved on the current blend of GDP in the formula—not just the share of PPP versus market GDP, but also the broader compromise that was achieved.

Mr. Gibbs made the following statement:

Although I did not agree with everything Mr. Hockin said, I certainly agree that all Directors should be unhappy at the end of this process. I support the way forward the Managing Director proposed at the start of the meeting. It would be good to come back after the Board recess and discuss the issues again.

In that context, I will make a general comment. The quota formula as a whole needs to be broadly acceptable to the membership. However, there does not need to be broad acceptability of every single component and variable within the formula. Directors will need to move toward compromise on the components in order to reach agreement on the whole.

I am open to constructive proposals on how to do this. We are beginning to see the start of compromise today. However, my readiness to compromise does not include being ready to accept a GDP-only formula as some chairs have proposed, or one that is dominated by GDP as others appear to seek. The reasons have been well set out by other Directors, but they bear repeating. A GDP-only formula would benefit a relatively small number of countries. It would reduce the calculated quota share for EMDCs as a whole by 0.4 percent. The divergence within the group is striking. The largest emerging markets would tend to gain quota share within that loss, so correspondingly the loss for the rest of the group would be high. As a basis for working toward something that is acceptable to the broad membership, I struggle to see how that is going to help.

The other reason a GDP-only formula would not work for this chair, is that we are committed to the role of openness in the formula and some reflection of the importance of financial openness as part of the formula. Clearly, our chair is some way from persuading all Directors, to put it mildly. At the same time, I have not been persuaded by the arguments that it is wrong or not legitimate to pursue this objective. Some of the gray statements discuss quota share in terms of whether a country deserves a higher share or should be rewarded for having a large financial sector in the case of financial openness. I am not sure that the language of reward and what is deserved is the most constructive way to discuss this issue.

The case for openness does not rest on what any country deserves; it is related to the nature of the international system. At the most basic level, there is not an international system without openness, there are just unconnected pieces and the connections between the countries. Like Mr. Weber, my view is that without adequately reflecting financial flows, we will miss a key piece of the picture.

This chair has been asking for a more adequate reflection of financial connectedness for a long time, since well before the current crisis. This is not a new agenda item on the table. Until now, data issues have made it impossible. I want to put on the record my appreciation of the staff's efforts to remedy the data issues, which I see as promising. I would repeat for the record that I fully agree that a cap on the implications for financial centers is necessary. On the basis of staff's work, my expectation is that a solution can be found.

Variability will not win a popularity contest and seems to have lost the support of the staff. It has not lost my support yet. We should be cautious before discarding a variable which, whatever its flaws, has always been part of the quota system. Ms. Choueiri made some good points on this issue.

On financial contributions, the staff has made a constructive start. I greatly appreciate their efforts to respond to the requests made by Directors. The indicators deserve further consideration. It brings me back to the point that we need to aim for an agreement on the formula as a whole. Directors will probably never reach agreement on each of the components, and in this respect I am in slight contrast to Mr. Hockin. Having these new options on the table as opposed to an approach that simply looks for variables to drop, actually opens up a broader scope for compromise, and a broader scope for compromise is needed to solve this problem ahead of the deadline.

Mr. Giammarioli noted that the discussion on the quota formula should be placed on a different level from typical Board discussions. The formula should reflect economic trends of a long-term and permanent nature. Short-term and coefficient episodes should not play a major role in the discussion. For example, the European crisis should be relevant for the quota formula review only to the extent it reflected more fundamental changes in the global economy. He agreed with Mr. Snel and other Directors that the current formula captured the economic shifts in the global economy. He agreed that the formula should be changed and improved. To complete the task within the established time frame, he suggested concentrating efforts on improving the current formula by reaching compromises on each single element of the formula, while adhering to the four principles underpinning it.

Mr. Mojarrad clarified his chair's position with regard to variability. A member's vulnerabilities and potential need for Fund resources should be taken into account in the formula. If the current variability variable did not meet this objective, as the staff had suggested, then his chair would support dropping the variable, provided that some other measure was included in the formula to reflect members' vulnerabilities and potential need for Fund resources. His chair did not support dropping variability while keeping openness as a variable in the formula. Both variables had significant shortcomings. In addition, keeping openness only would result in higher shares for advanced countries, which went against the widely acceptable objectives of the quota formula review.

The Director of the Finance Department (Mr. Tweedie), in response to questions and comments from Executive Directors, made the following statement:[7]

> I thank Directors for their views expressed today and in the gray statements. I cannot say that I see exactly the way forward that bridges these different positions, but I am sure it will come to me. At least the positions are clear. I appreciate the clarity. The staff will look carefully at all Directors' views when thinking about how to prepare the next paper.
>
> There were a few comments questioning the selectivity of what the staff presented in this paper. I do not want to sound defensive, but in deciding what to include in the paper, the staff was guided by the last Board discussion in March.
>
> In the March discussion, the staff was asked to do three things, which the staff addressed in this paper. The staff was asked to further explore measures that could capture underlying variability. Many Directors asked the staff to explore options to better capture financial openness and many Directors asked for further work on capturing financial contributions in the formula. The staff was guided by these requests.
>
> The staff felt that it was important to address these issues. There were no proposals in this paper, so the staff addressed the issues as best it could, in terms of how these considerations could be included, if there was sufficient support. The staff illustrated what the implications of including those considerations would be.
>
> The staff has not gone any further in this paper, rightly or wrongly. Perhaps the staff could have gone further and introduced thoughts on possible

[7] 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.

ways forward. The staff felt that there was enough in this paper already. However, in the next paper, the staff will consider everything that has been said today and look at possible ways forward.

In the same spirit, I will also address the issue of completeness. It is true there were a few comments that had been made at the March meeting and that the staff did not introduce in the paper. One such comment was to look at population again, which the staff did not do. This was one of the topics that the staff highlighted in the issues note in August 2011. It is an issue that has been raised in past quota discussions. For example, it was raised during the 2008 reform and it also came up in the work of the Cooper group following the Eleventh Review. In all these discussions, there has never been sufficient support for introducing population in the quota formula. The work the staff did in the context of the 2008 reform suggests that population and PPP GDP are closely correlated, and their inclusion with different weights could generate similar results. In the end, the decision was to introduce PPP GDP. The staff has not sensed a broad, or even sufficient, support for doing much more work on this issue. If this is something the Board wants to pursue again, the staff could do so.

There were a few comments in the gray statements and in the Board discussion that GDP enters into the formula with too much of a lag. The staff is using a three-year average. This was a change that was introduced in the 2008 reform. Previously the staff used the most recent year. It was felt widely at that time that using one year introduced too much variability into the measure, because GDP, particularly market GDP, can fluctuate significantly from year to year, including because of exchange rate effects. There was a view that smoothing was needed. The consensus was to move to a three-year average and that is what the staff has retained. If there is a broad view that the staff should revisit that issue, the staff will do so, but I emphasize this was a reform introduced in 2008.

There were a few comments on the country classifications. One suggestion was to drop groups altogether. The current classifications are somewhat arbitrary and can be expected to change over time, and for this reason, staff has sought to de-emphasize the groups in its work. For example, in the summary tables, the staff now reports the results of the top 35 countries. Previously the staff just reported the major country groups, which tended to overemphasize the group results.

The staff raised this issue in earlier papers and there was an annex explicitly devoted to this issue in the February paper. The annex examined the pros and cons of keeping the current classification, which has been in use for some time. It is clearly becoming out of date, and a number of countries that are now advanced countries in the WEO are still included among the EMDCs in this paper.

There are arguments both ways. On balance there may be an argument in terms of continuity for keeping the current classification, given that this reform is widely seen as a continuation of the reform that was started in 2008, and continued with the Fourteenth Review. If there is a change now, we will have to explain how it compares to the previous results. But one could go either way on this issue.

As tempted as I am to stop reporting the aggregate data, I am not sure we can avoid having groupings given the guidance we have received from the G20 and the IMFC. However, I do share the view of a number of Directors that the groups should be de-emphasized to some extent, because this ultimately is about individual countries and their shares in the Fund.

Mr. Kiekens drew the Board's attention to the work of SPR on interconnectedness. I can assure Mr. Kiekens that FIN staff is well aware of that work, and I would point him to Annex I of the staff paper, which takes that work and tries to apply it to quotas. This is clearly a promising avenue, and we looked at it in some detail in the February paper, and sought to build on this work in the latest paper. The staff's judgment is that, while this work is promising, it is not ready for use in quota calculations, particularly given the principle that we should use high quality and widely available data. However, it could be relevant in the future, and the staff will continue to monitor it as the work develops.

Mr. Zhang asked how the staff ranked countries in terms of openness in the formula. The openness variable measures the sum of current payments and current receipts for five years. This is measured over the whole membership and over the global total. That is what goes into the openness variable and it receives a 30 percent weight in the current formula. It is not a ranking, but obviously there is a country with a higher share and a country with a lower share.

Ms. Balsa asked to be reminded about the compromise on PPP GDP in 2008. The compromise was that PPP GDP and compression were both introduced into the formula, and there was an agreement that this would be reviewed after 20 years.

Mr. Lushin made the following statement:

> I will comment on Mr. Tweedie's observations about the Finance Department's work plan on the quota formula. I would like to draw Mr. Tweedie's attention to the fact that, according to my calculations, at least nine Directors propose dropping openness from the formula. These Directors represent 41 percent of voting power. There are a number of Directors who do not insist on dropping openness, but are still dissatisfied with its current formula, like Mr. Legg, for example.
>
> I do not want the staff to miss this situation, and I do not want the staff to think that nothing has been requested from the Directors in terms of openness. It is one thing to speak of openness in general terms, but it is another thing to deal with this particular variable in the formula, which is outrageously distortive, unfair, and gives unjustified benefits to a group of countries. As I tried to prove in the beginning of this meeting, openness is just a reward for smallness, and nothing else. If we want openness to remain as a concept, then another variable is needed. The current variable cannot work because it only creates distortions.

The Chairman asked Mr. Lushin if he could circulate his statement to all Directors. She also asked Mr. Chia to circulate his chart that identified the number of chairs and percentage of votes that supported various proposals.

Mr. Chia responded that he would double check the chart and circulate it to Directors when he was confident about its accuracy.

Mr. Nogueira Batista made the following statement:

> First, on the 2008 agreement, my understanding is that the agreement was to include compression and PPP GDP in the formula for 20 years and review it after that. There was no agreement to keep the level of compression and the composition of the blend for 20 years.
>
> Second, I do not see on what basis Mr. Tweedie has decided to de-emphasize groupings. The guidance received from the Board of Governors, from the IMFC, and from the G20, is couched fundamentally in terms of these groupings. I cannot see how staff on its own, listening to the views of a few Directors, can deviate from this.
>
> I would like to highlight a point made by Mr. Virmani in his gray statement: out of the total of 19 simulations presented in the paper for today's

discussion, 14 raise the share of advanced economies and only 3 raise the share of the EMDCs. Among other reasons, that is why I spoke of imbalance at the beginning of the meeting.

Finally, thinking of next steps, I emphasize two requests I made. Because I sometimes have the impression that the staff is not in the listening mode, I would like to repeat my requests clearly. First, I repeat my endorsement of Russia's request for a simulation for illustrative purposes of what the calculated quota share of the European Union and the euro area would look like if treated as a single entity. This would highlight the fact that openness and variability are to a large extent capturing the interconnectedness of European Union and euro area members, as Mr. Virmani stressed in his gray.

Second, I would like the staff, maybe after discussing bilaterally with the four Directors from BRIC countries, to produce some simulations of the proposal made in the joint gray by the Russian, Indian, Chinese and Brazilian chairs. We could discuss bilaterally what the specific parameters would be for simulation purposes, but it is important that this proposal be somehow incorporated into the calculations as part of our next steps.

Mr. Zhang fully supported Mr. Lushin's comments on openness.

Mr. Fayolle remarked that he did not like the tone of Mr. Nogueira Batista's previous intervention, in that he seemed to be intimidating the staff.

The Chairman remarked that Mr. Nogueira Batista surely did not mean to intimidate the staff. She also noted that the staff had worked extremely hard on the issues, and continued to do so. An entire working group was dedicated to the endeavor and the staff tried to accommodate Directors' many requests. She noted that the requests for specific calculations and inputs would be responded to by the staff.

Mr. Snel noted that members of the Board represented individual countries rather than a currency union or other groups of countries that had been thrown together. The request from Brazil and Russia was not relevant because member states had to be treated individually.

The following summing up was issued:

Executive Directors welcomed the opportunity for a further discussion on the quota formula review. They reaffirmed the importance of completing the review by January 2013, in line with the agreed timetable, and underlined that this will require a spirit of flexibility and compromise on all sides.

Directors agreed that the principles that underpinned the 2008 reform remain valid and should guide the current review, i.e., 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. Directors reiterated their commitment to protect the voice and representation of the poorest members, and a few suggested protecting also the smallest members, either under the quota formula or through other mechanisms, including a possible increase in basic votes.

Directors took note of the results of updating the quota data through 2010, which show that the aggregate calculated quota share of emerging market and developing countries had increased by 7.7 percentage points since the 2008 reform. A number of Directors viewed this shift as providing evidence that the formula captures dynamic developments in the world economy and is not in need of radical reform. However, other Directors considered that the formula remains seriously flawed, producing results that do not adequately reflect members' relative positions in the global economy.

Directors generally agreed that GDP is the most comprehensive measure of economic size and should continue to have the largest weight in the quota formula. Many Directors favored increasing its weight, with a number preferring a GDP-only formula or one that is essentially based on GDP. Some Directors supported the current weight of GDP in the formula, while a few others preferred to reduce it. Views continue to differ on the relative importance of market GDP versus PPP GDP. Many Directors favored increasing the relative weight of PPP GDP, a few considered that it should be reduced, and a few suggested eliminating PPP GDP. Some others noted that the composition of the current GDP blend variable had been a difficult compromise and should not be reopened. A few Directors saw scope for capturing more recent trends by relying on more recent data.

Many Directors considered that openness provides an important measure of members' integration into the world economy—with some also seeing its inclusion in the formula as consistent with the Fund's mandate—and favored maintaining or increasing its weight, notwithstanding scope for improvement in its measurement. A number of these Directors also stressed the importance of financial openness and welcomed the staff's work on possible approaches to increase its role in the formula, including steps to limit the share of international financial centers. However, many other Directors did not see a case for increasing the weight of financial openness—which would increase the calculated quota share of advanced economies—or for further exploring ways to better capture financial openness, given significant measurement and conceptual problems. Many Directors reiterated their view that the current openness measure is flawed, including due to its reliance on gross flows, and given the challenges posed by intra-currency union flows. A number of these Directors also stressed that, in their view, the openness variable should either be substantially improved or dropped from the formula altogether.

Directors took note of the staff's further work on alternative measures of variability. Most Directors favored, or could support, dropping variability from the formula, in light of the shortcomings in the current measure and the challenges in finding an alternative that better captures members' potential needs for Fund resources. A number of other Directors nevertheless preferred to retain some measure of variability in the formula, possibly with a reduced weight, and encouraged staff to continue its work in this area. A few Directors suggested setting access norms for small, vulnerable countries in terms other than quotas.

Many Directors continued to support retaining reserves in the quota formula, with a few favoring a higher weight, stressing the role of reserves in reinforcing global safety nets. A significant minority of the Board noted that this variable provides the wrong incentives by rewarding countries for excessive reserve accumulation.

Many Directors welcomed the staff's work on possible options for capturing members' financial contributions, which they saw as a good basis for further work on how to include such a measure in the quota formula, either in place of or in addition to the current reserves variable. Many other Directors, however, viewed the inclusion of financial contributions in the formula as inconsistent with the Fund's role as a quota-based institution, and observed that such an approach rewards largely advanced economies at the expense of emerging market and developing countries. A few noted that particularly generous contributions could be recognized outside of the formula, as has been done on occasions in the past.

To conclude, Directors expressed a wide range of views on how the quota formula can be improved. They also recognized the urgency of moving toward an agreement and looked forward to further staff work, which would take careful account of all the views expressed today.

APPROVAL: April 3, 2013

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:

GDP

1. ***Could staff provide more granular analysis of the impact of a GDP-only formula on EMDCs and the LICs?***

- Under a GDP-only formula using the current blend of market-based and PPP GDP, a little over two thirds of EMDCs would lose share (114 members) compared with the current quota formula. A broadly similar proportion loses in the case of LICs (46 members). Details for all individual countries are provided in Table A9 of SM/12/163 (7/2/12), Supplement 2.

2. ***Even the single simulation with a marginal increase in weight of GDP-PPP is offset by another simulation with a 70-30 blend. Can staff clarify on which countries asked for the latter simulation?***

- As noted in the staff paper, the simulations shown in Table 11 simply update those shown in the previous paper with the new data set, and were not in response to particular requests. At the March Board meeting, a range of views were expressed on the relative importance of market versus PPP GDP in the GDP blend variable. This was reflected in the Summing Up (BUFF/12/29) that stated "[W]hile 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."

Openness

3. ***Further work on measures of value-added trade flows and the impact of a currency union in cross-border financial flows is missing. Could staff give rough estimates in order to give a sense of the degree to which these data issues bias the measurement of openness?***

- The direct measurement of value added in trade is not feasible given the current practice of recording exports and imports on a gross basis. Specifically, data are not available at this stage for the broad membership of the Fund and conceptual and measurement issues have not been fully addressed in existing international statistical manuals. Approximate measures have been used in the literature based on input-output tables. However, these measures involve relatively strong assumptions and are only available for a small subset of the membership.

- As concerns intra-currency union trade, staff examined the impact on calculated quota share (CQS) of excluding intra-currency union trade in the context of the 14th General Review. The CQS of the euro area fell by about 2 percentage points when intra-currency union trade was excluded. For members of other currency unions, the impact was more modest (for data through 2007, see *Quotas—Updated Calculations and Quota Variables*, SM/09/227; for data through 2008, see IMF INTRANET, Economic and Financial Data at the IMF, *Fourteenth General Review of Quotas—Updated Data Set and Quota Calculations*, Tables 1, 2, 3, 4, A1, A2, A3, A4, and A5—Additional Variables & Alternative Measures of Variability). Issues reflecting the treatment of intra-currency union flows were discussed in more detail in SM/11/226 (8/17/11).

Variability

4. *Has the staff looked recently at "scaling variability to GDP and capping it at some reasonable level" as a potential measure, which would help EMDCs, especially small and poor countries, susceptible to shocks?*

- The staff examined scaling variability to GDP and capping it in the context of the work on the 14th Review (see paragraph 30 of SM/09/227, 8/28/09). Updating this work with the 2010 dataset presented in the current staff paper yields broadly similar results and raises similar issues. Scaling leads to radical shifts in the variability shares of the smallest countries relative to the current measure, but there is little evidence that the results have a bearing on potential need for Fund resources. Indeed, the latest analysis suggests that the correlation between the likelihood of a Fund arrangement and variability scaled to GDP is not statistically different from zero. To address the problem of the sharp increase in the share of smaller countries, the G-24 Secretariat had made a suggestion to cap the size of the variable for individual countries as a multiple (500 percent) of quota shares. The choice of the cap is, however, arbitrary and the analysis shows that while it ameliorates some of the extreme results, it does not fundamentally change the properties of the variability indicator. In particular, the correlation with the likelihood of using Fund resources remains statistically not different from zero.

Simulations

5. *Directors requested further technical work on different sequences of dropping variables to test the robustness of results presented in the paper discussed in March; on simulations with a weight of PPP GDP that is larger than the weight of market exchange rate GDP in the GDP blend; on simulations with alternative values of the compression factor (lower than the existing 0.95); etc. We would appreciate staff's comments on these unanswered requests?*

- The sequence in which variables are dropped has no impact on the calculated quota share of a member. In other words, the results are robust and the final CQS of a member is invariant to the sequence with which a variable is dropped.

- However, when estimating the *marginal* contribution of dropping a variable, the sequence can matter, as noted in the February paper (SM/12/29, 2/10/12). For example, if ultimately two variables were dropped in a simulation—say variability and reserves—a member's CQS in the resulting final simulation is a number that is independent of whether variability is dropped first and reserves second, or vice versa. However, the estimated marginal effect of dropping say variability differs when it is dropped first (i.e., from a 4-variable formula) or second (i.e., from a 3-variable formula).

- As noted above, Table 11 of the main paper shows the impact of increasing the PPP weight in the blend to 50 percent. In this case, the CQS of EMDCs as a group rises by 0.8 percentage points. If the PPP GDP component were increased further to say 60 percent, a further increase of a broadly similar magnitude would result.

- On compression, the paper does not include any simulations of different compression factors but this could be examined in future work.