

a very substantial and resource-intensive effort that, even if begun forthwith, would be unlikely to bear significant fruit for some time.

III. SELECTION OF A QUOTA FORMULA: GENERAL CONSIDERATIONS

A. Normative Approach

10. **The QFRG has taken a “normative” approach to reforming the quota formulas** based on *a priori* criteria for assessing alternative proposals rather than deriving formulas which produce a particular outcome (§84).⁵ However, successful implementation of a normative approach requires a broad consensus among diverse constituencies. The QFRG has also undertaken extensive econometric analysis in an effort to determine the factors that have driven actual quotas over time, and has also investigated (including through hypothetical simulations) the degree and pace of convergence of actual to calculated quota shares over time (Chapter V). However, this empirical work has not been used in support of the QFRG’s conclusions and recommendations. Instead, based on the criteria which it has outlined, the QFRG has recommended a single linear formula with only two variables.

11. **A normative approach has a number of attractions, even if a quota formula is to be judged ultimately on the calculated quota distribution it produces.** First, it elicits a reasoned examination of the principles on which quotas should be based. Second, it calls for a clear statement of the ultimate objectives to be achieved by the quota structure, while allowing for separate consideration of the pace at which to approach such a structure. Third, it allows for the reform to be forward looking and to provide a formula that is more likely to stand the test of time. Finally, it avoids some of the problems associated with the “positive” approach of trying to find a formula which explains current quotas, including, as the QFRG econometric analysis demonstrates, the difficulty of econometrically fitting present quotas to purely economic variables when such quotas have also been determined by judgmental or political factors which are very difficult to quantify.

12. **Under a normative approach, the Board would continue to decide the speed at which the actual quota distribution would move toward a new distribution of calculated quotas.** While, as the QFRG notes, “provision can be made for convergence toward any chosen quota formula over a period of time” (§112), it should be noted that, to the extent that quota share redistributions are made within the context of general quota increases, the pace of convergence would be faster, the larger are: (i) the proportion of a quota increase which is allocated selectively (i.e., according to the formula) and; (ii) the size of the overall quota increase. Also, since calculated quotas evolve over time, a rate of “convergence” which is too slow could in fact result in a further divergence of the actual and calculated quota distributions.

⁵ Paragraph references are to the QFRG Report.

B. Functions of Quotas

13. **Any reassessment of the quota formulas should take into account the functions of quotas.** Multiple functions can be found in the Fund's Articles of Agreement (¶20).⁶ Quotas (i) fix the maximum amount of financing a member is obligated to provide to the Fund, (ii) determine voting power in the Executive Board,⁷ (iii) bear on a member's access to Fund resources, and (iv) determine a member's share of general SDR allocations.

14. Traditionally, a critical role of quotas has been the **provision of financial resources** to the Fund since a monetary and financial institution could not function without an adequate supply of resources. This remains the case, although the financial role of quotas has been affected somewhat as alternative sources of finance have been developed, particularly the increased availability of borrowed resources to supplement quotas and the growing role of administered resources to provide concessional assistance to the Fund's poorest members.

15. Quotas determine the distribution of **voting power in the Fund**. The Fund's responsibilities outside of those directly related to lending have grown over the years, most recently with the various initiatives related to the reform of the international financial architecture (e.g., the fostering of international standards). Measures have been taken in the past to seek to ensure adequate representation for all members (e.g., increases in small quotas). However, for many smaller and medium-size emerging market and developing country members, quota-based votes may not adequately reflect the role these countries play in the world economy.

16. Quotas continue to play a crucial role in determining the **demand for Fund resources**. Quotas serve as the basis for access to such resources in the great majority of Fund-supported programs. Over the years, however, the relationship between quotas and access has become more elastic, especially as of late when the demand for Fund resources has become more unpredictable because of the increased role of capital flows in causing balance of payments disequilibria. Waivers of the Articles' limits on access to Fund resources have been granted where necessary to allow access in line with operational limits.⁸ More recently, the Supplemental Reserve Facility (SRF), which was approved in 1997, allows for substantial Fund financing without formal access limits. Similarly, access levels under the Contingent Credit Line (CCL) are not subject to formal limits, although

⁶ The QFRG has excluded from consideration any proposals for changes in the quota formulas that would require an amendment of the Fund's Articles of Agreement (¶83).

⁷ The Articles of Agreement provide that a member's voting power is equal to 250 "basic" votes plus one additional vote for each SDR 100,000 in quota. Basic votes therefore help to strengthen the relative voting power of members with smaller quotas. A change in basic votes would require an amendment of the Articles.

⁸ The Articles of Agreement restrict the Fund's holdings of a member's currency to no more than 200 percent of quota (Article V, Section 3 (b) (iii)).

commitments under the CCL are expected to be in the range of 300–500 percent of quota. More generally, the role of quotas in determining access could be changed by instituting a different approach for access decisions than for the provision of resources and voting power.

17. The Articles of Agreement also specify that quotas determine a member's share in a general **allocation of SDRs**,⁹ although this issue is not addressed in the QFRG report since there has been no general allocation for nearly 20 years and the proposed Fourth Amendment, providing for a special allocation of SDRs, is considered a one-time event.

C. Assessment Criteria

18. The QFRG report has **identified most of the key criteria** by which any proposed reform of the quota formula should be assessed **with the notable exception of broad acceptability** to the membership. In the staff's view, the most compelling assessment criterion is that the calculated quotas resulting from the new quota formulas should be broadly acceptable to the membership. There would be little point to the exercise if, in the end, a new quota formula generated calculated quotas that played no more of a role in determining actual quotas than in the past.

19. Preliminary illustrative calculations based on an incomplete version of the QFRG proposal indicate that the **proposed formula could result in a significant shift in quota shares toward the advanced, large, and relatively closed economies**. This shift is due to the much larger weight of GDP than in the current formulas and the deletion of the openness variable. It should be noted that the preliminary calculations reported in paragraphs 52 and 53 provide only an illustration of resulting quota shares, based on data ending in 1994 as used for the Eleventh Review (1999) and a limited version of the proposed variability measure. In the staff's view, nevertheless, the broad qualitative conclusion of such a shift in quota shares may not change much once the required data base has been assembled to apply updated data to the proposed formula in full. As noted above, the calculations do not include the variability of net long-term capital flows, which the QFRG proposed in light of the increased integration of world capital markets.

20. Regarding the other criteria identified in the QFRG report (¶84), the staff agrees that any new quota formula should:

- (a) **“have a sound economic basis.”** Variables in the formulas need to be grounded in solid economic reasoning and related to the Fund's activities as an international monetary institution;
- (b) **“reflect the relevant changes in the world economy” that have occurred since the last modification of the formulas in the early 1980s.** In particular, any new formula should try to capture the increased size and volatility of capital markets—a factor not reflected in the current formulas;

⁹ Article XVIII, Section 2 (b).

(c) **“be consistent with the several functions of quotas,”** including the provision of financial resources to the Fund, the distribution of voting power in the Fund, and the determination of the demand for Fund resources.

(d) **“be more transparent and easier to comprehend than the existing set of formulas.”**

- Transparency would be enhanced by a normatively chosen formula for which the economic rationale is clear. However, since each member can only have one quota under the Articles, transparency will remain inherently limited by the problem that results from a single quota serving multiple functions. That is, since there is not a separate instrument to determine each function of quotas in the Fund, a compromise inevitably needs to be struck among the different functions. The choice of weights assigned to the variables related to each function in the formula represents an implicit compromise.
- The criterion of simplifying the formulas is particularly compelling. Simplification would mean that any formula should satisfy the **principle of parsimony**, with a few key variables used to determine quotas. The current set of formulas is certainly not simple, even though the calculated quota of the majority of members is determined by just one formula (the Bretton Woods formula).

(e) **“be feasible [to implement], and where problems of data quality or availability arise, such modification [to the formulas] should be contingent on the resolution of these problems.”** As quota formulas are to be used to determine calculated quotas, proposed modifications of the formulas should be “feasible” in the sense that it should be possible to apply them using timely, high-quality, and widely available data. In particular, minimizing the amount of estimation needed to produce the data underlying quota calculations should be an important criterion in the choice of variables, although due regard could be given to likely statistical improvements in the future.

(f) **“not give incentives to members to adjust their policies adversely.”** The staff considers the possible adverse incentive effects from the quota formulas to be minimal.

IV. EVALUATION OF QFRG PROPOSALS

21. **The QFRG recommends a linear, one-equation, two-variable formula comprised of GDP and the variability of current receipts and net long term capital flows (¶107–08).** The central proposal of the QFRG, made with several caveats to be sure, represents a major reform of the quota formulas and raises several important issues which are discussed below.