Reforming the IMF

by John Morgan and “X”

John Morgan is the Gary and Sherron Kalbach Professor of Business Administration at the Haas School of Business and the Department of Economics, University of California, Berkeley. E-mail: morgan@haas.berkeley.edu.

After 60 years of stabilizing international financial markets, the International Monetary Fund (IMF) is now in danger of becoming irrelevant, going bankrupt, or both. Its finances are threatened by a projected $370 million revenue shortfall on a budget of $980 million. Its credibility is undermined by the fact that a country like China has less influence on decision making than the Benelux countries (Belgium, The Netherlands, and Luxembourg).

The IMF itself has acknowledged the seriousness of the situation: The twin problems of country representation and budget financing will occupy center stage at the upcoming Annual Meetings of the Fund in Washington, D.C.

We would like to propose a simple, market-based solution to both problems. Our solution is to “float” the price of voting rights through an auction. By allocating additional voting rights to underrepresented countries, who presumably value them most highly, an auction helps solve the representation problem. Moreover, the proceeds of the auction can be used to fix the budget problem and provide the IMF with a financing model that relies less on financial crises as a source of funds.

Background

The IMF funds itself through interest on the loans it makes to countries facing balance of payments problems. However, this line of business has largely dried up as many countries are now self-insuring against destabilizing financial episodes—the very thing the IMF was supposed to make unnecessary. As a result, the financial position of the Fund is tenuous at best.

Why are countries relying on self-insurance rather than on the Fund? IMF funding typically comes with strings attached—strings that many countries are no longer willing to accept. Owing to their lack of voice in setting Fund policy, many countries, especially the fast-growing Asian economies, are simply opting out of the system.

A country’s influence at the IMF largely depends on its “quota,” which determines the weight of a country’s vote in the decision making process. While, in theory, quotas reflect countries’ economic power, currently, there is little relation between the two. Indeed, even after a recent quota adjustment, China’s quota is still only four-fifths of that of the Benelux countries. Similar examples abound.
Throughout its existence, quotas at the Fund have been determined by formulas placing weights on GDP, trade flows, and other macroeconomic variables. While the formulas have evolved and multiplied over time, there is still little agreement on the “right” one. Currently, no fewer than five competing formulas are being considered.

The Underlying Problem

The difficulties in devising an acceptable formula are intrinsically linked to the many competing roles that quotas serve in the IMF. Quotas simultaneously determine the capital contributions (“subscriptions”) of member countries, their borrowing rights, and the weights of their votes for the purpose of decision making. The main obstacle to quota reform is the tension between the first and third of these roles. Namely, the fixed relationship between capital contributions and votes.

Unlike equity shares in a publicly traded company, quota shares in the Fund are not tradable—there is no market price for ownership and voting rights. Nevertheless, a fixed, non-market price does exist: The Fund’s Articles of Agreement prescribe that each country receives one vote per SDR 100 thousand in quota subscriptions.1 But the fight over quotas suggests that, in an open market, one additional SDR in quota subscription would sell for considerably more than its nominal value. Thus, whenever additional quota is allocated at SDR 100 thousand per vote, a net value transfer to the buyer takes place at the expense of the existing shareholders. From this perspective, it is hardly surprising that there is excess demand for quota.

The standard solution for dealing with excess demand is to allow the price to rise such that rationing is alleviated. Reconfiguring the quota formulas, on the other hand, does not address the excess demand and rationing problem. This may explain why obtaining consensus over the "right" formula has proved so elusive.

The Solution

We propose a market-based solution to determine quotas, through the creation of an auction for quota rights. This auction would determine how much additional quota each country is allowed to buy at the prescribed price of SDR 100,000 per vote, and how much it would have to pay for that right.

---

1 The SDR is the IMF’s unit of account and corresponds to a basket of international currencies; on 27 September 2007, 1 SDR = $1.55.
Compared to the formula-based approach, the use of an auction is both simpler and more transparent. Moreover, by allowing the price of quota rights to float freely, our approach aligns the demand and allocation of quotas with countries’ ability and willingness to pay, reflecting their true economic, financial, and political power. As in international financial markets, the auction encodes underlying fundamentals in the form of a price, as opposed to using a formula to attempt to capture the same information.

The details of our proposal are as follows: The Fund announces that it is going to auction, say, SDR 20 billion in new quota rights on a fixed date—approximately 10% of the existing quota. Each member country submits a demand schedule, stating the quota rights it would like to buy as a function of the price it would have to pay. At the end of the bidding process, the Fund aggregates the demand schedules of all bidders and determines the market clearing price for the new quota rights—that is, the price where the demand curve for quota rights as derived from the bidding schedules meets the vertical supply curve of available quota rights (SDR 20 billion in our example). The market price and the allocation of quota rights are announced, and the winning bidders make payments to the Fund in the amount of the market price times the increase in their quota. Next, to conform to the Articles of Agreement, the Board of Governors officially proposes a quota adjustment that corresponds to the outcome of the auction. Finally, actual subscription payments are made and the quota adjustments are implemented. Note that countries make two separate payments. First, they pay for the quota rights they have won in the auction. Then, they pay the actual quota subscriptions. Hence, quota rights are simply “call options.”

Continuing with our example, suppose that China bids most aggressively and captures half of the rights, i.e. SDR 10 billion. Japan captures SDR 5 billion, while India and Korea each capture SDR 2.5 billion. The market price, which is determined by the highest losing bid, turns out to be SDR 1. In this case, China pays SDR 10 billion for the rights, Japan pays SDR 5 billion, and India and Korea each pay SDR 2.5 billion. Finally, each country is allocated—and pays for—its additional quota. The resulting quota shares for a selection of member countries are shown in Table 1.
Table 1. Country Quotas

<table>
<thead>
<tr>
<th>Country</th>
<th>% of Total After Auction</th>
<th>% of Total Before Auction</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>15.7</td>
<td>17.1</td>
</tr>
<tr>
<td>Japan</td>
<td>7.7</td>
<td>6.1</td>
</tr>
<tr>
<td>China</td>
<td>7.6</td>
<td>3.7</td>
</tr>
<tr>
<td>Germany</td>
<td>5.5</td>
<td>6.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>4.5</td>
<td>4.9</td>
</tr>
<tr>
<td>France</td>
<td>4.5</td>
<td>4.9</td>
</tr>
<tr>
<td>Italy</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>India</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Canada</td>
<td>2.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Russia</td>
<td>2.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Korea</td>
<td>2.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Notice that China now has greater representation than the Benelux countries.

The proceeds from the auction can be invested in an endowment. Conservatively, such an endowment would generate a three percent real return per year. At a price of SDR 1 per quota right, a SDR 20 billion rights auction would generate roughly enough income to cover the entire operating budget of the Fund.

Finally, another widely acknowledged aspect of the representation problem, which our proposal does not directly address, is the issue of strengthening the voice of low-income countries at the IMF. There appears to be consensus within the Fund that this is best handled through an increase in the number of “basic votes” given to every member country, rather than through quota adjustments.

Conclusion

Compared to allocating quota by formula, an auction has several advantages. First, it allows countries to directly express the value they place on these rights. Second, the returns from the auction can be used to put the financing of the Fund on a more stable footing. Third, by controlling the amount of new quota rights issued, the Fund’s Board fully controls the maximal dilution of the voting shares of member countries not participating, or not winning, in the auction. Fourth, the same auction framework can be used repeatedly to adjust quotas without revisiting the basic mechanism. Finally, the allocation of quota rights through an auction does not require an amendment of the Fund’s Articles of Agreement. Such amendments are difficult to pass since they require an 85% supermajority.
References and further reading


International Monetary Fund (1992) Articles of Agreement of the International Monetary Fund (1944)., Washington, DC.


