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EMERGING MARKETS IN THE INTERNATIONAL MONETARY FUND: A PROPOSITION OF A NEW QUOTA-FORMULA

MERCADOS EMERGENTES E O FUNDO MONETÁRIO INTERNACIONAL: PROPOSTA DE UMA NOVA FÓRMULA PARA DEFINIÇÃO DAS QUOTAS

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Resumo

O artigo propõe uma nova fórmula para o cálculo das quotas dos países-membros do Fundo Monetário Internacional. Quotas são relevantes pois o número de votos de cada país é majoritariamente definido por sua quota. A fórmula proposta inclui PIB medido em Paridade do Poder de Compra (PPC) como a variável mais relevante; desvio padrão da média de 12 anos dos resultados em conta corrente do Balanço de Pagamentos e estoque de reservas internacionais. Resultados indicam que a participação dos países desenvolvidos no total de quotas e de votos cairia. As participações relativas dos principais mercados emergentes seriam substancialmente elevadas.

Palavras-chave: Fundo Monetário Internacional; Fórmula para quotas; Mercados emergentes.

Abstract

The article proposes a new quota-formula that intends to improve governance within the International Monetary Fund. Quotas are important because they define, among other issues, voting power. The quota-formula proposed includes GDP measured in Purchase Power Parity (PPP) as the most important variable. Current account is introduced in the quota-formula by its standard deviation over a 12-year average. Stock of international reserves is the last variable in the quota-formula. Results show a decline in the quota-share as well as in voting-share of developed countries. Selected emerging markets would see a rise both in quota-share and in voting-share.

Keywords: International Monetary Fund; Quota-formula; Emerging markets.

1 INTRODUCTION

The article intends to analyze the necessary improvement in governance within multilateral institutions such as the International Monetary Fund (IMF). The paper argues that improvement in governance is possible only in a context of a rise in development countries relative power in the IMF's decision making process. Thus, a better governance and accountability is only possible with a new rule to define quotas as well as a new structure in the Executive Board (PORTUGAL, 2005, p.15; HOUTVEN, 2002, p. 22).

Since voting power depends on quotas, a new quota-formula is a necessary condition to shift today's power balance among country-member in favor of developing countries, especially in favor of the largest emerging markets. Thus, the article presents a new quota-formula as well as some results in quota-share and voting-share after the appliance of the new quota-formula.

The paper is structured as follows: Section 2 presents the discussion about quota-formula. The proposition of a new quota-formula that intends to shift the actual voting power between developed and emerging markets is introduced in section 3. Section 4 presents simulations of the effects of the appliance of this new quota-formula in quotas-share and in voting distribution as well as the conclusions. The simulations consider the effects of the new quota-formula in selected groups of countries such as the developed countries; emerging markets economies (Argentina, Brazil, China, India, Indonesia, Korea, Mexico, Nigeria, Russia, South Africa), as well as the other developing economies.

2 QUOTAS DISCUSSION

Although many years have passed since the creation of the International Monetary Fund in the Bretton Woods Conference in 1944, the basic framework of voting, and thus, the political balance within the Fund, has not changed substantially. Indeed, the agreement between the principle of quotas and the principle of equality of the countries in the voting processes stand still: each quota of SDR 100.000 (Special Drawing Rights) represents one vote and every country has 250 basic votes that are added to the number of votes defined by quotas.

Quotas are important because they define the contribution a country has to make to IMF's resources; how much a country can borrow from the Fund, once that loans are defined as a proportion of quotas; share in a new SDR allocation and, most important in this article, the voting power. Voting power depends on quotas and basic votes as already mentioned.

Voting power is also defined by basic votes. Basic votes incorporate the principle of equality that gives foundation, for instance, to United Nations decision making process (L'HERITEAU, 1986, p. 33). Every country has 250 basic votes. Basic votes are more important in the context of relative power within the IMF decision making process for the majority of developing countries. However, since the IMF is a financial institution, this principle has lost relative importance in total voting power[1].

Since the number of quotas is the most important element in the voting power, the challenge for developing countries is to propose a new quota-formula. Besides this new quota-formula, the proposition of the developing countries (including the emerging markets that have used Fund's resources in the ninety's) should consider a rise in basic votes as well as a change in the actual structure of Executive Board.

The demands of development countries for a revision on actual quota-formula schema forced IMF to solicit external experts a proposition on a new quota-formula in 1999. Richard Cooper, former leader of the Quota-Formula Review Group, submitted a proposition that reduced the actual multi-formula schema to a single formula with three variables: GDP, variability of current receipts and long term capital flows. GDP should be considered as the most important variable. However the results have shown a rise in the quotas-shares of developed countries against a decline of developing countries quotas-share. This result was mainly attributed to the use of GDP converted to US dollars by nominal exchange rates (PORTUGAL, 2005, p. 26).

Today the discussions go on[2]. The currently quota definition is under revision. In July 2003 the Executive Directors proposed a new formula that

> is simpler and more transparent than the traditional formulas. In particular, a new formula should be based on an updating of the traditional economic and financial variables, and should comprise at most four variables, including GDP as the most important indicator of countries' economic size, along with measures of openness, variability of current receipts and net capital flows, and reserves (IMF, 2004b, p. 47).

1 In the first agreement at the Bretton Woods Conference, basic votes accounted for 11,3% of total votes. In 2002 they represented 2,1% (IMF, 2003, p. 55).

2 For a status of the discussion see IMF (2001, 2002, 2003, 2004a and 2004b).

All the same this new revision is in discussion process while imbalances persist: the quota of Canada (SDR 6,369 millions), for instance, is equal to the quota of China (SDR 6,369 millions), although China's GDP (Gross Domestic Product) in PPP (Purchase Power Parity) is almost six times the Canadian GDP (Table 2). These distortions are also found in the quotas of other representative emerging markets such as Argentina, Brazil, India, Korea and Mexico (Table 1).

Table 1

Quotas and quotas-share (2002)

	Actual quota	Quota-Share
Total	213,719	100.0
Developed countries	**131,360**	**61.5**
United States	37,149	17.4
Japan	13,313	6.2
Germany	13,008	6.1
France	10,739	5.0
United Kingdom	10,739	5.0
Italy	7,056	3.3
Canada	6,369	3.0
Othrs	32,988	15.4
Select emerging markets	**31,546**	**14.8**
China	6,369	3.0
Russia	5,945	2.8
India	4,158	1.9
Brazil	3,036	1.4
Mexico	2,586	1.2
Argentina	2,117	1.0
Indonesia	2,079	1.0
South Africa	1,869	0.9
Nigeria	1,753	0.8
Korea	1,634	0.8
Other developing economies	**50,813**	**23.8**

Source: IMF (2004a).

The political and practical consequence of these imbalances is the loss of voting power of those mentioned countries, which have came to the Fund in several occasions in the later decade.

3 TOWARDS A NEW QUOTA-FORMULA

Today quotas and quotas-share are defined by a multi-formula approach represented below:

$Q_1 = (0.01Y + 0.025R + 0.05P + 0.2276VC)(1 + C/Y)$ – Bretton Woods Formula

$Q_2 = (0.0065Y + 0.0205125R + 0.078P + 0.4052VC)(1 + C/Y)$

$Q_3 = (0.0045Y + 0.03896768R + 0.07P + 0.76976VC)(1 + C/Y)$

$Q_4 = 0.005Y + 0.042280464R + 0.044(P + C) + 0.8352VC$

$Q_5 = 0.0045Y + 0.05281008R + 0.039(P + C) + 1.0432VC$

Where,

Y = GDP at current market prices for a recent year;

R = twelve-month average of gold, foreign exchange reserves, SDR holdings and reserve positions in the IMF, for a recent year;

P = annual average of current payments (goods, services, income, and private transfers) for a recent five-year period;

C = annual average of current receipts (goods, services, income, and private transfers) for a recent five-year period; and

VC = variability of current receipts, defined as one standard deviation from the centered five-year moving average, for a recent 13-year period.

The quota of each country is given by the higher value of the Bretton Woods formula and the average of the two lowest values of the four remaining formulas after the application of the adjustment factor (the factor that equals the value of total quotas derived from Bretton Woods formula with the one from the four other formulas).

The shift in the voting power will only be achieved in a context of implementing a package that includes the appliance of a new quota-formula, a considerably rise in basic votes and a change in the Executive Board representative structure. The estimations presented below introduce the elevation of the share of basic votes in total votes to 11%. Together with the new quota-formula, the raise in the share of basic votes in total votes is necessary to minimize the impact of the new quota-formula in the relative power of other developing countries.

The quota-formula proposed is simpler and more transparent than actual multi-formula schema. Respecting the financial nature of the institution and the role that quotas designation plays in defining the possibility of contribution to the fund, we defend the permanence of GDP as the most important variable in the quota-formula. However, since nominal exchange rates vary considerably over time and are exposed to changes in monetary policies, we defend the measure of GDP in PPP terms. Data for GDP in PPP are available for most countries. Besides the accessibility, quality and trust worthiness on PPP data have been improving (McLENAGHAN, 2005, p. 45).

GDP is introduced in the quota-formula by using the 5-year average value in PPP. Table 2 shows a comparison of shares in world GDP of selected set of countries when GDP is measured in PPP and in US$ converted by nominal exchange rates. It is possible to see how under estimated are the participations of the most important emerging markets in the actual structure of decision making process in the IMF when GDP is calculated with nominal exchange rates instead of PPP.

The current account of Balance of Payments is included in the quota-formula. A macroeconomic reason to do so is that floating in the need of external savings traduces rapidly shifts in capital flows to host economies, namely emerging markets. This implies that variability in current account indicates in some degree the need of Fund's resources in a context of sharply degeneration in the access to international financial system. Current account is introduced in the quota-formula by its standard deviation over a 12-year average and is denoted in SDR.

The last variable in the quota-formula proposed is the stock of international reserves (SDR, gold included) for the last data available. International reserves are a natural variable to be introduced in the quota-formula since they traduces the pattern of external integration of the economy as well as denotes its macroeconomic strength facing Balance of Payments crisis. International reserves are measure in SDR.

Table 2

Shares of world GDP from selected sets of countries (%) (2003)

	GDP (current prices) share of world total (%)	GDP (PPP) share of world total (%)
Developed economies	**78.52**	**53.16**
United States	30.43	20.97
Japan	11.89	6.89
Germany	6.65	4.42
United Kingdom	4.98	3.17
France	4.87	3.17
Italy	4.07	3.01
Canada	2.41	1.93
Select emerging markets	**13.17**	**30.90**
China	3.92	12.69
Mexico	1.77	5.83
Korea	1.67	2.65
India	1.59	2.55
Brazil	1.40	1.86
Russia	1.19	1.82
Indonesia	0.66	1.44
South Africa	0.46	0.92
Argentina	0.35	0.85
Nigeria	0.16	0.29
Other developing economies	**8.32**	**15.94**

Source: IMF (2005).

Thus, the quota-formula proposed assumes the following simple formalization:

$$Q = 0.005GDP(PPP) + 0.0015CA + 0.0035IR$$

Where GDP (PPP) is the 5-year average of GDP measured in PPP; CA is the standard deviation from a 12-year average of the current account measured in

SDR; IR is the stock of international reserves in the most recent year and is measure in SDR.

In this paper, the current account data measured in US dollar was converted to SDR by the exchange rate of 2004 December 31. The GDP of China and US were introduced in the new quota-formula using the average of GDP (PPP) and GDP in current dollars.

4 ESTIMATIONS AND CONCLUSION

The introduction of the new quota-formula reduces quota-share of developed countries from 61.5% to 56.8%. Share in total votes would decline from 60,4% to 53.2%. Quota-share of selected emerging markets would almost double, rising from 14.8% to 28.1%. Their share in total votes would arise from 14.6% to 26.3%.

Other developing countries would see their quota-share decline from 23.8% to 15.2%. However, it is quite important to note that the new quota-formula should be part of a package that would include a rise in basic votes. In fact, with the rise in the share of basic votes in total votes to 11% as it was in IMF's beginning the voting-share of developing countries, excluded the emerging markets, would pass from 25% to 20.5% in the context of the new quota-formula.

In selected emerging markets, China would raise their quota-share becoming as important as Japan. All the same, the relative rise in voting power of this set of countries (emerging markets) only indicates the recent changes in world economic environment.

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