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U. S. Treasury Department
Division of Monetary Researc

A SUGGESTED FORMULA FOR THE DETERMINATION
OF MEMBER COUNTRY QUOTAS

The size of a member country's quota determines the amount of the contribution which that country makes to the resources of the Fund and is an approximate measure of the right of that country to purchase foreign exchange from the Fund. The size of the quota is also one of the factors which determines the relative voice of that country in the management of the Fund. The aggregate size of the quotas will determine the total resources of the Fund.

In view of the functions of the quotas, it would seem that the formula for the determination of relative quotas for member countries should take into account the following factors:

(a) The ability of a country to contribute resources to the Fund. This might be measured by the amount of gold plus foreign exchange freely convertible into gold which a country possesses, and its national income.

(b) The probable need of a country for the use of the resources of the Fund. A reasonable indication of this need is the magnitude of a country's imports. More significant possibly is the maximum variation in the exports which a country is likely to experience. Since it is impossible to forecast these items for any of the countries, past figures have to be used even though in some cases the situation which will prevail after the war may prove to be greatly different.

(c) The importance of foreign trade in the economy of a member country. A reasonable measure of this factor would be the ratio of total trade to national income, or the ratio of exports alone to the national income. Here again it will be necessary to resort to existing data rather than a forecast of future trade and national income patterns.

(d) The relative economic and political significance of a member country. International institutions can best function with the active support and cooperation of the major world powers. Because of the wide discrepancies in some cases between the generally recognized economic and political significance of a power and its foreign trade it might be desirable to give additional weight to an important nation even though it has had a relatively small amount of foreign trade. This is particularly true in view of the fact that the trade picture in the future might be quite different than in the past.

No single or combination of economic data is without disadvantage as a measure of a country's general importance in international affairs. Of those available a country's national income seems to be subject to the least criticism.

In order to take account of the above factors, the following formula for the determination of a member country's quota is suggested:

(a) 2 percent of the national income
(b) 5 percent of gold plus dollar balances
(c) 10 percent of average imports
(d) 10 percent of maximum variation in exports
(e) The sum of (a), (b), (c), (d) increased by the percentage ratio of average exports to national income.

Tables I and II illustrate the determination of the quotas according to this formula for a few sample countries on the basis of an aggregate Fund for the United and Associated Nations of approximately $10 billion.

Voting Power

The determination of an appropriate distribution of voting power is difficult. If each member of the Board were to be given an equal vote then a small country who is participating to the extent of $1 million would have as much power in making decisions with respect to operations of the Fund as a country that had subscribed 100 or 1,000 times that amount. With the possibility that the number of small countries participating will be much greater than the number of large countries participating a one-vote-one-member arrangement would seem to be unreasonable.

On the other hand to accord voting power strictly proportionate to the amount of participation would give two or three powers control over the Fund. To permit such a concentration of control would destroy the truly international character of the Fund and seriously jeopardize its success. Indeed it is very doubtful if many countries would be willing to participate in an international organization with wide powers if two or three countries were to be able to control their policies.

It is clear that the voting power must be so arranged as to steer between these two evils. This might be accomplished by working out some compromise between the two bases of voting power referred to above.

By giving each member 100 votes plus 1 vote for every million dollars invested in the Fund a reasonably equitable distribution of control might be approximated.

Assuming a total membership in the Fund of 40 countries and an aggregate quota of approximately $10 billion, the distribution of voting power would be about as follows:

Country	Number of Votes
Australia	249
Brazil	207
Canada	378
China	450
India and Burma	467
Mexico	163
New Zealand	154
U.S.S.R.	863
Union of South Africa	275
United Kingdom (including colonies)	1,375
United States	3,029
Rest of United and Associated Nations	6,454
Total	14,064

TABLE I

Data Employed in Table II for the Determination of Member Country Quotas
(Millions of dollars)

Country	National Income (1940)	Gold plus dollar balances 1/ (1943)	Average Exports (1934-38)	Maximum Variation In Exports (1934-38)	Average Imports (1934-38)	% Ratio of Average exports to National Income
Australia	3,200	30	496	187	438	15.5
Brazil	2,500	190	310	90	262	12.4
Canada	5,800	480	944	340	648	16.3
China	12,000	750	344	100	532	2.9
India and Burma	12,000	280	709	369	555	5.9
Mexico	1,400	140	212	70	130	15.1
New Zealand	600	30	214	82	176	35.7
U.S.S.R.	32,000	1,600	308	110	238	1.0
Union of South Africa	1,000	640	509	199	440	50.9
United Kingdom (including colonies)	27,000	1,300	2,484	815	4,812	9.2
United States	77,800	18,700	2,640	1,190	2,226	3.4
Rest of United and Associated Nations 2/	60,000	8,500	10,500	3,000 3/	11,000	17.5
Total	235,300	32,640	19,670	6,552 4/	21,457	8.4

1/ Includes private and official dollar balances. United States gold holdings reduced by amount of foreign-owned dollar balances.

2/ Rough estimate.

3/ Maximum variation in exports for Rest of United and Associated Nations taken as a unit and not sum of maximum variation for individual countries.

4/ This Total is not the same as the maximum variation in exports for the United and Associated Nations taken as a unit.

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TABLE II

An Illustration of How Member Country Quotas Would be Determined According to the Suggested Formula
(Millions of dollars)

Country	(1) 2% of National Income (1940)	(2) 5% of Gold plus Dollar Balances (1943)	(3) 10% of Maximum Variation in Exports (1934-38)	(4) 10% of Average Imports (1934-38)	(5) Sum: (1), (2), (3) and (4)	Quota Column (5) Increased by % Ratio of Average Exports to National Income
Australia	64	2	19	44	129	149
Brazil	50	10	9	26	95	107
Canada	116	24	34	65	239	278
China	240	38	10	53	341	350
India and Burma	240	14	37	56	347	367
Mexico	28	7	7	13	55	63
New Zealand	12	2	8	18	40	54
U.S.S.R.	640	80	11	24	755	763
Union of South Africa	20	32	20	44	116	175
United Kingdom (including colonies)	540	65	82	481	1,168	1,275
United States	1,556	935	119	223	2,833	2,929
Rest of United and Associated Nations	1,200	425	300	1,100	3,025	3,554
Total	4,706	1,634	656	2,147	9,143	10,064

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