COMMENTS ON THE GROUP OF TEN'S REPORT

(by Donald Baerresen)
I - Introduction

This paper has been written in response to a report to the Deputies of the Group of Ten entitled: Report of the Study Group on the Creation of Reserve Assets, of May 31, 1965.

The purposes of this paper are:
Part II - to describe the nature of international liquidity, and
Part III - to suggest a plan for expanding international liquidity in conformity with the criteria stated in the report to the Group of Ten, and the interests of Brazil.

Part III may be read independently of Part II.

II - General Comments Pertaining to International Liquidity

A. A country's international liquidity equals its financial capacity to: 1) obtain goods and services abroad, and 2) reduce its international indebtedness - within a short period of time. The shorter the time period, the smaller is a country's liquidity.

Thus a country's international liquidity equals the sum of:
1) its stock of gold and foreign exchange;
2) its credit and other assets which can be converted into gold and/or foreign exchange within the specified time period; and
3) the gold and foreign exchange which can be obtained from sale of domestic money to foreigners.

Credit may consist of lines of credit already established and available, and credit which can be negotiated and made available within the desired time period.
Assets may represent:

1) negotiable claims on foreigners;
2) stocks of readily marketable (internationally) goods over which the government has, or can gain, control, e.g. silver, diamonds, petroleum, cotton, etc. (Of course, total liquidity is only increased when the price elasticity in terms of foreign exchange exceeds unity for each such good coming from the country in question), and
3) services.

The purchase of foreign exchange and gold by country A with its own money means that country A is trading claims on its goods and services for claims on the goods and services of other countries. (In order for total liquidity to be increased the price elasticity of demand for country A's money must exceed unity in terms of foreign exchange - the same as for goods and services).

B. Only the "gross" form of a country's international liquidity has been described. The "net" form of a country's international liquidity is obtained by subtracting from the gross form foreign claims on the country's goods and services which can be realized within the specified time period.

The purpose of defining international liquidity is to provide a basis for taking inventory of the items and values used as one measure of a country's economic state of health. Although the gross form is predominantly employed, it might be well to consider also the net form under certain conditions.

C. The value of a country's international liquidity equals the purchasing power of this liquidity when converted into the goods and services obtained from abroad. Therefore, if the monetary measure of a country's liquidity remains constant while prices of foreign goods and services increase then there is a decrease in the value (in terms of purchasing power) of the country's liquidity. Value is also subjective depending on the confidence placed in future purchasing power of gold, foreign exchange and credits.

D. It is apparent that a country can increase its liquidity by shifting resources in compliance with the prece-
ding definition. For example, a country can sell some domestic right (e.g. to establish an electric company) to foreigners for foreign exchange, or the country can shift labor from building schools to mining gold. All such shifting of resources and/or their ownership involves a cost - the present value of which should be less than the present value obtained from the increased liquidity.

A "shortage" (either actual or anticipated) of international liquidity generally implies that at the existing price (or cost) for liquidity, a greater quantity of liquidity is being demanded than is being supplied. However, as described above, a country is usually capable of expanding its own international liquidity if it is willing to meet the resulting cost. So it is assumed that "shortage" when used to describe international liquidity really means that countries desire more such liquidity but are unwilling to pay the costs associated with their individual efforts to increase their own liquidities (assuming the elasticity condition specified above is met).

E. Therefore some international arrangement is often sought. It is understandable that a country might prefer an international arrangement for obtaining a given increase in its international liquidity - if the cost in this way is less to the country than from utilizing its individual capability. International liquidity to be attained through such an international arrangement usually considers expanding a country's financial capacity to obtain goods and services abroad only by increase of available gold, foreign exchange, and international lines of credit. The real purpose for providing increased liquidity seems to be for relieving strains (implicit or explicit) on the balance of payments.

It is to fulfill this purpose in conjunction with the stated desire (of the Group of Ten) for increasing international liquidity that the following plan is proposed.

III - Suggested Plan for Expanding International Liquidity

A. Expansion of international liquidity might best serve for offsetting adverse effects of cyclical changes in in-
ternational trade. In particular, an increase in the availability of periodic international financing seems especially desirable for a country whose traditional exports are subject to fluctuating earnings because of forces in the world market beyond that country's control. The following plan provides a method for expanding international liquidity in accordance with this objective and in compliance with the criteria presented in the monograph: Group of Ten; Renort of the Study Group on the Creation of Reserve Assets: 31 May 1965.

B. The Plan

1. The I.M.F. will provide the administration.

2. Each country which is a member of this arrangement will automatically receive a credit, or be responsible for repayment of a loan, in foreign exchange in relation to changes in its export earnings.

   a. When export earnings in real value1 decrease (increase) a credit will be made available (repayment on outstanding loans will be required) according to the following formula.

   1) 50% of the difference between:

      a) the average real value of export earnings for the preceding five years, and

      b) the real value of export earnings for the year in question; plus

   2) the product of:

      a) twice the average of the ratios of the country's export earnings to its GNP for the preceding five years, and

      b) the residual (50%) difference from Step 1).

3) the total credit to be granted in any one year shall never exceed 90% of the real value of the difference calculated in Step 1).

4) credits granted but not used within one year shall

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1 - A method for calculating the "real value of export earnings" is presented below.
cease to be available.

5) A country's obligation for repayment of a loan obtained under this arrangement is limited to the total value of the loan plus an annual interest charge of three percent (3%) on the outstanding balance.

C. A numerical example will illustrate use of this formula:

Let country A's average annual export earnings (in real terms) equal 1000 for the preceding five years.

If for the present year Country A's export earnings equal only 800 then the difference on which credit is to be calculated is 200.

For Step 1), \(0.5 \times 200 = 100\)

Let it further be assumed that for the past five years the ratio of country A's exports to GNP averaged 10%.

Then for Step 2), \(0.1 \times 2 = 0.2\) and this \(0.2 \times 100 = 20\).

(The 100 is the remaining 50% difference from Step 1), i.e. \(200 - 100 = 100\).

Adding the results of Steps 1) and 2) gives 120 which is the amount of credit to be extended to country A for this year.

Because \(120/200\) is less than 90%, the limitation imposed by Step 3) is not violated.

Continuing with this illustration, let us suppose that instead of having a decrease in its export earnings of 200, country A has an expansion in real value of 200. Then country A is responsible for some repayment of any outstanding loans which previously it may have obtained under this arrangement. According to the formula the amount of repayment which could be required equals: 120 plus interest.

D. Real value of export earnings should be calculated according to purchasing power. So, for example, if country A's export earnings remain constant in terms of foreign exchange but there is an increase in export prices of the countries from which country A imports, then country A is entitled to a credit.
The following example serves to illustrate the method for calculating real value of exports.

Suppose that country A has imported from three countries during the past five years. Table I shows: 1) the percentages of these imports (according to the averages of the five years preceding the last year); 2) variations during the last year of the countries export prices in comparison to the preceding five year average (=100) and 3) the adjusted import percentages, i.e., the products of columns 1 and 2. The sum of the figures in Column 3 gives the total weighted average index of export prices faced by country A. From the results of this summation we find that if country A's exports in monetary terms were the same in the last year as the preceding five year average, credit should be made available to country A according to the formula.

**TABLE I**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Percentage of Country A's</th>
<th>Export Price Index (100 = 5 preceding years)</th>
<th>Weighted Price Index (3 = 1 x 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>30%</td>
<td>1.10</td>
<td>33</td>
</tr>
<tr>
<td>C</td>
<td>50</td>
<td>1.06</td>
<td>53</td>
</tr>
<tr>
<td>D</td>
<td>20</td>
<td>0.95</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
<td>105</td>
</tr>
</tbody>
</table>

In other words, the real value of country A's exports has decreased in the last year by about 4.6% (i.e., 100/105). If country A's exports were nominally valued at 1000 then the real value equals 954 and the "difference" on which the credit is to be calculated equals 46.

Let us suppose that in the first example the export decrease was 200 in terms of foreign exchange and that there was also a 4.6% loss in purchasing power. Then the "difference" (i.e., between the real value of export earnings in 1) the

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2 - This information is available to the IMF and is published in: International Financial Statistics.
last year and 2) the average of the five preceding years equals 244.8, i.e. 1000 - (800 x 954).

If, on the other hand, exports increased by 200 (in terms of foreign exchange) while purchasing power fell by 4.6%, then the amount of required repayment should equal 114.48.

E. Chief characteristics of this plan are:

1. Once established, this system of providing international liquidity is automatic.
2. An existing administrative mechanism can be employed easily.
3. Extension of liquidity is not dependent on actual balance of payments difficulties. This means that when its exports decline, a country can reduce its imports without fear of removing its claim for obtaining outside compensation for the export decrease.
4. Liquidity is provided where and when it is most needed with respect to a country's dependency on international market forces. It is for this reason that the proposed plan includes:

   a) the relationship between a country's export earnings and GNP;
   b) the real value (or purchasing power) of these export earnings, and
   c) the sliding five year average as a basis for determining credit extension and loan repayment.

3 - This figure is obtained in the following manner: 200 (the nominal increase) x .954 (index of purchasing power) = 190.8
(adjusted "difference" used as basis for calculation)

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\begin{align*}
190.8 \times 50\% & = 95.4 \quad \text{Step 1) } \\
95.4 \times 20\% & = 19.08 \quad \text{Step 2) } \\
95.4 + 19.09 & = 114.48 \quad \text{Step 3) }
\end{align*}
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/cvts.