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A Central Banking Approach to Problems of  
Import Substitution

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A Central Banking Approach to Problems of Import Substitution 1/

Discussions of import substitution often overlook the fact that this term may describe a natural process, as well as governmental policy. The problems confronting the monetary authorities are likely to vary greatly depending upon whether the government chooses to pursue policies which rely on protectionist measures to supplant imports with goods of domestic manufacture, or whether the government chooses to rely primarily on the natural process.

The Process of Import Substitution

As an economy develops, it is to be expected that local production will supplant imports to some extent. This process is likely to occur even if no governmental policies are applied to encourage it. One reason for this is that expanding population and incomes result in a larger market which enables entrepreneurs to undertake some manufacturing operations on a scale sufficiently large to be competitive with imports. In addition, as development proceeds, the labor and capital necessary to support a variety of productive activities increase. This tends to reduce the comparative costs of production in lines which during an earlier stage of development would have had difficulty in attracting either sufficient labor or capital. There tends to be a perfectly natural change in comparative advantage over time, which may even result in a country developing a thriving export trade in commodities which it may have previously imported. This shift will not necessarily constitute a move away from agriculture and other primary production. It may take the form of shifting to a different pattern of primary production, or it may involve the development of a higher volume of manufacturing activity.

One of the most dramatic examples of the process is seen in the changing trade pattern of Japan in the last three decades of the 19th century. Finished goods as a proportion of total Japanese imports fell from over 50 per cent in the 1870's to about 30 per cent in the closing five years of the century. During the same period imports of raw materials rose from a mere 4 per cent of the total to nearly 27 per cent. This dramatic change in the import pattern illustrates the fact that the process of import substitution can take place in the absence of protectionist governmental policies designed to bring it about. This is particularly clear in the case of Japan, because Japan had signed treaties with European countries and the United States which obliged her to pursue a policy of free trade and not impose protective tariffs or other restrictions on imports from abroad. The first revision of these treaties which permitted protective duties was not made until 1899, and Japan did not obtain a completely free hand in her tariff policy until 1911. By that time Japan's emergence as a significant producer of manufactured goods for both the domestic and export markets was already well underway.

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1/ This paper was prepared for the Seventh Meeting of the Central Bank Technicians of the American Continent, Rio de Janeiro, Brazil, October 1963.

It would be quite wrong to suggest that the Japanese government during this period was not concerned about the development of domestic production of manufactures. It was very much interested in seeing that Japan, which had been isolated from the rest of the world for 250 years, caught up with Europe and the United States. The government made efforts to encourage industrial development within the limitations that its treaty obligations imposed. At first, the principal devices tried were direct government investment in industry and technical assistance. These efforts bore some fruit, but the government's industrial investments were on a very modest scale, and the results were far from impressive to the government itself. This is indicated by the motion establishing the Ministry of Agriculture and Commerce in 1881, which stated:

At present the most important business of agriculture and commerce, such as the over-all supervision, enactment of laws for encouragement and promotion, and fair and uniform administration of agriculture and commerce, is overlooked and instead, the government agency itself engages in enterprises, interferes with private enterprises by supplying funds, or protects a very small number of merchants and farming enterprises. The Ministry should change its policy and make the administration of commerce and agriculture its proper function.<sup>2/</sup>

The policy was changed and in the 1880's the manufacturing plants which had been started by the government in the previous decade were, for the most part, either turned over to private ownership or closed down.

To place the role of the Japanese government in developing industry in proper perspective it is useful to examine the development of the textile industry, which played the leading role in Japan's industrialization. After Japan was opened to foreign trade, the native cotton textile industry was virtually overwhelmed by competition from the flood of imported goods, which were both cheaper and superior in quality to the domestic textiles. As early as 1870 three spinning mills with a total of 6000 spindles were erected in Japan in an effort to check the importation of cotton yarn. Two of these were financed by the Lord of Satsuma and one by a cotton merchant. One of the Satsuma mills was purchased by the government in 1872. In 1878, the government set up two more mills of 2000 spindles each, and in the following year it provided private entrepreneurs with interest-free financing for the purchase of an additional 20,000 spindles in ten different mills. Thus, by the time the policy of government investment was changed in 1881, the government had acquired or financed a total of 26,000 spindles located in 13 small mills spread around the country. None of these were successful. The mills had been badly located, they depended on water power, the machines

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<sup>2/</sup> Keizo Shibusawa, Japanese Society in the Meiji Era, Obunsha, Tokyo, Japan, 1958, p. 435.

were not adapted to Japanese cotton, and the workers could not handle them properly. The Japanese spinning industry really got its start with the establishment of the privately-owned Osaka Spinning Company with 150,000 steam-powered spindles in 1883. This company was immediately profitable, and it inspired imitation. By 1890, Japan had 278,000 spindles in operation and yarn production had risen from 12,000 bales in 1883 to 115,000 bales. This was rapidly followed by the development of a machine weaving industry.

The government was perhaps a little more influential in introducing modern methods of silk reeling. It began two modern silk factories in the early 1870's. One of these was sold to private enterprise as early as 1874 because of financial difficulty, but the other was operated profitably until it was sold to private enterprise under the disposal policy. These plants helped stimulate interest in modern methods and trained workers. However, the development of private silk factories was so rapid that it could hardly have been dependent upon either the example or the training provided by the government's one successful operation. In 1873, a year after the government's model factory was established, the number of modern silk factories rose to at least 14, and six years later the number had risen to 668.

Obviously it would be easy to obtain a misleading impression of the role of government in these developments if one were unaware of the scale of activity in the private sector <sup>3/</sup>

The process of import substitution, insofar as it is a natural development reflecting shifts in comparative costs, presents no problems for the monetary authorities. Since the process reflects economic growth, total imports will tend to rise. However, the same factors that produce a change in import patterns also affect exports, and exports will also tend to expand. Japan, for example, increased the percentage of manufactured and semi-manufactured goods as a proportion of total exports from 34 per cent in 1875 to over 75 per cent in 1900. The percentage for food and raw materials fell from 59 per cent to 25 per cent in the same period. These developments were accompanied by a very rapid expansion of both imports and exports.

### Policies of Import Substitution

More often than not, governments have found the unaided process of economic development too slow and have undertaken to speed it up by adopting policies of import substitution. The theories on which such policies were based were somewhat lacking in respectability among economists for many years, but they won a wide measure of acceptance in the period following World War II.

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<sup>3/</sup> Ibid., pp. 241-49.

The acceptance of currency inconvertibility by most countries in the postwar period gave rise to the phenomenon of foreign exchange shortage and led to all kinds of efforts to economize on the use of foreign exchange. This gave new impetus and respectability to the use of protectionist policies to encourage domestic production to replace imports.

In contrast with the natural process of import substitution, policies designed to promote substitution in this way do tend to create problems for the monetary authorities. Problems arise when the changes being encouraged by the policy are not accompanied by corresponding changes in comparative costs. One result of this may be that even though the ratio of imports of finished goods to total imports is significantly reduced, there is no change in the composition of exports, and export growth is stunted. Obviously domestically produced goods which require protection in order to be marketed at home cannot compete in export markets unless subsidized or dumped. If a large volume of resources is absorbed by the production of such goods, it is likely that the export sector will be adversely affected. Exports may grow slowly or may even contract as a result of the import substitution policy.

Some countries have assumed that this does not matter. They have expected import substitution to reduce their need for foreign exchange. However, the demand for foreign goods and services is a function of (1) income and (2) the cost of imports compared with domestically produced goods and services. A country which experiences a rise in incomes will tend to experience a rise in import demand, other things remaining equal. If, however, the prices of domestic goods relative to foreign goods are reduced, the rise in import demand may be moderated. On the other hand, if domestic prices rise relative to foreign goods, the demand for imports may rise even faster than income.

These are important points to bear in mind in evaluating policies which are intended to save foreign exchange. A policy which reduces domestic prices relative to foreign prices, or one which contracts incomes, may be effective in saving foreign exchange through cutting import demand. One which increases domestic prices relative to foreign prices, and at the same time, raises incomes, will have the opposite results. A great many of the import substitution policies which have been experimented with during the postwar years have tended to raise both incomes and prices. It is not surprising that the expected foreign exchange savings have frequently failed to materialize.

For illustration, a country may adopt tariffs or import controls which cause a shift from imported shirts retailing for \$3.00 to domestically made shirts of similar quality which cost \$6.00. The users of shirts must be prepared to buy fewer shirts or to sacrifice some other expenditure in order to maintain their level of shirt consumption. This is because, in real terms, there must be a transfer of part of their income to those who are newly

engaged in the manufacture of shirts. The latter are able to claim a larger share of the country's real resources than did those who previously supplied the shirts because of their protected position. They presumably have to claim a larger share because they cannot produce shirts as efficiently as foreign suppliers. The higher prices reflect the underlying shift in the availability and distribution of real resources. However, this means a decline in the real incomes for some, and they resist this by demand adjustments in their money incomes.

If these adjustments are made, the monetary authorities are placed under pressure to increase the supply of money. Logically, the central bank should refuse to do this, since higher money supply cannot negate the real deterioration in incomes without hurting the balance of payments. In making funds available to permit wage and salary increases, it is only providing the means by which competing groups in the economy contest to shift the burden which has fallen on the consumers. Inflation has been described as a kind of economic civil war. In this struggle, it is more likely than not that the export sector will be hard hit. This is because export prices are usually determined by demand and supply in world markets. The exporter will find himself squeezed by rising domestic costs and a world market price which he is powerless to raise. The result is likely to be a diversion of sales from export to domestic markets, or simply a decline in production for export.

The rise in income will tend to buoy up the level of imports, or even increase it. Lower exports and higher imports may prevent any immediate decline in real income, but this effect can last only so long as the country has the foreign exchange reserves or the availability of foreign credit to finance the balance of payments deficit which will result. When these sources are exhausted, the problem of adjusting to a lower level of real income immediately reappears, perhaps in even more acute form.

The protected industries are less likely to develop the ability to compete with foreign-made goods in an inflationary environment than they are in one in which businesses are subject to a considerable amount of pressure to use resources efficiently and cut costs and prices. Therefore it seems highly desirable for the central bank to avoid an expansionary monetary policy if the government is pursuing a policy of encouraging import substitution on a large scale. However, this is not easy to do. Governments which are disposed to favor import substitution as a short-cut to economic development are likely to be inclined to favor expansionary monetary policies. This is reinforced by the pressures for wage readjustments that are bound to emerge as the protectionist policies begin to bite into real incomes.

#### What Can the Central Bank Do?

Under these conditions the central bank is placed in a deep dilemma. It can give in to the demands that will be made upon it and expand its credits to the government and the commercial banks. However, it knows that in doing

so it is increasing the likelihood that the balance-of-payments difficulties of the country will be exacerbated. The following policy alternatives would appear to be open to the central bank.

- (1) It might refuse to expand credit, thus forcing the economy to accept immediately the adverse impact of the protectionist policy on real incomes. This might tend to bring about adjustments that would increase the competitive power of the country internationally, but it would be politically unpopular.
- (2) It might cooperate in increasing the money supply, counting on the availability of financial assistance from abroad to avert the balance-of-payments crisis that this policy would invite.
- (3) It might expand money supply and rely on exchange controls and/or adjustments of the exchange rate to keep the balance-of-payments in equilibrium.

Policies which combine all of these alternatives have been quite common in recent years. A frequent pattern has been for a country to get into balance-of-payments difficulties as a result of an excessive expansion of central bank credit. At first, primary reliance may be placed on exchange controls to stem the drain of reserves, but these controls are more likely to aggravate than to correct the basic ailment. The next step has been to adopt a stabilization program involving foreign assistance, devaluation of the exchange rate and restrictive credit policies. These programs are usually quite unpalatable politically, and they have often failed to produce enduring stability because of the difficulty in executing them rigorously over a prolonged period of time. Frequently part of the trouble lies in the fact that the adjustments do not go far enough, and a substantial part of the country's productive enterprises remain in need of protection from foreign competition.

Neither devaluation nor restrictive monetary policy is a painless solution to this problem. Foreign borrowing is relatively painless, but it is seldom a solution, since it only postpones the day of reckoning. Indeed, it may complicate the finding of a solution, since amortizing the foreign debt may become very burdensome.

#### Export and Grow!

Since there is no painless escape from the dilemma, it may be that the best policy for the central bank is to resist the adoption of protective policies designed to promote import substitution on a scale that may produce serious distortions in the economy. Instead, it would seem advisable to press for an outward-looking policy of growth based on export expansion. This is not a negative or passive approach to economic development. It is one which carries with it the greatest possibility of bringing about strong, sustainable growth. Both economic theory and experience attest to this fact.

An increased inflow of export earnings operates through the multiplier effect to raise the general level of incomes and hence economic activity.<sup>4/</sup> This is supported by a monetary expansion based on the inflow of gold or foreign exchange. Unlike a similar development which is supported by an increase in money supply arising from an expansion of central bank credit, this is not a threat to the country's balance of payments. The rise in economic activity arising from an export expansion will tend to stimulate import demand, but this may well lag behind the rise in export earnings. This will depend on the marginal propensity to save, the marginal propensity to import, the type of monetary policy which the country pursues, and the policies pursued by its trading partners. The central bank of a country enjoying an export expansion may deliberately adopt a policy of contracting its domestic assets in an effort to partially offset the stimulative effect of the foreign exchange inflow. If it does so, and if the central banks in the countries from which it is gaining foreign exchange adopt the policy of expanding their domestic assets in order to offset the contractionary effect of the loss of foreign exchange, the rise in the first country's imports may lag behind the rise in exports for a prolonged period of time.

In addition to stimulating the expansion of economic activity without harming the balance of payments, export-oriented growth has the advantage of maximizing economic efficiency. In export competition, both management and labor are under pressure to do their best. The costly inefficiency and waste which is so often associated with highly protected enterprises cannot be tolerated. This obviously benefits the entire economy.

The country which grows through export expansion is likely to enjoy a third benefit. By demonstrating a record of vigorous growth, balance-of-payments strength and exchange rate stability it is likely to become increasingly attractive to private investors, domestic and foreign. This is important both because capital inflow will reinforce the stimulative effects of the export expansion and because it is likely to be accompanied by technical and managerial talent which will add to the country's economic potential.

In view of the strength of the theoretical case for a policy of export-oriented growth, it is not surprising to find strong empirical support for this approach. Recent experience tends to confirm the observations of economic historians with respect to much earlier periods of history.<sup>5/</sup>

Data for the period 1953 to 1961, show that countries that have had rapidly expanding exports and balance-of-payments surpluses have tended to enjoy rapid rates of economic growth, as measured by real gross national product. The relationship is shown in the following table which compares data for North and South America, Western Europe and a sampling of Asian countries.

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<sup>4/</sup> For a detailed discussion of the process see John Parke Young, The International Economy, Ronald Press, N.Y., 1963, pp. 114-15, 130-34.

<sup>5/</sup> See, for example, Douglass C. North, The Economic Growth of the United States, 1790 to 1860, Prentice-Hall, 1961, pp. 6-7, 68.



Table 1

Exports and Economic Growth<sup>1/</sup>  
1953-61

Countries with rapid export growth	Countries showing more rapid economic growth			Countries showing less rapid economic growth		
	Export Growth		Growth of real GNP	Export Growth		Growth of real GNP
	16.2	Japan	9.7	7.2	Belgium	2.9
	14.2	Germany	7.1	6.5	U. S.	2.4
	13.6	Italy	6.1	4.7	U. K.	2.8
	10.5	Austria	6.5	3.7	El Salvador	2.7
	10.1	Peru <sup>2/</sup>	4.6	3.6	Canada	2.8
	9.0	Netherlands	4.8			
	8.4	France	4.6			
	8.0	Sweden	4.2			
	7.4	Norway	3.3			
	7.0	Denmark	4.0			
	6.9	Switzerland <sup>2/</sup>	5.1			
	6.6	Venezuela	6.5			
	4.4	Mexico	6.6			
	3.9	Ecuador	4.5			
	3.6	Nicaragua	4.1			
Countries with less rapid export growth	2.7	India	3.3	2.7	Chile	2.7
	1.9	Guatemala	5.5	-1.2	Pakistan	2.4
	0.6	Costa Rica	4.3	-1.9	Argentina	2.4
	-1.0	Honduras <sup>2/</sup>	4.3	-2.0	Haiti <sup>2/</sup>	2.3
	-1.2	Brazil	6.4	-2.0	Paraguay <sup>2/</sup>	1.4
	-3.5	Colombia <sup>2/</sup>	4.5	-5.8	Bolivia <sup>3/</sup>	1.1

<sup>1/</sup> All figures are annual compound rates of growth based on data for the terminal years of the period. Sources are IMF for exports, U.N., IBRD and OECD for GNP.

<sup>2/</sup> 1953-60.

<sup>3/</sup> 1953-59.

Anyone who is aware of the difficulty in assembling reliable national accounts for the less developed countries may well view these data with suspicion. The appearance of precision in the estimates of real rates of growth is, no doubt, quite unjustified. It is interesting, and perhaps significant from the point of view of the reliability of the data, that for this period none of the developed countries show real GNP growing at a faster rate than exports. On the other hand, among the less developed countries only, Peru, Venezuela and El Salvador show

real GNP growing less rapidly than exports, and even the latter two countries show GNP growing more rapidly than exports when the trends are computed on the basis of all years in the period covered rather than just the terminal years. This might mean that a very different relationship between growth of exports and growth of real GNP prevails in the less developed countries as compared with the developed countries, or it might suggest that the GNP growth rates in the less developed countries tend to be overstated.

Probably both of these interpretations are correct in part. In view of the known weaknesses in the underlying data, it is not at all unreasonable to assume that in some cases, at least, the GNP growth rates are exaggerated. However, it is also significant that the countries that show GNP growing faster than exports also tend to show declines in international reserves, as is shown in Table 2. In a number of cases foreign financial assistance has been an important factor contributing to the maintenance of the growth rate. Some of these countries may also have benefited from increased receipts on service account and from inflow of private capital. This would, of course, tend to have the same effect as exports on the rate of growth of GNP.

Table 2

Annual Compound Rate of Change in Gold and Foreign Exchange Holdings<sup>1/</sup>  
1953-61

Italy	20.5	Belgium	5.4	Venezuela	1.5	U. S.	-3.2
Germany	18.0	Denmark	5.3	Chile	1.1	Haiti	-4.6
France	17.2	Peru	5.0	Pakistan	0	El Salvador	-7.0
Austria	12.6	Netherlands	4.9	Ecuador	-0.4	Honduras	-7.7
Norway	8.6	U. K.	3.4	Brazil	-0.9	Bolivia	-10.3
Japan	7.7	Sweden	2.9	Nicaragua	-1.6	India	-12.0
Mexico	7.7	Guatemala	2.7	Argentina	-1.8	Costa Rica	-12.9
Switzerland	5.7	Canada	1.5	Colombia	-3.0	Paraguay	-22.4

<sup>1/</sup> Source: International Financial Statistics computed from data for terminal years.

With full recognition of the weaknesses of the data, one might reasonably conclude from them that it is quite probable that a country that is able to achieve a high rate of export growth will also achieve a high rate of growth of real GNP. It is true that there are exceptions to this, notably the United States and Belgium, countries in which the growth of GNP appears to be considerably below that which might be expected on the basis of their export performances.

It would appear that Belgium, in spite of a substantial increase in gold and foreign exchange holdings has restrained monetary expansion to such a degree that the rate of economic growth has been somewhat slower than might have been feasible. <sup>6/</sup> The United States, on the other hand, has suffered from a substantial outflow of gold. Even though the Federal Reserve System has more than offset the monetary impact of this outflow by expanding its domestic assets, it has not appeared appropriate, for a number of reasons, to use central bank credit to achieve an even higher rate of increase in the money supply. If our theoretical

<sup>6/</sup> Money supply, real GNP, exports and reserves are shown in the annexed charts.

analysis is correct, to do so would affect both incomes and prices in a way that would have tend to worsen the balance-of-payments problem. Other important items in the balance of payments have operated to deprive the United States of the increase in money supply which it should have obtained from its quite satisfactory export performance. It could be argued that these items in the balance of payments constitute a drag on the growth of GNP. However, it might also be said that the United States export performance has been exaggerated by the provision of an extraordinary amount of financing on extraordinary terms. If it were possible to adjust for this, the rate of export growth might not be so far above the real GNP growth rate.

One other inference that might properly be made from Table 1 is that a high rate of increase in real GNP cannot be counted upon to bring about an expansion of exports. This is fully in accord with the theoretical analysis already discussed, which holds that while increasing exports may stimulate economic growth, the stimulation of economic growth by other means will not necessarily produce an increase in exports. Indeed, the evidence suggests, as does the theoretical analysis, that exports may even decline under these conditions.

Although a program of export expansion may enable a country to increase its rate of economic growth, there is no guarantee that the growth will be concentrated in any particular sector. It may or may not result in the substitution of domestic products for imported manufactured goods. Not every geographical area in the world is endowed with the resources and the location which are conducive to the development of an extensive manufacturing industry. However, there is probably no area in which techniques or production, and therefore productivity, are not capable of being improved. There is also considerable room for increasing the quantity as well as the quality of the labor expended in many parts of the world in a given period of time. These are the essential ingredients of growth. The Chinese communists discovered to their profound sorrow a few years ago that it was a great mistake to assume that economic progress would flow automatically from the creation of a heavy industry base. By neglecting, and actually abusing, other sectors, notably agriculture, they brought their people to disaster. But China is not the only country in the world that has made the mistake of concentrating on investment in manufacturing industry while doing little or nothing to improve productivity in other sectors which employ the vast majority of the labor force.

It has been forcibly argued that the scope for expanding exports of primary products is limited. If true, this would suggest that primary producing countries must look to industry if they are to pursue an export-oriented growth policy.

Change is the one unchanging certainty in this world. There are many countries that have traditionally exported commodities for which the future does not look particularly bright. It may well be that these countries cannot expect to grow rapidly unless they can introduce new products. However, the new products may well be other primary commodities. Fish meal in Peru, bananas in Ecuador, cotton in Central America, corn in Thailand are all examples of the recent development of new exports that have come to play a significant role in stimulating economic growth. No one can foresee developments such as these vary far in advance. Sometimes they are so unlikely that people have a hard time believing

that they have taken place long after the event. For example, no one foresaw in the early 1950's that Japan was destined to become a very large importer of feed corn, and who would have believed that Thailand, whose traditional exports were rice, rubber and tin, would become a major supplier of this commodity to Japan? In a few short years Thailand, which had never been a significant exporter of corn, captured a quarter of the Japanese market and corn became her fourth largest export. <sup>1/</sup> What was important in this case was not long-range planning, but flexibility. Since markets are always subject to change, the countries that maintain an environment in which businessmen can respond quickly and aggressively to new opportunities as they open up will be the ones most likely to develop new exports. The countries which saddle themselves with overvalued exchange rates, unrealistic pricing policies, controls which hamper productivity and boost costs and restrictions on travel and communication which hamper the free exchange of economic intelligence will find themselves outclassed.

### The Outward-looking Central Bank

The central bank has an important role to play in trying to keep the country in a posture of maximum flexibility. With its strong concern for monetary policy and the balance of payments, it is in a unique position to emphasize the importance of an outward-looking policy of economic development. It is not enough to merely stand firm as the dedicated opponent of inflation. It is important to recognize and resist narrow, inward-looking policies which carry within them the seeds of subsequent inflation and balance-of-payments crises.

Beyond this, the bank should stand for a positive program of national development through capitalizing on those lines of economic activity which the country can pursue with reasonable efficiency, as measured by its ability to compete in free markets. Where obstacles to this exist which can be removed by education and training, this should be forcibly pointed out. Where the missing factors are imagination and know-how, it may be advisable to recommend that efforts be made to attract people to the country who can supply these things. Where bad legislation and administrative bottlenecks are a drag on enterprise, there should be no hesitation in recommending corrective action. In the postwar period there has been far too much emphasis on providing the central banks with powers to restrain imports and far too little on the desirability of their directing thought to the importance of promoting exports and to ways of doing so. The emphasis has long since shifted in Europe and Japan. The accomplishment of this shift in other parts of the world should be one of the prime objectives of central banks in the present decade.

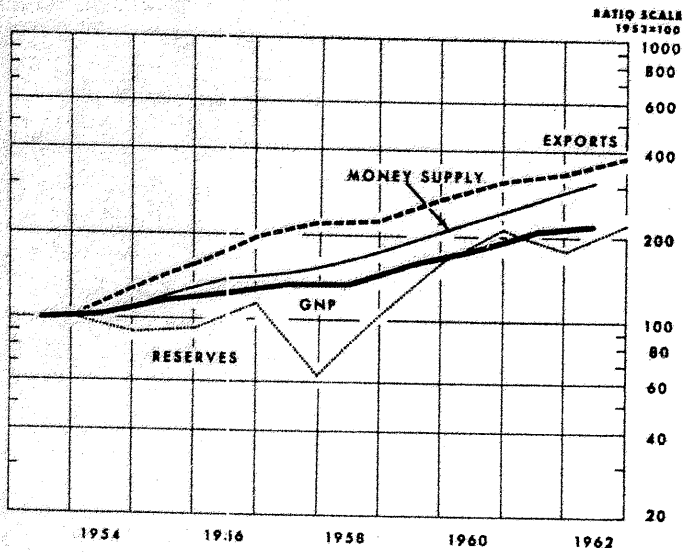
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<sup>1/</sup> Corn is only one of several new agricultural exports developed by Thailand in recent years. Others of importance are cassava, livestock, and kenaf. As a result of this, plus a big expansion in rubber exports, rice, in 1962, accounted for only 44% of Thailand's agricultural exports, compared with 64% in 1950. The U.S. Department of Agriculture comments, "This trend can be attributed mainly to the response of Thai farmers to world market conditions." Foreign Agriculture, U.S. Department of Agriculture, August 19, 1963, p. 9.

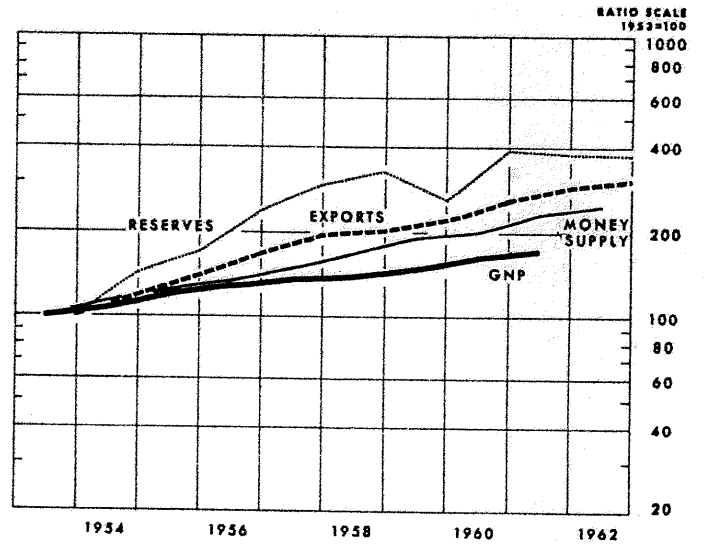
The following charts compare real GNP, money supply, exports and reserves for 26 countries.

The data for real GNP were obtained from the United Nations Yearbook of National Accounts Statistics, the Organization for Economic Co-operation and Development General Statistics, the International Bank for Reconstruction and Development and national source publications. The data for money supply, exports and reserves were obtained from the International Monetary Fund International Financial Statistics.

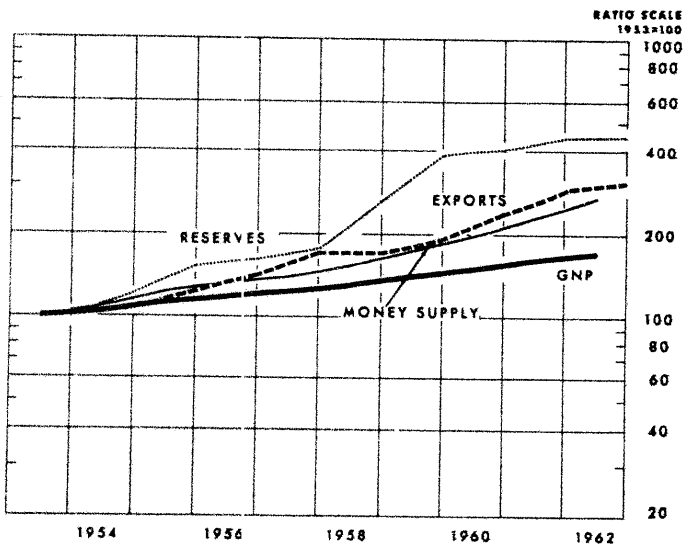
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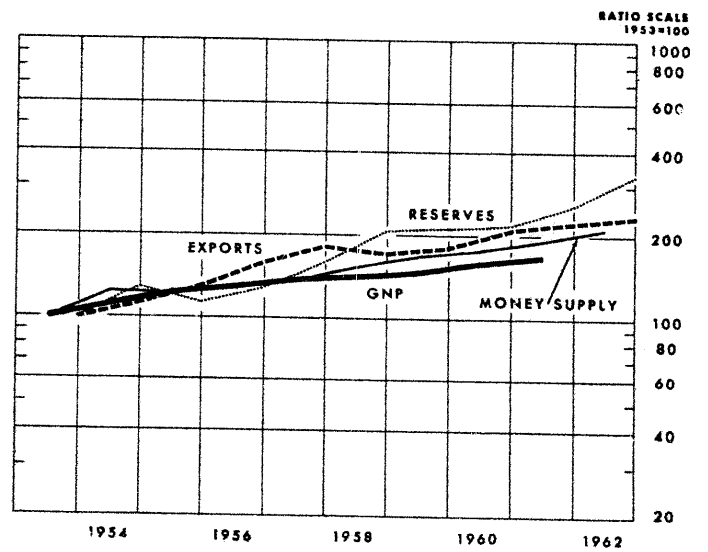
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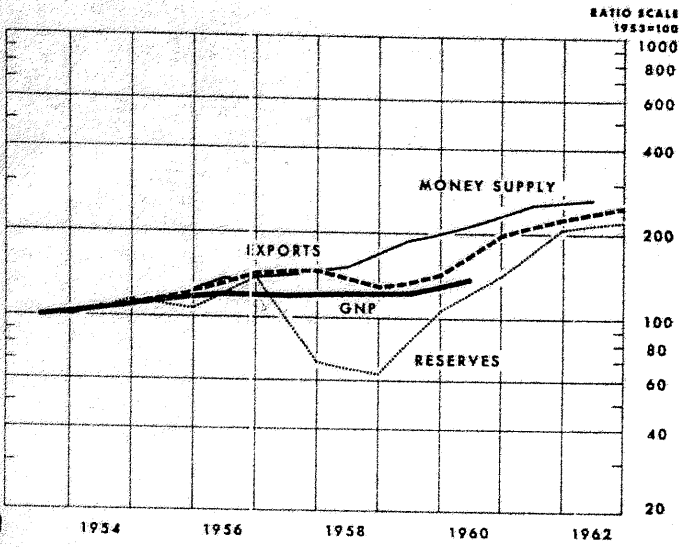
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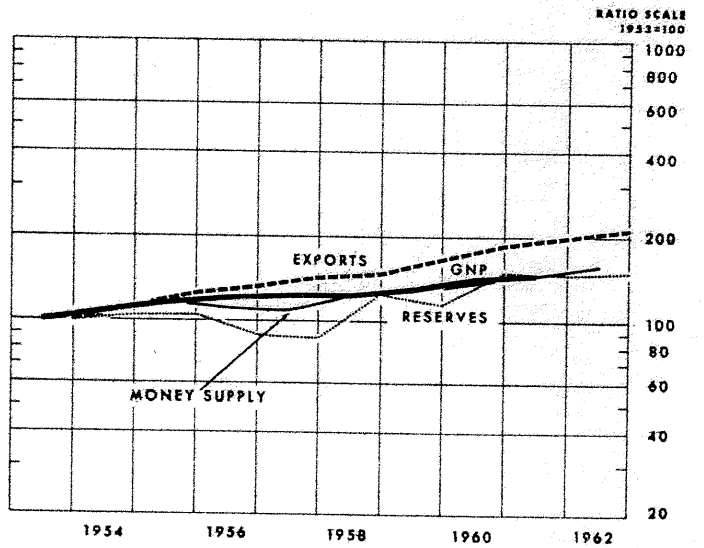
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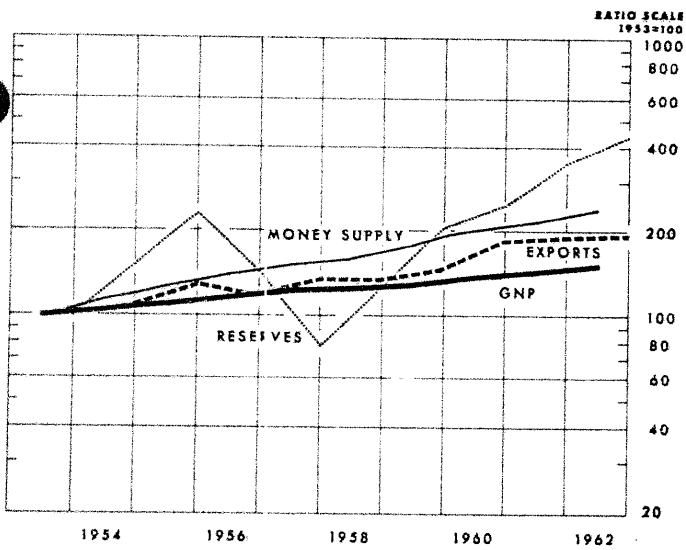
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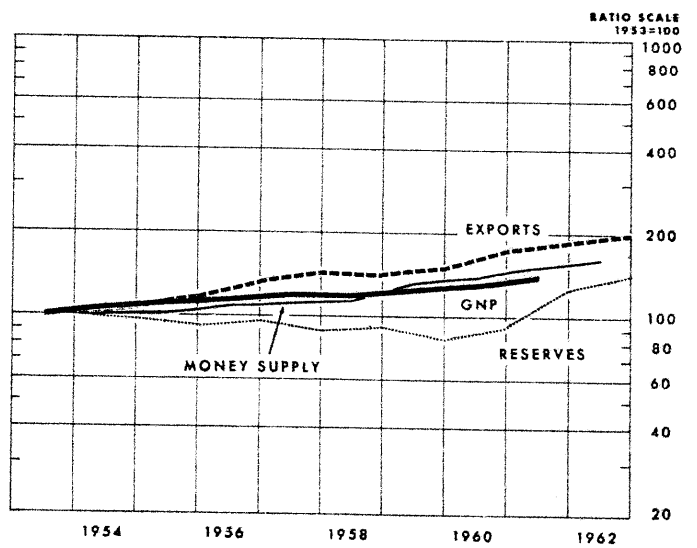
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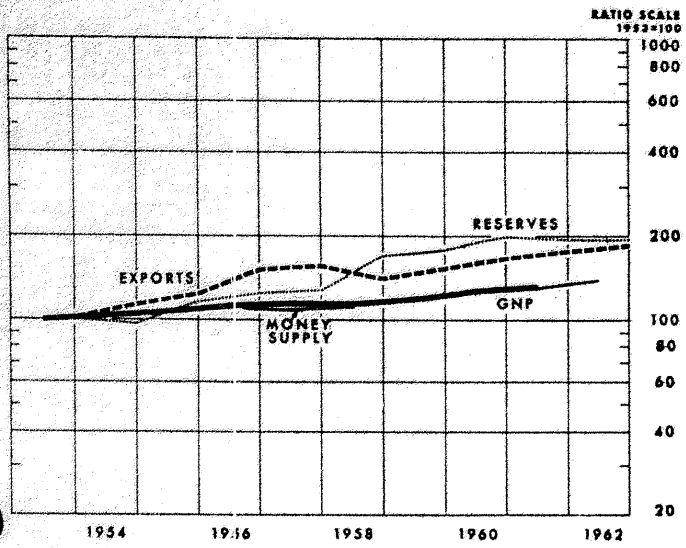
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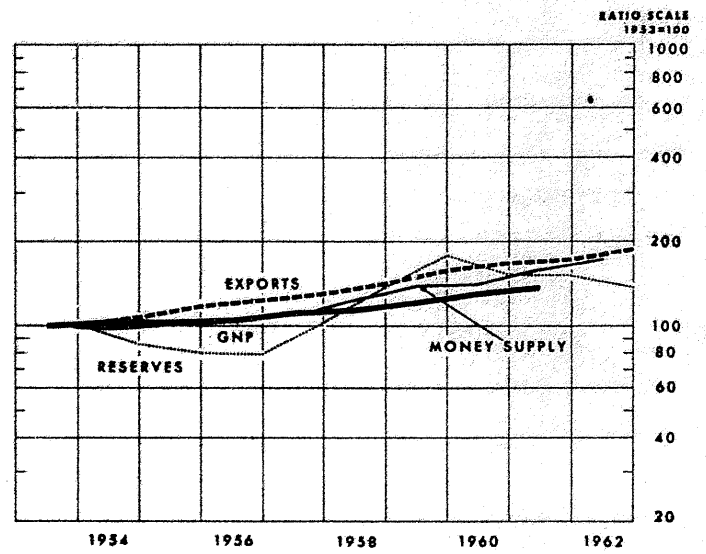
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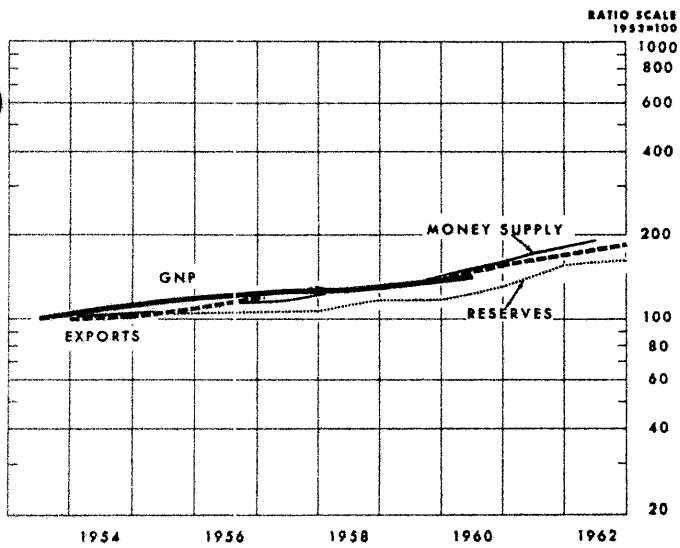
### NORWAY



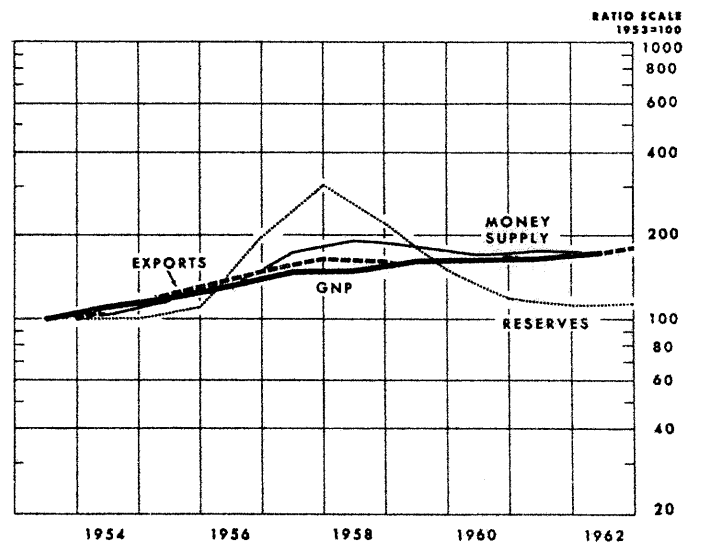
### DENMARK



### SWITZERLAND

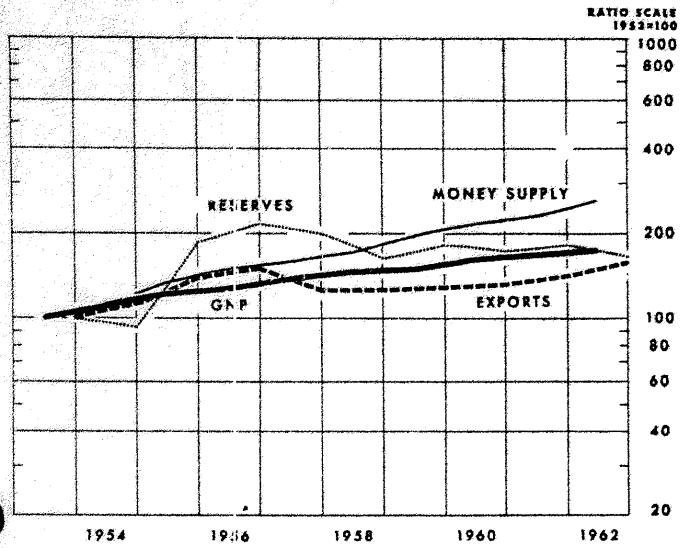


### VENZUELA

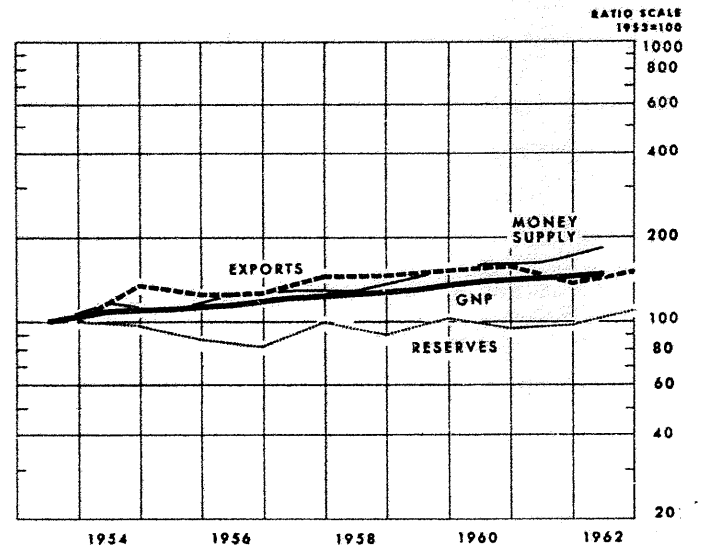




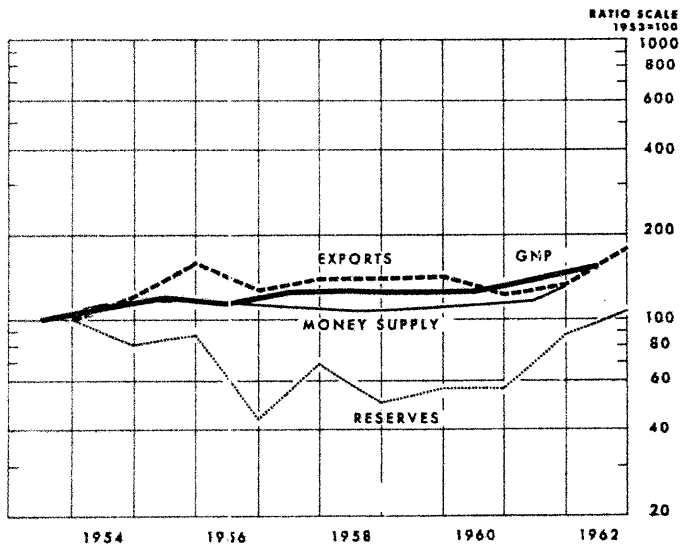
**MEXICO**



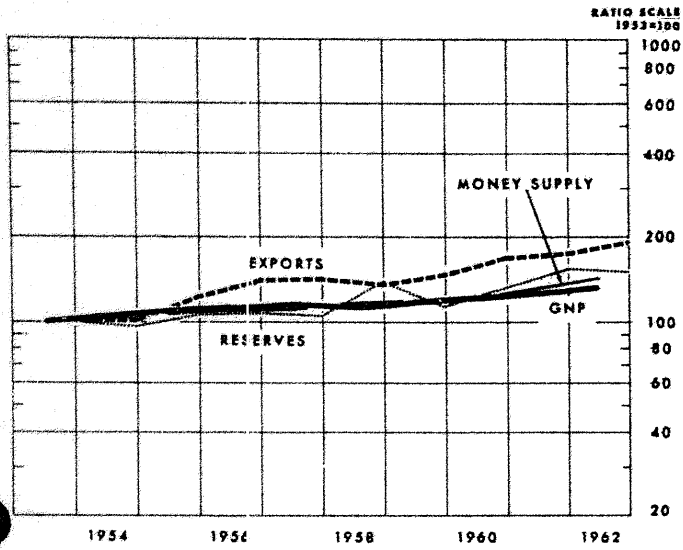
**ECUADOR**



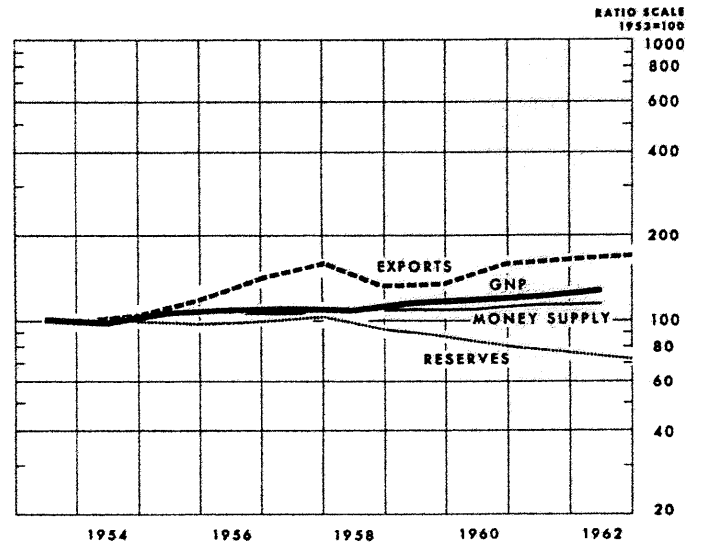
**NICARAGUA**



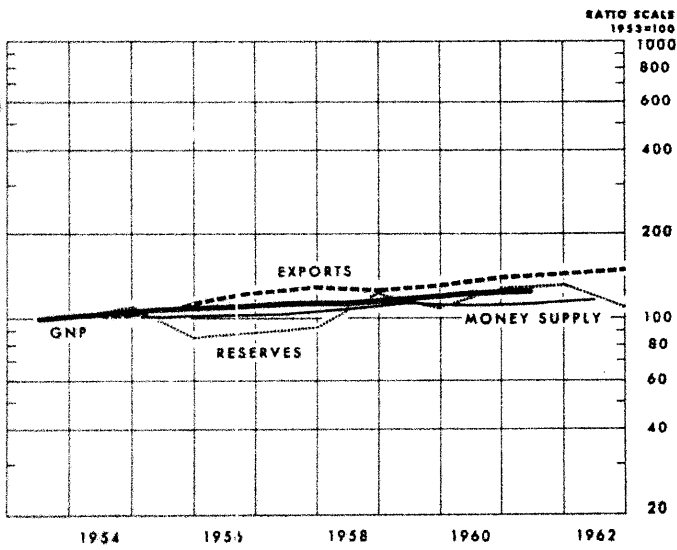
**BELGIUM**



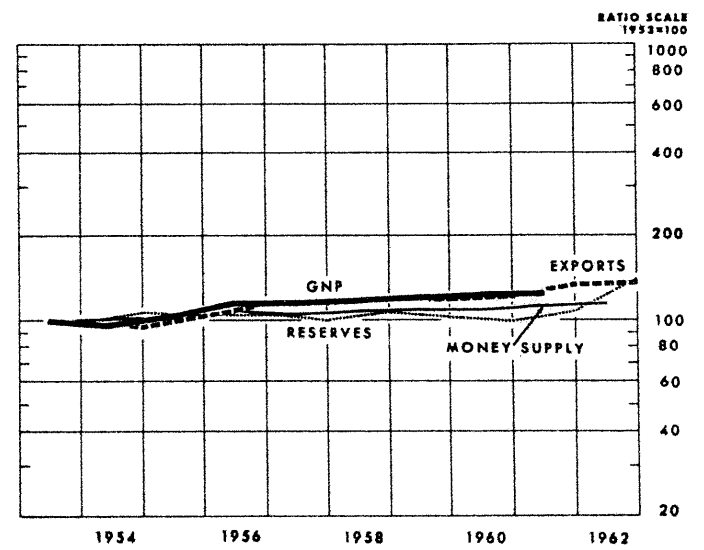
**UNITED STATES**



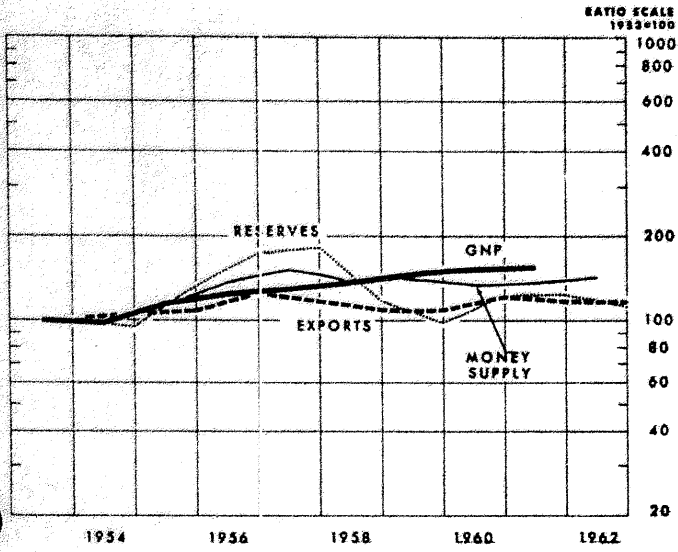
**UNITED KINGDOM**



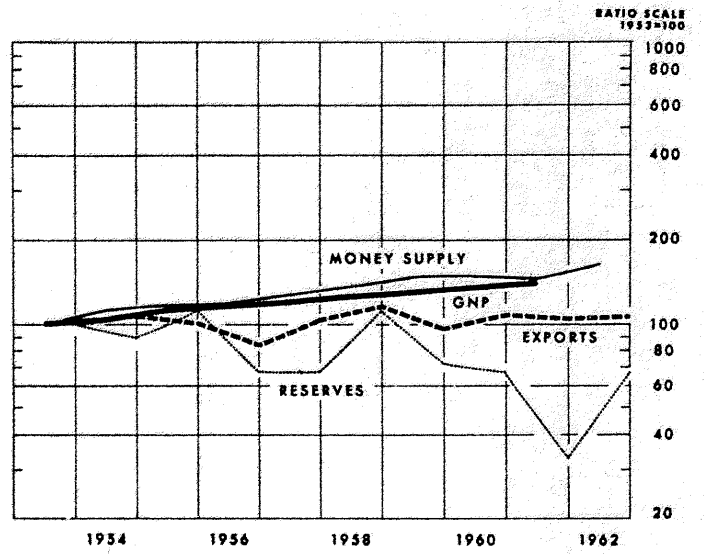
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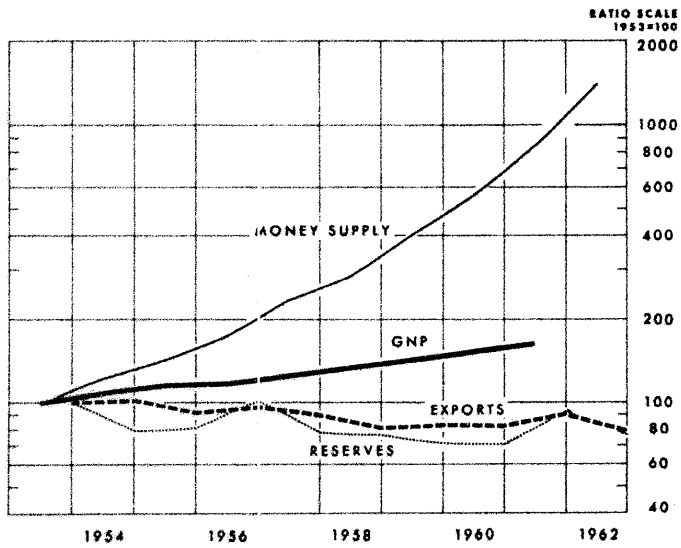
### GUATEMALA



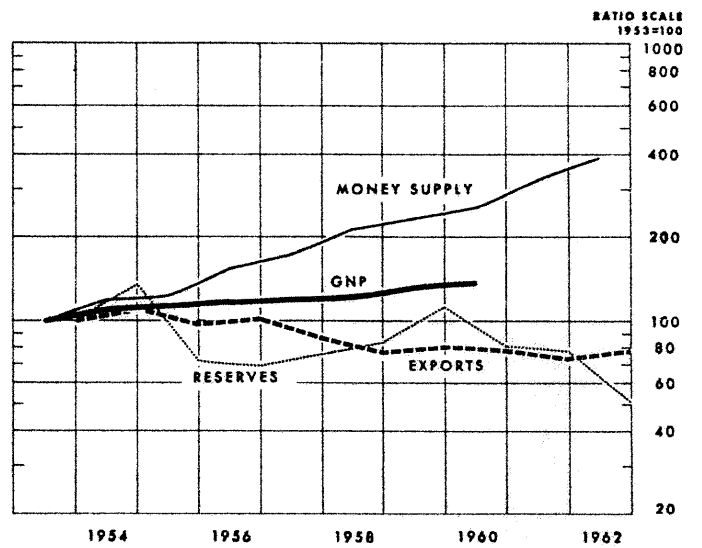
### COSTA RICA



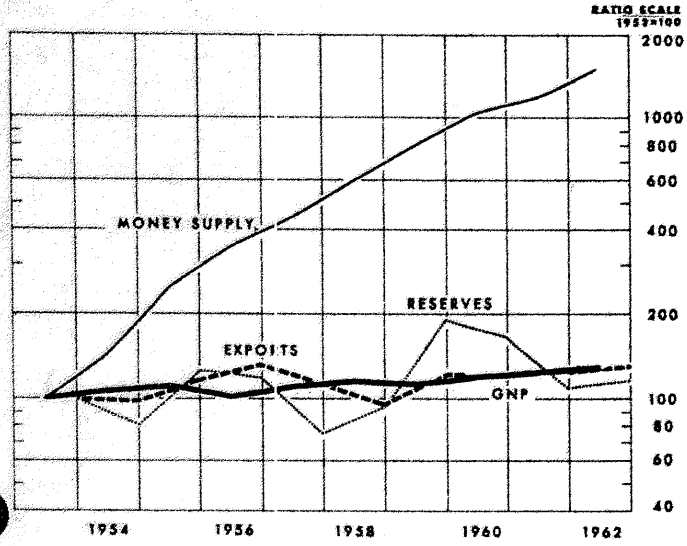
### BRAZIL



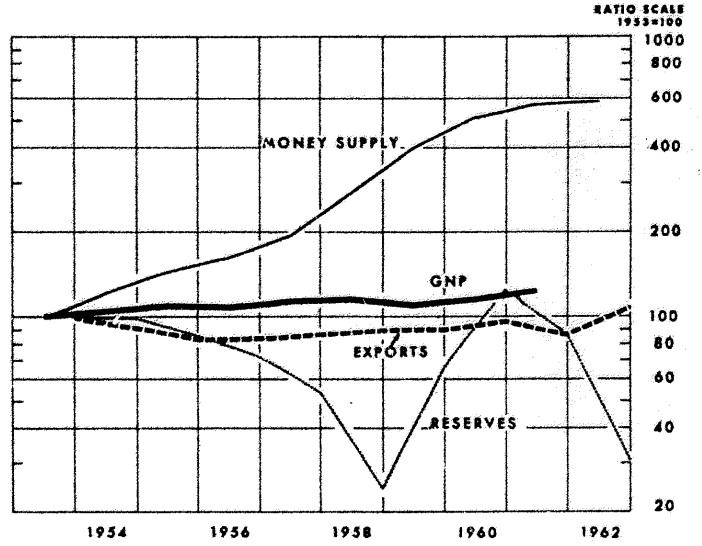
### COLOMBIA



**CHILE**



**ARGENTINA**



**BOLIVIA**

