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The Mutual Security Act of 1952

Stephen H. Axilrod

5 pages

The New York Federal Reserve Bank Study of the Pattern
of U.S. Import Trade

Edward Marcus

11 pages

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July 29, 1952

The Mutual Security Act of 1952

Stephen H. Axilrod

The Mutual Security Act of 1952 amends the 1951 Act in several important respects. This note will attempt to explain the more important changes and the new financial arrangements will be set forth. 1/

Appropriations for the program authorized in the new Act amount to \$6,002 million for fiscal 1953, a 22 per cent reduction from the total amount appropriated in the fiscal year just past. 2/ This reduction not only reflects the smaller amount requested by the executive (\$7,900 million compared with \$8,500 million) but also the larger cuts finally agreed upon by Congress, 24 per cent in contrast with 14 per cent in the previous year.

As indicated by the table on the following page, the whole decline in amounts appropriated is attributable to a sharp cut in funds for direct military assistance to Europe. Because of this cutback, funds for direct military assistance to all areas decreased from 80 per cent of total appropriations to 70 per cent in comparison with the previous year, while the relative share of funds for economic aid has correspondingly increased. 3/

When compared with the rest of the world, Europe suffered the only cut in military funds and also received relatively less total funds for the present fiscal year than it did in the past year. Last year, Europe received 81 per cent of total appropriations; this year its share declined to 73 per cent. On the other hand, appropriations for Asia and the Near East increased both absolutely and relatively as can be seen from the table.

The functional distribution of funds in the new Act does not indicate any reversal in the policy of strengthening mutual defense programs. On the contrary, economic aid is to be more closely related to defense measures than in the past. To this end, the Economic Cooperation Act of 1948 has been repealed except for those sections specifically mentioned as remaining in force (see Section 7c of the new Act). In general, this repeal has very little operational significance since all sections of the Act required for continuing MSA's present status and functions have been retained. However, the statement of policy and purposes has been deleted, with the result that most economic aid appropriations are now subject to provisions of the Mutual Security Act of 1951 as amended. These provisions emphasize military and defense support programs as legitimate uses for economic funds rather than broad programs for economic recovery and the stimulation of international trade.

1/ The previous Act was analyzed in this Review, November 20, 1951; the administration request for new legislation and funds was described in the April 8, 1952 issue.

2/ Appropriations are contained in P.L. 547, 82nd Congress, Chapter 11, Title 3.

3/ See footnote 9, next page.

Mutual Security Program, 1952 and 1953
(Millions of dollars)

	Fiscal 1953			Fiscal 1952
	Appropriated	Authorized	Requested	Appropriated
Aid, total	6,002	6,448	7,900 6/	7,329
Military	4,220	4,599	5,424	5,789
Economic	1,754	1,805	2,445	1,440
Other	28	44	30	100 8/
Europe, total	4,410	4,698	5,964	5,941
Military	3,128	3,416	4,145	4,819
Economic	1,282 9/	1,282	1,819	1,022 9/
Unallocated (Spain)	-	(25) 5/	-	100
Near East and Africa, total	680	741	802	540
Military	499	560	606	415
Economic	181 1/	181	196	125
Asia and Pacific, total	812	887	1,019	772
Military	541	565	611	535
Economic	271 2/	322	408	237
Latin America, total	72	78	84	59
Military	52	58	62	38
Economic	20 3/	20	22	21
Other	28 4/	44	30 7/	-

- 1/ Includes \$60 million for Palestine refugees and \$70 million for Israel resettlement which may also be transferred to economic aid and technical assistance in the larger area.
- 2/ Covers \$203 million appropriated as economic assistance under MSA and \$68 million for technical assistance.
- 3/ For technical assistance.
- 4/ Includes funds for movement of surplus population, ocean freight on relief packages, multilateral technical assistance, and the International Children's Emergency Fund.
- 5/ Of total aid to Europe, a minimum of this amount was to be used on unallocated assistance to Spain.
- 6/ Column does not add to total because of rounding.
- 7/ ICFE request of \$24 million not included in this total when first sent to Congress.
- 8/ Includes only the unallocated assistance to Spain.
- 9/ The provision of the 1951 Act providing that 10 per cent of the total of funds appropriated to Europe may be transferred to either economic aid (defense support) or military assistance programs for Europe remains in effect. In fiscal '52, \$478 million was transferred to the economic program, raising the economic allocation to Europe to \$1.5 billion and total economic aid to \$1.9 billion. If the full transfer permitted were made this year, the economic allocation to Europe would amount to \$1.7 billion and total economic aid would rise to \$2.2 billion.

Not all the economic appropriations are related to the military effort. All of the European appropriation is for defense support, but funds for the Near East can be used for defense support as well as for technical assistance in accord with provisions of the Act for International Development of 1950, which embodies the Point IV program. Of the \$271 million in economic aid for Asia, \$68 million can be used for technical assistance. All economic aid to Latin America is for technical assistance.

Adding some flexibility in the use of funds, Section 3b provides that not more than \$100 million of the total funds made available under the Act can be used without regard to conditions of eligibility contained in the Act when the President determines it is important to the security of the United States to do so. Not more than \$20 million can be allocated to any one country.

Collective security programs

The new Act also emphasizes the point that European economic, political, and military unification is critically important to world peace (see Section 2). Funds appropriated for Europe can be used to assist NATO, the Schuman Plan, or whatever organization may evolve from current discussions on a European Defense Community. Where necessary to the mutual security effort, no country can receive aid unless it takes decisive action toward participating in integration and unification plans in the appropriate area.

Counterpart

Three important provisions affecting counterpart have been included in the new Act.

(1) The amount of counterpart set aside for U. S. Government purposes has been raised from five to ten per cent of total local currency (Section 9b). According to the Conference Committee, the purpose of this amendment is to increase the funds available for the procurement of strategic materials.

(2) The Zablocki amendment (Section 9a) states that counterpart funds used for loan purposes shall be redeposited in the counterpart account upon repayment of the loan. This provision stems from the report of a special study mission to Germany from the Committee on Foreign Affairs. The mission noted that when counterpart had been released and used for industrial loans and then repaid, the United States no longer had control over the future use of those funds; 1/ it, therefore, recommended an amendment to provide some continuous participation in the use of counterpart funds.

1/ If the counterpart is released to a lending agency and loaned by such agency, it might appear that these funds are not subject to the re-deposit provision since they are not loaned directly from the counterpart account. This strict an interpretation, though, would not seem to be in line with the intent of the provision.

(3) The Case amendment (Section 7m, adding new Section 539 to the 1951 Act) is an effort to restrict the use of counterpart to economic programs more closely connected with the defense effort than, for example, debt retirement and other measures solely promoting financial and economic stability. It states that "except as otherwise specifically authorized by law" these funds "shall be expended only on programs to carry out the purposes for which new funds authorized by this Act would themselves be available." Senator Case explained this as meaning that counterpart should be released only for projects of military assistance or defense support and specifically mentioned that it eliminated the possibility of making any new releases for debt retirement. Nevertheless, that part of the local currency provisions of the old Economic Cooperation Act which mentions internal financial stability as an authorized purpose for counterpart is still in effect, clouding the whole matter with a bit of legal ambiguity.

Another restriction on the use of counterpart is contained in the Moody amendment (Section 9c), which states that up to \$100 million in aid should be provided under agreements assuring that the equivalent amounts of local currencies will be placed in revolving funds and used with a view to stimulating free enterprise and economic expansion.

Private investment

By the addition of several amendments (the Javits amendments), the new Act lays more stress on the role of private investment in the programs presented (Section 7k).

In one provision, the MSA (in cooperation with private business groups and other governmental agencies) is directed to encourage greater participation by private capital in the guaranty program and also to develop broad criteria to facilitate such, including participation in programs consistent with the purposes of the Act for International Development.

The Department of Commerce (in cooperation with other agencies and the International Bank) is directed to make a study of impediments, both foreign and local, to private investment abroad and to make recommendations to the Director for Mutual Security.

The Department of State is to accelerate its program of negotiating treaties of commerce and trade, and other arrangements, to encourage the flow of private investment to countries receiving aid under this Act. In addition, special stress is given to investment in underdeveloped areas by providing that the Technical Cooperation Administration is to find opportunities for investment in underdeveloped areas and to draw them to the attention of private enterprise. 1/

1/ In the original House version of the Act, \$100 million of the total funds authorized could have been used for subscription to the capital of an International Finance Corporation. This provision has not been included in the final Act.

Loans and guarantees

The section of the 1951 Act requiring that at least ten per cent of the total amount of economic assistance be in the form of loans has been repealed (by Section 7a of the new Act), although MSA may still make loans in appropriate cases. Also, it is still bound to consult with the NAC in determining whether assistance shall be through grants or upon terms of payment, and in determining what the terms of payment should be.

The guaranty provisions of the Economic Cooperation Act, as amended, are continued in force, including the \$200 million limitation on the amount outstanding and the proviso contained in the 1951 Act that "any area in which assistance is authorized by this Act" is eligible for investment guarantees. There had been some doubt as to whether this could be considered a guaranty program for underdeveloped areas, and whether it could be considered a substitute for the Administration's idea of a Point IV guaranty program. ^{1/} In light of the specific directive to MSA to encourage participation of private investment in programs consistent with the Act for International Development, the old provisions may now be interpreted in a more liberal fashion. Nonetheless, they are still no substitute for a broad guarantee program applicable to investments in any underdeveloped area regardless of its immediate contribution to mutual defense.

The authorization under the Economic Cooperation Act to extend guarantees for the distribution of informational media in foreign countries has been extended, but the function is to be exercised by any department or agency designated by the President (Section 7m, adding new Section 536). This function has already been delegated to the State Department and will be exercised by that agency after August 15 at the latest.

No other major changes have been incorporated in the Mutual Security Act of 1951. The whole program is still slated to expire on June 30, 1954 or before if the two Houses concur. What has happened is that in the past fiscal year the recovery phase of the economic program ended, and, with the minor exception of some underdeveloped areas, sole concentration on the defense support aspects of aid programs began.

^{1/} This review, Nov. 20, 1951, p. 9.

July 29, 1952

The New York Federal Reserve Bank Study of the Pattern of U. S. Import Trade

Edward Marcus

The Federal Reserve Bank of New York has just published a study on The Pattern of United States Import Trade Since 1923, covering the period 1923-1950. 1/ Unlike many earlier, more limited analyses, the Bank project has investigated a fairly detailed breakdown of our imports, compiling separate series for the main geographic areas. 2/ For each area--with a few unimportant exceptions--there are value, price and quantity series for crude foodstuffs, for manufactured foodstuffs, for crude and semi-manufactured materials, and for finished manufactures, as well as for total imports. This is a far more extensive set than is supplied by the Department of Commerce, which publishes only over-all series for the five commodity groups. 3/ Each of these series, in turn, has been used to estimate changes in U. S. imports of each of the categories for each of the regions as a result of changes in U. S. incomes (or industrial production) and, where appropriate, shifts in relative prices. The detail involved 250,000 separate computations.

The greater detail is of particular help in investigations that have a varying geographical impact. For example, it is significant to the student of the British balance of payments to know the behavior of our whisky imports, which frequently move differently from its commodity class as a whole (manufactured foodstuffs), because of the presence in the latter of items as stable as sugar. Or again, crude materials such as copper ore from Chile are subject to a different degree of competition than is rubber, which must be sold to the same purchasers that may also turn to domestically-produced synthetics. Global indices such as those of the Commerce Department obscure--or, more correctly, average--these quite different influences.

1/ The project was the work of three members of the Balance of Payments Division: J. H. Adler, now with the International Bank for Reconstruction and Development, E. R. Schlesinger, and E. van Westerborg. Copies of the publication are available without charge from the Federal Reserve Bank of New York.

2/ See Appendix A for the list of indexes compiled.

3/ The Department of Commerce publishes separate series for crude and semi-manufactured materials. The New York Bank combined these two classes since "the nature of the commodities contained in these two classes was considered so similar that the additional work which would have been involved in treating the two classes separately did not seem warranted; moreover, the relative smallness of the class of 'semi-manufactures' would have made satisfactory coverage impossible in the case of certain areas and countries." In addition, newsprint and burlap, which the Department of Commerce classifies as "finished manufactures" were transferred by the Bank to "crude and semi-manufactured materials" since "this reclassification presumably gives a more accurate representation of the economic nature of these products as distinct from their technological classification." (page 11).

General findings

Two conclusions stand out in the study. Confirming earlier findings, the authors agree that the level of economic activity and real income in this country were the primary determinants of our imports from each area. Other than in the war years, "the indexes rise and fall together, and even minor ripples appear at the same time in practically all the series" (page 13). It is interesting to note, however, that one exception is the drop in the 1949 volume of our imports from the Outer Sterling Area, indicative it would seem, of the curtailment of purchases in anticipation of devaluation. This close tie to our domestic activity is particularly true for imports of crude materials and semi-manufactures, since the price elasticities 1/ are all very low (page 43 and table XI).

The second, but more surprising conclusion is the estimate of price elasticity 1/ for finished manufactures, particularly those from the ERP countries. The authors believe that a change in the relative 2/ price of 1 per cent for this category would change the volume of our imports (in the opposite direction) by 2 to 3 per cent (table XV). For many commodities, the price elasticity tends to be greater, the larger the proportionate change in price. This responsiveness becomes greater, i.e., more elastic, the longer the time period considered (pages 45, 48). This is much higher than many other students believe to be the case; indeed, the general tone of most observers has been to minimize the influence of price. It has even been argued that a change in price--specifically, a reduction--would lessen total receipts, the volume of sales increasing insufficiently to offset the lessened earnings per unit.

The implications of these findings are quite obvious: to increase the value of sales to this country, Western European countries should either cut costs or devalue their currencies.

Price flexibility

Some of the other findings regarding price are similar to those for the domestic economy that F. C. Mills' work has shown. Over the cycle, the greater the variation in price, the less the variation in quantity, and vice versa (p. 24). Prices of primary imports fluctuate more than those of finished manufactures (p. 21); geographically, this means that the ERP export price structure is more stable than that of Latin America or the Outer Sterling Area. The price elasticity for crude materials and semi-manufactures is very low although individual suppliers, by a relative cut in prices, can increase their

1/ For an explanation of "price elasticity" and "income elasticity", see Appendix B.

2/ Relative to the price of finished manufactures from other areas or those produced in the U. S.

share of the U. S. market at the expense of other (non-U.S.) suppliers (p. 44). Since the United States has few substitutes for these two categories and since our demand is determined almost exclusively by the volume of industrial production, price cuts do not stimulate total sales but merely alter the geographic composition of these imports.

The possibility of the price mechanism serving as the means to substitute foreign for U. S. goods in the U. S. market is greatest for finished manufactures (p. 24). Not only would the over-all volume of imports rise greatly if prices were reduced, but a fall in price relative to competing U. S. goods would enlarge the foreign share of our market.

Imports and GNP

As compared with the pre-war period, our gross national product (GNP) in real terms, i.e., volume, has risen more than the volume of imports. For raw materials and semi-manufactures this may indicate a change in the fundamental relationship to domestic activity, although the authors believe that for small year-to-year changes the pre-war relationship still holds (pages 51-52). That is, the average, but not the marginal value of the propensity to import has changed.^{1/} For finished manufactures, however, it is thought that the relatively greater rise in foreign export prices compared with competing U. S. goods is a principal cause of the downward shift since pre-war in the proportion of these imports to domestic output, and that a reversal of this price shift would restore the pre-war ratio.

Transit trade

Based on data prior to 1937 ^{2/}, the authors conclude that there has been a decline in the importance of European transit trade in our imports, affecting particularly trans-shipments by the United Kingdom, and to a lesser extent, the other ERP countries with colonial possessions. Here, too, price considerations appear to have played a part (pages 31, 46).

Commodity trends ^{3/}

For many years--certainly since the end of the First World War--there has been a downward trend in the relative importance in imports of manufactured

^{1/} More technically, the intercept, but not the slope, has changed. See below, page 8.

^{2/} Prior to January 1, 1937, imports were credited to the shipping country, but since then it is the country of production (where known) that is credited, unless the intermediary has processed the item sufficiently to change its form. This change would affect countries like the United Kingdom, Holland, and Germany, important trans-shippers for U. S. imports. For the details, see pages 30-32 of the study.

^{3/} Based on volume data.

foodstuffs and beverages and finished manufactures. Crude foodstuffs and crude and semi-manufactured materials have shown improved proportions (page 15). However, these findings must be interpreted with caution. Four commodities--silk, rubber, coffee, and newsprint--exercise a dominating influence on the primary products series, particularly for certain areas (For the importance of silk in the volume index for the "Rest of the World", see page 5).

Random changes,--or what the authors call non-systematic--changes (page 30)--also play an important part. The movements of food imports, for example, could not be explained completely by the price and income relationships; the growth and composition of our population, the changes in sugar quotas, the marked rise in popularity of items like bananas, all worked to "swamp" the price and income measurements that proved more useful for the other series (page 47).^{1/} In addition, the drought of 1934-1937 was so influential on the findings for the entire period studied that separate series were calculated inclusive and exclusive of "drought" commodities (pages 34 ff.) A similar "fractionation" was necessary because of the repeal of prohibition, of particular significance for British series.

Geographic trends

The post-war decline in the proportion of our imports coming from the ERP countries was noticeable also in the inter-war period (page 15), and reflected the downward trend for finished manufactures in general. Part of the recent relative loss may have been caused by the fact that World War II stopped almost all imports from Continental Western Europe, thus transferring U. S. demand to other, more accessible areas (including in that term the U. S. domestic market), but part of the shift, too, can be attributed to the great increase in our demand for durables, items which have always been negligible among our imports (page 33).

Within the ERP group the relative decline has been greater for those countries whose export prices have risen the most, proportionately. The average price level for the group as a whole has also risen relatively to our prices; this, the authors believe, led to a shift away from ERP goods (page 25). Their conclusion, however, may not be the only important explanation; it is possible that the dislocations caused by the recent war curtailed supplies so much--particularly in the export trades, whose connections with this country had been disrupted for almost six years--that the mechanism worked from a shortage of goods to a price rise. In other words, the greater the shortage of a particular product, the greater the relative price rise, and the more the relative fall in its share of our imports. It is true that the proportion of our

^{1/} As an illustration of the influence of random factors, the study (page 50, note 1) cites the U. S. Army purchase of 2 million bags of coffee in late 1949, equal to about two months imports.

purchases from the individual ERP countries may have varied inversely to the degree of their inflation, but, for the group as a whole, the distortions may have come from the supply side. 1/

We have already noted that the prices of primary imports have tended to fluctuate more than for finished manufactures, and the quantity imported, as a result, has fluctuated less. In geographic terms, areas like the Outer Sterling countries and Latin America must face greater fluctuations in receipts per unit than, say, the ERP countries. On the other hand, although their selling prices tend to be more stable, the ERP exporters must face greater fluctuations in sales volume, and thus in domestic employment. In value terms, however, total ERP dollar earnings decline less than other areas' earnings during a downswing, but rise less, proportionately, in an upswing (pages 21, 24).

Silk dominates the series for the "Rest of the World"; from 43 per cent of our imports from that group in 1929, it declined to less than 1 per cent in 1949. Hence, a series leaving out this one commodity--of immediate economic concern only to Japan--shows that our volume of crude material imports from this region rose 13 per cent from 1937 to 1949, whereas, inclusive of silk, the volume for the two years was about the same (page 20).

The high income elasticity for Canadian supplies is apparently an indication of their marginal nature, small changes in our total demand exercising disproportionate effects on imports (page 47).

Technical comments

As remarked earlier, the study has gone into great detail to assure greater coverage and accuracy. The sample selected appears sufficiently large to justify extension of the findings to the entire parent body of imports. The country and area breakdowns have permitted greater homogeneity, since only certain types and grade of a particular article are likely to come from any one country. Thus, to use the illustration in the study, cotton cloth imports from the United Kingdom are presumably more nearly homogeneous than total imports of cotton cloth, which also include large quantities from Belgium and Japan. Where significant, series have been broken down to account for commodities affected by the drought, by tariff changes, and by the ending of prohibition (pages 10-11).

As indicated from the quotation below, the authors believe that they have also met the index number problem that often vitiates attempts to measure elasticities of demand, since their breakdowns are sufficiently detailed.

1/ See below, pages 6-7, for further remarks on the elasticity--i.e., expansibility--of ERP supplies for export.

"The necessity of deriving statistical import elasticities from index numbers which apply to groups of imports represents another important possible source of understatement of the true responsiveness of the quantity of imports to relative price changes. This argument, which has been elaborated most completely by Professor Harberger, is based on the following reasoning. If (a) a price index comprises commodities which are price-inelastic (such as raw materials) as well as commodities with a high price elasticity (such as finished manufactures) and if (b) price changes of price-inelastic commodities are greater than those of price-elastic commodities (as is likely to be the case), the statistical computations will give undue weight to the price-inelastic group of commodities, with the result that in extreme cases the apparent price elasticity may actually be lower than that of either component of the price index. In other words, the "true" price elasticity of import demand is often statistically understated because the prices of the heterogeneous collection of commodities which are included in one index do not move proportionately.

"It follows from the description of the new indexes (Chapter II) that this criticism of statistically derived price elasticities does not apply to an important degree to results based on the new indexes which, as indicated above, pertain only to individual economic classes of imports from particular countries and areas. The high responsiveness of some kinds of imports to moderate price changes is no longer "covered up" by the limited responsiveness of other imports to larger price changes, since it appears reasonable to expect that the prices of commodities included in one class of imports from one country or area will move proportionately to a sufficient extent to permit the statistical derivation of a close approximation of the "true" economic characteristics of import demand. The statistically derived price elasticities may, of course, still somewhat understate the "true" values of the elasticities. But, as the results of the statistical computation presented below indicate, the price elasticities that were derived for some commodity classes are surprisingly high, and it may be concluded that the distortion inherent in the computation of the indexes themselves is not of major significance." (page 42)

One assumption, which may be questionable, regards the elasticity of supply of finished manufactures to the U. S. market. The authors assume almost perfect supply elasticity--that, given a satisfactory price, foreign exporters can supply any volume of U. S. demand (within the normally experienced range), either by expanding output or diverting supplies from the home market. Hence, they conclude "that changes in the volume of imports reflect exclusively changes in the demand conditions and that the income and price elasticities computed for this economic class are true demand elasticities." (pages 41-42). This assumption is particularly important for the conclusions regarding imports from the ERP countries, where finished manufactures are so important as dollar earners.

It is true that goods can be diverted from the ERP home market if the suppliers so desire. But this shiftability may not be as simple as the authors imply. Even if prices are more attractive in the United States, it may be difficult to establish sales outlets--in fact, in view of the vagaries of our market and tariff policies, it may not be worth the risk. For example, let us assume a strong demand for automobiles in this country. On a purely comparative price calculation, it might pay to ship autos here rather than sell them at home or in other markets. However, there may not be the necessary repair and service stations to maintain the automobiles, there may not be the dealers' outlets willing to stock new--and, to the American consumer--strange products. Moreover, if the sales effort is successful, a tariff may be placed on this item, ending the imports and making the previous sales efforts worthless. Hence, the supply inelasticity may be quite high, particularly when the normal inertia supplements the other obstacles. So long as other profitable markets exist into which entry is less difficult, the greater profitability of the American market may not offset these other fears.

It is in the price policy implications that we find a possible weakness in the study, although one that is probably inevitable. Based on historical data, the study shows that a decline in the relative price of finished manufactures imports would increase the volume of sales so much that total receipts would rise. The obvious policy inference is for foreign manufacturers to reduce prices. But what cannot be certain is the reaction of U. S. competitors. If the per unit margin is sufficiently large, our prices can be reduced to meet this outside threat; in other words, although a relative fall in foreign sales prices would boost imports, any serious inroad into domestic markets might result in sharp reactions by our own producers, even ignoring the further complication of pressure to increase the tariff. The only two widespread decreases in foreign finished manufactures' prices relative to U. S. competitors were those associated with the devaluations in 1931 and 1949. In both cases the income effects on sales were so strong that producers may not have been aware of the influences of the accompanying price changes. It will be recalled that 1931 was a year of almost steadily declining incomes and output in this country, while in mid-1949 the recovery from the preceding recession began. If, in a future situation, foreigners reduce their prices relatively, and if it is clear that a successful penetration of our market results from this policy, U. S. producers may react more vigorously, pricewise. Hence, although a relative price reduction might aid foreign sales, in fact, it might also call forth corresponding cuts by U. S. firms, so that the gain to the foreign seller would thus be much less than is implied by the calculated elasticity. 1/

1/ In fairness to the authors, it should be noted that they have recognized these two influences--price and income--and have employed calculations intended to separate them out. See, for example, their discussion of the effects of the two devaluations, pages 50-51, 59. To some extent this criticism is also recognized inferentially in Chapter V.

Another weakness of the study is the assumption regarding the constancy (over the relevant ranges) of the price and income relationships. Mathematically these relationships were expressed in two forms--arithmetic and logarithmic.

The relationship of income to prices and imports by a formula such as $x = a + by$ implies, for example, that the marginal propensity to import is constant--that a given dollar change in national income ^{1/} will result in imports changing, in the same direction, by a certain amount, and always by (approximately ^{2/}) that amount. Yet, it may well be true that at higher levels of income, a given change of income will produce a greater change in imports than an equal income change at a lower level. In a depression, with much unemployment of domestic resources, demand rises may go mainly into the purchase of domestic supplies, while at full employment a greater impact will be felt on foreign supplies, because of the tighter domestic supply situation. In fact during the inter-war period, some students have attempted to demonstrate this kind of variation in the marginal import propensity for Canada.^{3/}

For some imports the study gives relationships calculated from logarithmic data. Here the assumption is "that the income and price elasticities are constant throughout the entire range of observations and independent of the size of absolute changes" (page 49). That is, a given proportionate change in national income will change imports by a certain per cent (in the same direction), regardless of the absolute level of incomes and imports, and similarly, mutatis mutandis, for price changes. Again, the criticism of the preceding paragraph may apply. To illustrate, the 1950 upswing in U. S. economic activity after the Korean outbreak boosted certain imports much more than a similar upturn from a lower level would have done. Steel and chemical imports rose much more than would have been the result had the economy been at, say, only 75 per cent of capacity.

Implicit in the preceding remark is the observation that a given change in national income, even from the same absolute level, may not always have the same impact on imports. An upturn resulting from rearmament may so concentrate demand on, say, the domestic steel industry, as to result in capacity operations--and thus the need for more imports--at a national income level lower than an upturn resulting from government expenditures on public works. In the former, steel imports (and thus total imports) would rise more, proportionately, than in the latter case, even though the proportionate change in national income were the same in both cases.

^{1/} For brevity, we shall use "national income"; actually, the authors used real gross national product or the unadjusted index of industrial production, depending on the series studied.

^{2/} The extent of the approximation of this relationship is implied in the value of the coefficient of correlation (see page 9).

^{3/} See, for example, the study by E. Munzer in the February 1945 Canadian Journal of Economics and Political Science.

As a qualification of these remarks, it is exceedingly difficult--if not impossible--to allow for the various possibilities. Indeed, even if the functional relationships suggested could be deduced, the extra work required for the refinements and the more complicated mathematical equations resulting, would probably not be justified. Hence, our observations are to be interpreted as qualifications, rather than rejections, of the findings. Moreover, the goodness of the elasticity estimates--and thus the appositeness of our remarks--can be gauged by the various correlation coefficients $\frac{1}{2}$; the greater the correlation, the less applicable, presumably, would be our criticisms.

Conclusion

A most valuable aid to future investigators in the field is the supplementary group of tables on price, quantity, and values, the raw data for the study. Many interesting questions arise as one thinks through the various points raised in the study, and the authors have provided the material from which further conclusions can be drawn. As an example of its usefulness, they have analyzed the effects of the tariff concessions granted by this country at the 1950-1951 Torquay conference under GATT (pages 54-56). They conclude that the short-run increase in our imports resulting from these concessions should be between \$20 million and \$30 million.

1/ The study includes correlation coefficients for the equations estimating income and price elasticities.

APPENDIX A

CLASSIFICATION OF NEW IMPORT INDEXES 1/

1. Geographical Breakdown of Series

A. Areas*

1. ERP countries
2. Other European countries
3. Scandinavia
4. Total Europe
5. North America
6. Latin America
7. Overseas Sterling Area
8. "Rest of the World"
9. Total United States imports

B. Countries

1. Belgium
2. France
3. Germany
4. Greece and Turkey
5. Italy
6. Netherlands
7. Portugal
8. Switzerland
9. United Kingdom

II. Economic Classes Analyzed for Each Area or Country

1. Crude foodstuffs
2. Manufactured foodstuffs
3. Crude and semi-manufactured materials
4. Finished manufactures
5. Totals imports

III. Series Computed for Each Economic Class **

1. Dollar value of imports
2. Index of quantity of imports
3. Index of unit value of imports
4. Price index corrected for duty payments

1/ Table I of the New York Bank study (page 9).

* For a more detailed geographic breakdown, see Table VIII, p. 61.

** Indexes for one or more classes could not be computed in the case of certain countries and regions; for further details, see page 60.

APPENDIX B

THE CONCEPT OF ELASTICITY

Appendix B of the study (page 67) contains a lucid and concise explanation of the concepts of "income elasticity" and "price elasticity", which we quote:

"The reaction of imports to changes in the level of income in the United States and to price changes can be described in quantitative terms by two figures, the income and the price elasticities of imports. The income elasticity is defined as the relative or percentage change in the physical volume of imports associated with a relative change in the level of real national income, or the real gross national product.^{1/} An income elasticity of 1, or unity, indicates that an increase or decrease in the national income of, say, 5 per cent is associated with a similar percentage increase or decrease in the volume of imports. If real income expands, or contracts, by 5 per cent while imports expand, or contract, by 3 or 4 per cent only, the income elasticity is 0.6 or 0.8, respectively. If imports expand or contract relatively more than real income, the income elasticity is larger than unity. Thus, an increase in the volume of imports of 10 per cent, which occurs when real income expands 4 per cent, gives an income elasticity of $\frac{10}{4}$, or 2.5.

"The price elasticity of imports, or more precisely the price elasticity of the demand for imports, is defined as the change in the physical volume of imports that is associated with a change in the prices of imports relative to the prices of other commodities.^{2/} The price elasticity is normally negative; that is to say, an increase in relative prices will be associated with a decrease in imports, and vice versa. If the volume of imports changes by the same proportion as the level of relative prices, the price elasticity is 1, or unity. If the volume of imports rises (or falls) more than proportionately with a fall (rise) in relative prices, the price elasticity is greater than unity; for instance, an increase in the volume of imports of 10 per cent associated with a decrease in relative prices of 5 per cent implies a price elasticity of $\frac{10}{5}$, or 2. Conversely, a change in the volume of imports smaller than the relative price change means that the price elasticity is smaller than unity."

^{1/} Real national income (or real gross national product) is the money income (or money national product) corrected for effects of changes in the price level. In this paragraph it is assumed that prices remain unchanged.

^{2/} It should be noted that changes in relative prices can come about either by prices of imports rising or falling more than other prices, or import prices rising (falling) while other prices remain constant, or by a change in other prices while import prices remain constant. If both import prices and other prices change by the same proportion and in the same directions, relative prices remain the same. In this paragraph it is assumed that incomes have remained unchanged.