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Utility of Valuation of Import Statistics on a C.I.F. Basis in Addition to Current F.O.B. Valuation

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Bases of valuation

The most commonly used bases of valuation of foreign trade flows are referred to as f.o.b. (free on board), f.a.s. (free along side), and c.i.f. (cost, insurance and freight). The f.o.b. and f.a.s. methods value goods moving in international trade at the border of the exporting country, the c.i.f. method--by adding insurance and freight to the initial cost of the goods--values them at the border of the importing country.

There seems to be no controversy about the respective merits of these alternative methods with regard to the valuation of export flows: these are commonly valued according to the f.o.b. or f.a.s. methods. However, with regard to imports no such clear-cut consensus exists. Generally the choice as to which measure is the most appropriate one would depend upon the analytical purpose to be served.

Uses of trade statistics

1. Where the over-all balance of trade is taken as indicative of a country's competitive position in international markets, the analysis generally concerns itself with changes over time. The absolute magnitude

1/ This paper was prepared in February 1966 when the author was on temporary duty at the Office of the Special Representative for Trade Negotiations. It provides background information on a legislative proposal (S.J. Res. 115) which, among other things, would require that reports on imports into the United States include the landed value of imported articles. This proposal seemed to be based in part on several arguments that f.o.b. valuation of U.S. imports gave a distorted picture of the U.S. position in international markets because it overstated the U.S. trade surplus, particularly when compared with trade balances of the Western European countries, all of which report their imports on a c.i.f. basis. Discussion of these matters has prompted Congress in the meantime to ask the Tariff Commission to prepare a study of all aspects of various systems of valuing trade.

of the trade balance reflects many things besides "competitiveness", such as the extent to which a country is self-sufficient in terms of raw materials and food, the degree of industrial diversification, the level of national wealth, etc. To the extent that a comprehensive measure such as the over-all trade balance can be a meaningful measure of "competitiveness" at all, its improvement or deterioration over time rather than its absolute size is the important analytical factor. Consequently, consistency of measurement over time is more important than the particular method of valuation. But given a choice, the f.o.b. valuation basis would clearly be preferable.

Changes in the trade balance, if they are to indicate the ability of the domestic industrial complex to compete in international and national markets, should reflect the movement of goods only. Netting pure merchandise transactions (on the export side) against a mixture of merchandise and service transactions (on the import side) would appear to be inconsistent conceptually and confusing analytically. Changes in merchandise movements would be obscured by changes in freight and insurance rates.

Changes in the ability of domestic producers to compete with foreign producers in domestic markets may in part be explained in terms of changes in price competitiveness. In this respect the c.i.f. valuation basis would appear to be more appropriate because it approximates more closely the market value of the imported good in the domestic market than does the f.o.b. valuation. However, the c.i.f. value falls far short of providing a fully satisfactory measure of price competitiveness, because the relevant market value of an imported good would include in addition to initial cost, insurance and freight, also duties paid, importers' margins, inland transportation, etc. Because of the lack of such a comprehensive price measure and because of the inability to properly measure the effects of non-price factors (such as credit terms, design, quality, etc.) analyses of the relationship between imports and domestic output and consumption are often forced to rely upon comparisons of changes in physical quantities.

2. For purposes of international comparisons, the United Nations requests that data on import values be submitted on the c.i.f. basis. This does not necessarily imply a conceptual superiority of this particular method; it primarily recognizes the fact that a majority of nations reports data on this basis--some for reasons of easier statistical collection possibilities rather than because of greater analytical value. Thus adoption of the c.i.f. system by the U.S. would make the U.S. valuation methods comparable with those of the majority of its trading partners (however our main trading partner Canada, and fourteen other nations also use the f.o.b. system for valuing imports[2/]).

Even if all nations were to value their imports c.i.f., greater international comparability and conceptual consistency would only be achieved in one sense, namely that goods traded internationally by country A would always be valued at the border of country A. However, this method of valuation gives rise to a loss of comparability and consistency in another sense: a given export from country A to country B would necessarily be recorded differently (to the amount of freight and insurance) in country A's than in country B's trade statistics. For example, $10 worth of merchandise,

2/ Dominican Republic, Ecuador, Honduras, Panama, Venezuela, Australia, Fed. of Rhodesia-Nyasaland, South Africa, Netherlands Antilles, Albania, Bulgaria, E. Germany, Poland and the U.S.S.R.

which cost $1 to transport and insure, would appear as a $10 export (f.o.b.) in A's trade statistics and would be recorded as an $11 import (c.i.f.) by country B; if this transaction represented the entire trade taking place between A and B, country A would show a $10 trade surplus with country B, while B would show a deficit of $11 arising from its merchandise transactions with A.

In order to achieve full international comparability, therefore, both exports and imports should be valued consistently. If both exports and imports world-wide were valued on the same basis, either c.i.f. or f.o.b., it would theoretically be possible to equate country A's exports to country B with country B's imports from country A.

However, in practice this result cannot be attained because of time-lags, differences in classification and difficulties in determining countries of origin. For example, a good originating in country A and transshipped in country B may show up as an import from B in country C's trade statistics, and as an export from A to C in country A's records.

The effects of such inconsistencies are clearly demonstrated by a comparison of our trade data with those of Canada. Because the United States and Canada use the same system of valuation (f.o.b. for both exports and imports) and time-lags are minimized because of geographical proximity, our trade balance with Canada theoretically should equal Canada's trade balance with us. In practice, the following differences were recorded in the official statistics:

	Canadian balance with U.S.	U.S. balance with Canada	Difference
	(million U.S.	dollars)	(%)
1962	$-510	$ 96	431%
1963	-482	213	126
1964	-663	426	56

Source: OECD

On the assumption that a comparison of trade balances may have been distorted by differences in the treatment of military and secret shipments, Canadian imports of food and live animals from the U.S. are compared below with U.S. exports of this category to Canada:

	Canadian imports	U.S. exports	Difference
	(million U.S. dollars)		(%)
1962	$312	$370	-16%
1963	326	440	-26
1964	327	421	-22

Source: OECD.

Thus even when comparable valuation methods are used, statistical discrepancies prevent real comparability of data across nations. This problem is likely to be much more serious when data based on different valuation methods are compared. Under these circumstances it is not very likely that all differences between two sets of data compiled in two different countries can be attributed entirely to differences in definition.

Thus efforts to estimate freight and insurance costs indirectly by comparing for example the United Kingdom's imports (c.i.f.) from the United States with United States exports (f.o.b.) to the United Kingdom could be subject to such large margins of error as to make the results virtually meaningless.

3. For purposes of trade negotiations, inconsistencies in the valuation bases of imports have been said to imply a disadvantage for the United States. In fact, these statistical differences have been allowed for in past negotiations and are being accounted for in the current one. Where import data are compared, countries on a f.o.b. basis are as a matter of course permitted upward adjustments to achieve full equality and reciprocity.

In the current negotiations, where some countries have emphasized differences in tariff rates on the same commodity, more precise knowledge of differences in values to which rates are applied is required. This need is being satisfied by a sample study of import documents made by the Tariff Commission. Any need for more accurate adjustments in other areas of the negotiation could be adequately served by a similar approach without necessitating adoption of a completely new basis of valuation.

4. For purposes of analyzing international payments flows the use of the f.o.b. valuation method for exports and imports is recommended by the International Monetary Fund and even earlier by the League of Nations. The reason for this recommendation is that the trade balance should reflect the movement of goods only; in addition, not all freight and insurance costs give rise to an international payment, since some of these services may have been provided by domestic companies. Furthermore, geographical allocation of payments flows would become more difficult if freight and insurance cost were mixed with those of the goods imported since the services may have been provided by a country other than that providing the goods. Finally, changes in the current account of the balance of payments statement (trade plus services) rather than changes in the trade balance alone are generally the basis for policy decisions for external payments reasons.

For an analysis of current account changes it makes no difference whether or not imports are valued c.i.f.

C.I.F. Valuation		F.O.B. Valuation	
Trade account shows:			
Debit	value of merchandise imports	Debit	value of merchandise imports
	plus payments for freight and insurance to		---
Debit	a) foreigners		---
Debit	b) domestic firms		---
Service account shows:			
Credit	payments for freight and insurance to domestic firms	Debit	payments for freight and insurance to foreigners
Current account shows: (trade plus service account)			
Debit	value of imports	Debit	value of imports
	plus payments for freight and insurance to foreigners		plus payments for freight and insurance to foreigners

Summary

Advantages of c.i.f. valuation

1. It approximates the value at which an imported good enters the domestic market more closely, and therefore is more appropriate for use in determining the relationship between domestic output and imports. However, it still falls far short of being an indicator of comparative price competitiveness of imports vs. domestic output.

2. It facilitates some international comparisons employed in trade negotiations.

3. It introduces a certain conceptual neatness in that internationally traded goods always will be valued at the border of the particular country under consideration.

Disadvantages c.i.f. valuation

1. It mixes service aspects with pure merchandise transactions thus obscuring changes in movements of goods.

2. It makes more difficult geographical allocation of trade flows since goods may be provided by a nation other than that providing the transportation and insurance services.

3. If exports are valued f.o.b. (or f.a.s.), as they commonly are, and if imports are on a c.i.f. basis a conceptual inconsistency is introduced since the same good will appear in the exporting country's trade statistics at a different value than in the importing country's records.

4. F.o.b. valuation is the preferred presentation for determination of international payments flows for the reasons stated above as well as the fact that not all insurance and transportation transactions give rise to international payments: those provided by domestic firms would need to be netted out.

On balance, considering the considerable effort and expense necessary to provide c.i.f. valuation data on imports in addition to the current f.o.b. valuation, the gains to be derived appear to be rather small. In those areas where there would be clear gains for analytical purposes, estimates based on sample studies could achieve comparable results at greatly lessened effort.