NOTES AND MEMORANDA

THE TREATMENT OF IMPORT DUTIES IN NATIONAL ACCOUNTS, A COMMENT ON A. L. GAATHON: EXCHANGE RATE PROBLEMS IN NATIONAL ACCOUNTING OF DEVELOPING COUNTRIES

BY HELMUTH E. FREY

Central Statistical Office, Salisbury, Rhodesia

In a recent article in this review [1] A. L. Gaathon proposes to value imports and exports at effective exchange rates instead of treating tariffs as indirect taxes, as is the present more or less acknowledged practice. He refers to J. L. Nicholson's paper "National Income at Factor Cost or Market Prices" in support of his argument, although it seems to me that the issues involved are of a rather different nature. The effect on domestic and public sector saving resulting from Mr. Gaathon's approach appears to be rather doubtful and understates the importance of public sector saving in developing countries. His argument depends on the existence of perfect markets in foreign trade transactions, since it is only under these conditions that factor rewards equal factor contributions to the product.

From the outset A. L. Gaathon argues that "developing countries which typically have import surpluses and inflationary pressures because of insufficient savings are prone to use indirect taxes on imports and subsidization of exports in order to prevent deterioration of the balance of trade." His frequent references to the market mechanism infer that it is through the market that this goal is attained. On page 239 we find the statement that the assumption of perfect markets is unrealistic for each point in time—however convenient and "for domestic markets not unreasonable: the relatively high degree of aggregation of the constructs of the national accounts, as well as the averaging-out over periods of years or at least quarters, tend to iron out upward and downward deviations. Moreover, market forces, as well as in some fields, government interference against monopolistic practices, tend to work in the direction of perfect markets." I fail to see the reasoning in the above; the high degree of aggregation of national accounts hardly affects the organization of the market and it is doubtful that current trends in developing countries tend to work in the direction of establishing perfect markets. The ever increasing involvement of the public sector hardly favours such tendencies. I should think Israel is a rather special case in this context.

It is certainly correct that exchange control is generally frowned upon, but it is equally true that it is only all too frequently employed. To assume perfect market conditions for international trade transactions would be a fairly tall assumption, as is demonstrated by the recent report on exchange restrictions compiled by the IMF. The majority of developing countries apply quantitative import restrictions and a growing number enforce annual import programmes or plans [2].

Furthermore, when tariffs were originally introduced the infant industry or protection argument and the revenue aspect played a more important role. To my mind, the following excerpt from the budget speech of the Minister of Finance of Fiji is more representative of the current situation: "We must remember that Fiji's customs tariff which is the basis for revenue collection makes no pretence to be anything other than a revenue tariff which has built into it measures which recognize the need to offer incentives and encouragement to the development and expansion of industries in Fiji." Customs taxes comprise 56 per cent of Fiji's government revenue [3].

In those cases where import surpluses could be checked successfully, this could seldom be achieved through the working of relative prices, multiple exchange rates or import duties. The shift of the aggregate demand or supply schedules through tariffs, although in some instances significant, is hardly sufficient to stop the trade balance from deteriorating. This ultimate goal has predominantly been achieved through exchange control and import restrictions. For the price mechanism to work effectively, infinite, or at least comparatively high elasticities of supply are required. Indeed, the Marshall–Lerner condition, *viz.* that the sum of the elasticities of demand for imports and exports exceeds unity, does not apply for most developing countries. The absorption approach [4, 5] is more useful in this respect and utilizes the familiar *ex post* accounting aggregates of output and expenditure, with similar results.

It is typically the case in developing countries that total absorption cannot be decreased easily, at least not without hampering the development of domestic industries. This latter condition has temporarily been experienced in Latin America [6]. It is far more likely that the result will be a switch within the demand structure, in particular between tradeables and non-tradeables. Total demand is hardly affected, but the demand for domestic goods and services is increased, resulting eventually in increased imports and higher prices. It is for this reason that little reliance should be placed on the market mechanism for the purposes of adjustment.

A. L. Gaathon rejects the valuation of imports at official rates because they do not represent the resources the economy has to surrender to obtain such goods and services and/or is overcompensated for its exports. Effective rates are then identified as the appropriate price for the factors of production used up in producing these commodities; accepting this argument the effect on saving, as outlined in Gaathon's paper, is the only logical consequence. However, the fact that economic agents tend to equate marginal productivity and/or utility with the price paid for the commodity or the factor does not necessarily mean that the factor, or the supplier of the commodity, receives this price as income. This is the case whenever indirect taxes and tariffs are levied on factors or commodities. Theoretically, of course, no distinction need be made between factors of production and commodities.

The result of indirect taxes and tariffs is that the marginal revenue product (marginal utility) has to be higher than the factor price before intervention, in order to equal marginal costs and marginal product (utility) for the demanding producer (consumer). Gaathon, however, postulates that marginal product (utility) *equals* factor reward, because, quoting Nicholson: "Estimates at market prices derive their importance from the underlying assumption that in equilibrium marginal product or marginal utility of each commodity is proportional to its market price." This statement is certainly useful as long as we deal merely with problems of productivity and welfare but is not necessarily correct when applied to income distribution. The fact that indirect taxes and subsidies affect productivity may not be apparent, but is a fact which national accountants have learned to accept [7].

Similarly, for the purpose of expenditure analysis the transfer aspect of tariffs or indirect taxes in general is irrelevant. Only when we turn to the income side is it all important to recognize the transfer character of these payments and the direction of the flows.

Whenever the rewards to factors (always excluding government as a factor of production when merely collecting tariffs) do not add to their product, the distribution of income does not follow G. B. Clark's rules on income distribution. This state of affairs can hardly be corrected by simply redefining indirect taxes as factor income as is implied in Gaathon's approach.

Nobody will doubt the importance of the tariff structure on relative prices, but (a) it is certainly over optimistic to expect tariffs to lead to a balance of payments equilibrium, in particular an equilibrium for which the perfect market condition holds true; and (b) even if we could assume perfect markets, it does not follow that national accounts ought to show how many resources a country would have to give up to obtain her imports—had the exchange rate been a market rate. Surely, it is more significant to demonstrate how many resources were actually committed to this goal. National accounts are an *ex post* record of attained equilibria and it would be erroneous to expect that by redefining tariffs as quasi factor income a past equilibrium could be restored.

This, of course, does not mean that effective exchange rates cannot be an extremely useful concept—outside national accounts. Valuation is a difficult enough problem in national income accounting and the concept of factor cost valuation and the theorem of perfect competition should not be overstretched unnecessarily.

The reference to J. L. Nicholson's recommendation on the treatment of tariffs, in particular when deriving GDP from the expenditure side, is misleading; since he defines tariffs as indirect taxes, income and saving are thus not affected. Nicholson's definition of GDP at market prices excluding import duties is challengeable, but is merely a definitional problem of little practical and theoretical importance, which has attracted rather unjustified criticism to an otherwise excellent contribution.

References

[1] Gaathon, A. L., "Exchange Rate Problems in National Accounting of Developing Countries," *The Review of Income and Wealth*, Series 18, No. 2 (1972).

[2] "Report on exchange restrictions 1972", IMF Washington.

[3] Minister of Finance, Fiji, Budget Speech 1971 (November 1970), quoted in M. Ward, "The Brussels Tariff Nomenclature and Developing Countries." *The Journal of the Economic Society of Australia and New Zealand*, Vol. 51, No. 120 (1971).

[4] Meade, J. E., *The Theory of International Economic Policy*, Vol. 1, "The Balance of Payments," Oxford University Press, New York (1951).

[5] Johnson, H. G., *Towards a General Theory of the Balance of Payments*, International Trade and Economic Growth: Studies in Pure Theory, Harvard University Press (1961).

[6] Diaz Alejandro, C. F., *Essays on the Economic History of the Argentine Republic*, Yale University Press (1970).

[7] Nicholson, J. L., "National Income at Factor Cost or Market Prices?" *Economic Journal*, London (1955).