## Tariff Protection, Import Substitution, and Investment Efficiency: A Comment

## by Gustav Papanek\*

The Soligo and Stern article [6] renders a major service, in attempting a quantitative measure of the efficiency of the allocation of investment to different industries. By substracting the net subsidy provided to domestic industry (through tariff protection) from the value added in each industry, Soligo and Stern estimate the social contribution to the economy (or "social value added") of investment in a particular industry. They reach the conclusion that "the pattern of investment has been wastefully biased towards consumer goods industries." If correct, this conclusion should have important consequences for tariff policy and investment planning. However, a number of questions can be raised about the methodology of their study. A different set of assumptions and methods might have led to different conclusions. The major adjustments which could be made are:

- 1. Soligo and Stern calculate value added at factor cost. This may introduce a bias in their analysis since indirect taxes are very largely imposed on consumer goods. It can and has been argued that indirect taxes largely determine only the distribution of value added between government on the one hand and wages/profits on the other since they are not passed on to the consumer to any significant degree [3;5]. If the bulk of indirect taxes impinge on factor payments (primarily profits), calculating value added at factor cost results in understating value added in the production of goods which bear the heavier indirect taxes. Table I shows figures for value added at factor cost and indirect taxes for a few representative industries derived from a sample survey [4]. It is clear that if Soligo/Stern had calculated value added at market prices rather than at factor cost, the value added in consumer goods industries would have been increased much more than value added in the other two categories.
- 2. The second bias, recognized in the article in part, stems from the understatement of profits by industrialists. As a pure guess the declared profits may be as little as one half of actual profits in many industries. Understatement of profits would not affect conclusions about the relative efficiency of investment in

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TABLE I
VALUE ADDED AND INDIRECT TAXES

(Estimates for 1958; crores of rupees)

	Value added at factor cost (1)	Sales and excise taxes (2)	Col. (2) as % of Col. (1) (3)
Consumer goods			
Sugar	5.2	1.7	33
Edible oils and fats	3.9	0.3	8
Cigarettes	3.9	1.8	46
Cotton textiles	39.2	13.9	35
Silk and art silk	3.5	<b>0</b> .9	26
Matches	1.5	1.4	93
Sub-total	57.2	20.0	35
Intermediate goods			
Jute textiles	5.9	1.3	22
Tanning	0.8	0.2	25
Rubber products	0.2	0.01	5
Paper products	3.0	0.4	. 13
Sub-totai	9.9	1.91	19
Investment and related goods			
Cement	2.4	0.7	29
Metal products	1.9	0.2	11
Basic metals	1.9	0.02	1
Sub-total	6.2	.92	15
Grand total	73.3	22.83	. 31

Source: See [4]

different industries if it is at a uniform percentage level. However, it is plausible, and interviews with industrialists lend support, that the percentage of understatement varied directly with the rate of taxable profit. An industrialist earning a 5 per cent taxable rate of return has less incentive to understate his reported rate of profit than one who earns a 50 per cent taxable rate of return.

There are two reasons for supposing that the rate of return on some consumer goods was higher than for other manufactures:

a) Some consumer goods were most highly protected from import competition (art silk, woollen textiles) and internal competition for some of these wa also limited.

b) Consumer goods industries in general were established before other industries. They had, therefore, used up some of their tax concessions at an earlier time (accelerated depreciation, tax holiday). Their taxable return would then be higher, even if their total returns were not.

To the extent that the returns from consumer goods industries were understated by a greater percentage than those of other industries, the comparison among industries would be biased. However, it is difficult to obtain any evidence on this point and it may not be too important in any case.

- 3. More important is the questionable nature of a basic assumption in the Soligo/Stern article "...that the domestic price of each commodity is at least equal to the c.i.f. price of a competing import converted at the official exchange rate plus import taxes". There are three types of commodities for which this assumption does not necessarily hold true:
- a) Commodities that are exported presumably sell in the domestic market at world market prices plus the subsidy implied in the export bonus voucher scheme minus the cost of exporting, i.e., of penetrating foreign markets. The resulting price could equal the c.i.f. price plus import taxes only by accident.
- b) Commodities for which domestic productive capacity exceeds domestic demand at the c.i.f. price of imports plus import taxes are also likely to have lower prices than assumed by Soligo/Stern as the result of competition. (Exceptions would be industries where expansion of output is not profitable or where it is not possible because inputs are not available or where monopoly elements or collusion allow firms to restrict output and raise prices.)
- c) Commodities whose price is effectively fixed by government can obviously have prices that differ from the Soligo/Stern assumption.

Without a careful investigation one cannot be sure which commodities fall in these three categories, but a number of important goods are likely candidates. The price of sugar is fixed by government. There seems to be rather vigorous competition in vegetable oils, matches and cigarettes. In these industries collusion is unlikely, though not impossible. The fixed price for sugar and the competitive price for other commodities can, therefore, be below the level of c.i.f. prices plus import duties. Only careful investigation can establish, however, whether it is in fact lower. The important category, however, is of commodities that are exported. By comparing the export bonus earnings with tariff rates on these commodities one can draw some conclusion about the relationship of the internal price to the c.i.f. plus tariff price. On the assumption that the world market price must be slightly higher than the domestic price to induce exports, whenever the

export bonus is equal to or less than the tariff, the domestic price will be lower than c.i.f. plus tariffs. Table II suggests that at least for some important goods the internal price is less than c.i.f. plus tariffs.

TABLE II
EXPORT BONUS AND IMPORT DUTY

		Export bonus	Import duty (per cent)
	•	(per cent)	
Cotton cloth		30	153
Cotton yarn		. 0	153
Jute textiles		30	68

Sources: Premium on export bonus voucher from [2, Statistical Section, p. 120]; the export bonus rates from [1], and the traiff rates from G.M. Radhu [5a].

Whenever the actual domestic price is less than the c.i.f. price plus tariff, the real subsidy is less than the tariff. By substracting the tariff from actual value added Soligo/Stern understate the "social value added" by commodities whose domestic price they have overestimated. Competition, government price fixing and exports exist mainly for consumer goods (and jute goods) so Soligo/Stern may substantially understate the "social value added" of these commodities.

4. What is particularly striking is that several of the suggested adjustments affect some commodities simultaneously and all three are of particular importance for consumer goods. Consumer goods in general have the highest rates of indirect taxes and the use of factor costs therefore understates their value added. Some consumer goods have the highest profit rates and most have used up their tax concessions some years ago, and they may therefore show the greatest difference between reported and actual profits. A number of consumer goods are exported and some consumer goods industries are highly competitive and their prices are therefore likely to be less than c.i.f. plus import duties. If the Soligo/Stern data were adjusted to take account of these factors, it is likely that conclusions with respect to the inefficiency of investment in textiles (cotton, jute, art silk, knitting), cigarettes, edible oils and fats, sugar, tanning, footwear and some other goods might be modified. Such comparatively "efficient" investment as matches should appear as even more desirable.

The conclusion that investment in consumer goods industries has been carried too far, and that future investment should be concentrated particularly in investment goods production at least does not seem warranted on the basis of the Soligo/Stern article.

## REFERENCES

- 1. Bruton, H. J. and S. R. Bose, *The Pakistan Export Bonus Scheme*. (Karachi: Pakistan Institute of Development Economics, 1963).
- Pakistan, Ministry of Finance, Economic Adviser's Office, Economic Survey 1964-65 (Rawalpindi: Economic Adviser's Office, Ministry of Finance, May 1965).
- 3. Pal, Mati Lal, "The Determinants of the Domestic Prices of Imports", Pakistan Development Review, Vol. IV, No. 4, Winter 1964.
- 4. Papanek, G. F., "Industrial Production and Investment in Pakistan", Pakistan Development Review, Vol. IV, No. 3, Autumn 1964.
- 5. Radhu, G. M., "The Relation of Indirect Tax Changes to Price Changes in Pakistan", *Pakistan Development Review*, Vol. V, No. 1, Spring 1965.
- 5a. ——, "The Rate Structure of Indirect Taxes in Pakistan" Pakistan Development Review, Vol. IV, No. 3, Autumn 1964.
- 6. Soligo, R and J. J. Stern, "Tariff Protection, Import Substitution and Industrial Efficiency", *Pakistan Development Review*, Vol. V, No. 2, Summer 1965.