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TARIFF COMPENSATION: AN UNDESIRABLE POLICY

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For Harris the question is—'is the tariff compensation argument a sufficient justification for assistance to Australian agriculture?' His paper is essentially a reply to the Industries Assistance Commission which in its Annual Report for 1973-74 [1, Appendices 5.2 and 5.5] poured a little cold water on the principles recommended by the Green Paper on Rural Policy [2, Chapter III]. This four-man working group which included Harris had concluded that 'while tariff protection remains extensive, however, some compensating assistance to the rural export industries is warranted' [2, para. 3.109]. The proposal is an important one and merits careful examination.

In several respects the case Harris presents in favour of 'tariff compensation' for rural exporters is more acceptable than that presented earlier by the Green Paper. Whereas the Green Paper appears to base its recommendation for 'tariff compensation' partly on the need to improve resource allocation in the economy and partly on the grounds of redistributing income to those who are adversely affected by existing tariff protection for import-competing industries,¹ Harris states quite explicitly that the only grounds for compensation is that it increases national economic welfare. He rejects rightly the notion implied by the term 'tariff compensation' that the government is obliged to compensate one group of producers for the harm done to them by prior assistance granted to another group of producers. He recognizes that the level of assistance given to rural producers, given existing tariffs on import-competing manufactures, in order to increase national welfare may be less than that given to manufacturers; that is, the optimum level of compensation is less than 100 per cent of the (average?) divergence between the domestic market prices of manufactures and the landed duty-free prices. We shall see that the optimum level in these circumstances depends on several factors. The Green Paper on the other hand had prejudged the issue and asserted that 'subject to one general qualification (the terms of trade argument for taxing some exports), the most efficient allocation of resources would, in principle, be obtained if the general level of protection or assistance to the export industries were broadly equivalent to that given to import competing industries' [2, para. 3.71]. He recognizes too that the case for 'tariff compensation' applies also to import-competing manufacturers who receive low levels of assistance and manufacturing exporters whereas the Green Paper referred to rural exporters only. Moreover, Harris gives

¹ The Green Paper is unclear on the grounds on which it recommends tariff compensation. The tenor of its comments on the costs tariffs impose on rural exporters, the term 'tariff compensation' itself, and its recommendation of full compensation suggest to me that income distributional aspects as well as efficiency aspects concerned the group.

a useful summary of most of the pros and cons for 'tariff compensation'. However, there are some aspects of the strategy of 'tariff compensation' which he has not considered. These lead this writer to reject 'tariff compensation' as a strategy for reform of the structure of assistance to producers.

The argument for 'tariff compensation' advanced by Harris is a second-best argument. He agrees that it would be preferable if the government were to remove all tariffs, non-tariff barriers to imports, and direct and indirect subsidies on outputs and inputs which distort relative prices of internationally-tradeable commodities away from social opportunity costs and, if necessary, to change the exchange rate. The pursuit of second-best rests on the difficulties of dismantling the existing structure of assistance to producers, and the economic costs of these distorted prices during the period before they are dismantled: '... if it were evident that the generalized system of tariff protection were to be dismantled over, say the next 5 to 10 years, it would be doubtful if, on balance, it would be worth creating new forms of compensatory assistance' [6, p. 137]. (The argument is supplementary to other arguments for government intervention in markets because of the presence of externalities, terms of trade effects of trading internationally, and the greater instability of prices and incomes of some rural producers.)²

The policy is founded, as Harris noted, on the formal economic theory of the second-best, or rather on one particular application of this theory. This application assumes that there is a subset of prices received by producers (and another subset of prices paid by consumers) which are distorted from world prices and that these rates of distortion are fixed while the relative prices of some other subset of commodities are adjustable.³ However, close inspection of this theoretical underpinning reveals that there are a number of logical problems and practical difficulties in proceeding according to the theory. For convenience these are presented as a list.

1. It is difficult to determine what is the existing structure of distortion of prices to producers when assistance is given to both agricultural and manufacturing producers in the form of many different instruments—tariffs, output and input subsidies, import prohibitions, two-price schemes, etc. (The list of different instruments used in Australia to assist producers which has been compiled by the IAC [1, Appendices 3.2 and 3.3] runs into more than one hundred and many of these apply jointly to the same commodities.) The BAE has prepared for the IAC

² The Green Paper [2, para 3.111] suggested that compensatory assistance could be reduced when farm incomes are high and reduced when they are low. This suggestion of using 'compensation' for the dual purposes of improving resource allocation and stabilizing farm incomes is dangerous. It opens another door for disguised long-term assistance which is difficult to measure and control.

³ When discussing the problem of determining the optimum second-best rates of assistance to producers, Harris [6, p. 21] refers to the earlier work of Meade [10] and to Corden [3, pp. 367-8]. In the last three years a number of formal models of a country producing and trading internationally many commodities subject to constraints on a subset of the commodity prices, have been developed; see Hatta [7], Lloyd [9] and Dixit [4]. These papers show how to determine the levels of intervention in a highly-distorted multi-commodity trading world.

a table of average nominal rates of assistance to rural products which is comparable with the IAC estimates of nominal rates of protection for manufacturing industries [1, Table 3.3.2.]. In 1969-70, the year to which the latest IAC estimates for the manufacturing sector relate, all of the rural products examined received positive assistance and some, such as butter, cheese, sugar and tobacco, enjoyed average nominal rates of protection above the average for the whole of the manufacturing sector (22 per cent). A number of the rural products which are currently exported receive quite substantial protection from potential imports by means of non-tariff quantitative restrictions which allow producers to receive higher prices for sales on the domestic market in the same way as tariffs protect import-competing manufacturers—for example sugar, butter and cheese and lamb, wheat and dried vine fruits (see the estimates in [8, Table 10.4]).

In looking at the distortion of patterns of production one should use effective rather than nominal rates of assistance. One marked feature of assistance to rural producers is that tariffs on importable material inputs and farm machinery are low compared not only to most items in the Customs Tariff but also to the average tariffs on materials used in the manufacturing sector (13 per cent in 1969-70). Ever since the introduction of the bounty to Australian manufacturers of tractors in 1922 the government has preferred in most instances to protect Australian manufacturers of materials or capital equipment used by farmers by means of subsidies rather than tariffs. The Green Paper itself estimated that 'it seems unlikely that they (tariffs on farm imports) would amount to more than a few per cent of the farmers' total costs' [2, para. 3.60]. (Furthermore there is an inconsistency in the way the Harris and the Green Paper treat these tariffs as a 'direct cost' to farmers and at the same time complain that tariffs penalize exporters directly because they make the exchange rate higher than it would be under free trade and hence lower the prices in domestic currency received by farm exporters. When the average tariff on inputs is less than the margin by which the exchange rate would be devalued if there were free trade, as seems true of rural exports today, these inputs are effectively being *subsidized*. This partly offsets the penalty of a higher exchange rate.)

Given some high nominal rates and low input tariffs, one cannot say that the assistance to the manufacturing sector overall is greater than that to the rural exporters, or to the whole agricultural sector.⁴ The BAE has recently calculated effective rates of protection for the sheep and wheat farms and the egg industry [11]. The average in the four years ended 1971-72 for sheep and wheat farms, 11 and 14 per cent respectively, were below the average for the manufacturing sector in 1969-70 (35 per cent) but that for the egg industry in 1969-70 (104 per cent) was well above it. Similarly, it is certain that some other rural exporters, for example dairy farmers, receive effective rates of protection from the existing structure which is above the average for manufacturing.

Hence there is no reliable basis for the premise of both Harris and the Green Paper that the present structure of assistance to all producers

⁴ Gruen [5] estimated that the average effective rate for the agricultural sector was the same as that for the manufacturing sector in 1967-68, about 18 per cent.

penalizes overall rural exporters. In terms of broad sectors of the economy it is probable that at present it is the mining and the service sectors which are discriminated against vis-a-vis both the manufacturing and agricultural sectors.

The main feature of the evidence we do have concerning the structure of assistance in the manufacturing and agricultural sectors is that the *intra*-sector variance in rates of assistance is great within both the manufacturing and agricultural sectors. Second-best considerations can only justify selective increases in assistance to some rural producers.

2. The relevant theory of the second-best seeks to find the sub-optimal or second-best levels of those rates of assistance to the producers which are not fixed. But which prices are fixed? Harris and the Green Paper regard the higher rates of distortion of prices of manufactures as fixed and levels of assistance to all rural exporters as adjustable. This is quite arbitrary. It is true that the structure of tariffs and subsidies to manufacturers could not be dismantled in a short period of say a few years but the same is true of the instruments which give high levels of assistance to rural producers, such as the two-price schemes.

The reality is that no government assistance or price intervention is immutable and the forms and levels of assistance to both manufacturing and agricultural producers are changing all the time. The level of assistance to the manufacturing sector has probably declined over the last ten years as a result of the recommendations of the Tariff Board and the IAC and the 25 per cent reduction of all tariffs in 1973, but since there is no time series of average nominal or effective rates we cannot quantify the reduction.

Harris himself notes that 'the process of providing any warranted tariff compensation would be a gradual one, with the question being looked at as cases came before the IAC' [p. 140]. His basic rationale for 'tariff compensation'—namely, that existing distortions can only be reduced slowly—is illogical since he envisages that 'tariff compensation' would come about through the same process of piecemeal review as references sent to the IAC.

3. The sub-optimal or second-best set of subsidies-taxes is very difficult to calculate. In fact each adjustable production subsidy-tax turns out to be some weighted average of all of the unalterable production distortions in the economy. (For a derivation and formal statement of this important theorem see Lloyd [9] or Dixit [4].) The weights are complicated terms which summarize the relationships of substitutability and complementarity in production between the commodities whose relative prices are adjustable and those whose are not. As an approximation, we should give production subsidies (taxes) to those producers whose production is substitutable to some other producer receiving a fixed and relatively high (low) level of assistance. In this context the production of one commodity is substitutable for another if the receipt of a higher level of assistance to one draws resources from the other. Analogous rules apply to distortions of prices to consumers.

It should be noted that the best instrument to minimize the economic costs of existing fixed distortions is not necessarily an export subsidy, as Harris maintains [6, p. 136]. An export subsidy raises the prices

received by domestic producers and domestic consumers by the same proportion. If either the rates of distortion to consumers for related commodities are different than those to producers (as is the case for many agricultural products in Australia—see the preliminary estimates in [8, Tables 10.3 and 10.4]) or if a commodity whose adjustable rate is being determined is more substitutable on the production side for the other commodities with high fixed distortions than on the consumption side, or *vice versa*, the second-best calls for two different rates of corrective subsidies or taxes on consumption and on production. This may seem unduly subtle but it illustrates the complications one is up against if one attempts to engage in this kind of second-best piecemeal policy-making.

Clearly when there are substantial intra-sectoral differences in the levels of assistance to producers, a policy of sub-optimal interventions requires that we know the detailed structure of relations of complementarity and substitutability among producers within and between sectors as well as the structure of distortions. The case for tariff compensation to rural exporters assumes that the production of these commodities is significantly substitutable with the production of the manufacturing sector. Given the greater similarity in input use among the producers within the agricultural sector, it is more likely that rural exporters receiving low rates of assistance have been harmed by higher rates of assistance going to other rural producers with whom they must compete for land, farm labour and management, than by high rates of assistance to city-located industries such as chemicals. To the extent that rural producers are substitutable with some urban manufacturing industries the tariff compensation argument cuts both ways. Those manufacturing industries which have to compete for labour and other resources with agricultural producers receiving high rates of assistance have a case for second-best assistance.

The Green Paper recognized the difficulties of trying to estimate the rates of distortion (but said nothing about estimating the equally important relationships of substitutability) and on this ground warned against 'trying to calculate too finely either these levels or the "appropriate" extent of compensation assistance. At best it can be no more than a "by and large" assessment which will provide reasonable balance over a period of years' [2, para. 3.81]. Harris [p. 141] admits these difficulties but his acceptance of tariff compensation implies that the IAC could measure them at least to the extent of improving resource allocation.

4. While the theory of the second-best tells us in principle what commodities should be subject to production (and consumption) subsidies or taxes, in practice any intervention is almost certain to introduce new distortions other than those called for. The choice of instruments is limited. For budgetary reasons it may be necessary to give part of the increase in the incomes received by rural producers through higher prices on the domestic markets, rather than by subsidies. If these consumer prices are already substantially distorted this will cause a welfare loss. Agricultural producers, and sometimes agricultural economists, tend to ignore the welfare costs of distorting the prices

paid by consumers for different products. If instead, second-best subsidies are financed by an additional taxation of commodities, or personal or corporate incomes, these higher taxes themselves are distortionary. If the subsidies are small in total value, this problem is unimportant but then so probably are the benefits. Similarly, the use of input subsidies when the problem arises because of fixed distortions of prices to producers distorts the relative prices of inputs and leads to higher social costs of production because the subsidized inputs are substituted for other inputs whose prices are now relatively dearer. The Green Paper used the 'tariff compensation' argument to justify the financing of pest control programmes [2, para. 5.256], research programmes [2, para. 5.256], government assistance to northern development [9.167] and export promotion expenditures [2, para. 6.225]. The benefits to national welfare from such interventions will be small, if positive.

5. The problem in the theory of the second-best is usually couched in terms of a once-for-all attempt to minimize the economic costs of unremovable distortions but the Green Paper and Harris envisage a sequential and gradual process of second-best intervention. This raises the possibility that some third party could claim assistance on the grounds that assistance to some second party in order to compensate for the initial assistance to some first party, has now injured him, the third party. If this were allowed, it is not clear that we would converge to some situation which is a welfare improvement over the initial situation. Harris' answer that export or import-competing industries compete with producers in other countries rather than at home mistakes the competition in the product markets for the competition on domestic resource markets which is the mechanism by which the changes in costs and hence in volume of production are brought about.

Any strategy for the reform of tariffs, or more properly of all distortions of prices to both consumers and producers, must be evaluated in comparison with other alternative strategies. If all tariffs, for example, were unchangeable over the period of say 5-10 years which Harris considers, the problems enumerated above should not prevent an attempt to improve the resource allocation by introducing new assistance to other producers. But the Harris-Green Paper presumption that little can be done to reduce existing distortions in the manufacturing sector is an extreme position and, to my mind, an unduly pessimistic one. We have noted above that the average level of tariff protection for manufacturing has been falling in recent years, albeit slowly probably with the notable exception of the 25 per cent reduction in 1973. Increasing willingness to change the exchange rate and use of the Structural Adjustment Assistance Scheme introduced in 1974 should also improve the rate of tariff reform though substantial reductions in assistance are feasible only in periods of increasing demand for the products concerned and below peak levels of aggregate unemployment.

The best unilateral strategy to my mind is the most direct and obvious one of reducing distortions sequentially by first reducing all import barriers and subsidies which distort prices at a nominal rate of say more than 50 per cent to the level of 50 per cent and then reducing

the highest remaining rates to 40 per cent and so on.⁵ These reductions should apply to agricultural producers as well as to manufacturers. (In principle one should consider effective rather than nominal rates but the nominal rates which are much easier to measure are highly correlated with effective rates.) It can be shown that this strategy is sufficient to improve welfare (Hatta [7, Chapter 8], Lloyd [9, pp. 378-9] and Dixit [4, pp. 117-8]). It has the advantages over the 'tariff compensation' strategy of not introducing new distortions which complicate the pattern further, of not requiring any knowledge of the relations of complementarity and substitutability among producers and consumers, and of following a timetable which is known in advance and phased over a period.

As far as the group of (rural) exporters with which both Harris and the Green Paper were preoccupied are concerned, there is another strategy available. This is a stronger commitment to the multilateral trade negotiations now taking place in Geneva. Of course Australia's influence on these multi-national negotiations may not be great but the trade concessions that result will benefit our actual and potential exporters in two ways. First, our exporters, including our agricultural exporters, may gain greater access to higher priced overseas markets. The second benefit is much less widely appreciated in Australia and is also relevant to the question of 'tariff compensation'. The 'mid-way' strategy adopted by the Australian government at previous GATT negotiations has allowed it to avoid binding any of the tariffs protecting major Australian manufacturing activities. The Department of Overseas Trade has estimated that about 10 per cent of Australian tariff items are bound and that these account for only about 20 per cent by value of total Australian imports. This is a very much lower percentage than that of most other developed countries. Similarly, Australia has not signed the Declaration Giving Effect to the Provisions of GATT Article 16(4) which binds the levels of subsidies of the signatories. This allows the Australian government much greater freedom to increase tariffs and subsidies without breaching international obligations than most other developed countries possess and it is an important factor behind the continual see-saw of rates of assistance in Australia. If the Australian government could be persuaded to bind more tariff and subsidy rates, the efficient producers would be protected to a greater extent against future declines in their relative positions.

For all of these reasons this writer prefers a strategy or mix of strategies which are more certain to move the economy towards efficient production than the complex assessments required with 'tariff compensation'. Moreover, simpler strategies have the advantage that we could devote more attention to increasing the *productivity* of all resources through such means as improved technologies and product selection and design instead of pursuing the national pastime of haggling over the allocation of existing resources used with existing technologies and products.

⁵ There are of course other strategies. One possibility is to make uniform all of the tariff rates within an industry or sector. But this does not eliminate the distortions between sectors. Even a uniform tariff applied to all imports leads to under-production and over-consumption of exports and non-traded goods.

References

- [1] Commonwealth of Australia, Industries Assistance Commission, *Annual Report 1973-74*, Canberra, 1974.
- [2] ———, *The Principles of Rural Policy in Australia: A Discussion Paper*. Report to the Prime Minister by a Working Group, Canberra, May 1974.
- [3] Corden, W. M., *Trade Policy and Economic Welfare*, Oxford, 1974.
- [4] Dixit, A. K., 'Welfare Effects of Tax and Price Changes', *Journal of Public Economics*, 4, 1975, 103-123.
- [5] Gruen, F. H., 'The Optimum Economic Size of Australian Agriculture', ANZAAS, 1972.
- [6] Harris, S., 'Tariff Compensation: Sufficient Justification for Assistance for Australian Agriculture', *Australian Journal of Agricultural Economics*, this issue.
- [7] Hatta, T., 'A Theory of Piecemeal Policy Recommendations'. Unpublished Ph.D. Dissertation, the Johns Hopkins University, 1973.
- [8] Lloyd, P. J., *Non-Tariff Distortions of Australian Trade*, Canberra, 1973.
- [9] ———, 'A More General Theory of Price Distortions in Open Economies', *Journal of International Economics*, 4, 1974, 365-86.
- [10] Meade, J., *Trade and Welfare*, London, 1955.
- [11] Motha, G. and H. Plunkett, 'The Effective Rate of Protection—An Investigation into the Application of the Concept to the Australian Rural Sector', *Quarterly Review of Agricultural Economics*, 27, July 1974, 125-141.