THE CONTROVERSY REGARDING DEVALUATION

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Australia's balance of payments problems have, understandably enough, received a good deal of attention in the pages of the *Economic Record* in recent years. Some articles have proposed diagnoses of, and/or remedies for our " shortage " of foreign exchange.[1] Numerous references to the problem are also to be found in the series of articles dealing with the state of the national economy.[2] Furthermore, Australia's foreign trade difficulties have undoubtedly helped to inspire a number of articles dealing with general theoretical aspects of the problem of achieving external balance.[3]

It is not my intention to undertake a systematic review of this literature. In it, in one place or another, are to be found most of the possible arguments *pro* and *con* devaluation and import restrictions. The only general criticism which I would offer of the discussion which our trade problems have received is that there has been (a) a lack of systematic comparison of alternative policies—with the result that problems common to both import restrictions and devaluation have, at times, been attributed to one of these measures only, and (b) some failure to draw the distinction between short-term and long-term problems and effects.

The two broad issues with which any discussion of our trade policy should be concerned—and with which the articles cited above have, by and large, been concerned—are :—

(i) Should we attempt to achieve external balance through the use of the price mechanism, or should we continue to rely on direct controls ?

(ii) Should we continue to rely largely on the restriction of imports to balance our overseas accounts, or should we offer more encouragement to exports ?

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[1] Erik Lundberg and Malcolm Hill, " Australia's Long-term Balance of Payments Problems ", *Economic Record*, Vol. XXXII, No. 62 (May 1956), pp. 28-49.
J. E. Meade, " The Price Mechanism and the Australian Balance of Payments ", *Economic Record*, Vol. XXXII, No. 63 (November 1956), pp. 239-256.
W. M. Corden, " Import Restrictions and Tariffs : A New Look at Australian Policy ", *Economic Record*, Vol. XXXIV, No. 69 (December 1958), pp. 331-346.
Ian Bowen, " The Case For and Against Devaluation of the Australian Pound, 1956 to 1959 ", *Economic Record*, Vol. XXXV, No. 70 (April 1959), pp. 21-28.

[2] In particular, Russell Mathews, " The Australian Economy, November, 1958 ", *Economic Record*, Vol. XXXIV, No. 69 (December 1958), pp. 291-305.
C. G. Firth and A. J. Hagger, " The Australian Economy, February, 1959 ", *Economic Record*, Vol. XXXV, No. 70 (April 1959), pp. 1-20.

[3] J. E. Meade and E. A. Russell, " Wage Rates, the Cost of Living and the Balance of Payments ", *Economic Record*, Vol. XXXIII, No. 64, (April 1957), pp. 23-28.
W. E. G. Salter, " Internal and External Balance—The Role of Price and Expenditure Effects ", *Economic Record*, Vol. XXXV, No. 71 (August 1959), pp. 226-238.

It should be noted that use of the price mechanism does not simply mean, in this context, a currency devaluation : the setting free of the exchange rate, imposition of a uniform tariff or granting of uniform export subsidies are alternative ways of using that mechanism. Similarly, direct controls do not necessarily refer only to import restrictions : minimum export quotas are a conceivable alternative to maximum import quotas. However, with the exception of Corden's advocacy of a variable tariff, most of the Australian discussion has been concerned with the merits and demerits of import restrictions versus those of devaluation, and it is with this issue that this paper is mainly concerned.

Two Valid Arguments in Favour of Import Controls

Import restrictions have certain advantages as compared with devaluation both as a means of remedying a temporary balance of payments deficit, and as an initial and temporary response to a permanent balance of payments problem, pending the effective operation of long-run corrective measures. The short-term advantages of import restrictions about which there seems to be general agreement are the following :—

(1) When exchange rates are pegged, but periodically changed, currency speculation tends to be destabilizing : anticipation of a devaluation can cause a flight from the currency and perhaps force a devaluation—and conversely for appreciation. Hence a country which showed a willingness to revalue its currency frequently in response to short-run movements in its overseas balances would invite the development of extensive speculative transactions in its currency and perhaps lose effective control over its exchange rate. For this reason currency revaluations are usually in practice made sufficiently drastic as to testify to their being semi-permanent changes.

(2) Devaluation is a less certain way of reducing an external deficit than are such direct measures as import restrictions. Provided export receipts can be predicted with tolerable accuracy, it is relatively easy to estimate the degree of restriction of imports necessary to achieve a trade balance. It is a much trickier undertaking to calculate the degree of devaluation necessary to have the same effect. Furthermore, import restrictions can be relaxed or increased in accordance with the way events develop, whereas, as was pointed out above, a country cannot afford to experiment unduly with its exchange rate.[4]

To my mind these are the only generally valid arguments favouring the use of import restrictions. More precisely, they are arguments against exclusive reliance upon currency revaluations to achieve external balance, and are therefore arguments in favour of the use of other supplementary devices, such as the use of import restrictions, or the accumulation of large foreign exchange reserves. The first might also be construed as an argument against a system of pegged, but periodically changed, rates of exchange between currencies, and in favour of a system of flexible exchange rates.

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[4] Corden has pointed out that in practice licensing authorities shrink from imposing drastic and sudden restrictions, on account of the hardship and disorganisation which they bring about. Thus it is by no means clear that import restrictions will in fact be more effective in producing a quick reduction in imports than a devaluation—or uniform tariff—would be. See W. M. Corden, *op. cit.*, pp. 335-6.

Any method of discouraging imports and encouraging exports is likely to result in changes in relative prices that are unnecessary in the sense that they induce no change in quantities produced and consumed, imported or exported. Import restrictions offer the authorities an opportunity of curbing these unnecessary price changes. This may be desirable from the point of view of stabilizing the general price level or for preventing redistribution of incomes in favour of rentiers. To be successful in these aims, the authorities must restrict imports (or encourage exports) of goods having high price elasticities of demand (supply) rather more than the market would, and restrict (encourage) those goods having a low elasticity rather less. If, as is no doubt true for Australia, the short-run elasticity of supply of exports is substantially less than the short-run elasticity of demand for imports, a given improvement in the balance of trade may be obtained with less aggregate change in relative prices by means of import restrictions than through devaluation. Similarly a policy of selective import restrictions which discriminated against imports with highly elastic demands would involve less price distortion than would non-discriminatory import restrictions or a uniform tariff. Such policies are bound, of course, to cause some distortion in the pattern of production and consumption, but it may be that in the short-run these disadvantages are outweighed by the benefits of a rather more stable pattern of prices and income distribution. In the longer run, however, the distortions are likely to become quite serious, as the experience of controlled economies has demonstrated. Even in the short-run, successful implementation of such a policy requires the existence of a rather skilled import licensing authority, i.e. an authority able to gauge the relative price elasticities of demand for the various types of imports. At best a rough categorization of imports is all that can be attempted and it is quite possible that the induced price movements will be, in aggregate, more violent than those needed with an undiscriminatory policy.

A further advantage, from the point of view of domestic price stability, has been claimed for import restrictions, as compared with devaluation or a uniform tariff. It has been argued that because of business conventions, or for reasons of goodwill, or simply because it takes them time to adjust to new situations, firms controlling scarce supplies of import goods do not raise the prices of these products to the full extent that the traffic will bear : instead, they resort to various informal rationing schemes. It might be possible, therefore, to restrict imports temporarily without their prices rising at all—although, at the cost, of course, of further distortions in the allocation of commodities and resources. Although not explicitly stated, this assumption underlies the comparison of the effects of import restrictions and devaluation (and deflation) presented by Salter in the final section of his article dealing with the interrelationships between internal and external balance.[5]

Salter mentions three possible objections to devaluation as a short-term remedy for a balance of payments deficit. (1) " The short run elasticity of demand substitution between traded and non-traded goods may be so low that no conceivable exchange rate will equate demand with

[5] Salter, *op. cit.*, pp. 236-238.

the fixed supply."[6] (2) " a severe devaluation would imply that producers of traded goods are earning large excess profits while producers of non-traded goods are making losess (although covering prime costs). Even though this situation will not persist, in the short run there is considerable distortion—and in Australian conditions a shift in the income distribution towards farmers." (3) " a situation of balance of payments surplus and home over-employment will appear as the supply reactions become effective ; and this will require correction by an appreciation of the exchange rate to yield a price ratio consistent with long-run equilibrium."

By contrast, import restrictions, it is claimed, " enable us to ' buy time ' while long-run supply adjustments are set in motion, so avoiding the necessity for wasteful short-term measures to achieve external balance . . .". This, Salter concludes, is " perhaps the only respectable argument for import restrictions ".

It is clear that this argument for the use of import restrictions depends crucially on the assumption of sticky relative prices. For, if this assumption is dropped, it is apparent that import restrictions are open to the same sorts of objections as Salter makes to devaluation : (1) If " no conceivable exchange rate will equate demand with the fixed supply (of traded goods) ", then import restrictions will result in very steep rises in the prices of import goods—rises even greater than those required by devaluation. (2) While devaluation will result in a shift in the distribution of income in favour of exporters, import restrictions will cause a similar shift in favour of importers and manufacturers of import-replacement goods. There seem to be few compelling reasons for believing that the latter group is more deserving of windfall gains than is the former. (3) The supply effects induced by devaluation will be inappropriate from a long-term point of view and hence will need correction by means of a subsequent currency appreciation or internal inflation. Similar distortions will follow the imposition of import controls and will have to be corrected by a removal of those restrictions.

Furthermore, it seems to me that in the circumstances envisaged by Salter, the assumption of sticky import prices *should* be dropped as being unrealistic. The assumption, it has been argued, is warranted for import restrictions " imposed only for sufficiently short and isolated periods and (which) are sufficiently moderate in their impact ".[7] But if short-lived and moderate restrictions will do the trick, it seems inconsistent to argue that the alternative policy of devaluation will need to be " drastic ", and involve a violent redistribution of income. Alternatively, if the elasticity of substitution between traded and non-traded goods were low, and the magnitude of the required devaluation correspondingly

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[6] Salter's analysis distinguishes between traded and non-traded goods, rather than making the usual distinction between export, import and home-traded goods. This simplification rests on the assumption that the terms of trade of the country concerned remain unaffected by its own foreign trade policies. This assumption is regarded as being not unduly unrealistic for a small country like Australia, whose volume of trade is a small part of total world trade.

[7] T. W. Swan, " Notes on Some Inter-relations of Economic Policies (Employment, Balance of Payments, Spending and Costs) ". Paper presented to Section G, A.N.Z.A.A.S. (August 1955), p. 4.

great, so too would the profits to be made by raising the prices of the restricted import goods. In these circumstances the sticky price assumption would seem to be very dubious.

(It might be noted in passing that it would be equally inconsistent to argue that firms, for reasons of goodwill, will exercise " price restraint " in periods of temporary import restrictions but will not do so in the event of a devaluation that is expected to be temporary. The short-run opportunity costs of both types of behaviour are roughly the same, as are the expected long-run benefits.)

Disadvantages of Import Controls

The disadvantages of import restrictions, particularly in the long run, are well known and have received a good deal of attention in the local literature. Their major disadvantage is, of course, that they are more protectionist than a devaluation, and hence deny us more of the benefits of the international division of labour. Furthermore, they give rise to distortions in the pattern of imports and home production of import replacement goods, as compared to the pattern that would result if imports were restricted by means of a uniform rise in their price (e.g. by means of a uniform tariff). Just how serious these distortions will be will depend upon how skilful and how ambitious the import control authority is. (By " skill " is meant its ability to gauge correctly the relative price elasticities of demand to import of the various import goods. " Ambition " refers to the degree of detailed control over imports that the authority attempts.) If it is very unambitious, it need possess little skill, and vice versa. If it were content simply to restrict the total amount of foreign exchange made available to importers, leaving the latter free to spend it however they desired, no distortions would arise. On the other hand, if the authority possessed " negative skill " (i.e. if it systematically restricted most those products the demand to import for which was least elastic) and was very ambitious, very serious distortions would ensue.

In practice the principal danger is that whatever " skill " the authority possesses will tend to be negated by the intrusion of policy goals other than that of securing an efficient allocation of expenditure among imports. One such goal has already been mentioned, viz. that of minimizing the rise in an index of domestic prices of import goods. A variant would be to prevent rises in the price of import goods which enter into a cost-of-living index. Another goal might be to effect a redistribution of income in favour of the poor by restricting luxuries more than necessities.[8] " Economic development " may be fostered by restricting imports of consumer goods more severely than imports of producer goods.

All of the goals mentioned above seem to have played some part in shaping the pattern of Australian import restrictions. The most obvious

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[8] Messrs Firth and Hagger have argued that one of the advantages of import controls is that they can be used to restrict items consumed by " tycoons and their wives " more severely than " textbooks " and " power generating equipment ". But if an allocation of expenditure other than that given by the market is considered desirable, surely the more appropriate means of achieving it is by means of raising sales taxes or by the granting of subsidies to particular items.

feature of that pattern has been the greater severity of restrictions imposed upon consumer goods as compared with producer goods. This policy may well be in accord with the short-run price elasticities : however, the correlation between short-run and long-run elasticities may be low. Operating over a period of years this policy could have serious consequences : for, in effect, it provides a form of double protection for import-replacing industries. The prices of finished import goods are raised by more than they should be, while the prices of the components, materials and capital items used in their manufacture are raised by less—or, in some cases, not raised at all.

Encouragement of Exports

The extent to which devaluation will result in increased earnings of foreign exchange depends upon (i) the elasticity of supply of export goods, (ii) the elasticity of home demand for these goods, (iii) the proportion of the total supply consumed at home, and (iv) the elasticity of overseas demand for our exports.

Since most of our exports are primary products, the elasticities of supply of which are almost certainly very low in the short-run, devaluation is likely to have only a very limited impact on the supply of export goods in the short run. Even in the short run, however, there is scope for reducing home consumption of primary products ; although their elasticities of demand may be low, a sufficiently high proportion of most of these products (the only notable exception being wool) is consumed at home for the effect of reductions in home consumption to result in near-proportional increases in export supplies. Furthermore it is likely, as Professor Mathews has argued, that many of our more efficient manufacturing industries could expand output for export rather rapidly without encountering steeply-rising marginal costs.[9]

For these reasons, devaluation might be expected to bring about a useful increase in export supplies even in the short run. It is probably true, however, that any effect on the export side is likely to be small as compared with the reduction in imports. The effect of non-discriminatory import restrictions, or a uniform tariff, may therefore be not very different from the effect of devaluation in the short-run.

In the long-run, however, the situation is quite different. It seems to me likely that the long-run supply elasticities of most agricultural products are reasonably high, and that the long-run elasticity of aggregate farm output is much nearer unity than zero. Whatever the numerical elasticities may be, I can think of few good reasons for supposing that, in the long-run, our supply of exports is any less elastic than our demand for imports. If this is the case, reliance on import restrictions as a permanent policy would lead to a costly and unnecessary sacrifice of the benefits of international trade.

My assertion that farm output is responsive to price in the long run rests partly on the principle of insufficient reason—i.e. on the grounds

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[9] Russell Mathews, *op. cit.*, pp. 299-300. The argument is based on the efficiency—by world standards—of many of our manufacturing industries and the existence of excess capacity in several of them.

that we have no reason to believe that it is particularly *inelastic* : practically all of the evidence and argument that have been put forward regarding the low supply response of farmers is of a strictly short-run character[10]—and partly on the evidence in favour of this hypothesis that has been obtained in some recent studies in the United States.[11] Furthermore, the substantial increase in Australian agricultural production that has occurred in the last decade—particularly when compared with the relative stagnation of the two previous decades—is suggestive of a responsive long-run supply relationship. But whatever explanation is offered for this development, it at least demonstrates that our agriculture possesses the capability of fairly rapid expansion.

It is true, of course, that for a number of our agricultural products—notably wheat, butter, cheese, sugar and dried fruits—the existence of marketing monopolies, stabilization schemes, etc., means that the effect of devaluation upon prices received by farmers will be dampened. These products, however, account for no more than about 17 per cent of our total exports, whereas wool and meat, the two principal commodities unaffected by home price schemes, account for about 55 per cent. Furthermore, it seems unduly pessimistic to regard the present marketing arrangements as being immutable, in a long-run context. Devaluation, in fact, by weakening the comparative protection argument, by offering farmers some sort of a *quid pro quo* in the form of higher export earnings and by increasing the profitability of alternative production opportunities would provide the government with a political opportunity to reduce the degree of special protection granted some of these industries. Even if existing home-price arrangements, etc., remained unchanged, however, devaluation would raise returns from the unprotected section relative to those received in the protected industries, and thus make for a more efficient allocation of resources within agriculture.

There remains for discussion the terms of trade argument. To the extent that overseas demand for our exports is less than perfectly elastic,

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[10] Nevertheless, I think that our judgments concerning long-run elasticities are often unduly influenced by the knowledge that, typically, farm production shows little response to price in the short run. Some of the explanations that have been offered for the short-run unresponsiveness of farm output—explanations involving the imperfect rationality of farmers and the peculiar technological conditions of farm production—lend plausibility to the view that the long-run elasticities are also low. However more recent work in supply analysis—and, in particular Johnson's article on " The Nature of the Supply Function for Agricultural Products " (*American Economic Review*, Vol. XL, No. 4 (September 1950))—has shown that many facts the explanation of which seemed to require special assumptions regarding farmer psychology or farm technology, can be satisfactorily explained in terms of orthodox economic theory. I also believe that we have tended to underestimate the importance of price in determining output by overestimating both the importance and the autonomy of technical change. " Technology " has become a convenient category to be invoked to provide easy—but question-begging—answers to difficult questions.

[11] In particular, Marc Nerlove, *The Dynamics of Supply : Estimation of Farmers' Response to Price* (Baltimore : The Johns Hopkins Press, 1958), especially Chs. II, VIII and IX ;

Zvi Griliches, " The Demand for Inputs in Agriculture and a Derived Supply Elasticity ", University of Chicago Office of Agricultural Economics Research, Paper No. 5825 (November 1958) (Mimeographed);

Zvi Griliches, " The Demand for Fertilizer : An Economic Interpretation of a Technical Change ", *Journal of Farm Economics*, Vol. XL, No. 3 (August 1958), pp. 591-606 ; and

Dale E. Hathaway, " Agriculture in an Unstable Economy Revisited ", *Journal of Farm Economics*, Vol. XLI, No. 3 (August 1959), pp. 487-499.

increases in the volume of exports will be partially offset by lower prices received. Foreign demand for our exports depends upon (i) the elasticity of overseas demand for the products we export, (ii) the elasticity of foreign supply of these products, and (iii) our share of the total market. The fact that some of the agricultural products which we export have low demand elasticities is offset by the fact that their share of the market is rather small.[12] Only in the case of wool—and it is, of course, a very important exception—have we perhaps cause for concern.

Horner's[13] and Philpott's[14] studies suggest that the long-run price elasticity of world demand for wool is in the range −.4 to −.6. Since Australia's share of total world production is about two-fifths, these estimates would suggest that the elasticity of world demand for our wool is within or beyond the range −1 to −1.5. But both on account of —(1) the estimation methods employed by Horner and Philpott, and (2) the fact that synthetic fibres which are close substitutes for wool were not available during the periods covered by their studies, it seems likely that their estimates understate the current long-run price elasticity of demand. Certainly the " market strategy " advice offered the wool industry by Philpott—viz. to produce more wool in order to discourage further research into new fibres and to obviate the risk of an irreversible change in consumer tastes away from wool towards synthetic fibres[15] implies the existence of a long-run demand elasticity substantially greater than 1. If this is the case, and given that our share of the world market is about 40 per cent., the elasticity of demand for Australian wool is substantially greater than 2.5 in numerical value.

It would seem, then, that we should not be greatly concerned about a possible adverse terms of trade effect resulting from an attempt to expand our exports of primary products. This argument applies *a fortiori* in the case of an expansion of exports of manufactured products, our share in the world market for which is extremely small, and for which world supply and demand are rather more elastic than is the case for primary products. Oddly enough, it is only with regard to these products that any serious invocation of the terms of trade argument has been made in the Australian literature.[16]

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[12] Curiously, the fact that our agricultural exports other than wool form a small part of world supplies has been adduced as an argument *against* the effectiveness of devaluation : " . . . the short-run supply of wool . . . cannot be much varied, nor is the price which that commodity fetches in foreign exchange in any way directly affected by Australian economic policy. In a somewhat less rigid sense, the same argument applies to other agricultural exports, *and here there is the added argument that they form a small percentage of world supplies.* . . . It is difficult, therefore, to see how devaluation could work favourably in the short-run on Australia's balance of payments ". (Ian Bowen, *op. cit.*, p. 25—italics added.)

[13] F. B. Horner, " Elasticity of Demand for the Exports of a Single Country ", *Review of Economics and Statistics*, Vol. 34, No. 4 (November 1952), pp. 326-342.

[14] B. P. Philpott, " Wool in the New Zealand Economy ", *Economic Record*, Vol. XXXIII, No. 65 (August 1957), pp. 216-233.

[15] Philpott, *op. cit.*, p. 225.

[16] " Only if the elasticity of oversea demand for these (manufactured) goods with respect to their oversea price is greater than unity will the amount of foreign currency we earn from the sale abroad of manufactured goods increase as a result of the devaluation . . . We are not denying that this may be the case : it is simply that we have not yet seen any evidence that it is so." (Firth and Hagger, *op. cit.*, p. 14.)

Conclusion

In published discussions of our trade policy the desirability of devaluation has been questioned on a number of grounds. Doubts have been expressed concerning

(a) the effectiveness of devaluation in restoring balance of payments equilibrium ;

(b) the ability or will of the government to make a devaluation effective (by holding internal inflation in check) ;

(c) the political possibility of devaluation ; and

(d) the necessity for devaluation.

This paper has been concerned almost exclusively with the first problem. The major source of doubt concerning the efficacy of devaluation has probably been the belief that farm output may be unresponsive to a rise in its relative price. I have argued to the contrary : that there is little doubt production of agricultural products is substantially responsive to price in the long run. I am inclined to think that this view might meet wider acceptance today than it would have several years ago. For this change of opinion we must thank the fairly spectacular increase in wool production that has followed—with quite a lag—the wool boom.