AGRICULTURE IN THE BALANCE OF PAYMENTS*

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There must be reasons for choosing such a title. The reasons are—

(*a*) The balance of payments is, and is likely to remain, a key problem for Australia; and

(*b*) The products of agriculture are the source of the bulk of our export income and are likely to remain so.

1. THE PROBLEM POSED

The question really posed then is whether agriculture can carry the external economic burden of Australia's chosen road of development, namely—

(i) forced population growth by way of migration;

(ii) full employment; and

(iii) the expansion, or at least the maintenance, of living standards.

These objectives have become postulates or articles of faith in the economic thinking of very many Australians.

All will be familiar with the broad balance of payments situation—an understanding now helped by Treasury Bulletins and an improved standard of public debate. Anyhow, I will assume sufficient familiarity with the position last year and the current improvement. I would like, however, to suggest some evidence in support of the first reason for my title.

It is interesting to examine Australia's propensity to import as revealed by the post-war balance of payments figures. (See Table III—Appendix) My only concern this evening, however, is to make the observation that the average long-term propensity to import revealed by these statistics is 20.6 per cent. Of course, not too much weight can be placed on the significance of these calculations but it is important to note that the level of imports expected during 1956-57 (about £700m.) represents only 15.4 per cent of an estimate of Gross National Product for 1956-57 of £5,350m. when freight and insurance are added.

*For reasons of time the latter portions of this paper were considerably abbreviated when the address was delivered.

The sustained and expanding demand for imports has reflected both the high level of economic activity and excess demand generated by inflation. It may be argued that inflationary pressures have been successfully repressed by Government action over the past year and that the propensity to import will slacken off to a point where restrictions are unnecessary. I will not disagree but will merely say that even the lowest figure which one could reasonably put at this stage on the propensity to import, without predicating severe recession, gives a figure for imports which makes easy optimism about trade balance in future years, without import licensing (or an equivalent action) inappropriate. The weight of evidence, some of which I touch upon to-night, suggests that control of the internal economy under full employment conditions will not automatically solve *all* the problems affecting the balance of payments.

As regards my second reason for the title of my address, namely, the importance of agriculture in meeting any balance of payments gap, the statistics in Table IV (Appendix) may be permitted to speak for themselves. It is sufficient to mention that agricultural products comprise 80 per cent of our total exports and have done so for many years.

I may turn now to the theme of my address and the question I posed —can agriculture continue to carry the lion's share of the burden imposed in the external sphere by our programme of development? The objectives which I have mentioned are not open to public challenge—least of all by a public servant charged with the responsibility of seeing part of them through. Yet I have a feeling that unless we clarify their meaning and study their implications the Australian public may not be aware of or quite ready for the consequences.

The Postulates Examined

Let us have a *quick* look at all three postulates if only to raise questions which are relevant to my theme.

Immigration

I am not concerned to discuss migration to-night although the level of migrant intake is likely to become increasingly a subject for public debate. However, I would like to remind you that the average rate of population increase since 1950-51 has been 2.4 per cent per annum, comprising 1.4 per cent from natural increase and 1.0 per cent from migration.

Its relevance to my talk lies in the fact that I am assuming that at some level it will go on and that it has both short-term and long-term effects that are important for Australia's balance of payments position. I do not think these effects have as yet been adequately studied and considerable scope for useful work in this field exists. One of the short-term effects is the need for capital equipment and raw materials in order to provide employment opportunities as well as housing for the migrants. Further, there is the addition to import demand generated by the income earned by the migrants once in employment. I am not willing to accept uncritically contentions that these essentially short-term problems are so great as to necessitate the elimination or drastic curtailment of the immigration programme. Perhaps it needs to be remembered that there are quite real economic costs involved in increasing the population by natural increase alone.

I suppose the main economic argument in favour of population increase rests on the thesis that increasing returns to scale are available. It may well be that—

(i) these more than offset the capital costs involved in the population increase; and

(ii) these capital costs might be less under migration than for natural population increase.

There are other economic aspects of our migration programme which are relevant, such as the high proportion of skilled to unskilled workers and of workers to dependants. However, as I remarked before, my purpose is merely to assume that an immigration programme will go on and that it will tend to swell the debit side of Australia's external accounts.

Full Employment

The need to sustain employment opportunities for the rapidly increasing population involves a continuous battle with inflation. The public apparently is accepting the idea of sporadic unemployment but only if there is no real problem in transfer (cf. motor industry). Yet it is probable that the public will not accept general unemployment, even as little as say 2 per cent of the work force, which on overseas comparison is a very low figure. I am satisfied to rest tonight on Professor Harbeler's laconic statement: "the tolerance for unemployment in our time is low".

The most serious implications for my theme are:—

(i) an upward pressure on costs (especially in the situation of a pegged exchange rate plus, therefore, unsheltered exports);

(ii) a high marginal propensity to import under conditions of full employment, particularly if accompanied by conditions of inflation;

(iii) the disposition to consume now in preference to making long term savings, when full employment is combined with such aspects of the welfare state as medical benefits and old age pensions; and

(iv) full employment in growing secondary industries which adds to import demands for investment goods and raw materials, possibly to a greater degree than would be expected from an equivalent expansion in agriculture. The proportion of capital goods, raw materials and auxiliary aids to manufacture in total imports is at present very high (about 80 per cent) and gives rise to obvious problems. For instance, unless we can ensure that a significant proportion of such development is concentrated in real import saving and/or export earning industries we must look forward to further import cuts from time to time which will become progressively less manageable and bring increasing hardship to the community.

Living Standards

People do want their cake and to eat it too. They want schools, hospitals, housing, etc., but they are not keen to meet the bill either by voluntary savings or by way of taxation. They want cars, roads, power, increased leisure and higher living standards generally, but they are unable or unwilling to understand that if inflation is to be avoided these can only result from increased productivity or from savings.

Without attempting to explain it to themselves in terms of savings—investment, or indeed of any other theory, it is probable that many wage-earners believe that conditions of mild inflation are desirable in order to equalise the real burdens of economic growth between the different sections of the community. They believe that, so long as the unions are strong enough or the wages system such as to give wage increases to match price rises, any loss in real living standards will be shared by those whose savings are financing the process of economic growth, through the depreciation of money and the lower value in real terms of their receipts by way of interest payments. The same reasoning, of course, does not apply to profits under inflationary conditions, and taxation is perhaps looked to by the wage-earners as the means of achieving some equality of sacrifice during the gestation period and of reward when the investment and growth bear fruit in increased productivity. It is probably this belief, in alliance with the fear of unemployment in the economy, which explains the traditional opposition of a large part of the Australian electorate to any tightness in monetary conditions. Without some explanation of this sort I find it rather puzzling that by and large the Australian public is not reacting more positively to the discomforts of inflation. A change in temper might come from the cessation in automatic wage adjustments.

Do not misunderstand me. I think inflation can be a most dangerous thing, but I don't consider it helps to pose the problem in terms of an unreal dilemma between serious inflation and deflation. At the moment inflation is relatively mild and the important question is what dangers are there in this. To my mind the dangers are—

(*a*) we may develop a cost structure in Australia that will price us out of our markets; and

(*b*) the pressure of domestic demand on the level of imports may steadily grow quite apart from the normal increase to be expected in an economy in which real and money incomes are rising.

Particularly with respect to (*a*), we should not consider our own affairs in isolation from the rest of the world. The severity of the disease may be relative and an attempt to enforce deflationary policies by a small country against world inflationary trends may not only impose severe strains but in fact be not really necessary. However, if we move ahead of the inflation of other countries, efforts to develop new manufacturing markets and hold or expand primary markets will be hampered—a very serious matter for Australia.

It may be worth emphasising that the absence of strong public feeling (if I am correct in predicating such) about inflation renders any Australian Government's task the more difficult when trying to cope with the balance of payments problem from the demand side.

So much for the three "postulates" which I have assumed as underlying public thinking and the scope of action therefore politically available to the Government in dealing with the balance of payments problems. The purpose of my brief comments has simply been to stress how they are, all three, directly related to the problem with which we are dealing tonight. I emphasise that there is danger in accepting these postulates as articles of faith without thinking through clearly to their consequences. We have to admit the possibility and, even the probability, that we cannot effectively pursue the aims of national policy outlined in these postulates and at the same time maintain balance in our external accounts without import restrictions or some equivalent action.

One strong pointer in this direction is plain to see. World trends support the possibility that our import demands for investment and consumer goods are likely to expand more rapidly than are the markets for our exports. FAO's annual report *The State of Food and Agriculture 1956* mentions that world trade in agricultural products was still only 5 per cent above 1934-38 levels in contrast to a rise of 70 per cent in the volume of world trade as a whole. Australia's steadily falling terms of trade since 1950 is further suggestive evidence pointing in the same general direction. The fall has been fortunately arrested this year —but mostly by wool.

Granting these general trends in world trade, it is perhaps all the more important (and certainly more encouraging) to note that over recent years Australia has succeeded against these trends in expanding her agricultural exports. It is, however, only prudent to emphasise that the decline in our terms of trade would have been worse if wool were excluded. A reasonable degree of faith in the long-term future of wool certainly seems to be necessary if one is to be optimistic about our future balance of payments position. On this I will have more to say later.

I am now satisfied to proceed with three assumptions given the basic postulates of policy—

(*a*) the demand for imports will grow;

(*b*) service charges (freights) will not lessen; and

(*c*) the need for exports will grow.

I will not attempt to construct tonight an economic model to illustrate our possible problems. I realise that such models are no stronger than the assumptions upon which they rest. However, I have been impressed by the conclusion, based upon the assumptions that the population in, say, 1960, will be $10\frac{1}{4}$ millions, imports at the same per capita level which have obtained over the past three years, export and import prices constant, and assuming a capital inflow of £75 million, that a level of export income of about £1,000 million will be required if there is to be no impossible strain placed upon our international reserves.

2. SOME POSSIBLE LINES OF APPROACH

This position might be modified by one or more of the following possibilities—

(i) suddenly finding that we are "import saving" better than we know, e.g., by major developments in copper, steel or the discovery of oil;

(ii) because terms of trade have improved either by import prices falling, or export prices rising;

(iii) a fortuitous increase in the availability of investment funds from abroad.

For good reasons I would not like to rely solely on any of these possibilities, and we must look for more positive measures such as the following:—

External Borrowing

It is not enough to sit back and hope that overseas investors will voluntarily seek out opportunities to invest capital in our industries. We must encourage the inflow of capital although such a policy is not without dangers. Our policy, I think, would need to be selective and as a general rule directed into projects which we are confident will result in reduced imports or greater exports.

Lundberg and others have recently drawn attention to the fall in net interest paid overseas and the rise in net remittances of dividends and profits as well as in undistributed profits accruing to foreigners. It is obvious that continuation of this trend could ultimately present its own problem in foreign payments unless the effect of this investment is either to diminish the need for imports or to increase exports.

Import Replacement

Import replacement industries should be encouraged but only if of a genuine character and not merely local industries built up under the protection of import restrictions irrespective of their real competitive position in terms of comparative costs. Considerable expenditure and the taking of financial risks may well be justified in certain instances. Dr. Raggatt, the Secretary of the Department of National Development, has recently pointed out that in mineral exploration there is a direct relation between effort and discovery. He has estimated that the annual benefit to Australia's balance of payments through developments in the mineral industry could be increased above present levels by as much as £60 million a year within five to ten years, depending upon the effort devoted to it. Of course, not all the benefit to the balance of payments will accrue by way of import replacement but it is an exciting and practical illustration of the developmental potential of this young nation.

There are other potential import savers too, such as tobacco, oil-seeds and cotton. I am not yet convinced that these cannot be developed on a competitive basis within the level of protection consistent with a normal tariff policy. However, even if this is not the case they may need to be re-assessed in the light of the possible necessity of conserving the maximum amount of our foreign exchange earnings for other raw materials and investment goods of the type we cannot as yet produce in Australia.

The Positive Expansion of Exports

This brings me to my main theme which is to examine the scope for expansion of our principal agricultural products. But first let me briefly look at the prospects of expanding our exports of manufactured goods.

Without wearying you with figures, and while admitting the contentious problems of definition that are involved here, perhaps I can state the present position by saying that so far secondary industry has only slightly increased its pre-war share of exports despite a 140 per cent increase in the volume of output since 1938-39 while over the same period primary production retained its share of exports (about 80 per cent) although production expanded by only 28 per cent in volume.

It would be easy to project forward on the basis of some conservative rate of increase in manufactured exports and then argue that such an increase would be quite inadequate to cover the existing gap in overseas payments or to cope with an annual increase in the import bill which could be of the order of £50 million on the basis of the average long-term propensity to import referred to earlier and an annual increase of 5 per cent in Gross National Product.

However, I do not propose to take such a facile approach to the possibilities for our manufacturers. I have already referred to the high level of world trade in industrial commodities since the war. A GATT report for 1955 points out that the increase in the volume of international trade in that year was only a continuation of the growth which began in 1952 though it represented a further acceleration in its speed. Since 1952 the volume of world exports has risen annually by 4.3 per cent, 6.4 per cent and 8.6 per cent. The increase in exports kept pace with the world's industrial production. Since 1950 the increase in both has slightly exceeded 30 per cent. It would be inconsistent and unduly pessimistic to assume that these trends (if continued) will by-pass Australia. As some of our major secondary industries like steel, motor car manufacture, chemicals and oil refining get into top gear, and if we can solve the transport and freight problem to give them the advantages of our proximity to Asia's markets, it is my conviction that our competitors in the Indian and Pacific Oceans will have to look to their laurels. The Australian workman is good—any number of overseas concerns operating in Australia have testified to that effect—and our wage rates are about one-half those in the U.S.A. In addition, essential experience, research and technical know-how are coming into the country with imports of capital to augment that already here.

However, I feel it necessary to season my optimism with a dash of caution. Rising costs could spoil the promise of the future and manufacturers need stability in the internal economy to enable their present interest in the export field to bear fruit. Manufacturers are beginning to understand the economic advantages of large-scale production. Rising costs will discourage such interest except among those who are satisfied with sheltered domestic markets. Perhaps, too, we have a few tricks to learn from our competitors in the way of pricing policies for export. In any event, the goal is worth striving for. Demand for industrial and manufactured goods is more elastic with rising incomes than demand for rural products and a foothold gained now in Eastern markets for our secondary products must pay handsome dividends later as living standards in those areas rise.

3. THE PLACE OF AGRICULTURE

This brings me to agriculture. We want more exports and any really complete analysis would be in terms of the individual commodities. Time will necessitate that my remarks be of the most general nature but some preliminary observations on the demand and supply factors, insofar as they are likely to affect the problem of expanding our rural exports, together with some very brief comment on what seem to be major problem zones in the field of agricultural policy, may be useful.

Simply because my remarks will be so discursive they run the danger of being incoherent. It seems to me wise, therefore, to attempt a few broad propositions around which my rambling remarks will perhaps adhere in some recognisable pattern. Some of the ideas I want to get across or, because they are self-evident, merely remind you of, are as follows—

(*a*) There are recognisable determinant variables which affect our prospects for expanding export markets. These include natural phenomena like population growth, artificial barriers to trade like agricultural protectionism and the relatively slower growth in consumption of foodstuffs compared with industrial products.

(*b*) These determinants do not readily lend themselves to simple qualitative, let alone quantitative statements, usable for policy making purposes, of the position for agriculture as a whole, Australian agriculture in particular, or for particular commodities within the picture.

(*c*) This observation, however, does not destroy the value of making attempts to generalise or establish theories—e.g. comparative advantage, measurement of demand and supply elasticities, creating tools for measuring the ability of industries to weather depressions, and so forth. The very task of theorising is the best way, perhaps, to sort out the factors relevant to a given problem. Yet pragmatism is wise: the application of any generalisation to a particular case must be done with great care. I think it will be agreed Australia enjoys comparative cost advantages in wool and wheat: this should not blind us to the effect of research on wool substitutes or of the competition from high cost wheat if subsidised.

(*d*) As to the farmer in Australia: my proposition is that he is entitled to ask why should he produce more and that our answer cannot be in use of the big stick of compulsion but rather in appropriate use of carrots and ear-stroking (the last metaphor belongs to Sir Dennis Robertson). In this situation the farmer must make his own decision even if upon that decision may finally rest our ability to develop as fast as we wish. This observation suggests that more action may be necessary by way of fiscal and credit concessions in order to encourage output—the problem is really national, not sectional.

(*e*) Of any particular commodity propositions I have time to risk tonight, I single out one: we should deliberately aim to expand wool production even at the risk of offsetting some of the greater stability, which may be a blessing, of greater diversification. I will return to this point.

Factors Affecting Demand

When we look at the factors affecting demand for Australia's exports it is easy to list them. It is just as easy to see that each one leads to no simple conclusion about our exports. Here are some such factors about which I will be forgiven if I merely list them without comment—

(*a*) Growth of income in customer countries.

(*b*) The proportion of this income which will be spent on the products which Australia exports.

(*c*) Domestic policy which will determine how much of the new demand is met by local producers in the customer countries.

(*d*) The pattern of trade and the policy of Australia's competitors which will affect our share of the demand not met by the home producers.

(*e*) The relationship of changes in price in our exports to the amount consumed.

(*f*) Supply conditions of various producers which will have a bearing on the share of the market which each will supply at a given price.

(*g*) Continuity of supply which can affect demand for a particular export product—short-term unavailibility may lead to production in the customer country (where feasible) or to a changeover to substitutes or alternative sources of supply.

It is in my role as administrator of Australian trade policies that I am most frequently faced by the facts of life in a way which leaves me wondering—but not finally despairing—about the theory of comparative advantage. Let me briefly list four such "facts":—

(i) U.S. surplus disposals;

(ii) U.K. Agricultural Policy;

(iii) European agricultural policies (including the new possibility of a Free Trade area in Europe); and

(iv) Our own tariff and import policies insofar as they may affect the quantity of our exports which our customers are willing to take.

I have warned that to be realistic an analysis of world demand must finally be in terms of individual commodities. But I would also like to add a proviso about the importance for Australia of particular countries or areas. In poor sequence, maybe, but I suppose to elaborate this a little further—

(*a*) Spectacular increases in the output of agriculture during and after the war have taken place, and any prognostications of a dramatic change before 1960 in terms of trade for food products, in terms of industrial goods, appear likely to be falsified. However, the general question of whether an improvement in these terms of trade is ultimately likely with the industrialisation of thickly populated and under-developed countries still remains open.

(*b*) There is no way of guessing when or to what extent the Iron Curtain countries may re-enter the main stream of world trade but one finds it difficult to believe that, in the absence of war, the present situation will indefinitely persist.

(*c*) Changes in the economic status and trade patterns of individual countries take place. I need only mention the spectacular resurgence of Western Germany and Japan to illustrate this point. Both are of considerable importance in Australia's economic future.

(*d*) The dollar and sterling areas dichotomy seems, like the poor, to be always with us but the imminence of the European Common Market is a potential regional grouping fraught with possibilities for Australia.

(*e*) Current activity by Australia in the field of trade agreements and particularly the recent U.K.—Australia Trade Agreement will be well known to you all. For my purpose tonight the important points are the newly acquired room for manoeuvre to negotiate with other countries and for cost reduction which Australia has gained under the Agreement.

(*f*) Major policy implementations such as the development plans of India and the recent re-orientation of policy in Argentina can have profound importance for Australia's trade prospects. Perhaps I may be forgiven for noting in passing that general development policies enunciated by other countries are not in themselves clear sign-posts as to specific trade opportunities for Australia. There is an important job of commercial intelligence and analysis to be done in watching these schemes and interpreting their relevance for Australian exporters. I hope my own Department will be able to fill a useful role here but I have no dog-in-the-manger attitude in the matter. We will welcome co-operation (and even constructive criticism) from other gleaners in the field and from industry itself, which may often have valuable contacts in the countries concerned.

Factors Affecting Supply

On the supply side within Australia certain observations seem safe enough—

(*a*) Pressure on resources in Australia is probably less than on many of our competitors and given the opportunity (even without introducing new technologies) of expanded production without steeply diminishing returns Australian agriculture may be in a better position than world agricultural production as a whole or other competing producers to take advantage of any increase in demand.

(*b*) Domestic demand for agricultural production is variable and due allowance must be made for growth in population and changes in consumption rates. In 1950 when this point became obvious in relation to production trends Australian Governments accepted the need for a positive agricultural policy.

(*c*) Time is usually required to expand output and when the future is uncertain investment for specialised production may be risky and deter producers (or policy makers) from decision. I am not saying that there is no scope for action in the short run (say, two years) : there is. However uncertainties and the time element as well as high capital costs for much profitable investment are very important.

(*d*) I have no intention of discussing in detail agricultural investment in Australia; I do, however, wish to make one point which is basic to my own particular theme. This point is to make the distinction between expanding production on existing farms and developing new units. There has been considerable (even if not optimum) investment on existing farms over the past few years and it is probable that *relatively* modest extra expense (say for pasture improvement) could effect significant increases in production at relatively low cost. However, where it is necessary to make farms *de novo,* capital costs even with the latest methods are likely to be high and probably out of line with some of our existing cost of production assessments. If the lights should be considered sufficiently green to press on towards expanded rural production this is an important problem that cannot be birked.

It would be interesting to speculate on the possibility that revival of company investment *may* be one answer to this problem (Eg. A.M.P., Esperance Plains, etc.). Just in passing, I draw your attention to the recently announced U.K. policy with respect to subsidies for farm improvements as well as to the U.K. system of production grants taking such forms as fertiliser subsidies and ploughing-up grants. It is fundamentally the same problem as our own that U.K. is tackling along these lines.

(*e*) Subsidies and grants may still be out of court, but many will be willing to consider sympathetically the provision of additional credit facilities where desirable to enable producers to expand production. I am sure other speakers will deal with this matter and I will confine myself to saying that I find somewhat confusing the conflict of opinion one gets: on the one hand, statements by farmers that credit is tight (even for those with adequate security) for development work; on the other hand we have assurances by the banks that all reasonable requests are being met. There seems a need for more factual information. The matter is too important to be left unresolved. Even with adequate credit available the problem will remain of convincing the farmer that it is worthwhile to invest, with borrowings if need be, and the banks that it is worthwhile to lend.

(*f*) Any discussion of the probable future supply of Australia's rural products cannot leave unmentioned the downward movement in recent years in farm incomes. Professor Campbell has recently drawn attention to the fact that farm income in 1955-56 fell for the fourth year in succession to the lowest level (in terms of purchasing power) for nine years, making farm income, as a percentage of national income, the lowest since the war-time drought year 1944-45. He has pointed out the seeming anomaly that although output has continued to expand farm investment has diminished appreciably. This may produce a lagged effect with rural production slowing up in a few years' time. The current high wool prices may not automatically arrest this possibility. I have no wish to labour the point but the relevance to my general theme is obvious.

I have said the most realistic (admittedly pragmatic) approach is to look at the factual position about each commodity in turn. I think the practice of listing factors favourable and unfavourable is a useful device—provided it does not leave us inconveniently impaled on a fence. I have no intention of attempting this major and really difficult task to-night, much as one might like to have a quick look at such products as meat, butter, fruit, wool, etc., etc.

The Special Place of Wool

As already foreshadowed, I propose to put my neck out on one specific proposition. I believe the right policy for the wool industry and for Australia to follow is an expansionist one. An increase of 50 per cent in the Australian clip in 10 to 15 years does not frighten me. I believe our comparative advantage is clear; this is not to imply that we have not a comparative advantage in other commodities but it is perhaps not so clearcut. Furthermore, the arithmetic involved in assessing the advantage where sales are on an unsheltered export market and costs are largely determined within the sheltered home market, is complicated. In the case of wool our advantage is not obstructed by agricultural protectionism anywhere; it is fitted by its production structure to weather price cycles rather better than most of our primary industries; and the order of increase—while it would arrest a downward trend in its share of total fibre consumption—would not raise it significantly above the present 10 per cent. Such an action may prevent price booms. This is all to the good, for stable or even gently declining price trends (relatively to the general price level) are one major factor in the fight against substitutes. The other is research to widen the appeal of wool—on this I feel confident rather than the reverse. I think the net result of rising production would be a steady addition (in trend terms) to export receipts. Personally, I believe wool, minerals and manufactures will lead the way in export expansion over the next decade, with grains and meat next.

This proposition about wool presupposes it pays the individual to produce in expanding quantities. I will not try to review recent work by the Bureau of Agricultural Economics and the N.S.W. group—much as it deserves appreciative attention. The real question to which these studies relate is the one the farmer asks: "why should I produce more?" In a time of war the answer can often be clearly answered. In peace it is not sufficient to say: "because we need more London funds." We have to say this and then trust that the farmer is convinced that expansion will pay in his individual case.

4. THE ROLE OF FARM ECONOMICS

This is where the real role of the agricultural economist (farm management branch) has yet to be played in Australia. Education is a slow process but the task of enabling the farmer to utilise costing analysis and budgets appropriate to his own farm must be tackled. I do not look to too refined budgets or linear programming as a general approach. I do think, however, that many farmers with average to good farms can be assisted, for example, to test whether pasture improvement will pay under conservatively assumed conditions. Based on such analysis investment decisions—by the farmer himself—can be made. Likewise lenders may acquire a useful technique for looking at a borrower's problem.

Let me just restate the principle. We want more exports. Our first step is to let farmers have data on which they can make decisions. Concurrently we must examine available evidence to decide which broad judgments about total and regional industry prospects are sound. (The arithmetic for the individual farm is easier than this national approach.)

If this approach gets us nowhere, if farmers are too cautious, or we think costs are too high (relatively to prospective market conditions) to justify expansion on a significant scale—I then believe we must fairly face ways and means of direct cost cutting. These means range from direct action to make inputs cheaper (e.g. reduced fertiliser costs) to capital reconstruction of farms to fit in with more efficient management needs. They do not exclude price stabilisation schemes and also included is an assurance of abundant supplies of farmers' needs—the major early post-war difficulty.

In short I believe our policy should be to assist the farmer by not obstructing his efforts to expand, for example by either credit restrictions or failure to supply his needs.

We cannot use a stick to obtain greater production but where we are satisfied that investment (or borrowing) for greater production will pay, I believe we can "ear-stroke" him in terms of national need. Some carrots are available now in the form of some special assistance (e.g. depreciation allowances), but we may have to face up to further carrots in the future to assure an expanding place in world trade for at least some commodities. I think for example that the dairy industry needs help to reconstruct itself in certain areas, but I am far from suggesting that all primary commodities require more carrots at the present time. They may require trade treaties and sales promotion—but this story is beyond my scope to-night.

5. CONCLUSION

May I attempt to recapitulate—

(*a*) Australia's import demand is closely linked to our rising national income and exaggerated in recent years by some degree of inflation. Even if the latter is curbed there is every reason to believe that Australia's advancing industrialisation in conjunction with immigration will ensure a continued rise in national income with high import demand.

(*b*) Under these conditions, and given full employment, there are not firm grounds for confidence that capital inflow, expansion of manufactured exports or relative price movements in exports and imports (i.e. the terms of trade), would, at the present level of rural production cover any gap in the balance of payments. The increased home demand for rural products on account of increasing population is of course a vital element in this situation.

(*c*) Technologically there is undoubtedly potential for increased production both on established farms and on new development. Yet there are not strong grounds at present for assuming continued rural expansion of major magnitude without positive action to encourage it.

(*d*) By positive action I mean adequate credit, supplies of materials and equipment and, not least, usable data which enables judgments about profitability to be made.

(*e*) If further encouragement by way of actual carrots is required, it should primarily take forms aimed at cost cutting and greater efficiency especially on established farms. Grants like the fertiliser subsidies in Britain may be a more economical way of doing this than overall price guarantees.

(*f*) I did not discuss in detail the possibility of further incentives to rural production but I did suggest that a sympathetic overhaul of the dairy industry is needed. I argued also that a deliberate expansionist policy on the wool industry is a good bet nationally and for a generality of wool producers.

(*g*) Finally I argued that no single course of action is likely to solve completely the complex problem we have glanced at briefly to-night. The moral of my talk is that some of the policy aims or "postulates", which we have to take as given when prescribing our remedies, by their very nature spell uneven progress with economic strain and stresses and plenty of resulant headaches. The cure is not the hasty swallowing of one APC tablet but rather a wet towel and a patient examination of the possibilities for fruitful action along many fronts at once. Agriculture offers a broad and vital front in the total attack.

As one who was robbed of the pleasure of attending all of this conference, may I indulge in one observation. Those of us who have passed the 40 mark cannot help seeing some resemblance between the ferment in economic enquiry and theory directed to-day towards the problems of inflation and that which in the thirties was directed at the crueller problems of depression. I think our armoury of theory and methodological tools is better to-day, thanks in no small part to the late Lord Keynes, for analysing and understanding the complex forces that underlie economic activity in a modern industrial community. However, it would be the wildest self-delusion to imagine the answers are there by rule of thumb and, that diagnosis and prescription for economic malaise is foolproof. Circumstances alter cases in a bewildering variety of ways and the painstaking marshalling of facts with rigorous analysis from sound theoretical premises is the best assistance the policy maker can hope for from the economist. I think there is more and better informed thinking on important economic issues going on in Australia to-day than ever before and I think the agricultural economists are proving worthy members of the wider confraternity of economists. The Bureau of Agriculture Economics has I consider made a contribution. The Universities are fortunately expanding their activities and without being invidious I must pay a special tribute to the active New South Wales group and to the increasing number of individual efforts in other States. As a Canberra dweller seeking light from wherever it may emanate, I say sincerely "More power to the elbow" of all these groups. I look forward to ever closer co-operation between all workers in the field, whether Commonwealth or State, in Universities or private industry. We all, I fancy, have the same motto in our endeavours, "Truth is great and will prevail". The organisers of this conference have worked hard: I am confident they have built well.

APPENDIX

TABLE I

Net Gold and Foreign Exchange Holdings: Australia

June 30, 1950—£m629
June 30, 1951—£m803
June 30, 1952—£m372
June 30, 1953—£m561
June 30, 1954—£m570
June 30, 1955—£m428
June 30, 1956—£m355
Dec. 31, 1956—£m425

TABLE II

Balance of Payments: Australia

Item	1951–52	1952–53	1953–54	1954–55	1955–56
	£m.	£m.	£m.	£m.	£m.
Current Account—					
Exports f.o.b. (excluding gold)	664	846	812	761	773
Imports f.o.b.	— 1,051	— 510	— 682	— 847	— 820
Trade Balance	— 387	+ 336	+ 130	— 86	— 47
Freight Payable Overseas...	— 145	— 77	— 69	— 88	— 103
Other Invisibles	— 47	— 68	— 76	— 83	— 71
Balance on Current Account	— 579	— 191	— 15	— 257	— 221
Capital Items—					
Loans and other Capital Transactions (Net) ...	4	45	21	42	61
Other Movements of Funds (Net)	144	— 47	3	73	87
Movements in International Reserves ...	— 431	+ 189	+ 9	— 142	— 73

TABLE III

*Imports and the Gross National Product**

Item	1938–39	1948–49	1949–50	1950–51	1951–52	1952–53	1953–54	1954–55	1955–56
Imports f.o.b. £m.	109·4	415·1	538·1	741·9	1,050·9	510·2	681·9	846·9	819·5
Freight Payable Overseas £m.	15·2	43·0	64·8	92·1	145·4	77·4	69·0	88·0	103·0
Marine Insurance Premiums and Claims (Net) †£m.	0·1	1·7	2·5	3·0	4·3	0·7	1·4	2·2	2·0
Total Freight and Insurance £m.	15·3	44·7	67·3	95·1	149·7	78·1	70·4	90·2	105·0
Freight and Insurance as Percentage of Imports f.o.b.	14·0%	10·8%	12·5%	12·8%	14·2%	15·3%	10·3%	10·6%	12·8%
Imports c.i.f. £m.	124·7	459·8	605·4	837·0	1,200·6	588·3	752·3	937·1	924·5
Gross National Product £m.	912	2,262	2,696	3,596	3,830	4,191	4,537	4,836	5,194
Average Propensity to Import	13·7%	20·3%	22·4%	23·3%	31·3%	14·0%	16·6%	19·4%	17·8%

* All value figures in Australian currency.

† Marine insurance payable overseas on Australian imports.—Excludes insurance payable in Australia.

TABLE IV

Australian Merchandise Exports

Commodity	1952–53		1953–54		1954–55		1955–56	
	£m.	Per cent.	£m.	Per cent.	£m.	Per cent.	£m.	Per cent.
Wool and Sheepskins ...	420·2	49·7	426·9	52·5	369·1	48·5	353·6	45·7
Wheat and Flour ...	89·4	10·6	60·6	7·5	65·5	8·6	66·2	8·6
Butter	20·1	2·4	16·1	2·0	24·6	3·2	29·2	3·8
Meats	65·8	7·8	57·8	7·1	63·5	8·3	60·8	7·9
Other Foodstuffs ...	122·6	14·5	123·1	15·2	111·5	14·7	108·9	14·1
Metals, Metal Manufactures and Machinery	61·4	7·2	66·1	8·1	59·1	7·8	63·7	8·2
Other Exports	66·5	7·8	61·4	7·6	67·7	8·9	90·6	11·7
Total	846·0	100	812·0	100	761·0	100	773·0	100

DISCUSSION

I. A. BUTLER—*Commonwealth Bank of Australia*

Mr. Crawford has placed a very intractable problem before us. While it would be unwise to write down its seriousness it is felt that some of the arguments indicating its magnitude are not quite as conclusive as they seem to be. The manufacture in Australia of at least some classes of goods, *e.g.,* tinplate, does seem to me to represent a net reduction in demand for imports and upsets any attempt to think in terms of a constant propensity to import. Moreover, consumer demand is for particular sorts of goods and is generally indifferent to whether they are manufactured locally or are imported. Despite all this, however, it is easy enough to agree that we cannot see daylight through the current balance of payments problem.

I would like to refer briefly to a previous statement made by Mr. Crawford in his Joseph Fisher lecture in 1952. In this, he says that most of us would agree that the outlook taken in the sense of "demand" for agricultural produce is very good; he would hold this view quite strongly. He interjects that he still does, although from the general tenor of his paper, I would say not nearly so strongly. It is clear that the enthusiasm for expansion has diminished somewhat and the experience of the intervening years has modified earlier high expectations.

Whether we like it or not, we have all retracted somewhat from earlier positions. After the conclusion of the war we were fearful of a return to pre-war conditions in agriculture. Then there was a period of high optimism and almost every product was a winner with unlimited demand for it; our problems were all production problems. Then, one by one, the commodities began to strike difficulties. Firstly, wheat then eggs, then butter, now meat, leaving wool almost the one remaining unchallenged commodity which we can still produce more and more of, without worrying unduly about the market. This, despite the fact that in the earlier years confidence in the future of wool was always hesitant.

Mr. Crawford has stated that investment in agriculture appears to have been checked. I think it is true that there had been a change in this direction due mainly to the reduction in rural incomes. However, some of the indicators quoted could be misleading in this regard. The wheat acreage last year was down very heavily due largely to climatic factors and a reduction in the use of superphosphate would be a consequence of this, and need not be due to a change in attitude to pasture development. Also, the same factor would have affected the demand for agricultural machinery which, in any case, must suffer some interruption of its growth once the lee-way of past years had been overcome.

Mr. Crawford has gone over the various problems arising out of the difficult balance of payments situation and has given a reasoned statement of it. He has indicated that increased agricultural production is an important step in grappling with the problem but is not likely to provide a complete answer. Indeed, the problem must be tackled in many ways at once. No simple or ready-made answer has been offered by the speaker and I am afraid that I am unable to do better in this regard.

C. DAWSON—*Bureau of Agricultural Economics*

As we expected, Mr. Crawford has presented a masterly analysis of Australia's balance-of-payments problem and its implications for agriculture. I admired particularly his survey of the implications, for the objective of achieving external equilibrium, of other Australian popular and governmental economic objectives and their attendant pressures on resources and cost-price levels in Australia.

The crux of the problem is that, even if allowance were made for what might be called the import content of excess domestic demand, Australia's demand for imports would still exceed our current level of exports.

In dealing with the possible methods of correcting our balance of payments, Mr. Crawford expressed doubts that expanded exports of manufactured goods will close the prospective gap. It must be recognised, in this connection, that the import content of non-rural exports is, generally speaking, very much greater than that of rural exports. In 1955-56, for example, as much as 46 per cent of total Australian merchandise imports were producers' materials for use in manufacturing and petroleum refining, whereas less than one per cent of the total imports were materials for use in rural industries.

It is unlikely that capital imports will be sufficiently large to fill the prospective payments deficit on current account; moreover, equity capital would be a particularly expensive method of meeting our problem. The service payments on foreign investment in Australia are likely to continue to increase at a rapid rate. I should consider unwarranted any assumption that Australia will continue to enjoy a large net contribution to the balance of payments from oversea capital investment in this country. Our expenditure on "invisibles" is likely to rise sharply in coming years because of higher freight charges and service payments on past investments of oversea capital.

It follows that the rural industries must continue to make the major contribution to our export income, which must grow substantially if we are to achieve external equilibrium. This means—unless our terms of trade show a remarkable improvement on recent levels—that the physical volume of our agricultural exports will have to be increased.

Mr. Crawford's analysis of the factors relevant to an expansion of agricultural production for export is, I think, particularly incisive. There is a vast potential for increased production on both established farms and in new units, but it cannot be assumed that rural industry—unaided by special measures—will continue to expand at a sufficiently rapid rate to contribute in the required degree to achievement of external equilibrium. We cannot rely on the price mechanism to bring our foreign exchange earnings into line with import requirements, in conditions of domestic inflation and fixed exchange rates.

The continuing necessity for administrative limitation of imports indicates that, at current cost-price relationships, the social marginal utility of an increase in export income would be greater than the private marginal profitability of additional production for export. The justification for governmental assistance for export production in these conditions is apparent. Although we might believe that government intervention in the allocation of resources should be kept at a bare minimum, we have to concede, I think, that there is a very strong case for adoption or intensification of measures which can be frankly described as especially favourable to the export industries, for the purpose of correcting a shortcoming of the price mechanism as it is allowed to operate in Australian conditions. It should be recognised that the competitive ability of Australian export industries, for markets overseas and for resources at home, is being weakened by conditions and policies which make high-cost production of non-exportable goods profitable. Selective encouragement of increased export production by governmental measures would be a positive approach to our payments problem and may be contrasted with a restrictive import policy.

The question of the level of local prices and costs relatively to the levels of oversea prices and costs is at the heart of Australia's balance-of-payments problem. For this reason I feel that fuller reference would properly have been made to the implications of a pegged exchange rate and to the possible role of exchange rate adjustment.

As I see it, Mr. Chairman, Mr. Crawford's paper raises numerous important, complex points which are relevant to a consideration of Australian agriculture in relation to the balance of payments, and discusses them in an incisive and stimulating manner. More than that—the paper makes a notable contribution to an assessment of the implications of the balance-of-payments problem for Australian agricultural policy.