Implications of Wages and Industrial Policies on the Competitiveness of Agricultural Export Industries

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An internationally competitive agricultural sector is important to the Australian economy of the next few years. Agriculture accounts for 37 per cent of total exports and increased agricultural exports will be part of a successful strategy to reduce our current account deficit and restore confidence in the ability of Australia to pay its way in the world economy. Exports represent the major market for many of our agricultural industries, over 90 per cent in the case of wool, 80 per cent in the case of wheat and sugar, and 50 per cent for meats, coarse grains and dried vine fruits. The greater is international competitiveness the brighter are the prospects for the growth of income and employment levels of those directly and indirectly dependent on the rural sector, perhaps in excess of 20 per cent of the population. Australia has a comparative advantage in the production of agricultural products, especially the land intensive cropping and livestock industries. Its success in exploiting these natural advantages, that is in developing international competitiveness, will have an important bearing on future national income and wealth.

In setting a background for today's Policy Forum and to suggest some issues which the industry workshops might canvass I propose to cover four topics:

- the meaning of international competitiveness;
- the cost structure of Australian agricultural export industries and in particular the importance of labour costs;
- a closer look at the extent and underlying reasons for high labour costs and low productivity in some parts of the production and marketing chain of agricultural export industries; and
- a checklist of factors to consider in looking at ways to improve the international competitiveness of our agricultural export industries.

I International Competitiveness

To set the scene I propose to offer a working definition of international competitiveness and use this to draw some points about the ingredients for achieving internationally competitive agricultural export industries.

Competitiveness means "ability to deliver goods and services at the time, place and form sought by overseas buyers at prices as good as or better than those of other potential suppliers whilst earning at least opportunity cost returns on resources employed".

This definition raises a number of points that are important in achieving internationally competitive industries and in raising competitiveness.

1. The product has to meet the preferences and requirements of buyers, and in this case overseas buyers. In general buyer preferences vary across countries and over time. The marketing exercise is a dynamic process and it needs to recognise the heterogeneity of the world market. Buyer preferences embrace a complex of factors such as timeliness and reliability of supply, product quality, associated services and so forth, and not price alone. That is, international competitiveness is a marketing exercise in a world of diverse and changing preferences as well as a cost containment task.

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2. We are talking about all activities and costs involved in the delivery of the product to overseas buyers, e.g., wheat to Cairo, wool to Peking, fresh fruit and vegetables to Tokyo, beef to New York. That is, competitiveness refers not only to farm production costs but also costs of inputs of fertilizer, machinery, management advice, etc., purchased by farmers, costs of transport, storage and processing products off-farm in Australia, marketing costs, and costs of transport and delivery from Australia to the foreign customer. In general these off-farm costs are more important in the make-up of the delivery cost than farm costs. Then, and this is a key point I want to make today, reducing costs of off-farm storage, transport, processing and marketing, and reducing the costs of inputs purchased by farmers are at least as important to improving competitiveness as reducing farm costs. A dollar is a dollar and we should be looking at all segments of the production chain for improvements in productivity and efficiency in the quest of raising the competitiveness of agricultural export industries.

3. International competitiveness involves out-performing alternative sources of supply whether this comes from production in the importing country or from production by alternative exporters. We need to be aware that competitors are on the look-out for improvements in their marketing and production methods. That is, just as conditions of demand are forever changing so are the skills and technology of alternative suppliers.

4. An important factor influencing the international competitiveness of Australian agricultural export industries is the Australian exchange rate relative to that of the currencies of export competing nations. All other things equal, the lower the Australian dollar relative to the currencies of these countries the more internationally competitive will be our agricultural export industries. To an important extent the exchange rate can be influenced by macro-economic policies, by industry assistance policies in the rest of the economy, and by direct exchange rate controls.

5. Competitiveness of agricultural export industries is a relative concept in the sense of comparisons with costs of production in other sectors of the economy. Australia's relative rich endowment of national resources and her relatively expensive labour favours land intensive, labour extensive activities.

6. For the most part the Australian agricultural sector can be regarded as a price-taker, both on the side of product sales and on the side of purchase of non-farm inputs such as labour, capital funds, plant and equipment, fuel, etc. Then, savings in input usage and productivity gains become reflected almost dollar for dollar in increased international competitiveness.

To summarize, a competitive agricultural export industry is about marketing as well as production costs, it is about all farm and off-farm costs of delivering products to overseas buyers, it is about beating alternative suppliers, and it is couched in a dynamic world of changing buyer preferences, advancing technology, and changing relative input costs.

II Cost Structure of Australia Agricultural Exports

Australian agriculture is a highly specialized industry with many interdependent steps involving different production entities in the production chain before final delivery to the overseas buyer. Figure 1 provides a simplified illustration of the production and marketing chain for an agricultural export commodity.

An idea of the relative importance of the different steps in terms of dollars per unit of final product sold and share of the final product sale price are given by the following examples for wheat, wool and sugar.

Figure 1: Production and Marketing Chain for An Agricultural Export Industry

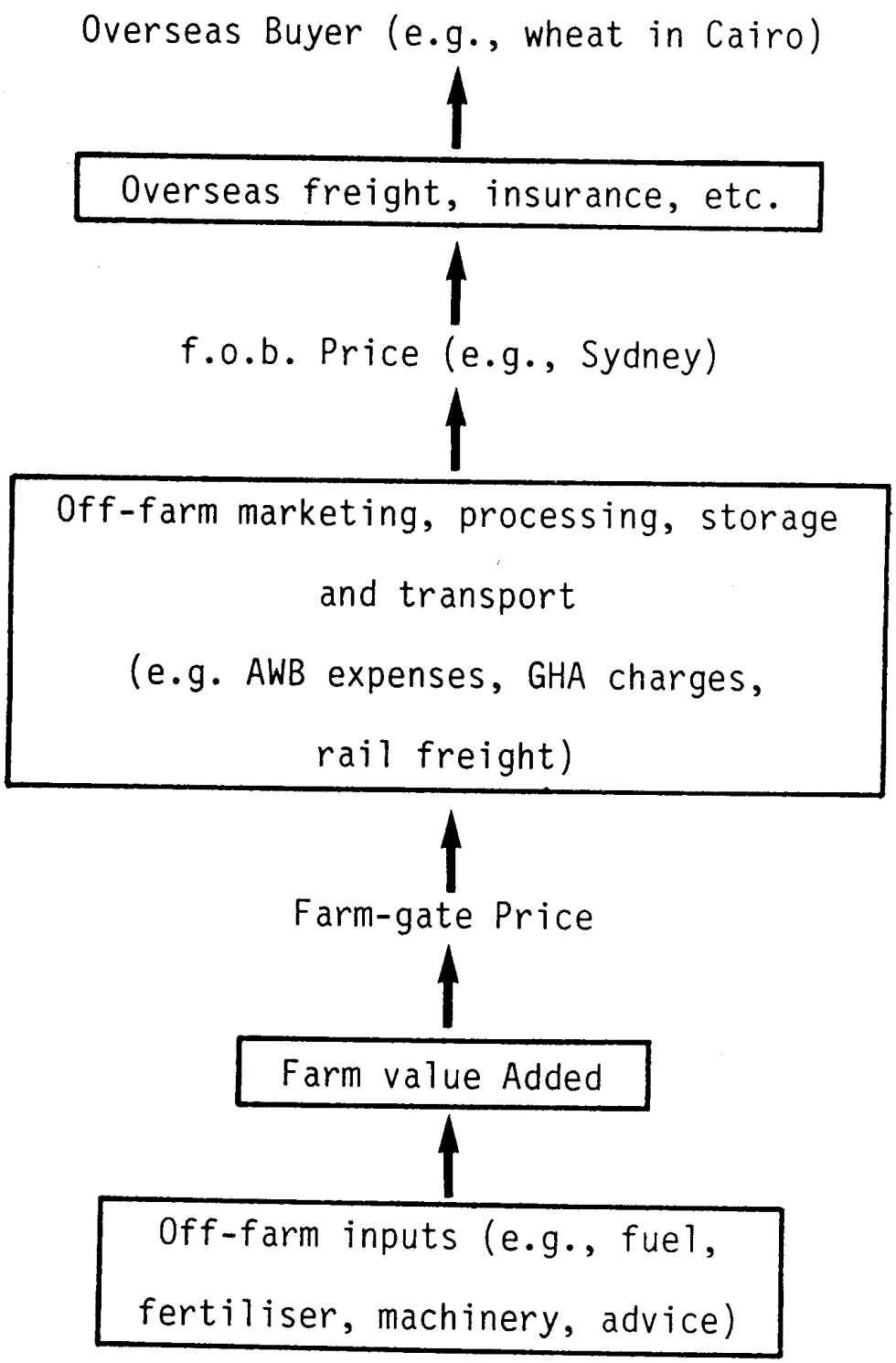

Table 1: Components of Export Wheat Price

		$ per tonne	% of Customer Price
Price cif Egypt		211.4	100
Sea freight	23.0		
Price fob N.S.W. port		188.4	89
Off-farm Costs:			
AWB administration	2.0		
Interest	20.0		
Storage and handling	16.7		
Rail freight	24.8		
Wharfage	1.7		
Levies	0.5		
Return at farm gate		122.8	58

1. *Wheat:* In Table 1 is presented an illustrative example for a sale from N.S.W. to Egypt reported in Hussey (1986):

Bureau of Agricultural Economics (BAE) farm survey data indicates that over half the farm gate price is spent on purchased off-farm inputs such as fertilizer, fuel, sprays, insurance, repairs of plant and machinery, depreciation of machinery.

Data for the last ten years or so show that the important off-farm costs of storage and handling and of rail freight have risen at or above the general inflation rate. BAE indices of costs of farm purchased inputs have risen faster than the general inflation rate.

Labour costs loom important in all stages of the wheat production and marketing chain. For example, they represent over a half of the costs of the grain handling authorities and of the railway authorities. A large part of the farm returns represent an opportunity return to the farm operator and farm costs include wages and salaries for hired labour. Again, labour costs are important components of the price paid by farmers for machinery and other goods and services.

2. *Wool:* In Table 2 are presented data for January 1985 conditions prepared by Slack-Smith *et al* (1985).

In fact, about 20 per cent of Australian wool is scoured in Australia before shipment overseas, and so for this part of wool export sales the off-farm costs are a much greater share of the export price than shown for the greasy wool example. It is likely that labour costs account for over two-thirds of the off-farm costs and

Table 2: Components of Export Wool Price

		Cents per greasy kg	% of Mill Price
Greasy wool value at mill		302.7	100
Overseas freight	15.6		
Fob price		287.1	95
Off-farm costs:			
buyer/dumping	17.1		
taxes and levy	21.8		
warehousing/sale	13.5		
packaging/store/transport	6.2		
Farm gate		228.5	76
Shearing shed costs	57.2		

Table 3: Components of Sugar Returns

		$m	% of sale price
Sales		823.8	100
Sugar Board Costs (costs of handling, refining raw to white sugar, storage, administration)	82.4		
Availability to Raw Sugar Industry		741.4	90
Raw Sugar Milling Costs	266.9		
Grower Return		474.5	58

over 90 per cent of shearing shed costs. Wool growers, like other Australian farmers, spent in excess of a half of their farm gate receipts on off-farm inputs such as shearing shed costs, veterinary supplies, vehicles, fences, water supply, fuel and casual labour.

3. *Sugar:* In Table 3 are presented data from IAC (1983a).

While I have no specific data, it is likely that labour costs account for more than a half of the off-farm costs. Sugar farmers spend a large part of their gross receipts on off-farm inputs such as fuel, fertilizer, machinery, and advisory services.

4. *Other Products:* Off-farm processing, storage, transport and marketing costs are important for meats (slaughtering, deboning, packaging, transport and storage), dairy products (processing, storage, transport and marketing) and the horticultural products.

These examples are illustrative only and the actual numbers are very sensitive to the particular period, to the export market, and to the product. For the purposes of my presentation they illustrate three points which I regard as important in understanding the competitiveness of Australian agricultural exports:

(i) off-farm costs are especially important in understanding the total cost of delivering products to overseas buyers. In general the off-farm costs of transport, storing, processing and marketing of farm products exceed 25 per cent of the cif export price—with wool at the lower end—and they go as high as 40 per cent for wheat and sugar—and perhaps higher still for more highly processed dairy and horticultural products. Farmers in turn spend over a half of their farm gate receipts on off-farm produced inputs.

(ii) by and large the prices set for these off-farm produced goods and services are based on production costs. This means the farm return is a residual and absorbs most of the variations in market prices and seasonal production fluctuations.

(iii) as is the case with the rest of the economy, labour costs represent the larger share of production costs at each stage of production in the agricultural export industries. For the economy as an aggregate, labour costs have accounted for between 55 and 65 per cent of gross value added. Because of the capital intensive nature of agriculture the figure for the agricultural export industries probably is somewhat lower, but still large.

III Industrial Relations and Agriculture's Competitiveness

International competitiveness of Australian agricultural export industries is influenced in several ways by our system of industrial relations. These include the dimensions of labour costs, the productivity of the labour, and industrial harmony. Each of these need to be considered in relation to each other. For example, higher labour costs might be associated with and be offset by improvements in productivity and less industrial disputation so that costs per unit of production falls and the reliability of delivery rises.

Labour costs represent an amalgam of direct wages and salary costs and the various on-costs associated with time paid for but not worked (e.g. annual holidays, public holidays, long service and sick leave), allowances (e.g. holiday leave loading), superannuation and other fringe benefits, workers' compensation and payroll tax. The on-costs have grown in relative importance over recent years and now represent as much as 30 per cent of total labour costs for much of the Australian workforce. A key point is that a dollar increase in, say, workers' compensation is just as costly to the employer as a dollar increase in wages.

In reality wages and many of the on-costs such as leave provisions. allowances and superannuation paid to agricultural sector workers (both farm and off-farm) are set by or directly flow from decisions of the Australian Conciliation and Arbitration Commission. While bodies such as the National Farmers' Federation (NFF) make submissions to National Wage Cases and other submissions sometimes refer to circumstances in the agricultural sector, it generally is the case that agricultural sector labour rates are determined very little by circumstances in the sector itself. Rather, they reflect total economy conditions and undertakings enshrined in wage fixing principles and in recent years in the Accord agreements between the Australian Labor Party (A.L.P.) and the Australian Council of Trade Unions (A.C.T.U.).

Australian labour costs measured as total labour costs per hour of actual work and when adjusted for different currency values are lower than those paid in some export competing countries, including the U.S.A. and Canada, and higher than in some others, including South Africa and Argentina. Clearly such international comparisons can only be crude and they are sensitive to assumptions about exchange rates and the composition of total labour costs. The other important side of the labour costs and competitiveness equation is productivity.

Unfortunately we have only patchy empirical data on the relative productivity of labour in the farm and off-farm components of the agricultural export industries of Australia and its export competing countries. Most estimates indicate the superiority of the Australian farm sector on the criteria of output per farm worker, e.g. Haig (1986) compares Australia with the U.S.A., U.K. and West Germany, and Sargent (1985, p.32) indicates "The average Australian farmer produces sufficient food for 70 people compared with 59 by the average U.S.A. farmer and 19 by the average West European farmer".

The productivity picture is not so impressive for other parts of the economy, and this includes components of the off-farm agricultural sector. In terms of absolute output to labour ratios, Haig (1986) and Kasper and Masih (1979) found Australian manufacturing labour productivity to be some 20 to 40 per cent below that of Germany and the U.S.A., and about the same as the U.K., and Haig finds Australian labour productivity in the services sector well below that of Germany, U.S.A. and U.K. On the criteria of rate of growth of labour productivity, Australia's performance in the last 20 years or so of about 2 per cent per annum is ahead of that of the U.S.A. but well below that of the European countries and that of Japan and the newly industrial countries of the Pacific Region (see OECD 1985). Overall, the available evidence points to a relatively unsatisfactory picture of both the absolute productivity levels and the growth of Australian productivity in recent times when comparisons are made with our main export competitors.

Turning more specifically to the agricultural sector there are numerous anecdotes of low productivity in Australia. Examples include: low labour productivity in the storage and rail transport of wheat (see, for example, BAE 1983; IAC 1983b; Hussey 1986; and Lloyd 1986 who point to improvements in productivity which could reduce storage and transport costs by at least $10 per tonne and as much as $20 per tonne); Australia's relatively low

handling rate of containers at ports, frequent wharf stoppages, and the costs associated with actual and threatened demarcation disputes on the wharves; slow progress in the introduction of new technology and improved productivity in abattoirs with the 1985 Mudginberri dispute indicating the magnitude of potential productivity gains; and low productivity of the transport and milling of sugarcane (BAE 1986, suggests potential savings of around 15 per cent).

On the criteria of industrial disputation the Australian picture is mixed as shown in the recent Hancock Report (1985). In terms of number of strikes, Australia's record is among the worst (between 1962 and 1981 on average, in any one year, 23 per cent of Australian employees were involved in a stoppage of some kind; only Italy of all OECD countries was worse). But the average duration of Australian strikes is short and much shorter than those in, for example, the United States of America and United Kingdom. In terms of total days lost per 1 000 employees Australia is in the middle of the OECD pack. This is not a state about which we should be very happy.

Overall, there are good grounds for looking for improvements in the system of industrial relations as a means of improving the competitiveness of Australian agricultural export industries. Fertile grounds for rethinking are in the areas of improving productivity and reducing industrial disputation.

IV Some Avenues for Improving Labour Productivity

A complex of factors influence labour productivity levels and increases over time in productivity. These include the incentives facing employers and employees, available capital and technology, management-employee relationships, government regulations, and the attitudes and expectations of the workforce. In general a number of factors in combination can be blamed for low productivity. Further, workable solutions require a degree of co-operation between employers and employees and a recognition of the mutual benefits of change. In this section I want to look at some of these issues as they bear on opportunities for raising productivity in Australia's agricultural export industries.

First, and I believe most important, it is necessary to have an institutional structure that provides incentives and rewards for improved productivity, both for management and for workers. In many parts of the off-farm agricultural sector we have a collection of historical and now clearly outdated institutions and regulations which deter change and productivity improvement.

The incentives and rewards to both management and workers to raise productivity are limited in the statutory public authorities responsible for the storage, transport and marketing of much of our agricultural products. Additional profits and cost savings do not accrue as benefits to the employers or management and hence they have little incentive to secure them. Regulations that raise barriers to entry and the absence of the threat of takeover lower the competitive pressures to improve productivity and to try innovations. A direct benefit of reducing the barriers to entry in the agricultural transport, storage and marketing areas would be marked and continuing improvements in productivity.

Somewhat more controversial and debatable are the ways in which our current industrial relations system acts to deter change and productivity growth. Advocates of change raise several arguments. It is argued that the centralized system of wage determination, and especially the national productivity principle, is less effective in encouraging and rewarding productivity improvement than a more enterprise-based system. Under the centralized system all workers gain and free rider problems arise. By contrast, a decentralized system allows more flexibility at the individual enterprise and industry level, including the opportunity to reward those who do improve productivity. As a counter argument, those favouring the present

centralized system worry about comparative wage justice and flow-on effects of particular enterprise agreements. It may be that a major change in the contractual arrangements regarding the rights and resonsibilities of employees and employers such as exist in the U.S.A. would be necessary for a workable decentralized industrial relations system to operate in Australia.

A second criticism of the present Australian industrial relations system as it reflects in a poor productivity outcome concerns its effects on management-worker relationships. Industrial disputes quickly move from the enterprise level to a third party tribunal, initially for conciliation and then arbitration. Often the tribunal hearings are adversarial in nature and fought as if industrial relations was a zero sum game. Brown and Rowe (1983) and others argue that the third party dispute settlement procedure is associated with distrust of workers and management for each other, and often in management failing to develop skills necessary for harmonious and productive co-operation of labour and management in the day-to-day operations. The system of craft unions and, under present union registration arrangements, the protection of existing unions from potential new unions has been blamed for operating to rigidify existing work skills and in promoting demarcation disputes where technology and other changes are occurring. At the heart of productivity growth is the introduction of new technology, new equipment, and changes in work skills and practices. Improvements in Australain management-labour relations will require positive moves by both managers and employees.

An important area of criticism of Australia's industrial relations system is the way wages and other conditions of work are set. Particular criticisms are directed at the centralized system of determination applying to the entire workforce with little regard to particular industry circumstances, although this argument can be over-played. Most employers are critical of the criteria used to set national wage case decisions. Many would like to see the present emphasis on automatic indexation downplayed and more emphasis placed on such criteria as the unemployment level, international trade circumstances, and that wonderfully undefined term "capacity to pay". Geoff Carmody will explore the options in more detail.

V A Check List

To conclude, let me highlight what I see as key factors to consider in making an assessment of ways in which changes in our industrial relations system might improve the competitiveness of Australian agricultural export industries.

First, competitiveness is a marketing problem as well as a production problem and hence it is necessary to keep an eye on providing goods and services at the time, form and place sought by buyers.

Second, turning to the narrower cost issue, concern must be with all stages of production including areas supplying off-farm inputs to farmers, farm production, and off-farm transport, storage, processing and distribution. The different stages are interdependent and a dollar is a dollar.

Third, from the industrial relations' perspective, improvements in competitiveness can be achieved by labour cost restraint (not just wages but also of the various on-costs), by raising productivity, and by better industrial harmony. In my assessment there are large potential gains for our export industries in raising productivity and reducing industrial disputes.

Fourth, in looking at ways to raise productivity, attention can be directed to the incentives facing management and labour to improve productivity, to the present sorry state of management-labour relations, including contractual arrangements, and to outdated regulations restricting innovation in the post-farm marketing of our export products in what is a heterogeneous and rapidly changing world market.

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