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Wheat Marketing

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Background

Stabilization schemes for the Australian wheat industry, or marketing schemes as they are now called, first came into existence in 1914 when the Commonwealth Government exercised powers under the War Precautions Act and set up an Australian Wheat Board to acquire the crop, fix purchase prices, allocate shipping and make advance payments to growers on delivery of wheat. This first scheme was replaced by voluntary co-operatives and private trading between the two World Wars. A new Australian Wheat Board was set up again in 1939. The experience from compulsory pools during the two World Wars, incorporating the payment of fixed prices, helped growers appreciate some of the advantages of centralised marketing and encouraged them to seek a compulsory national marketing scheme after the Second World War. Growers did not want a return to the depressed conditions of the 1930's and perceived that the Australian Wheat Board would protect them from the vagaries of the international market. Thus, in 1948, national marketing schemes for wheat became a permanent feature of Australian rural policy with the commencement of the first Stabilization Plan covering the five-year period 1948/49 to 1952/53. Currently, we are in the 7th Plan, with an 8th Stabilization Scheme to commence in 1984/85, if, as I expect, Federal Parliament endorses a new scheme.

The first five Plans were relatively similar involving guaranteed prices based on "costs of production" and a first advance payment. With the 6th Plan commencing in 1974/75, the method of determining the stabilization price was changed to reflect actual changes in export prices as opposed to being based on the "cost of production".¹

The Guaranteed Minimum Price (GMP) to growers, introduced in the 7th or current Plan, continues to be based on events in the market place, as well as permitting growers to receive a high proportion of the expected returns in the payment made soon after delivery. Australian farmers now receive market signals on changes in wheat returns through changes in the GMP and can make their production decisions accordingly. The protection offered to farmers in the current Plan through the GMP removes the possibility of a sudden fall in prices although the GMP will continue to move down if prices decline further. The current wheat stabilization arrangements are market oriented, overcoming much of the criticism of previous Plans. The Government has not been required to contribute funds to growers to support prices since the 1973/74 pool.

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¹ See Rosenthal (1980) for a description of these plans and Longworth and Knopke (1982) for a comparative static analysis of who gained and who lost in each plan.

Objectives

The broad objectives, summarized from Miller and White (1980), of the wheat stabilization schemes have been:

- (i) To achieve stability of farm incomes, purchasing power and domestic prices;
- (ii) to achieve greater resource use efficiencies by reducing (or transferring) the price risk and uncertainty associated with wheat production; and
- (iii) to increase production to meet domestic requirements and expand exports.

Miller and White (1980, p. 5) note that a Departmental Review Committee established prior to the formation of the 6th Plan reviewed the objectives and noted that many could not be achieved in the context of wheat stabilization.

Emphasis is increasingly being given, in the discussions now in process in the formulation of the 8th Plan, of maximization of returns to growers. Less emphasis is being given to the objective of stabilization of farm incomes. There is, however, an underlying commitment to continue providing growers with a payment soon after delivery, which is a high proportion of the expected realized returns.

The Marketing System

Grain marketing systems as Martin (1980, p. 889) notes are complex. Both Martin (1980, p. 889) and McCalla and Schmitz (1979, p. 200) observe that there is a tendency to oversimplify the system's structure and that often a part of the system (for example, the Australian Wheat Board) is identified as the total system. The Australian system is often labelled as a Board controlled monopoly, essentially under Government control, while the U.S. system is regarded as an open market, free trade system essentially in the hands of private traders. Neither label is correct and arises from a myopic view of the marketing system. In both countries the public sectors are important actors in wheat marketing through pricing, trade, food aid, financial and transportation policy as well as in inspection standards, the provision of market intelligence and research. In both countries the private (multinational) grain firms, the banks and the grain futures markets play an important role in marketing wheat crops.

In Australia the marketing system starts in the farmers paddock and extends through:

- (a) the local silo;
- (b) the port terminals and port facilities;
- (c) the transformation system which converts the grain into intermediate products (feed and industrial use) and final products (food products); and

- (d) the transportation system which moves the products from the farm paddock and between a, b and c.

These four elements constitute the physical elements of the system. In addition there are:

- (e) the sets of standards which ensure the cleanliness and hygiene of the grain: and
- (f) the institutions which facilitate the functioning of the system. In the private sector these include the co-operative bulk handling authorities, (BHA's) the financial intermediaries (both domestic and offshore) which ensure that the wheat inventory is funded, the millers, processors (both domestic and overseas), the private traders, including multinational grain traders, road transport firms, the private shipping firms, the commodity exchanges and those groups providing market intelligence. In the public sector, these institutions include the State Statutory bulk handling authorities, the State rail authorities, the Australian Wheat Board, the Department of Primary Industry, the Department of Trade, national shipping lines and National purchasing agencies.

Another element in the marketing system is:

- (h) the public policy environment which includes farm policies, food aid programmes, export policies, including exchange rate and control policies, credit policies, and general economic considerations which directly or indirectly affect the marketing of grain. The Australian marketing system is open to influence from the policies of other grain exporters and the public institutions in them, such as Commodity Credit Corporation activities, European commission activities, etc.

The intention of this description is to emphasise that the wheat marketing system is a complex system and is made up of many participants. It is far too simplistic to label one as a Government monopoly system and another as a free market or open system. Similarly, in evaluating a system it is, as Martin (1980, p. 889) notes, tempting to define performance as the level of prices received by producers, but such a measure is too simplistic and ignores the legitimate interests of others in the marketing system. Many of the participants in the Australian wheat marketing system are outside the control or influence of the Australian and State Governments or the influence of organizations within Australia. It is reasonable, therefore, in any consideration of the Australian wheat marketing system to take the roles of those outside as given and to decide then on the most appropriate system within Australian control.²

None the less there are still many participants within Australia whose objectives need to be considered. The trade-off between economic and social objectives is part of public policy development and State Governments are increasingly looking towards their statutory authorities, which service the grain

² Incidentally, in the evaluations which have been undertaken, especially between the Canadian and the U.S. systems, it has not been possible to decide which is better (see BAE (1982, p. 5.7) and McCalla and Schmitz (1979)).

marketing system, to contribute towards State revenues. The role of the grain grower organizations and particularly the Australian Wheatgrowers' Federation will be important in the political determination of the extent to which the objectives of these other participants in the system are realized.

The role of the AWB, however, is, I believe, relatively clear. Its role is to market, and I use the term in the broadest sense, the crop to its best advantage. This means to maximize its net returns and hence the returns it passes back to the growers over the longer run, from the marketing and financing of the Australian wheat crop. To allow you to focus on the AWB, let me discuss some of its activities.

Export Marketing

The international wheat market is dominated by five exporting countries, the most important of which is the U.S., accounting for over 45 per cent of wheat traded. In contrast about 100 countries import wheat but the USSR and China take about 30 per cent, while Japan, Egypt and Brazil take about another 20 per cent. As Schmitz *et al* (1981, p. 25) have noted over 90 per cent of wheat trade passes through a Government importing agency. Government policies permeate the international wheat market with virtually every Government protecting its domestic wheat industry and many such as the EEC providing export subsidies. Because of the open nature of the U.S. grain market, its domestic farm programme policies impact directly on the international price and in combination with U.S. export policies (aid, credit, etc.) results in the U.S. Government playing a major role in the grain trade.

The Australian Wheat Board markets wheat to more than 40 countries. The countries may be broadly classified into Developed Countries (principally Japan) which takes about 7 per cent, Centrally Planned Countries (USSR and China) which take about 42 per cent, and the Developing Countries taking the remaining 51 per cent. The Developing Countries may be further subdivided into the Middle East, OPEC countries and the middle income countries in South East Asia, which together take 24 per cent and the low income countries (Egypt, Indonesia and others) which take 27 per cent.³

Australian wheat is white grained and ranges from high protein hard wheats to low protein soft wheats. The highly variable climatic conditions experienced across the Australian wheat belt may lead to fluctuations in wheat quality in the various regions from year to year. The bulk of the Australian crop is Australian Standard White wheat, which may be likened to, but is not the same as, the Hard Red Winter (Ordinary) wheat from the U.S. Studies have shown a very close correlation between HRW (ord.) and ASW prices. Australian wheat, however, is white, is drier and cleaner than most other wheats.

There is a variety of end uses for wheat in the importing countries and they each have particular characteristics which they require in their purchases. These particular characteristics range from factors such as milling quality (extraction), grain hardness and protein content of wheat, through to suitable dough

³ These percentages relate to the 1979-80 (July to June year).

properties, colour and baking quality of the flours produced from the wheat. Tolerances for foreign material (types and levels of weed seeds, insects, etc.) and for types and levels of pesticide residues also vary from country to country.

It is difficult to over-estimate the importance of Australian wheat being clean, dry and white. It places the Australian producer at a distinct advantage to other producers as buyers desire these characteristics and the AWB utilizes these desires in its marketing programmes. Australian wheat did not always enjoy the reputation of being insect free, however, and with our environment it is a continual potential problem. These marketing considerations underly the AWB's concern for grain hygiene which some people, uninformed in the area, underestimate.

Promotional Activities

The quality characteristics demanded by countries are changing as these countries become more technologically sophisticated in their milling and baking industries and as their consumption patterns change. The AWB has no explicit charter in the 1979 Act to develop markets overseas but, in order to expand markets and to meet the competition from groups such as U.S. Wheat Associates, the AWB sends technical and promotional missions to overseas endusers. I might add these promotional activities are minuscule in comparison to those of the U.S. Wheat Associates, who in large part, are funded by the U.S. Government, and minuscule in comparison to U.S. aid programmes. Incidentally, the private (multinational) trading firms do not run such programmes. The technical assistance provided by the AWB is in the fields of baking, milling, wheat quality, grain storage and grain hygiene. The AWB conducts baking and milling seminars overseas and it has a direct input into baking and milling courses conducted at the Bread Research Institute, for technicians invited from overseas. AWB staff undertake technical surveys to determine end-user requirements and to ensure that flour mills are provided with the most appropriate quality of wheat.

AWB specialists have gone overseas to advise on storage technology and technical missions from overseas are hosted in Australia, so that they may better understand the Australian wheat industry. The AWB also provides displays for trade fairs. The AWB provides these services to all end-users, even those who purchase indirectly from the AWB through traders. The costs of these missions, which benefit all Australian wheat producers, are spread over the entire crop. The missions can be planned and co-ordinated to achieve maximum returns at lowest cost because a single organization is involved and unnecessary duplication of services is avoided.

In addition, because the organization providing these technical services is the organization drawing up the contracts of sale, a much better integration of buyers' needs with present and future supplies is obtained.

Logistics

The importers of Australian wheat have varied requirements for their shipping programmes. There are logistical problems related to satisfying the requirements of buyers both in regard to quality and quantity of wheat. The requirements include the actual shipping patterns, as well as the size of ships which the countries wish to charter and which they can accept into their own ports.

Because of channel restrictions and port depth in a number of Australian ports, not all sizes of ships can be sent into all wheat ports. Congestion, strikes and other interruptions add to the complexity of the movement of the grain from the silo to the importers' ships. To give an indication of the enormity of the logistical programme, in 1979/80 the AWB co-ordinated the movement of 13 million tonnes of wheat to 18 ports and onto 733 vessels. Nearly 68 per cent of the quantity shipped, however, was through five ports, two in New South Wales, two in Victoria and one (Kwinana) in Western Australia. Given the diverse requirements of buyers, there is obviously a considerable amount of co-ordination needed to ensure that the appropriate wheat is programmed to the correct ship at the correct time. A single authority, marketing and programming the wheat movements is best placed to achieve this co-ordination.

Financing the Inventory

The AWB is currently empowered to raise monies offshore as well as in the onshore commercial money markets. The monies are used to pay out to growers at delivery the GMP less the various statutory charges and to finance the BHA, rail and other marketing costs until sales revenue is received. The monies are raised for various periods of time, such as 90 or 180 days and where possible are timed to mature when sales receipts are available or else they are rolled over. A figure was provided to the IAC during its recent inquiry into the wheat industry, showing that for the period December 1982 through September 1983 the AWB average cost of borrowing rate was near the lower end of the interest rate band (see IAC 1983, p. 47). I ask you to note that the March devaluation falls within this time interval and for some period prior to that devaluation it was very difficult to raise monies because of the expectation of a change in the value of the currency.⁴

The AWB also invests funds which accumulate from sale receipts until such time as they are required to repay monies or until sufficient funds to warrant a payout to growers accrue. The increase in the financial responsibilities of the AWB since 1979 when it moved away from obtaining funds from the Rural Credits Department of the Reserve Bank, is, I believe, *the* major change which has occurred in the wheat marketing arrangements in recent times.

⁴ Editors note. The Australian dollar was devalued by 10 per cent on March, 1983. At this stage the value of the Australian dollar was set as a managed float by a flexible peg system.

Price Determination on the Export Market

The AWB determines a price for its export wheat sales in three main ways.

1. Daily f.o.b. prices for the spot month and for delivery in each of the five succeeding months are offered. The prices are based on the prices of comparable types of wheat in a similar shipping position in the U.S. These prices are quoted flat and also as a basis, that is, a margin over a U.S. futures price.
2. By submitting tenders for sales.
3. By direct negotiations with the buyers.

These ways are intimately related to the prices being realized in the international wheat market and because of the role of futures markets in price determination are related to the prices there also. The prices though are adjusted to allow for specific features which affect the Australian position and which act to the advantage of Australian producers. In other words, the AWB will extract a consumer surplus wherever possible.

Since the floating of the exchange rate in December 1983 export prices are quoted publicly in U.S. dollars, with an Australian dollar price on request.

The AWB regularly sells more than three million tonnes for export through the international grain traders. The smaller buyers often like to purchase through traders who also provide freight and financial services to them. It depends basically on what the buyer wants as to whether the AWB sells direct, sells through the trade, sells f.o.b. or c & f.⁵

Economies of a Single Supplier of Australian Wheat

There are a number of cogent reasons for maintaining the AWB as the sole supplier of Australian wheat.

- (i) Many government import agencies, which account for over 90 per cent of world wheat imports (Schmitz *et al.* 1981, p. 25), prefer to deal with an official body such as the AWB in the exporting countries.
- (ii) The AWB is in a stronger bargaining position than would be a number of competing groups attempting to sell Australian wheat into overseas markets.
- (iii) Considerable economies of scale, through the immediate and timely use of information and the co-ordination of grain placements, flow from a single authority. Production is highly variable and the demands of our customers are becoming increasingly more specific. A single body is able to gather, to analyse and to match end-user requirements with supplies at very low informational costs. The AWB is in a position to act to the best advantage of Australian producers. Any costs are spread over the largest volume of grain. These economies are considered in detail in Caves (1977-78).

⁵ f.o.b. = free on board. c & f = cost and freight.

- (iv) Because the AWB has control of total Australian supplies, the Board can more confidently enter long term agreements with the knowledge that the agreements can be serviced. The AWB currently has agreements covering some 5.5 million tonnes, but actual commitments to the countries involved are larger than this. In view of the increased supplies of the world market, these agreements are becoming more important because they ensure sales of Australian wheat and access to these market for additional sales.
- (v) The AWB is concerned with the longer term national interests of the Australian wheat industry and also is concerned with promoting the use of Australian wheat. Trading companies may be expected to have short-run profit maximization objectives. In addition, traders are not constrained to Australian wheat, they are able to draw on supplies from anywhere in the world to fulfil contracts. Their interests and that of the Australian producer do not necessarily coincide.
- (vi) The AWB is a marketer as distinct from a trader. The AWB is active in promoting Australian wheat through sending technical missions overseas and receiving persons for training within Australia. Market promotions, through technical missions, will become increasingly important during the next marketing scheme, because of the increased sophistication of buyers' requirements and to counter the promotional activities being pursued by our competitors, particularly groups such as U.S. Wheat Associates.
- (vii) In his recent study Caves (1977-78) advances reasons and some statistical evidence to support the hypothesis that the profit margins of large grain firms depend not so much on volume traded, but on the incidence of disturbances in the market which create opportunities for a good deal of non-routine arbitrage. Because of the economies of information, the large firms are able to capitalize on disturbances in the market to their own advantage. The advantages gained by the AWB through economies of co-ordination and information are passed back to the producer.

IAC Report

The AWB's submissions (1982, 1983) to the IAC are on the public record. The AWB's attitude to the recommendations that were handed down in the final IAC report is clear from that public evidence. The AWB and I, myself, were disappointed at the IAC report. In essence the report recommended that on balance the AWB should retain control of the export market. It then proceeded to reject virtually all the suggestions which the AWB had put forward to provide it with the flexibility that is needed to enable the AWB to properly discharge its functions and to compete with other organizations and companies operating in the export market. (Incidentally, the floating of the Australian dollar in December has done more to increase our flexibility and hence our ability to respond to commercial opportunities than has the IAC report.) The report showed a complete lack of understanding of the use of futures markets, the importance of these markets in the international wheat trade, the importance of these markets in the way in which the AWB prices its wheat, the way in which it sells wheat to its end-users, and to the information flow which arises from being a participant in that market. Rather than yet

another discussion on why the AWB is using futures and the benefits that it has, I would refer you to a talk which David Rutledge (1984) presented to the Coarse Grains section of the 1984 Outlook Conference in Canberra. Dr. Rutledge emphasises the flexibility in marketing conferred through using futures and suggests that the debate about what is speculation and what is a hedge is a sterile one. He appeals to Working's definition of over 30 years ago of a hedge as "the use of futures as a temporary substitute for a merchandising transaction to be undertaken at a later time".

Before passing on from futures I must put to rest one gross misconception and that is that futures transactions caused the current difficulties in the Queensland Graingrowers Association. It was unfortunate that the QGGA encountered difficulties after the IAC hearings on the draft report and while the IAC was preparing its final report. My understanding of the QGGA situation is that the problems arose because of a lack of adequate internal controls and the difficulties arose in the forward market for foreign exchange, not in its commodity futures activities. As Rutledge (1984, p. 5) notes, a forward market is different from a futures market.

The IAC recommended against a number of suggestions from the AWB in relation to establishment of reserves, in relation to capital expenditure, in relation to combination cargoes and in relation to AWB staffing matters. The AWB was particularly disappointed that the IAC was not prepared to take notice of its suggestions and recommendations in relation to BHA's. The AWB pointed out a number of difficulties that exist in the current relationship between the BHA's and the AWB, and despite requesting and being provided with additional evidence on this matter, the IAC was not prepared to pass comment in its final report.

Basically, the AWB suggested that the Remuneration Agreement which is the agreement between all the BHA's and the AWB should have a life which is concurrent with the life of the Wheat Marketing Act. Further, that there should be provision for different agreements to be made with each State to reflect the peculiarities of the State. Of course, matters that are common to States would be standard in the agreement. The AWB attitude is that where costs can be identified on a State basis, then those costs should be reflected back onto these States as much as possible. These costs should include any which arise from a lack of performance. One method which may be worth pursuing is to have a charge which covers the receival and outturn costs and the first several months storage of the wheat and then a monthly charge applying from there on with a fobbing charge applying if the grain is actually put through an export terminal.

Domestic Marketing

The IAC recommends that the domestic market be opened. The BAE (1984) also is in favour of such a step and estimates that something like \$68 million is the cost impost on growers because the domestic market is not open.

The AWB disputes the \$68 million figure on the grounds that:

- the volume of sales on the domestic market is two million tonnes rather than three million tonnes, hence the base over which the estimated savings apply is too high even if none continued to be sold through the central system;

- the basis of estimating part of the savings, namely using the difference in the GHA (NSW) rates for barley versus wheat and extrapolating that to the whole of Australia is suspect;
- further costs savings (to apply to all wheat) which are supposedly to arise from greater efficiencies because of competition from private merchants are not substantiated;
- estimates of costs savings on the road transport of wheat also are suspect and are likely to suffer from aggregation problems;
- no account is taken of the costs to farmers, private merchants or end-users of having to provide or upgrade their existing storage facilities; and
- no account is taken of the economies which I have alluded to earlier arising from pest control and from co-ordination of grain movements, etc.

My comments do not mean that there cannot be improvements in the domestic marketing system. There are obviously instances where individuals are facing higher costs because wheat goes through a central storage system. The cost to those individuals has to be balanced against the benefits which accrue to all growers because they are all able to share in the pooling of sales to all end-users and from the economies which arise from a central system.

The AWB is able to operate in a more relaxed system such as the permit system put forward for discussion by the AWF. The AWB, however, would still require to have control over the system and I believe the drought last year provided ample evidence of the need for that.

Pricing on the Domestic Market

Wheat sold on the domestic market is classified into three end uses, wheat for human consumption, wheat for industrial uses and wheat for stockfeed. Wheat for human consumption (1.1 million tonnes annually) is priced according to a formula set in the legislation (the HCP formula). Wheat for the other end uses is priced at the commercial discretion of the AWB. Wheat for industrial purposes is priced daily and is based on export parity. Wheat for stockfeed is also priced daily in forward months, but for administrative reasons is held fixed for a week in the spot position. The stockfeed wheat price is based on export parity and has quantity rebates associated with it. As mentioned earlier, wheat for stockfeed and industrial purposes may be booked at a basis over U.S. futures prices. The AWB suggested to the IAC that it would have no difficulty in pricing wheat for human consumption according to its commercial discretion. The millers prefer a set price. No one, however, appears satisfied with the current HCP formula. The AWB has suggested that HCP could be set quarterly based on an average, in the month preceding the quarter, of the monthly forward quotes for delivery during that quarter.

One point I would like to make is that since 1979, the pricing arrangements for domestic sales are different from those prevailing earlier. Consequently, one cannot go to comparative static studies such as Longworth and Knopke (1982) which cover a series of marketing schemes and say that the marketing system

(inferring the current system) is benefitting one group or another. Further, who gains or benefits (producers or consumers) is very sensitive to the commencement period of the study. For example, in Longworth and Knopke (1982) if the first plan (1948/49 to 1952/53) is omitted, the producers gain. The relevant issue of course is the current marketing arrangements.

Summary

In summary, I believe that the Australian wheat marketing system is an efficient low-cost system. We have the advantages of a single seller on the export market and we have the advantages of a single body which can co-ordinate the requirements of buyers with the available supplies. Given the climatic variability of this country it is extremely important that co-ordination be achieved. In a world market which is oversupplied with wheat at the prevailing prices, in a world market which is beset with government subsidies and government assistance, one needs to have a strong, single seller of Australian wheat. I know of no economic theory which says if you increase the number of sellers you will improve the price to the seller.

There are a number of minor matters which need to be rectified in the system, in particular, the relationship between the AWB and the BHA's and we believe that that is in train. There are a number of restrictions or lack of flexibility which the AWB has in its operation. We believe those matters are being rectified. The AWB does not wish to avoid accountability. We are more than happy to be accountable for our activities and to be responsible for our decisions. Do not confuse accountability with bureaucratic procedures. We do require if we are going to compete in the market place that we have the same flexibility and the same ability to make decisions that our competitors have and that we do not have to unduly, publicly release details which are commercially sensitive.

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