1. Introduction

THE TERMS OF REFERENCE

The proposed project

The Australian Government Department of Agriculture, Fisheries and Forestry has sought to undertake research and analysis of price movements in food and farm produce prices over time and of factors determining price formation (including identification of costs and margins through the chain) and a comparison of financial profitability of listed retail and food manufacturing companies in Australia and other selected countries.

The scope of the review

The terms of reference for the project require that the research and analysis should focus on three broad areas:

1. analysis of movements over time in retail prices paid by consumers in comparison to prices received at the farm level. This analysis should consider, explore and detail supply and demand factors and the impact of these on price movements and prices received by farmers and chain intermediaries. The time period should be of sufficient scope to ensure that a reasonable and reliable assessment is established;

2. determination of value-adding factors contributing to food prices using qualitative and quantitative data (including ABS input–output data) in respect of key commodity lines. It will be important to isolate the key components affecting the final price and associated trends and drivers for this. Current research into these factors in Australia, New Zealand and other countries should be included where appropriate and feasible; and

3. analysis of financial performance for publicly listed companies in food manufacturing, marketing and retailing in Australia and other countries as appropriate, focusing on key indicators from publicly available information. This should take account of the diversity of business activities and markets, relative industry concentration and other factors. It should also include assessment of relative profitability and financial and business risk over time for Australian companies compared with companies in other developed economies.

Time frame

The analysis should provide an historical dimension, outlining the information over the past decade, where possible.

Influences

These activities should be analysed and brought together with reference to identified key trends and drivers within the industry including:

• significant supply and demand influences relating to a changing global marketplace, as well as how changes in these factors have been reflected in price transmissions through the chain, resource mobility, supply and demand responsiveness and price variability, and the manifestation of productivity improvements in inputs and outputs;

• structural changes including the impacts of, and drivers for, changing market influence and vertical integration (through ownership and contractual relationships); changes due to technology in consumer and production sectors, consumer preferences and changes in underlying economic drivers; and

• differences and changes in the nature of competition through the value chain with reference to different business strategies that are adopted by participants through the chain.
Food lines

The analysis of food product pricing has been undertaken for a number of product lines which:

• ensure coverage of significant grocery items;
• ensure coverage of a range of key industry sectors;
• are capable of analysis, in view of the availability of data and the identity of a farmgate sector in the value chain; and
• provide examples of the differing extent of product transformation.

The predominant focus of the study is on grocery items which make up the major share of retail food sales to the consumer.

PURPOSE AND SCOPE

Purpose

The aim of this paper is to identify and explain the determinants of prices in some key grocery product value chains.

This report has been compiled as a result of analysis of the prices and costs through a number of food categories. Products have been selected for use in this analysis where there is a relatively strong similarity between the physical farmgate produce and the consumer product that appears on the supermarket shelf.

The selection of products has been made to provide adequate coverage across the following:

• fresh and processed products;
• products supplied by integrated and disaggregated industry value chains; and
• products that display varying influence from export and import trade.

The purpose of the work has been to provide an objective analysis of:

• comparisons of farmgate and retail prices over time;
• the apparent share of the retail sales dollar;
• factors contributing to changing costs over time;
• implications drawn from the study of prices for the performance of the key companies engaged in manufacturing and retail sectors; and
• the nature and role of value-adding being undertaken in each product category.

The approach and project workplan were based upon available resources and collaboration from subject industries.

The opportunity brought by this balanced and objective analysis is to provide the food industry – in particular, primary production – with a greater appreciation of the drivers of prices and costs in each of the product categories examined.

Scope

A project with the purpose outlined is potentially a mammoth exercise. Our approach has been to work with known sources of information, including extensive literature that addresses the issues of food pricing and cost structures across the sectors selected in this work.

We have also worked closely with industry sectors, including commercial participants in food production, processing, marketing and retail.

The products selected in this work are within the following categories:

• dairy products (milk, cheese, butter and spreads);
• meat (pork, beef, lamb);
• fresh horticulture (various product lines);
• orange juice;
• processed fruit;
• frozen processed vegetables (beans, peas, potatoes);
• rice;
• eggs;
• flour;
• vegetable oil; and
• sugar.

Each sector has been analysed in terms of the big picture determinants of prices and costs, drilling down to specific products used in the analysis.

The work has been performed within a relatively tight time frame and a finite project budget, forcing a focus on major issues only within these food categories.

The study has not covered foods where the primary product represents a very small component of the finished product cost or where products have been elaborately transformed – such as bread, cereals or snack foods. The study has also chosen not to examine industries where the value chain is fully integrated – such as chicken meat, where there is no equivalent of an autonomous farm sector.

OVERVIEW OF THE APPROACH

Overview

Our work has followed a number of key stages:

1. Mapping the chains and scanning data
   The work has mapped the value chains and undertaken a data scan for a list of product groups and items. This included a range of products that provide the project with representative coverage of product categories.

2. Accessing data and intelligence on prices and margins
   The study identified available data and intelligence from food industry sources, including industry statistics, existing research studies and from consultation with organisations and participants.

3. Mapping and analysing product value chains
   The work has collated and analysed pricing data and relevant pricing dynamics for the product groups.

   Assessments of corporate profitability and dynamics have been undertaken at industry/product level with necessary assessment of the linkage between product pricing and the outcomes achieved by food companies.

4. Reporting
   The work has drawn on the outcomes of consultation with industry participants, together with a review of considerable literature relevant to contemporary issues in food pricing.

This document is a summary of the findings and conclusions addressing key policy issues that have relevance for the Department of Agriculture, Fisheries and Forestry; as well as providing credible food industry insight.
Pricing and cost information

The information contained in this section of the report has been compiled and analysed by Whitehall, based on its own investigations and in consultation with a number of industry organisations and participants, as well as a review of available published material.

This is not an economic study of food pricing – it has been based on significant commercial analysis and consultation with food industry decision-makers. It therefore contains a significant number of assertions that have been based on the consultant's analysis of factors influencing pricing and cost relationships. These assertions are not always backed by empirical data but result from confidential discussions with industry.

One of the significant challenges in undertaking an exercise of this nature is accessing reliable and accurate data. In general, the study found that food industries are currently making a low level of investment at industry level in industry-wide data. As the food industry becomes more concentrated and integrated, there is a high risk that the transparency of information and intelligence will be reduced.

Literature reviews

A comprehensive review has been undertaken of available literature published in recent years. This has relevance to the analysis of food pricing and the factors affecting prices and costs through major grocery food value chains.
This has included:

- industry outlook and analysis papers;
- reviews and inquiries into market structures, including a number of reviews into the structure of food retailing;
- Productivity Commission reviews; and
- international papers on innovation in food value-chain management and market innovation.

These sources are listed in the bibliography.

**Value-adding**

Our work has recognised the areas where industries and enterprises are striving for value-adding in the relevant product areas.

The aim in exploring value-adding is to establish what is driving the initiatives and what sort of gains are flowing to the food industry and its participants from such endeavours.

There is substantial investment in value-adding across the food sector and a full study of value-adding itself is beyond the scope of this study.

Our work identifies the primary ways in which food industries and enterprises are striving to add value to their products and services to customers and the factors that are driving those endeavours.

As identified in the report, there is little willingness to disclose, in a public document such as this, the sharing of gains from involvement in value-adding. The analysis of the performance of companies will discuss the implications of the pursuit of value-adding at a corporate level.

**ASSESSING CORPORATE PROFITABILITY**

**Industry analysis**

A key part of the study requires us to undertake an assessment of the implications of food pricing and the relative profitability of food companies.

There is not necessarily a direct and causal link between the pricing of key food lines and the profitability of major food companies.

As the chart on the right shows, corporate profits are driven by a convergence of issues which include:

- industry dynamics and the competitive environment;
- dynamics in the product value chain which largely determine the influences on product group returns; and
- the appropriateness of corporate strategy and the quality of management’s execution of that strategy.

**Corporate sector**

Relatively few Australian food companies are locally listed firms where full financial analysis is readily available. Limited data is available on Australian subsidiaries of overseas-based parent companies.
Figure 2. **CORPORATE PROFITABILITY**

**Industry structure and dynamics**
- demand growth
- influence of international trade
- basis of competition and product substitution
- barriers to entry

**Execution of corporate strategy**
- positioning
- diversification and business mix
- risk profile
- financial capacity
- success of management’s execution

**Product value-chain dynamics**
- balance of demand and supply
- influence of trade
- extent of integration
- scope for differentiation
- influence of technology and innovation
- basis of competition

**Corporate profitability**
measures based on key financial indicators

**Line item pricing through the chain**
- key grocery lines
- retail products
- influence of product value-chain drivers (above)
- apparent margin capture