

**The Effects of Marketing Organisation
on the Delivery of Added Value:
A Historical Comparison of Australia's
Beef and Chicken Meat Marketing
Systems**

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Bachelor of Business (Hons)**

**Submitted in fulfillment of the requirements of the
degree of Doctor of Philosophy**

2 June 2005

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Abstract

This thesis examines how the organisation of marketing activities in Australia's beef and chicken meat segments shaped the major forms of value exchanged in these two meat marketing systems. Separate contributions from agribusiness, marketing, and business history on the effects of marketing organisation on the delivery of value are reviewed and integrated. This review demonstrates that research has attempted to keep pace with changes in the configuration of agri-food value chains to understand shifting demand patterns and associated value orientations. But, in focusing on a limited number of links in these value chains for limited periods of time, insights from previous studies do not fully account for the observed changes in Australia's two major meat marketing systems. Inadequacy of existing descriptive accounts and frameworks also relate to their production-focused notion of value. Analysing the forms of value exchanged in terms of the benefits and sacrifices considered by consumers in consuming meat redresses the preoccupation with high volume and low price as the dominant type of value embodied in meat.

The food marketing systems perspective adopted permits identification of four interrelated coordination mechanisms that comprise the marketing infrastructure. These mechanisms connect participants in meat value chains to direct and support the flow of resources between them. Despite a few cross-sectional studies examining their role, understanding of how they shape value delivery in Australia's meat marketing systems has been disjointed and incomplete. The research question at the centre of this study concerns the following gap in knowledge:

how does the configuration and control of coordination mechanisms influence the delivery of value in a meat marketing system over time?

A comparative historical methodology is applied to identify patterns of value delivery across the two cases. Synthesis of the findings reveals four distinct modes of value delivery. Two factors are decisive in explaining the observed patterns. The locus of control over marketing organisation, whether external or internal, is one decisive factor. The other defining factor is the responsiveness to product market conditions. Responsiveness is categorised as either passive or active and depends on the role of coordination mechanisms in detecting changes in the marketing environment and responding to them in order to deliver value. From the interplay of these two factors four different modes of value delivery are identified - inactive, reactive, submissive, and proactive. These four modes are aligned with different forms of value exchanged in meat marketing systems - commodity goods, generic products, value

added products, and added value brands respectively. The profiles fit distinct phases of the configuration and reconfiguration of Australia's beef and chicken meat marketing systems.

Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Andrea Insch

CONTENTS

CHAPTER ONE: INTRODUCTION	1
POSITIONING OF RESEARCH QUESTION IN THE LITERATURE.....	2
<i>Mechanisms to Coordinate Marketing Activities</i>	3
CONCEPTUAL FRAMEWORK AND FOUNDATIONS.....	4
<i>What is a Meat Marketing System?</i>	4
RATIONALE FOR SELECTION OF CRITICAL CASES	6
<i>Historical Method</i>	9
Methods of Data Collection	10
Sources of Historical Data	10
<i>Methods of Comparative Analysis</i>	12
CONTRIBUTIONS OF THE RESEARCH	13
ORGANISATION OF THE THESIS.....	15
CHAPTER TWO: LITERATURE REVIEW & CONCEPTUAL FRAMEWORK.....	16
INTRODUCTION AND OUTLINE	16
LITERATURE REVIEW	17
<i>Value Delivery in Context: Conditions Shaping Australia's Meat Industry</i>	20
<i>Evolutionary Patterns in Food Marketing Organisation</i>	23
<i>Forms of Organising Meat Value Chains & Effects on Value Delivery</i>	24
<i>Mechanisms to Coordinate Marketing Activities</i>	29
Quality Assurance Systems.....	29
Supply Coordination	31
Market Orientation.....	32
Integrated Marketing Communications	34
<i>Research Question</i>	36
CONCEPTUALISING A FOOD MARKETING SYSTEM	37
<i>Principle Components and Boundaries of a Meat Marketing System</i>	37
<i>Meaning, Forms and Process of Delivering Value to Consumers</i>	40
Forms of Value Exchanged in a Meat Marketing System.....	46
CONCLUSION	53
CHAPTER THREE: CONFIGURING BEEF'S MARKETING SYSTEM, 1860-1974.....	55
INTRODUCTION.....	55
THE SPECULATORS: ENCOURAGING ABUNDANCE AND MEDIOCRITY, 1860-1932	56
<i>Supplying Distant Markets</i>	60
<i>Surrendering Control of Marketing</i>	64
ENTRENCHING COMMODITY STATUS, 1933-1955.....	69
<i>Controlling Supply and Redirecting Consumption</i>	73
SERVING THE MASSES, 1956-1974	77
<i>Depending on Low Quality Export Markets</i>	78
CONCLUSION	84
CHAPTER FOUR: RECONFIGURING BEEF'S MARKETING SYSTEM, 1975-2002	86
INTRODUCTION.....	86
THE AUTHORITIES: CORPORATISING CONTROL, 1975-1989	87
<i>Reacting to Systemic Failure</i>	89
<i>Redressing Image and Integrity</i>	92
ENSURING PRODUCT SAFETY AND REPUTATION, 1990-1996	96
<i>Internalising Control</i>	101
CONSOLIDATING CONTROL, 1997-2002	107
<i>Attempting to Deliver Greater Value</i>	112
CONCLUSION	119

CHAPTER FIVE: CONFIGURING CHICKEN'S MARKETING SYSTEM, 1960-1979.....	121
INTRODUCTION.....	121
ORIGINS AND EARLY DEVELOPMENT	122
THE INTEGRATORS: COORDINATING THE CHAIN, 1960-1967.....	126
<i>Coordinating Supply</i>	129
<i>Coordinating Information</i>	133
GUARANTEEING QUALITY AND SECURING SUPPLY, 1968-1979	134
<i>Standardising the Product</i>	138
<i>Differentiating the Product</i>	140
CONCLUSION	142
CHAPTER SIX: RECONFIGURING CHICKEN'S MARKETING SYSTEM, 1980-2002	144
INTRODUCTION.....	144
THE CONSUMERS: SEEKING CHOICE AND CONVENIENCE, 1980-1989	145
<i>Delivering Added Value</i>	148
<i>Positioning the Product</i>	150
COMPETING FOR CONTROL IN MASS MARKETS, 1990-2002	152
<i>Remaining Focused on Local Markets</i>	155
<i>Pulling the Product</i>	160
<i>Maintaining Space in Merging Markets</i>	165
<i>Seeking a Niche</i>	168
CONCLUSION	172
CHAPTER SEVEN: DISCUSSION & SYNTHESIS.....	174
INTRODUCTION AND OUTLINE	174
DISCUSSION AND SYNTHESIS OF FINDINGS.....	174
<i>Product Market Conditions</i>	176
<i>Coordination Mechanisms</i>	180
<i>Organisation and Functioning of Marketing Systems</i>	187
<i>Dynamics and Constrains of Marketing Organisation</i>	191
Comparison to Evolutionary Patterns in Food Marketing Organisation.....	191
Forms of Value Exchanged.....	193
Responsiveness to Product Market Conditions	194
Development of Coordination Mechanisms	194
Value Delivery Modes	195
<i>Explaining Patterns of Value Delivery in Australian Meat Marketing</i>	198
CONCLUSION	206
CHAPTER EIGHT: CONCLUSIONS & IMPLICATIONS	209
INTRODUCTION.....	209
MAJOR FINDINGS AND CONTRIBUTIONS OF THE RESEARCH	210
IMPLICATIONS FOR MANAGERS	216
IMPLICATIONS FOR PUBLIC POLICY	217
SUGGESTIONS FOR FUTURE RESEARCH	221
APPENDIX 1 - LIST OF PARTICIPANTS AND EXPERTS CONSULTED	223
APPENDIX 2 - SUPPORTING SECONDARY DATA.....	226
APPENDIX 3 - CHRONOLOGY AND SUMMARY OF MAJOR EVENTS.....	233
REFERENCES.....	242

List of Tables and Figures

Tables

TABLE 1: FLUCTUATIONS IN MEAT EXPORTS FROM QUEENSLAND TO THE UK, 1893-1910.....	62
TABLE 2: INDEX NUMBER OF PRICES FOR SELECTED TYPES OF MEAT.....	68
TABLE 3: UK IMPORTS OF FROZEN AND CHILLED BEEF (PER CENT), BY COUNTRY, 1930s.....	72
TABLE 4: PRICES AND MARGINS FOR BEEF SOLD IN AUSTRALIA, 1971-1975.....	87
TABLE 5: INCOMPATIBILITY OF AUSTRALIAN BEEF QUALITY ATTRIBUTES WITH JAPANESE GRADES	97
TABLE 6: COMPARISON OF PRICES OF SELECTED BEEF LINES ACROSS RETAIL OUTLETS	109
TABLE 7: COMPARISON OF THE DOMINANT FEATURES OF AUSTRALIA'S BEEF AND CHICKEN MEAT MARKETING SYSTEMS.....	175
TABLE 8: TYPES OF MEAT MARKETING SYSTEMS	191
TABLE 9: VALUE DELIVERY MODES FOR MAJOR PHASES OF CONFIGURATION AND RECONFIGURATION	196
TABLE 10: TOP 25 RED MEAT PROCESSORS (BY THROUGHPUT), 2000	226
TABLE 11: OVERALL AND FOOD SAFETY COMPONENT INDUSTRY CONTRIBUTIONS	232
TABLE 12: CHRONOLOGY AND SUMMARY OF MAJOR EVENTS IN BEEF'S MARKETING SYSTEM, RESPONSES AND IMPACTS	233
TABLE 13: CHRONOLOGY AND SUMMARY OF MAJOR EVENTS IN CHICKEN MEAT MARKETING SYSTEM, RESPONSES AND IMPACTS	238

Figures

FIGURE 1: PRINCIPLE COMPONENTS AND BOUNDARIES OF A MEAT MARKETING SYSTEM	39
FIGURE 2: FLOW SHEET OF MELBOURNE MEAT PRESERVING COMPANY OPERATIONS, 1870.....	58
FIGURE 3: CONFIGURATION OF BEEF VALUE CHAINS IN NEW SOUTH WALES, 1972.....	83
FIGURE 4: HOW AUSTRALIAN BEEF IS EXPORTED, 1992	100
FIGURE 5: RECONFIGURATION OF AUSTRALIA'S BEEF MARKETING SYSTEM.....	114
FIGURE 6: EVOLUTION OF THE CONTRACT GROWING SYSTEM	128
FIGURE 7: CONFIGURATION OF AUSTRALIA'S CHICKEN MEAT MARKETING SYSTEM.....	130
FIGURE 8: MARKET SHARE OF THE AUSTRALIAN CHICKEN MEAT SEGMENT, JULY 1999	158
FIGURE 9: RETAIL PRICES OF BEEF AND VEAL, AND CHICKEN MEAT, DOMESTIC MARKET, 1980-2000	188
FIGURE 10: CONSUMPTION OF BEEF AND CHICKEN MEAT, DOMESTIC MARKET, 1960-2000	188
FIGURE 11: REPRESENTATIVE COSTS AND GROSS REVENUES FOR CARCASS MEAT AND BY-PRODUCTS, DOMESTIC MARKET, 1998.....	227
FIGURE 12: FARMGATE, RETAIL AND WHOLESALE PRICE TRENDS, CENTS/KG, 1998-2003	228
FIGURE 13: CUMULATIVE DISTRIBUTION OF ABATTOIRS BY GROSS PROFIT MARGIN, 1992-93	229
FIGURE 14: COST OF BEST IN-CLASS PROCESSING FACILITIES, SELECTED COUNTRIES, 1991-92	229

FIGURE 15: COST PROFILES OF DELIVERING MARKET READY MEAT TO THE UNITED STATES, 1991-92, A¢/KG	230
FIGURE 16: THE CHARACTERISTICS OF THE COMPARISON PARTNERS	230
FIGURE 17: COMPONENTS OF VALUE OF TRANSFORMATION IN AUSTRALIAN RED MEAT PROCESSING (%), 1992-93	230
FIGURE 18: COMPONENTS OF UNIT PROCESSING COST (%), 1992-93	231
FIGURE 19: DIRECT COSTS TO SLAUGHTER AND CHILL CATTLE ^a (INDEX: TOTAL COST EQUALS 1.00)	231
FIGURE 20: INDIVIDUAL COST COMPONENTS OF TOTAL PROCESSING COSTS (EXCLUDING LIVESTOCK PURCHASES) (%), 1992-93	231
FIGURE 21: INDICATIVE COSTS IN THE BEEF VALUE CHAIN (%)	232

List of Acronyms and Abbreviations

ABARE	Australian Bureau of Resource Economics
AAC	Australian Agricultural Council
AACo	Australian Agricultural Company
ACA	Australian Consumers' Association
ACC	Australian Country Choice
ACCC	Australian Competition and Consumer Commission
ACGC	Australian Chicken Growers' Council
ACMF	Australian Chicken Meat Federation
AFF	Australian Fast Foods
APIA	Australia Poultry Industries Association
AMB	Australian Meat Board
AMC	Australian Meat Council
AMIEU	Australasian Meat Employee's Union
AMH	Australian Meat Holdings
AMLC	Australian Meat and Livestock Corporation
AMPC	Australian Meat Processor Corporation
ANZSIC	Australia and New Zealand Standard Industry Codes
AQIS	Australian Quarantine Inspection Service
AUS-MEAT	Authority for Uniform Specification of Meat and Livestock
BAE	Bureau of Agricultural Economics
BSE	Bovine Spongiform Encephalopathy
cif	cost inclusive of freight
CSIRO	Commonwealth Scientific and Industrial Research Organisation
d	pence
DC	Distribution Centre
DPI	Department of Primary Industries
EEC	European Economic Community
ECR	Efficient Consumer Response
FDI	Foreign Direct Investment
FMCG	Fast Moving Consumer Goods
FMD	Foot and Mouth Disease
HACCP	Hazard Analysis Critical Control Points
HMR	Home Meal Replacement
JIT	Just-In-Time
kg	kilogram
kt	kilotonne
lb	pound
MLA	Meat and Livestock Australia
MNC	Multinational Corporation
MRC	Meat Research Council
MSA	Meat Standards Australia
NHF	National Heart Foundation
NLIS	National Livestock Identification System
NVDS	National Vendor Declaration System
PSA	Prices Surveillance Authority
POS	Point of Sale
QA	Quality Assurance
QMIB	Queensland Meat Industry Board
SMA	Statutory Marketing Authority

USDA	United States Department of Agriculture
VMS	Vertical Marketing System
vCJD	variant Creutzfeldt-Jakob disease

Acknowledgements

It would not have been possible to complete this thesis without the support and assistance of many people. My sincerest thanks to Associate Professor Bradley Bowden, whose guidance, support and encouragement were crucial to the completion of this thesis. His invaluable advice, knowledge and patience made the journey enjoyable and rewarding. I would also like to thank my Associate Supervisor, Professor Bill Shepherd for his support, especially during the early stages of this research and my academic career.

I would like to thank the Department of International Business & Asian Studies and Griffith Business School for their administrative and financial support in providing me with a completion scholarship. I also appreciate the award of an International Conference Travel Grant by the Office of Postgraduate studies. Without this support, my participation at the 2004 AMS Conference in Vancouver, Canada would not have been possible. My fieldwork was also assisted by the provision of a Postgraduate scholarship from MINTRAC. Thank you to Andrew Harris at MLA for supporting my application for a MINTRAC scholarship. Many thanks also Jenny Kroonstuiver and Margaret Antony at MINTRAC for assisting me to showcase my research to industry stakeholders. Thanks also to the organizers and sponsors of the annual MLA postgraduate student workshop held in Sydney. Special thanks to Vivienne Todd at MLA for organising access to archival resources and for arranging interviews.

I would especially like to thank all the participants who graciously gave their precious time and shared their valuable experience and knowledge. Thank you to Lesley Marman and Bevan Peters for inviting me to Wandoan and for organising many useful field trips and informal interviews with members of the local community. This was an excellent introduction to the 'on-farm' scene for me. Thanks to my fellow PhD colleagues with whom I have shared ideas as well as moral support throughout this process.

Last, but not least, I would like to thank my family for their love, understanding and moral support throughout my thesis. I would like to give a special expression of appreciation to my partner, Levon Guiragsossian for his love and encouragement.

Chapter One: Introduction

Economic and business historians have collectively portrayed the development of Australia's meat industry as the story of purposeful production, extensive resource utilisation and fluctuating fortunes driven by the whims of foreign markets (Blainey, 1966; Boehm, 1979; Butlin, 1964; Shann, 1948). This focus on production maximisation has largely ignored the role of marketing in coordinating the functions and activities that bridge the divide between production and consumption of meat. In the late nineteenth century, meat was among the first foods to be traded across national borders as a bulk commodity foodstuff (Duncan, 1959). As soon as the physical infrastructure was in place shipments of minimally processed beef and mutton were transported vast distances from Australian rangelands in order to fill eager stomachs in the United Kingdom (Blainey, 1966). Supplies sourced from distant shores covered shortfalls in local production; availability and price were vital considerations in these procurement decisions. Consumer perceptions of product quality, associations with its source, and the retailer's identity also influenced the choice between local and imported product (Duncan, 1956).

The analysis of Australia's meat industry by historians has, in aggregate terms, overlooked subtle yet fundamental differences between the major segments of this multifaceted food group (Cutler, 1976). By selecting red meat species on the basis of their overall contribution to the national economy, chicken's rise in the Australian diet has been underplayed. This omission, linked to the emphasis on the industrial infrastructure, has produced a lack of understanding of how marketing organisation shaped modes of value delivery across Australian meat value chains. The evolution in the organisation of Australia's primary meat marketing systems and patterns of value delivery differs from the path in other western markets. Apart from obvious differences like beef's dependency on world markets and chicken's protected domestic market, the range of added value branded meat products marketed overseas, especially in the US and Western Europe, is more extensive than in Australia. This thesis reconstructs the shifting marketing organisation and patterns of value delivery in Australia's two major meat segments to address the following research problem:

how does the organisation of marketing activities affect the process of value delivery in the context of Australia's beef and chicken meat marketing systems?

Positioning of Research Question in the Literature

Whereas meat has traditionally been traded largely as a commodity, higher value market segments have been cultivated in many western markets to deliver meat in value added and branded product forms. While the proliferation of modern retail outlets expanded consumer access to these products, supporting this trend, the shift appears driven by changes, both gradual and incremental, in the underlying organisation of the meat marketing system. Studies of the organisation of food value chains and the broader food marketing system can be categorised into two major groups. The first group of studies take a micro perspective and focuses on the roles and interactions of individual firms as dyads at different levels of the value chain. These studies mostly adopt a cross-sectional research design to examine the internal political economy of marketing channels from an economic efficiency perspective (Corriveau & Tamilia, 2002; Frazier, 1999; Stern & Reve, 1980). A similar focus is taken in studies of agri-food supply or value chains. This group broadens the unit of analysis to capture multiple participants in specific chains (Fearne, 1998; Hobbs & Young, 2000; Katz & Boland, 2000). In adopting this perspective, these studies overlook important aspects of the marketing environment and the evolution of marketing organisation. Less attention is given to the role of external participants like competitors, government authorities, and trade industry associations in attempting to influence or control participants' activities (Pfeffer & Salancik, 1978).

A second group of studies adopt a macro perspective to examine how specific product market conditions shape the evolution of food value chains. Breyer's (1931) analysis of the US meat marketing system in the 1920s identified several features of the marketing environment as potent in explaining its marketing organisation – meat's perishability, seasonality of supply, and diversity among consumer segments. Whereas Breyer's study takes a snapshot view other empirical studies use a longitudinal research design to examine changes and continuities in marketing organisation over time (Kaynak, 1999; Kim, 1989; Kobayashi, 2000). These studies indicate a gradual shift in marketing organisation from traders supporting localised production and consumption to the dominance of large scale retail supermarket chains that directly source food inventory. Through successive phases of horizontal and vertical integration, these chains are able to deliver a range of low cost food products to end consumers. The final phase in this model describes most western countries, especially the UK and US. In these food value chains there is evidence of a shift in the locus of power from food suppliers to national supermarket chains (Hughes, 1994). Researchers examining the rising concentration of store ownership and sales in food retailing argue that these chains or 'multiples' have led the reconfiguration of food value chains since the 1980s (Shaw, Burt, &

Dawson, 1989). Similar trends are seen in Australia, albeit at a slower pace (Humphery, 1998; Pritchard, 2000).

This developmental pattern in the modernisation and organisation of food marketing systems and the factors that have been proposed to account for the shift in power to large food retail chains serve as useful tools to analyse the phases of food marketing organisation in urban areas of different countries. Although, there are marked differences between the changes that have taken place in Australia's meat marketing systems with those overseas, and domestically between beef and chicken meat value chains. Global growth in meat consumption, especially chicken, accompanied by new products and well-known brands like Tysons, Armour, Hormel and KFC, suggests a transformation in the organisation of meat marketing systems. The anecdotal evidence is mixed. Therefore, there is a need to compare the key events and forces in the development of Australia's meat marketing systems to account for the way meat value chains have been organised and how this has impacted the delivery of value to consumers.

Mechanisms to Coordinate Marketing Activities

Coordination mechanisms develop to synchronise marketing activities in meat value chains through investments by participants and public authorities. They underpin the delivery of value in agri-food value chains by facilitating all marketing efforts to guarantee the integrity of added value brands from paddock to plate (Barkema & Drabentstott, 1995; Hanf & Kühl, 2005; Streeter, Sonka, & Hudson, 1991). In the review of the literature in chapter two, four key coordinating mechanisms are identified that facilitate and direct the delivery of value: quality assurance systems, supply coordination, market orientation and integrated marketing communications. Despite their importance in structuring the organisation of meat value chains, little is known about how their alignment affects the delivery of value in meat marketing systems. Griffith's (2000) study of the development of four national meat industries did not systematically identify or examine their role. Existing knowledge needs to be extended to explore how internal and external participants construct and adapt marketing coordination mechanisms and how this impacts patterns of value delivery in a meat marketing system over time. Therefore a historical perspective is needed to overcome the limitations of prior studies that take a static approach to study how coordination mechanisms influence the organisation of marketing. This is achieved by analysing the changes and continuities in their configuration and control in Australia's beef and chicken meat marketing systems to answer the following question:

how does the configuration and control of coordination mechanisms influence the delivery of value in a meat marketing system over time?

Conceptual Framework and Foundations

Meat value chains are embedded in distinct, dynamic environments. Both internal and external participants seek to exercise power and influence other participants' activities to manage their dependence on the environment for critical resources. As an overarching theoretical perspective resource dependency theory offers a rationale to explain how participants seek to influence and control resources through interactions with each other and their environment manifest in patterns of organisation (Kaynak, 1999; Pfeffer & Salancik, 1978). Links that are established between participants are sets of power relationships based on exchange of strategic resources (Ulrich & Barney, 1984). This power is manifested in the ability of one participant to control the marketing decisions of participants at other levels of the value chain. Resource dependency theory is applied as the theoretical lens to analyse these power shifts in meat value chains and how participants have sought to influence and gain control of the mechanisms for coordinating marketing activities to direct the process of value delivery.

What is a Meat Marketing System?

Following conventions of their respective fields, economists and business historians employ the term 'industry' to define the limits of their research. Scholars of marketing history too have embraced this unit to specify the type of business activity examined. However as the range of products included in industry classifications vary in scope, they can be all encompassing or quite narrowly defined. Problems with the use of the term 'meat industry' have already been noted by Cutler (1976) in his classic study of the Australasian Meat Industry Employees' Union. However, subsequent studies have failed to analyse the similarities and differences between major product categories in this industry. Consequently, red meat products are given more attention than other categories, while some are completely overlooked.

Following Breyer's (1931) comparative marketing systems approach the conceptual framework of this study incorporates the environment in which meat value chains are

embedded. Church (1999) also argues for the product market as the appropriate level of analysis for developing histories of marketing under the umbrella of business history. While clear classification of product categories is an important step in redefining and selecting the focus of analysis, the boundaries of activities, processes and participants involved in creating and distributing value also needs to be defined appropriately. Meat is positioned as food, moving beyond the inspection of meat in business history simply as an agricultural or industrial product (Fernández-Armesto, 2002).

Creation and distribution of meat products occurs in a food marketing system, defined by Kaynak (1986: 5) as: ‘...[the] primary mechanism for coordinating production, distribution and consumption activities in the food chain’. Interdependent participants like farmers, processors and retailers operate and manage the system, sequentially transforming the form of value exchanged to ultimately deliver meat products to consumers. The coordination of flows of material inputs across the chain involves three types of functions – exchange, physical, and facilitating functions (Clark & Clark, 1947; Kohls & Uhl, 1998). First, exchange functions involve negotiating, buying, selling and arbitrage. Next, physical functions include transport, storage and processing. Finally, facilitating functions incorporate standardization, financial services, market information and marketing research. These functions bridge gaps in time, place, and form utility between production and consumption (Weld, 1917).

The conceptual parameters of marketing systems are well established in marketing science by scholars advocating a systems approach to theory development and practice (Alderson, 1978; El-Ansary & Liebreznz, 1984; Kaynak, 1986; Wilkinson, 2001). A meat marketing system is comprised of resource inputs, processes, and the outputs derived from execution of production and marketing activities and operate as ‘organised behaviour systems’ embedded in rich socio-economic and cultural environments (Alderson, 1978; El-Ansary & Liebreznz, 1984). Complex meat marketing systems are characterised by organisations specialising in specific marketing functions and activities, independently or jointly with other participants (Bagozzi, 1975). By virtue of the sequential transformation of value, organisations are functionally interdependent. To properly align and synchronise value creating and distributing activities coordination is required (Alderson, 1954; Bucklin, 1966). This need for functional coordination shapes the organisation of meat marketing systems to deliver value. The main challenge of adopting a systems view is ensuring that the problem definition and data collection are manageable. This was achieved by laying the conceptual framework for this study to specify the system’s key components as detailed in chapter two.

Classification of meat as a bulk commodity, semi-processed product and convenience good relate to differing assumptions of the form of value it embodies. The concept of value itself and the resources, activities and forms of organisation associated with its creation and distribution across space and time are central to the study of economic and business history and marketing. Since it was first developed by the great classical economists such as Adam Smith, David Ricardo, and Karl Marx the concept of value has tended to be perused primarily from a production perspective. Aligned with this approach value is viewed principally in terms of the creation of tangible economic outputs, that is value added, through material conversion of resource inputs into physical products. Conceptions of value from a consumption perspective recognise the range of tangible and intangible attributes of products considered by consumers in meat purchase decisions that provide utility. In addition to price, other factors that form a product's total utility value are influential in consumer behaviour (Sheth, Newman, & Gross, 1991). A broader conception of the benefits and sacrifices perceived by consumers, embraced by the concept of added value, is applied to overcome previous conceptual limitations. Assumptions about the differing forms of value exchanged in meat marketing systems are made explicit to avoid confusion and contradictions between them. Integrating overlapping insights from agribusiness, food marketing, marketing management and business history distinguishes between each form, specifies the resource capabilities required to transform forms of value and provides operational definitions for this study.

Rationale for Selection of Critical Cases

To examine how resource interdependencies and constraints shape patterns of marketing organisation and value delivery across Australian meat value chains, beef and chicken meat were selected as critical cases for comparison. These two product categories in the retail meat segment are worthy of examination for several theoretical and empirical reasons. The first reason relates to value they contribute to the Australian economy. Australia's beef and veal cattle production is worth \$6.9 billion annually. In 2003-04 Australian beef exports were valued at \$3.6 billion, 3.5 per cent of merchandise exports, and domestic consumption of beef was valued at about \$6 billion (Australian Bureau of Statistics, 2004b). Second to beef, the chicken meat segment of the meat industry contributes \$3.6 billion to the Australian economy annually and records about \$2.5 billion in retail sales each year (Rural Industries Research and Development Corporation Australia, 2004). In volume terms, chicken is the most popular fresh meat sold through foodservice outlets (BIS Shrapnel, 2004). The second reason relates

to their practical importance as major sources of food in the Australian diet. Both products have emerged the dominant meat categories in Australian retail market¹. This trend is mirrored in countries such as the US. In Australia beef has traditionally enjoyed pride of place at mealtimes due to its abundance and low price.

Despite receiving accolades as a 'strong international performer' Australian beef has held modest shares of individual foreign markets, whilst increasing its overall dependence on these markets relative to the domestic market. Where Australian beef has dominated imports in overseas markets, these have been the low quality, low value segments. Unlike chicken or pork, problems with quality, efficiency and limited value adding activity have been singled out repeatedly as issues of concern in red meat segments. In the beef and sheepmeat categories, less than one per cent of production is estimated to be processed into higher value added products (House of Representatives Standing Committee on Industry, 2000). Comparison of aggregate overseas sales with those distributed domestically masks the eminence of the domestic market as the single largest one for Australian beef. Total sales to foreign markets account for two-thirds of Australia's total beef production. Although, the domestic market alone represents the remaining third. Much of the preoccupation with beef, like other red meats, is attached to foreign earnings generated from exports. Academic interest has echoed this national obsession and created a vacuum in respect of other meat product categories.

To redress this imbalance, chicken is selected for theoretical as well as practical reasons. Theoretically, the case of chicken meat provides a contrast to beef in many respects. Beef has exhibited a sustained dependency on overseas markets while the majority of sales of Australian chicken meat are in the domestic market. Exports account for a small proportion of total production. The beef marketing system has operated in a loosely connected fashion with arm's length trading between links in the value chain. In contrast, the modern chicken meat marketing system is highly integrated and connected by contracts and long term preferential supply agreements. Whereas successive government controlled authorities have provided marketing support and representation for divergent beef interests, the coordination of chicken meat marketing has been controlled internally through voluntary organisation.

¹ Retail markets for meat in Australia include supermarkets and grocery stores (5110), takeaway food retailers (5125) and non-petrol sales of convenience stores of selected petrol stations, fresh meat, fish and poultry retailing (5121), and specialised food retailing (5129). These outlets account for the majority of meat sold in Australia are part of the ANZSIC retail trade division (Australian Bureau of Statistics, 2004a).

Modern marketing of chicken meat in Australia developed much later than beef and is attached to an intensive production base unlike beef's extensive cattle production and processing elements. Another theoretically important dimension is the sizable, recurrent foreign investment in the beef value chain. Foreign ownership in the Australian chicken meat segment has been confined to fast food retail outlets operating franchisees like KFC. Together, the resource base and infrastructure of the chicken meat marketing system has been better equipped and its coordination mechanisms aligned to deliver a uniform quality product. The shifting consumption patterns and retail market shares warrant the critical comparison of these rivals in the butcher's shop window, supermarket meat case, and at takeaway food counters.

Methodology

A comparative historical methodology was adopted to examine the key changes and continuities in the process of value delivery in Australia's beef and chicken meat segments. The historical grounding of the research problem and the major gap identified in the literature required the methods, sources and analytical techniques of the historian. Application of historical methods in marketing was appropriate since description and analysis of previous events and conditions provided insights into the origins and patterns of organisation, activity and change in each meat marketing system (Savitt, 1980). This methodological approach allowed the researcher to use multiple sources of data in order to examine events in their full context and apply a range of techniques for analysis and synthesis (Elton, 1967; Fullerton, 1987). While historical research aims to understand the probable cause of events and achieve broad generalisation, such generalisations are subject to revision where exceptions are uncovered (Elton, 1967; McCullagh, 1984). To explain anomalies and build a theory to fit the data historical methods were used to search for patterns of behaviour in order to reveal 'what really happened' (Kantrow, 1986; Savitt, 1980; Smith & Lux, 1993). Use of historical methods enabled the researcher to link and fit facts together and to present them in a way that represent the interdependent nature of events (Elton, 1967; Kantrow, 1986).

The comparative dimension of the research was justified on theoretical as well as practical grounds. As detailed previously in this chapter, the cases were chosen on the basis of contributions they could provide for theory building to examine the effects of marketing organisation in shaping patterns of value creation and distribution in Australia's meat marketing systems. For that reason case selection was not based on a random sampling plan

(Eisenhardt, 1989). The significance of the research problem to Australia's meat industry and the theoretical rationale for selecting these two segments was indicated from reviewing academic literature and trade publications on the global meat trade, focusing on Australia's major meat segments. This decision was also confirmed after attending an international industry conference, *Beef 2003*, from 26 April to 2 May 2003, talking to delegates about the significance of the research problem and question. In addition, a research scholarship from Australia's major organisation funding off-farm research in the red meat industry, MINTRAC, also gave support from the industry as to the practical importance of the case selection. Overall, this preliminary review supported the need to: a) delineate segments of Australia's meat industry, b) apply a comparative historical methodology, and c) analyse changes and continuities in the process of value from a food marketing system perspective

Historical Method

The primary research method applied to examine the underlying process of value delivery in Australia's two meat marketing systems is the historical method. This research method is the primary approach taken by economic historians, in related business history disciplines and in the subset of marketing history research. While the specific data sources, units of analysis and analysis techniques differ between researchers, the method is based on the assumption that 'historical phenomena can be rich and complex and that they can best be understood by investigating the time(s), place(s), and context(s) in which they arise and develop' (Low & Fullerton, 1994: 174). The fundamental objective of historical research is to establish accurate accounts of social phenomenon through a careful consideration of all relevant available data. The potential for biases that may taint analysis and interpretation of historical data is always present. Historical research is prone to conclusions based upon limited data (Kahneman & Tversky, 1973), be overly vivid (Nisbett & Ross, 1980), or place disproportionate authority and weight on evidence obtained from elite respondents (Miles & Huberman, 1994). However a number of methods have been used to minimize these potential biases. Firstly, the wide availability of data to the public makes it easier to falsify misguided interpretations. Secondly, procedures that comprise the historical method are designed to obtain conclusions based upon multiple sources of data, rather than upon preconceived views. Thirdly, techniques for comparative analysis which are applied to interpret and synthesise the data ensure thorough analysis of all data (Eisenhardt, 1989). These techniques are discussed in the section dealing with data analysis techniques used. In the following section a full description of the data collection methods and data sources is provided.

Methods of Data Collection

Selecting a topic to be studied from a historical perspective depends upon the availability and access to sufficient archival records and other relevant data sources (Brooks, 1969; Fogel & Elton, 1983). In this research, initial investigations of data sources to determine the type, quality, quantity, location and availability of material were made in the early planning stages of the research. To make this assessment, the researcher consulted a range of local and inter-State library databases, consulted with librarians and her supervisor. Over the course of collecting the data the researcher located appropriate archival sources and noted important factual information where appropriate. As recommended by Gottschalk (1969) notes are considered sufficient when collecting evidence in historical research. Where the source material was judged important, where possible, copies of relevant articles were made and exact quotations were transcribed for further analysis (Gottschalk, 1969).

The aim at this stage was to correctly evaluate the authenticity of documents and exclude all inauthentic evidence (Gottschalk, 1969). Referred to as the process of ‘external criticism’ by historians, this stage involves determining the author of each document and where, when and under what circumstances it was written (Shafer, 1974). The three steps of external criticism as specified by Langlois & Seignobos (1898) were followed, these are: (1) *textual criticism* – examining documents to determine if they are originals or the best copy available; (2) *investigation of authorship* – determination of who wrote the document, commissioning or authorizing bodies, its origins and date of publication; (3) *classification of sources* – verified documents are arranged according to whether they were primary or secondary sources. The distinction between primary and secondary sources is another useful classification for establishing a document’s authenticity.

Sources of Historical Data

To construct the historical narratives of patterns of marketing organisation and value delivery in each segment, primary and secondary sources were collated. Primary sources are eyewitness accounts of events that can also be based on audio or video recordings. Documents that are based upon secondary sources are testimony from those who were not present at the time of the event of interest and are a presentation of their interpretation of primary sources. Even though the testimony of secondary sources is not authentic, it often provides corroboration or adds missing details that are consistent with the testimony of primary sources (Golder, 2000). Primary sources were arranged into three categories –

archival records and documents, corporate communications, and media reports. Archival sources analysed comprised government parliamentary records, policy documents, organisational records, statistical yearbooks and survey data. Corporate communications included internal documents such as strategic marketing plans, market research reports, newsletters, annual reports, presentations and promotional materials such as press releases, advertisements, labels and packaging. Media reports and documents - radio and television reports, magazine and newspaper articles - produced by external agencies were also analysed to verify information from other primary sources.

Secondary data was sourced from statistical databases, published books, articles and pamphlets and unpublished theses. Statistical data was sourced from industry associations, government departments and agencies, international agencies and consultancy reports. Each source of evidence was critically evaluated following guidelines provided by Golder (2000) to ascertain the authenticity and credibility of the evidence. Despite these internal validity checks, reliance on these sources still presented difficulties and limitations. The primary difficulty faced in reconstructing these histories involved analysis of reports written by non-marketing professionals. Particularly in government technical reports, economic efficiency criteria were firmly applied in the evaluation of marketing functions and services. This observation provided an insight into the value orientation of these authors and their sponsor organisations. Two procedures were applied to verify the factual accuracy of the historical information in the in-depth cases. Data from the different primary and secondary sources described above were triangulated to substantiate facts where possible (Eisenhardt, 1989; Keep, Hollander, & Dickinson, 1998; Miles & Huberman, 1994). Informal interviews were conducted with a range of participants representing various groups in both segments – farmers, veterinarians, scientists, supporting service providers, peak industry bodies, government agencies and departments, and companies as listed in Appendix one. In this research data from the interviews served to verify and supplement the archival sources in order to achieve data triangulation. They were not a primary data source. Where explicit reference is made to specific information obtained from the interviews presented in the cases, these are cited and fully referenced. As interviewees provided a relatively standard account of ‘the facts’ each of these occurrences is not listed individually in the body of the thesis. Second, drafts of cases were given to participants to corroborate reporting and sequencing of facts (Schatzman & Strauss, 1973; Yin, 1994). This review did not produce any substantive changes or revisions.

Methods of Comparative Analysis

Analysis of the case histories followed a two step process based on procedures for analysing and interpreting historical evidence and methods of case study analysis (Eisenhardt, 1989; Golder, 2000; Miles & Huberman, 1994; Patton, 1990). The first step applied procedures for within-case analysis and the second step applied techniques of cross-case analysis. This is the usual sequence for comparative analysis of cases (Miles & Huberman, 1994; Patton, 1990). In the first step, narrative histories of the cases were written focusing on the concepts of interest specified in the conceptual framework detailed in chapter two. A major advantage of using narrative to present the analysis and interpretation is that it enabled communication of 'a rich understanding of events, especially when the evidence collected is primarily qualitative' and links together events in such a way that cannot be achieved by use of chronologies alone (Golder, 2000: 161).

The sequencing of events and changes in the concepts of interest was explicitly described in each narrative (Abbott, 1990), arranged into major phases inductively using the technique of periodisation (Hollander, Rassuli, Dix, & Jones, 2003). Description of relevant events, conditions, concepts and participants' roles in each phase were organised around the important conceptual components specified in chapter two: 1) product market conditions, 2) mechanisms for coordinating marketing functions, and 3) overall organisation and functioning of the meat marketing system, to aid comparative analysis (Hartley, 1994). This broad scheme allowed classification of factors suggested by existing literature and the development of new thematic categories emerging from the research (Eisenhardt, 1989). Classification of factors enabled the empirical validity of existing concepts to be assessed and their definitions to be refined, so that available evidence from diverse sources converged on a single, well-defined concept for each (Eisenhardt, 1989). Continual clarification of operational definitions enhanced the empirical validity of the concepts, providing a solid foundation to search for associations between categories within each case (Eisenhardt, 1989, 1991; Perry, 2000).

Following the logic of replication, a priori and emerging relationships between concepts were continually verified by assessing the fit between the concepts and the evidence within each case. Following completion of the written narratives, feedback from participants at organised seminars was obtained to verify the factual accuracy of the cases (Schatzman & Strauss, 1973; Yin, 1994). This feedback did not recommend that any major revisions to the content of the cases were necessary. Refinement of the cases based on this review produced condensed versions, which are presented as chapters three, four, five and six in this thesis.

The second step, cross-case analysis, continued the analysis from where the stand-alone cases ended. Cross-case analysis focused on finding explanation for why differences were found and why or why not relationships held (Perry, 2000). Two procedures were adopted to search for cross-case patterns in the data by examining it in several different ways. These techniques enhanced the accuracy and reliability of the emergent theory to gain close fit between theory and data whilst improving the chances of discovering novel findings (Eisenhardt, 1989). The first procedure involved selecting dimensions of concepts and then searching for within-group similarities and inter-group differences. Matrices were used to compare several categories at once. As discussed in the following sections, this process revealed important associations in phenomena between the cases. The second procedure involved listing the similarities and differences in thematic categories and patterns across the cases to reveal new and unexpected categories, concepts and dimensions (Eisenhardt, 1989).

As Eisenhardt (1989: 546) explains, ‘the process of building theory from case study research is a strikingly iterative one’. To enhance the validity, generalisability and theoretical grounding of the emerging theory, emerging concepts, relationships and findings were compared to existing literature (Eisenhardt, 1989; Hartley, 1994). The researcher consulted a wide range of literature to capture perspectives that were similar to, and those contradicting the findings. As analysis unfolded, initial themes, concepts and relationships between factors emerged. Next, the emerging typology was systematically compared first within and between cases to assess the fit. Inconsistencies and variations were reconciled through synthesis and refinement. This produced a holistic explanation for the findings presented in chapter seven.

Contributions of the Research

The major contribution of this research is the development of a typology of modes of value delivery in Australia’s two key meat marketing systems. As Hunt (1983: 349) notes a typology is a scheme for classifying phenomenon that is often ‘the first step in theory development’. The typology is based on the different types of responsiveness observed in meat marketing systems – passive or active, and the locus of control over coordination mechanisms – external or internal. Together these two elements are combined to create four types of value delivery modes for Australia’s meat marketing systems that are aligned with the major form of value exchanged in each. These four modes are – inactive, reactive, submissive and proactive. The profiles fit distinct phases of the configuration and reconfiguration of Australia’s beef and chicken meat marketing systems. Each of these

phases is discussed in detail in the penultimate chapter of the thesis. This typology makes a number of important contributions to theory and practice. Firstly, it makes a clear conceptual distinction between active, market oriented meat marketing systems and passive, market dependent ones. The burgeoning literature on the causes and consequences of being market orientated has focused on the active profile. In doing so, the features and implications of being dependent on markets are not appreciated. Secondly, the typology relates the different types of market responsiveness to the locus of control exercised in Australia's meat marketing systems to build a conceptually rich and complete set of modes of value delivery.

Thirdly, in conceptualising meat marketing systems as mechanisms for coordinating the functions that deliver value their overlooked roles are brought to the fore. Comparative analysis of their features over time demonstrated that organisations that maintained their investment in these mechanisms and aligned them retained control of the value chain. This was demonstrated in the case of Australia's chicken meat segment where quality assurance was underpinned by investments to develop the information capabilities required to meet changing market requirements. Further, continual investment in market intelligence capabilities required to construct a system that could interpret consumer preferences formed the critical element of the marketing infrastructure. Although, reading market requirements was insufficient, to be market oriented participants were obligated to articulate this knowledge in the assortments of value delivered to consumers.

For practitioners the typology offers a tool to analyse patterns of marketing organisation and their impacts on forms of value exchanged in meat marketing systems. The conceptual framework presented in chapter two permits systematic examination of these components and demonstrates how they affect the organisation and functioning of meat marketing systems. This in turn enables organisations to locate their role in shaping each coordination mechanism while also allowing them to detect where the locus of control over each mechanism resides. The historical approach enables changes and continuities in product category images to be detected and related to the specific investments made to influence them over time. The reliance on generic promotion in the case of beef is linked to the slow development of mechanisms to coordinate supply and guarantee quality which discouraged firm specific product and brand promotion by cattle producers and beef processors. Supermarkets and fast food chains invested heavily in these integrated marketing communication activities to capture the rewards from their investments in integrated procurement and information systems that assure product quality. Conceptualising a meat marketing system as linkages of interdependent organisations, the findings demonstrate how shifts in the balance of power

between participants in the value chain and those outside can transfer control of marketing coordination mechanisms and alter the dominant forms of value exchanged.

Organisation of the Thesis

To understand the dynamic processes of value creation and distribution in Australia's two major meat marketing systems and how the shifting organisation of marketing shaped them, this thesis is organised into seven chapters. Chapter two presents a review of prior research, positions the central research question, and constructs a conceptual framework for empirical inquiry. Chapter three details the configuration of the Australian beef marketing system from its early origins up to the crisis in the mid 1970s. Chapter four presents the second part of this in-depth critical case study focusing on the reconfiguration process from 1975 to 2002. Chapter five documents the configuration of Australia's chicken meat marketing system from its early origins in the 1950s to 1979. Chapter six continues the second in-depth case study of the reconfiguration of this meat marketing system from 1980 to 2002. In chapter seven methods comparative analysis are applied to reveal the similarities and differences in patterns of marketing organisation and value delivery between the two systems. The findings are synthesised to form a typology of modes of value delivery that explain how resource constraints and interdependencies drive patterns of marketing organisation and value delivery. Chapter eight presents the major findings and conclusions drawn from this research, including the implications for managers and public policy makers and suggestions for future research.

Chapter Two: Literature Review & Conceptual Framework

Introduction and Outline

This chapter examines the interdisciplinary research on patterns of marketing organisation in food value chains and the effects on the delivery of value to consumers. Review of prior studies in agribusiness, food marketing, marketing channels, macromarketing and business history reveal differences in foci, research methods and conceptualisations to study these phenomena. The first difference relates to the scope of their focus. Most research on the structure and functioning of food marketing channels (or food value chains) focus on a limited number of discrete elements contained in the internal political economy of buyer seller relationships. Contributions from macromarketing and business history broaden this perspective by contextualising the marketing environment. This offers a holistic view of the interactions between participants in food value chains, their service providers, and the institutions that support the functioning of food value chains embedded in their environments.

The second major difference relates to the time frame of the research. Studies aiming to offer advice to marketing managers of individual firms are cross-sectional in design. Consequently they do not reveal changes and continuities in marketing organisation or patterns of value delivery over time. On the other hand, studies with a longitudinal design and those using historical methods suggest an evolutionary pattern in organisation, but are limited in their engagement with the effects on value delivery for participants in the value chain and for consumers. The third difference relates to conceptualisations of value and the process of delivering it to consumers. Differences in meaning and emphasis on the activities contributing to deliver value in food value chains are identified through interrogating and integrating the major contributions to this debate. From this review three main forms value embodied in meat are discussed and a set of defining criteria and prerequisite conditions are given for each.

Across the research streams mechanisms are identified that coordinate the value delivery process in meat value chains. What is missing from this literature is an explanation of how these coordination mechanisms connect and function together to structure marketing organisation. Moreover, it is unclear how their alignment shapes the value delivery process in a meat marketing system over time. This gap is expressed as the central research question tackled by this study.

As previously stated in chapter one, Australia's red meat sector has struggled to develop added value offerings in order to capture a share of high value market segments domestically and internationally. Some of the obstacles, like quotas and health restrictions, are unavoidable. But, as the Senate Rural and Regional Affairs and Transport Committee (1997: para 6.81) reported: 'difficulties the industry makes for itself in dealing with overseas markets, such as a lack of unity and cooperation in the industry, can be overcome with some effort by all the parties concerned'. By contrast, the chicken meat sector is touted as an exemplar of agri-food restructuring in the post-war period (Dixon, 2002; Kim & Curry, 1993). Lack of systematic comparison of the organisation and functioning of Australia's major meat marketing systems has thwarted understanding of how their similarities and differences affect delivery of value to consumers over time.

This study addresses the under-appreciation of relationships between marketing organisation and the processes of value delivery in Australia's beef and chicken meat segments. Specifically, it seeks to address the following research problem at the centre of this thesis:

how does the organisation of marketing activities affect the process of value delivery in the context of Australia's beef and chicken meat marketing systems?

The historically situated nature of the problem facing this sector and the peculiarities of the Australian experience necessitates a conceptual framework that captures the key factors shaping this evolutionary process. Thus the following literature review narrows the focus of previous studies of agri-food marketing, taking a macro oriented approach, to construct a framework of a food marketing system. The main components of a food marketing system are specified and the boundaries are defined to examine and analyse the organisation of Australia's beef and chicken meat marketing systems and how this has affected the delivery of value over time.

Literature Review

The study of food marketing systems and how their components are organised and function to deliver value to consumers span several disciplines. Each discipline has approached the phenomenon in different ways due to the foci of their analysis and can be divided into two major groups. The first group takes a static, micro perspective to examine the relations between participants in food value chains. The second group takes a macro perspective to examine the interactions between participants both in and outside the value chain in the context of their marketing environment. Contemporary treatment of food marketing focuses

on the former approach. Studies taking the latter approach are holistic and incorporate the environmental influences on the evolution in organisation of food value chains that constitute a food marketing system.

Empirical studies in the first group focus on relationships between buyers and sellers, commonly wholesalers and retailers and manufacturers and retailers, as dyads in marketing channels. These studies adopt a cross-sectional research design to examine the internal political economy of marketing channels from an economic efficiency perspective (Corriveau & Tamilia, 2002; Frazier, 1999; Stern & Reve, 1980). Explanations of these marketing channels or sub-systems focus on the economic and socio-political factors that influence inter-organisational relations between value chain participants (Stern & Reve, 1980). They do not explicitly examine the role of external participants, like government authorities, competitors, marketing boards and trade associations, in attempting to influence or control channel participants' activities (Pfeffer & Salancik, 1978). Yet, coordination and interaction in food marketing channels cut across sectors. In particular it involves government directed actions and initiatives that may find 'political support difficult to obtain from the traditional parties interested in development investment' (Slater, 1970: 154). Relations between these external participants are also neglected. The micro orientation of these studies and focus on intra-channel variables has directed limited attention to 'questions of the maintenance, adaptation, and evolution of marketing channels as competitive entities' (Stern & Reve, 1980: 53).

A similar focus on inter-organisational relations is taken by empirical studies of agri-food supply chains (Fearne, 1998; Hobbs & Young, 2000; Katz & Boland, 2000). In this subset of studies the unit of analysis is broadened to capture multiple participants in a specific chain. These studies also adopt a static view concentrating on supply chain structures and processes in terms of the efficiency of their procurement and physical distribution activities. In doing so, the changes and continuities in value delivery are neglected. In both groups of studies the macro-environments of agri-food value chains² are conceptualised as the abstract problem of uncertainty about external conditions (Achrol & Stern, 1988). Details of the particular events and environmental factors which influence their organisation and functioning over time are de-contextualised and underappreciated. Meat value chains are embedded in distinct, dynamic environments. Both internal and external participants seek to exercise power and influence other participants' activities to manage their dependence on the environment for critical resources (Achrol & Stern, 1988; Pfeffer & Salancik, 1978). To overcome the internal,

² Use of the broader term "value chain" incorporates the concepts of a marketing channel and supply chain. No distinction is made in this review of the particular differences between the terms marketing channels and supply chains, but their distinct foci are recognised.

dyad-level micro focus of prior studies of agriculture based food value chains and achieve a holistic understanding of the effects of marketing organisation on value delivery the roles of external participants and environmental factors need to be explicitly included.

Studies in the second group that adopt a macromarketing perspective explicitly incorporate and describe these 'external' elements in their analysis. Breyer's (1931) analysis of 16 non-agricultural commodities in the US during the 1920s combines aspects of the commodity and institutional approaches to marketing. In two chapters dedicated to meat Breyer documented this system's main components, functioning and the specific conditions which shaped its organisation. Description of demand and supply conditions, marketing channels, roles of middlemen and provision of marketing services preoccupy the study. Product and market conditions are demonstrated to be influential in shaping the organisation and operation of this meat marketing system. Two product characteristics are highlighted: meat's highly perishable nature and the variance in quality between carcasses and among different cuts or parts of a carcass. Several distinctive features of demand are also highlighted: seasonality, price, preferences of specific segments and the shift to substitute foods.

As a framework for comparative analysis of marketing systems Breyer (1931) indicated several key components: participants (primary channel members, facilitating agencies and specialist firms), context (type of product and related market conditions), marketing activities (or functions) and marketing organisation (marketing machinery) that arises to perform these activities. For Breyer (1931), context is of utmost importance and explains variations in organisation and functioning of systems 'caused largely by the wide variations in the character of the commodities and the nature of the market conditions' (Breyer, 1931: 1). Broader environmental factors like regulations and socioeconomic conditions are also weaved into the analysis to demonstrate how participants respond to these issues and collectively how value chains adapt to the marketing system environment.

Like Breyer, historical studies of UK and US business development have tended to treat meat as an industrial product of the corporation - the 'modern form' for organising value creation and distribution activities (eg Chandler, 1990; Porter & Livesay, 1989; Wilkins, 1992, 1994). Compared to other consumables meat attracts considerably less attention due to its uneasy classification as both an industrial raw material input and a food product. Distinct classifications of meat as a perishable commodity, semi-processed food item and convenience good are conflicting and unhelpful. Business historian Mira Wilkins (1994) categorises meat as a convenience product along with other food and drink categories – canned and frozen foods, sugar confectionaries, alcoholic beverages and soft drinks. Brands, it is argued, are

vital to convenience goods since they reduce uncertainty for these frequently or repeatedly purchased goods (Wilkins, 1994). However, unlike these categories, brands have been less prevalent in meat product categories. Like other agri-food products notions of value in meat's case is based on the flawed assumption that it is a homogenous raw commodity incapable of product differentiation or reaching the status of a branded product³. While the idea, role, salience and control of brands have differed across food product categories their existence and function in the marketplace cannot be denied. If certain product categories, like meat, did not follow the typical path of progress towards 'multibrand' status what reasons account for this? Research in business history has been largely confined to studies in US and UK settings. There is a corresponding paucity of studies outside these western economies. This underrepresentation is acute to Australia which differs in terms of market size, geography, distance to overseas markets, economic structure, social and cultural history, as well as the role and organisation of marketing over the past 250 years (Ville & Merrett, 2000).

Value Delivery in Context: Conditions Shaping Australia's Meat Industry

Australian business history, in general, and of the meat industry, in particular, mirrors the dominant approach. Accordingly, many gaps in understanding the interplay of marketing and consumption are absent from accounts of Australia's economic and business development. Historians widely acknowledge that by the 1860s the development of Australia's colonies was dominated by large scale expansion of pastoral and mineral production. Minimally processed raw material outputs from these rural industries - wool, wheat, mutton, gold, coal and base metal - were shipped to Britain. Funds from the mature imperial economy largely financed the assets and infrastructure to cultivate these natural resources. In spite of this relationship of dependency between Australia and the UK, Butlin (1964: 5) argues that:

the critical decisions in capital formation and in the orientation of the economy were taken in Australia, by Australians and in the light of Australian criteria. Indeed, one of the implications of Australian experience appears to be that too little regard was paid to external factors and that parochial, long-term and non-market criteria led to eventual major miscalculation.

Further, Butlin (1964) contends that in contrast with the other new world countries' early economic growth, rapid urbanization outpaced rural development in Australia. These initial

³ Wilkins (1992) affords the same classification to apples, oranges, gourmet coffee and coal, as to meat. Yet in the same study of the role of trademarks in the growth of 'modern organisation', Wilkins (1992) cites two prototype meat packing companies, *Swift* and *Armour*, that have relied on their company names to market meat products over long distances. Likewise, the classification of apples and oranges, coffee, coal as homogenous commodities can be contested with contrary evidence (Strasser, 1995).

starting conditions played a clear role in shaping not only the nature of enterprise in Australia, but also the level of investment in the marketing infrastructure. In their study of emergence of large scale enterprise in Australia, Ville & Merrett (2000) and Merrett (2002) showed that foreign-owned firms were amongst the largest operating between 1910 and 1964. This analysis identified several key differences in the pattern of business development in Australia compared to the major western economies. These are smaller company size, the dominance of a small number of companies in several industries and their inefficiency. Several environmental factors are suggested to explain this divergence: high trade barriers, ingrained organisational structures, and simple business skills and technologies. The authors argue that the dense, complex system of marketing services – merchanting, finance, insurance, warehousing and shipping – supporting early Australian businesses were inappropriate for the ‘modern form’ of industrial enterprise (Ville & Merrett, 2000). Unlike their overseas counterparts, Australian firms were less likely to integrate forward or backward along the marketing channel or to leverage operational efficiencies through mergers and acquisitions. Some notable exceptions were the foreign subsidiaries of Australian domiciled multinationals.

In a related study Merrett (2002) examined the low ratio of outward foreign direct investment (FDI) by Australian firms before 1970 and identified a number of conditions preventing most from establishing a presence in overseas markets. These were: natural and artificial protection, a small domestic market, inefficiency and trade barriers abroad. Furthermore, firms ‘could not or would not’ make necessary investments to compete with foreign rivals in terms of scale or scope. Unable to compete Australian firms typically focused on the domestic market. For firms actively exporting agricultural and pastoral products the study indicated that just a handful engaged in processing or merchanting did so before the Second World War. Joint ventures were most common. The most extensive equity investment overseas by a local meat processor was William Angliss, which established sales offices in London, Liverpool and Glasgow to support in-market distribution in the UK, and a killing works in New Zealand before World War One. Following the general pattern only two of Australia’s agricultural marketing intermediaries known as stock and station agents established offices overseas.

The growing control of marketing rural products by the state and Australia’s relative ‘late start’ in the global market for food are also singled out as reasons to account for the failure to develop capabilities to actively compete in foreign markets. Specifically, Merrett (2002) links increasing foreign control of red meat processing in the 1930s to: the failure of local firms to develop scale efficiencies, the inconsistency in supply, the underinvestment in cold storage and in-market distribution, and the shortage of refrigeration space. The small relative volume

of agricultural produce is also advanced to account for the failure to develop ‘sophisticated’ marketing exchanges like those in London, Chicago and New York.

Research specific to Australia’s meat industry has concentrated on issues relating to labour relations, industrial organisation and the development of pastoral activity and overseas markets. Important studies in the field are unpublished theses by Cutler (1976) on the history of the Australasian Meat Employee’s Union (AMIEU) and Griffiths (2000) on the evolution of state and industry linkages and institutional capabilities as sources of competitiveness in the global meat industry. Ville (2000) maps the role and expansion of stock and station agents in supporting the growth of pastoral activity in Australasia. Duncan (1959, 1962) and Beever (1967) contribute histories of the origins of Australia’s refrigerated meat trade with the UK. Yet, as Cutler (1976: iv) notes in his classic study of the industry: ‘the use of the term “meat industry” can ... be misleading’, given that the industry also involves the processing and sale of pork, bacon, smallgoods, chicken and fish’.

Despite this admission, however, business historians have continued to largely direct their gaze towards the red meat sector⁴. In doing so, they have tended to overlook the fundamental transformation of the Australian meat industry since the early 1970s, which has been characterised by the rapid displacement of beef by chicken meat on the nation’s dinner tables. As a theoretically rich setting that features salient differences between domestic and export trades (Cutler, 1976), turbulent economic conditions and power relations, it is unsurprising that the red meat sector has been the focus of attention. However, important differences exist across meat product categories and their major markets. Griffiths (2000) focuses his analysis from the 1970s but, completely overlooks the growing importance of chicken meat in the Australian diet. This stems from the customary portrayal of the red meat sector as ‘export-driven’ and thus a major contributor to the economy. But this picture obscures the process of organising marketing functions and activities, and the patterns of value delivery in Australia’s two major meat segments.

⁴ Important exceptions to this red meat focus are Bowden (1996) history of the Bacon Factories’ Union of Employees and Dixon’s (2002) sociological study of the changing cultural meaning of chicken in the Australian diet.

Evolutionary Patterns in Food Marketing Organisation

A number of empirical studies outside Australia have traced the evolutionary dynamics of food value chains, particularly fresh produce, in developed and developing countries. The study of patterns of organisation in food marketing systems originated from the need to understand their developmental process to inform public policy and practice to facilitate their operation and modernisation (Abbott, 1986, 1987; Slater, 1970; Taylor & Omura, 1994)⁵. From these studies a developmental pattern of three to four phases is discerned. As a country's economy develops the role of food marketing changes (Kaynak, 1999; Mittendorf, 1986). Each phase in this evolution is related to a set of political, economic, socio-cultural and technological conditions in the marketing environment of the country that precipitates change.

The first phase, common in least developed nations, is characterised by traditional, small scale food distribution in local areas. Average annual consumer income is estimated to be US\$250 based on 1972 prices (Kim, 1989). Wholesale and retail activities are not distinct and food marketing takes place at 'bazaars'. There is no government regulation of food marketing and information is the most important resource to participants. Indonesia and Laos are placed in this group (Kobayashi, 2000). Europe's town markets from the fifteenth century up to the end of the nineteenth century were the centres of food exchange, encouraging 'movements towards concentration, then dispersion, without which a somewhat accelerated economic life could not have been created, either in Vietnam or in the West' (Braudel, 1973: 391).

With further growth and specialisation there is a shift to the second phase. Well-established grocery stores and specialist food shops dominate the value chain in this phase exemplified by many European cities during the mid twentieth century. Consumer income on average is between US\$400-600 based on 1972 prices (Kim, 1989). Countries which are classified in this phase, like Thailand and the Philippines, have clear distinctions between wholesale and retail activities formalised in law. Their governments also regulate wholesale markets. Countries like China and Russia are in an intermediate stage (between first and second) as traders continue to operate at wholesale and retail markets despite regulation designed to distinguish between them. The third phase includes Japan and Korea where more than half of the fresh produce moves through wholesalers. Wholesale markets serve as price discovery institutions. The final third phase features highly developed integrated food retail chains serving cities with higher consumer incomes of between US\$460-850 based on 1972 prices

⁵ The practical focus of this research is based on the idea that coordination of food marketing channels plays an important role in economic development, see Slater (1970). For a review of the role of food marketing infrastructure in economic development see Abbott (1986) and Mittendorf (1986).

(Kaynak, 1999; Kim, 1989; Mittendorf, 1986). In this phase wholesale markets move out of city centres and their share of fresh produce and meat declines as vertically integrated supermarket chains adopt direct sourcing. Countries in this phase, the UK, US, France and Germany, feature fierce competition between large supermarket chains to procure and merchandise fresh produce and meat products (Hughes, 1994; Burch & Goss, 1999; Ailawadi, 2001; Hollingsworth, 2004)⁶.

This developmental pattern serves as a useful tool to analyse the phases of food marketing in urban areas of different countries. However, its plausibility is questionable due to the coexistence of different marketing channels in various developed and developing countries. For example, meat products are sold in chilled and frozen pre-packaged form in supermarkets and butchers in western markets. In many Asian countries wet markets remain as the main outlet for buying live animals and animal products (Food and Agriculture Organization of the United Nations, 2002). Specific product market conditions such as consumer demands and natural resource constraints are powerful factors shaping the organisation and functioning of food value chains (Breyer, 1931). Thus the key events and forces in the development of Australia's meat marketing systems⁷ need to be studied systematically to account for the way meat value chains are organised and evolve over time.

Forms of Organising Meat Value Chains & Effects on Value Delivery

Different forms of organisation arise within and between sectors of meat value chains to coordinate activities and minimize disruptions in flows of information, physical and financial resources. Previous research demonstrates that the organisation of marketing functions, activities and participants' roles are dynamic. Persistence of forms of organisation and participant roles relate to features of the local marketing environment such as participant's socio-cultural characteristics, relative labour and capital costs and the political economy of marketing channel decisions (Kaynak, 1999; Moll, 1986; Slater, 1970). Each factor influences the availability of funds for modernisation and maintenance to improve how marketing functions are coordinated and operate together (Moll, 1986). This suggests that the marketing

⁶ Slater's (1970) market integration thesis, based on the experiences of three less developed economy's cities, adds to this evolutionary model. He argues that economic development depends on successive stages of horizontal and vertical coordination of food marketing channels driven by retailers, but supported by public facilitative changes like improved transport facilities, extension services and timely market intelligence.

⁷ These are summarised in Appendix three.

system's resource profile determines participants' ability to invest in mechanisms to coordinate marketing activities.

As an overarching theoretical perspective resource dependency theory offers a rationale to explain how participants seek to influence and control resources through interactions with each other and their environment manifest in patterns of organisation (Kaynak, 1999; Pfeffer & Salancik, 1978). Where participants lack sufficient internal resources they may seek external sources (eg investors, government agencies, competitors). As a trade-off they sacrifice some or all of their control over marketing decision making to these external interests. Lack of self-sufficiency creates the potential for dependency on external sources controlling the resources (Pfeffer & Salancik, 1978). To overcome dependency organisations in meat value chains aim to control resources that minimise their dependence on other organisations; and control the resources that maximise the dependence of other organisations on them (Pfeffer, 1981; Pfeffer & Salancik, 1978). Thus, the links that are established between organisations are sets of power relationships based on exchange of strategic resources (Ulrich & Barney, 1984). This power is manifested in the ability of one participant to control the marketing decisions of participants at other levels of the value chain. Shifts in power occur when there is a change in a participant's original level of control over their marketing strategy (El-Ansary & Stern, 1972; Stern, Ansary, & Coughlan, 1996).

Following the resource dependency logic, the organisation of meat marketing activities like livestock procurement, product development, and retail distribution is a negotiated process between participants. A particular participant may come to dominate the value chain, controlling and directing marketing activities as the chain's captain or 'channel leader' (Etgar, 1977; Seperich, Woolverton, & Beierlein, 1994; Stern et al., 1996). In most western countries, especially the UK and US, there is evidence of a shift in the locus of power in food value chains from processors to national supermarket chains (Hughes, 1994). Researchers examining the rising concentration of store ownership and sales in food retailing argue that these chains or 'multiples' have led the reconfiguration of food value chains since the 1980s (Shaw et al., 1989). Similar trends are reported in Australia, albeit at a slower pace (Humphery, 1998; Pritchard, 2000).

Changes in the marketing environment including fragmentation of food markets, stagnant growth in consumption, intense competition and availability of new technology reshaped the context of relations between food retailers and their suppliers. Retailers responded by introducing initiatives with suppliers to reduce impediments to operational efficiency and effectiveness. Adoption of computer based technologies to analyse store sales and automate

information flows between retail buyers and suppliers underpinned the centralisation of procurement and distribution. The centralisation of these functions eliminated separate wholesaling organisations. Through aggressive acquisitions and mergers of smaller stores the larger chains achieved the economies of scale required to reduce their costs and maintain investments in technology, advertising and joint product development with manufactures. At the same time, retailers were diversifying their product ranges and expanding store sizes. They also erected barriers to prevent many smaller suppliers from gaining shelf space and made it more difficult for larger or more established suppliers to introduce new products or retain weak ones (Shaw, Burt & Dawson, 1989). These practices continued into the 1990s and early 2000s under the banner of Efficient Consumer Response (ECR) which takes a customer-focus to programs designed to deliver higher quality, better service and greater variety at lower cost (Fearne & Hughes, 1999; Soucie, 1997). In agri-food marketing a parallel stream of literature terms the phenomenon the industrialisation of agriculture (Goodman, Sorj, & Wilkinson, 1987; Gregor, 1982)⁸. Here retailer dominance is associated with pressure for product differentiation and dictation of narrow specifications on suppliers. Whether retailers' concurrent focus on procuring low-cost, standardised products and promoting their image creates added value for consumers is also being questioned (Hollingsworth, 2004). This body of research has contributed to understanding the key factors shaping trends in contemporary food retailing and how changes in power relations among food manufacturers and large supermarket chains has affected the delivery of value to consumers. In doing so it tends to ignore participants upstream and neglect patterns over time.

Taking a broader historical perspective of food value chains different forms of vertical and horizontal coordination have been observed. These forms of coordination are designed to create and capture greater value through economies of scale and stronger bargaining power (Galbraith, 1952; McCammon, 1970; Palamountain, 1955). Firstly, there has been a documented shift away from conventional marketing systems to vertically integrated and coordinated ones. Conventional meat marketing systems rely upon the invisible hand to coordinate flows. Auctions and electronic markets are common methods of selling cattle in this type of system (Schaffner, Schroder, & Earle, 1998; Tomek & Robinson, 1990). These systems are characterised by large numbers of diffuse participants demonstrating little or no cooperation and in which no one participant has control (McCammon, 1970). Loosely aligned, autonomous organisations engage in arm's length relationships where price is the only means of coordinating exchange. Thus buying and selling of livestock and intermediate

⁸ Davis & Goldberg (1957) coined the term 'agribusiness' in the 1950s to denote this process in its formative stages.

meat products are discrete transactions, rather than part of long-term relationships between parties. Closer coordination of marketing activities through vertical marketing systems aims to synchronise marketing flows between points of production and consumption (Corriveau & Tamilia, 2002; McCammon, 1970)⁹.

Meat processors and retailers employ a range of vertical coordination devices. These range from standard purchase contracts with suppliers to ownership of functions backward and forward through vertical integration. Companies like Swift & Co and Armour & Co in the US meat packing sector were among the first to organise their meat processing and distribution in this way in the 1880s (Chandler, 1977). Intermediate arrangements, or quasi-integration, include outsourcing through subcontracting, exclusive or preferred supplier agreements and forms of joint control like strategic alliances and joint ownership like joint ventures (Amanor-Boadu & Martin, 1992; Hobbs & Young, 2000; Mighell & Jones, 1963; Webster, 1992). These forms of vertical coordination are designed to overcome the weaknesses of traditional spot markets where price is an imperfect means to communicate quality information and consumer requirements back and forth along meat value chains. They also aim to reduce the risk and uncertainty due to large fluctuations in demand and supply of stock and intermediate products. In contrast to beef cattle marketing that has relied on externally coordinated auction markets, use of contracting in the supply of live birds was common in Australia and the US by the 1960s (Barkema & Drabenstott, 1995; Conroy, 1962).

As well as vertical integration there is evidence of greater concentration in food retailing in Australia and overseas through horizontal integration (Burch & Goss, 1999; Parliamentary Joint Select Committee on the Retailing Sector, 2001). Firms engaged in meat processing have pursued horizontal integration through acquisitions and mergers vigorously in Australia (Dixon, 2002; Rolfe & Reynolds, 1999). This trend is also evident in the US broiler industry where a few large vertically integrated firms dominate production of processed chicken meat and further processed products (Kim & Curry, 1993). Horizontal integration is also high in the US red meat processing where three large firms dominate cattle slaughtering (Harris, Kaufman, Martinez, & Price, 2002).

⁹ A typology of VMS details the features and differences between forms to understand how participants manage the alignment of marketing functions. There are three main types of VMS in addition to the conventional spot-market system. These are administered, contractual and corporate systems. For a more detailed discussion of the different types of VMS see McCammon (1970) and Stern et al. (1996).

To counter the bargaining power of retailers and processors, Australian farmers have used forms of horizontal coordination more than vertical forms¹⁰. Horizontal integration in the form of producer cooperatives has been common among Australia's dairy, pig meat, grain and horticultural farmers (Helibron & Roberts, 1995)¹¹. Whereas farmers engaged in rearing beef cattle and birds have been reticent to form cooperatives to secure the benefits of horizontal integration. A desire to preserve independence over decision making authority is the major obstacle to growth of horizontal farming alliances, or cooperatives, in Australia (Nitschke & O'Keefe, 1997). Small farm businesses dominate Australian beef cattle production. The majority of specialist beef properties (70 per cent) stocked more than 1 000 head of cattle and almost 34 per cent were on farms that ran more than 5 500 beef cattle (Australian Bureau of Agricultural and Resource Economics, 2003). A smaller number of large pastoral concerns operate as public companies and have greater access to resources to expand their herds.

On a larger scale farmers can pool their resources as part of organised marketing schemes to avoid or minimise external control and loss of authority over marketing decisions. Due to farmers' desire for autonomy, many organised marketing schemes required government assistance or intervention to compel producers to join their marketing boards, to market through them, and to accept quotas on production (Drummond, 1985). Consequently, in the European-peopled dominions of Australia, New Zealand and Canada, a large number of marketing boards – 'quangos' – were legislated. Both mandatory and voluntary forms of organised agri-food marketing need proper expertise as well as the cooperation and support of all members to succeed (Morey, 1959). Parallels and differences between Empire (later Commonwealth) and non-Empire countries in the use of marketing boards are found. But, comparison is made difficult due to the degree and range of powers held by these marketing organisations. As Drummond (1985: 195) explains: 'some could promote; some could market; some could control. Some boards undertook one of these three functions; some undertook two or even three'.

Producer marketing boards also named statutory marketing authorities and growers' committees can perform marketing functions, outsource them, regulate them, or serve a supervisory role. Common aims are to: a) improve and standardise quality, b) minimise costs and maximise returns, c) offset the bargaining power of processors and retailers, d) stabilise the flow of produce to market, e) stabilise prices and income, and f) increase demand (Fleming, 1999; Industry Commission, 1991; Morey, 1959). These goals attempt to reduce

¹⁰ Farmer initiated vertical coordination in the form of strategic alliances is only a recent trend in Australia's red meat industry (Hayes, Malcolm, Watson, O'Keefe, & Thatcher, 1998).

¹¹ For a profile of marketing coordination of agricultural cooperatives in the US see Wissman (1997).

uncertainty in the distribution of value in the chain and are often a substitute for producer cooperatives more common in countries like Denmark.

Australia's first organised marketing schemes were voluntary and focused on supervising internal trade, but were soon joined or replaced by statutory control after the collapse of world markets in the 1920s (Gropp, Hallam, & Manion, 2000; Morey, 1959). While organised marketing schemes have been common in Australia knowledge of their role in shaping patterns of value delivery over time is limited. Prior studies adopt a short term perspective and as such do not examine the changes and continuities in the organisation of these agriculture based food marketing systems (Capie, 1978; Fleming, 1999; Martin & Warley, 1978). Cross-national comparisons can obscure important differences in organisation and impacts on value delivery for specific products. A limited selection of criteria, like efficiency, is used to assess the impacts of organised marketing schemes on value added outcomes. As a result, differences in outcomes like the quality of produce and their responsiveness of organised marketing schemes to changing product market conditions are not assessed.

Mechanisms to Coordinate Marketing Activities

Coordination mechanisms develop to synchronise marketing activities in meat value chains through investments by participants and external authorities. This infrastructure is designed to enhance the flow of information and physical materials to overcome discrepancies in assortment (Alderson, 1978). Coordinating mechanisms direct the flow of conglomerate resources through the transvection channel (or value chain) into meaningful assortments for consumption (Alderson, 1978; Alderson & Martin, 1965). They underpin the delivery of value in agri-food value chains by facilitating all marketing efforts to guarantee the integrity of added value brands from paddock to plate (Barkema & Drabentstott, 1995; Hanf & Kühl, 2005; Streeter et al., 1991). From a review of the literature in agribusiness and food marketing four interrelated coordination mechanisms are identified that support the delivery of branded meat products in food value chains. Each one is discussed in turn and its role is explained. Next, the research question at the heart of this study is stated.

Quality Assurance Systems

The first component of the marketing infrastructure comprises the system-wide mechanisms for assuring meat quality. Quality assurance systems are designed to measure, communicate

and provide a guarantee of meat product quality. They have evolved from vague metrics of commodity characteristics to integrated systems to control and continuously improve quality. As Clayton & Preston (2003: 737) observe, 'grades and standards are shifting from a traditional role of reducing transaction costs in broad commodity markets toward an emerging role as strategic tools for product differentiation and market segmentation'. Modern quality assurance systems focus on processes, rather than outcomes, underpinned by R&D to define and assess the objective indicators of meat quality. These measures form the basis of grade standards that set parameters of meat quality (Bindon & Jones, 2001).

Grading standards and systems serve a number of roles and functions. Firstly, they provide the basis for product differentiation by performing a sorting function. Secondly, by isolating valuable quality characteristics or attributes, they influence the allocation of resources in agri-food value chains (Hennessy, 1995). Thirdly, they provide quality assurances to buyers whether they are marketing intermediaries or end consumers. Fourthly, they facilitate handling and long distance trade (Bockstael, 1987). In long and complex value chains they offer a formal language to communicate quality information between buyers and sellers, thus reducing risk and uncertainty (Alkerlof, 1970). When feedback mechanisms are present these can assist efforts to monitor and improve quality (Hobbs, Spriggs, & Fearn, 2001). Conversely, they can be used as strategic tools to extract revenue and create unequal power for specific participants or sectors of meat value chains (Clayton & Preston, 2003).

As quality is a cornerstone of meat products and brands, systems for assuring quality are vital. The role and dominance of organisations – public and private – in instituting this mechanism affects how value is created and distributed. Empirical research on agri-food product grading and inspection is based largely on descriptive accounts of their development in the US. These studies demonstrate that the USDA was instrumental in setting and enforcing meat grade standards and quality inspection (Clayton & Preston, 2003). Dimitri (2003) traced the co-evolution of quality and inspection standards for fresh produce, grains and meat with the emergence of national markets in the late nineteenth century. Trade in grains, fresh fruit and vegetables over long distances between anonymous buyers and sellers created problems of adverse selection where pricing was based on average rather than actual quality. Disputes over quality were frequent necessitating quality standards to facilitate trade between farmers and marketing middlemen. This contrasted with the livestock and meat trades.

Rapid growth and control of livestock procurement and retail meat supply by the dominant meatpacking companies meant that agreements on quality were easier to achieve and uphold (Addudell, & Cain 1981a; 1981b). Concerns over quality were secondary to the growing

power of the 'beef trust' and motives for monitoring quality through Federal inspections were founded on health and hygiene concerns, rather than disputes over quality attributes. Comprehensive mandatory requirements did not come into force until 1906 following a Federal investigation (Young, 1989). Tightening of meat sanitation standards and inspection authority by the USDA was fuelled by growing public concern over meat quality following the portrayal of unsatisfactory hygiene practices in the popular press especially in Sinclair's novel *The Jungle*.

Australian State and Commonwealth governments have been involved in developing and administering quality standards and systems for livestock and meat products in domestic and export markets. However, unlike empirical studies of their operation in the US, details of the functioning and value of meat grading and quality control systems in Australia take a static snapshot (eg Griffith, 1975; Mullen, 1982; Todd & Cowell, 1978). Several studies have evaluated economic impacts on meat marketing in Australia, especially for beef and pork (Bureau of Agricultural Economics, 1976; Freebairn, 1967, 1973). But, little is known of their role in influencing patterns of value delivery in Australian meat marketing systems over time.

Supply Coordination

Consistency of supply in terms of quality and volume is crucial to build and maintain a positive image and reputation as a supplier or distributor of meat products. By guaranteeing the time of delivery, quality, and volume of supply meat suppliers can establish an identity in a crowded market of commodity producers. Meat buyers in domestic and export markets are willing to pay higher prices to gain these assurances and benefits (Aksoy & Kaynak, 1994; Wortzel & Wortzel, 1981). Meat marketing systems around the world have traditionally used market-based mechanisms, especially price, to coordinate supply and demand (Fearne, 1998). Participants, especially cattle producers and livestock buyers, have demonstrated arm's length relationships using spot market transactions. This has encouraged opportunism in meat value chains as trust is low and information asymmetries exist (Hughes, 1994).

Despite trends towards greater vertical coordination through ownership and contractual relationships in agri-food marketing channels many meat value chains remain fragmented. This reluctance to integrate either forward or backward is grounded in a silo culture prevalent in many food marketing systems where firms prefer to focus on their specific sector (Hudson, 1990). Disjointed and fragmented value chains increase uncertainty and risk as coordination is imperfect. Where meat products are marketed overseas instability is heightened, exposing

primary producers to fluctuations in world markets. Price risks can be mitigated through futures contracts – a forward contracting device that provides primary producers with a low cost method of hedging against adverse price changes (Tomek & Robinson, 1990).

Like the regulation of grading standards and quality assurance systems governments play an active role in controlling meat supply through a number of direct and indirect mechanisms. They can regulate the flow of meat supplies by directly controlling marketing through a single desk selling approach. Unlike other agricultural products meat has avoided monopoly control in Australia, except during wartime when food supply was tightly controlled. Government authorities also apply a variety of tariffs (eg countervailing duties, sliding scales), non-tariff barriers (eg quotas, quarantine restrictions, price support and subsidy programs) and voluntary trade restrictions (eg orderly marketing agreements) on imported meat (Lesser, 1993).

Market Orientation

The third component of the infrastructure is encapsulated by the market orientation construct. Traditionally farmers, co-operatives, meat processors and statutory marketing authorities have focused on production to maximize output (Streeter et al., 1991). Despite developing many technical capabilities to enhance productivity they have viewed markets as vacuums capable of absorbing excess supply. Cattle farmers relied first on stock and station agents to furnish information to base their marketing decisions (Martin, 2000). Many became dependent on government export agencies and chambers of commerce to provide information and knowledge about export markets (Brooks & Rosson, 1982). They also rely on marketing intermediaries like export agents for market intelligence on overseas buyers as well as handling their in-market distribution arrangements. This dependence is pronounced in Australia's beef cattle and meat sales to overseas markets where stock and station agents have held a dominant role (Ville & Merrett, 2000). In contrast, participants located downstream in the value chain (ie retailers and restaurants) due in part to their strategic position have developed a more attuned market orientation. By virtue of their direct relationship with consumers and their ability to access and compile detailed information regarding food buying behaviour retailers are in privileged positions vis-à-vis their suppliers. Their superior access to and use of this market information has shifted the locus of control over marketing agri-food products to the large national supermarket chains (Burch & Goss, 1999; Hughes, 1994).

Simply defined, market orientation refers to the activities involved in implementing the marketing concept (Kohli & Jaworski, 1990). The philosophical underpinning of the market

orientation construct - the marketing concept - has been defined as an ideal or a policy statement (Barksdale & Darden, 1971; McNamara, 1972), a distinct organisational culture (Felton, 1959), or philosophy of business management (McNamara, 1972) that comprises three pillars. These pillars focus on (1) customers' current and future needs and the factors affecting them, (2) the ability of the organisation to generate, disseminate, and make use of superior information about customers and competitors (Kohli & Jaworski, 1990; Slater & Narver, 2000), and (3) the integration of organisational efforts (Kohli & Jaworski, 1990) to create superior customer value (Slater & Narver, 1994).

Based on these foundations, market orientation can be defined as 'the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of intelligence across departments and organizationwide responsiveness to it' (Kohli & Jaworski, 1990). A similar definition is advanced by Narver & Slater (1990: 21), who argue that 'the three hypothesized behavioural components of a market orientation comprehend the activities of market information acquisition and dissemination and the coordinated creation of customer value'. These two widely accepted and empirically applied conceptualisations of market orientation share common components; these are: 1) continually monitoring product market conditions, and 2) responding to changing conditions and adapting responses to particular market segments (Shapiro, 1988). The market intelligence function of an organisation assumes a central role in the process of a) acquiring and generating market information, b) disseminating market information across departments, and c) coordinating and responding to information to create and distribute value (Jaworski & Kohli, 1993; Kohli & Jaworski, 1990). Sustained investment in marketing information systems and information technologies that facilitate sourcing and dissemination of market intelligence is necessary to support and execute a market orientation (Webster, 1992). Practice of a market orientation has been theorised to apply to organisations, industries and economies (Kohli & Jaworski, 1990; Grunert et al., 2002; McCarthy, 1988).

Market orientated behaviour and activities are distinguished in terms of their responsiveness to changing product market conditions. Proactive actions differ from reactive actions (Grewal & Tansuhaj, 2001; Slater & Narver, 1995; Slater & Narver, 1998). Whereas reactive behaviour is a reaction to signals in the marketplace, proactive responses reflect a continuous search for opportunities and experimentation with responses to changing marketplace conditions (Slater & Narver, 1993). Strong inter-functional cohesiveness and a market focus underpin proactiveness which is more representative of a market orientation than reactive behaviour (Atuahene-Gima, 1996; Jaworski & Kohli, 1996; Slater & Narver, 1995). Even though customer orientation is a critical component of market orientation, an exclusive focus

on customers may be detrimental since they are ‘notoriously lacking in foresight’ (Hamel & Prahalad, 1994; Macdonald, 1995). The ‘tyranny of the served market’ may constrain the search for and detection of novel opportunities and threats (Hamel & Prahalad, 1994; Macdonald, 1995; Slater & Narver, 1998). A market orientation affords a broader, long term focus on delivering value to meet customers’ expressed and latent needs by learning from competitors and other aspects of the marketing environment (Grewal & Tansuhaj, 2001; Slater & Narver, 1998, 1999).

Grewal & Tansuhaj (2001) demonstrate that although undesirable reactive actions are more appropriate in situations of unexpected change like economic crises where conditions are novel, unique and infrequent. In these circumstances there is little scope for applying existing knowledge or motivation to learn from the specific conditions that gave rise to the crisis. In these circumstances, organisations require sufficient strategic flexibility that is flexibility in available resources and in mechanisms for coordinating their use to deliver value during and after the crisis when competition is intensified and conditions have changed (Grewal & Tansuhaj, 2001; Sanchez, 1995). This resource slack or strategic flexibility which enables marketing strategies to adapt quickly to changed situations are not expected to benefit meat marketing systems in stable or forecast conditions. Instead deployment of available resources is required so marketing functions are organised to enable proactive responses that drive and deliver value (McKee, Varadarajan, & Pride, 1989). Thus marketing systems require adequate resource flexibility or a buffer from their environments to respond appropriately to changes and reconfigure meat value chains to continue to create and distribute value.

Integrated Marketing Communications

The fourth component of the infrastructure is integrated marketing communications. To raise consumer awareness of and familiarity with their meat products and brands sponsors need to deliver consistent promotional messages to target markets over time (Aaker, 1996a). Building a recognizable and favourable image of a product or brand is a resource intensive process demanding commitment of scarce resources to marketing communications programs such as advertising, promotions and public relations (Aaker, 1996a; 1996b; Capron, 1999). Multiple information sources are commonly used to influence consumer perceptions of meat products and brands. Whereas extensive promotional campaigns are infeasible for many firms, methods such as POS materials, print advertising and word-of-mouth promotion are more commonly used. Use of opinion leaders such as nutritionists and celebrities like chefs and the media more generally are effective in educating food buyers of the nutritional value of meat,

and the methods by which different cuts can be prepared, cooked and served (Wolfe, 1977). Since a high proportion of food and meal decisions are made at the point of purchase, product presentation, packaging, labelling, positioning in-store and other merchandising techniques are highly influential in meat purchase decisions (Northern, 2000; Shimp, 2003).

Selection of appropriate channels and media for communication depend on the target market as well as a firm's internal resources (Papavassiliou & Stathakopoulos, 1997). Fast food and supermarket chains invest considerable resources in television, radio, magazine and newspaper advertising to promote their brand identities. In 1993 for example, McDonalds spent \$45 million on advertising in Australia alone. Each year, Woolworths and Coles advertise heavily in each of the four major advertising media in Australia – metropolitan television, newspapers, magazines and radio. These food retailers have made long term investments to retain their strategic position in value chains creating formidable entry barriers.

In 1993, two of Australia's largest statutory marketing authorities also invested significant sums in generic advertising and promotional efforts. These were the Australian Meat and Livestock Corporation's expenditure of \$12 million and the Australian Dairy Corporation's expenditure of \$11.5 million (Sindall, Wright, & O'Dea, 1994). As Wolfe (1977: 539) argues, 'the difference between "branded and "generic", is by no means a superficial one'. Whereas brand advertising aims to create loyalty to a specific brand by altering the brand shares within a market, generic advertising has the more difficult task of shifting food consumption patterns. Effective generic advertising alters consumer behaviour across whole product categories by, for example, encouraging consumers to eat more beef as opposed to chicken meat products. Many agri-food products feature strong use of generic promotion over branded advertising. The process of developing brand identities where participants control and delegate promotional activities are unclear since the presumption of minimal product differentiation in the meat category has mitigated the need for promotion. This aspect of marketing meat and other agri-food products is overlooked in Australian business history.

For meat processors and manufacturers establishing a strong brand involves building direct relationships with trade customers like foodservice wholesalers and retail resellers through a push strategy (ie field sales force, trade promotion, training and merchandising support). This process also involves managing indirect relationships with final consumers through a pull approach using advertising and public relations campaigns (Wortzel & Wortzel, 1981). Meat processors and food manufactures' brand building efforts often compete with food retailers' investments in advertising and promotion to strengthen their private label and store brand images (Anon, 2005; Burt, 2000). Decisions of whether marketing communications efforts

should be conducted in-house, outsourced, performed individually or collectively by participants in the value chain affect a meat product category's image (Insch, 2004).

Complexity of marketing communications is heightened in overseas markets, which require a sophisticated knowledge of foreign consumers' needs and preferences. Organisations seeking to export differentiated and branded products typically utilise intensive and direct marketing in foreign markets (Kirpalani & McIntosh, 1980; Yaprak, 1986). Activities undertaken by exporters to build preference for their products include more frequent and intensive participation in trade shows, more advertising in export directories and buyer guides, and the use of direct mail advertising (Wortzel & Wortzel, 1981). Marketing a branded meat product overseas requires targeted advertising and promotion, with the logical progression from 'channel push' to 'consumer pull' as a loyal consumer following develops. As empirical studies by Cavusgil (1980), Christensen, Rocha, & Gertner (1987) and Wortzel & Wortzel (1981) have demonstrated, this is reflected in the transfer of marketing control to the exporter and the corresponding reduction in dependence on other organisations such as overseas agents, distributors, retailers, government agencies and industry associations. Exporters at this stage are actively involved in and control trade promotion, advertising to consumers and product design (Kirpalani & McIntosh, 1980; Yaprak, 1986). They have a marketing department as well as a sales department to deliver these activities similar to the marketing organisation and functions of indigenous firms they compete with (Cavusgil, 1984; Wortzel & Wortzel, 1981). Advertising agencies, market research firms and other marketing service providers are sourced in-market, like local firms with less reliance on home country organisations. Thus it becomes difficult for local buyers to differentiate domestic from imported products, unless it is an integral part of the brand image (Wortzel & Wortzel, 1981).

Research Question

Despite recognizing the importance of coordination mechanisms in the development of national meat industries Griffiths' (2000) study did not systematically identify or examine their role. What is missing from prior analyses is the systematic study of the role of coordination mechanisms that support the delivery of value in meat marketing systems. Further, existing research and knowledge needs to be extended to investigate how the alignment of these mechanisms affects the creation and distribution of different forms of value over time. A historical perspective is needed to overcome the limitations imposed by previous studies which have taken a static approach to examine how the coordination of marketing activities affects the organisation and functioning of food marketing systems and

value outcomes. This can be achieved by studying the changes and continuities in their configuration. The following research question, derived from the literature review is empirically and theoretically important:

how does the configuration and control of coordination mechanisms influence the delivery of value in a meat marketing system over time?

Conceptualising a Food Marketing System

Following Breyer's (1931) comparative marketing systems approach the conceptual lens of this study incorporates the environment in which meat value chains are embedded. The conceptual framework of a food marketing system is applied to achieve two objectives. Firstly, it explicitly incorporates the elements of theoretical and practical importance to the research problem – participants, marketing activities, coordination mechanisms and product market conditions. Secondly, it seeks to explain why linkages are established between participant organisations taking into account the opportunities and constraints of the resource environments in which they are embedded. This is elucidated through the lens of resource dependency theory which explains why participants try to exert influence or even control the exchange of resource flows in an attempt to direct the process of value delivery in a food marketing system.

Food is a necessity of life. As a major source of protein, meat is a strategic and highly politicized foodstuff that has been protected and subject to government control since it became one of the first globally traded commodities in the late nineteenth century (Fernández-Armesto, 2002). Food safety regulations, import barriers and agricultural support programs condition the development of a food marketing system (Currie, 1968). In general, there is a tendency for continuation of the status quo in agricultural policy, even temporary measures, due to pressure exerted by beneficiary interest groups and policy administrators (Veeman, 1990). A review of conceptual frameworks of food marketing systems is presented to firstly define what a food marketing system is, and secondly to identify its analytical components to study Australia's dominant meat marketing systems.

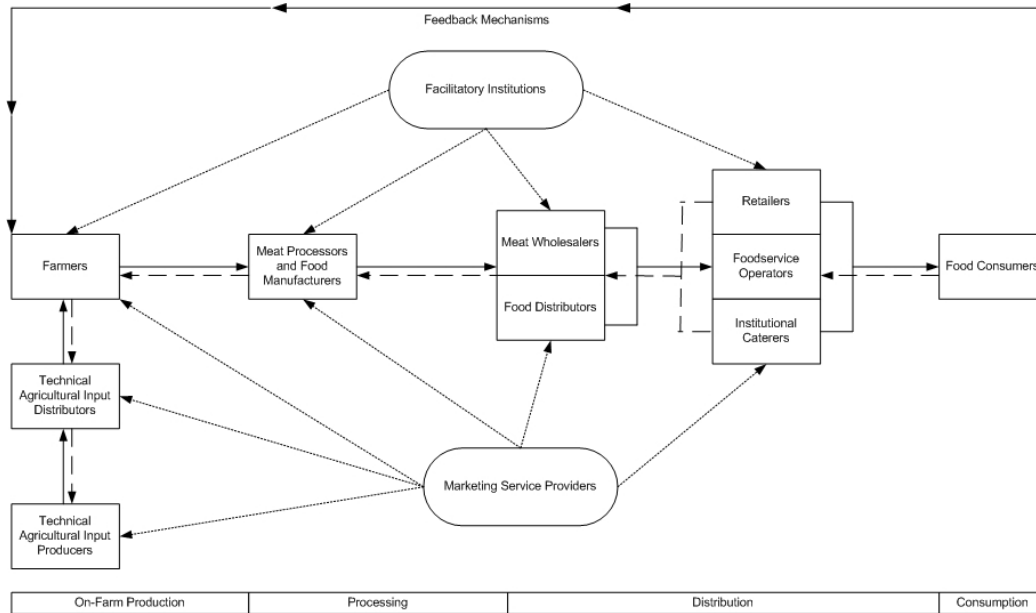
Principle Components and Boundaries of a Meat Marketing System

Food marketing systems, of which meat is a subset, have been conceptualised in a number of ways using different parameters to define a system's components and boundaries. For

example, the United States Department of Agriculture (USDA) uses the term to refer to all value adding activity that occurs to deliver food products to consumers. Their focus of analysis is on activities in the food manufacturing, wholesaling, grocery retailing and foodservice sectors and the economic, technological and competitive factors influencing their structure and performance (USDA, 2002). This definition is too narrow to serve as an analytical framework as it does not afford attention to the other participant groups, such as consumers and produce farmers. An appropriate definition of a food marketing system that has been applied in prior studies of developing and developed countries is stated by Kaynak (1986: 5) as ‘... a primary mechanism for coordinating the production, distribution and consumption activities in the food chain. In this context, marketing includes the exchange activities associated with the transfer of property rights to commodities, the physical handling of products and the institutional arrangements for facilitating these activities’. Adopting a ‘systems orientation’ recognises the interdependencies of participants directly and indirectly involved and hence the drive to coordinate marketing activities to deliver value.

Key participant groups that are directly involved in meat value chains can be mapped out to specify all the steps in the value delivery process as depicted in Figure 1. It shows their main interactions as flows of resources as indicated by the arrows between them. This depiction of the links in the meat value chain serves to specify positions and identify the marketing activities they perform in coordinating the flow of resources to deliver meat products to end consumers. It also serves as the basis for examining the interrelationships between participants and how their positions and roles can change over time. For analytical purposes the key participants of a meat value chain that are directly involved in delivering value to meat consumers are: 1) on-farm producers; 2) meat processors and food manufacturers; 3) meat wholesalers; and 4) retailers of meat products and meals. There are also a number of participants that are involved indirectly in the process that support the value chain. These participant groups are: a) agricultural input producers and distributors, b) facilitatory institutions; and c) marketing services providers, and can be privately owned, publicly funded or jointly sponsored organisations like meat science R&D consortia. The multi-faceted marketing environment surrounds the participants in the value chain and the input providers and distributors, facilitatory agencies, and supporting marketing service providers.

Figure 1: Principle Components and Boundaries of a Meat Marketing System



Based on Kaynak (1986: 4) and adapted for this study.

Participants that are directly involved like farmers, processors and retailers operate and manage the system, sequentially transforming the form of value exchanged to deliver meat products to consumers. The coordination of flows of material inputs across the chain involves three types of functions – exchange, physical, and facilitating functions (Clark & Clark, 1947; Kohls & Uhl, 1998). First, exchange functions involve negotiating, buying, selling and arbitrage. Next, physical functions include transport, storage and processing. Finally, facilitating functions incorporate standardization, financial services, market information and marketing research. These functions bridge gaps in time, place, and form utility between production and consumption (Weld, 1917). The activities, actions and interactions between participants in carrying out these marketing functions are influenced by environmental factors that effect the organisation of food value chains over time. As noted previously, coordination mechanisms play a fundamental role in supporting the transfer of resources between participants, service providers and facilitating institutions in a meat marketing system. Although, it is less clear how their alignment shapes the delivery of value and how conditions in the market environment shape this relationship. Before this can be examined empirically, clarification of the meaning, forms and process of value delivery in the context of a meat marketing system is required to give operational definitions for this study.

Meaning, Forms and Process of Delivering Value to Consumers

The concept of value and the related concepts of value added and added value are central to market exchange in a meat marketing system. Unfortunately, the diversity of conceptions of these key terms creates ambiguity when they are used interchangeably. This section seeks to remove ambiguity by defining the meaning and forms of value delivered in meat marketing systems. Usage and meanings of the term value can be categorised into two main groups - use value and exchange value. In the *Wealth of Nations* Adam Smith (1776 reprinted in 1974: 131) referred to these two types as 'value in use' and 'value in exchange'. The first meaning of value relates to the utility of a particular object or good, whereas the second relates to its power to purchase other goods in exchange. Smith illustrated the differences between these two types of value by analogy to the paradox concerning water and diamonds. Water has a practical utility; it is essential to life, and essentially free due to its relative abundance. Yet diamonds possess an aesthetic utility, they appeal to the visual senses, and are relatively scarce, commanding a high value in exchange (Smith, 1776 reprinted in 1974).

Despite the qualitative differences in their usefulness, both goods possess some utility to the individual since they represent a 'source of preference', 'pleasure', or 'satisfaction' to the consumer of the item (Smith, 1776 reprinted in 1974: 39). For Smith (1776, reprinted in 1974), wealth resided in tangible goods, but not through their use or consumption. Marx (1954: 36) also contributed to the scholarly debate on the meaning of value, proposing that the use values of a good are only ever realised 'by use or consumption' and that objects do not have value without utility. For Marx (1954) exchange value is the only form that goods could take to express value. To distinguish it from use value he delineated the nature of value from its form. He considered exchange value as the 'mode of expression, the phenomenal form, of something contained in it, yet distinguishable from it' and a 'total abstraction' from its use values (Marx, 1954: 37). He goes further to state that: 'as use-values, commodities are, above all, of different qualities, but as exchange-values they are merely different quantities, and consequently do not contain an atom of use value' (Marx, 1954: 37-38).

A breakthrough in understanding of the role of subjective scarcity in the determination of value was presented in the work of 'marginalists' W. Stanley Jevons (1835-1882), Leon Walras (1834-1910) and Carl Menger (1840-1921). Supplementing the earlier ideas of scholars including Bentham, Cantillon, Cournot and Gossen these neoclassical economists are credited with developing the theory of marginal utility to understand and explain consumer

behaviour¹². Working independently they simultaneously advanced a theory which posited that value depends entirely on utility. As Jevons explained, people exchange with the goal of maximising utility and will engage in exchange only if they expect to gain from the exchange (1871 reprinted in Jevons, 1957: 145). This view subverted the notion of exchange value and established a direct link between diminishing marginal utility and demand. Jevons stated this formally as a general law: ‘the degree of utility varies with the quantity of commodity, and ultimately decreases as that quantity increases’ (1871 reprinted in Jevons, 1957: 111). To explain this ‘general law’ Jevons referred to economist Nassau Senior’s (1790-1864) ‘law of variety’ which proposes that humans seek qualitative variety alongside their demand for an insatiable quantity of a good¹³. Further, he argued that things have no ‘intrinsic’ utility, but are relative to the desires they satisfy for an individual, that is, the same good can have different utilities to different people. Jevons also elaborated on the differences between value in use and value in exchange by introducing another notion of value, as esteem, or urgency of desire, that is subjectivity. According to this conception, value in use is equated to the total utility of a thing; value in exchange is the ratio of exchange or exchangeable value of two things; and esteem as the intensity of desire or esteem for a thing (1871 reprinted in Jevons, 1957: 128-131).

Despite the contribution by elaborating how marketing activities create utility through assortment Jevon’s recognised that participants involved in the process (ie. ‘retail trade’) did not consider quantities to be infinitely divisible (1871 reprinted in Jevons, 1957: 125). These ideas were refined by other members of the marginalist revolution in the late nineteenth century. Among others, Economist Alfred Marshall (1842-1924) popularised the theory in the English vernacular in his texts *The Economics of Industry* and *Principles of Economics*. He explicitly acknowledged that the purpose of value creation is to produce utilities that satisfy individual wants and needs, stating in his influential text *Principles of Economics*: “Man cannot create material things...He really only produces utilities; or in other words, his efforts and sacrifices result in changing the form or arrangement of matter to adapt it better for the satisfaction of wants...” (Marshall, 1920 reprinted in 1982: 63).

At the same time Marshall (1932: 39) emphasised the notion of exchange value, arguing that ‘the term value is relative, and expresses the relation between two things at a particular place and time’. By extension, he considered price to be a universal means of expressing and

¹² Bentham’s definition of utility, which is still influential in economics, was applied: “by utility is meant that property in any object, whereby it tends to produce benefit, advantage, pleasure, good, or happiness, (all this in the present case comes to the same thing)....” (Bentham, 1967:2).

¹³ Jevon’s also cites similar explanations in T. E. Banfield’s (1844) ‘law of the subordination of wants’ and the work of Richard Jennings (1855) (1871 reprinted in Jevons, 1957: 112-114).

communicating relative value in monetary terms to facilitate exchange. American economist Richard T. Ely (1854-1945) also recognised the ‘productive’ role of marketing in creating form, place and time utility. The meaning of utility is revisited in the works of North American economists like JB Clark (1847-1938) and Irving Fisher (1867-1947) in the early twentieth century¹⁴. They explained marketing’s role in creating value in terms of various types of utility – form, place and time. JB Clark highlighted that ‘merchants are not mere exchangers, for they make positive additions to the utility of goods’ (Clark, 1907: 17)¹⁵.

Early marketing scholars in the US revisited the two perspectives of value. Among them, Breyer (1934: 13) considered that productive activities created utilities and ‘utility’ was the capacity to satisfy wants. Similarly, Beckman (1957: 8) concluded that ‘values are created through the addition of utilities, which are capacities in goods or services to satisfy human wants’. This view accords with the value in exchange meaning since Beckman (1957: 7) anchored the calculation of value added upon the ‘selling value’ of the product. Influential marketing scholar Wroe Alderson’s view of value is rooted in the value in use sense. In *Marketing Behavior and Executive Action* Alderson (1957, reprinted in 1978: 198) argued that all economic activity, marketing included, creates a ‘single form of utility’. He considers this to be ‘the value which a product contributes to the potency of an assortment’ (Alderson, 1978: 198). As Dixon (1990: 342) argued, marketing is an integral part of the productive process generating ‘bundles of utilities’ through activities including ‘breaking and dividing, transport, storage, and “non-material” elements, such as information’. Marketing systems also create value in exchange by transmitting information relating to the agreed value of goods, that is, prices and other monetary expressions of costs of acquiring goods and transferring ownership when goods are exchanged. In this way as Dixon (1990: 342) reasoned, ‘marketing systems also contribute to usefulness by reducing the costs of its production’ through the emergence of specialized marketing organisations designed to mitigate uncertainty.

Debate on the meaning of value and related productive activities has continued across the spectrum of business disciplines, most notably strategic management, consumer behaviour, industrial marketing management and pricing. From the review of the various interpretations of value, writers can be classified into two dominant perspectives – production and consumption. These perspectives echo earlier notions of exchange value and use value. Even though these perspectives are not mutually exclusive, they each emphasise different

¹⁴ For an in-depth discussion of the philosophical underpinnings of these writers and other prominent scholars see Dixon (1990).

¹⁵ There was also cleansing of the utilitarian philosophy from the theory by economist John Hicks (1904-1939) who replaced it with the terms preferences, substitutes and complements.

orientations to value delivery. Value viewed from the production perspective focuses upon the monetary or tangible value added at each stage of production as raw material inputs are transformed into consumer products. Value from this perspective is typically defined in a cost accounting sense as 'selling price less cost of raw materials and production activities' (Walters & Lancaster, 1999: 643). Thus, the economic contribution, or value added, of each productive function can be calculated to determine their relative cost and efficiency. Researchers adopting this perspective define value primarily in monetary terms (Anderson, Jain, & Chintagunta, 1993; Anderson & Narus, 1999).

Value viewed from the consumption or user perspective focuses on the total utility value gained from consuming a product and incorporates intangible values in addition to tangible ones. Researchers taking this point-of-view define it as the perceived trade-off between the total benefits obtained and the total sacrifices incurred to obtain those benefits (de Chernatony, Harris, & Dall'Omo Riley, 2000; Möller & Törrönen, 2003). Taken further the evaluation of multiple product attributes that provide utility to the consumer is embodied in the idea of added value. This concept has been defined as a multidimensional construct which includes functional and psychological benefits of a particular product perceived by consumers, relative to competing product offerings (de Chernatony et al., 2000). Referring back to Smith's conception of value-in-use as incorporating utilities such the beauty of a diamond which appeals to the senses and its perceived uniqueness, it is clear that the concept of added value is not new. Added value also incorporates Jevon's notion of marginal utility as the perceived surplus value to be gained from the exchange. The customer ultimately determines the added value of any good or service based on the value they place on it. This involves a subjective assessment of tangible as well as intangible benefits and sacrifices (de Chernatony et al., 2000; Möller & Törrönen, 2003; Parasuraman, 1997).

How consumers determine what is of 'value' to them is examined by the consumer behaviour approach to value, which adopts this broader interpretation of 'benefits' and 'sacrifices' to determine value. According to this approach factors other than price are also important in evaluating value. Five consumption values are identified by Sheth et al. (1991): functional (eg health and nutrition benefits), social (eg symbolic and self-expressive benefits) emotional (eg feelings of comfort and security), epistemic (eg novelty, variety and innovativeness) and conditional (eg expected utility obtained from the consumption situation). In the case of meat products these values potentially influence customers' preference for and evaluation of certain product attributes. They also affect assessment of a specific attribute's performance, the consequences of consuming the product and how these factors affect the achievement of personal goals and values (Woodruff, 1997).

By adding value to a product's tangible and intangible attributes valued by consumers the added value or equity of the product increases. Tangible attributes or characteristics of meat products include their nutritional and eating qualities (ie leanness, tenderness, succulence, appearance, flavour and texture) (Steenkamp, 1997). These attributes are determined by the animal's sex, breed, and age at slaughter and the production system employed, especially the feeding program (Schroder & McEachem, 2002). Intangible attributes of meat products are more abstract and include the pleasure, safety, and happiness gained from eating meat and involves the consequences of benefits from purchasing and consuming meat involving factors such as convenience, availability, versatility, and piece of mind concerning the safety of consuming the product and the treatment of animals in the meat production process (Steenkamp, 1997). For example, attaching a 'free-range' label to a pack of fresh chicken breast meat would provide some consumers with assurance (intangible benefit) that it has been produced in an ethical manner and is free from pesticides or other chemical residues. A segment of consumers might pay premium for this benefit if they value it highly.

The combination of consumption values that can be considered in any purchase decision demonstrate the complexity of this process and the difficulties that arise in defining added value. From this perspective, the concept of value is highly subjective (Hardy, 1987; Soucie, 1997), differs between customers (Wikström & Normann, 1994), within customers (Parasuraman, 1997), in different situations (Ravald & Grönroos, 1996), before and after purchase (Gardial, Clemons, Woodruff, Schumann, & Burns, 1994), between tangible and intangible offerings (Naumann, 1995), and cultures (Johansson, 2000). Understanding customers' specific needs and preferences through market research therefore becomes a prerequisite for adding value to meat and other agri-food products.

Value offerings, the combination of benefits to customers, are reflected in the supplier's value proposition. Walters & Lancaster (1999: 644) define this as the statement of how the value is delivered to customers. Operationalising this statement through the interlinked activities that combine resources in a meat value chain forms the basis of the rewards for supplying firms. Value delivery also depends on whether the firm can offer a unique value proposition and capture the returns from their value creating activities. This condition of gaining the benefits from value delivery is referred to as value appropriation - that is the ability to extract the value as profits (Cox, 1999; 1997; Mizik & Jacobson, 2003). Value delivery thus incorporates the process of creating value for customers (ie innovating, producing and delivering products to the market) and distributing it through appropriation (ie extracting profits) (Mizik & Jacobson, 2003). The first part, value creation, refers to the creation of benefits for participants in organised activities. The second part, value distribution, refers to the ways that

the value an organised activity creates is allocated among the participants (Cox, 1999; 1997; Mizik & Jacobson, 2003). These processes depend on the relative power, resource dependencies and positions of participants in meat value chains as they seek to influence and control the marketing activities and coordination mechanisms to deliver value to consumers.

Despite differences in their respective foci and scope there is agreement between the production and consumption perspectives that value indicates the worth of a particular item or object since it is an expression of the trade-off between benefits and sacrifices for customers and suppliers involving monetary and non-monetary values (Anderson, 1995; Parasuraman, 1997; Walter, Ritter, & Germünden, 2001). Conventional ways of conceiving value have been production focused so the concept of value added has been pervasive in modern business theory and practice. However, with its focus on discrete, quantifiable material input costs, the concept of value added overlooks several additional sources of value creation. These are other input costs such as marketing activities and expenditures, the value created through linkages between elements of the marketing system, and interactions between raw material inputs and other cost elements (Walters & Lancaster, 1999). In the early twentieth century Weld (1916: 6) also acknowledged the valuable contribution of marketing activities in agribusiness and the focus on the organisation and methods of production:

...agricultural economists have concerned themselves primarily with the raising of crops, farm management, feeding of animals, etc., and not to any great extent with the marketing of the products...and yet the marketing part of production is extremely important as compared with the manufacturing or crop-growing part.

To address these limitations in conceptualising the interconnectedness of production and marketing functions the broader concept of the value chain has been influential as popularised by Porter (1985). Value chain frameworks have been used extensively for analysing the activities, resource contributions and linkages of elements involved in material conversion chains both in organisations and between them. Analysis of the participants or sectors in a value chain and the flow of resources between them is encapsulated in (Alderson, 1978; Alderson & Martin, 1965) transvection construct. The process of creating value involves the progressive transformation of conglomerate resources into meaningful assortments in the hands of consumers (Alderson & Martin, 1965: 122). This covers all flows of resources between the points of origin, through intermediaries, to the final buyers of finished food products and involves sorts and transformations. In the case of a meat transvectional chain each sector of the industry is involved in the alternating sequence of sorting and transforming resources to deliver a meat product to a consumer. Thus, the complete sequence of exchanges that take place along the pipeline is covered. Each sort serves to facilitate the next

transformation. Alderson & Martin (1965: 95) stressed that in configuring the optimal number of steps in a transvection ‘the situation is not static but dynamic because of changing technologies both in transportation and sorting’. Aggregating sets of channel transvections to deliver a specific meat product to consumers depicts the value delivery process of a meat marketing system. Porter (1985) notion of value that accrues to firms and industries through the value chain is couched in terms of efficiency and effectiveness. Alderson & Martin's (1965) transvection construct also emphasises efficiency in the sequence of sorts and transformations to create utility.

Contemporary views of value delivery challenge the dominant production-centric paradigm. Particularly since the 1990s the locus of power in the food value chain has been reversed to reside with retail and trade buyers and ultimately with consumers. Svensson (2003: 391) for example, argues that ‘nowadays, the concept of value is defined differently and has often a pronounced market orientation’. This view contends that value and supply chain thinking should be more customer-driven as decisions concerning value originate with the buyer (Woodruff, 1997). In agri-food marketing this chain reversal is linked to the dominance of retail buyers and end consumers in dictating product specifications and differentiation according to ECR principles (Fearne & Hughes, 1999; Soucie, 1997). These approaches reflect the competitiveness of business markets and variability of consumer preferences, introducing a third criterion to evaluate value delivery in food marketing systems – adaptability and responsiveness. While the locus of power may have shifted to retailers and consumers, the contention that customer-focused value chains are novel is misguided when positioned within the history of scholarly thought on the meaning of value. Throughout the debate, writers have recognised the *raison d'être* of activities involved in delivering value – to satisfy consumer needs through a unique value proposition (Anderson, 1982; Vargo & Lusch, 2004; Webster, 1992). The continuing importance of added value is discussed in detail in the section on branded products. First the most basic form of value exchanged in a meat marketing system - the commodity - is defined.

Forms of Value Exchanged in a Meat Marketing System

Commodities

Commodities are defined as goods that are undifferentiated across a particular category, class or grade (Wilkins, 1994). As Baker (1991: 192) explains, they are “materials in their natural state, often termed ‘primary commodities’”. In most western markets consumers do not

purchase meat in commodity form as rural production is separated from urban consumption. Since they undergo little or no processing or further value adding before being sold to buyers or transferred to intermediaries commodities are homogenous (Wilkins, 1994; Schaffner et al., 1998). Price is usually the only way to differentiate between large numbers of competing suppliers that individually cannot influence the prices they receive (Cramer & Jensen, 1982). Thus, commodities are extremely sensitive to price competition. Consumer demand for meat is sensitive to fluctuating prices relative to the availability of substitutes (Seperich et al., 1994). Long production cycles and uncontrollable physical and biological conditions can constrain supply making commodities subject to price instability (Cramer & Jensen, 1982). Seasonal, cyclical, and trend factors create fluctuations in commodity prices. Unpredictable events such as drought and disease heighten the financial and price risks for producers and threaten the continuity of commodity supply (Tomek & Robinson, 1990; Schaffner et al., 1998). Due to their homogeneity and susceptibility to price instability suppliers are price takers and face an infinitely elastic demand for their output (Schaffner et al., 1998; Seperich et al., 1994).

A variety of characteristics such as age, breed, sex, origin and weight are used to classify animal based commodities like livestock and carcasses into specific categories, classes, and grades (Tomek & Robinson, 1990). Systems of sorting commodities into groups based on specific criteria allow buyers to distinguish between them and form the basis for product differentiation as value is progressively added. One or more of these characteristics are applied in sorting systems to specify the type of commodity traded and to assign grades. Variations in these specifications may result in either a price premium (above grade) or price discount (below grade) being offered. These variations are seasonal and can exhibit trends over time, but are relatively small compared to changes in commodities' average prices (Seperich et al., 1994; Tomek & Robinson, 1990).

Grading systems set up by national government agencies and industry associations, often in consultation with producers and consumers, are used to determine the value of commodities and to facilitate the sorting of meat (Schaffner et al., 1998; Slater, 1970; Tomek & Robinson, 1990). To be effective grading systems should reflect consumer tastes and preferences and objectively measure commodity characteristics (Schaffner et al., 1998). Thus, the market value of a commodity is derived from its tangible attributes which are translated into a price determined by the forces of supply and demand. These forces are influenced by government intervention, lobbying and withholding of supply by producer groups, and the actions buyers acting alone or in groups (Seperich et al., 1994; Tomek & Robinson, 1990).

As goods sold as commodities undergo little physical modification or differentiation before being transferred to intermediaries there is limited opportunity for suppliers to influence the prices they receive. The exception to this general rule is the manipulation of supply through the operation of cartels. An example of this is the case of a group of primary producers who agree to withhold their cattle from the market until they receive a more favourable price. On the buyers' side there are many examples of livestock buying cartels such as the infamous meat packing 'trusts' at the turn of the twentieth century in the US (Lesser, 1993). Due to the perceived homogeneity of commodities there has been little incentive for buyers to remain loyal to a particular supplier, giving rise to greater power among processors to dictate prices.

Despite having little control over the prices paid for commodities where free markets operate producers can attempt to strengthen demand for their commodity through generic promotion. This marketing approach involves activities sponsored by producers of a nearly homogenous good to disseminate information about its underlying attributes and generic benefits to buyers (Fulop, 1989; Schaffner et al., 1998)¹⁶. Generic advertising is employed in domestic markets periodically to stimulate demand, but is used more extensively in overseas markets to build awareness and preference for produce from a particular country. These promotional campaigns feature strong use of product country images and associated quality cues as points of differentiation from competing commodity suppliers (Insch, 2004).

In traditional agri-food value chains commodities pass through long channels before reaching end consumers. As soon as ownership is transferred the supplier, typically a farmer, loses control over marketing and the ability to differentiate their offering as a food product. In turn, a farmer's ability to brand their produce depends on direct involvement in marketing at each stage of the value chain. But as supply contracts between farmers and retail buyers are increasing and consumer food markets are becoming more fragmented opportunities for product differentiation are being pursued by livestock farmers (Beverland, 2005; Fearn, 1998; Lusk, 2001; Soucie, 1997). However, as meat has been treated as a commodity and perceived as being incapable of product differentiation, the process of developing further processed and value added products has received minimal attention in the literature. Extant research is comprised of case studies of organisations and their supply chains. These studies are descriptive rather than analytical and do not look beyond general supply chain management principles and accepted agribusiness practice (Beverland, 2005; Fearn, 1998;

¹⁶ Whether generic advertising is effective in achieving its main goal is inconclusive on the basis of empirical studies that have examined its effects. Producers contributing to generic advertising in the US and Australia have questioned its effectiveness (Crespi & Marette, 2002; Industry Commission, 1994).

Katz & Boland, 2000). As the next step to deliver higher forms of value the product concept is defined and the key characteristics of meat products are specified.

Products

In food and retail marketing the product concept has held a central place. A product has characteristics or attributes capable of being differentiated. Therefore, to move a commodity to a product its characteristics must be altered in some way to benefit the end consumer. Thus value is added that is valued by the buyer. This may involve changing the appearance, taste, quality, nutritional properties or other intrinsic attributes of the meat as valued by the target market. It may also involve manipulating the extrinsic qualities of the product such as its packaging or improving physical distribution to enhance its presentation and eating quality. Thus products are bundles of attributes that satisfy wants and needs of consumers (Kotler, 2001; Lancaster, 1966, 1979). These wants represent 'physical and non-physical elements believed by the demander necessary to satisfy the condition requiring gratification' (Narver & Savitt, 1971: 61). Here marketing functions play an important role in determining value and communicating it to target markets. This requires integration of R&D with marketing intelligence and communications capabilities (Steenkamp & van Trijp, 1998; Ward, 1997).

As it is possible to differentiate between products, it is possible for customers to distinguish between producers of heterogeneous products. Thus products can be defined as goods that are differentiated by their characteristics and their producer (Onkvisit & Shaw, 1989). Producers often associate their company or trade names with products so that buyers can easily identify them. Customers' past experiences in dealing with, purchasing, and consuming products from a specific producer are stored in memory. These memory associations which collectively form a supplier's reputation are recalled in future purchase decisions. Thus, suppliers largely rely on their trade reputations as a means to maintain customer loyalty.

A product's exchange value is the relationship between the range of prices that customers are willing to pay for it (Porter, 1980) and the amount below which the seller will not sell (Brown & Jacques, 1964). This reflects 'the costs incurred and the benefits contributed via the processing of the raw materials' (Pope, Cullwick, & Kennelly, 1998). The range of prices that customers are willing to pay depends on the product's perceived value (Woodruff, 1997). Secondary producers, commonly known as processors, are principally involved in physically transforming commodities into products such as minimally processed cuts of beef (eg striploin, rump, ribeye) and chicken (eg thighs, breasts, wings) and further processed products

like hamburger patties and crumbed chicken drumsticks. Intrinsic attributes like tenderness, taste and juiciness are gauged through cues like cut, trim, meat juice, colour and marbling (Northern, 2000). Tangible value is added to products via processing, manufacturing and R&D. Intangible value can be added through marketing activities like point-of-sale (POS) materials, advertising and public relations efforts. Product positioning is also applied in the meat cabinet through labels that serve as cues to communicate extrinsic product attributes to consumers (eg organic beef accreditation, place of purchase and country of origin). The value that labels provide to consumers as deciphers and predictors of food quality depend on their awareness and perception of the label (Grunert, Juhl, & Poulsen, 2001). Logos designed to identify a product serve a similar purpose provided they are well-recognised and easily recalled (Henderson & Cote, 1998; van Riel, van den Ban, & Heijmans, 2001).

Processors distribute their meat products to consumers through a variety of intermediaries such as retail and foodservice outlets. Prices and terms of agreements formalised in contracts between meat processors and distributors are the outcome of complex negotiations. These interactions determine the component of value added that will be appropriated by each party (Cox, 1999). The retailer determines their in-store sale prices taking into account the profit margin for each product. These sale prices are displayed on product packaging and price tags visible to the consumer. Suppliers will aim to achieve the cost of production plus a profit margin, or in value terms will add value that costs less than the likely return from the customer (Pickard, 1967). However, in highly competitive markets with price competition like discounting and price promotions, suppliers are willing or forced to sell products below their profit margin. In the long term this price cutting strategy is unsustainable for suppliers.

From this review three criteria are required for commodity goods to be transformed into products: 1) quality and quantity consistency; 2) the possibility of product differentiation, and 3) the degree of importance customers place on the product attribute to be differentiated (Onkvisit & Shaw, 1989). The first criterion requires suppliers to maintain the quality and quantity consistency of their products. This is achieved through quality control techniques and commitment to total quality management (Morgan & Vorhies, 2001). In markets characterized by competition this requires producers to maintain and enhance the quality of their products through product development and innovation (Cooper & Kleinschmidt, 1987). To meet the second criterion, that is, to effectively differentiate products to suit consumer needs, knowledge of customer tastes and preferences is required (Brooksbank, 1991; Dickson & Ginter, 1987; Woodside & Wilson, 1986). This requires market intelligence capabilities and the marketing expertise to segment and research target markets and in turn respond to this information. To meet the third criterion - customer identification with product differentiation -

suppliers must effectively communicate the benefits of their products to target markets through product positioning and promotion (Christy & Norris, 1999).

Branded Products

As Wilkins (1994) argues brands in a trademark sense were first applied to products where producers became separated from buyers, but wanted to maintain their custom and loyalty¹⁷. Apart from linking the producer to the brand where company associations are clear a brand can convey additional information concerning the product, differentiating it from competing products (Aaker, 1996b; Acres, 1995; Keller, 1998; Ries & Trout, 1979). Most importantly, brands provide a signal and guarantee of quality, reflecting the ‘skill and industry’ of the producer (Wilkins, 1994). This quality assurance reduces the risk involved in purchasing and gives producers incentive to ensure consistent product quality to uphold their reputation (Aaker, 1996b; de Chernatony & Dall’Olmo Riley, 1998; Holstius & Paltschik, 1983; Wilkins, 1994).

Brands reduce the complexity of purchase decisions by abstracting and summarizing product information in shorthand form (Aaker, 1996b; Keller, 1993; Rossiter & Percy, 1997; Trout & Ries, 1985). This enables buyers to quickly access associations they have retained in memory about the brand through previous direct and indirect experiences with it over time (Gardner & Levy, 1955). These associations relate to the specific functional, psychological, and emotional attributes of the brand, communicated through ideas and images (de Chernatony & Dall’Olmo Riley, 1998). Buyers interpret the information they receive about the brand through various mediums in the form of brand associations or dimensions of meaning that form an overall image. Brand associations can be grouped into four categories: 1) brand as product, 2) brand as organisation, 3) brand as person, and 4) brand as symbol (Aaker, 1996a). Organisational associations are the most popular means of expressing the brand identity of meat suppliers who rely upon their company reputation, name, innovation and success. Product attributes are also common. Firms may also link their brand to specific breeds, quality standards, product uses and their country of origin (Grunert & Valli, 2001).

¹⁷ Trademark legislation was first introduced into Australia in 1905, following the lead of the US (from 1870), the UK (1871) and Japan (1885) (Boyce & Ville, 2002). A rapid rise in numbers of legal disputes over the use of trademarks from about 1810 spurred this formal recognition of the need to protect this intangible asset (Duguid, 2003).

To successfully differentiate a brand from competitors firms need to effectively communicate the brand's essence and benefits to customers. This is achieved by securing distribution outlets and maintaining consistent supply (Aaker, 1996b; Neal, 2000; Swait & Erdem, 2002; Whan & Zaltman, 1987). It also requires long term investment in advertising and other promotional activities to build awareness and familiarity with the brand (Aaker, 1996a). Packaging is an effective medium used to build and position branded meat products. The process of developing a brand requires investment of resources to build awareness, recognition and loyalty among customers. Given this investment there is incentive to protect brands from misuse or emulation through trademark registration and monitoring of unauthorized use (Elkington, Hall, & Kell, 2000).

The key characteristic that distinguishes products from brands is the unique value added to a product. Several authors share this view that added values are the most important criteria in defining the brand concept (de Chernatony & McDonald, 1998; Jones, 1986). The value that is added can be viewed from both a buyer's and a supplier's perspective. For buyers, it is the augmentation to an identifiable product they perceive as 'relevant unique added values which match their needs more closely' (de Chernatony & McDonald, 1998: 20). Thus a brand's worth is reflected in its equity - the perceived additional value customers obtain from the brand compared to competing products. This value includes the functional, emotional and self-expressive benefits from consuming the brand (Aaker, 1996a). By reducing the perceived risk and complexity of purchase decisions, brands overcome buyers' cognitive dissonance (Festinger, 1957). Given increasingly time-poor lifestyles brands offer convenience and save time through their function as a shortcut device enabling customers to quickly identify the product they wish to purchase. Through this intangible benefit, some buyers may be willing to pay a premium for brands they are familiar with and trust (Aaker, 1991; Hutton, 1997).

Strong brands offer several benefits for brand owners. They can assist to establish an identity in the marketplace, develop a solid and loyal customer base (Aaker, 1996a; Kapferer, 1997; Keller, 1998), provide a foundation for introducing new products (ie brand extensions) (Aaker & Keller, 1990) and offer meat product suppliers with a defence against growing distributor power (Barwise & Robertson, 1992; Katz & Boland, 2000). Drawing on these key characteristics brands are defined as information control and short-cut mechanisms used to differentiate competing products that incorporate a complex set of associations built up over time describing its functional and psychological attributes to deliver added value to buyers and owners of the brand. From this review, four prerequisite criteria are required to achieve the status of branded meat products: 1) quality consistency, 2) consistency and availability of

supply to target customers, 3) unique customer benefits, and 4) awareness and familiarity of the brand by target customers.

Each criterion is aligned with marketing activities and resource capabilities required to meet them. The first criterion requires suppliers to assure and continually improve product quality. This requires implementation of quality control and assurance systems as well as resources devoted to R&D and product development. The second criterion requires firms to establish strong relationships with distributors of their brands. For meat processors and food manufacturers that are not integrated forward into retailing, this requires close relationships with food distributors, whether they are small independent retail butchers, large supermarket chains or foodservice outlets. As well as the relational capabilities to ensure access to retail space, firms require logistical expertise and supply chain management capabilities to handle the physical flow of inventory. This capability is essential in the handling and transportation of perishable meat products. The third criterion requires firms to develop market intelligence capabilities. In addition to market research which can be performed in-house or outsourced to a specialist provider, firms need to generate, disseminate and respond to information about changing market conditions including competitors and consumer preferences. The final criterion requires firms to build the identity of their brand through integrated marketing communications. Promotion of the brand image and its specific benefits is achieved by investing in advertising, personal selling and marketing collateral like product packaging, logos, labels, POS material and direct mail. As discussed previously, sustained investment in marketing communications is needed to raise awareness and familiarity of the brand among target customers as brand associations are formed over time.

Conclusion

This review of the major contributions from agribusiness, food marketing, marketing channels, macromarketing and business history research regarding the influence of marketing organisation on patterns of value delivery in meat marketing revealed several important gaps in knowledge. Firstly, the dominant perspective in business history explaining the interaction of marketing organisation and the delivery of value emphasises the productive functions in modern business organisation in determining value outcomes. Empirical studies are also concentrated in the centres of western business, the US and UK. Evidence is required to confirm or disconfirm whether Australia's meat markets match this pattern. Thus the central problem of the thesis is concerned with how the organisation of marketing affects the delivery of value in meat marketing systems, in the case of Australia's two major meat segments.

Secondly, previous research on the different forms of marketing organisation in agricultural and food value chains revealed a division between research on the participants specializing in on-farm or primary production and those engaged in downstream activities like wholesaling, retailing and distribution. Both streams seek to describe and explain different forms of organised marketing schemes for aligning marketing functions and activities. Research in the first category concerns the different forms of organised marketing adopted by participants directly involved in creating value and those participants external to value chains like government authorities that control and regulate some or all marketing activities for broader economic and social reasons. Research in the second category, while applicable to on-farm organisations, has concentrated on those located downstream. Since a dyad level, cross-sectional approach dominates this research the impacts of their configuration on value delivery over time are unclear. These two perspectives on the forms of organising marketing systems are integrated to specify the types of purposeful organisation in Australia's meat marketing systems in order to investigate their effects on patterns of value delivery.

Thirdly, by integrating this research on the role and forms of marketing organisation, the infrastructure supporting the delivery of value in meat marketing systems is specified. Through the literature review four key coordinating mechanisms are identified – quality assurance systems, supply coordination, market orientation and integrated marketing communications. Previous studies of marketing organisation and value delivery in meat marketing systems have not systematically explained how the configuration or control of these mechanisms influences the delivery of value. They have also overlooked the relative importance of coordination mechanisms in influencing value outcomes over time. This research question is investigated empirically by examining the role and alignment of coordination mechanisms in the major phases of configuration and reconfiguration of Australia's two major meat marketing systems in the following four chapters.

Finally, prior research on the forms of value exchanged in meat markets provides inconsistent evidence of the progression towards higher forms of value. As the review demonstrated this stems from the diverse conceptualisations of value in relation to meat which creates ambiguity when interpreting research findings. Thus in order to overcome this confusion the key concepts of value, value added and added value were first defined within the ongoing academic debate on the meaning of these terms. These three primary forms of value exchanged in meat marketing systems were identified and their defining features were specified along with the operational conditions and resource capabilities required to deliver them to buyers.

Chapter Three: Configuring Beef's Marketing System, 1860-1974

Introduction

Repeatedly cited as a prototype of export led growth, Australia's beef segment was slow to develop and remained dependent on low value markets for well over a century. The arid, remote pasturelands of Northern Australia where cattle production was concentrated were not conducive to marketing a high quality product. As beef production expanded in spite of the problems, by the final decades of the nineteenth century Australia's small domestic market was saturated. Cattle outnumbered the populace by 1861 (Davidson, 1981; Williams, 1967). Consequently, beef's abundance offered the new colonies a cheap source of protein despite marked variation in quality. Owing to its low cost and availability, beef consumption was high in Australia relative to other western nations. In 1900, annual consumption of beef stood at 166 pounds (lb) per person (Coghlan, 1900, 1902a). This level was well above the UK average at 109 lb or that of the US at 150 lb (Hutchinson, 1958). Yet even this unnaturally large domestic appetite for beef could not sustain the segment, which was geared for extensive, large scale production.

Despite several failed attempts to successfully export the foodstuff, the segment soon relied on overseas importers and independent agents to handle excess supply. Consequently control over the marketing of Australian beef passed to these external intermediaries, retailers and government agencies. They sourced the commodity as cheap ingredients for fresh meat and further processed products. The signing of consecutive bilateral trade agreements between the Australian government, UK, and US governments sanctioned this supply relationship, reinforcing a dependency on overseas markets. Outside exercise of control of the supply chain intensified the natural commodity cycle, fashioning approaches to promoting Australian beef. Treatment of beef as a commodity conditioned consumer attitudes towards meat consumption that have proven difficult to alter.

Following successive failures to address quality concerns, the commodity became synonymous with its undesirable attributes – toughness, inconsistency and discolouration. By the time Australia entered the chilled beef trade in 1934, it had already acquired a reputation as a third rate commodity producer. Insulation from real competition throughout the Second World War entrenched the nation's status as a passive commodity supplier. This position was

repeated again when Australian beef found its niche in the post-war US hamburger trade. The level of demand for this low grade meat was such that it attracted a better price than higher quality beef. Shipments to the US increased from just 5 thousand tons in 1957-58 to 218 thousand tons in 1963-64 (Axelsen, 1968).

A number of factors contributed to the systemic failure to make quality improvements and achieve the standardisation required to develop higher value products. Firstly, the marketing system was neither aligned nor coordinated to pool resources for acquiring and disseminating information about consumer preferences, market conditions and quality standards. Secondly, the marketing system lacked the mechanisms to support quality control or continuous improvement to meet market specifications. Thirdly, the focus on the domestic market and dependency on overseas markets for mass-produced low quality beef ingrained the segment's inflexibility to respond to particular and changing consumer preferences.

The overriding focus on volume at the expense of delivering value through quality improvement exacerbated the impacts of the global meat market collapse in the mid 1970s. As such, the spectacular rise and fall of the segment as popularly portrayed, when examined in light of the configuration of this marketing system, is questioned. A refined account of the segment demonstrates continuity in value orientation through the following historical analysis up to the beef crash of 1974. Unlike Griffiths (2000) the state does not occupy a central position in this thesis, thus the history of the segment is viewed from an earlier date than Australian Federation. This chapter embeds the segment in its local market context by examining its origins and early development to appreciate the factors shaping the configuration of the marketing system up to this crisis and turning point.

The Speculators: Encouraging Abundance and Mediocrity, 1860-1932

As the preserved meats are without bone, they may, at the price above-named, be regarded as being half the cost of first-class English meat. But I think that by most English workmen half a pound of English fresh meat would be regarded with more favour than the whole pound of Australian tinned meat (Trollope, 1873 reprinted in 1967: 96).

Salt beef, often tough and maggoty, had been a core component of ration scales in colonial Australia up until 1815. As cattle numbers grew red meat soon became lodged as a staple in the antipodean diet. Consumption was high due to the low price, which by 1820 was the

cheapest source of protein in New South Wales (Coghlan, 1902b; Walker & Roberts, 1988). Over the next 50 years or so cattle production expanded steadily. As squatters speculated on a small unstable market, a growing problem of over-supply threatened these improbable pastoralists.

Further expansion of cattle production from 1860 to 1900 exacerbated the oversupply of cheap, low quality meat. To reduce wastage and increase the return for each beast, additional markets were needed to absorb the excess. A superior form of preserving meat to salting was keenly sought. Canning using heat processing offered entry into the UK institutional trade with the Royal and merchant navies the major customers (Anon, 1992c; Turner, 1980). Following the establishment of a boiling-down works and a canning factory in Newcastle in 1847, the Dangar brothers – Henry, William and Richard, spearheaded the export of canned meat (Turner, 1980). Shortages of meat in England during the mid 1860s due to cattle plague increased demand for imports, stimulating the trade. Demand-pull was so great that the canned form became cheaper than fresh (Drummond & Wilbraham, 1957). As well as the British Admiralty canners found an expanding market among Britain's working class who could not afford home-cooked butchers' meat (Farrer, 1988).

The market peaked in 1871 with a record 10 thousand tons shipped to the UK (Farrer, 1988; Symons, 1982). 'Tinned dog' was an apt descriptor of its quality. Slices were either served with salad, bread and butter or on sandwiches (Beckett, 1984). Prices ranged from 4d to 9d per lb for tins ranging from 1 lb to 6 lb in size (Symons, 1982). Despite its cheapness and wholesomeness, consumers disapproved of the quality in terms of its appearance. Mrs Isabella Beeton, an English housewife, described the attitude of British consumers toward Australian beef in 1880:

an objection has been raised by some as to the appearance of Australian and other tinned meats when turned out of their tin holders; but they are sold in pretty dishes for the very purpose of lessening their ugliness (Beeton, 1880 cited in Symons, 1982: 90).

Like the salted variety, canned and corned Australian beef was in a lower league than premium domestic product. Processing technology was largely experimental with no accepted guides for quality control (Farrer, 1988). Meat was commonly overcooked and contained in cumbersome tins that were difficult to open and occasionally mislabelled. Comparison with fresh cuts by the media, medical fraternity, sales agents and general public did not assist its perceived nutritional value or appetite appeal (Williams, 1872). It was sold mainly to institutions like prisons, hospitals, workhouses and large working families that valued its relative cheapness, indefinite storage life and bulk convenience. By the end of the 1890s the

most popular form of Australian beef sold in the UK was corned, packed in 6 lb tins and sold by the slice. Following their civil war, the Americans developed advanced canning technology that Australia could not match, effectively ending this first export foray by Australian producers (Farrer, 1980). Figure 2 depicts the flow sheet of operations of the Melbourne Meat Preserving Company in 1870, typical of early canning operations. As shown the carcass meat was processed into a range of canned, corned, fresh meat and extracts of meat products. A variety of by-products like offal, bones, skins and hides were also removed.

Figure 2: Flow Sheet of Melbourne Meat Preserving Company Operations, 1870

Figure removed, please consult
print copy of the thesis held in
Griffith University Library

Source: Farrer (1980), derived from description in Argus, 26 February 1870.

Consumption of meat in the colony was much higher than Britain. Average per capita consumption in New South Wales in 1895 was 2.6 kg a week, comprised of 60 per cent beef and 37 per cent mutton. The pastoral ration of 4.5 kg also exceeded the 1 kg per week average in Britain between 1889 and 1903 (Walker & Roberts, 1988). Between 1860 and 1894 Australia's livestock population grew from 4 million to 12 million cattle, and from 20 million to 100 million sheep (Shaw, 1970: 13-14). By the turn of the twentieth century Australia's annual consumption of meat stood at 276 lb per capita, consisting of 166 lb of beef, 98 lb of mutton, and 12 lb of pork (Coghlan, 1900, 1902a; Hutchinson, 1958).

In the absence of adequate refrigeration, meat spoilt quickly in most areas of Australia and had to be cooked and consumed immediately after slaughter meaning that it was rarely tender (Gollan, 1988). Cooking methods were equally primitive. Beef was most commonly boiled or roasted in a cauldron-like pot with the melted fat or ‘drippings’ collected and stored for lard or later application as a spread on bread. Meat boiled in this way resembled an Irish stew. Alternatively, meat could be preserved for future consumption by salting, smoking, or drying. Each of these methods diminished beef’s eating quality. Although Australia’s reputation as the greatest meat-eating race on earth was deserved, this dietary idiosyncrasy seems to have been borne out of necessity rather than choice. From 1830 to 1900 the comparative price of two staples - meat to bread was relatively inexpensive – ranging from a ratio of 1:1 to 1:3 (Coghlan, 1902b). As a pure commodity, meat and its growing abundance devalued its true worth and enhanced its affordability. This relationship permanently shaped Australians’ attitudes toward purchasing meat.

For Australian producers there was an economic imperative to maintain the economies of scale of extensive livestock production. As supply outran domestic demand, more stable and lucrative markets were sought to safeguard pastoralists against financial ruin. Groups of producer-processors pursued ‘fickle’ overseas markets to which their product was ill suited, often leaving them insolvent. Through partnerships these local entrepreneurs constructed the first meat preserving works to can and freeze beef for export. Few operations were able to make a profit; changing ownership and closures were frequent. The Lakes Creek works at Rockhampton, Queensland was typical of the sector. Low cattle prices saw the plant change ownership four times during its first 30 years of operation (McDonald, 1988).

Initial growth of the processing sector led by under-resourced entrepreneurs was driven in part by the misreading of distant overseas markets and inappropriate policy responses by local governments. In Queensland, grants of up to 50 per cent of the projected cost were awarded to proprietors of existing or planned meat freezing under the *Meat and Dairy Produce Encouragement Act 1893*. This provided an impetus for the increase in the number of meatworks in that State from one in 1891 to six by 1900, with the volume of frozen beef exported growing from 5.9 million lb to 77.2 million lb over this period (Duncan, 1962). Unfortunately, this produced an unsustainable expansion of meatworks. Facilities were poorly located, frequently closing in the face of adverse seasonal conditions or selling to foreign interests. In addition, the disease pleuro-pneumonia, the buffalo fly pest and cattle ticks threatened the viability of cattle production especially in Northern Australia (Parsonson, 1998). Dominance of British breeds, like the Shorthorn and Hereford, ill suited to the dry,

harsh climate elevated their susceptibility and the irregularity of cattle supply (Watt, 1955; Peel, 1973).

Supplying Distant Markets

The drive to maintain production encouraged premature development of overseas markets for Australian beef. Like earlier attempts to grow export markets for salted and canned beef, trade in frozen beef was ill fated and marginal. While the frozen meat trade dominated Australian exports for the 60 years from 1880 to 1940 its economic fundamentals were always problematic. This venture again locked the segment into high volume production of low quality beef unable to attract premium prices. Configuration of the beef value chain for abundance and mediocrity created dependence on overseas markets, which reinforced the continuing commodity cycle. Firms in the beef segment did not develop as active and direct exporters. Instead distant markets were sought to absorb excess supply and sustain artificially high volumes of production. Protected by natural barriers of excess and isolation, the segment was unresponsive to local market preferences. This value orientation also proliferated in overseas markets as marketing control was passed to foreign agents and officials disengaging Australian exporters from user requirements.

After two previous failed attempts, Australia's first consignment of frozen beef was successfully shipped to London in February 1880 on board the *Strathleven*. A world first had been achieved 2 years earlier aboard the *Paraguay* between Argentina and Marseilles (Davidson, 1981). A consortium of pastoralists from Queensland, Victoria and New South Wales and the part owners of a small shipping firm - Andrew McIlwraith and Malcolm McEacharn - financed the Australian shipment to London. The venture produced a loss as did a second shipment. Despite the logistical feat, frozen beef was a marginal enterprise for Australia. Expansion of cattle production, rather than actual market demand, drove growth. Tinned meat remained more lucrative until the end of the century (Davidson, 1981).

In terms of the quality of the meat and the consistency supplied, Australian product remained substandard (Duncan, 1959, 1962). Despite impressive advances in refrigeration technology, ice crystals regularly burnt Australian meat. This resulted in meat that lost the richness of its colour when thawed, appeared sodden, was stringy in texture and flavourless in taste. Australia could not compete with chilled Argentinean product (Critchell & Raymond, 1912). At first, the US dominated the UK imported beef market making up 91 per cent of imports in 1891. As the US domestic market expanded quantities available for export declined.

Argentina then came to dominate the market – holding a share of between 60 and 80 per cent from the mid 1890s until the 1940s. Australia managed to fill just 10 to 20 per cent of UK imports. This, however, accounted for 70 per cent of Australia's total beef exports. Whereas Argentina cultivated demand for premium chilled product Australia was relegated to supply the declining frozen beef market, which by the mid 1920s was confined to institutional buyers, food manufacturers, and retailers sourcing it as a raw ingredient. Like imported canned meat, British consumers were resistant to Australian frozen beef. Butchers circulated reports and rumours to undermine its nutritive credibility (Duncan, 1956).

Failure to develop a competitive product identifiable with its source of origin enabled participants further along the value chain to control the product and capture the added value. This failure is explained by a number of interrelated factors, notably resource and location disadvantages, coordination problems, and negative image effects. Deficiencies in available resources and limitations imposed by physical distance placed Australian beef at a serious disadvantage to competitors. Insufficient capital investment in property management, sown pastures and watering facilities prevented the purposeful production of animals of sufficient weight or quality to meet overseas market requirements. Viewed as a less lucrative enterprise to wool production, beef cattle were raised on second rate pastures with inadequate watering outlets requiring that they travel great distances across large land holdings. Poor farm management practices were commonplace in Northern Australia - breeding and fattening on the same property, scarcity of suitably fertile paddocks for fattening purposes and long distances from abattoirs. Duncan (1959) explains that up to the 1930s, the average Queensland property or 'station' was seriously under-resourced lacking vital fencing, stud stock, or paddocks. Stations were of considerable size, ranging from a few thousand to several million acres (Crawford, Donald, Dowsett, Williams, & Ross, 1954). More detrimental to export markets was their typical location, long distances from freezing works and ports.

Distance also prevented transportation of chilled product overseas until the mid 1930s. Research to improve beef quality and develop refrigeration capable of keeping beef fresh for extended periods had begun as early as 1920. However, prior to 1926 when the Council for Scientific and Industrial Research was established, advances were minor since all agricultural research had been at the discretion of the States (Symons, 1982). Establishment of agricultural research institutes at Australian universities relied on bequests from private donors (Watt, 1955). Overall, Australian research lagged behind efforts of rival exporting nations – Canada, New Zealand, the US, Denmark and South Africa.

Beef cattle production became concentrated in Queensland, the origin of 85 per cent of exports. Due to the uncertainties of drought across the colony and the poor quality of pastures, cattle numbers fluctuated wildly, directly impacting on the supply available for export as shown in Table 1. Numbers fluctuated by up to 75 thousand animals, or 9 per cent of total cattle numbers in a single year (Duncan, 1962). This inconsistency in volume caused dissatisfaction amongst retailers, with butchers reluctant to remain loyal to Australian suppliers following disruptions in supply. Institutional customers were also unconvinced. Purchasing officers were hesitant to enter long term contracts where the supply could not be assured. Australian supply also peaked during the English summer and autumn months when demand for heavy meat was at its lowest and competition amongst high quality sources was fierce. More favourable conditions in Argentina allowed for a much younger turn-off age compared to cattle reared in Queensland (Duncan, 1962; Smith & Coatman, 1936). Australian product simply could not compete.

Table 1: Fluctuations in Meat Exports from Queensland to the UK, 1893-1910

Year	Cattle in the State	Frozen Beef Exports to UK in cwts^a
1893	6 693 200	207 000
1899	5 053 836	513 000
1903	2 481 717	77 000
1910	5 131 699	800 000

Source: Critchell & Raymond (1912: 47). ^acwt=hundredweight, 1 cwt=50.80 kgs

Inability to assure consistency of supply both in volume and quality was linked to the underlying lack of coordination between separate marketing functions. As the only means for coordinating livestock numbers, the price mechanism did not appear to operate effectively. Stock numbers, domestic demand, exports and price bore no clear relationship. This faulty mechanism exacerbated the irregularity of export supply. Since an inaccurate price mechanism was the only way of communicating market needs in a disjointed, long and complex value chain producers received no feedback about the relative quality of their product. Therefore they had no information on which to base future production decisions or any incentive to improve cattle quality. The Royal Commission into the Queensland Beef Industry in 1928 also criticised the absence of a price premium for first grade export cattle to encourage herd quality improvement (The Beef Cattle Industry Commission, 1928).

Poor communication and lack of coordination between primary production and processing raised costs and inhibited product consistency. Due to the geographic dispersal of producers, a

large number of small meatworks were established to service pastoralists. The possibility of smaller, inland freezing facilities was untenable, due to the lack of a suitable railway system. As a result works were scattered along the coast, proximate to adequate ports (Queensland Royal Commission on Abattoirs and Meatworks, 1945). Seasonality of production meant that operation of meatworks was largely confined to six months of the year March to August, with the height of cattle turnoff occurring in the winter months. This poor utilisation of capital increased processing costs.

Fragmentation within and across sectors impeded the logistical alignment required to schedule regular shipments. Difficulties concerned collecting a large number of small lots at multiple ports due to the geographic spread of the segment and the failure to develop a standardised contract with ship owners (Duncan, 1962). Lack of dedicated transport lengthened travel time to markets as vessels were obliged to load and unload at multiple ports. This exposed beef to draughts of warm air as hatches were repeatedly opened, thereby reducing quality, while raising shipping freight costs. Freight charges represented 20 to 30 per cent of the price obtained in London for first class Australian frozen beef. Most freight problems were overcome by 1900, but high costs continued unabated over the next century. Argentina enjoyed a cost advantage of £1.18s.7d. a bullock in freight charges in 1921 (Duncan, 1962).

Absence of a grading system in Australia, together with poor quality beef derived from older cattle, meant that British consumers' preference for 'small, lean, tender joints' was not met (Duncan, 1959). This inability to deliver added value put Australia at a serious disadvantage. Initially weight was the only objective, universal measure of value routinely used in the marketing of frozen beef, both in the source country and the export market, indicating a limited and ineffective grading system. Introduction of a grading process first emerged in 1890 to facilitate forward sales (ie cost inclusive of freight (cif) trade) of frozen beef since buyers needed a standard for specifying and selecting the type of meat required without first inspecting it. English retail stores or 'multiple shops' located in larger cities were major trade customers. They stimulated the development of grading to facilitate forward contracting, for up to six months in advance, but usually on a month to month basis (Critchell & Raymond, 1912).

Each country used different weight grades and within these groups, different freezing companies commonly applied their own grade classifications. Both New Zealand and Argentine exporters enjoyed better reputations in the UK for their grading schemes as they distinguished between different standards of quality. Due to the confusion over the meaning

of Australian standards, buyers were notorious for demanding arbitrations and price concessions to compensate for inferior quality. To some extent this problem was mitigated when grades were accompanied by a familiar producers' label or logo, referred to as 'well-known accepted brands, with a reputation' (Critchell & Raymond, 1912: 111). These symbols acted as indicators of quality, thereby improving the interpretation of ambiguous grades. Repeated attempts over several years to develop a universal standard or contract through coordination of the Frozen Meat Trade Association were unsuccessful due to the divergence in grade interpretations which persisted. Instead, London buyers often set an allowance of 1/16d. per lb when accepting 'colonial weights' to compensate for discrepancies in quality and weight due to shrinkage in freezing. This allowance also accounted for the London 'bate'. This referred to the practice of US traders offering an initial 'bate' of 1 lb off the weight of their chilled beef quarters which was withdrawn when sales were sufficiently strong to dictate to customers (Critchell & Raymond, 1912).

As forward trading and selling on cif contracts became more firmly established the trade gradually moved away from its initial speculative orientation. Given the novel and perishable nature of the goods, insurance was a necessary cost incurred to compensate exporters for any loss sustained during the lengthy trip. Compared to their Argentine competitors, insurance costs faced by Australian exporters were usually double. Premiums were also raised by the increasing claims for damage made by Australian consigners anxious to avoid marketing 'an inferior product on a low market' (Duncan, 1962: 115).

Surrendering Control of Marketing

By the early 1900s, graziers were removed from direct exporting by selling their cattle to meat processors and freezing works. These firms became responsible for the multifaceted tasks of export marketing. Processors, in turn, handed control of marketing their goods to a large number of London-based agents, who negotiated sales with wholesalers and retailers. Marketing of Argentine and US products was more focused and concentrated, with only three and four firms handling their distribution arrangements respectively. In contrast, Australian exporters employed a total of 35 separate agents in 1896 (Duncan, 1962). These smaller consignees were typically less resourced, inexperienced and generally ignorant of the trade. Through a lack of communication between the export meatworks and agents stock numbers could not be ascertained easily, regularly causing 'embarrassing accumulations and temporary scarcities'. This meant that the Australian trade was inherently more speculative than the

Argentina (Critchell & Raymond, 1912: 101). Agents with an oversupply of stock, unprepared to pay for storage costs, were anxious to sell and would accept low prices. This method of marketing was logically unsustainable – as evidenced by the tightening control of export marketing by stock and station agents.

Portrayed by Ville (2000) as a quintessentially Australasian institution, stock and station agents were the first significant marketing intermediaries active throughout the value chain. They provided a broad range of services to ‘the man on the land’ acting as property agents, importers, wholesalers and distributors of farming equipment, inputs and provisions (Ville, 2000). Of equal, if not greater, importance to cattle farmers were the marketing services offered to bridge the chasm in knowledge of local and overseas markets due to the vast distances between them. Agents also facilitated the flow of information, finance and supplies in the opposite direction acting as commission agents for shipping, insurance companies and freezing works.

By relying upon these marketing service providers, those most intimately involved in creating the core product - cattle producers and beef processors - relinquished the opportunity to learn about their customers and market conditions. This was compounded by the aggressive expansion strategies of agents who harboured unrealistic optimism amongst landowners. To avoid exclusion from the beef value chain the larger agent mercantile companies also invested in meatworks and freezing chambers (Ville, 2000). An indication of their firming grip over marketing was the order given to the Central Queensland Meat Export Company to forward all of its meat to the London Office of its debtor – Goldsborough Mort & Co. in 1890 (Duncan, 1962). A number of American and British firms like Swifts, Borthwicks, Bovril, Yuills, and Vestey also acquired facilities prior to the First World War. Their investments were linked to sizable distribution networks of agents and principals, shipping lines and even retail outlets. Hence, they combined all four main marketing functions – importing, jobbing, wholesaling and retailing of beef. These wholly owned, internally coordinated operations were the target of animosity from competing meatworks who resented their control of the world meat trade (Beever, 1967). They also attracted criticism from smaller British meat traders and the consuming public over concerns that ‘any agreement between the American firms and Vestey’s could establish a virtual monopoly in our imported beef supplies’ (Perren, 1985: 53).

World War One gave rise once again to canned meat exports to overcome space constraints caused by the disruption of commercial shipping routes to the UK. During the war and up to 1920 Australia contracted to sell considerable quantities of meat to the UK to feed the allied

armies under a bulk purchase agreement (Cutler, 1976; Queensland Meat Industry Board, 1934). This precluded private companies selling outside the UK and discouraged them from contracting independently (Scott, 1936). Meanwhile, consumption of meat in Australia declined due to high prices (Hutchinson, 1958). According to the report of the (Inter-State Commission, 1918) meat prices increased by almost one hundred percent between 1913 and 1918. While rationing was not introduced, the wholesale price of meat in Melbourne increased considerably from a base of 1000 units before the outbreak of war in July 1914 to 2609 units in July 1920 (Commonwealth of Australia, 1920). This was due to the scarcity of stock, exacerbated by the organised control of meat wholesaling, particularly in New South Wales (Inter-State Commission, 1917). Queensland on the other hand managed to control prices through state run butcher shops and stock stations. Their prices were benchmarked against more competitive imperial contract export rates, which in turn stabilised retail prices throughout the State (Laurie, 2003).

In contrast to high prices received for commodities during and immediately after the war the crash of frozen beef prices in 1921 hit beef cattle producers hard, especially inexperienced, capital-poor returned servicemen. In response to growing concerns of producers and exporters for relief and assistance a subsidy of ¼d. per lb on export beef was offered. This bounty was conditional upon the formation of a Meat Board led from within to promote greater coordination by means of supervision and even control. As evidence of the token nature of the Board and the unwillingness of the segment to cooperate and self-organise, the Australian Meat Council (AMC) established in November 1922 disbanded less than 4 years later as a lack of producer support resulted in financial insolvency.

Up to the early 1930s the beef segment was notable for the absence of direct government intervention. The failure to address ineffective coordination mechanisms and improve the image of Australian beef during the segment's formative years had long term impacts. The necessity for an organisation able to better coordinate the segment echoed in the argument of Mr. J. B. Cramsie, Chairman of the AMC in 1924:

We must organize supplies so that there may not be a beef and mutton shortage in one part of Australia, while in other parts the graziers are on the brink of ruin, the meat works closed, the meatworkers unemployed and cattle eating out valuable pasture, but giving the nation no return. The nature of the industry obviously makes it impossible for individuals to effectively advertise our meat overseas successfully or to perform some other important functions, without the performing of which the industry and those engaged in it cannot prosper. We must therefore have a system of co-operation to do these things, which are a business necessity (Committee on Meat Industry Encouragement Bill, 1924: 724).

Despite disunity and apathy across the segment, the Commonwealth government persisted with its policy against direct intervention and control. But it was willing to grant financial assistance to members provided they organise voluntarily. Yet in spite of five national conferences spanning 8 years from 1922 to 1930, the segment still lacked an effective central coordinating organisation (Duncan, 1959). Then, in August 1931, the Queensland Meat Industry Board (QMIB) was established following a Royal Commission 3 years earlier. This government sponsored organisation focused on regulating the Brisbane trade and local market. Additionally, public funds were used to provide facilities for export abattoirs, such as a meatworks at Cannon Hill, purchased from Swift Australia Co. previously in 1930. Provision of dedicated export facilities was designed to facilitate a more consistent, regular supply of beef for export. Funds were also allocated to research into pasture improvement and meat preservation (Queensland Meat Industry Board, 1932).

As export outlets shrank, 85 per cent of Australian beef was consumed locally throughout the 1920s and the early 1930s (Windett, 1933). Cattle numbers fell from 2.8 animals per person in 1921 to 1.7 animals per person in 1928 with the decline in beef cattle most pronounced, defying an upward world trend (League of Nations Economic Committee, 1913; Windett, 1933). Australia maintained its high level of beef consumption at 152 lb per person in 1928-29. This was equivalent to three times that of the US and two times that of the UK and Canada (Windett, 1933). During the Depression, beef was replaced by cheaper mutton and consumption dropped from 155 lb per capita in 1927-28 to 92.5 lb per capita in 1931-32. Mutton and lamb consumption increased from 73 lb to 79.9 lb per person (Hutchinson, 1958).

The trigger for the decline in beef exports from 1924-25 was the virtual closure of UK markets for Australian beef due to the superiority of Argentine supplies and the Vestey family's control of the London beef trade. Vestey was integrated throughout the global beef value chain. They owned substantial pastoral and processing holdings worldwide, shipping lines, cold storage facilities, wholesale market stalls and retail shops. By the mid 1920s the Vestey owned a third of cold storage facilities in the UK under its Union Cold Storage company. This firm acquired three multiple companies to boost its retail outlets by 2 356 shops in addition to its Dewhurst chain. Like other Vestey enterprises Union Cold Storage was able to close less profitable outlets and so led the rationalisation of the multiple format in UK meat retailing (Perren, 1985). Within Australia Vestey was the single largest landholder and wielded the financial strength to selectively build, expand and close meatworks to deter competitors and retain market leadership (Knightley, 1981). Tight control of the prized London market, together with the low quality and negative image of Australian beef was reflected in prices received for frozen beef, compared to exported chilled beef, lamb and

average UK domestic prices, as shown in Table 2. Argentine product received a premium of 1¼d. more per lb than frozen Australian beef (Windett, 1933).

Table 2: Index Number of Prices for Selected Types of Meat

Year	Chilled Beef London	Frozen beef London	Lamb London	Melbourne Wholesale Price Level
1913	100	100	100	100 ^a
1926	174	136	180	161
1927	167	129	175	160
1928	187	139	194	157
1929	192	150	190	159
1930	187	150	141	144

Source: Windett (1933: 290). ^aBase: July 1914 = 100

The root cause of Australia's commodity value orientation was exporters' failure to target specific markets and coordinate production with export demand. Rather, the trade was treated as a 'variable residuum over and above local seasonal requirements' (Windett, 1933: 70). In 1926 Australia still only represented a small slice, just 5 per cent of the UK's total meat imports (British Economic Mission, 1929). With increasing criticism of various public schemes designed to develop domestic and export markets, an independent investigation was undertaken. At the request of the Commonwealth government four British businessmen were selected to review Australia's economic development. Their report strongly advocated that no further public funds be made available for large scale cattle ranching and that more intensive land development be pursued (British Economic Mission, 1929). They also urged reducing the number of export meatworks, which were considered to be 'uneconomically large' (British Economic Mission, 1929: 1253).

Given Australia's inability to compete on price due to high costs of production the authors pressed for attention to quality, rather than quantity and that 'both should be kept constant for the export market' (British Economic Mission, 1929: 1253). To advance exporting the report suggested that 'best possible selling organisation employing the highest grade of salesmen should be set up there, preferably outside all government control' (British Economic Mission, 1929: 1267). While they agreed that the UK should remain Australia's main export market, they argued that closer markets be sought to provide diversification. Had this advice been heeded, the segment's growth may have been more profitable. By 1929 Australian beef exports still constituted a small proportion of global trade and only one-tenth of those from

South America. While the UK remained the principal export market its share declined and European and Pacific markets absorbed the surplus (Windett, 1933).

The first noteworthy representation of Australian beef interests overseas was at the Imperial Conference at Ottawa, Canada in 1932. These lengthy trade negotiations aimed to relieve some of the financial pressure facing the segment by securing an expanding, stable share of UK markets. A Commonwealth government delegation including a meat industry representative attempted to persuade UK officials to give preference to meat sourced from Australia. The intended effect of the ensuing agreement was minimal. Despite the psychological closeness between Australia and the UK and outward preferential treatment, the physical distance placed Australia at a disadvantage in the market. British consumer tastes favoured chilled beef that more closely resembled fresh, butchers' meat (Anon, 1935). This preference was so strong that by the mid 1920s, frozen beef was almost eliminated from the UK retail trade (Duncan, 1962). A decade later the institutional trade and food manufacturers remained the chief purchasers of Australian beef.

Entrenching Commodity Status, 1933-1955

I then proceeded to eat my tin of bully beef, all by myself despite the looks from the bright sparks who had thrown theirs away (Knowles, 2004).

By 1933 there was an acute awareness of the segment's dire state and need for change. Failing several attempts to self-organise, government officials took control of marketing by negotiating and administering bulk supply contracts. In guaranteeing a market for Australian beef, these long term government-to-government purchase agreements distorted price and quality signals and bred complacency. Consequently Australia's status as commodity producer was entrenched as evidenced by the fledging transition from frozen to chilled beef. Accumulative value of Australia's chilled beef exports reached £988 thousand in 1938-39. This represented one-third the value of frozen beef exports and 26 per cent of total beef exported (Duncan, 1959, 1962). But the segment's advancement was again undermined by systemic failure to effectively coordinate supply, improve quality and capture added value from higher value market segments.

With the gradual rise in disposable incomes of Britain's working class, preference for chilled beef above frozen made demand for the latter price dependent upon the former. Chilled product attracted a price premium over frozen of £1 to £2.10s.0d. per head for good average

quality Australian beef aged between 5 and 6 years (Duncan, 1962). Yet, Australia was unable to supply this product until the mid 1930s, as the technology required to safely transport chilled product from Australia to the UK did not exist. An experimental program of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) on meat preservation began in 1931, which assisted the discovery of conditions required to chill beef for Australian needs in 1933. Over the next 2 years inclusive, chilling facilities were installed in most meatworks in Queensland and in some Southern States. Vessels were refurbished and discounts on freight were provided to encourage the new trade. This preparatory work climaxed in the first successful experimental shipment in February 1934 sponsored by the QMIB (Queensland Meat Industry Board, 1934). Even though this achievement signified a major milestone in the export trade, it lagged behind the Argentines who dominated imports of prime chilled beef in the UK since 1875. Like exported frozen beef the UK was the major destination for chilled beef accounting for 99 per cent of exports (Commonwealth of Australia, 1942-43).

Successive decisions and events prolonged the segment's entrapment in a vicious commodity-cycle. The Ottawa agreement offered no more than a temporary solution to the systemic failure to organise marketing. On this front, Australia faced strong competition from the 'efficiently organised' South American beef marketing system (Windett, 1933). The agreement did not deliver promised access or growth for Australian beef in UK markets. Even though the government successfully renegotiated with UK authorities to substitute higher value chilled for frozen beef, this gain was offset by depressed price levels until 1937 (Duncan, 1962). Security of a fairly permanent market for surplus beef offered little incentive for improvement. A caveat of the amended Ottawa agreement was the creation of a Meat Board to work in tandem with the Empire Meat Council to regulate meat supplies. Cattle producers were well represented on the Board, holding 9 of the 18 positions. Elected representatives keenly promoted and protected their interests. But without the wider grassroots support of conscripted members the Board could not tackle the system's underlying weaknesses. Up until the Australian Meat Board (AMB) was created in January 1936, a number of piecemeal attempts were made to coordinate marketing activities at the national level. Two years earlier, the Federal Meat Advisory Council was formed to deal with the problems facing the segment. But, as an advisory committee it lacked the regulatory grunt to administer quotas and control shipments.

A common thread explaining resistance to an organisation capable of coordinating these functions was the fear that members would lose their independence if control was centralised. A related reason was the varied and competing interests of the different sectors of

the Australian meat industry. Factions felt members from other States or sectors would not properly represent them. Tensions were felt between beef farmers from Queensland, New South Wales and Victorian, between beef and sheepmeat farmers, domestic processors and export-focused processors, and between cattle farmers and large, often foreign processing companies. Objections to the proposed AMC in 1925 went so far as to say that it symbolized 'the nationalisation of the sheep, cattle, and meat industries of all States'. Similarly, a proposal in 1933 was criticised as being 'socialistic in trend' (Duncan, 1959: 196).

Statutory marketing control, particularly in export markets, was the source of the greatest opposition across the segment. Conflict surrounded how activities would be financed. Members focused on the local market were ambivalent about contributing funds to a Board that promoted the product overseas. There was also stern opposition from many meat exporters who believed grading was being conducted satisfactorily so there was no need for another supervisory authority (Duncan, 1959). Yet, as various conferences had identified, regulatory action was needed to raise the consistency and continuity of exports.

Like its predecessor, the AMB was predominantly an advisory body with minimal executive power. Unlike the Advisory council, it did have the power to regulate meat exports and negotiate uniform contracts for freight and insurance. Its role also extended to implementing programs and activities designed to improve herd quality, standardise grading and promote sales overseas. Among its achievements was the introduction of a chiller grade of cattle, a measure designed to promote improvement in herd quality. Through collaboration with the other commodity export boards, the AMB gained freight price reductions of 1/16d. per lb for chilled beef. Appointment of a dedicated London-based officer in 1937 was designed to rationalise distribution, while extending the outlets that sold Australian beef across the UK (Duncan, 1962).

Nevertheless, the AMB faced serious limitations since its jurisdictional authority was confined to exports. This precluded it from controlling the domestic trade including prices of stock and meat or from negotiating directly with the British government. More significantly, the Board could not attempt to rationalise or unite the segment to address marketing coordination problems. Through its licensing powers the AMB could 'determine the flow of meat to overseas markets' and assign space on particular vessels (Duncan, 1959). In effect this merely made it easier to respond to excess supply. It did not ensure the regularity of supply. As a result, the beef segment was less able to be influenced, directed, or coordinated than other export foodstuffs (Duncan, 1959, 1962; Morey, 1959). Progress of the AMB's work was stalled by the interruption of World War Two. In its first 3 years it faced multiple

interrelated problems, hampered by limited resources, restricted power and lack of member support. The Board's misdirected aim - to ensure Australia remained a stable, key source of UK meat imports - also impaired the segment's ability to resolve its genuine deficiencies. Nevertheless, this organisation marked a major milestone in the configuration of Australia's beef marketing system and formed the basis for future centralised representation.

Motivated by stable markets for exports and sensing the need for rationalization of meatworks, large foreign multinational corporations (MNC) acquired a majority share of the processing sector. The local subsidiaries of these MNCs reordered the beef export sector. Concentration of ownership by foreign firms was strong in Queensland (Beever, 1967). Three firms dominated these operations – the English firms Borthwicks and Vestey, and the American company, Swifts (Cutler, 1976). Vestey's purchase of William Angliss & Sons' operations in 1934 marked the end of significant Australian ownership of export-focused meatworks. Timing of this first wave of reorganisation coincided with economic depression rendering all participants more amenable to foreign direct investment (FDI) (Beever, 1967; Cutler, 1976).

Australia's market position worsened, such that by 1935 onwards Australian chilled beef commanded lower prices than any other source, except sometimes Rhodesia. Low prices reflected low quality. Cattle producers were unable to supply sufficient cattle of chiller quality and so exports included heavy, coarse quarters from older animals. Grading remained poor and shipping was lengthy and irregular. Due to the quality gap UK distributors were unwilling to afford preferential distribution facilities granted to the Argentines who still dominated the chilled trade as shown in Table 3 (Duncan, 1962).

Table 3: UK Imports of Frozen and Chilled Beef (per cent), by Country, 1930s

From:	Australia	New Zealand	Argentina	Other British	Other Foreign
Frozen beef					
1931-32	45.0	15.1	24.4	N/A	15.5
1933	37.8	26.7	22.5	3.4	9.6
1934	44.3	28.9	15.4	3.9	7.5
1935	46.5	25.5	16.6	4.0	7.4
Chilled beef					
1931-32	N/A	N/A	86.9	N/A	13.1
1933	N/A	N/A	85.1	1.7	13.2
1934	0.7	N/A	84.2	2.2	12.9
1935	0.2	1.3	81.7	1.6	12.7

Source: Australian Meat Board (1936)

Heavy reliance on UK markets leading up to the Second World War perpetuated an unhealthy dependence, cementing Australia's place as a supplier of commodity beef. Neither preparation nor experience from the previous world war could prevent the dislocation along the beef value chain which occurred during this war. Division of marketing functions between multiple government organisations complicated coordination. There was an uneasy separation of power over production at the State level and marketing and overseas trade at the national level. Unlike the US, which coordinated agricultural policy through a Federally based Department of Agriculture since 1862, Australia still lacked a national authority at the end of the 1930s (Crawford, Donald, Dowsett, Williams, & Ross, 1954).

Controlling Supply and Redirecting Consumption

Only the exigencies of war could mobilise more centralised control of marketing. Under the *National Security Act*, the Commonwealth was granted 'sweeping powers' to organise the marketing of meat (Cutler, 1976; Morey, 1959). With the purpose of securing large quantities of food for the armed forces the Department of Commerce took control of overseas marketing (Crawford, Donald, Dowsett, Williams, & Ross, 1954; Mellor, 1958). Control of export sales, licensing and shipping resided with the AMB and six State subsidiary councils. The Board also acted as the principle in contract negotiations with the UK government and set shipping charges (Butlin, Barnard, & Pincus, 1982). Organising export marketing in this way minimised disturbances caused by war and homogenised the methods of diverse enterprises contributing to overseas trade - local and foreign-owned firms, co-operatives, private firms and public companies. Centralised control was sold to producers as a way of protecting them against market collapse, but it intensified their position as commodity suppliers. More significantly, central control of the meat supply redirected beef, a staple foodstuff, to the UK. To formalise the arrangement Australia entered a long term contract with the British government in July 1939 for the purchase of the entire meat surplus until 1948 (Butlin & Schedvin, 1955).

Within the first year a total of 276 thousand tons had been shipped, a bonus of 15 per cent of the amount previously negotiated. Yet a sense of fear pervaded, as producers worried that huge surpluses of meat could not be 'disposed of' in other markets. As one State Minister for Agriculture expressed in 1940, 'if we increase our activities in primary production, we shall have to face the problem of disposing of the products. Marketing is a bigger problem than production' (Crawford, Donald, Dowsett, & Williams, & Ross, 1954: 28). Rather than seeking additional markets for surplus supplies, techniques were adopted to preserve and

modify its form for consumption within the Commonwealth. Methods included new processing techniques such as canning, drying, deboning and telescoping carcasses, in addition to bulk storage. Publicity campaigns were also sponsored to encourage local consumption and emergency plans were devised to adjust meat prices to stimulate consumption if necessary (Butlin & Schedvin, 1955).

Exports of chilled meat were insignificant during the war, falling from 58 963 009 lb (valued at £988 148) in 1938-39 to 1 843 lbs (valued at £69) in 1942-43. No chilled meat was sent overseas in 1940-1941 and exports were negligible until 1953 (Commonwealth of Australia, 1942-43; Anon, 1965). By late 1941, as shipping capacity was reduced to just 20 per cent of 1939-40 levels, the UK government anticipated that it could only receive 81 thousand tons of frozen meat (Butlin & Schedvin, 1955). Due to drought Australia had difficulty filling the contract and grappled with acute food shortages when fighting reached the South-West Pacific. The region's population swelled due to the expansion of Australia's forces and the arrival of American servicemen (Clements, 1986; Mellor, 1958).

Pressured to feed a growing population, the Commonwealth government instigated a number of measures to remedy the failure of existing mechanisms to coordinate marketing functions performed by various departments and agencies. The Australian Food Council established in April 1942 was given the all-embracing duty to ensure production and distribution met orders from local civilian, defence force and overseas markets. However, short term targets to lift beef supplies were futile since production could not expand rapidly. A cabinet subcommittee - the Food Executive - was established in April 1943 to address growing food shortages. Federal authority over agricultural production and marketing was eventually integrated later that year under Commonwealth Food Control within the Department of Commerce and Agriculture. This central agency coordinated decisions regarding food policy both internally with the price control and rationing boards and externally with overseas authorities.

Consumption was heightened, given full employment of a civilian population which had a higher disposable income and so increased their demand for beef. To remedy the growing shortage of meat, a Meat Industry Commissioner was appointed in September 1942 (Butlin & Schedvin, 1977)¹⁸. This move was criticised by producers who demanded greater representation. Consequently the Commission was dissolved and replaced by a smaller Meat

¹⁸ The Meat Industry Commission consisted of government representatives (Rationing Commission, Prices Board and the Department of Supply and Shipping), meat producers, meat exporters, cannery and industry employees.

Industry Advisory Committee again led by a Meat Controller¹⁹ the following year. Due to the increasing needs of British forces and the newly arrived American contingent, control over civilian meat consumption became apparent near the middle of 1943. The Controller of Meat Supplies was armed with the authority to compulsorily acquire meat and curb slaughterings²⁰. Consumer coupon-rationing of meat was also reintroduced effective from 17 January 1944 to 21 June 1948 as the last item to be coupon-rationed. Consumers were agreeable to the coupon system, as there were a variety of substitute foods on offer – particularly smallgoods not subject to consumer rationing. They appeared willing to replace their usual cuts of meat for pre-cooked meats as well as less popular cuts such as ‘mutton flaps’ and offal like cheeks and hearts (Butlin & Schedvin, 1977). Despite these constraints, Australian meat consumption was still substantially higher than either the UK or the US (Report of the Joint Committee of Australian and UK Officials, 1945). The fall in Australian beef consumption during the war was a result of its reallocation to the services.

Attempts to control meat prices at each stage of distribution from April 1943 were complicated by fixed prices under the UK purchase contract. Ceiling prices were fixed for meat for each individual trader as there was uncertainty among purchasers as to the legal ceiling price for specific items. As rationing and price fixing led to a contraction in production, prices were guaranteed in March 1944. Prices of beef destined for export, civilian and service consumption were treated uniformly, based upon prices in the ‘centre of the meat market’, the Greater Brisbane area. As purchases were not guaranteed, producers had the right to use ordinary sales channels or to receive the standard government price if they were unhappy with quoted trade prices (Butlin & Schedvin, 1977).

Domestic meat supplies were increasingly diverted to the allied armed forces as UK demand for meat was ‘virtually unlimited’ (Crawford, Donald, Dowsett, & Williams, & Ross, 1954). Processed meat in canned form grew by more than four times pre-war production levels in 1943-44 (Crawford, Donald, Dowsett, & Williams, & Ross, 1954). Though lessening palatability and morale, canning and dehydration were more suited to combat conditions and distributed a larger quantity of meat than would have otherwise been consumed (Hutchinson, 1958; Commonwealth of Australia, 1944). Australia’s total meat exports declined during the

¹⁹ A Meat Canning Committee complemented the Controller of Meat Supplies. Both were dissolved in 1946 following the expiry of the *National Security Act* 1939-1946 and the AMB was reconstituted.

²⁰ 15 per cent of all slaughterings was reserved by the Meat Controller to supply the UK populace and armed services, with the remainder allocated to the domestic trade on a quota basis. This reserved amount was increased between 25 and 33 1/3 per cent to meet UK demands, in which case rationing was inevitable (Butlin & Schedvin, 1977; Griffiths, 2000).

war, from an average of 236 million lb over 1936-37 to 1938-39 to 124 million lb in 1945-46. Canned meat also displaced frozen and chilled carcass forms (Australian Meat Board, 1950).

Strict government control of the beef value chain during the war reinforced a commodity mindset that constrained the move to value-based marketing practices. Attitudes towards marketing saw the function as a problem rather than a way to learn more about buyers to deliver added value beef products for specific markets. Relative, albeit artificial price stability granted by long term supply contracts created distortions in the market and provided disincentive for quality improvement or innovation. In many ways, the demands of the Second World War drove the further disintegration and complexity of the beef value chain, 'alienating eaters further from the source' (Symons, 1982: 171). It artificially boosted meat processing, with the volume of canned meats rising to over 100 thousand tons per annum in 1950 (Axelsen, 1968). War also brought incongruous opportunities for product innovation and learning about consumer preferences in mature overseas markets. Meat processing was refocused towards catering for the peculiar tastes of the US forces (Symons, 1982: 171). Nevertheless, consumer preferences, both locally and abroad remained strongly for fresh meat, so industry focus remained on developing 'different types of packaging and ways of handling fresh meat' (Axelsen, 1968: 151).

Knowledge of beef cattle breeding and raising lagged behind that of dairy cattle. Animal husbandry practices were primitive. Animals were 'hunted' and left 'virtually unattended' (Axelsen, 1968: 152-153). Queensland's Department of Agriculture and Stock admitted their inability to assist due to the 'comparatively small amount of research which has been completed in Australia on beef cattle husbandry and management problems' (Department of Agriculture and Stock, 1950: 665). Resistance to infuse *bos indicus* breeds more suited to tropical climates intensified the problem (McDonald, 1967). There was a general reluctance to commit additional resources toward quality improvement that would not yield short term gains (Kelly & Williams, 1953). Security of a renewed long term UK purchase contract in 1951 shielded the segment from changing markets. The AMB's power to award export licenses was not a powerful enough device to direct quality improvement across the segment. Since a decent price was received for frozen beef, meatworks and shipping companies were unprepared to upgrade their facilities to the standard required for proper chilling. As before, production could not be stabilised to ensure a constant supply of chiller quality cattle and so the predicted boost from the resumption of chilled exports was not realised.

Serving the Masses, 1956-1974

BUT you must remember this - steaks as we know them fill a small portion of the family's weekly diet – the price is too high to allow them to eat steak every night. Lamb and mutton as such are small sellers, mainly due to the fact that the U.S.A. has a small sheep population, consequently the majority of the meats eaten are processed (Ground Round or Hamburger Steak) and these are items which can be packaged (Hooten, 1960).

Australia continued as a long term source of cheap meat for Britain, a war ravaged, hungry nation under the *Fifteen Year Agreement* from 1952 to 1967. Minimum prices were guaranteed providing little incentive for quality improvement. Complaints about Australian beef in UK markets were rife and importers often took legal action over underweight packs and substandard product. The mind-set of Australia's principal trade promotions authority did not assist the cause. Commenting on an incident involving canned product in 1953, the Australian Trade Commissioner in London, Mr Critchley shifted all responsibility onto private enterprise 'to fight it out' (Anon, 1953). Lulled into a false security by the exclusive purchase agreement with the UK, the processing sector entered a 'moribund state' (Queensland Royal Commission on Abattoirs and Meatworks, 1945).

This attitude changed markedly after 1956. Through a blend of chance and coincidence, Australian beef was granted its niche with the opening of the US boneless meat, or hamburger beef trade. In a reversal of fortune, South American producers were denied access through the discovery of Foot and Mouth Disease (FMD) in a consignment of lightly salted beef. By 1959-60 the US succeeded the UK as Australia's main overseas buyer (Australian Bureau of Statistics, 1961). Market access was formalised in a voluntary marketing agreement, the *United States – Australia Meat Agreement*, signed in February 1964, which protected American producer interests, and cemented Australia as a commodity supply base for high volume, low grade hamburger beef (Bolton, 1990). Manufacturing quality meat was a vital input in America's expanding fast food industry that fed an affluent, growing population (Ritzer, 1993; Schlosser, 2002). This ingredient could be sourced most cost effectively from North Australia's open range pastures. Consequently, the form of beef exports changed from primarily carcass to boneless boxed beef shipped to US food manufacturers. Exports increased from 5 thousand tons in 1957-58 to 218 thousand tons in 1963-64, and is claimed to have raised the value per beast by \$50 (Axelsen, 1968).

In a repeated pattern, overseas trade customers considered Australian beef a cheap, wholesome commodity and were willing to pay for these attributes. As a result of a shortage of this type of beef, Australian exporters received £2 extra per 100 lb for third grade beef in

the US than for first grade product in the UK (Risdale, 1959). Significantly, the relationship between price and quality was severely distorted. Since price was the only mechanism to communicate value and reward for quality, high prices for low grade beef provided no incentive to lift standards. US competitors were seeking to progress to higher value products, underpinned by a sophisticated quality grading system. Australia's top grade compared with their second grade retail product (Hooten, 1960) and was much cheaper than locally reared grain fed cattle (Davidson, 1972). The majority of Australia's lean beef was graded as manufacturing quality – cutter and canner – mixed with fatty American meat and processed into hamburger mince. As required by US law, a proportion of manufactured meat had to be lean. Very rarely did Australian beef reach top-tier restaurant or retail markets.

Desperate to capitalise on the booming American market, producers unloaded most of their stock - including store, breeding and dairy cattle - resulting in a record level of meat production during 1958. Beef cattle marketing, especially for export, was labelled 'chaotic' and 'planless'. Each cattle producer acted independently, rushing in 'with their heads down' (Anon, 1959c). While some believed that the situation would 'right itself', others called upon State and Federal governments to control the wanton slaughter of cattle. To overcome these 'hit-and-miss' marketing methods of individual producers there were calls for greater centralised control through orderly marketing arrangements as with the other major traded commodities (Anon, 1959a).

Depending on Low Quality Export Markets

Throughout the 1950s and 1960s the segment remained dependent on bottom-tier UK and US markets (Axelsen, 1968). Australia's inability to expand chilled beef exports also retarded growth in the value and share of overseas markets. Argentina once again came to dominate this higher value segment of the UK market, increasing their share from 55 per cent to 77 per cent in the first five months of 1955; New Zealand gained a 21 per cent share while Australia managed just 2 per cent. Whereas Argentina previously enjoyed a premium of 33 per cent on their chilled beef over Australia's frozen beef prior to World War Two, this margin increased to more than 100 per cent (Bureau of Agricultural Economics, 1953).

There was criticism of the closed trade with the UK and active pursuit by Argentine and New Zealand rivals of new market opportunities. By focusing on the UK, its closest market culturally, Australia ignored potential markets such as Russia, China, Japan, Continental Europe, and South-East Asia (Axelsen, 1968). Mr W. J Borthwick of Thomas Borthwick &

Sons, one of the largest meat exporters argued that the country ‘bend her long term meat agreement with Britain until it breaks’ and tap into other markets (Anon, 1956). Some suggested that a more direct relationship be established with export markets already serviced through middlemen (Anon, 1957b). Since supply could not be assured, intensive promotion was not possible. AMB Chairman, Mr J. L. Shute, made this clear, stating that ‘it is useless to launch a large scale publicity campaign in Britain extolling the quality of Australian meat when we were not in a position to send regular supplies of good quality meat in quantity – it certainly pays to advertise but only if you can deliver the goods’ (Anon, 1957a).

AMB representatives witnessed first-hand transport and handling problems that affected eating quality and harmed Australia’s already tainted image in the UK. Successive national meat conferences in Sydney in 1957 and 1958 discussed these problems in detail. Improper refrigeration at major wholesale markets caused rapid deterioration in the ‘appearance’ and price of Australian meat by as much as 4d. per lb after just four hours following its arrival at market. Poor stacking in the ship’s hold, bad handling when unloading and delay awaiting transport caused damage and discolouration (Anon, 1957c). Attempts to develop new techniques to improve the post-slaughter quality of export beef failed as they destroyed the flavour. No real effort was made to remedy the recognised mistreatment of Australian beef.

Further automation of processing technology in the early 1960s coincided with a second wave of FDI. Foreign owners acquired greater control of processing linked to investments backward and forward along the value chain. Increasing integration of activities by corporate interests, especially foreign MNCs, cemented Australia as a secure and cheap supply base for beef used in further processing in overseas markets. On a smaller scale of investment, a similar pattern was developing in cattle production. Across both sectors there emerged an intricate web of cross-ownership. Australia’s Northern cattle sector was a target of FDI. In 1965 alone, 11 cattle stations encompassing 9 thousand square miles were purchased in Queensland (Kelly & Crawford, 1971). Bolstered by the strength of the economy and impressed by the success of the ‘King Ranch’ in acclimatizing tick-resistant, Santa Gertrudis (ie Brahman cross-cattle) cattle during the 1950s, Texas ranchers increased their offshore investment in Australia. Large British meat processors Vestey and Bothwicks also increased their investment, upgrading their works and purchasing large pastoral leases. Yet, there was little improvement realized in the actual quality of beef produced through the 1950s and 1960s (Bolton, 1990).

While the government appeared grateful for this FDI, others were less content. The Australasian Meat Industry Employees Union (AMIEU) questioned the motives of the ‘Big

Three' foreign 'monopolies', pointing to their vast network of overseas processing plants and distribution outlets. Vestey, for instance, operated 6 500 butcher shops under the *Dewhurst the Butchers* chain in Great Britain alone and, under the *Union International* banner controlled half of the meat imported into Britain (Anon, 1956). Their influence at Smithfield wholesale market was particularly powerful and did not serve Australian interests. The AMIEU linked the low quality Australian beef sold in the UK to monopoly control of the segment, insisting that these large trading companies intentionally made the beef look worse to bring down wholesale prices and lower local livestock prices (Anon, 1957e).

Pressure mounted to address the lack of meaningful methods to measure value. In 1957 graziers pushed for the universal adoption of live weight measures at sale time (Anon, 1957d). This proposal was taken a step further by the AMIEU who insisted on controlling on-the-hoof prices to combat butchers overcharging for inferior meat (Anon, 1958). Weight grading facilities had been introduced at Homebush market in Sydney in 1958 and earlier in the US and Argentina. The AMIEU, supported by the Housewives' Association also pushed for the reintroduction of meat grading in Queensland, suspended in November 1957 (Anon, 1959b).

Local consumers were concerned about rising beef prices triggered by high prices in the UK and strong US demand for manufacturing beef. Wholesale prices in Queensland rose by 25 per cent in the nine months to January 1959. Sydney fared better with a 12 per cent rise while Melbourne reported a 20 per cent hike (Anon, 1959d). As price was a key factor in meat purchase decisions, rising prices impacted negatively on domestic consumption. Australian consumers began to replace beef with protein sources they perceived as close substitutes – chicken, pork, lamb, and mutton (Axelsen, 1968). Apart from the growing dissatisfaction with price, consumers were also disappointed by the lack quality and consistency therein. Many housewives, especially 'new Australians', switched to pork as beef prices climbed (Morey, 1959). As evidence of this relationship, beef and veal consumption in Australia hit a post-war peak of 132.7 lb per capita in 1956-57, but had fallen to 100 lb per capita by 1959-60 due to buoyant overseas markets (Commonwealth of Australia, 1960).

Shifting focus toward the expanding US mass market required a number of changes in the processing sector to hygiene standards and inspection procedures. US hygiene standards forced expensive modernisation of many abattoirs, requiring further capital investment for remodelling of existing works and construction of new ones. A number of export licences were revoked until modifications were made. Standards were enforced through the Commonwealth's Department of Primary Industry, but indirect external control by the USDA was blatant. Export establishments that did not meet the minimum requirements dumped their

output on local or other overseas markets. Processing was further mechanised with the introduction of the Can-Pak system of beef slaughtering in 1959. This 'revolutionary' system was enthusiastically embraced such that by 1962 it was operational in all of the works owned by the 'Big Three'. In addition to dressing cattle on-the-rail which replaced the old bed dressing method, a conveyor belt system was also introduced to raise the number of cattle treated. Mechanisation was also intensified in packaging, carton sealing, pre-packing, casing, boning, and freezing.

Unquenchable demand from the US triggered expansion in processing with the entry of many smaller locally-owned works, and publicly-owned abattoirs located inland. The number of plants grew from 212 in 1955-66 to 565 in 1969-70 leading to overcapacity (Griffiths, 2000). Live cattle exports to Asia were also increasing, albeit erratically by the late 1960s (Bureau of Agricultural Economics, 1975e). Both sectors concentrated on low value commodities, whereas rival overseas market leaders in the US and New Zealand were refocusing on higher value products.

By 1968-69 over 80 per cent of Australia's beef exports were shipped to the US compared to 5 per cent to the UK. On top of this, Australia was heavily dependent on exports with 42 per cent of production sent overseas (Commonwealth Bureau of Census and Statistics, 1970). The segment received a shock when in 1968 the US imposed an embargo on Australian beef, limiting the quota by 4 per cent. Fearful of future prohibitions, Australia agreed to limit exports to the predetermined levels and downgraded a small portion of higher quality product to third and fourth grade. Seeking a way to maintain exports while meeting the US quota restrictions, in 1968 the AMB responded with the *Meat Export Diversification Scheme*. Initially, the policy encouraged exporters to diversify into new markets by rewarding them with an increased quota entitlement for the US market. By 1975 the number of overseas destinations for Australian beef had proliferated to 80 or more. Yet shipments were still concentrated to four importers. The US, EEC, Japan and Canada accepted 90 per cent of Australia's total meat exports (Bureau of Agricultural Economics, 1975d).

With an image firmly engrained as a bottom-ring supplier to mass markets, Australia's attention shifted to Japan, a competitive, non-traditional market. This was matched by growing Japanese corporate interest in Australia as a stable supply base for cheap, clean raw ingredients for their standardised, value added products. Aside from cold storage, market access was a major impediment as imports were severely restricted. Once in-market, the greatest barrier was the impenetrable marketing system in which meat was exchanged through multiple middlemen at various levels of distribution before reaching end consumers (Bureau

of Agricultural Economics, 1975c). Unsurprisingly, Australia mainly exported frozen manufacturing quality beef. Shipments reached 47 thousand tons in 1971-72, a rise of 60 per cent on the previous year and seven times the average over the mid 1960s. In comparison, shipments of chilled beef in 1971-72 only reached 12 thousand tons (Bureau of Agricultural Economics, 1973).

Like Britain a decade earlier major changes in meat retailing were happening in Australia during the 1960s. By the end of the decade, the two major retailers - Woolworths and Coles - had acquired their franchisee butchers and introduced sophisticated food processing techniques. Change extended to pre-cutting and self-service refrigerated cabinets filled with pre-packaged cuts (Anon, 1966). The supermarkets also built their own meat distribution facilities and began to integrate beef supply chains through long term contracts with suppliers (Parliamentary Joint Select Committee on the Retailing Sector, 2001). With increasing centralisation of procurement, processing and retail distribution, there was increasing distance between the source and point of consumption. Overcharging for inferior meat was possible since consumer knowledge of the various cuts of meat was relatively limited. A national beef classification system was advocated to overcome problems of overcharging and enhance producer returns (Biggs, 1975). Pilot trials commenced in 1971, but the majority of research funds were still allocated to the 'paddock end' of the value chain, that is, on pastoral and production issues like pasture and breed development (Griffiths, 1998). This research was financed by a levy on producers and processors matched by contribution from the Commonwealth government. The Australian Cattle and Beef Research Committee administered this research scheme which mostly served producer interests.

Interconnectedness and dependency on overseas markets impacted on domestic retail prices and consumer demand. The severity of the cattle boom and bust cycle accentuated price fluctuations, reinforcing the commodity mentality of retailers and consumers. As the most obvious indicator of the growing imbalances in the chain, analysis focused on price - fluctuations and the associated costs and efficiencies of beef marketing. A leading academic authority on livestock marketing, Longworth (1972) questioned the system of marketing beef in Australia on the basis that redundant middlemen impaired the efficiency of the beef value chain as depicted in Figure 3. But, few solutions were offered. One possible solution, a move towards greater consignment selling, was discarded on the basis that producers would be unwilling or unable to absorb the risk. Adding to this risk was the lack of specialist agents operating in meat halls who could sell direct to the retailer, rather than via a wholesaler and concerns that this approach might fragment meat marketing. There were also too few meat halls to display competing produce. Transmission of price and market information to

producers was identified as inadequate and improved reporting services together with sale of cattle by live-weight were seen to improve the accuracy of prices which producers could realise at auction. Whereas live-weight selling was commonplace at Homebush in Sydney, NSW with most cattle sold on this basis, it was less pervasive in country sale centres.

Figure 3: Configuration of Beef Value Chains in New South Wales, 1972

Figure removed, please consult
print copy of the thesis held in
Griffith University Library

Source: Longworth (1972: 53).

Climbing world demand for beef and veal redirected attention to overseas markets. Riding high on seasons of record exports to the US, Australian producers steadily built up their herds to a total of 25.2 thousand beef cattle in 1972-73 (Australian Bureau of Statistics, 1980). Dependency on overseas markets had also risen from 33.5 per cent of total production in 1960-61 to 61.7 per cent in 1972-73. In terms of absolute production, this represented more than four-fold growth, from 215.3 thousand tons to 884.4 thousand tons (Australia and New Zealand Banking Group, 1974). There was an implicit realisation that the segment was export-dependent and not genuinely export-oriented and so could do little to influence prices.

Several unforeseen events coincided during 1972-73 to dramatically raise retail prices around the world (Australia and New Zealand Banking Group, 1974). To quell prices, the US

government imposed a temporary price freeze and lifted import quota restrictions. However by February 1974 these actions were suspended indefinitely. Caught by the cattle cycle and commodity terms-of-trade, the segment was ill prepared for the sudden, sharp downturn in economic conditions in 1973-74. Australian producers' confidence was shattered as consumer purchasing power declined, slackening demand for beef and veal. Decisions by the EEC and Japan in mid 1974 to impose a virtual embargo on beef imports sent livestock and beef prices plummeting. Prices of first and second grade export ox beef at Melbourne fell from an average of \$1.06 per kg in September 1973 to just 32¢ per kg in December 1974. In the US the price of manufacturing beef declined from \$1.45 per kg in August 1973 to 65¢ per kg in December 1974 (Bureau of Agricultural Economics, 1975d). Despite historically low prices, the surplus commodity mentality resurfaced as producers rushed to 'dispose' of cattle setting new records for turn-off.

Conclusion

Unlike previous studies of Australia's beef segment that are restricted to examining its natural resource limitations, industrial relations, and state and industry linkages, this chapter analysed the delivery of value from a marketing system perspective. By positioning marketing centrally, this chapter demonstrated that the failure to coordinate marketing functions constrained progression to delivery of added value products that could compete in higher value market segments. Moreover lack of investment in coordination mechanisms, other than by external control, sealed the segment's focus on producing a bulk commodity, with little concern for value based outcomes.

For over the first 100 years of its development the segment did not graduate beyond commodity status as a supplier to institutional markets. Despite repeated official inquiries and customer concerns about quality no real effort was made to adjust the coordination mechanisms to facilitate quality improvement and the pursuit of greater value. Recurringly surplus quantities of fresh beef were transformed to allow transportation over huge distances, but in a form that devalued the worth of its value to consumers. Thus, configuration of the beef value chain demonstrated a lack of internal cohesiveness between the centres of production and the markets they served. By transferring control over marketing to external intermediaries and authorities, local participants lost the opportunity to build intimacy with buyers and cater to their requirements. Inherent resource inadequacies reinforced dependency

on overseas markets and marketing agents, preventing the segment from retaining ownership of their produce through the entire value chain to trade customers and end consumers.

Australian beef thus fell into residual, often uncontested markets. For most participants in the beef value chain, especially cattle producers that were separated almost entirely from end users, price operated as an imperfect indicator of market conditions. Functioning of this mechanism to assign and reward value was continuously faulty. Firstly, colonial speculators entered the trade intent to gain from short term movements in overseas markets, encouraged by government support. Secondly, as price takers, markets absorbed surpluses. Rarely did participants actively seek markets by first assessing whether they could actually meet market specifications or achieve premium prices. Thirdly, long term contracts between central governments fixed prices and guaranteed returns thus removing all incentive to respond to changing markets. Consequently, minimum standards imposed externally typically via regulation became the norm. No real attempt was made to enhance compatibility to market specifications or exceed customer expectations to deliver added value.

Shielded by excess and isolation, the segment was unresponsive to local market preferences and so by the mid 1960s Australian consumers began to switch to alternate protein sources. With entry into each new market the image of Australian beef, if it had not lost its identity, became firmly established as low in quality and affordable, but not preferred to competing products. Reliance on quantity and responsiveness to price rather than quality or consumer preferences thus intensified participants' reactions to the burgeoning world market. As expansion was politically unsustainable, by the time the segment faced its watershed, the ensuing crisis of the mid 1970s; it had failed to erect even the most basic infrastructure for creating and distributing added value beef products that targeted specific market segments.

Chapter Four: Reconfiguring Beef's Marketing System, 1975-2002

Introduction

The beef crisis of the mid 1970s proved a watershed for Australia's beef marketing system. Impacts of the crisis were dramatic and direct – livestock prices fell from 93¢ per kg in September 1973 to a low of 24¢ per kg in January 1975 (New South Wales Government Overseas Trade Authority, 1981). Yet the system's dysfunctions were obscured by a value orientation of cost minimisation. Previous studies examining the crisis, after-effects, and responses have perpetuated a mindset fixed on industrial and cost competitiveness (Booz, Allen, & Hamilton, 1993; Griffiths, 2000; Industries Assistance Commission, 1983; Industry Commission, 1994). Whilst these are valid objectives, indicators of the system's effectiveness and flexibility to adjust to market changes over the long term are needed to complement this perspective. This chapter examines the beef marketing system following a major turning point and demonstrates how continued reluctance to institute coordination mechanisms to align marketing functions inhibited the realisation of added value outcomes.

Configuring the beef marketing system to primarily serve overseas markets had cemented Australia's position as a price taker and commodity supplier. As a result, the impacts of unstable export markets were severe. Even though participants realised the dangers of this imbalance, little progress was made to reconfigure the system to deliver added value products until the mid 1990s. Instead the major players were content to seek out new buyers to source their commodity as a raw ingredient for further processing. Minimal investment was made in product development or other marketing innovations. Limited attention was given to changing requirements and consumer preferences in the domestic market. Beef and veal consumption fell by 47.5 per cent between 1976 and 2000, from 69.1 kg per person to 36.3 kg per person (Australian Bureau of Agricultural and Resource Economics, 2001b).

This chapter identifies the weaknesses of this meat marketing system and the attempts to address them by locating the major developments since the crisis up to 2002. The domestic market, the single largest outlet for Australian beef, overlooked by researchers who have focused on cost effectiveness is examined in addition to the main overseas markets. Entry into the Japanese market is tendered as an exemplar of the persistent commodity and generic approaches to marketing Australian beef overseas. Based on the evidence presented, this

chapter shows that reconfiguration of the beef marketing system up to 2002 featured a multiplicity of authoritative and corporate interests competing to control the coordination mechanisms for sourcing and valuing Australian beef. Implementation of quality assurance systems has been painfully slow and is a reactionary response to external pressures. Despite self-presentations of greater unity and cohesiveness there is little evidence that a proactive orientation to value delivery, featuring added value branded products, will become the dominant mode of this meat marketing system.

The Authorities: Corporatising Control, 1975-1989

not all beef suited to the export trade can be sold on the home market. Quality cuts of export grade beef are usually too large to be readily accepted by the local consumer, and the demand for manufacturing beef in Australia is insufficient to absorb large quantities of manufacturing beef, particularly if the price of quality cuts declines (Australia and New Zealand Banking Group, 1974: 24).

National government responses to the flood of beef on the world market in the early 1970s were not unique or novel. Most nations that imported Australian beef installed trade barriers to protect local producers²¹. As demand waned, the domestic market became saturated with cheap beef. Consumers responded positively and per capita consumption rose from 40.4 kg in 1972 to a height of 69.1 kg in 1976 (Australian Bureau of Agricultural and Resource Economics, 2001b). All sectors faced fluctuating prices and margins as shown in Table 4.

Table 4: Prices and Margins for Beef Sold in Australia, 1971-1975

Period	Prices (¢/kg)			Margins(¢/kg)	
	Auction	Wholesale	Retail	Wholesale	Retail
1971 av.	67.3	75.1	109.9	7.8	34.8
1972 av.	67.1	72.1	113.9	5.1	41.8
1973 av.	87.1	96.6	136.9	9.4	40.3
1974 av. to June	86.0	106.1	161.6	20.1	55.5
1974 av. to Dec	45.9	81.9	128.7	36.0	48.0
1975 av. to June	35.2	62.3	115.6	27.2	53.8

Source: Griffith (1975) supplemented by information from the author at New South Wales Department of Agriculture, Division of Marketing and Economics, Bureau of Agricultural Economics (1975b).

²¹ The US restricted imports, the EEC banned imports, Japan and Korea imposed quotas on beef imports and Canada established an import scheme (Industries Assistance Commission, 1983; New South Wales Government Overseas Trade Authority, 1981).

Suppliers of livestock and beef appealed for support to offset falling prices and incomes. Instead of continuing to insulate the segment, government policy promoted market forces to regear the beef marketing system to compete for a share of the world market. This decision was critical for the segment's future as export markets absorbed one-third to one-half of total production (Industries Assistance Commission, 1983). Cattle producers were worst affected and managed to secure various forms of short term financial assistance to cushion the impacts of plummeting prices (Bureau of Agricultural Economics, 1975b). This short term aid expedited the exit of many farmers. Successive proposals for price and income stabilisation schemes were dismissed on legal, practical and ideological grounds. It was argued that these initiatives worked against market forces and were ineffective in complex meat marketing systems like beef (Bureau of Agricultural Economics, 1975a; New South Wales Parliament Legislative Assembly, 1972; Victorian Department of Agriculture, 1973).

Most processors faced increasing wage costs of up to 30 per cent over 12 months (Bureau of Agricultural Economics, 1975d). According to Kevin Bowtell, Managing Director of Consolidated Meat Holdings, the direct labour costs of producing one lb of boneless beef rose by 88 per cent from 1970 to 1974 that is from \$3.02 per lb to \$5.86 per lb. Added to this cost was rising shipping freights to Australia's major markets (Bureau of Agricultural Economics, 1975d). Unable to withstand the cost pressures, many smaller works shutdown. Larger export works that could not upgrade their plant to meet US and Japanese hygiene standards either closed or were acquired by foreign interests. However, the responses in both sectors did not address the underlying problem of product quality. An audit of mechanisms in place for coordinating marketing activities at the height of the crisis in the mid 1970s revealed serious flaws in the functioning of this meat marketing system. The major concerns were a weak quality control and grading system, fluctuating cattle supply, uncertainty of demand and access to export markets, inadequate promotion, and failure to coordinate or disseminate market intelligence (Bureau of Agricultural Economics, 1975a, 1975b, 1976; Industries Assistance Commission, 1975; Queensland Department of Primary Industries, 1975).

Directly related to these problems was the inadequacy of price as the system's primary coordinating mechanism. Price was an unpredictable indicator of carcass quality. Several public inquiries advised that a carcass classification scheme was needed (Joint Committee on Prices, 1973; New South Wales Parliament Legislative Assembly, 1972; Report on Select Committee of the House of Assembly with Minutes of Proceedings, 1974). Economic assessment of price and alternative indicators by the Bureau of Agricultural Economics (1976) revealed much variability in meat trade sorting practices, and in buying and grading carcasses. Systems and procedures varied according to the type of establishment (ie domestic,

export or domestic/export), clients' needs and prevailing market conditions. Grading systems did not extend beyond the abattoir to consider the flow of quality information between all participants. A lack of standard carcass definitions, due to the diversity of 'product' further complicated attempts to develop a standardised system. Various subjective terms and labels were used as grades (eg prime, good and plain). Consequently, there was scope for opportunistic behaviour by manipulating grades. Participants between the farm gate and retail meat counters employed a rough measure, fat ratio to carcass weight, to purchase meat (Beckett, 1984). To operate effectively, a grading system would require support from participants in each sector of the value chain (Bureau of Agricultural Economics, 1976).

Tension emerged over the promotion of Australian beef. Most of the limited expenditure on advertising was generic. Brand specific advertising was restricted to include brand names only where 'promotion was demonstrably concerned with promotion of the product as such (ie 'generic promotion')', and not added value brands (Industries Assistance Commission, 1976a: 1). The Industries Assistance Commission concluded that domestic market promotion was inappropriate. Their review of rural product promotion argued that such expenditure would 'merely transfer sales from export markets to the domestic market with little or no gain in total revenue' and injure competing food producers (Industries Assistance Commission, 1976a: 2). By contrast, export promotion was deemed critical since it facilitated product and market diversification to stabilise producers' incomes. This approach was also justified on the basis that individual producers were unlikely to undertake brand specific promotion, as they did not expect to receive a proportionate share of the returns.

Reacting to Systemic Failure

Hesitancy to install appropriate classification and grading schemes and promotional strategies demonstrated participants' preference for the status quo. But as the crisis lingered, there was growing agreement that the failings of the beef marketing system exacerbated price instability. Discontent and disillusionment with the AMB and United Graziers Association precipitated the formation of the Cattlemen's Union in Rockhampton in May 1976. Central to their purpose was marketing reform. Members advocated the development of a uniform carcass classification scheme, centralised control of market development, quality control, and sales in overseas markets. These actions were thought to increase producer incomes by distributing returns more equitably (New South Wales Government Overseas Trade Authority, 1981; Schmalkuche, 1990).

An obvious target, the AMB was criticised by this group and others for outmoded marketing strategies, high levies and passivity in seeking new market opportunities (Schmalkuche, 1990). From 1 December 1977 the Australian Meat and Livestock Corporation (AMLC) replaced the AMB. Two traditionally hostile groups – processors and livestock exporters, and producers – governed this new corporate form. Power was extended to domestic market promotion. A third group – the Australian Meat Industry Conference – comprised of producer, exporter, processor, livestock agent, union, and consumer representatives convened annually to debate issues of concern to their constituents (Australian Bureau of Statistics, 1978). Flaws in the AMLC's objectives and organisation were soon visible. First, there was conflict between the goals of facilitating growth in export markets and promoting the sale of meat in Australia. Second, the vagueness of its prescribed powers engrained the on-farm focus of R&D (Australian Bureau of Statistics, 1980). As a result, the drive to enhance product quality was production-centric and bore no connection to AMLC's promotional role.

Despite the segment's grappling with the issue of quality, domestic consumption soared. By 1977-78 beef and veal production was at a peak of 2 184 thousand tons owing to the rush to turn-off low priced livestock in the face of liquidity pressures and poor seasonal conditions. Another sign of the depressed market was the total value of beef and veal exports (\$825.9 million), relative to the volume (1 115.3 thousand tons). World demand and prices began to improve the following year with an increase in exports valued at \$1 366.1 million, representing 1 212.3 thousand tons of fresh, chilled and frozen beef and veal (Australian Bureau of Statistics, 1980). Just as the major markets for the bulk of Australia's production showed signs of renewed growth, a series of meat substitution scandals threatened the product's integrity and image. On 18 August and 21 August 1981 horsemeat and kangaroo meat were consecutively identified in shipments of beef labelled as boneless boxed destined for the US. Pressure for cost minimisation, along with the rationalisation of export inspection and control functions²² provided the ideal conditions for an illegal substitution racket, culminating in a trade crisis. The USDA banned imports of all Australian meat.

This scandal publicised the inadequacy of quality control mechanisms in terms of duplication and complexity of procedures and the failure of self-regulation. Significantly, it illustrated the segment's apathy to improving or guaranteeing the standard of product quality. Adept at mass production of a low grade product, cost minimisation took priority over quality as processors sought minimal compliance to external standards. A mindset persisted that quality eroded

²² Thirty per cent of the 1 900 positions in the DPI's Bureau of Animal Health were cut a few months before the scandal in August 1981 (Department of Primary Industries, 1981).

profits rather than 'contributing value to the product' (Griffiths, 2000: 159). A Royal Commission was promptly instigated in response to allegations of malpractice. Under close scrutiny just one export meatworks tested positive for an illegal substitute.

Before the Royal Commission's findings were handed down in September 1982, the DPI's export control powers were constrained. In its place a new authority - the Export Inspection Service - was created to handle all exported produce. These steps marked the beginning of deregulation in export control and the shifting onus of responsibility for export quality control to individual companies. Several of the DPI's anticipatory actions pre-empted the Royal Commission's major recommendations. The Commission was critical of the 'closeness' of professional relationships between senior departmental officers and key figures as members of the AMB and AMLC. Justice Woodward went further to describe malpractice in the industry as widespread and found evidence of bribery and corruption of some DPI meat inspectors, veterinary officers and Federal police officers (Woodward Royal Commission, 1982). Noting the DPI's swift response in instituting 'drastic but appropriate measures', Commissioner Woodward believed that both private operators and the DPI were resolved to avoid further rocking the 'export boat', or a more detailed examination of past malpractice (Woodward Royal Commission, 1982: 2.20).

Distancing of government involvement in the segment penetrated the core of beef marketing. As part of the transition from 'detailed ministerial oversight' of Statutory Marketing Authorities (SMA) to annual plans and reporting, the AMLC was reorganised in mid 1984 (Department of Primary Industries, 1985). Its functions were reduced to marketing and promotion. Responsibility for policy development and R&D were separated and managed by two new bodies – the Australian Meat and Livestock Industry Policy Council (AMLIPC) and the Australian Meat and Livestock Research and Development Corporation (AMRDC) – the nation's first agricultural R&D Corporation (Australian Bureau of Statistics, 1989). Disintegration of these interlinked functions was intended to inject a new professionalism and expertise into management, replacing the traditional system of appointment based on agri-political connections. Funding of \$7 million over 4 years for innovation in meat marketing compared meagrely to the grant of \$30 million or so each year for wool promotion (Department of Primary Industries, 1986).

Rationalisation of marketing and the transference of responsibility from government to industry placed serious strains on the system in a protectionist trade environment. Major overseas markets, like the UK, were closed to imports due to the formation of regional trading blocks and related restrictive import policies. Market access again became a priority as the

segment tackled issues like the banning of hormone growth promotants, administration of meat export quotas and anti-dumping and countervailing legislation (Anderson, 1982; Australian Meat & Live-stock Corporation, 1983b, 1986a). As in the past, the segment again sought to overcome its crisis of market access and oversupply of low grade product through market diversification. East and South-East Asia, Korea and the Middle East were investigated as potential targets (Australian Meat & Live-stock Corporation, 1983a; Johns & Bureau of Agricultural Economics, 1980; Tyers, Anderson, & ASEAN-Australia Joint Research Project, 1985). Market research was conducted on the viability of a live cattle trade with South-East Asia (Beere & Northern Territory Department of Primary Production, 1985; Rural and Allied Industries Council, 1983). In each of these directions, the segment was distracted from adapting product to meet the specific requirements of the highly-prized Japanese market. South America remained a major competitor and European beef exports to Pacific-Basin markets were perceived as a threat (Blyth, Parsons, & Spence, 1986; Australian Meat & Live-stock Corporation, 1986b).

Redressing Image and Integrity

In 1987 the integrity of Australia's quality control systems again created a broader crisis. Prohibited levels of Organochlorine residue were detected in samples of Australian boneless beef imported into the US. This group of chemicals widely used in cotton production and presumably entered the feed chain through cotton trash fed to cattle in Queensland. This event, estimated to have cost the segment in excess of \$50 million, provided the impetus for greater specification of meat products and stricter quality control (Webber & Nicholls, 1998). Responsibility for trade language used to describe meat passed to the Authority for Uniform Specification of Meat and Livestock (AUS-MEAT), a quasi-government agency established in September 1986. The prior substitution racket, nicknamed 'roo in the stew', added impetus to the drive for a national meat trading language for both domestic and export meat. AUS-MEAT language represented the first attempt to develop standardised product descriptions, at least in the processor and export sectors. But, whereas the aim was to provide the basis for developing a language for communicating information about beef quality, in practice the scheme was ineffective since it had no grounding in consumer tastes and preferences. Thus it could not enhance the creation and distribution of added value along beef value chains.

A startling trend that emerged in the mid 1970s was the gradual fall in beef and veal consumption in Australia. Consumers began to replace their purchases of this red meat with chicken meat, which had become comparatively cheaper. Beef was also developing a stigma

in relation to the inconsistency of its eating quality. Distance between consumers concentrated in metropolitan centres and meat production was increasing such that 'apart from a few faded signs still decorating butchers' shops proclaiming 'country killed', the meat could come from anywhere' (Beckett, 1984: 207). Anxious to reverse the trend, in the mid 1980s the AMLC invested heavily in a generic advertising program to stimulate demand and regain consumer interest and confidence in beef. The program featured a series of five ad campaigns designed to shift negative attitudes towards red meat. Consumer research conducted in 1984 by a marketing consultant found associations of beef as old fashioned, boring, fatty, heavy and masculine. Many consumers believed that 'too much meat is not good for you'. Apart from negative health connotations red meat was perceived as inconsistent in quality, high in price, restricted in product range and inconvenient to purchase from butchers and supermarkets. Beef was slow to respond to these concerns as well as the shift to lighter meals and ethnic foods, animal welfare issues, and improved food merchandising (Shoebridge, 1992a).

Even though domestic marketing had been given greater priority with the new board, the generic approach remained. AMLC saw its role as influencing aspects of the segment's marketing mix by persuading consumers to choose beef and encouraging the other links to be more responsive to consumers. Keen to halt the drift to other protein sources, the AMLC appointed the Campaign Palace as its advertising agency in March 1985 to work with the corporation's domestic marketing group. Consumer segmentation research identified young working mothers aged 25 to 40 years as the target group most disenfranchised with red meat and most likely to reverse declining consumption. Their role as primary meal providers placed them as the primary target market. Three secondary target groups were revealed – young single women, budget-conscious housewives and traditional housewives. Advertising appeals were designed to reposition beef as contemporary, versatile, convenient and appealing to the whole family. This was a departure from the previous, traditional 'Feed the Man Meat' campaign of the late 1970s and early 1980s (Ross-Smith, Walker, National Working Party on the Portrayal of Women in the Media, & Office of the Status of Women, 1991). Values like speed, taste, quality, convenience and nutrition were emphasised over price and patriarchy.

The marketing program featured three parts: an advertising and promotional campaign, public relations efforts directed at consumers and health professionals, and retail merchandising activities to update in-store presentation and promotion. Speaking directly to the target market, working mothers, the 'short cuts' campaign offered a consumer friendly way to describe red meat products rather than the intimidating language of retailers (Symons, 1982). The ads positioned the product category as a friend and problem solver instead of as meat and were linked to recipe cards available from retailers. Unsurprisingly, the campaign had its

critics. A group of producers and processors - the 'Beef Machine' - attacked the campaign as changing meat eating habits rather than boosting beef consumption. So, when beef consumption fell in 1986-87, the AMLC began advertising nutritional values more intensively. These values which appealed to most segments were backed by independent scientific evidence. The 'Shouldn't you lean towards beef' campaign built upon prior public relations activities targeting nutritionists and doctors. Then in 1989 the National Heart Foundation (NHF) endorsed lean beef and veal through its 'Tick of Approval' logo on approved cuts (Shoebridge, 1992a).

Able to increase levies over 1987-89, the AMLC increased spending on domestic marketing from \$3 million in 1984-85 to \$8 million in 1985-86 to \$16 million in 1988-89. This budget allowed the corporation to target other groups – more traditional housewives and even men – with their steak dinner ads that were more traditional, clever, down-to-earth and humorous. Updated meat merchandising supported public relations efforts and consumer advertising. From 1987 AMLC's merchandising team encouraged Australian butchers and supermarkets to update their look and attitudes to product presentation and customer service. They also pushed the incorporation of value added, further prepared cuts of meat such as stir-fry, pan-ready and oven-ready packs of beef in meat cabinets. These beef cuts were typically trimmed of fat, cubed, sliced, mixed with sauces, rolled and stuffed. Television ads were also used to incorporate the 'new look' butcher as part of beef's modern image (Ross-Smith et al., 1991). Deregulation of grocery shopping hours reinforced the accessibility and convenience of meat retailers, especially the 6 500 butcher shops throughout Australia (Shoebridge, 1992a).

For each unit of red meat consumed total marketing expenditure increased from 0.08¢ per kg in 1975-76 to \$1.51 per kg in 1987-88 (Australian Meat & Live-stock Corporation, 1988)²³. Expenditure on publicity and promotion increased significantly during 1986-87 and 1987-88. While it is difficult to directly link this expenditure to consumption these efforts assisted to arrest the 10 year decline in consumption and fuelled periodic growth in consumer spending on beef (Shoebridge, 1992a). Lack of detailed market intelligence on Australia's red meat product categories hampered consumer marketing. In 1987 the AMLC and the Australian Meat and Livestock R&D Corporation combined to commission AC Nielsen to conduct a regular monitor of meat purchased by butchers and supermarkets - the bulk of the retail fresh meat trade. Less was known about the impacts of generic advertising on these markets. With increasing expenditure on this type of promotion, the first study to attempt to understand and

²³ These figures include spending on beef and lamb and cover advertising, merchandising, product public relations, nutrition, product development, education, food service, and for some years market research and technical services.

quantify the effects for beef, lamb, and pork was conducted in 1989 (Ball, Dewbre, & Australian Bureau of Agricultural and Resource Economics, 1989). Expenditure on advertising was erratic, fluctuating widely, averaging about \$0.6 million per year. Using a simulated model, retail prices were observed to increase in the initial years following changes in advertising²⁴. While the study revealed that beef producers were likely to benefit from generic advertising in the short term, the effectiveness of promotional messages in influencing consumer behaviour over time was still unknown.

In spite of growing appreciation of how consumers related to the product, attention shifted again to cost minimisation at the most intensive stage of value adding prior to shipment - disassembly and pre-packing. Driven by cost reduction imperatives, the processing sector focused on value adding through improvements in efficiency (Hale & Ashton, 2002; Woodward Royal Commission, 1982). This issue was framed as the major issue affecting global competitiveness in the red meat industry (AACM International, 1996, 1997; Australian Industrial Relations Commission, 1991; Booz et al., 1993; Griffiths, 2000). The Industry Commission (1994: xv) articulated the dilemma facing the sector:

Although Australian meat is generally price competitive on export markets, this is largely because processors are able to buy livestock at very low prices compared with processors of other countries. This inquiry has found that despite some recent improvements, Australia's meat processing industry operates at significantly higher cost than processing industries of most countries with which it competes. It has also found that Australian meat exports have been losing market share in almost all our major export markets.

Consecutive inquiries sought areas of cost minimisation, emphasising labour productivity and raising throughput (Industries Assistance Commission, 1983). These enquiries tackled cost-centric problems without linking the production and supply limitations to the deficiencies in the meat marketing system. Several international benchmarking studies were conducted to identify areas in processing to improve efficiency and reduce costs. These studies confirmed that Australian abattoirs were at a cost disadvantage to competing best-in-class red meat processors in New Zealand, Argentina, Ireland and the US. Comparison of the total costs of delivering boneless beef in the US market placed Australia at \$4.341 kg on a par with the US at \$4.347 kg. Australia's relatively low cost livestock was the main contributor to overall cost competitiveness. Data from a variety of sources indicated that the cost of purchasing livestock represented about 63-70 per cent of the total retail cost in the domestic market. The cost of purchasing cattle for export markets of the US and Japan is similar. For product exported to

²⁴ Beef prices rose by 1.2¢ per kg in the first year of additional advertising. However, in the long run this price increase would only amount to 0.2¢ per kg (Ball et al., 1989)

the US processing costs are 20-25 per cent and transport to CIF around 8-10 per cent of total costs. Processing costs for product exported to Japan are around 23 per cent and transport and delivery costs about 12 per cent CIF value. Domestic processing costs are similar; however transport and delivery costs are less at about 5 per cent (Industry Commission, 1994)²⁵.

Ensuring Product Safety and Reputation, 1990-1996

As the level of company branding increases, the justification for extensive government requirements for meat inspection diminishes. A company that invests time and resources to create a reputation for reliability and quality has a strong commercial incentive to build and maintain its reputation for hygienic products (Industry Commission, 1994: 79).

Australian farmers entered the 1990s facing another drought induced recession. Despite the hardship beef producers remained relatively optimistic. Their confidence emanated from the promise of greater access to high value Japanese and Korean markets. Partial liberalisation of Japanese beef imports from April 1991²⁶ was hailed as a boost to Australia's livestock sector. One commentator boldly described it as the 'best news for Australian cattle producers since the US market for manufacturing beef opened in the late 1950s' (Anon, 1988a). Such optimism was partly offset by growing criticism of increased foreign ownership of Australia's cattle raising and beef processing sectors by Japanese and US food conglomerates (Australian Meat and Live-Stock Industry Policy Council & Australian Department of Primary Industries and Energy, 1989; Weeks, 1990; Young & Sheales, 1991). Preoccupation with the Japanese market diverted attention from dissatisfaction among domestic consumers. Frustration with beef manifested in the continuing decline in consumption from 39.6 kg per person in 1990 to 35.2 kg in 1995 (Australian Bureau of Agricultural and Resource Economics, 2002b). Overseas, Australian beef's major selling proposition, its safety status, was directly challenged with further pesticide scares and indirectly by food safety crises. Doubts about generic promotion in export markets were voiced in 1994 as part of a major inquiry that marked the first real attempt to reconfigure beef's value chain. The mechanisms to ensure product quality - defined in terms of safety and integrity - consumed the segment's attention and resources. Eating quality and product consistency were assigned to second place. The

²⁵ See Figure 11 and Figure 21 in Appendix two for a breakdown of relative costs in the beef value chain. A detailed description of the component costs in processing as part of the benchmarking studies is also provided in this Appendix.

²⁶ Pre-existing beef import quotas were phased out. First quota volumes were increased over three years and replaced by a 70 per cent tariff in 1991. Tariff levels were progressively reduced to 60 per cent in 1992 and 50 per cent in 1993 (Harris & Australian Bureau of Agricultural and Resource Economics, 1990).

continuing shift of control over the coordinating mechanisms from producers and processors to domestic retailers, overseas agents, and trade customers underpinned the delivery of value.

From the late 1950s Australia held a majority share of Japanese beef imports due to its ability to consistently supply the lean boneless commodity. Access to the premium market following the market's liberalisation was not automatic. Australian beef faced a new set of barriers. Firstly, the level of understanding between Australian exporters and Japanese customers was limited. Knowledge of consumer preferences, retailing practices and distribution channels was particularly restricted. Secondly, the existing image of Australian product in the market was very unfavourable. Thirdly, Australia's major competitor, the US, held a first-mover advantage in capturing the higher quality table beef market – retailer and foodservice buyers including restaurants and hotels. This was partly achieved by the persuasiveness of the US grading scheme among Japanese importers and distributors and the quality upgrading of US beef through longer feeding programs. US exporters were also more able to supply full sets of boxed beef and willing to build direct and long term relationships with their distributor partners. Fourthly, US grain-fed product was consistent with Japanese fattening methods that produced marbled beef meeting Japanese preference for this product.

In contrast, Australia relied on pasture feeding for most of its cattle. Assessment of animals for export mainly on the basis of weight, with the heavier classes allocated for the Japanese market, was incongruous with the Japanese grading system favouring traditional breeds – Wagyu (beef) and Holstein (dairy). The Japanese grading system did not recognise the quality attributes of lean Australian beef. As such, product rated top quality grain-fed beef in Australia received second grade Dairy Ox classification in Japan. Failing Japanese specifications, range-fed Australian cattle retained the lower end of the market in the early 1990s as shown in Table 5.

Table 5: Incompatibility of Australian Beef Quality Attributes with Japanese Grades

Japanese Grade	Japanese Domestic Product	Imported Product
High A (1 to 5)	Wagyu	USA Frozen Beef
B (1 to 5)	Dairy Ox	Australian Chilled Beef Australian Frozen Ox
C (1 to 5) Low	Dairy Cow	Australian Frozen Cow

Source: Anon (1989).

Recognising the strategic benefit of sourcing greater quantities of low cost beef from abroad, Japanese companies began investing in Australia in anticipation of liberalisation. Their American rivals followed suit, eager to secure production capacity and an export base to meet growing demand for 'everyday quality' beef in Japan (Francis, 1992; Ufkes, 1993). This phase of FDI was more pervasive than previous ones as it penetrated livestock production linking it directly to processing through vertical integration. Inflows of foreign capital coincided with the continuing rationalisation of the sector, transforming it from a fragmented structure comprising a large number of small players to a concentrated one. By 1990, Australian Meat Holdings (AMH), the meat division of Elders IXL emerged as the leader, followed by Metro Meat (Australian Meat and Livestock Corporation, 1991). At that time Japanese investment in total cattle slaughter volume stood at 15 per cent and included both joint venture arrangements and wholly owned subsidiaries (Weeks, 1990). Australia's third largest meat company – R. J. Gilbertson was 40 per cent owned by the Itoman Corporation. The country's fifth largest meat processor was a joint venture between Nippon Meat Packers Australia and Thomas Borthwick & Sons.

Two of America's largest food companies, ConAgra and Cargill, also increased their FDI in Australia from 1990. ConAgra formed a joint venture with Sydney based processing company, the D.R. Johnson Group. This provided access to an export abattoir in Guyra, New South Wales, which handled approximately 1 per cent of total Australian throughput. In 1991 ConAgra increased their investment with the purchase of a 50 per cent stake in AMH, jointly owned by Elders (45 per cent) and D.R. Johnson (5 per cent). This acquisition represented a major stake in Australian meat processing since AMH accounted for 11 per cent of total annual output and controlled an estimated 20 per cent of beef exports (Ufkes, 1993). Fellow American food giant Cargill entered the sector by acquiring Metro Meat's plant in Wagga Wagga, New South Wales judged as 'one of the most streamlined plants in the country' (Anon, 1992b).

Investment in processing was linked to more direct sourcing of cattle and the use of feedlots. Closely aligned to their processing investments, feedlots supplied grain-fed cattle to produce higher quality beef. Local Australian producers increased their involvement in feedlotting especially in partnership with Japanese interests. In 1991 Japanese ownership of Australian feedlot capacity was about 24 per cent, with ConAgra controlling about 15 to 20 per cent (Ufkes, 1993). The other key link in the Japanese export system was their trading and marketing divisions which were experienced and highly specialised in penetrating Japanese wholesale and retail outlets. Wholly owned Australian meat exporters were placed at a relative disadvantage (Anon, 1992a; Australian Meat and Live-stock Policy Council, 1991).

As an indicator of the increasing export market penetration by Japanese interests, from 1988 to 1989, the proportion of Australian beef exported to Japan by abattoirs with full or partial Japanese ownership increased by about 8 per cent, from 15 to 23 per cent (Australian Meat and Live-stock Industry Policy Council & Australian Department of Primary Industries and Energy, 1989). The majority of wholly-owned Australian firms did not become active and direct exporters. Where Japanese partners did not directly import product, indirect export methods via intermediaries such as brokers, import agents and wholesalers were routinely used.

Apart from their role in arranging market access and authority over licensing, the AMLC's involvement in promoting Australian beef in Japan did not support full delivery of added value. In spite of the initial growth in demand, levels stabilised such that competition was played as a fight for market share. Whereas the volume and value of exports to the market increased, market share gradually decreased, with notable short term fluctuations. At a peak of 77 per cent of imports in 1979, this market share fell to 40.7 per cent in 2001 (JETRO, 2003). Organisation of marketing and the strategies pursued by Australian authorities constrained the creation and distribution of higher value beef products in Japanese retail markets. Attempts to reposition the generic product through elaborate promotional campaigns were ineffective as the mechanisms required to improve product quality were not put in place.

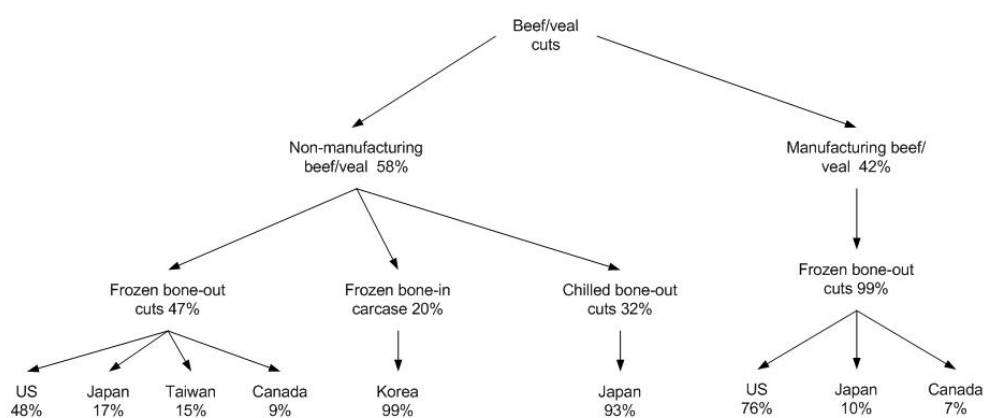
Prior to liberalisation the only imported beef that Japanese consumers recognised was from the US. Eager to establish awareness of the existence and benefits of Australian beef the AMLC launched the 'Aussie Beef' logo in 1989²⁷. Up to that point Australian beef was perceived as 'tough and smelly' by those who could identify it (Ramsay, 1999). Absence of beef from the traditional Japanese diet with seafood the preferred protein source represented another major challenge to expanding Australian beef exports to Japan. Altogether, the Japanese market was not a logical choice. The extensive promotional campaign that continues was as much about raising Japanese demand for beef as it was about building preference for beef of Australian origin. As a result, the generic positioning of Aussie beef as a food for everyday consumption assisted other beef exporting nations like the US and New Zealand.

As the agent or 'custodian' of the logo, the AMLC was responsible for all marketing activities associated with the self-proclaimed brand development program. The campaign was founded on the rationale that the logo could co-exist as a complementary 'generic brand' with specific

²⁷ The logo itself consists of the letter 'A' in bold red type with a map of Australia inset and the word 'Aussie' below, all set against a white background with a Japanese translation beneath.

processor and supermarket brands. Broad based promotion was supported to build widespread awareness of the logo. Individual retailers, larger chains, wholesalers, distributors and Australian exporters were encouraged to use the logo. When first introduced, the logo appeared as stickers on meat packs, POS material, and in-store displays. Approximately \$120 million was spent on promoting the logo over 10 years from 1989 to 1999 to educate consumers about the logo's meaning and to raise recognition and recall. In 1992-93 \$11 million was spent on television advertising and \$1.1 million on magazine ads in Japan alone, with another \$3 million to support companies using the logo (Industry Commission, 1994). Even though shipments of Australian beef overseas had grown in absolute terms by 312 442 tons (61 per cent) from 1980-81 to 1992-93, share of key markets had declined. The form of these exports was split between manufactured (42.4 per cent) and non-manufactured beef (57.6 per cent)²⁸. The breakdown of these exports to major destinations is shown in Figure 4.

Figure 4: How Australian Beef is Exported, 1992



Source: Industry Commission (1994: 45).

In 1992 52 per cent of Japanese imports were sourced from Australia and 45 per cent from the US (Industry Commission, 1994). However, the merit of this achievement was questionable given the expanding consumption of low quality 'everyday' beef sold in unidentifiable commodity form. Despite intensive promotion, Aussie beef was still perceived as inferior to competing US and New Zealand product (Small, 1995). Declining overseas market share, inability to penetrate the high-end restaurant or 'Hilton trade', livestock producers' deteriorating profitability and falling domestic consumption; taken together were interpreted as a crisis.

²⁸ These terms are defined by AUS-MEAT. Manufactured beef is defined as meat to be further processed and can be exported into chilled and frozen cuts, which are divided between bone-in carcasses, bone-in cuts and bone-out cuts (Industry Commission, 1994)

Internalising Control

Concerns were raised in the Industry Commission's inquiry into the red meat industry about the effectiveness of the logo campaign in differentiating and improving the image of Australian beef overseas. The inquiry provided the authoritative impetus to reshape the arrangement of marketing functions. Rhetoric at least espoused the desire to transform the system from a production focus to a customer-focused one (Industry Commission, 1994: xxxv). Organisation of the beef marketing system and its supporting coordination mechanisms did not attest to this rhetoric. Methods of selling livestock continued to be adversarial, arm's length relationships between participants. Whereas auctions at local saleyards were the preferred method in Southern Australia, there was greater reliance on implicit and explicit direct contracts in Queensland (Australian Bureau of Agricultural and Resource Economics, 2002a). Despite greater sales over-the-hooks from 18 per cent in 1988-89 to 24 per cent in 1994-95, with a 7 per cent decline in auction sales from 58 to 51 per cent, there was still a reluctance to use technology like computer aided methods to facilitate livestock sales (Australian Bureau of Agricultural and Resource Economics, 1995).

Among the most profound changes that occurred during the early 1990s was the shift to co-regulation of product safety and quality. This model of shared responsibility between government and individual companies, based on the rationale of Quality Assurance (QA) was influenced heavily by the standards of international trading partners, notably the US. Consistent with the approach that emerged during the 1980s, focus was again on quality control of hygiene and food safety at the point of processing output and pre-export shipment. This point was also perceived by overseas customers as most critical and by the government as requiring further rationalisation. In 1993 the US government introduced stringent import requirements and rejections of Australian beef imports doubled from a historically low base. Through the progressive introduction of QA systems in response to this and broader influences, the rejection rates fell. Moves by retail chains and agri-food MNCs to adopt HACCP based QA systems placed demands on their suppliers to do likewise.

Rather than focusing solely on the slaughter or 'harvest' stage at abattoirs to 'inspect errors out', QA philosophy extended inspection to the pre-harvest and post-harvest stages of production. As part of the corporatisation and harmonisation of quality control, Australia's Quarantine and Inspection Service (AQIS) was commercialised in January 1991. The overall reform package included full cost recovery for export inspection and certification services to focus the service provider more on its 'clients, consumers and overseas markets' (Department of Primary Industries and Energy, 1991-92: 120). An estimated \$213 million per annum was

obtained in levies and charges from cattle producers and processors. This was equivalent to about 5 per cent of the gross ex-farm gate value of red meat output. Of this, about 45 per cent (\$96.89 million) was received for food safety and hygiene costs incurred by the industry and government agencies (Australian Meat and Live-stock Steering Committee, 1996)²⁹. Reforms impacting meat inspection involved the revision of staffing standards for establishments and the transfer or elimination of tasks previously undertaken by AQIS³⁰. Division of responsibility for meat inspection became clearer as State authorities regained power to inspect meat for domestic consumption and standards were harmonised from 1 March 1993 (Hale, 2001). Most States agreed to return control of these functions to the Commonwealth in 1994 following a review of AQIS.

During the early 1990s failures of the quality control system brought to end earlier gains in the Japanese market. Contamination of a consignment of beef to the US with Chlorfluazuron residues in November 1994 cost the segment an estimated \$100 million, tainting the image of all Australian beef. The segment reacted to the negative publicity by instituting three major QA systems – HACCP, the National Vendor Declaration System (NVDS) and Cattlecare in defence of their quality standards. While HACCP was embraced by beef processors handling exports to Japan, Cattlecare and the NVDS - covering farm based quality - had a much lower level of adoption among cattle farmers. Systems for tracing Australian cattle and beef products originated in the late 1960s as part of efforts to eradicate bovine brucellosis and tuberculosis (Animal Health Australia, 2004). These basic marking and identification procedures became more sophisticated as end user requirements became more demanding. Contemporary traceability systems include each of the three major elements of the physical distribution system – movement of cattle, processing plants and transport and shipping (Meat and Livestock Australia, 2004). The basis of the first component of the system is the Property Identification Code (PIC) – an eight digit alphanumeric identifier that specifies the landholding on which the animal most recently resided³¹. Animals that enter feedlots and are destined for export are required by the National Feedlot Accreditation Scheme (NFAS) to

²⁹ See Table 11 in Appendix two for estimated contributions and expenditure. Apart from these direct costs, substantial costs are also incurred by all participants in the segment in complying with food safety and hygiene regulations like training, consumables, maintenance, system documentation and labour.

³⁰ Staff were withdrawn from activities considered non-essential, some duties were transferred to operators under AQIS supervision. The introduction of electronic issuance and transmission of certificates under the EXDOC system eliminated many positions.

³¹ A tail tag carrying the PIC is required before cattle are moved from a property. When an animal is sent for slaughter the tag is entered in a central database with corresponding data for reside status. There are limitations with this identifier. The PIC only relates to the most recent property the animal was held on and is not unique to individual animals. If there is a problem with one animal a whole lot or pen of animals may need to be destroyed.

have an individual identification number. This is linked to a detailed health and feeding history for each animal. The NVDS supplemented the existing tail tag PID system as a paper based declaration. Forms are completed prior to transfer of cattle between buyers and sellers and are mandatory for cattle destined for export. Declarations are widely used and may form the basis for legal action by future owners of the cattle.

To overcome the limitations of the tail tag system and paper-based NVDS the National Livestock Identification Scheme (NLIS) was first introduced in 1999 on a voluntary basis. In the State of Victoria this became mandatory in January 2005 with other States to follow. This is a whole of life livestock traceability system allowing individual animals to be traced from their property of origin through to their slaughter destination. It represents a major transition from herd based identification to individual electronic identification. This system requires compliant radio frequency identification devices (RFID) to be attached to calves prior to them leaving their property of birth. The devices can be ear tags or rumen bolus/ear tag combinations and contain a microchip encoded with a unique Property Identification Code of the property where the animal was born. MLA maintains a central database which records the movements of cattle as their devices are electronically read at least at every transaction. This centralised recording service is funded by levies on producers and processors. Other information can also be recorded by individual producers relating to medical treatments, growth performance and carcass feedback data etc. NLIS is being implemented on a State-by-State basis with some State governments providing additional financial support to farmers to purchase RFID devices and for upgrading of shared facilities³². Traceback requirements are also applied to carcasses and cuts from processing plants. Processors of beef destined for export are legally obligated to maintain traceability systems that accurately correlate the beef carcasses with the PIC numbers for identification. This information is stored in the processor's database. In transporting beef to export markets each container number is stored in a central database maintained by AQIS and can be linked to the foreign port of import (Meat and Livestock Australia, 2004). Mandatory adoption of traceability systems in Australia has been motivated by trade to maintain and enhance export market share.

In the early and mid 1990s systems audits of a number of processing establishments by overseas authorities and AQIS officials revealed a range of faults. In response, a National Plant Management System (NPMS) was introduced in 1996 as a standard QA management tool for AQIS auditors. Along with a nationally consistent export inspection program, mutual

³² The Federal government provided State grants of up to \$5.4 million to support the roll-out of the NLIS, which includes updating infrastructure at saleyards, abattoirs and major feedlots.

recognition of standards also assisted AQIS to gain international recognition of Australian meat inspection standards and procedures. AUS-MEAT's QA role was strengthened by the shift to accreditation based systems. In addition to compulsory accreditation of export establishments, companies seeking to gain the highest rating – A plus – were obliged to develop and maintain a QA program (Industry Commission, 1994).

In the transition to internalise responsibility for marketing, the AMLC's role was questioned. One of the major criticisms levelled at the corporation was the large number of goals (181) and market support projects (189), relative to its resources. Of its goals, just 33 per cent were fully achieved or exceeded (Australian Meat and Livestock Steering Committee, 1996). The AMLC's total budget expenditure of \$101 million for 1992-93 demonstrated a focus on export marketing (\$47.6 million), compared to domestic marketing (\$22.7 million), and minimal expenditure on communicating with levy paying members (\$3.1 million) (AMLC, 1993). Independent assessment of the corporation by Coopers and Lybrand found that levy payers perceived their service provider 'as somewhat unresponsive and distant' and had difficulty in gaining commitment from members for various initiatives. They also described its style and corporate culture as 'fairly conservative and traditional' (Australian Meat and Livestock Steering Committee, 1996: 60).

Each of the AMLC's major roles in marketing coordination was challenged. Processors were most critical of the centralised control of market access and overseas market representation through generic advertising. Many companies had begun to invest in promoting their branded and differentiated, value added products and resented generic advertising. They argued that it acted as a 'disincentive' to developing new products and a 'new product culture' (Industry Commission, 1994: 105). The Smorgon Meat Group was unconvinced that the \$500 thousand it contributed to promotion in Japan was spent effectively. They were concerned that 'Aussie Beef' did not describe a specific grade of product and might give 'give all Australian beef a bad name' if there was a problem with just one carton (Industry Commission, 1994: 105: Sub. 67, p.17).

Support for generic advertising was mixed. Peak councils pushed for an incremental move to brand promotion. While some processors challenged whether levies should be paid at all, the AMLC agreed to reduce the Japanese budget and to formalise its co-operative promotion program. Use of the logo was restricted to higher quality marbled beef under the revised 'Aussie Gold' label. This campaign now operates as a joint venture promotion between the MLA and nine different organisations including feedlot producers and processors such as AMG Gold. The criteria to qualify for use of the new logo are contrary to the product image

of the original ‘Aussie Beef’ logo, that is, cheap beef. Attempts to reposition the logo would be a lengthy, expensive process causing confusion among trade customers and consumers alike.

Coordination of R&D was also scrutinised. Public sector contributions were higher than private investment. Funding of on-farm research was justified on the basis of market failure. Accordingly, the authority responsible for coordinating R&D, the Meat Research Corporation (MRC), was still production focused. Of the corporation’s six priorities, processing efficiency received the greatest proportion of funds (\$22.6 million), followed by market development (\$4.6 million), efficient and sustainable agricultural production (\$3.0 million), product description and communication (\$1.3 million) and selected threats (\$0.9 million) (Meat Research Corporation, 1993). This allocation was typical of the MRC’s annual budget and overlapped with the AMLC’s market research and analysis services.

The case was less convincing for post-farm gate research, particularly in processing where firms had greater capacity to invest in and benefit from firm-specific innovation. Processors were more likely ‘to capture the benefits of research so as to gain a competitive advantage over rivals’ where they developed a branded product (Industry Commission, 1994: 137). Yet the commitment to R&D of \$5 200 per firm fared embarrassingly against the average of \$43 200 across all manufacturing sectors (ABS, 1991). According to 1991 estimates, just 3.5 per cent of all processors conducted research worth a total of \$3.1 million. Several larger processors and the Australian Meat Exporters Federal Council argued that firm specific research had greater commercial success. To enhance commercialisation, the MRC was refocused to increase collaborative R&D projects that could be tailored to partnering applicants’ needs. However this did not address the major impediment to R&D in meat processing - high tariff barriers penalising value added meat products in export markets. Relatively high labour costs of further processed, added value products also precluded their manufacture on a mass scale to compete on price. To resolve this dilemma, a number of companies contended that added value products for export should target niche markets. Beak & Johnston, one of the most successful companies, explained in their submission to the Commission:

Adding value generates over double the labour involved in a straight slaughtering and boning operation. Adding value is also most likely to differentiate our products from those of other countries, and secure long-term niche markets overseas (Industry Commission, 1994: Sub. DR 113, p.2).

Producers also felt alienated from major export markets. This was due in part to their distance from consumers and the high cost of obtaining market intelligence. Many relied on market information provided by the AMLC which comprised a minor component of the corporation's budget. This amounted to \$1 million in 1992-93, typical of most years. With just 5 per cent of total costs recouped, there was a strong case that public provision barred competitive suppliers from offering better market intelligence services. Duplication of the service by State authorities was also criticised (Industry Commission, 1994). More importantly, there was resounding agreement that product quality needed 'urgent' attention, made explicit in the Meat Industry Strategic Plan in 1996. This public affirmation coincided with overt marketing reform and less conspicuous reorganisation of QA systems driven by the quest for power and control over delivery of value.

Corporatisation of SMAs intended to engender flexibility, self-sufficiency and greater commercial focus, reorganised the arrangement of red meat promotion and R&D. Reforms contained in the Meat and Livestock Steering Committee review aimed to make the central authority more internally-driven. Funds for mass media advertising were reduced. R&D and promotional functions were reunited in a wholly producer funded body – Meat and Livestock Australia (MLA). This corporation superseded the AMLC and segregated competing processor interests which were represented by the Australian Meat Processor Corporation (AMPC). Livestock exporters formed Livecorp to promote their interests. AUS-MEAT retained its role but was further corporatised through formation of a joint venture company backed by producers (MLA) and processors (AMPC). The Red Meat Advisory Council was established as the government's key consultative body representing the segment's six peak councils. These changes became effective from 1 July 1998. Delegation of the operational details to participants was designed to empower and pass 'responsibility to industry' (Australian National Audit Office, 1998). There remained an uneasy separation between regulation and service delivery to implement policy directives and initiatives (Woodward Royal Commission, 1982). In its capacity to coordinate policy and promote consensus building the Australian Meat Policy Industry Liaison Committee had not performed well (Australian National Audit Office, 1998). It was equally unlikely that the new arrangements would foster greater accord among members.

Consolidating Control, 1997-2002

Over the past 20 years there has been a rapid decline in the number of independent retail butcher shops. One of the principal reasons has been the dominance of the large retail chains and the practices they adopt (National Meat Association of Australia, 2001).

While most participants were transfixed with formal reorganisation, meat retailers were competing for a share of the 70 per cent of total sales in Australia and control of beef's value chain. Immediacy of supermarkets' relationship with consumers was also becoming more pronounced. Their share of beef and veal retail sales rose from 23 per cent in 1987-88 to 40 percent in 1997-98 to reach 70 per cent by 2002 (AMLC & MRC, various). Supermarkets provide a one-stop solution for pre-packed, convenience beef. This strategy, which began in the 1970s, displaced many butchers the outlet traditionally favoured for purchasing beef in Australia. These small, independent butcher shops collectively held the majority of the remaining 30 per cent of total retail sales (Rabobank International, 2002). Foodservice providers including restaurants, cafés, fast food outlets, hotels and institutional caterers accounted for 30 per cent of total domestic beef sales (Bindon & Jones, 2001; Industry Commission, 1994). These buyers seek heavier weight cattle than retailers to offer larger meal portion sizes. McDonalds is a major purchaser of Australian beef. In an average year the company uses 18 million kg of beef in Australia. Suppliers to this fast food giant also export to their franchisees in Japan, Kuwait and Saudi Arabia (McDonalds Australia Limited, 2003).

A key factor driving consolidation in retail sales was the installation of integrated systems by the major supermarket chains for the procurement of beef and veal. In their broader role as food retailers supermarkets were obliged to meet a host of food safety standards, not only to conform to regulation but to maintain their reputation (Hobbs et al., 2001). These pressures prompted the two major chains to integrate their QA systems, heightening their influence in the beef value chain. In the case of Woolworths, in 1996 the company made their suppliers equally accountable for implementing HACCP principles through its Vendor Quality Management System. Likewise McDonalds introduced a HACCP verification program for its dedicated suppliers to 'ensure the quality of products in every restaurant' (Fabiansson, Cunningham, & Bureau of Rural Sciences Australia, 2000: 8).

To deliver greater product consistency, Woolworths, Australia's main buyer and seller of beef, collaborated with the MRC to develop standard specifications. Through this research, combinations of product attributes based on cross-bred animals with a low marbling score and minimum fat content were purposely designed. Carcass specifications for 'The Woolworths Steer' are then fed into a grid to determine prices paid to suppliers. This grid operates as a

grading system based on Woolworths' preferences enabling the retailer to control how value was defined and rewarded. A strict adherence to the grid and slow adoption of video image analysis technology, VIAscan™, to calculate carcass yields caused resentment among Woolworths' suppliers. Some felt they lost control over what they produced and the prices they received as Woolworths' bargaining power increased.

To enhance the reliability of supply both major retailers sourced greater volumes of grain finished stock, invested in further processing and crafted preferred supplier arrangements or vertical partnerships. In 1993 Coles Supermarkets formalised an exclusive supply contract with Brisbane based meat producer and processor – Australian Country Choice (ACC). This agreement made ACC a dedicated Coles' meat supplier, managing the chain's Northern supply chain covering Queensland and the Eastern Seaboard. ACC fulfil Coles' premium, organic and market value branded beef products (Queensland Farmers' Federation, 2001). Woolworths also use preferred supplier contracts to rationalise their supply base. They purchase live cattle from a pool of 500 producers in addition to 27 dedicated or 'valued' producers that have supplied Woolworths between 2 and 20 years through forward contracting. These supplies are supplemented through purchases made on-farm, at regional saleyard auctions and over-the-hooks. Woolworths forged preferred processor agreements in each State. For example, in New South Wales, Cargill's Tamworth plant supplies 90 per cent of their beef, representing 75 per cent of its total output (Lawrence, 2002). Woolworths purchase carcasses from these preferred processors through their subsidiaries that perform further processing. Since July 2001 Woolworths have provided online feedback to producers supplying Cargill's Tamworth plant on how well their cattle conform to their product specifications. This underpins a performance based payment model where returns to producers are based on carcass conformity to Woolworth's criteria (Woolworths, 2001).

Despite these changes, beef's share of total meat consumption continued to decline. Attempting to account for this pattern, a survey of factors influencing meat purchases by the MRC indicated that the most important factor was eating quality (65 per cent), followed by price (28 per cent) and description (7 per cent) (McKinna et al Pty Ltd, 1994). This confirmed several earlier studies that revealed dissatisfaction with beef quality. Together the evidence suggested that the product category was not meeting consumer expectations due to problems with palatability and the inconsistent supply of product that met market specifications (Australian Meat and Livestock Steering Committee, 1996). As shown in Table 6, a random survey of retailers in Sydney revealed discrepancy in prices for selected cuts. There was mounting evidence of variance in price and quality across States as well as causing consumer resentment (Select Committee on Territory Food Prices, 1999). In terms of the costs

attributable to each link in the beef value chain, the cost of livestock represented the largest input cost (65 per cent), followed by primary processing (12 per cent) and deboning and further processing in the wholesale sector (12 per cent) and finally the retail sector (11 per cent)³³. Most revenue is derived from meat cuts (92 per cent), followed by skin/hides (7 per cent) and offal and rendered products (1 per cent) (Hayes et al., 1998).

Table 6: Comparison of Prices of Selected Beef Lines across Retail Outlets

	Butcher 1	Butcher 2	Clancy's (Independent)	Coles	Woolworths
1 kg mince	\$8.50 (topside)	\$8.99 (regular)	\$9.99 (extra-lean)	\$5.99 (regular)	\$3.99 (regular)
1 kg T-bone	\$14.95	\$14.99	\$14.99	\$12.99	\$8.99
1kg Chuck	\$9.50	\$7.99	\$8.99	\$7.39	\$3.49
Total Price	\$32.95	\$31.97	\$33.97	\$26.37	\$16.47

Source: Braund (1999). Prices were obtained from an in-store survey conducted on Wednesday 19 May 1999 at Lane Cove, Sydney. Woolworths' prices were collated from its weekly specials catalogue.

With 6 600 independent butchers and 1 700 supermarkets retailing meat in Australia, these outlets account for 70 per cent of the total red meat sold in the retail market (Rabobank International, 2002). The value of the domestic retail market rose from \$4.6 billion to \$5.5 billion during 2002 (Meat and Livestock Australia, 2003b). As the last link in the value chain retailers hold a privileged position in accessing information about consumer meat purchasing, yet they did not apply this information effectively to deliver added value. Both butchers and supermarkets tended to promote specials on price alone, rather than featuring new meal ideas. Generic promotion, especially TV advertising, was seasonal and selective and could not sustain interest in the product category.

The continued positioning of beef as 'lean' since the mid 1980s cemented this attribute in the Australian psyche. Studies of Australian consumer attitudes toward red meat in the mid 1990s confirmed fat content was the most important factor influencing fresh beef purchases for home consumption (Hearnshaw & Shorthose, 1994). Emphasis on leanness overshadowed the diversity of product available and other important attributes like taste, texture and versatility. Even though generic promotion was slow to promote beef's nutritional properties, compared to white meat, the lean label was used vigorously to convince consumers that it was still healthy. MLA's 'Red Meat. Feel Good' campaign launched in February 2002 targeted

³³ These estimates should be viewed with caution as they tend to vary between organisations and over time. A complete breakdown of these costs and revenues is provided in Appendix two.

metropolitan consumers. The campaign was backed by further scientific evidence of an independent expert committee (Meat and Livestock Australia, 2000a). Health and nutrition influencer groups like the Heart Foundation and Cancer Societies endorsed the expert committee's report. Consumer and expert campaigns stressed the health benefits and safety of frequent consumption, at least 3 to 4 times per week. In this campaign, red meat was positioned as the source of vitality and well-being (Meat and Livestock Australia, 2001). This message was linked to promotional efforts utilising the enduring 'short cuts' concept. The lynchpin of the campaigns – quick, convenient, nutritious meals – was based on the notion that increased consumption is more likely to occur with frequency of servings rather than quantity per serve. Yet, domestic consumption remained stable from 1998 to 2002 averaging about 37 kg per person (Australian Bureau of Agricultural and Resource Economics, 2004).

Communication of differences in eating quality to consumers was less transparent. AUS-MEAT's carcass specifications were irrelevant to consumers who considered eating quality, price and product description when making repeat purchases (Egan, Ferguson, & Thompson, 2001). However, most were confused over the pricing and labelling of different cuts of meat and 'grades', which were inconsistent from week to week. A contentious issue in the supermarket trade was the labelling of cow meat as 'export quality' and use of the word 'budget' on meat packs (Anon, 1998a). These labels sent confusing signals to consumers unaware of its trade use for manufacturing purposes. Use of the terms 'economy' and 'bulk meat' on labels was equally ambiguous. Terminology to describe different cuts of meat frequently changed with scotch and rib fillet, and porterhouse and sirloin used interchangeably.

Discussions between the MRC and the CRC for the Cattle and Beef Industry began at the end of 1996 to address the need for a consumer based beef description and grading system (Bindon, 2001). The R&D program, Meat Standards Australia (MSA), advanced knowledge of factors that contributed to beef eating quality. However, MSA was not embraced as a national commercial grading system. Failed adoption as the uniform mechanism for communicating information about beef quality was due in part to the scientific and production emphasis, with less concern for retailer support. MSA's development relied heavily on scientific taste testing. By mid 1998 \$7.3 million had been spent on R&D, with an extra \$1.2 million on promotion (Ball, 1998c). Initial commercial trials featured a money back 'tenderness guarantee' to purchasers, supported by a media campaign in early 1998 to promote the benefits to consumers (Thompson, 1998). In its media coverage, MSA was described as 'ground breaking' and the 'most important industry initiative in 30 years' (Brown, 1997b).

In addition to a formal review of the trial, feedback from some groups expressed dissatisfaction with the system due to its perceived constraints and bias. Victorian producers, saleyard operators and retailers accused MSA of exhibiting a Northern bias. They also contested the exclusion of cattle purchased through saleyards, representing 70 per cent of cattle in Victoria (Brown, 1997a). Many already supplied premium quality assured and branded products. Franklins supermarket national beef category manager Addy Leyten identified shortfall of supplies as a major problem (Ball, 1998a). Twenty-five per cent of the cattle targeting the scheme's lowest three star rating failed to make the grade after the first two weeks of the trial. Whereas MSA's original intent was to permit potentially unlimited pathways to achieve the grade standards, there were already 20 separate requirements. With less than 50 per cent of cattle submitted judged eligible, several criteria were revised to allow more to fit the pathways (Anon, 1998b).

Independent assessment of the consumer trial found that despite delivering more money to the segment overall, the returns were unevenly distributed along the value chain. Retailers were the only link to benefit consistently. According to the report, three-star beef obtained a \$1 to \$5 per kg premium over non-rated meat, with four-star product gaining a further \$3 per kg premium (Ball, 1998b). Despite consumer satisfaction, the segment remained divided over the limitations imposed on the MSA 'pathways'. There was much debate as to whether genetics, environment, or post-slaughter conditions were most influential in determining eating quality. The scheme was extended from a carcass to a cuts based system in mid 1998. Differentiation between cuts allowed more opportunities to add value to lower value cuts and thus maximize the total value of the carcass. Subsequent R&D and consumer testing provided a points-system model that was launched in Sydney in June 1999, finalised in 2001 and later launched nationally.

Even though it won an International Meat Secretariat prize and represented a breakthrough tool for continuous quality improvement, it failed to translate with the major retailers that applied their QA systems. Butchers, wholesalers and foodservice outlets throughout Australia adopted the scheme as well as a handful of companies developing branded products for foodservice and retail markets. This list included smaller producer based groups, large pastoral companies and small and medium sized processors. Up to 670 hotels, restaurants, taverns, cafés and other caterers have become licensed distributors. This accreditation serves to guarantee the quality of their meals and reputation through more consistent ingredient supply (Meat and Livestock Australia, 2002c).

Attempting to Deliver Greater Value

One company using MSA spanning the whole value chain is Polkinghorne's gourmet butcher in Melbourne, Victoria. The venture is the brainchild of Rod Polkinghorne who led MSA's initial development. Polkinghorne reworked traditional butchers' cuts by altering the way muscles were extracted to remove unnecessary sinew, excess fat and connective tissue. This offered a better quality eating experience for consumers who gain greater value from the beef they purchase (Bennett, 2002). Polkinghorne's overarching aim is to reduce a complex product, production, and marketing system to simplicity to provide a range of added value products. Fresh meat is sold according to five different cooking methods: grill, BBQ, stir-fry, casserole, and roast. In-store butchers add value by preparing beef ready for cooking, matching each cut to the cooking style for which it is best suited. There are a variety of products sold under Polkinghorne's store brand – Marrinya Grills, thinly sliced Shumi, 'Rodz' tender-tasters, Aga cubes for casseroles, flavoured beef for a roast and 'Farmhouse ground' mince. As quality assured added value products they attract a price premium from Polkinghorne's up-market clientele that patronise the store in Melbourne's gentrified suburb of Albert Park.

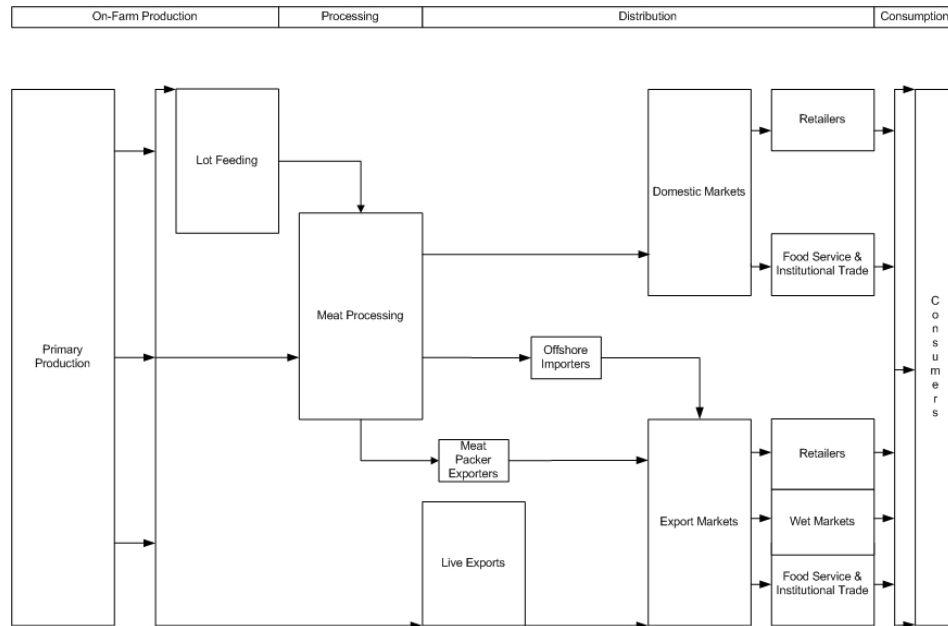
Contrasting with the concentration in beef retailing and processing, cattle farming remains fragmented. Farmers fall into one of three groups. Small specialist beef properties with less than 300 head of cattle carried 9 per cent of the national herd. However the majority (70 per cent) stock more than 1 thousand head with 34 per cent of these carrying more than 5 500 head of beef cattle (Australian Bureau of Agricultural and Resource Economics, 2003). In 2001-2002 an estimated 18 400 properties were classified as 'specialist beef properties' that is, engaged mainly in running beef cattle. A further 21 950 non-specialist properties ran more than 50 beef cattle but were mainly engaged in enterprises other than beef cattle. The number of specialist properties declined from 19 901 properties in 1994-1995 (Australian Bureau of Agricultural and Resource Economics, 1995). Specialist beef properties carried around 62 per cent of Australia's beef cattle and non-specialist beef properties around 27 per cent of the total in 2000-01. Properties with fewer than 50 beef cattle carried a further 1 per cent of the national beef herd³⁴ (Australian Bureau of Agricultural and Resource Economics, 2003). The average herd size of beef cattle is much larger in Australia at 409 than the US at 37, but is comparable to Argentina and Uruguay.

³⁴ ABARE's survey is estimated to cover a total of around 23 million beef cattle (about 91 per cent of the national beef herd) in 2001-02. The remaining beef cattle not covered by the survey or 9 per cent of the national beef herd, were on dairy farms, farms with an estimated value of agricultural operations between \$5 000 and \$22 500, in feedlots, and on properties in other industries not covered by ABARE's surveys.

Australian specialist beef farmers reported the highest farm cash income in 2001-02 since annual surveys commenced in 1977-78. This amounted to an average of \$73 200 per farm which was 30 per cent higher than the average over the three years from 1998-99 to 2000-01. Average profitability of non-specialist beef properties was higher due to the larger scale of their operations. Profitability among beef farmers has been inconsistent. From 1980-81 to 1994-95 the proportion of farms showing cash losses has been around 20 to 30 per cent. Although, larger properties (those with gross receipts over \$200 thousand per annum), report significantly higher profitability than smaller properties. At the farm level, the segment is internationally cost competitive. A study in 1993 indicated that net cattle costs to an abattoir were \$1.00 per kg less than the US costs, but \$A0.5 kg and \$0.56 kg more than New Zealand and Argentina (Booz et al., 1993).

The number of cattle entering feedlots has slowly increased since 1990. In March 2002 622 thousand cattle were held in feedlots, marginally higher than the numbers recorded for the December and March quarters of 2001 (Australian Bureau of Agricultural and Resource Economics, 2002a). Concentration of feedlot cattle in Australia is lower than the US. Australia's top 20 lotfeeding companies hold 73 per cent of total capacity in the sector (Australian Meat and Live-stock Steering Committee, 1996). While reliable longitudinal data is not available on the profitability of feedlots, anecdotal evidence suggests that it is highly variable over time and between enterprises. A smaller number of larger beef cattle properties are located in Northern Australia where the large pastoral companies run most of their stock. At this end of the sector, the nation's top ten beef producers like Stanbroke Pastoral Company, Australian Agricultural Company (AACo) and Consolidated Pastoral Company account for about 10 per cent of total production (Australian Agribusiness Group, 2002). The flow of live cattle from on-farm production, processing, distribution, through to consumption is shown in Figure 5. A range of different beef value chains feature in this meat marketing system including the live export trade, and domestic retail, foodservice and institutional trades, and the export trade in minimally processed carcass meat.

Figure 5: Reconfiguration of Australia's Beef Marketing System



Source: Adapted from Australian Meat and Livestock Steering Committee (1996: 23)

Processing is more concentrated than on-farm production due to frequent rationalisation designed to achieve greater cost savings through economies of scale. In 2000 the top five companies controlled 31.1 per cent of all meat processed in Australia at 15 plants (Meat and Livestock Australia, 2000b). These top 5 companies had a combined turnover of \$4 215 million and employed 7 850 people (Meat and Livestock Australia, 2000b). This concentration is still much lower than the US (71 per cent), New Zealand (60 per cent) and Argentina (64 per cent). Meanwhile the top 25 meat processing companies in Australia had a turnover of in excess of \$5 876 million and employed around 12 295 people at 43 plants³⁵. The top meat processing company, Australian Meat Holdings, reported an annual throughput of 370 thousand estimated tonnes carcass weight (ETCW) at four plants, up from 224 thousand tonnes ETCW in 1990 at nine plants (Australian Meat and Livestock Corporation, 1991; Meat and Livestock Australia, 2000b). From 1990 to 2001 the number of plants processing red meat fell from 390 to 130 accredited processors (Australian Agribusiness Group, 2002; Bindon & Jones, 2001). Larger plants are export focused and have a high proportion of foreign ownership. Among the top six processors who control 50 per cent of production three are foreign-owned (Rabobank International, 2002). From 1982-83 to 1994-

³⁵ Full details of the top 25 red meat processors in 2000 including throughput, kill share, number of plants, turnover and employee numbers are given in Table 10 in Appendix two.

95 foreign ownership of processing turnover increased from about 18 per cent to 30-35 per cent (Australian Meat and Live-stock Steering Committee, 1996).

Cooperative meatworks are less common in Australia than overseas, whereas government ownership is more common in Australia (Helibron & Roberts, 1995). Less than 5 per cent processing capacity is owned by farmer cooperatives in Australia, compared to 60 per cent in New Zealand. Average excess capacity in Australian processing plants is estimated at 30 per cent, compared to less than 15 per cent in the US and 10 per cent in New Zealand (Australian Meat and Live-stock Steering Committee, 1996). This reduces processing efficiency and the cost competitiveness of Australian beef. A study by Booz et al. (1993) estimated that Australia was the least efficient in terms of costs and productivity compared to its major competitors³⁶. Meanwhile processors' profitability tended to vary between enterprises and over time. A survey by the Industry Commission for 1992-1993 reported an average gross profit margin of 4.7 per cent. A quarter of the processors surveyed reported gross losses and a half reported gross profit margins of between 5 and 15 per cent. Other processors reported higher levels of profitability (Industry Commission, 1994).

Processors wield greater power compared to the large number of producers who are mostly price takers. Producers receive a premium or discount based on objective characteristics of the carcass. Although, to counter processor bargaining power, many independent producers have formed horizontal marketing alliances or co-operatives. Coordination of supply increases their ability to receive premiums based on how well the group can consistently supply high quality carcasses. Some producers have entered forward contracts with processors and established vertical alliances to perform specialised kills for specific accreditation purposes. Closer and more permanent relationships between farmers and processors has encouraged sharing of quality performance information.

As the nation's largest distribution outlet for fresh beef, supermarket chains have strengthened their power vis-à-vis producers and processors. Both major supermarket chains, Woolworths and Coles, have centralised their purchasing, processing, distribution, and promotional functions. This is confirmed by the creation of preferred and exclusive supply agreements and meat processing subsidiaries. Distribution is also centralised through State based distribution centres (DCs) coordinated nationally at the chains' head offices. There is evidence which suggests that the market power of the two retailers, concentrated through centralised buying

³⁶ See Appendix two for more detailed secondary data on these cost/productivity profiles.

allows them to purchase beef at the same price as wholesalers who, in turn, earn profits by charging inordinate prices to independent retailers (Braund, 1999).

By the end of the 1990s the major retailers were just beginning to develop value added products such as smaller portions and ready-to-heat items. Since in-store butchers have remained in most outlets, moves to modified atmosphere packaging and pre-packed products in case-ready form have been slow (Rabobank International, 2002). As well as the push to sell meat by cooking method instead of cut, Woolworths launched a range of meal ideas and components such as simmer sauces to boost beef sales. One range was developed in partnership with celebrity chef Neil Perry using his name to establish credibility. Apart from the co-branding of complementary products, innovation in fresh meat has been restricted to ready-to-cook beef burgers featuring a variety of multi-pack, traditional, heart smart and fattier trim offerings. A range of gourmet sausages was also introduced featuring differing flavours and textures. The chains have been reluctant to stock niche branded products, with limited distribution of Cleavers' organic meat and Certified Australian Angus Beef (CAAB) by Coles in the Eastern States of Australia. Most fresh beef and veal products are sold under retailers' umbrella store brands and labelled accordingly. There are few examples of value added products identified by their supplier's labels like Beak & Johnstons' cooked ribs packaged products under the Mr Beak label. Beef mince is the largest selling item in the fresh beef category (27.6 per cent) for use in popular meals like spaghetti bolognaise, lasagne, meat balls, rissoles, pies and hamburgers (Anon, 2002a; Meat and Livestock Australia, 2002b). Beef sausages (19.5 per cent), non-prime steak (17 per cent) and prime steaks (10 per cent) were also popular cuts in the fresh beef category (Meat and Livestock Australia, 2002b).

Development of new value added products by supermarkets has been restricted and incremental, due partly to the perception among meat managers that Australian consumers are resistant to new food products and trends. Instead, retailers rely on suppliers of further processed products and smallgoods for innovation in the product category. Favouring their role as providers of ingredients or meal solutions, they have preferred to team innovations in other categories such as sauces and carbohydrate products with the core meat ingredient. This strategy relies on merchandising techniques in displaying ingredients together to assist meal choices and improve consumer convenience.

Once the dominant outlet for meat, independent butchers located in suburban strip malls and major shopping centres are changing their image and product offerings to compete with the major retailers. Rather than directly competing with them on price, they stock value added meal ranges and niche branded products. Another feature of the changing butcher retail

environment is the entrance of some major pastoral companies. Stanbroke, Australia's largest pastoral company established Diamantina Fine Australian Food Butchers in Brisbane's inner city suburb of Milton as a means of distributing their branded products. Likewise AACo entered retailing by acquiring a stake in Polkinghorne's in late 2001 as one channel to grow their branded products, including their flagship 1824 label. However, this alliance with Polkinghorne was short-lived as the pastoral giant divested of their share in November 2003 when they retreated from their vertical integration strategy (Asia Pulse, 2003).

Outside Australia, in the Japanese market, the original 'Aussie beef' logo is still used in conjunction with high profile brands and Japanese retail store and house brands like Ito Ham and Nippon Ham that source product from Australia. Subsequent campaigns continue to promote the taste and safety of the product with new health and nutrition associations. Despite attempts to change the image from a low quality to high quality product, marketing efforts were not reengineered to support the redesign and repositioning of the logo. The majority of export marketing funds were still spent on consumer and trade promotions like Olympic Games showcase events and retail and foodservice support such as POS materials. A smaller proportion of funds were assigned to establish long term relationships with direct trade customers. Just a handful of companies had begun to manage in-market distribution in Japan as active and direct exporters in an effort to build identifiable branded products. While still in the formative years of development, brands like OBE Beef and Banksia beef are targeting niche markets through continual investment to maintain control of their products through to end users.

Identification of Bovine Spongiform Encephalopathy (BSE) in Japan in September 2001 compounded the pressure on Australian cattle producers and beef exporters. As average Japanese household beef consumption declined by 60 per cent, sales of Australian beef fell by 82 145 tons, worth an estimated \$520 million (Meat and Livestock Australia, 2003a). This represented a drop of 24 per cent year on year for September (Anon, 2002b). To ease the fallout the Federal Government contributed \$5 million towards a market recovery campaign featuring a series of TV, magazine and newspaper ads to restore public confidence in status of Australian beef. Producers and processors contributed an extra \$1.25 million through levies. Australia's single largest customer in Japan, McDonalds, spent ¥500 billion to reassure customers of the safety of their meals (Takahashi, 2002). These promotional and public relations activities built upon the systems already in place to minimise the likelihood of BSE entering or becoming established in Australia's beef value chain. The first major preventative action taken was prohibitions on importation of cattle and genetic material in 1988 on top of existing stringent quarantine regulations. The second major initiative, in 1990, was the

introduction of a surveillance program involving the examination of the brains of cattle to identify BSE. The third major development was the introduction of compulsory ruminant feedstuff bans and enhanced monitoring and surveillance in 1997 following the announcement of possible links between BSE and variant Creutzfeldt - Jakob Disease (vCJD) by the UK government in 1996. Additional measures since 2000 have included further bans on a range of animal feeds, import restrictions, development of rapid BSE testing methodologies, auditing of management systems, emergency training, scientific reviews and campaigns to raise awareness domestically and overseas. Three days after the notification of BSE in Japan, Australia suspended imports of Japanese beef and beef products and advised Australian retailers and consumers to discard these items³⁷. There appears to be support across Commonwealth, State and Territory agricultural ministers for new measures and legislative changes where appropriate to preserve Australia's Geographical BSE risk rating of 1³⁸.

Prior to the BSE fallout in Japan, in 2000-01 Australian beef products bearing the Aussie Gold logo increased by 1 192 tons (6 per cent) during the year, with a 17 per cent increase in value from \$185 million in 1999-2000 to \$217 million. Aussie Beef sales of the 28 foodservice companies receiving support from MLA increased by 18 per cent, compared to a projected 30 per cent increase among a more conservative estimate of 10 companies. With over 60 per cent of Australian beef distributed through the foodservice sector MLA realized that it needed to work more closely with major restaurant chains to maintain and expand market share (Meat and Livestock Australia, 2002a). Considerable marketing activities are still focused on the supermarket sector. As a telling indicator of the perceived quality of Aussie Beef, a subsidiary of the Japanese Snow Brand Food Co was caught repackaging imported Australian beef as domestic product in December 2001 (Anon, 2002e). Up to 30 tons of Aussie beef was substituted as domestic to obtain government subsidies paid to domestic producers to counter reduced consumption caused by the BSE scare (Anon, 2002e). This case confirms the ranking of Australian beef as third after Japanese and US products.

³⁷ This ban was similar to the temporary suspension on imports of beef and beef products from 30 European countries in January 2001 and the ban on specified foods containing British beef and beef products since 1996. A certification system commenced on 16 September 2001 that required all bovine meat and food ingredients derived from bovines must be derived from animals free from BSE (Department of Health and Ageing, 2001). A National Health and Medical Research Council (NHMRC) committee was also established to review the scientific evidence and make recommendations to Government on human and animal health risks in 2000. For full details of these progressive changes see Meat and Livestock Australia (2004) and Department of Health and Ageing (2004).

³⁸ This rating was given by the European Commission and means that it is highly unlikely that BSE existed in its clinical or pre-clinical form in Australia's domestic cattle herd (Scientific Steering Committee of the European Commission, 2000)

Conclusion

This analysis of Australia's beef marketing system in the contemporary period from 1975 to 2002 demonstrates fundamental continuities in the character of coordination mechanisms, despite critical changes in the domestic and key export markets. The direction of demand shifted from the US to Asian markets following the collapse of prices in the mid 1970s. The type of product – manufacturing quality beef – persisted even though the segment perceived markets like Japan as higher value and promoted entry into liberalised Asian markets as a way to move from low quality commodity exports to higher value products. Without a suitable product – or the appropriate mechanisms to understand market specifications, improve the product, and gain access to these segments - the commodity trading model remained in place. Participants were aware of the deficiencies in the system, but were unprepared to dismantle outdated and unresponsive mechanisms to design a value-based beef marketing system.

Instead of intervening directly to address the underlying problems, the government as an external change agent granted temporary financial assistance to reduce the shock and encourage adjustment to new market conditions. Processing capacity was rationalised through consolidation. At participants' request the government persisted in its policy of not intervening and went further to shift control and responsibility for marketing functions to private enterprises. Government authorities retained a role in quality control securing access to export markets and allocating quotas. Both producers and processors were reluctant to initiate or adopt new, integrated systems for assuring the quality of their products. Instead, the major supermarket chains moved quickly to install QA systems to gain greater control of the beef value chain. This was underpinned by their desire to promote their store brands and private label lines, rather than distributing competing proprietary branded products.

The picture is similar in overseas markets. In servicing highly sophisticated consumer markets like Japan without a strong preference for beef, Australia again relied on the minimal value attached to its disease-free status. Loss of this status and associated image would be so damaging that much effort is directed to protect it. Complementary strategies to develop added value products to target specific niche markets were ignored. There are limited exceptions with a few entrepreneurial participants seeking ways to create added value for their customers to achieve more sustainable returns. Overall, Australian beef still rates third in the market despite its strong generic presence. This position is borne by the ineffectual branding of Australian beef in the market, a lack of customer intimacy by the Australian production base and poorly graded product inconsistent in both quality and quantity.

During the mid 1990s the segment reached another breaking point as declining market share at home and abroad manifested as an internal crisis. Corporatisation of centralised, state-sponsored marketing activities was promoted as the momentum to internalise change and direct participants to seek and deliver higher value products. But, on the whole, the segment remains fixed in a commodity mentality, bound by tradition, configured to deliver least cost solutions for mass markets. Consequently, this inflexible, conservative meat marketing system facing a static domestic market, intense competition in overseas markets and from other protein sources continues to see its market share eroded. Beef's struggle is most apparent when compared to rapid rise of the chicken meat segment. The next chapter examines the transformation of this meat marketing system through the segment's shifting organisation of marketing functions, coordination of related activities and patterns of value delivery.

Chapter Five: Configuring Chicken's Marketing System, 1960-1979

Introduction

Compared to beef, the chicken meat segment emerged much later and developed more rapidly. From humble beginnings as a backyard family enterprise and sideline to egg farming, the segment has grown to become one of Australia's most successful agriculture based food enterprises (Blackett, 1970; Dixon, 2002). This enviable feat is evidenced by the spectacular growth in domestic production from an estimated 3 million birds in 1950 to 78 million birds in 2000 (Australian Bureau of Statistics, 2002; Fairbrother, 1994). With production concentrated in New South Wales, Victoria and Queensland, the segment has an annual turnover of \$3.5 billion and employs 120 thousand people both directly and indirectly (Fairbrother, 2001). Whereas prior to the 1960s the segment was of marginal significance to Australia's meat industry, in 40 years per capita consumption has grown from 4.4 kg to 32.9 kg to rival beef in total levels of consumption (Australian Bureau of Agricultural and Resource Economics, 2001a). Chicken meat overtook lamb in 1990 to become the second most popular meat in Australia (Australian Bureau of Agricultural and Resource Economics, 2001c). If this trend continues unabated as forecast, by 2010 chicken is poised to surpass beef as the main form of meat and source of protein at the centre of the nation's plates. This substitution represents a fundamental shift in Australian consumers' long held preference for beef in particular and red meat in general.

These aggregate indicators of the transformation in national meat consumption do not reveal the complex changes in the system of marketing chicken meat driving the shift. The speed at which chicken meat value chains adjusted to respond to change and uncertainty is exemplary, typifying a market oriented meat marketing system. In the space of 50 years, the organisation of this system moved from a traditional agricultural marketing system to a highly streamlined and synchronized vertically coordinated one. Chicken meat value chains have been transformed to deliver added value to consumers through configuration of a tightly coordinated marketing system to create value and distribute it among participants. Control over key marketing functions and the infrastructure to support and coordinate these activities moved downstream to become concentrated in the hands of two prominent processing companies – Inghams and Steggles, two major supermarkets – Woolworths and Coles, and leading fast food chains like KFC, McDonalds and Red Rooster. Together these firms

renegotiated the domain of value creation and distribution in the segment. At a higher level still the segment has redefined the notion of added value across the entire meat industry, setting formidable standards of quality, efficiency, product innovation, and consumer choice.

Reorganisation of the marketing system kept pace with the transformation of techniques for producing chicken meat. Realignment of the system from one catering for self-sufficiency and occasional, luxury consumption to mass production and everyday, convenient consumption has been driven by the pursuit of added value. To understand the shifts occurring both within the chicken meat marketing system and across the Australian meat industry, this section maps the development of the chicken meat segment over space and time. Examination of the segment in its historical context permits the identification of factors that have fostered this dramatic growth in consumption, and underlying this shift, the mechanisms reshaping the organisation of the marketing system. More importantly, this allows identification of the factors stimulating the development of added value meat products in a segment previously dominated by commodity production. Together, these factors explain the movement from a typical agricultural commodity base towards a tightly controlled system marketing a wide assortment of differentiated meat products.

Origins and Early Development

The present price of 6/6 to 7/6 a lb puts chicken beyond the reach of most people as a regular Sunday dinner. It is my aim to bring down the price to a level at which people can afford chicken twice a week and make it competitive with the best beef (Norm Thomas, owner of the Windsor Poultry Shop, Adelaide, 1959 cited in Cain & Ball, 1990: 111).

The origins of the chicken meat segment in Australia since white settlement can be traced to the collection of animals that landed with the First Fleet of British colonizers in 1788. This assortment included, in addition to cows, pigs, goats and sheep, a small number of turkeys, geese, ducks and fowls (Wood, 1977). Poultry was raised exclusively for their eggs. Until the 1950s it was not an identifiable commercial enterprise, but an offshoot to dairy farming. Table poultry was expensive, variable in quality and scarce. Demand for chicken meat was seasonal with consumption largely reserved for festive occasions, particularly Christmas and Easter (Cahn, 1977). Perceived as a superior cut of meat, those classed as the more well to do ate chicken for their weekend dinners, procuring prime poultry from dedicated city outlets. But for the majority of Australians who ate chicken only on occasion, their 'roasters' were sourced from backyards, local city markets, specialist butchers or small urban-fringe farms.

According to a report by the Western Australian Department of Agriculture in 1940, ‘apparently, size and cheapness is of more importance than daintiness and tastiness’ (cited in Cain & Ball, 1990: 123).

Each link in the modern chicken meat value chain, from conception to consumption, bares little resemblance to its suburban origins at the beginning of the twentieth century. Up to the 1950s, and in some locations until the 1960s, chicken rearing was typically either an ancillary part of other farming activities or birds were kept in urban backyards. The latter were seen as mobile waste disposal units, converting bones and other household food-scraps into useful by-products – eggs, meat and manure. In the early twentieth century the ‘chook’ shed symbolised self-sufficiency for many Australians, providing some with an additional source of income. Aside from their utilitarian function ‘poultry fanciers’ also kept birds for show purposes.

During the ‘waste not want not’ days of the 1930s it is estimated that over one-third of suburban households kept chickens and the practice was encouraged due to meat rationing in the decades that followed (Spearitt, 1994). As food gradually became more plentiful after the Second World War the roosters’ crows and fowls’ odours were nuisances in respectable metropolitan suburbs. Urban dwellers were distanced from production as chicken, once the preserve of wealthy households and mainstay of specialist poulterers, was cheaply offered for casual consumption in the butcher’s display cabinet. Rapid maturity from an amateur pursuit to a professional agricultural enterprise was achieved through a combination of advances in genetic selection and feed conversion, integration of primary production and processing, international sourcing of technology and concentration of control over supply of live birds.

With a swift reproductive cycle the ‘chook’ made an ideal candidate to apply the laws of genetic inheritance and enhance its meat yield. Backyard breed enthusiasts, or poultrymen as they were labelled, became more interested in efficiency, rather than the visual appeal of their fowls. An ardent desire to ‘secure the Australian market for the Australian producer’ led to the establishment of breeders and growers’ associations, such as the Utility Poultry Society of Queensland, as early as 1917 (Milne, Burton, & Marshall, 1989: 23). Member, Stan Lloyd’s account of the origins of this organisation explains the commitment to a shared vision:

It was during World War One that many of the men who held positions in the business and professional world of Brisbane, and who were interested in poultry culture, felt the need for some organisation to look after the interests of poultry breeders and commercial egg producers. They were the “backyarders” of 1915 and 1916 (cited in Milne et al., 1989: 23).

While the segment's origins can be attributed to the determined efforts of many small operators, two families - Inghams and Steggles - drove the system's modern configuration. Their separate beginnings shortly after the First World War, on modest family farms located in urban-fringe areas of New South Wales, morphed the other and typified the development of pioneering poultry integrators. Inghams' empire began as a small family chicken farm at Casula, near Liverpool in Sydney's west in 1918 and continued under the control of founder Walter Ingham until his death in 1953. The 45 hectare estate, comprising a chicken farm of 30 thousand birds, 650 pigs, and a few horses was left to sons Jack and Robert (Bob) Ingham who assumed control of the business as joint managing directors (Inghams Enterprises, 2003).

Steggles' beginnings can be traced back to the family of produce merchants who began trading in potatoes, onions, and horse feed in 1919 in Newcastle. By 1930, the family based enterprise run by the three Steggles brothers - Jack, George and Stan had expanded their business and began producing poultry feed designed for backyard growers and commercial layer production (Cain & Ball, 1990). The driving force behind Steggles' poultry production, Bruce Steggles, son of Jack, was initially discouraged by his father from entering the family business and so began his career working in a skin and hide processor, before joining the Royal Australian Air Force during the Second World War. Upon returning to Australia, Bruce took control of the business to assist his ailing father. Bruce was responsible for developing the existing stock feedmill business into a leading broiler production operation by purposely integrating the two functions (Steggles, 2003). Fifty hectares of land at Beresford, 20 kilometres west of Newcastle, was purchased in 1958 and the existing mill in Newcastle was relocated to this site. With the assistance of a local electrician a novel system of batch feeding was applied giving Steggles a 10 year break over rivals.

Growers in Queensland and Western Australia adopted another method of coordinating feed supply in the form of co-operative arrangements. The Queensland co-op formed in 1921 represented the interests of the National Utility Poultry Breeder's Association of Australia (NUPBA) (Queensland Branch) and was so named the NUPBA Co-operative Society Limited. Renamed the Poultry Farmer's Co-operative Society Limited 4 years later in 1925, the co-op produced a range of specially prepared feeds under their *Red Comb* label. These manufactured feeds were well received, providing a healthy source of income. Whereas the co-operative had been primarily focused on laying birds and marketing mashes, they started to experiment with dressing birds in the 1930s (Milne et al., 1989). However, the local market was insufficient to support this operation and it was not until April 1945 that a commercial poultry abattoir became a reality in Queensland.

Conversion of the top floor of Red Comb House located in Roma Street, Brisbane provided a temporary facility for slaughtering the mounting 'spent hens' dumped on the market due to serious grain shortages (Milne et al., 1989). Processing capacity expanded over the next 2 years with the construction of two modern, large abattoirs complete with chilling and cold store rooms in South Brisbane and Salisbury. The Poultry Growers' Co-operative Society in Canning Vale Western Australia operated a similar processing plant featuring semi-automated 'flail-type' pluckers and organised along a chain system. Singapore and the UK received the bulk of its output, leaving the remainder for the local market, with a portion of this sold through the Co-operative's Perth store (Cain & Ball, 1990).

Exports of chicken meat to the UK grew in 1948 as the Ministry of Food agreed to purchase as much as Australia offered (Juniper, 1949). This government-to-government initiated contract, worth 43 million in 1947-48 was short lived. As Europe rebuilt its flocks, Australia could no longer compete with suppliers from Holland and Denmark. Consequently the UK market was flooded, bringing prices down and prompting some producers to quit (Cain & Ball, 1990). A year earlier, Red Comb began delivering dressed poultry in Brisbane city and metropolitan areas. However modest, the service represented the final link in the value chain, completing the 'full circle of its poultry operations' (Milne et al., 1989: 24).

In this sense laying fowls could now be easily procured and recycled to harvest their meat, along with crossbred cockerels judged inferior in weight. Scientific officers from Queensland's Department of Agriculture and Stock began experimenting with feeds to gain higher flesh yields in the early 1930s at an Animal Health Station at Yerongpilly (Milne et al., 1989). The desire to hone traits for table purposes was shared by the Breeders and Hatcherymen's Association formed in New South Wales in 1945. Quarantine restrictions preventing the exchange of seedstock outside national borders meant that improvements in meat strains would come from within Australia.

Impressive advances were reported by AA (Bert) Tegel from his growing farms at Leppington and Camden, New South Wales in the late 1950s. Tegel franchised his meat chickens to hatcheries throughout the country in 1957 and 2 years later introduced Australia's first scientifically bred meat strain, 'TM1'. A breeding program was also set-up at the Rochedale Hatchery in Queensland which marketed the Hywate breed (Milne et al., 1989). Concurrently, a consortium of breeding organisations from New South Wales and Victoria established the Scientific Breeders Poultry Pty Ltd purchasing land at Kellyville, New South Wales. They also entered franchise agreements with hatcheries in Australia and New Zealand. These milestones and further gains in carcass conformation, growth and feed conversion

delivered improvements in grow-out efficiencies, reducing the time and feed required to reach slaughter weight.

Where regulations prohibited imports of genetic material participants compensated for this barrier by actively seeking information, ideas and technology from overseas. Many pioneers were trained or travelled to the US prior to establishing or expanding operations in Australia. America's relatively advanced broiler marketing system which had expanded rapidly from 105.6 million birds in 1939 to 1 795.7 million birds in 1960 provided fertile grounds for study (Conroy, 1962). Envious per capita consumption of 23 lb in the US compared to Australia's measly 1.5 lb in 1960 provoked the challenge of how to grow domestic demand (Cain & Ball, 1990; Conroy, 1962). To this end, Australian operators emulated American production methods designed to deliver efficiency, increase output and reduce farm-gate prices.

A notable foreign influence was Swift's Australian subsidiary which built a hatchery, growing-out sheds and a dedicated abattoir as part of its large meatworks at Maryborough, Queensland in 1957. This provided 'free flow of information' about advances in America between the parent headquarters and local plant (Milne et al., 1989). In particular, Swift was among the first companies in Queensland to use *Cry-o-Vac* plastic film packaging. The subsidiary also adopted an early version of the modern contract growing system to guarantee supply of live birds. Under this buy-back system a guaranteed contract price which deducted feed and chick costs was offered to independent growers (Milne et al., 1989). Swift's example encouraged many local operators to follow suit. The practice of organizing the system by integrating production and marketing functions was quickly gaining acceptance, despite the looming threat to growers' independence and potential for oversupply and instability (Conroy, 1962).

The Integrators: Coordinating the Chain, 1960-1967

Family companies know what they are doing. You've got to know chickens through and through if you're going to be successful. You've got to know breeding to hatching to processing to marketing (Jeff Fairbrother, Executive Director of the Australian Chicken Meat Federation, cited in Schmidt, 1999b: 90).

The 1960s marked the beginning of modern, commercial chicken meat production in Australia. Building upon previous advances in genetics, feeding and husbandry primary production expanded rapidly in the 20 years between 1950 to 1970 (Milne et al., 1989).

Broiler production grew seven-fold in the 1950s and five-fold in the 1960s. Following the introduction of Australia's first scientifically bred chicken meat strain 'TM1' in 1959, Tegel released a new improved strain 'TM4' the next year. This development enabled poultry farmers to diversify from egg production and profitably engage in meat production for the first time. During the early 1960s stockfeed companies discovered a new market - poultry farmers, and their product began to replace farmers' 'own mashes' (Symons, 1982). By sourcing feed off-farm from transnational grain companies like Bunge, farmers were allowed greater specialisation in rearing chickens for their meat.

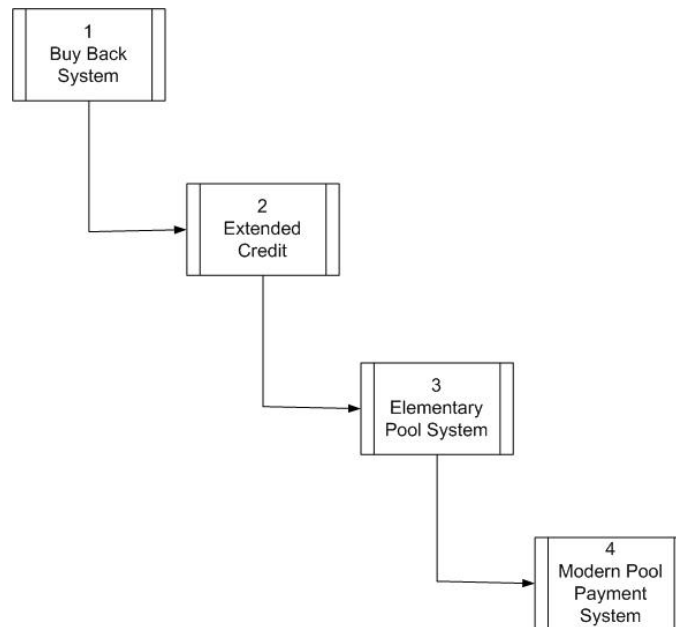
Another landmark was the introduction of the first commercially viable, continuous chain processing system in July 1961. As operators installed the new processing equipment, imported from the US, processing was gradually automated. This led to marked increases in scale and efficiency. With a processing capacity of 3 600 birds per hour up to the mid to late 1970s, the increasing scale of production saw the price of chicken falling rapidly. However, to justify expenditure on this equipment and remain financially viable, processors were obligated to scale-up their production. The solution for the segment's two largest processors was a combination of vertical integration, contracting and long term supply agreements formed with the country's largest supermarket retailers. These arrangements, which in effect constituted a production and marketing oligopoly, provided the stability and financial resources for expansion and market growth based at first on the ability to undercut red meat prices.

The actions of Inghams and Steggles to control the supply of chicken meat laid the foundations for this oligopoly. This process of coordinating supply involved rapid restructuring of production relations through ownership and contracts. The two long established poultry farming families became the most integrated and powerful firms in the segment by acquiring breeding and hatching farms, feed mills and processing plants. Of the pair, Inghams was the first to move into broiler production in 1959 as one of the original Tegel's franchisees. After Jack returned from a study trip to the US and UK in 1960, he, along with brother Bob constructed Australia's largest poultry abattoir at that time. To ensure consistency of supply, they expanded their hatchery and grow-out operations by acquiring additional farming properties. Their control over the nucleus breeding stock was further consolidated in 1963 with the purchase of 50 per cent of Tegel's hatcheries and franchises.

Just 3 years earlier, Bruce Steggles had approached the brothers touting to supply their feed. After they refused him a guaranteed outlet Bruce decided to enter the trade but was promptly faced with the immediate dilemma of sourcing seedstock. Unlike most operators, Steggles developed his own unique breed in-house. He hired a geneticist and set-up a commercial

hatchery in 1961 at Beresfield complete with equipment imported from the US. By 1962 the company had grown to accommodate 100 thousand birds and owned a facility capable of processing 25 thousand birds per week. Both firms expanded their breeding and rearing farms over the next few years and augmented their growing operations by contracting-out chicken rearing from day-old to slaughter weight. By 1966 up to 90 per cent of broilers throughout Australia were produced under contracts between growers and specific processors (McConnell, 1966; Williams, 1967). This unique contractual arrangement began as a chicken buy-back system and evolved into the contract growing system as shown in Figure 6.

Figure 6: Evolution of the Contract Growing System



In its original form prevalent in the early 1960s, growers bought all inputs from the processor – day old chickens, feed and medication – who would in turn buy the chickens back at an agreed price when they reached maturity. Two shillings per lb liveweight was the average price growers received, despite the tactics used by both sides to secure a more favourable price. As the scale of production grew, growers required significant resources to purchase chicks and feed. This represented the first step towards the modern contract system, where processors bear the costs of feed and chicks. Under the extended credit system, costs of these inputs were deducted from their grower payments. To encourage greater efficiency, growers were paid a fee for each bird grown according to its weight under the elementary pool system. This system provided incentive to lower feed conversion and achieve higher weights (Dixon, 2002; Milne et al., 1989).

Building upon this method, the modern pool payment system developed which applied formulae to calculate growing fees, taking into account body weight, feed conversion and the bird's age (Milne et al., 1989). As rearing became more intensive and tightly controlled, growers relinquished much of their independence. While growers provide their labour and invest in high-tech sheds, the processing company specifies the conditions of the contract. Processors supply the grower with strict operating procedures, day-old chickens, feed and supplements, most chemicals, cleaning, veterinary services, fumigation and disinfection. They may also provide labour to collect and transport chickens to the processing plant. This shift in control over marketing live birds was so dramatic that it has been equated to the task of babysitting, where growers closely monitor chickens in ventilated, feed and water automated, computerized and temperature-controlled sheds until they achieve market weight (Glatz, Critchley, & Lunam, 1996; Henderson, Epps, & Rural Industries Research and Development Corporation Australia, 2001).

Coordinating Supply

By controlling this coordinated system of broiler supply, Inghams and Steggles were able to reduce their capital investment in chicken meat production. Rather than investing in large sheds and expensive equipment used to rear chickens to slaughter weight, these companies sub-contracted this function to chicken farmers who made these investments. Farmers do not own the chicken stock which remains the property of the processors. This arrangement enabled the major processors to reduce their investment in production of the core product by shifting 'capital and supervision costs while simultaneously concentrating the high value added processing and distribution functions' (Kim & Curry, 1993: 76). A telling indicator of the extent of vertical coordination is the absence of a marketing board to align production and sales common to many of Australia's agriculture based food sectors. Instead this segment relied upon internal coordination of production activities to ensure supply of fresh chicken meat to retail outlets. This was achieved through a form of vertical alignment whereby the integrators retained corporate ownership of essential inputs and outsourced the standard growing function through contracting. Transition from a conventional agricultural marketing system to one organised through vertical coordination and increasing concentration of control provided the foundation for chicken's progression to deliver greater value to end consumers. Changes in arrangements for producing and distributing chicken meat in the late 1960s had a significant impact on how the modern chicken meat marketing system is organised as summarised in Figure 7.

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graph TD; NBS[Nucleus Breeding Stock] --> BF[Breeding Farm Multiplication Farms<br/>1. Contract<br/>2. Company]; BF --> H[Hatchery]; BF --> BG[Breeder Growout<br/>1. Contract Farmers<br/>2. Company Farms]; H --> BG; H --> FE[Fertile Eggs]; FM[Feed Mill] --> BG; FM --> PP[Product Plant]; BG --> BG_LB[Live Broilers]; BG --> BG_FFS[Broiler Feed and Flock Service]; BG_FFS --> PP; BG_LB --> P[Processing Plant]; P --> PP; P --> FS[Food Service]; PP --> DP[Further Processed Products]; DP --> RO[Retail Outlet]; PP --> WCDP[Whole or Cut-up Dressed Poultry]; WCDP --> FS; DP --> D[Distributor]; WCDP --> D; D --> RO; D --> FS;
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The flowchart illustrates the broiler production chain, starting from the Nucleus Breeding Stock at the bottom. This stock is used to create Breeding Farm Multiplication Farms (Contract and Company). These farms supply Breeder Chicks to a Hatchery and provide Broiler Feed and Flock Service to a Feed Mill. The Hatchery also provides Fertile Eggs to the Breeding Farm Multiplication Farms. The Feed Mill provides Broiler Feed and Flock Service to the Breeding Farm Multiplication Farms. The Breeding Farm Multiplication Farms produce Live Broilers, which are then sent to a Processing Plant. The Processing Plant also receives Broiler Feed and Flock Service from the Feed Mill. The Processing Plant produces Further Processed Products, which are then sent to a Retail Outlet. The Processing Plant also produces Whole or Cut-up Dressed Poultry, which is sent to a Food Service outlet. The Further Processed Products are also sent to a Distributor, which then sends them to the Retail Outlet and Food Service outlets.

Whereas a virtual duopoly was established in the production of chicken meat, a similar pattern was replicated in the retail arena as preferential supply relationships were forged between the two largest chicken processors and the two emergent supermarket chains. This production-marketing cartel saw Steggles align itself with Coles while Inghams allied itself with Woolworths. In 1960 both G.J. Coles and Coy Ltd and Woolworths Limited opened their first freestanding supermarkets in North Balwyn, Victoria³⁹ and Warrawong, New South Wales respectively. By November that year, Woolworths had extended its young grocery

130

retail operations to all States and Territories through a speedy succession of local chain acquisitions (Woolworths, 2002). As the new supermarket format was being firmly implanted in the Australian retail landscape, Bruce Steggles formed an association with the Coles organisation, and the Ingham brothers with Woolworths. The first Inghams' bird appeared on Woolworths' shelves on 17 July 1961 (Woolworths, 1999b). Despite establishing firm commitments to these suppliers, the supermarket duopoly engaged in price wars with alternate suppliers to gain market share. In consequence, retail prices dropped to as low as 60¢ per kg, with it being remarked that chicken was 'always on special'.

This behaviour placed frozen chickens as a loss leader item to entice customers into supermarkets, with minimal profits for the retailers (Milne et al., 1989). The major chains were content to sell whole chickens well below cost to attract customers into their stores. They did so based on the premise that once inside their supermarket customers were likely to purchase other more profitable merchandise from which they expected to make an overall profit. Fortunately for chicken processors and retailers alike, the sale of frozen chicken coincided with increasing use of freezers in Australia, facilitating mass storage of the product. Whole frozen birds were sealed in *Cry-o-Vac* packages for ease of transport to and from the supermarket display case. In Queensland alone, it was estimated that as much as 70 per cent of chickens were sold in *Cry-o-Vac* during the 1960s (Milne et al., 1989). This magic vacuum-sealed plastic bag preserved the carcass effectively unlike other techniques that caused freezer burn, rendering the carcass red and dehydrated. Whereas in the US and the UK where chickens were mostly sold fresh, packed in crushed ice that was allowed to thaw in the case, the frozen form offered the benefits of extended shelf-life and interstate distribution.

Freezing perpetuated cutthroat price competition. Whole flocks were processed at a time and birds of undesirable weight stored for months on end without any noticeable loss of quality. As soon as sufficient quantities amassed they were sold to retailers who advertised them among the week's specials. Price discounting was also triggered when processors exceeded their storage capacity or purposively lowered their prices to gain market share. Australian consumers responded positively to the extensive availability of attractively presented, cheap frozen chooks with per capita consumption rising steadily from 1.64 kg in 1960-61 to 5.2 kg in 1964-65 to 8.4 kg in 1967-68 (Fairbrother, 1994; Walker & Roberts, 1988)

Able to transport excess stock considerable distance from their respective production hubs in Hoxton Park and Beresfield, Inghams and Steggles began to penetrate interstate markets in the mid 1960s. In anticipation of their plans to expand, Inghams purchased a 50 per cent stake in refrigerated transport company Eastoe's Transport Proprietary Limited in 1964. With their

combined distribution capabilities, the two companies set up a depot at Moorabbin in Victoria. A year later the Ingham brothers registered their venture as a proprietary company in Canberra, retaining the entire ordinary share capital of the company. Keen to showcase their success to date, a 30 minute film entitled *Chicken City* was produced and screened before a receptive audience of business leaders at Sydney's Circular Quay (Cain & Ball, 1990). Shortly after the company entered the Queensland market acquiring a Tegel's franchise hatchery at Wynnum and associated breeding farm at Cleveland from Gisler Bros and a modern abattoir at Park Ridge previously owned by the Red Comb Co-op Society. In turn the Co-op secured a long term contract to supply their feed. This arrangement continued until sale of the feedmill to Gillespie Brothers in 1980 (Milne et al., 1989). Following Inghams' lead Steggles established a distribution centre based at Hawthorn to service the Victorian market (Cain & Ball, 1990).

By the mid 1960s most of the large processors were selling frozen product interstate. By increasing the water content of their chickens during processing and freezing, they were able to undercut smaller operators in other States. To thwart these actions and reclaim market share two responses were taken. Firstly, processors in Victoria convinced buyers that unlike those imported from the Northern States their products did not shrink when cooked. They also appealed to their State government to regulate against the practice, which it did by ascribing maximum moisture pick-up levels. Secondly, local companies in affected States pushed fresh chickens - a product that favoured local distribution. Customer response was positive and demand for fresh product escalated forcing the 'integrators' to acquire local operations to supplement supplies freighted from their main distribution centres (Cain & Ball, 1990).

From 1967 onwards the processing sector was gradually consolidated. Unable to compete many smaller players were forced out of the segment, bought out by larger concerns. To augment its supply of fresh product sourced from its plant at Murray Bridge in South Australia, Inghams acquired a controlling share of Golden Poultry Farming Industries Limited, a Victorian based integrator. The parent of its holding company, AMATIL⁴⁰, retained the remaining shares (Inghams Enterprises, 2003). In November 1967 the jointly owned subsidiary purchased long-established South Australian integrator, Windsor Poultry Service (Cain & Ball, 1990). In the following years Steggles acquired Tenda Poultry on the outskirts of Geelong, Victoria and built a dedicated hatching and breeding facility at Bannockburn. The company coordinated sales and distribution throughout Victoria from its Hawthorn base (Cain & Ball, 1990). On an operational level the integrators were active

⁴⁰ The major shareholder in AMATIL was British American Tobacco.

coordinating the physical flow of the product by controlling most aspects of the meat supply chain. However, the longevity and growth of the segment required coordination of information, at a higher level, among the varied organisations which together constituted a functioning marketing system.

Coordinating Information

For much of its early development, the modern chicken meat marketing system suffered from a lack of authoritative and widely disseminated information on the volume and value of production or consumption. This problem was acknowledged by Conroy (1962: 178) who pleaded that 'if the industry is to progress it will be necessary for data relating to such items as chick placements, slaughterings, production, prices and the level of consumption to be readily available'. Active participants were quick to sense the need to coordinate the collation and dissemination of vital information throughout the segment to align supply with market requirements.

This drive culminated in the formation of the Australian Chicken Meat Federation (ACMF) in 1964. As the national representative organisation the ACMF oversaw the workings of related associations and provided a united voice for the segment, nurturing and protecting its development. This central authority coordinated the varied interests of growers, processors, service providers, and related enterprises, facilitating consensus at this early stage. The first national chicken meat conference held in Victoria in March 1965 brought together multiple State based organisations. Topics of discussion included the absence of official national statistics, standardization of packaging and marking and orderly marketing arrangements at both State and Federal levels. Delegates also pressed for the need to apply marketing techniques other than lowering price to increase consumption, with advertising, recipes and special promotion days among the suggestions. Later that year, Australia's Bureau of Census and Statistics started to collate national data on production of chicken meat for human consumption (Cain & Ball, 1990; Fairbrother, 1994).

Momentum for coordinating the exchange of information on a range of issues - disease control, promotion, and scientific development - gained pace. Sydney hosted the world poultry congress in 1962. Australia's poultry people also headed overseas to attend congresses and study tours to learn about best practice. Within Australia various State and national associations held a number of meetings and conferences, along with the annual national chicken meat conference. A contentious subject at the well-attended third annual

conference held in Surfers Paradise, Queensland in May 1967 was the formation of a combined national research fund. At that time private companies and public organisations in some States conducted basic and applied research. Methods of collecting funds differed across each State. Queensland operated a combined slaughter fee (1/8¢ per bird) and feed fee (26¢ per ton), Victoria and Western Australia had a feed levy. New South Wales was adamant that it did not want to contribute its funds, despite the lure of matching government funding. At this time ‘marketing and promotion now took a back seat behind the problems of research and disease control’ (Cain & Ball, 1990: 16). However members remained resolute that the segment should not be subsumed under government control, like the case of eggs, as pooling and price equalization schemes would remove the incentive for independent promotion. As everyday consumption of chicken was still relatively novel to most Australians, ongoing promotion was needed to raise product awareness and purchase intent.

Representation of often divergent interests in the segment, growers and processors in particular, was becoming more distinct and coordinated as competition intensified. Early broiler buy-back arrangements had not encouraged unity amongst growers. However, the increasing downward pressure on contract fees brought these farmers together in the face of a common crisis. Delegates from Queensland, New South Wales and Victoria uniting as the Australian Council of Broiler Grower’s Association, later the Australian Chicken Growers’ Council (ACGC), met in Sydney in 1967 (Cain & Ball, 1990). They urged affiliate State associations to support a universal contract scheme with independent price arbitration for the marketing of live broilers within Australia.

Guaranteeing Quality and Securing Supply, 1968-1979

With almost every other meat rising in price, housewives flocked to buy chicken at a time when supermarkets were rapidly replacing local grocers and butchers, and frozen convenience foods were becoming both feasible and popular in an affluent age of large domestic refrigerators (Ronald Anderson, agricultural journalist, 1970 cited in Fairbrother, 1994: 570).

Although the chook had not been banished altogether from the backyard, numbers had fallen from between 16 and 25 per cent in 1963 to about 8 per cent by 1976 amongst Australia’s suburban population (Halkett, 1976). With rising numbers of married women in the workforce, improved rubbish services and prohibitive poultry keeping regulations, Australian consumers began to rely on commercial providers for their chicken meat. Intensification of methods for producing chickens through the 1960s was paralleled only by expansion of the

system for delivering value added products to consumers over the following decade. Australians were granted greater access to fresh and frozen products via the proliferation of self-service supermarkets and fast food outlets dotting suburbia. In 25 years chicken consumption had risen by more than 200 per cent, from 4.4 kg per person in 1950 to 13.9 kg per person in 1975. In meal terms this meant an increase in actual servings from 20 (or two and a half birds) to 50 (or ten smaller chickens). Over the same period production increased by just over 300 hundred percent and the real price dropped progressively until 1975 when they rose above the price in 1950 (Morcombe, 1978).

The retailers acted as conduits for the mass production and consumption of chicken. Preferred supply agreements and the use of State-wide distribution systems by the major supermarket chains consolidated supply, eliminating many smaller suppliers whose processing plants did not meet their strict quality control standards (Milne et al., 1989). Through their ability to set prices for frozen and fresh chickens, the supermarkets had quietly taken control of the chicken meat value chain. Many growers and processors fell victim to chronic oversupply when, in 1968, production eventually outpaced demand. Price wars continued to rage between the major processors and at least one small processor in each State as they fought to secure orders from key retailers. This activity only exacerbated instability.

Cost cutting was imperative as many processors struggled to remain competitive. Unable to contain feed and product transportation costs, Swifts discontinued its Maryborough based operation in 1968 selling its assets to Provincial Traders Ltd. An explanatory letter sent to all 10 growers in the district stated:

Dear Sir, during the past twelve months keen competition has developed between the major poultry processors resulting in continuous reductions in the retail price of poultry meat to the consumer. We have no alternative but to advise you that, after the present batch of birds has been collected, we will not be able to continue using your facilities (cited in Cain & Ball, 1990: 148).

Contract growing fees paid to farmers were successively reduced since this was the input over which they had the greatest control. In a more formal response to the problem, managing directors from the nine major integrators formed the Australian Poultry Industries Association (AIPA) in 1968 to control stock levels. Together these firms accounted for 85 per cent of all poultry processed in Australia (Fairbrother, 1971). Members of the 'poultry club' met monthly and Jack Ingham presided as foundation President (Cain & Ball, 1990). The AIPA's mandate was expanded to cover technical issues of disease control, R&D, plant hygiene and inspection among others, as well as voicing the common interests of the segment to various

levels of government. In 1970 the Association's political weight within the segment was crystallized with the election of AIPA Executive Director Dr Jeff Fairbrother to the equivalent position in the ACMF. Specialist committees comprising experts on nutrition, chemistry, veterinary science, and commerce supported Dr Fairbrother providing advice on technical matters, nutrition, packaging, industrial relations, promotions and public relations.

Despite the seeming cohesiveness of interests in the segment, the ongoing tension over growing fees was one dilemma that could not be resolved internally. As retail prices of chicken meat fell, so too did the prices processors paid to growers for broilers. Relations between the two groups deteriorated especially during periods of overproduction. Contract growers found themselves in a situation of dependency vis-à-vis the principal processors. The initial buy back system no longer proved effective as processors were able to manipulate costs of feed and day-olds in order to reduce grower payments. By the end of the 1960s farmers began to refuse to take birds from the processors and State governments intervened to mediate contract price setting. Informal agreements were first struck to ensure a fair growing fee per bird was paid to growers. In practice these arrangements were difficult to enforce. Growers in New South Wales reported average returns as low as seven cents per bird (Cain & Ball, 1990). Meanwhile in Victoria the standoff between the two groups escalated as growers struck in 1969 for 17 weeks, then a second time in 1975 for 16 weeks. These growers did not receive income for 6 weeks or more at a time. But the small number of buyers of live birds left them no alternative but to resume their contracts (Dixon, 2002). Processors in Queensland were reluctant to increase growers' fees by \$1.22 to \$15.22 per bird to provide a reasonable return on growers' investments (Milne et al., 1989).

Heeding to the relative power imbalance between the two groups, State based chicken meat councils were established to redress the undesirable consequences by negotiating growers' fees. New South Wales was the first state to introduce legislation in 1975 to regulate contractual agreements between the two parties. Victoria followed suit in 1976 and growers in that State received a 25 per cent increase in fees per bird on the first arbitration ruling. By 1977 all states except Tasmania had passed legislation to arbitrate fees and establish industry negotiating committees (Cain & Ball, 1990; Dixon, 2002). Tasmania opted for guidelines and a voluntary advisory committee covering the whole poultry sector and reporting directly to the State Minister for Agriculture (Cain & Ball, 1990). Where previous attempts by the growers to develop uniform contracts had failed, these more formal arrangements assisted to bring stability to the segment and artificially achieve greater cohesiveness between growers and processors. From 1975 to 1980 relations improved returning to a state of relative stability

assisted no doubt by a boom in chicken meat production which rose by 68 per cent over the period (Cain & Ball, 1990).

Retail authority in the marketing system extended beyond the supermarket aisles to an entirely new format for purchasing and consuming chicken in Australia. The opening of the first KFC store at Guildford in Western Sydney in 1968 followed by a string of 'me-too' takeaway food outlets signalled the beginning of another food revolution in retailing that favoured chicken over beef. These convenience food chains represented a revolution in Australian eating contributing to the rapid increase in chicken consumption in the early 1970s. KFC alone was responsible for a 38 per cent increase in chicken production in 1970-71 via its 75 stores (Dixon & Burgess, 1998). By 1973 there were 126 KFC outlets operating in Australia⁴¹ and the group's sales had risen from \$2.1 million in 1969 to \$35 million in 1973. The food chain had expanded through corporate ownership as well as franchised stores. There were another 36 outlets owned by other major chains, and some 300 rotisserie barbeque and takeaway chicken shops (Fairbrother, 1975). Combined, these outlets sparked an unprecedented appetite for takeaway chicken in Australia.

With the arrival of the fast food format, the integrators located another major channel of distribution. Inghams formed what was to be a long association with KFC. Within 18 months of its arrival, KFC had opened another 20 stores including Queensland's first at Kedron. Patrons were able to choose from a menu consisting of Original Recipe Chicken, three salads and whipped potato & gravy. These items were available in five sizes - Snack, Dinner, Thrift, Bucket and Barrel. This original menu may appear limited when compared to current offerings - whole fillet burger range, Twisters, Popcorn Chicken and Hot & Spicy Chicken (Kentucky Fried Chicken, 2003).

Steggles too became a major supplier of fresh chicken to the takeaway trade. The company also moved downstream along the value chain, establishing the Henny Penny chain in 1969 after importing specialised cooking equipment from the US a year before. In 30 years or so the chain has expanded to 15 stores concentrated in the Hunter region of New South Wales, nine of which are franchised. Like its rivals, the chain offers dine-in, takeaway and drive-through services from free standing and shopping centre outlets. Henny Penny's product range has expanded from its staple items - BBQ and Fried chicken to a wide variety of fresh salads and an assortment of delicious chicken and beef wet dishes (Henny Penny, 2003). Red Rooster followed in 1972, as the Kailis family opened the first store in the Perth suburb of

⁴¹By 1987 the number of KFC outlets expanded to 260. In 1999 there were over 400 stores nationwide.

Kelmscott. After several years with the family company, operations manager, Stan Fyfe became involved in a similar concept store 'Big Rooster' in Queensland. Together with Nick Tana, the first store was opened in 1974 (Klinger, 2002). The original Perth based chain, founded by the Kailis family challenged its legitimacy and the two chains became embroiled in a legal battle that Big Rooster eventually won.

Standardising the Product

Whereas beef has been subject to incessant scrutiny from regulators over product standards, chicken meat has remained largely unaffected. Preferring to limit outside interference, members at all levels have pursued a model of 'co-operative self-regulation' (Cain & Ball, 1990: 10). This approach is exemplified by the segment's management of product size, which became a real issue by the end of the 1960s as it was claimed that water made up to one-third the weight of frozen table chickens. This outcome had been the response of processors to extreme price competition driven by the supermarkets. Milne et al. (1989: 96) describe the workings of this common practice: 'by keeping birds in the spin chiller at low temperatures for extended periods then freezing very fast in *Cryo-Vac* in glycol tanks, considerable amounts of water could be held in carcass tissues'. While excess water did not appear to affect sales of frozen chicken, the 'water fowl' incident did not go unnoticed by the public either. One Queensland newspaper headline proclaimed – 'Expensive ice – a million dollars worth of water' (Fairbrother, 1994: 570).

With such negative exposure and falling into disfavour, participants in the processing sector acted in 1969 to address the issue. Through the central authority of the ACMF processors voluntarily agreed to lower the free moisture content of frozen chicken to a maximum of 8 per cent of dressed weight. The following year this agreement became enshrined in uniform legislation recommended by the Australian Agricultural Council (AAC) (Fairbrother, 1994). A more comprehensive response to inconsistencies in product weight came in the form of a uniform national standard of number coding for chickens in November 1969. This universal scheme for communicating the size of chickens was introduced following meetings between ACMF President Don Blackett and the Chairman of the Standards Committee of the Department of Weights and Measures in Canberra. Further alterations were made to the coding standards in 1971 with the conversion to the metric system and specification of weight on chicken packs in 100g increments (Cain & Ball, 1990).

Steps were also being taken to enhance the quality standards under which chickens were raised and processed into meat products. The ACMF once again took on a central coordinating role in organizing the Australian Chicken Meat Research Committee at its annual conference in 1968. With the in-principal support of all State Ministers of Agriculture, the committee was constituted with members from the AMCF, university researchers, and representatives from the CSIRO, AAC and DPI. A formal levy based research scheme was set-up the following year. Funding was sourced from levies on hatched chickens with matching contributions from the Commonwealth government. This scheme provided a program of research dedicated to the scientific, technical and economic problems of the segment. Grants were awarded for research covering disease, nutrition, physiology, anatomy, management, public health and genetic aspects of broiler production (Chicken Meat Research Committee, 1974-75). As well as boosting overall investment in on-farm R&D in the segment, the scheme fostered greater collaboration between the integrators, government funded research organisations and departments of agriculture. Overall investment in chicken meat research in 1973-74 was estimated at \$1.4 million, or about 1 per cent of total funds spent on rural research (Industries Assistance Commission, 1976b).

Continuing improvements in the genetic attributes of stock, coupled with the adoption of the 'all in-all out' growing procedures in tightly controlled environments delivered greater consistency in chicken meat quality. As farming became a more intensive practice, vaccinating day old chickens and enforcing strict quarantine and hygiene protocol between farms strengthened disease control (Morcombe, 1978). The two most powerful integrators secured control over seedstock narrowing the major breeds to two. Beyond improving the quality of mature birds a number of swift measures were adopted to achieve greater consistency in food safety and hygiene standards of the processors. In 1975, the AIPA members introduced a code of hygienic practice for all poultry processing facilities. These self-regulatory guidelines were based on US systems. State chicken meat councils vigorously pushed for the code's adoption by their respective meat inspection authorities. In the same year, the ACMF supported initiatives to develop a standard delivery crate for day old chickens, review detergents and sanitizers in use, and update information on the regulation of date stamping of food (Cain & Ball, 1990). Together these developments encouraged the standardization of chicken meat eating quality.

Marketing communications became a priority following the beef crash in 1975 as the AMLC aggressively promoted red meat. For the first time per capita chicken consumption stabilized at 13.9 kg over 1974-75 as the price of beef fell rapidly and consumption reached an all time high of 65.4 kg per person, up from 41.6 kg the previous year. As a result, chicken's share of

total meat consumption declined by 2.6 per cent to 11 per cent (Morcombe, 1978). In response, the Western Australian council sponsored a promotional campaign in the press and on television entitled – ‘Which is the Best Meat – Beef, Lamb or Chicken’. The campaign was run in other States, but not without being legally challenged by the AMLC. To emphasise and reinforce chicken’s positive attributes the AIPA and State councils co-sponsored television cooking sessions with celebrity chef Bernard King the following year (Cain & Ball, 1990).

Differentiating the Product

The introduction of a new product in the Australian market - the fresh or chilled chicken - in 1970 represented a watershed in adding value to products in the segment. To keep pace with orders from their State based and nationwide retail customers, the integrators expanded the geographical coverage of their operations through aggressive acquisitions. This aside, they sought to extend their ability to create value added products by investing more in R&D to enhance the range of products on offer to consumers through their local supermarkets, delis and takeaway food shops. The ability to develop new products by differentiating the basic offering solved a more pressing dilemma for the integrators.

Decades before their counterparts in the red meat segment, chicken processors realised the need to maximize the value of the whole carcass. The explosion of demand for specific cuts, particularly drumsticks and thigh, left stockpiles of breast meat and other pieces, triggered this significant realization. To be profitable operators had to find a value added use for every part of the core product, a challenge they still face decades later as wings replace breast meat as the abundant leftovers. The pressure on processors to find a home for all parts is still dictated by retailers’ product requirements. While production schedules are tightly controlled with major orders placed 6 months in advance, intermittent periods of oversupply create headaches for processing company sales managers.

A leader in this regard, Steggles was first to construct a dedicated further processing plant in the late 1960s. This facility enabled the company to extend its product range beyond whole fresh and frozen birds to meet the retailers’ expanding product requirements. A number of new product ideas were gradually introduced including convenience ‘cut-ups’ and the ‘butterball’ chicken which utilised a system that Bruce Steggles invented and patented for injecting a butter mixture under the skin of processed chickens and turkeys (Cain & Ball, 1990). This innovation faded in comparison to the Chicken Roll, a product that Steggles

conjured up during an overseas study trip (Dixon, 2002). In its original form, the product was formulated from surplus breast and thigh meat encased in skin in natural proportions. A food technology manager working for a processor in Scotland was invited by Steggles to transform the product concept into a product line item. He explained that:

the need [for the product] arose because the amount of product being sold in portions, mainly wings and legs, left a surplus of breast and thigh meat. There was no research conducted on any products back then. The original trials were conducted by producing the product and sending it out to our sales force and hoping it sold! (cited in Dixon, 2002: 104).

For a product concept adapted from the red meat segment early consumer response was disappointing with the first few batches failing to sell. Advice provided by a smallgoods producer helped the product to gain acceptance, as the first product were sold encased in the instantly recognizable *Dons'* casing. With marketing leverage of an experienced and well-regarded meat processor, the product gained popularity in supermarkets and among the hotel, restaurant and institutional foodservice trade as a natural accompaniment to salads and sandwiches. As can be seen, product development efforts of the processors in the late 1960s and 1970s were largely experimental when compared to current practice. As further testament to the modest level of development at this stage, most new product ideas did not pass the scrutiny of internal committees or the rigors of co-product development planning with retailers.

To supplement their primary processing operations, Steggles constructed a modern processing plant in 1977 at Geelong and a dedicated diagnostic laboratory at Blackhill to handle veterinary needs. Catching and transportation of birds from the growing farms to their processing plant at Beresfield also became integrated through acquisition of the assets of their existing service providers, Bob and Norm Purden (Cain & Ball, 1990; Steggles, 2003). At this time, Inghams focused more on technical expertise and product diversification than product development. In 1972 the company purchased Tegel's existing Technical Centre at Leppington with offices, a well-equipped research and diagnostic laboratory, nutrition centre and a serology and virology centre (Inghams Enterprises, 2003).

Over the next 6 years Inghams' collection of acquisitions included hatcheries, a feedmill and processing plants in South Australia, an integrated pig breeding and growing complex in Queensland, a chicken operation in the Northern Territory and growing facilities at the Ord River in Western Australia. In 1978 the joint venture with Tegel expanded operations in their home market by acquiring the assets of Allied Mills Limited and St Mary's Chicken Pty Ltd.

The following year, subsidiary Golden Poultry farming Industries Ltd completed a new feed mill at Clyde in Victoria and acquired another processing plant and distribution based in Western Australia (Cain & Ball, 1990). Meanwhile in Queensland, the company's hold on the market was clinched with the purchase of Provincial Traders Pty Ltd entire operations. This included a feed mill, breeder and broiler farms, two hatcheries and a processing plant (Inghams Enterprises, 2003).

In term of geographic coverage and volume of production, Inghams emerged as the leading retail supplier by the end of the decade. Yet the overall balance of power shifted towards the retailers who commanded a dominant position by virtue of their position in the value chain as providers of chicken meat products. Their rapid expansion in the 1970s provided ease of access to a growing range of cheap, convenient chicken meals which consumers associated with added value. This was as confirmed by the shifting direction of Australian consumption towards this white meat.

Conclusion

As this chapter has demonstrated chicken's gaining popularity among Australian households throughout the 1960s and 1970s depended upon the cohesiveness of all links in the chicken meat value chain. A small number of family based firms led the coordination of supply to guarantee the availability and quality of this fresh meat. They used a combination of vertical sourcing arrangements - vertical integration, contracting and long term supply agreements - and in just 30 years the category evolved from non-existence to a mass-produced and consumed range of products. They formed part of a close association of organisations determined to actively address systemic concerns before they manifested as blockages by coordinating information collation and dissemination. This model of cooperative self-regulation offered the advantages of collaborative R&D and standardization of production and marketing practices to provide uniformity, largely free from government regulation.

While many of chicken meat's inherent qualities suited the quickening pace of food preparation and meal consumption, the gradual shift towards this white meat did not happen spontaneously or serendipitously. Rather the sequencing of investment in each coordination mechanism affected the mode of value delivery throughout the value chain. First, the integrators drove intensification of production and improvements in the efficiency and consistency of the core product - a food previously viewed as an inconsistent, inconvenient

luxury. Concentrating on the local market, processing firms were able to stimulate demand, carried by concurrent growth in food retailing and home refrigeration.

Second, retailers rapidly enhanced the accessibility of the product both physically and in the minds of consumers by placing frozen chicken as a loss leader in their expanding chain of outlets. Proliferation of the product across multiple food retailers was accompanied by product differentiation and expanded ranges to ensure that Mum purchased chicken, not just tonight but several nights a week. Thus a consumer driven market placed increased pressure on the marketing system to deliver variety and high quality at a low cost.

The long term supply arrangements forged between the integrators and the major retailers of fresh and fast food were pivotal to maintaining internal control of marketing functions and in turn ownership of the product itself. Up to the late 1960s the integrators directed the physical flow of products. Expansion of food retailing in the 1970s drove a surge in chicken meat consumption that was unsustainable as the price of beef crashed mid decade. Consequently processors faced the dilemma of oversupply and sought ways to simultaneously cut costs and add value to surplus cuts in order to maximize the total value of the carcass. Driven by their retail partners, this response was the solution to sustaining growth of the product category. It offered the retailers a suite of value added products which positioned them as the ultimate providers of value to consumers in the form of chicken meat meals. Relations between processors, retailers and consumers framed the organisation of chicken's marketing system from the 1960s to the late 1970s. Building upon these insights, the next chapter analyses the reconfiguration of this marketing system from 1980 up to 2002. In doing so it traces the shift in control over marketing functions and relates this to the impacts on value delivery for the participants in the value chain.

Chapter Six: Reconfiguring Chicken's Marketing System, 1980-2002

Introduction

In the final decades of the twentieth century product differentiation and positioning strategies intensified to pull Australians to chicken meat. Marketing practices responded to changes in lifestyles and attitudes towards food that surfaced during the 1970s. Diffusion of appliances like the microwave oven, which reduced preparation and cooking time, signalled an era of eating characterised by convenience both in and out of the home. In a contested partnership, processors and retailers drove a 80.6 per cent increase in chicken consumption from 20.1 kg to 36.3 kg over 1980 to 2002 (Australian Bureau of Agricultural and Resource Economics, 2001b, 2004). As leaders in configuring the chain, the integrators acquired resources that enabled them to retain ownership of their products up to the point of purchase. Steggles and Inghams sponsored advertising to promote the relative merits of their products. This raised consumer awareness of their identities. However, without clear differentiation and positioning based on chicken's generic attributes, they faced difficulty in building added value brands. Generic promotion initiated to counter intermittent stabilisation in consumption of chicken overshadowed brand specific promotion by the major processing companies.

Despite their aim to lead the delivery of added value to consumers, processors faced pressure for rationalization in the early 1980s. This redirected their attention to cost cutting and the search for ways to value add to grow the category. While the integrators had created a predatory environment in the supply of chicken meat, this was matched by concentrated retail distribution of chicken meat products. Australian food retailers Woolworths and Coles led consolidation in their sector that turned the balance of power in their favour. Consequently, processors were distanced from consumers. Instead, they served retail buyers in relationships characterised by submission to demands for value added products. This reconfiguration resembled previous retail control of the chain during the late 1960s and 1970s.

Concentration in Australian food retailing steadily increased such that by the mid 1990s consumer access to chicken meat was dominated by the major supermarket and fast food chains. Through a series of strategic investments retailers tightened their control over the mechanisms for coordinating the delivery of value in this meat marketing system. Concentration in the supply of fresh chicken meat matched by centralised retail procurement

reconfigured the system to one organised for the outsourcing of standardised products. Marketing activities involved in producing value added products were delegated to processors enabling their retailer partners to promote these products as part of their store brand range.

The Consumers: Seeking Choice and Convenience, 1980-1989

[t]here has been continual changing emphasis for convenience foods, such as take away chicken, Chinese meals and TV dinners. Chicken meat has played an important role in satisfying these evolving community preferences (Larkin & Associates, 1991: sec 2.2).

The continuing decline in the relative price of chicken meat underpinned the shift in Australian meat consumption from the 1960s onwards. Whereas retail prices of beef increased by \$4.94 per kg to \$8.61 per kg between 1978-79 to 1988-89, the price of chicken rose by just \$1.36 per kg to \$3.12 per kg (Australian Bureau of Agricultural and Resource Economics, 1994). Correspondingly, in the 20 years from 1969-70 to 1989-90, there was an increase in poultry consumption of 133.3 per cent (Skurray & Newell, 1993). Chicken's lower price elasticity and lower average price rises as compared to the consumer price index eroded beef's low price status. For much of the twentieth century the absence of real choice in the fresh meat category protected the place of beef in Australian diets. However, as chicken challenged this position, consumers looked beyond price to satisfy the added value they sought from meat to abate their hunger and provide nourishment. Chicken was able to meet and then exceed consumer notions of value other than low price and accessibility. As chilled cuts became the standard format, the integrators moulded them into a multiplicity of added value branded products driven and supported by their retail partners. Participants quickly learnt that fresh chicken in its raw, commodity form provided a base that could be modified in many ways to create a variety of products suited to different segments of consumers. Smaller portions of chicken in a range of value added products – breaded, oven ready and smallgoods – outpaced sales of whole fresh birds by decade end (Milne et al., 1989).

Consumers responded positively to the combination of choice and convenience that these products delivered. Not only did consumption continue to rise from 19.6 kg per person in 1981-82 to 24.7 kg per person in 1988-89, but also consumers' attitudes toward chicken were highly favourable (Australian Bureau of Statistics, 1985). Consumer perceptions of the product category reported in the 1980s consistently described the meat as a 'healthy, versatile, good-value food providing easy-to-cook meals enjoyed by the whole family, particularly children' (Fairbrother, 1994: 570). With even more women in the workforce and heightened

anxiety about health meals were required to be quick and easy to prepare, as well as nutritious and low in fat. There was also growing acceptance of 'exotic' cuisine and a taste for food that could provide variety, new flavours and eating experiences. Takeaway cooked chicken maintained its share of the Australian food budget through the 1980s. This has been linked to the increase in numbers of families with both spouses in the workforce (Roepken, 1988). Simultaneously, chicken consumed at home also increased as ready-to-cook cuts sourced from the supermarket or local butcher suited the no-fuss, informal atmosphere of Australian family dining.

The segment's responsiveness to changing consumer tastes and preferences was motivated in part by necessity. A second period of oversupply emanating from the rapid expansion at the end of the 1970s left many farmers and processors with overcapacity in the early 1980s. In Queensland it was reported by Milne et al. (1989) that the largest processor reduced throughput from 5.2 batches a year at 0.70 density to 4.4 batches at 0.82 density by February 1981. Small and medium sized processors also reduced their demand for live birds. As a result, growers lost income and experienced difficulty servicing their loans to finance earlier expansion. An informal agreement was reached between the Queensland Chicken Growers' Association and the major processors to purchase growers' existing shedding. A verbal commitment was also given not to increase company owned housing for live birds.

Rationalisations intensified in the processing sector, where major changes in ownership brought further concentration. In 1980, Inghams purchased the Eurunderee Stud Pty Ltd in New South Wales and Cester Poultry and Pappas Poultry, both based in Victoria. Cesters' gave Inghams an entry into the live sale market in Victoria and with Pappas boosted their volume of fresh sales in the State (Cain & Ball, 1990). Together with AA Tegel, the company started to produce smallgoods by establishing further processing facilities in Queensland and New South Wales. Over the next few years Inghams augmented its feedmill and farming assets in New South Wales and Tasmania (Inghams Enterprises, 2003). More significantly in 1981 Steggles' integrated poultry operation was sold to AMATIL a subsidiary of British Tobacco. This led to a quasi-monopoly in the segment as the company jointly owned subsidiary Golden Poultry with Inghams. Three years later, Australian food company, Fielder Gillespie entered a 50:50 joint venture with AMATIL to form Table Talk Poultry Farms. This combined the poultry interests of Fielder Gillespie, Davis and George Weston Foods.

In their inquiry into the price of table chickens the Prices Surveillance Authority (PSA) reported that in 1982-83 the top four enterprises controlled 66 per cent of turnover (Prices Surveillance Authority, 1986). The PSA also found that between 1968 and 1980 control over

day old stock and the acquisition of smaller, State based operations by the major processors - Inghams, Steggles, and Inghams-AMATIL - created a predatory environment. Their control over stock and ownership in processing encouraged manipulation of prices paid to growers. The PSA was not convinced 'that major processors related by ownership were operating at arm's length in marketing dressed chicken' (Prices Surveillance Authority, 1986: 2). As a trigger to remedy the power imbalance, the PSA elected to oversee all future live bird price decisions of the major processors. This threat of closer scrutiny spurred a number of MNCs to leave the segment. These actions actually increased concentration in chicken meat production as the segment expanded in the second part of the decade.

Inghams continued to enlarge its poultry operations by purchasing a number of family owned businesses in Victoria, New South Wales and South Australia including Moore Primary Industries, Lefkas Poultry, Cester Sales, Hazletts and C. Leach and Sons in 1985. In the same year, a new further processing plant was constructed at Cleveland in Queensland to supply the East Coast of Australia, simulating the production of large birds in that State (Milne et al., 1989). In October 1987 AMATIL sold half of its share in Steggles and Table Talk to Goodman-Fielder-Wattie, making Steggles the poultry business division within a publicly listed company (Anon, 1988b). In the same month, Inghams acquired the remaining 49 per cent share of Golden Poultry Farming. Investment in AA Tegel increased to 70 per cent and the company took full ownership of Pape Bros in South Australia. The following year Inghams acquired a 40 per cent stake in Aldinga Turkeys, supplying them with turkey poults. Goodman-Fielder-Wattie purchased AMATIL's remaining shares in its poultry operations in August 1989 to form Australian Poultry Limited (Inghams Enterprises, 2003).

Consolidation of ownership was occurring in the retail sector as well. Ownership of outlets merchandising food became increasingly concentrated from 1975 as Woolworths and Coles acquired and merged smaller operators (Rosewarne, 1983). Coles Supermarkets acquired Perth based Red Rooster in July 1981 as part of its entry into fast food retailing (Red Rooster, 2003). The grocery giant merged with department store retailer Myer Emporium in 1985 and was officially named Coles Myer Ltd in January 1986 to become Australia's largest retailer. In the same year, the company purchased 36 Big Rooster chicken restaurants. A number of smaller food retail chains were also acquired over the next few years, including South Australian chain Bi-Lo supermarkets (Coles Myer, 2004). With a stronger focus on grocery retailing, rival supermarket chain Woolworths became Australia's largest food retailer following the acquisition of 126 US-owned Safeway stores in Victoria, New South Wales and Queensland (Woolworths, 2002). Expansion was replicated in the fast food sector. McDonalds' stimulated growth with the launch of its *Chicken McNuggets* in 1983. Since their

introduction the line has been extremely profitable for the chain (Jereski, 1985; Schlosser, 2002). Inghams is McDonalds' preferred supply partner for chicken meat and sources a portion of its *McNuggets* from them (McDonalds Australia Limited, 2003).

Concentrated sourcing of chicken meat from a narrowing base of processors in turn pressured farmers to simultaneously deliver quality birds and minimize their costs. Whereas the average retail price of chicken had increased by \$1.36 per kg over 1978-79 to 1988-89, producer prices had risen by just over half this amount at 69¢ per kg (Australian Bureau of Agricultural and Resource Economics, 1994). Relations between growers and processors were particularly uneasy in Victoria throughout the 1980s. A dispute in South Australia between growers and Inghams culminated in the blockade of farms to stop collection of birds by company owned trucks (Cain & Ball, 1990). Rationalisation of government funded poultry research including the closure and restructuring of several research stations in the early 1980s prompted the ACMF to amplify its role in coordinating R&D. Their influence was maintained through participation in the Australian Chicken Meat Research Council, keeping all members informed of technical and scientific developments. As the market had matured rapidly there was a concerted quest to add value to boost growth by expanding the market. Aware that the product category had evolved significantly from the frozen whole bird, processors and retail buyers experimented to deliver further added value to consumers.

Delivering Added Value

Cain & Ball (1990: 10) attribute the segment's rise to aggressive marketing and 'high quality standards and presentation which the public has seen as acceptable'. This has been underpinned by ongoing R&D undertaken and/or funded by chicken meat and stock feed companies, chicken breeding companies, pharmaceutical companies, vaccine manufacturers, universities, colleges, CSIRO Divisions and State government agencies and the Rural Industries Research and Development Corporation's (RIRDC) Chicken Meat Program. Between 1995-96 and 2001-02 the RIRDC spent an average of \$1.5 million per year on R&D programs to benefit the segment (Rural Industries Research and Development Corporation Australia, 1994-2002). This budget comprised levies from participants based on meat chickens hatched, with a matching contribution from the Australian Government. Research funded by the RIRDC and its predecessors has focused on 'on-farm' issues. Whereas the large integrated companies have focused on applied and developmental research in the areas of nutrition, husbandry practices, disease, product development, processing technologies, quality assurance and market development. These companies employ nutritionists, veterinarians,

microbiologists, food technologists and back-up technical and laboratory staff. Major producers and distributors also undertake economic analysis and marketing research (Rural Industries Research and Development Corporation Australia, 2004). But, while the success of the segment is associated with the willingness of the major players to meet consumer needs, marketing practices employed were often experimental, often having insufficient resources to guarantee success. New product ideas and retailing concepts were still sourced extensively from overseas. However, imported notions were not always directly transferable, especially where little or no research was conducted to assess their suitability to the Australian market.

The ill fated example of Golden Farms' chilled cooked chicken products in the mid 1980s typifies the segment's product development practices. Inghams and AMATIL's joint venture company, Golden Poultry Farming Industries Ltd launched a ready-to-eat product that was a direct copy of one sold by Marks and Spencer in the UK. Despite extensive R&D, the product was not test marketed and it failed to sell sufficient volume to warrant continued marketing (Adam & Adam, 2002). Without test marketing consumers' confusion over whether the product was gourmet or a fast food substitute went unnoticed. Success of the product in the UK was linked to clear positioning as takeaway cooked chicken. However, in Australia the product was positioned against similar takeaway food options, but with a gourmet food price tag. Television advertising featuring anglophile Rolf Harris singing 'Oh, Dem Golden Chickens!' and product information that highlighted the words 30 minutes led to further ambiguity about whether these were ready prepared convenience, or gourmet foods. Apart from competing takeaway outlets, the product was also vied with supermarket chains' products such as spit-roast chicken and deli products. With these mixed messages consumers could not discern the unique added value and sales did not meet forecast expectations.

In contrast, concepts of value adopted by the retailers resonated more positively with consumers in the 1980s. In the first part of the decade most consumers were preoccupied with price due to high inflation. To minimise costs and the pass savings onto consumers retailers minimised service, reduced aisle space to cut rent and dimmed lights to minimise electricity bills. Discount supermarkets gained popularity clawing market share from the majors. They responded by acquiring the discounters, improving their fresh produce and investing in technology to improve their efficiency (Parliamentary Joint Select Committee on the Retailing Sector, 2001). These electronic systems included front-end scanners and Electronic Funds Transfer Point of Sale technology. Electronic recording of sales information via barcodes, coupled with computerised food warehouses, strengthened control in the chicken meat value chain, providing retailers with an edge over their suppliers. Again borrowing from overseas, Woolworths instigated their 'fresh' identity in 1983 to differentiate their offering

from rival Coles Supermarkets based on US retail positioning strategies (Shoebridge, 1994). 'Woolworths the Fresh Food People' campaign was publicly launched in 1987 following a rigorous review of buying, merchandising and training programs in each fresh food department and the implementation of new standards for each (Woolworths, 2002).

In addition to price, freshness and variety, consumers were becoming increasingly conscious of time constraints in shopping for food. The growth of convenience stores like Seven Eleven, Majik Market and Food Plus stores adjoining petrol stations reinforced this trend. These stores carried a limited range of items, but were open longer and offered fast food and partly prepared meals to suit more frequent shoppers, particularly men (Humphery, 1998). Prohibitive trading laws prevented the 'Big Two' from competing for this market (Parliamentary Joint Select Committee on the Retailing Sector, 2001). Yet the three largest chains - Coles, Woolworths and Franklins - still controlled 65 per cent of national grocery sales in the mid 1980s. The two main independent chains, Associated Australian Warehouses and Composite Buyers held 34 per cent of sales. This made ownership in Australia's supermarket sector one of the most highly concentrated in the world (Anon, 1985).

Positioning the Product

Consumption of chicken meat has also been positively influenced by its positioning as the 'healthy, safe alternative' to red meat as doubts were raised about the staple's nutritional benefits. Just as Australian consumers began to question the place of beef in their diets, a series of promotional campaigns sponsored by the ACMF drummed the health benefits of eating chicken to a receptive audience. In contrast to the heavy use of promotion by the AMLC, the chicken meat segment has used limited generic advertising to position their product in the Australian market.

Two major campaigns were staged during the 1980s. The first in 1982 was a 6 week national advertising campaign. The second in 1987 involved a public relations campaign sponsored by the ACMF (Fairbrother, 1988). A public relations firm and a well-known Australian consultant nutritionist, Rosemary Stanton, were employed by the organisation to emphasise chicken meat's low fat quality. The vehicle for this campaign was the highest circulation women's magazine *New Idea*. The magazine contained an eight page insert 'healthy eating featuring chicken' and extolled chicken's relatively low-fat status as compared to other meats and the need to include chicken meat as part of a healthy diet, as well as six nutritious recipes featuring chicken.

Sensing the effectiveness of this approach, the AMLC tried to counter criticism of red meat and emulate the success of the public relations campaign by sponsoring a 60 page supplement in the *Food Australia* journal. This article borrowed data selectively from the *New Idea* insert to discredit chicken's nutritional standing. Acting in the interests of Steggles and Inghams the AIPA brought these misrepresentations to the attention of the Trade Practices Commission (Fairbrother, 1988). Beef's image also suffered a battering with the discovery of chemical residues in an export shipment at the same time the AMLC was reprimanded for its defamatory article.

On top of generic promotion, individual companies' ongoing advertising campaigns also positioned chicken as the healthier, leaner meat. Inghams' product range carried the simple slogan 'Inghams' Chickens Love'em'. Goodman Fielder, the owner of the Steggles label, advertised its 'Steggles' Champion Breed Chicken' in 1989. Their breed was promoted as having a lower fat content and a 20 per cent higher breast fillet compared to its competitors. While this claim was substantiated by the Australian Consumers Association (ACA), it was also acknowledged that '...any chicken (if cooked properly) can form the basis of a healthy meal, made healthier by removing all skin and visible fat' (Australian Consumers Association, 1990: 37). Similarly, another ad campaign to promote the Steggles' brand 'red meat or white meat?' further emphasised the perceived health benefit of chicken over red meat. Rather than promoting the specific benefits of the Steggles' brand, this type of advertising was more effective in raising consumption of chicken overall. Consequently, neither Steggles nor Inghams continued this style of advertising campaign.

Presentation of products at the point of purchase reinforced the category's health conscious positioning with the NHF's Pick the Tick logo featured prominently on packs (CSIRO, 1994). The scheme was first introduced in 1989 to reduce early death and disability by influencing eating patterns. Participating companies use the logo under an annual licensing agreement with the NHF. To further enhance in-store appeal absorbent trays lining fresh chicken meat packs became the norm. This eliminated leakage of raw poultry juices - a source of inconvenience and a potential health risk (McKean & Australian Food and Grocery Council, 1999).

Positioning chicken primarily as low fat was particularly effective in what has been described as the 'low fat' era (Santich, 1995). Yet, the subtext of this campaign - that most lean cuts of meat, grilled instead of fried, were low in fat - was selectively ignored as consumption of fast food increased over the period. Animal welfare in intensive farming became an issue in the mid 1980s. To allay the concerns of animal liberationists and the general public, the ACMF

made submissions to formal reviews of animal welfare standards and codes of conduct and supported the Council for Responsible Animal Management (Cain & Ball, 1990).

Competing for Control in Mass Markets, 1990-2002

Competitively priced chicken is important for households and businesses as it is sold in many supermarkets, fast food shops and restaurants (Australian Competition and Consumer Commission, 1999: 1).

Throughout the 1990s the momentum for creating and distributing value gained pace with heightened competition in retail mass markets. Tight coordination of marketing activities enabled the major processors, in concert with retailers, to 'adjust production and develop new products with astonishing speed and flexibility' (Boyd & Watts, 1997: 215). Through long term supply relationships that have encouraged joint product planning and development, the partners responded to changing consumer lifestyles. Acceleration of the pace of life has dictated more convenient meal options like takeaway, ready-to-cook and home meal replacement (HMR) products. The HMR concept can be defined most broadly as 'totally pre-prepared meals - which only require heating' (O'Keeffe, 2002: 29).

In consumers' minds, freshness provided the best guarantee of good tasting chicken, as well as positive associations with nutrition and food safety. During the decade, Australian chicken meat consumption increased from 24.8 kg per capita in 1990 to 33.1 kg per capita in 2000 (Australian Bureau of Agricultural and Resource Economics, 2001b). Over this period chicken's share of the fresh carcass meat category increased by approximately 7 per cent. By the end of the decade the majority of chicken was sold fresh (85 per cent) to consumers, with supermarkets also carrying some frozen stock (McKean & Australian Food and Grocery Council, 1999). Even though most of the raw and further processed products distributed through fast food restaurants and takeaway shops are delivered to outlets frozen, items are sold to consumers 'fresh'. Logistically, the feasibility of this method for delivering value relies upon close alignment of production and consumption through a vertically coordinated marketing system where marketing roles are clearly defined and linked across organisations.

Physical transformation of the core product into an array of value added food products is tightly integrated. Growing and processing functions are coordinated by a computerised just-in-time (JIT) production system at processing plants. Continual improvements in efficiency have been the major source of falling prices for intermediate fresh and frozen chicken

products sold to retailers. Commercial meat birds have evolved to take just 42 days to reach a market weight of 2.2 kg (Glatz et al., 1996). By 1995 a standard processing line reached a speed of 8 thousand birds per hour (Henry & Rothwell, 1995). The cost of live birds at the farm-gate stabilised between 1980 to 2000, constituting about 8 per cent of the average retail price of chicken meat, at 22¢ per kg (Australian Chicken Growers' Council Limited, 2004).

A national benchmarking study showed that feed accounts for the majority of live bird costs at 58 per cent. Chick costs were estimated at 20 per cent. The relative cost of growers' fees was just 15 per cent, or 17.14¢ per kg. Other costs including grower administration fees and transport represented 7 per cent. In terms of international cost competitiveness Australian grain was about \$87 per ton higher than the cost of subsidised grain in the US in 1996. This explains in part the high relative cost of feed as a proportion of total live bird costs. Live bird costs make up 54 per cent of the total cost of a whole bird ready to cook per kg. This amounted to \$1.12 of the total cost of \$2.07 per kg. Transporting birds to processing facilities accounted for about 16 per cent or 33¢ per kg. Processing costs account for about 28 per cent or 57¢ per kg. The other component of processing expenses was overheads and interest at 2 per cent or 0.04¢ per kg. In the fifteen years to 1994-1995 the real price of chicken at retail declined on average by 4.7 per cent a year, compared to falls of 2.4 per cent for pork, 1.6 per cent for lamb and 1.3 per cent for beef (Larkin & Heilbron, 1997).

Containing the procurement price of this critical input has been achieved via the mediated contract growing system, whereby growers' are rewarded according to their relative productivity per bird. In 1992 about 1 000 growers produced 75 per cent of chickens under contract. The remaining 25 per cent of birds were grown by a small number of large company farms (Australian Meat and Live-stock Steering Committee, 1996). By 1996 there were 822 contract growers that produced 6.9 million birds per week. This accounted for about 80 per cent of live birds with the remaining 20 per cent supplied by in-house company farms. Contract growers raise day old chickens to slaughter weight with an average of 4 sheds that accommodate about 22 000 birds per shed, or about 90 000 birds in total per farm. Shed sizes have converged to about 1 000 sq meters. This can alternatively house about 4 500 breeders. On average growers produce 5½ batches per year. This gives an annual capacity of about ½ million birds (Larkin & Heilbron, 1997). Each bird consumes about 5 kg of feed through to slaughter weight. Around two million tonnes of feed are used each year. This includes about 50 per cent of the meat meal produced in Australia (Rural Industries Research and Development Corporation Australia, 2004). Growers are highly dependent upon processors since they are typically tied to a single processor under 3 to 5 year contracts. For their part growers are paid between 52.5¢ and 55.0¢ a bird. Even though this arrangement is considered

favourably in comparison with the system of individual agreements in the US, processors have increasingly challenged its consistency with the National Competition Policy since the early 1990s. Critics argue that this system of fee setting is inflexible and anachronistic. In defence of the legislation chicken growers argue that it is their only protection against the lack of competition in the processing and retailing sectors (Dixon, 1999).

Despite the demonstrated ability of most processors to consistently reduce the costs of delivering basic and further processed products, retailers have retained the balance of power. In the enduring contest between processors and retailers, it is the large supermarket chains and franchised fast food giants that are most influential in marketing channels, making decisions concerning price, promotion, products and distribution of chicken meat. For the most part supermarkets continue to place chicken as a loss leader, thereby controlling prices paid by consumers. They also direct the development of new products and spend the most on sales promotions. Fast food chains too are the largest advertisers of chicken meat products, in addition to their corporate advertising and public relations expenditure. They also invest heavily in developing and launching new products. As such, the battle for mass markets has become one fought as much between supermarkets and other retailers such as specialist poulterers and fast food chains, as the ongoing negotiation between processors and retailers over their terms of trade. Supply conditions and arrangements like discounts, rebates, product selling prices and profit margins are divisive issues souring relations between the parties.

As the product category matured further through the 1990s, the mass market became more segmented as niche markets were identified. Products like organic and free-range chickens were marketed to affluent, socially aware and health conscious consumers. Pre-packed free-range de-boned cuts offer targeted segments an alternative and the ability to prepare their own meals. While whole rotisserie birds and portions still dominate the retail market, growth of further processed products - raw value added cuts and cooked and partly cooked, formed products - demonstrated the greatest potential (McKean & Australian Food and Grocery Council, 1999). In this phase retailers have been the most successful in placing their store brands in consumers' minds. In fact, most consumers would be hard pressed to identify whether they are eating a Steggles or an Inghams chicken (or any other for that matter). They can identify the store brands of Woolworths and Coles, KFC, Big Rooster and McDonalds more readily than processors' labels.

Remaining Focused on Local Markets

Like the supermarket retail sector, control of basic and further processing has remained in local hands with almost 90 per cent of chicken meat supplied by Australian owned companies. Foreign influence in the fast food sector is more pervasive. Multinational corporations control retail distribution through their Australian subsidiary franchise operations. Protected by strict bio-security and quarantine laws, the Australian market is filled entirely by domestic product. In contrast to beef, exports have also been minimal (Dixon, 2002; Fairbrother, 2001; Larkin & Heilbron, 1997). All elements of the segment support exclusion of imports, fearing that deregulation would threaten the disease-free status and competitiveness of local products (Senate Rural and Regional Affairs and Transport Committee, 1996). Relaxation of the strict quarantine regulations was estimated to cost the segment \$1.8 billion in lost GDP, \$450 million in household income and 17 700 in lost jobs. This estimate does not take into account the additional economic costs of an exotic disease outbreak (Fairbrother, 2001). Executive Director of the APIA, Dr. Fairbrother, a steadfast advocate of the ban stated that:

The impact of a disease outbreak on an intensive livestock enterprise such as poultry could be devastating. The very rapid death of birds, lost production, and adverse image of the product in the perception of the consumer, could well risk the whole basis of the poultry industry... (Fairbrother, 1992: 2).

Together with the APIA, the Australian Veterinarian's Association and ACGC opposed the AQIS recommendation to lift the prevailing ban after over 40 years of protection. Support for the proposal came from the three nations investigated in AQIS's position paper – the US, Thailand and Denmark – as well as a major anonymous American fast food chain (AQIS, 1994). Following a Senate Inquiry, in November 1997, the government decided to allow importation of chicken meat cooked under conditions that would render it fit for pet food only (Taylor, 1997). This quarantine ban is a politically charged measure to mitigate the spread of poultry diseases in Australia's wild and commercial bird populations. Other bio-security measures are designed to prevent contact between commercial flocks and wild birds, especially migratory waterfowl, by protecting feed and water, limiting entry to farms and physically isolating poultry. AQIS's disease surveillance program, the Northern Australia Quarantine Strategy, and other programs monitor the presence of viruses in wild birds. When a virus is detected the typical response is to cull flocks, disinfect and quarantine farms in

order to stop the spread⁴². This has occurred in 1999 when the Newcastle disease was detected among a number of farms in New South Wales. There have been five reported incidents of the less virulent H7 subtype of avian flu in Australia. These occurred at poultry farms in Victoria (1976, 1985 and 1992), Queensland (1994) and Tamworth, NSW in 1997. While the H5 subtype has not emerged in Australia the threat of spread of this strain is real (AFFA, 2005). Australia's bio-security agencies are monitoring the disease and have established comprehensive contingency plans in concert with industry participants. Many poultry farmers are still recovering from the financial losses associated with these outbreaks even though they have received some assistance from the government under the pre-existing 'Emergency Animal Diseases Response Agreement' (Parliamentary Library, 2004).

Parallel to Australia's minimal level of imported chicken meat the volume traded internationally is low, representing about 10 per cent of world poultry production (Butland & Rabobank International, 2002). Most markets, like Australia, are protected by quarantine legislation. Unlike Australia, many overseas producers receive economic protection in the form of subsidies, quotas and tariff barriers (Dixon & Burgess, 1998; Fairbrother, 2001). The main importing countries - Japan, China (mainly Hong Kong), the Middle East and Russia - are hotly contested by the four major chicken meat exporting nations, the US, Brazil, China and Thailand (Butland & Rabobank International, 2002; USDA, 2001). Along with the EU these exporters accounted for 92 per cent of volume traded in 2001 (USDA, 2001). Less than 2 per cent of Australian production is exported, the bulk of this is frozen cuts and edible offal worth \$7.7 million in 1995-96 (Instate Pty Ltd, 1997).

As an opportunistic exporter, Australia has targeted proximate markets such as Papua New Guinea and other South Pacific Island nations with surplus product. Consistent with the push into Asian markets for Australian food products generally, this segment has also been encouraged to pursue higher value niche markets in the region. However research commissioned by the Department of Primary Industries and Energy and ACMF into opportunities in Asia, focusing on Japan, Singapore, Hong Kong and China, identified several obstacles. High levels of tariff protection across Asia are formidable barriers (Instate Pty Ltd, 1997). These are as high as 63 per cent in Malaysia, 70 per cent in Indonesia, 60 per cent in Thailand, 31 per cent in South Korea and 100 per cent in the Philippines. A 10 per cent tariff is imposed on chicken meat products entering the US. Quotas are often imposed alongside

⁴² This 'stamping out' policy is detailed in the AUSVETPLAN to eradicate diseases in the shortest possible time while limiting economic effects. This plan describes the quarantine measures that will be put in place should an outbreak occur, including the culling of infected birds, disposal method used for carcasses and sanitary measures that will be adopted at infection sites to contain the disease.

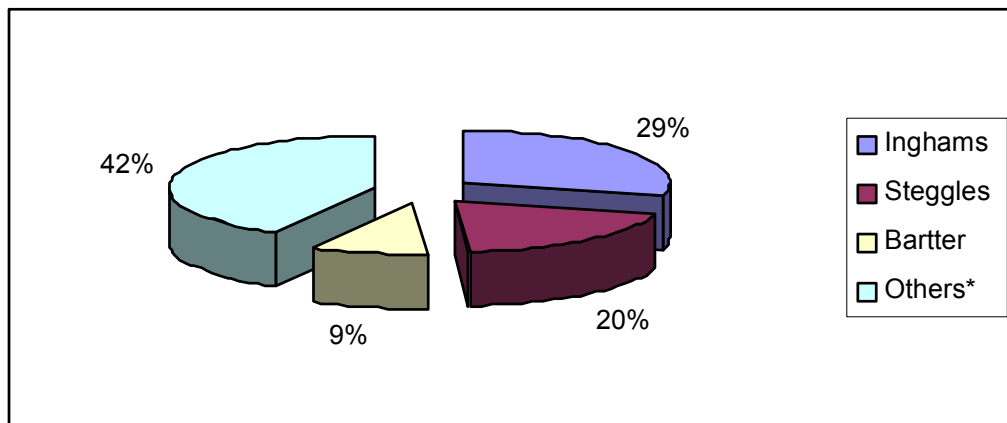
these tariffs. The EU, for example, has placed an import quota equivalent to 25 per cent of the market (Dixon & Burgess, 1998). As Australian products cannot compete with Thai exports in terms of volume and price, niche markets were rated more lucrative. However, the report clearly identified that most Australian firms lack the market knowledge, export marketing expertise and in-market support required to effectively target subtly different niche markets. Chicken is an established part of most Asian diets (excluding Japan) and self-sufficiency suggests indigenous firms would offer stiff competition. Some firms have made inroads into Singapore and Hong Kong. They are exceptional as exports remain a minor component of total sales for processors (Instate Pty Ltd, 1997).

Apart from the palpable foreign influence in fast food, the highly capital intensive processing sector is the other major recipient of internationally sourced technology. In 1993-94 capital investment in this sector was estimated at \$2 billion (Fairbrother, 1994). Accordingly, market stability and predictability is needed for firms to commit additional resources for expansion. In the early 1990s both Inghams and Steggles continued to expand. Inghams entered the New Zealand market by wholly investing in Harvey Farms the second largest integrator in that market. Meanwhile in Australia, the company purchased the remaining 30 per cent stake of AA Tegel in 1994 and a year later acquired a leading supplier of cordon bleu further processed products to the foodservice market, Unichef Pty Ltd at Kirrawee in New South Wales. Capital investment in existing and new facilities continued over the next 2 years. Processing facilities in Victoria and New Zealand were upgraded and a new processing plant was built in South Australia. A quarantine farm and a product development centre with further processing capacity were established in New South Wales to manufacture value enhanced and portion controlled products (Inghams Enterprises, 2003).

The Steggles' division expanded further by purchasing smaller poultry operations in South Australia and Victoria. However, under Goodman-Fielder-Watties' control, Steggles had not met performance expectations since its purchase in 1989. Believing that they could transform the division's profitability, the parent company centralised management and eliminated State based administration. Upgrading hatchery and livestock handling facilities enhanced production and a new breed of chicken was introduced to reduce costs and lower mortality rates. Additionally, efforts to develop a stronger brand and market higher margin, valued added products were pursued. By 1996-97 these investments appeared to deliver returns, generating \$20.6 million on sales of \$488 million (Mitchell, 1999). Yet, after 3 years of speculation and recording a \$4.1 million loss due to increased feed costs and discounting, Goodman Fielder announced its intention to sell the division in 1999. The market share of the

major players in the segment as at July 1999 was worth \$2.5 billion in total, as reported by Mellish (1999), is shown in Figure 8.

Figure 8: Market Share of the Australian Chicken Meat Segment, July 1999



* Others include about 20 small players such as Baiada, Cordina and Joe's Poultry.

Despite increasing concentration in the processing sector, the Australian Competition and Consumer Commission (ACCC) has repeatedly declined to stop the acquisitions reasoning that the public benefits of low cost chicken meat outweigh the potential disadvantages (Australian Competition and Consumer Commission, 1999). Ongoing consolidation in the supply of fresh and further processed products created a pyramid shaped oligopoly of processors comprised of three distinct tiers. Together Australia's poultry processors operated a total of 136 plants in 1998-99, rising to 155 plants the following year (Australian Forestry and Fisheries Department, 2002). The configuration of this sector presents a double-edged sword of high market share and low profit margins. The two major processors referred to herein as the 'big two', Inghams and Bartter, make up the first tier and control 35 per cent and 30 per cent of the market respectively (Schmidt, 1999a). Bartter Enterprises, a medium processor based in Griffith, New South Wales joined Inghams following its acquisition of Steggles Ltd in August 1999 at a price of \$131.5 million, \$45 million below book value. The purchase gave the company processing and distribution facilities in every State except Tasmania, as well as a 50 per cent stake in foodservice provider Steggles Food Products Pty Ltd.

Like its main competitors, Inghams and Baiada, Bartter Enterprises Ltd is a wholly owned family company, which began as a school project of founder Peter Bartter, aged 18 in 1955. A family partnership - BA Bartter & Sons - was formally established between brothers Peter

and David and their father in 1960 based at the family irrigation farm situated at Hanwood, New South Wales. The brothers focused on egg production until 1982 when an integrated breeding, hatching and rearing facility was established (Bartter Enterprises, 2003). With increased demand for fresh chickens Bartter achieved their targeted production of 200 thousand chickens per week on a consistent basis by 1989-90. In the following 2 years production capacity was lifted to 600 thousand birds per week as part of a two stage rollout of a new processing plant. Existing broiler rearing sheds were converted to tunnel ventilation with automatic cooling systems. The new processing plant, among one of the most technologically advanced in the world, was considered the best in Australia. Bartter gradually expanded its production and processing capacity over the next decade investing in new sheds, nesting systems, a feedmill, hatchery, and further processing plant and equipment. By 1998-99 the company had grown to become a strong rival to the big two in its home market New South Wales, controlling about 15 per cent of that market. Rather than taking over smaller firms and adopting a cost cutting strategy, Bartter bought its market share by acquiring Steggles. Bartter's activities in 2000 focused on integrating the new poultry business with existing operations, coordinated by Peter's son Simon. Bartter also negotiated contracts with up to 250 individual farmers contracted to Steggles (Schmidt, 1999a).

After a succession of strategic acquisitions and divestments, the company became the largest vertically integrated producer of chicken meat in Australia. While this expansion and consolidation increased their economies of scale, it also substantially increased overhead and operating costs, providing less flexibility and leanness in production, with the constant threat of oversupply. Smaller, local producers occasionally cut their prices and often undercut the major processors reducing their already meagre profit margins. This has led to a situation where returns are less than they were 10 years ago and growth in consumption is one of the major factors sustaining the number of growers and processors in the segment.

The second tier is made up of 10 or so medium sized processors including Baiada Poultry, Hazeldene Chicken Farm, La Ionica Poultry, Cordina Chicken Farms, Golden Cockrel, Red Lea and Joe's Poultry. These medium sized processors each control between 1 and 8 per cent of the total market. Baiada Poultry is the third biggest poultry processor in terms of market share. Its sales totalled around \$200 million compared to market leader Inghams with sales of around \$1 billion in 2002 (McGregor, 2002). Like the 'big two' Baiada began as a family based operation at Pendle Hill, 30 km west of Sydney New South Wales in the early 1950s and is still privately owned by co-founder Giovana Baiada as the company's Executive Director and her six children (Baiada Poultry, 2003a). With a head office located at the site in New South Wales and major operating centres in Brisbane, South Australia, Tamworth in

New South Wales and throughout Victoria, the company markets a wide range of products from live poultry and breeding stock to poultry feed, fertile eggs, day old chickens, primary processed chicken (minimally processed and raw) and further processed products (Baiada Poultry, 2003d).

In 1990 the company expanded the scope of their operations by entering the foodservice and value added retail markets. Baiada's marketing manager, Matthew Bosnjak, lists route trade (ie cooked and fresh chicken shops), major supermarkets, various distributors and foodservice accounts as the company's major customers. Awareness of the core brand – Baiada Select Poultry – is relatively low amongst consumers, although it is a well-regarded name for service and quality amongst trade customers. Baiada acquired two medium sized, Victorian based poultry processors and suppliers – Marven Poultry and Eatmore Poultry consecutively in July 2001 and 2002. These acquisitions boosted the company's further processing capacity and the volume of value enhanced products, particularly free range products. These are sourced from farms situated at Lilydale in Victoria that were included in the Marven acquisition. Below this is the third tier consisting of a handful of much smaller processors. These operators use alternative primary production and processing methods to the conventional techniques employed by the second and first tier companies.

Pulling the Product

The internal dynamics of relations between processors and retailers forged in the late 1960s continued to shift toward retail dominance. Their strategic position in the chain and high volume buying power allowed retailers, especially the large supermarket chains, to pull product from their suppliers and pull consumers into their stores. This usurped processors' sales methods to push product onto retailers. Reversal of ordering and sales based on JIT sourcing strengthened retailers' control of the marketing chain. By the mid 1990s Australian consumers' access to chicken meat products was dominated by supermarkets, controlling 50 per cent of distribution, and takeaway outlets handling 25 per cent of products. The remaining 25 per cent of products was shared between smaller retailers (15 per cent) and the foodservice sector (10 per cent) (Fairbrother, 1994). Throughout the decade and into the early 2000s the major outlet for chicken meat was heavily concentrated. Three major supermarket chains - Woolworths, Coles and Franklins - increased their share of grocery retailing from 40 per cent to 80.2 per cent between 1975 and 1998 (National Association of Retail Grocers of Australia, 1999). The 'Big Two' continued to dominate retail chicken meat sales and consolidated their control by each purchasing a number of Franklins stores following divestment of the chain by

Hong Kong based Dairy Farm International in mid 2001 (McCallum, 2001). This produced a duopoly in Australian grocery retailing with similar consolidation occurring in wholesaling. Davids Holdings, the main wholesaler to independent retailers began merging with other wholesalers until its takeover in 1998 by South African retailer Metcash. Two years earlier, Woolworths purchased competing wholesaler – Australian Independent Wholesalers to service its stores as well as independent retailers (Parliamentary Joint Select Committee on the Retailing Sector, 2001).

Overall low profit margins of between 2 and 4 per cent and continued positioning of chicken meat as a loss leader item fuelled fierce competition among retailers and between retailers and their suppliers (Ferguson, 2003). Driven by a low cost environment, several important changes in the nature of supermarket retailing in Australia reinforced the shift in power to the major food retailer chains. Each change contributed to the intensification of power in the chain and with this power consolidated retailers' authority over marketing decisions, roles, and responsibilities.

The first key change was expanded access to supermarket space. Shop hours were extended in most Australian States from the 1990s allowing consumers to shop outside traditional work hours (National Competition Council, 2002). Australian supermarkets became physically larger, locating in suburban shopping centres to provide a 'one-stop' shop for time-poor consumers (Humphery, 1998). A new convenience format was also introduced offering greater accessibility in the city and inner city suburbs aligned with population growth in Australia's capital cities (Condon, 1999; Kirby, 1999). Both Coles and Woolworths opened smaller, new format stores from 1997 under the banners of *Coles Express* and *Woolworths Metro*. These stores catered for and promoted individual meals and minimal home preparation, thus seeking to capture a share of the foodservice trade. This diversification of the traditional supermarket format was a response to the sizeable proportion of meals consumed outside the home - up to 50 per cent - including one-quarter of all evening meals in Australia (Ban, 1998; Fidler, 1998). Repositioning stores in convenience formats also suited the shift in household composition, where almost one-fifth are one person and a quarter are couples without resident children (Spearitt, 1994).

The second significant development that consolidated power in the chain was the centralisation and integration of procurement and distribution by the 'Big Two'. Internal restructuring of these processes according to the philosophy of ECR and JIT principles altered the dynamics of relationships with suppliers. This reassignment of marketing functions usurped State based buying and warehousing, aiming to reduce inventory holding and

handling costs. Centralised nationwide buying and marketing groups located at each chain's head offices coordinated the procurement, promotion and merchandising of chicken meat. Woolworths began to streamline these functions under a 5 year program aptly named 'Project Refresh' in June 1999 designed to 'deliver increased customer value and satisfaction and greater shareholder wealth' (Woolworths, 1999a). Investments were made in state-of-the-art distribution centres (DCs) and information technologies for JIT sourcing (S. Mitchell, 2002).

An important application of these principles and technologies that directly impacted on the sourcing of chicken meat is the cross-docking distribution system. Cross-docking uses warehouses as processing facilities rather than storage areas. From there, smaller volumes of product are delivered more frequently and dispatched to stores. This system also reverses the traditional ordering process where the sales representatives of processing companies solicit orders from supermarket store deli and meat managers. Instead, retailers send through their orders from State DCs to processing company staff (Dixon, 1999). A major facet of this arrangement is the selection of preferred chicken meat suppliers that meet their stringent criteria. Suppliers must be quality assured and are regularly audited by retailers for compliance. Steggles was the first chicken processor to be ISO 9002 accredited, Inghams followed shortly afterwards. Their QA System affords HACCP accreditation and Certification to the SQF 2000 Quality Code. Retailers are still tied to a major supplier, supplemented by a limited number of smaller suppliers. As a consequence the system reinforces arrangements operating in the 1960s and 1970s with the two major processors and a limited number of medium sized firms supplying the retailers. Smaller firms supply local butchers and takeaway outlets.

Related to this, the third major change was maturing of JIT sourcing towards real time purchasing led by the retailers. Access to and use of information about consumer buying patterns underpinned the transition. Large volumes of Electronic Point of Sales data collated at the checkout register enhanced predictability of demand for existing and new products. This information, used as a bargaining tool, gives retailers the authority to allocate shelf space, dictate volume discounts and control the development of new products. Adoption of Electronic Data Interchange also allows retailers to track stock and sales along the supply chain from supplier to consumer. Further, the move to complete electronic ordering (ie automatic stock replenishment) provides retailers with improved efficiency as well as the power to direct the physical flow of products. Rather than pushing stock onto retailers, supplies are pulled from processors. This process extends to how new products are developed, as well as weekly ordering and stock replenishment. Retailer and processor operations are thus highly integrated and tightly controlled. Delivery of value operates as a JIT system,

whereby six month plans are used. These are broken down into weekly schedules to plan and control for quantities and sizes of birds produced and the specific cuts and quantities of each required.

Effects of retailer led reconfiguration on processors can be seen by examining the marketing organisation of Australia's largest integrator Steggles-Bartter. Their product range, promotion and pricing are all dictated by retailers. Product development is done in close consultation with their major partner, Coles, and is seasonally-themed (ie summer and winter product lines). The company must receive approval from their retail partners for all new product ideas. Steggles' account managers meet with Coles' central buyers (based in Melbourne) and plan production and purchases six months in advance. Retailers largely determine prices and may cooperate whereby they promote different cuts each week. If they offer the same cut at a different price, the retail chain charging the higher price will try to reduce it and press their suppliers for a greater quantity to meet the potential surge in demand. This is challenging since the entire production and marketing process is pre-planned and schedules are so tight it is difficult to source extra supplies at short notice (Anon, 2003b).

Like the other major integrator Steggles spend considerable funds on R&D especially in the areas of product development, processing technologies, quality control procedures, distribution and packaging and market research (Rural Industries Research and Development Corporation Australia, 2000). However, the scope for developing brands to accompany new products is limited. One of the company's State managers explained that this was due to the retailers preventing manufacturers from developing and promoting their own branded meat products. Retailers want to be in a position where they can purchase from any supplier who first meets their selection criteria at the cheapest price and then place their identity - store brand - on the product. While the State manager admitted that there were opportunities for branding niche products he explained that soon all the major processors would be offering the same product, such that these product attributes, or added values, would no longer be unique. He believed that further processed products have the greatest potential for branding, but the main barrier is retailers' store brands and their private label development strategies (Anon, 2003b).

Steggles produce over 1 thousand different products including cut frozen or fresh and further processed products like marinades and pre-cooked ready-to-heat and eat meals. Of these, whole birds to be cooked as Rotisserie chickens account for 40 per cent of a plant's production. However, on a value basis, most money is made from chicken breast meat by sheer volume and price per kg compared to other parts of the carcass. Even with value adding

such as marinating, most revenue overall is still derived from this cut. Faced with differential value, demand, and supply of parts, managers aim for total or whole-of-car cass utilization. This means that the promotion of specific cuts is a balancing act, whereby an outlet has to be found for each cut and promotion coordinated to use the whole bird. The State manager explained that ‘I have to find a home for every part of the bird’ (Anon, 2003b). There is always a shortage of wings which are a value enhanced product. Bartter markets a wide range of value enhanced lines under its original Steggles brand: patties, kebabs, schnitzels, fillets and kiev s, fully cooked products such as nuggets, chicken breast fillets and drumsticks, oven roasted meat; turkey products such as roasted turkey breast fillet and rolled roast turkey breast roll; and chicken and turkey smallgoods (Bartter Enterprises Pty Ltd, 2002). These products are labour intensive and more expensive than fresh cuts where minimal labour is involved.

The fourth major change granting greater retail power is invigorated positioning of supermarkets as superior providers of fresh food, an image ideally suited to chicken. Woolworths’ efforts to redefine its image as the ‘Fresh Food People’ in the mid 1980s proved so effective that Franklins and Coles emulated the concept the following decade. Sales of Woolworths fresh food increased by more than 300 per cent from 1986-87 to 1993-94, soaring from \$920 million to \$3.9 billion (Shoebridge, 1994). Franklins followed Woolworths’ fresh strategy, repositioning itself from a ‘No Frills’ discount retailer to a full-service supermarket with an expanded fresh food range. Coles also mimicked Woolworths’ strategy, adding new fresh food products, prices and in-store displays in the early 1990s (Shoebridge, 1994). As an extension of the concept applied to chicken, Coles introduced ‘All Things Poultry’ in 1996 at their Knox Shopping Centre store in Melbourne. Imitating butchers and specialist poultry shops, this in-store shop targets consumers in high socio-economic groups with pre-prepared chicken meals prepared in-house. This offers a sense of extra freshness, with additional staff providing more personalized customer service and hence scope for higher prices to capture greater added value. Targeting higher income earners, this product range competes indirectly with their revamped ‘Deli fresh’ section that also pushes multiple chicken lines (Anon, 1997).

Processors’ prior attempts to establish unique identities were overshadowed by retailers. They were relegated to the position of supplier. To this end, retailers have even changed the way they present and promote meat products in the service deli cabinet to strengthen their brands. Labels revealing the manufacturer’s identity on sliced chicken meat packs have been removed. Store brands dominate fresh products in tray packs. Most products do not display the manufacturers’ logo and the supplier is usually indiscernible from the small print on the label. Steggles’ State manager explained that these changes started to happen in the mid

1990s. Most lines (ie fresh meat cuts, processed meat rolls and value added meat products) moved from being manufacturer labelled products to store branded or private label products (eg Coles' Farmland range) (Anon, 2004).

Products are mainly promoted through specials and price promotions in weekly direct marketing pamphlets and television ads to reinforce store brands and private labels. For example, just 10 per cent of Bartter's product is sold under its own brand; the majority is sold as the Steggles' brand or as retailers' labels (Bolt, 2001). The integrators still invest in their brands through TV and print advertising. These products are predominantly frozen meals. Steggles is still responsible for promoting their range of branded products in further processed frozen and ready to heat-and-eat lines which represent 7 per cent of the frozen chicken supermarket trade (Anon, 2002a). The State manager explained that it is easier to promote differentiated products brands, even if it involves something as simple as different packaging (eg tray pack). The same goes for frozen chicken, even though this has become a small component of the range (Anon, 2003b).

In 1998-99 Inghams was ranked the sixtieth largest retail supermarket supplier with retail sales of \$55.5 million. Inghams' umbrella brand, including its frozen meals, reached twenty-fifth position with sales of \$102.8 million. Their position improved slightly the following year up two positions on sales of \$61.4 million. Steggles was ranked 92 in 2000 (A.C. Nielsen Company (Australia), 1999a, 1999b, 2000). Foodservice and independent grocers (eg IGA, SPAR) offer the greatest potential for promoting processors' branded products and this is where Steggles' salespeople focus. The foodservice market (excluding the fast food chains like KFC and Red Rooster), which includes restaurants and cafés, are more open to branded products as they are delivered as frozen birds, cuts and pieces and packaged with identification (ie logos) as wholesale brands. Local butchers are also more responsive to and influenced by branded products. Building and maintaining close relationships with independent trade customers is vital to pushing their branded product lines.

Maintaining Space in Merging Markets

Competition between retail formats intensified during the 1990s. Supermarkets and specialist meat retailers compete directly with ready-to-eat service providers. Convenience supermarkets offering meal solutions rather than just meal ingredients directly challenge cooked chicken chains. According to Dixon (1999) most chicken meals were purchased ready made, with more fast food and takeaway outlets offering chicken than any other type of pre-

prepared meal. Fast food retailers raised their investment in marketing activities in the face of competition. The top five chains, including McDonalds, KFC and Red Rooster spent an estimated \$114.6 million on advertising for the year ending April 1999. Of this, \$50 million was spent on in-store advertising and promotions (BIS Shrapnel, 1999). In 1999-2000 KFC trailed McDonalds 45 per cent share of fast food sales with 18 per cent (BIS Shrapnel, 2000).

KFC, owned by Yum! Brands, is part of the American based restaurant group that owns Pizza Hut and Taco Bell. The multinational's Australian subsidiary is 'one of the most successful divisions in the world in terms of sale and profit contribution' representing 35 per cent of earnings outside the US (Shoebridge, 1996: 65). While the number of restaurants grew from 370 in 1991, to 516 in 2003, the chain's profitability slumped from levels reported the previous decade (Shoebridge, 1996). Two-thirds of the stores (386) are franchised and the remaining stores (130) are company owned (Yum! Brands, 2004). The franchise system provides coordination and pooling of resources for advertising and promotion with a reported 5 per cent of sales spent annually on advertising (Shoebridge, 1992b). This level of expenditure affords nationwide reach and whole-of-year coverage making it difficult to avoid KFC's constant brand exposure. Sponsorship of up to 15 major events each year reinforces the company's brand presence.

Yet, KFC's strong corporate image and association with fried chicken impeded efforts to transform its image to a provider of healthy meals. In 1992 the chain officially shortened its name to KFC, removing the word fried, and appointed a new agency to handle its national advertising account worth \$15 million annually (Shoebridge, 1992b; Smithers, 1992). The following year, to coincide with its twenty-fifth anniversary in Australia, the chain staged a major repositioning exercise designed to change its 'fried food king' image. At the time, KFC's standard meal combination of original recipe chicken, chips and coleslaw contained 9 teaspoons of fat, second only to fish and chips and pie and chips as the fattiest takeaway meal on the market (Australian Consumers Association, 1994). In addition to the \$60 million spent on constructing restaurants and refurbishments, a major new product was launched emphasizing their revised slogan – 'Today's KFC – I Like it Like That' (Shoebridge, 1992b).

A total of \$300 million in equity investment was allocated for capital expenditure over 5 years (Syvret, 1993). The centrepiece of this strategy was the multimillion dollar development and launch of *TenderRoast*, a non-fried BBQ chicken product in July 1993. Women aged between 25 and 39 years were the primary target market (Shoebridge, 1996). Viewed as the platform to reposition the chain's image, the product was developed by KFC's technical and marketing groups in consultation with major suppliers Inghams and Steggles, food ingredient

manufacturers McCormicks Foods, as well as packaging and equipment firms. At various stages of development, consumer research was performed including taste tests, followed by test marketing. The product launch and company repositioning was supported by TV and newspaper ads, direct mail as well as a host of public relations activities (Dixon, 2002).

Initial reaction to the product did not meet company expectations due to KFC's seemingly pungent association with greasy, fried chicken. In recourse, an unlikely celebrity spokesperson, supermodel Elle McPherson was selected to endorse the product (Anon, 1993; Strickland, 1996). This ad campaign featuring an unlikely supporter appeared to lift sales in the short term by 50 per cent. However KFC's sales of its *TenderRoast* BBQ chicken dropped by 43 per cent during 1995 (Shoebridge, 1996). Declining market share led to the product's removal within 2 years of its launch. A replacement product *Kentucky BarBQ* was introduced in October 1995 in similar style to its predecessor. Unlike *TenderRoast*, this product was more closely positioned as part of a family friendly meal. To boost sales KFC even offered a money back guarantee as a point of differentiation (Shoebridge, 1996).

Attempting to move their entire product range from being perceived as snacks or treats to 3 meals a day to capture the HMR market, KFC promoted their chicken as 'real food fast', not 'fast food' (Shoebridge, 1996). Their advertisements targeted two groups. The first appealed to the dominant household food provider, mothers, that KFC offered a healthy alternative to home cooked meals. The second ad, resembling a MTV music video, targeted the youth market (18 to 24 year olds), 40 per cent of the chain's market which perceived the food as fried chicken (Ryan, 1997).

KFC's major competitor, Red Rooster is associated more closely with non-fried, BBQ chicken. Perth based Australian Fast Foods (AFF) Pty Ltd purchased the chain from Coles-Myer in May 2002. A decade earlier the Coles' subsidiary bought remaining Big Rooster stores in Queensland from AFF for \$20 million. This lifted their national coverage to over 230 stores under the Red Rooster banner. Subsequent acquisition by AFF, which included 250 company stores and 50 franchise outlets, augmented their existing 'Chicken Treat' chain with stores in Western Australia, South Australia and Thailand. AFF's Managing Director Frank Romano opened the first Chicken Treat store in Western Australia in 1976. The deal with Coles-Myer was partly a buy back of up to 150 stores which Romano and business partner Nick Tana established. This gave the company a combined coverage of over 380 stores nationwide (Klinger, 2002). Together the two chains captured 8 per cent of fast food sales in 1999-2000 (BIS Shrapnel, 2000). As retail sectors merged heightening competition among food service providers, the large chains applied repositioning and growth and acquisition

strategies to maintain their presence. Facing significant barriers in a crowded market smaller participants and new entrants have adopted alternative marketing strategies, especially those based upon differentiation, to deliver added value in niche markets.

Seeking a Niche

Apart from the major retail chains, a handful of independent fast food outlets and specialist retailers compete for a share of the market. Lenards is a dedicated meat retailer worthy of close examination due to its success in securing a formidable share of the ready-to-cook and heat-and-eat segment. By 2000, in just over a decade, this 'meals solutions' franchise had raised consumer responsiveness in the segment. Founder and Managing Director, Lenard Poulter, a Melbourne butcher migrated to Queensland in 1987 and in November that year opened the first Lenards' Poultry Shop in the suburb of Sunnybank Hills. Following the success of this first store, a second outlet was opened on Queensland's Sunshine Coast (Lenards Pty Ltd, 2002). Two years after opening the first store, Lenards expanded interstate into New South Wales. By 1990 Lenards' franchised stores were selling 1.5 million chickens a year. Three years later this had increased to 5 million chickens (Tovia, 2002). Lenards' growth continued into 2000 with 150 stores that typically serve 165 thousand customers a week (McNamara, 2000).

Lenards' concept of 'adding value to fresh produce' is realised in their range of meals for the kitchen-ready market. The range, including kebabs, marinated chicken breast and seasoned chicken pieces, was developed by Poulter who recognised a trend towards longer working hours, busier lifestyles and a corresponding increase in demand for convenient meal solutions. Continuous innovation drives the development of new products, with the proportion of value added products increasing from 10 to 90 per cent of the range between 1987 and 2002 (O'Keeffe, 2002). The chain is at the forefront of the HMR market in Australia and has also developed a wide range of pre-assembled foods. These meals involve components pre-prepared but combined at home. Lenards' Salad Kit and Chicken Honey Macadamia Roll are pre-assembled foods, while the Easy Living Beef Lasagne is a HMR item.

Customer service and convenience underpin Lenards' commitment to 'fresh, quality products that represent good value for money'. Putting these values into practice is demonstrated in how the franchise system applies the concept of adding value to all cuts in the carcass. Lenards focus on the cheaper cuts first, where potential lies for the greatest value adding (O'Keeffe, 2002). In mid 1998, Lenards extended this philosophy to fresh lamb, pork and beef

and changed their name to *Lenards*’ to accommodate the change (McNamara, 2000). Despite success in expanding their product range Lenards’ still faced a further challenge as Poulter describes:

Four or five years ago was a critical time for us when I realised that we were in danger of becoming a commodity product. ...we had to look forward to see what consumers want. So we went into red meat. And we repeated the same formula. ...it went all right but didn’t do anything really fantastic. But when we analysed it we didn’t do what consumers wanted us to do. We had to get down to 10 minutes meal preparation time – not 20 minutes. The only way we could add value to the cheaper cuts was to cook it for the consumer (Lenard Poulter, cited in O’Keeffe, 2002: 29).

What differentiates Lenards is their unique system to create and distribute added value to deliver quality, service, freshness and convenience. The store system is a master franchisee one, whereby each master franchisee purchases a specific territory and then sub-franchises stores within the territory to independent store owners. Individual franchisees receive marketing and operational support from the master franchisee as well as a team of specialist support staff at the national head office in Brisbane (Anon, 2002d). Lenard’s marketing department offers support in advertising, promotions, consumer research and product development (Ellul, 1999).

Even though these functions are centrally controlled, individual store owners are given flexibility to select store product offerings from a databank of 150 recipes. This is the source of Lenards’ impressive product variety and assortment. In a week, a franchisee is likely to select up to a third of the recipes. Relative independence in product selection affords greater responsiveness to each store’s clientele as decisions about product assortment can be made each day, or within a particular day. Decisions about merchandising, layout and presentation of products in the cabinet are also discussed with the franchisee. Although, franchisees are strongly encouraged to apply the principle of variety to avoid undermining Lenards’ ‘whole-of-bird’ matrix system for adding value to all cuts codified in the recipe databank.

Lenards’ system grants several benefits to franchisees, the franchisor and customers. All value adding tasks to core meat products are performed in-store. This contrasts with the organisation of major retail chains where these tasks are carried out at a central processing plant. Retail ready packages are shipped from a central DC to individual stores. Lenards operates a more precise JIT inventory system than major supermarket chains that is responsive to changing preferences. Products are fresher and waste is minimised. It has been reported that wastage is less than 1 per cent, compared with 6 to 8 per cent documented by supermarkets, saving as much as \$5 million per year (O’Keeffe, 2002). Franchisees’ ability to

make stock-ordering decisions closer to the consumer has clear strengths in managing supply. Unlike the major retail chains which are locked into longer order and fulfilment lead times, often leading to out-of-stocks, Lenards' franchisees are more flexible and can anticipate and respond to shortages. The core benefit of Lenards' store brand is the convenience of their products, given time-poor lifestyles and the erosion of knowledge and practice of home cooking. Aids such as cooking guides and brochures make meal preparation easier. Franchisee staff can provide greater product knowledge than most supermarkets as they personally pre-prepare the product.

Small and medium sized processors have also attempted to carve a niche by targeting higher income segments with differentiated products. Baiada Poultry introduced a range of fresh, de-boned products derived from free-range chickens ahead of major competitors. Their products comprise a selection of premium lean chicken cuts including skinless thigh fillet and skinless breast fillet, wings, drumsticks and whole chickens. Managing Director, John Camilleri stated that Baiada's consumer research showed customers wanted affordable free-range chicken, but were also looking for quality (Marketing Editor, 2002). Baiada launched the range under the *Lilydale Farms* label in most States in March and April 2002 supported by a booklet of recipes, wine matches, handling, and storage tips (Anon, 2002c).

Lilydale products are sourced from chickens grown in farms scattered throughout Victoria, but particularly in the Yarra Valley and Mornington Peninsula. As part of the requirements of their free-range accreditation, the birds are free to roam around in 'generous-sized paddocks', but must be fully feathered (ie approximately 21 days of age). They are also housed in sheds from sunset to sunrise and fed indoors to protect them from predators (Baiada Poultry, 2003b). Compared to Baiada's corporate brand, Lilydale's visual identity is more striking utilizing the picturesque imagery of the lush green grass of the region. This imagery emphasises the link to nature. Product images are communicated through a range of media. The Baiada website features a special Lilydale Farms' section, trucks are specially labelled and products are distinctively packed in recyclable packaging (Baiada Poultry, 2003b). Each premium cut is offered separately and packaged with a unique silver tray and packaging so that it stands out in the meat cabinet. Lilydale products are distributed through Coles, Bi-Lo and Franklins supermarkets. Consumers can also access the range at smaller independent chains as well as specialist butchers and delis like Lenards, Wishbone Delis, Bush's Meats, Joe's Meats and other specialist outlets located in the suburbs of major metropolitan centres (Baiada Poultry, 2003c).

Baiada provides POS materials to support their retail customers like shelf strips, talkers, information request slips, display cards, wobblers and consumer guides. Independent foodservice distributors are given product information to communicate to customers. The range was promoted on major metropolitan radio stations in Sydney and Melbourne as well as in various food magazines. Matthew Bosnjak, Baiada's marketing manager, believes that their POS material, eye-catching labels and packaging differentiates the range from competitors. Yet, advertising is required to grow awareness of the Lilydale brand. Baiada's sales representatives track Lilydale sales to evaluate its performance and consider the ability to demonstrate products to trade customers a 'privilege' which is maintained through close contact with them.

The added value offered by this product range targets the growing niche market seeking healthy, safely and ethically produced food. Free-range chickens are perceived as more healthy, according to Baiada's Queensland manager, Wayne Sullivan, and sales have grown 'through the roof' (Anon, 2002f). Although, the company knows very little about their specific consumer base as it does not commission consumer research. Baiada's sales representatives gain most of their market intelligence from retailers in the field and from relevant trade magazines. Prices range from around \$7 per kg to \$7.50 per kg for whole chickens, \$16 per kg for skinless breast fillets, \$14 per kg for skinless thigh fillets, \$7 per kg for drumsticks and \$6.30 per kg for wings (Anon, 2002c). Ultimately, retail prices depend on negotiation with each retail buyer.

At the end of 2001 Bartter staged a campaign to promote their products as hormone-free and barn-reared. Product labels were used to promote the message (Bolt, 2001; McCracken, 2001). The move was questioned by the ACMF as having the potential to confuse consumers and to strengthen misconceptions of chicken as containing added hormone growth promotants⁴³. Bartter Chairman, Peter Bartter, publicly criticised the ACMF's reluctance to promote the category, or to raise awareness of the production process to dispel the longstanding myth (Anon, 2001b). This debate illustrates the tension between the major processors and the ACMF over the best method to promote chicken. The category has reached a level of maturity to warrant brand specific promotion. While processors recognize this, they have focused on product fulfilment rather than preserving their identity in the supermarket aisles. Competition to control the added value associated with chicken meat products and build unique identities attached to them is contested as participants attempt to capture the rewards for the value they deliver to consumers.

⁴³ Their use had been banned in Australia since the 1960s (Anon, 2001a)

Conclusion

The preceding analysis of the chicken meat segment from 1980 to 2002 has shown that the continued shift to chicken as the nations' second largest source of meat protein depended on reinforcing the alignment of marketing functions. By investing in coordination mechanisms to support and sustain rapid the expansion of production and supply of chicken meat, control was retained within the value chain. These mechanisms were crafted and integrated to respond to changing lifestyles, attitudes toward food, and the desires of Australians. As a result, this diverse, mature product category is barely recognisable from its backyard origins 50 years ago. Supermarket chains embraced chicken as a major drawcard and fast food outlets invested heavily to promote it as the primary component of their meals. As the pace of life sped-up throughout the 1980s and 1990s the substance and image of chicken evolved to deliver the added value desired by Australian consumers – consistency, choice and convenience – in the form of competing branded products.

Together, processors and retailers reconfigured the system to deliver value. Processors' flexibility to deliver a range of products responsive to changing consumer needs was honed during the 1980s as marketing roles and responsibilities were defined and delegated. By the early 1990s control over marketing gradually shifted from processors to retailers. They centralised and updated their internal procurement system to pull products from suppliers. In their position closest to consumers, retailers were better positioned strategically to recognise and respond to change. Their ability to monitor buying behaviour and identify emerging trends was achieved through sequential investments in technology to gather and disseminate market intelligence. Consequently, retailers attained control of the chain and made key decisions regarding price, product, place and promotion, delegating subsidiary marketing roles. Simultaneously, retailers invested in the physical space to control access to chicken and built their brands to secure ownership of chicken's identity to retain their position in a crowded marketplace. Paradoxically, attempts to reposition the negative image of fast food products to healthier meal solutions were hindered by inconsistent and overpowering corporate identities.

Processors have consistently delivered value to their retail partners. In doing so the search for a point of differentiation wide enough to appeal to the mass market yet still unique to prevent replication by competitors has been complicated. Survival of niche products is constantly threatened by mass-market capture. Free-range lines supplied by the major processors and smaller operators alike exemplify the competitiveness of mass markets. More importantly, it

underscores retailer authority to command suppliers to deliver value in the form of chicken meat products which position them as Australian's preferred meal providers.

This chapter analysed the reconfiguration of the chicken meat marketing system, embedded within the Australian market context. The next chapter discusses the radical reorganisation of this system relative to the changes and continuities in beef's marketing system analysed in chapters three and four. Comparative analysis of the two meat marketing systems demonstrates how their internal dynamics contributed to the fundamental transformation of Australia's meat industry. The following chapter also reconciles and synthesises the research findings with prior empirical studies and theoretical perspectives to provide a holistic response to the research problem and question posed in chapter two.

Chapter Seven: Discussion & Synthesis

Introduction and Outline

The critical cases in this thesis were purposefully selected to compare and contrast patterns of value delivery in Australia's beef and chicken meat marketing systems. As the two cases in chapters three, four, five, and six demonstrate the patterns of value delivery in each marketing system vary. Up to this point the thesis has not sought to systematically identify the similarities and differences that extend beyond each segment. This is the approach taken by the majority of studies of marketing systems for agricultural and food products. As noted previously, they tend to be all inclusive or narrowly defined with limited attempts to elucidate comparative processes across different product categories. Studies that compare multiple product categories tend only to take a snapshot at a particular point in time and typically focus on a particular supply or value chain. To address these research design limitations this chapter compares the two critical segments of Australia's meat industry during phases of their configuration and reconfiguration. As the discussion reveals, it is possible to draw a number of conclusions about the organisation of marketing functions and the impacts on value creation and distribution in these meat marketing systems.

In the following section the methods of comparative analysis described in chapter one are applied to the two cases. These techniques are used to show the similarities and differences among patterns of value creation and distribution both within and across the two cases. First the similarities and differences between the systems are discussed; second, the factors accounting for divergence are identified; and third, the reasons underlying the differential patterns over time are explored. Next, these insights are synthesised with existing literature to assimilate the findings. Finally, a typology of the different modes of value delivery for Australia's beef and chicken meat marketing systems over the major phases of their configuration and reconfiguration up to 2002 is detailed.

Discussion and Synthesis of Findings

The three major components of the conceptual framework identified in chapter two: 1) product market conditions, 2) mechanisms for coordinating marketing functions, and 3) overall organisation and functioning of the meat marketing system, are discussed in turn. This

process teases out the major similarities and differences between the cases. Together the comparative analysis seeks to highlight the differing patterns of value delivery and to identify the factors contributing to the divergence. A summary of the distinctive features of these dimensions drawn from the major themes in the two cases is presented in Table 7. This intermediate step assists to explore the differential patterns of value delivery over time. Next, an explanation is given for the changes and continuities in the dominant modes of value delivery for each meat marketing system during the major phases of their configuration and reconfiguration. Aspects of convergence and divergence are compared to and synthesised with existing literature.

Table 7: Comparison of the Dominant Features of Australia's Beef and Chicken Meat Marketing Systems

Component (Features)	Beef Marketing System	Chicken Meat Marketing System
Product Market Conditions		
Biological features and production base	Features are unsuited to environment	Environment is tightly controlled to suit features
	Extensive and geographically dispersed	Intensive and geographically integrated
	Lengthy production cycle	Short production cycle
	Variance in carcass quality	Standardised carcass quality
Product category image	Established with negative, enduring associations	Newer with positive, flexible associations
Market direction	Dependency on export markets	Oriented to domestic markets
Market location and focus	Distant and diverse	Local and concentrated
Market type	Homogenous low quality segments	Differentiated value added segments
Coordination Mechanisms		
Role of information	Provides basic description of commodity characteristics	Determines quality through tangible and intangible product attributes
Role of price	Mechanism for exchange, susceptible to unexpected fluctuations	Mechanism for distributing value, subject to change through negotiated agreement
Role and adoption of quality standards and grades	To ensure minimal compliance to external standards, low to medium adoption	To mitigate all risks to quality to meet internal standards, medium to high adoption
Regulation of supply flows	Speculative and disjointed	Streamlined and concentrated
Access to and use of user specific market intelligence	Low	Medium to high
Transparency in determining value and quality characteristics	Low	High
Type of marketing communications activities	Mostly generic advertising and limited firm specific promotion	Limited generic advertising, mostly corporate promotion

Component (Features)	Beef Marketing System	Chicken Meat Marketing System
Concentration of investment in mechanisms	Production focused R&D Generic promotion	More evenly allocated across mechanisms
Organisation and Functioning of Meat Marketing System		
Relations among links in meat value chains	Weak and trading oriented	Strong and multi-faceted
Alignment of marketing functions	Loosely connected and misaligned	Tightly connected through vertical coordination
Programmability of marketing activities	Low to medium	Medium to high
Role of external authorities and intermediaries	High and continuous	Low and intermittent
Responsiveness to product market conditions and flexibility of value chains	Unresponsive, outmoded and inflexible	Responsive and able to adapt quickly
Dominant Form of Value	Undifferentiated, uneven commodity goods	Differentiated, standardised products

Product Market Conditions

As previous empirical studies in business history and agribusiness have demonstrated, product market conditions influence the ability of organisations in meat value chains to deliver value. Members of agri-food value chains deal with product market conditions like perishability of produce, drought, seasonality, trade barriers and statutory control of marketing more intensively than other enterprises (Beverland, 2005; Breyer, 1931). These conditions are manifested as constraints and opportunities in their operating environment. A summary of the major events and the impacts and participants' responses to these conditions is detailed in Appendix three. Across the two cases, three major differences in product market conditions were identified that influenced the differing forms of marketing organisation and modes of value delivery. These are: the biological features of the products and their production base, product category images, and the direction of their market focus and position in world trade. The most obvious similarity between the two meat marketing systems is the uncertainty of natural resource conditions that constrain supply of agri-food products. While both species are susceptible to disease, pests and other adverse environmental conditions, beef cattle production remained more exposed to these threats. An extensive pasture based production system combined with variation in climatic conditions compromised the reliability of supply and the quality consistency of cattle. The most popular beef breeds were unsuited to the Northern Australian environment where production became concentrated. Cattle producers were hesitant to infuse breeds like the Brahman, hardy to tropical and semi-arid conditions. On-farm production, meat processing and preservation works remained geographically

fragmented in unfavourable locations unable to produce high quality meat. Thus the variance in cattle supply across Australia moulded the seasonality of beef processing which in turn bestowed exporters' reputation as unreliable and unresponsive to changing customer requirements.

Beef's extensive production base contrasts with the intensive farming of chicken. Average numbers of birds reared by individual chicken farmers grew much larger relative to the numbers of head of cattle run on larger properties. There was also a convergence in the chicken growing function to unit shed sizes of 1000 square metres holding 4 500 breeders or 20 000 broilers, compared to the wide variation across beef cattle farms. Chicken's inherent physiological features made birds easier to contain in controlled environments. Farming practices, seedstock and other basic inputs to hatch and grow birds were standardised and controlled in-house to ensure product consistency. Their growth could be closely monitored and enhanced through regimens of pre-prepared feed in climate controlled sheds. Company veterinarians regulate their nutrition and supervise their health. As the production of meat chickens rapidly became a specialised task, by outsourcing the function, processors could procure birds at a declining cost. Rapid up-scaling of processing capacity in this segment also reduced unit costs of production. Companies in this sector also demonstrated greater similarities in operating conditions and profitability than firms in the red meat processing sector. Chicken meat processing companies were thus able to assure their supply of the core product at a competitive price in order to deliver intermediate buyers and consumers first with a standard quality product and then standardised value added chicken meat products.

Control over product attributes was also facilitated by chicken's relatively short growth cycle of 6 weeks (12 weeks in 1950), compared to cattle's 3 year beef production cycle. Chicken's shorter biological response time enabled more rapid progress in genetic improvement of stock, thereby reducing uncertainty over the quantity as well as the quality of supply of the core product. The relative simplicity of the chicken carcass compared to cattle's complex anatomy enabled more rapid adoption of a shared language throughout the meat value chain reducing uncertainty in exchange. The narrow range of cuts in the standardised chicken carcass, compared to that of beef, focused efforts more to develop products that could deliver added value. Beef struggled to achieve consensus on quality standards and nomenclature for cuts. This was confusing for buyers and sellers of intermediate products along the meat value chain and encouraged opportunism. So far beef has been unable to achieve the same level of standardisation of carcass quality as chicken. The section examining the coordination mechanisms discusses their differing nature and role in achieving consistency of quality and supply and in more detail.

Differences in the transition from subsistence farming to modern production methods impacted on consumer access to and familiarity with both products. These variations shaped consumer perceptions of each product category that registered long term image effects. Modernisation of methods for producing chicken meat occurred much later than beef, which by the 1950s had a well-defined image with Australian consumers. It also had an established reputation among customers in the UK that sourced it as a bulk commodity whereby working class consumers purchased beef in canned and frozen forms. Unlike beef, chicken had a favourable image at the outset as it was considered a luxury food item. Representing a truly 'modern', flexible protein chicken was free from the negative value associations that have trapped beef – poor quality, variable supply and inconsistent prices. This image was perpetuated by recurring speculative interest in the segment. Chicken was able to quickly match beef's positive associations – availability, wholesomeness and affordability.

In constructing a modern production system, chicken was able to learn from the experiences of beef's modernisation process and from poultry production systems overseas. There was a rapid convergence in production in terms of technology diffusion facilitated by international communication at trade shows held regularly throughout the world. Supply of chicken meat became concentrated in the hands of two major companies, Inghams and Steggles, in an oligopoly arrangement. Both integrated poultry processing firms constructed a model of production relations around which the chicken meat marketing system was configured. Their control over the inputs to production by means of ownership and outsourcing of chicken rearing ensured that Australia's chicken meat value chain avoided most bottlenecks and constraints to supply in traditional agri-food value chains.

Successful breeding and control of genetics by integrated companies explains efficiency gains when compared to other meat segments as well as state of the art processing capabilities and investment in sophisticated capital equipment for further processing. Increasing specialisation in marketing roles that were designed to assure supply and product quality contributed to reduce the costs of production (Dixon, 1990). By rapidly expanding production and lowering the real cost of chicken the product became more accessible to Australian consumers. Consequently, chicken's image was transformed from an infrequently consumed food to one purchased everyday by first matching and then exceeding beef's value offering. The relative abundance of beef worked to diminish the marginal utility that Australian consumers gained from consuming it. In addition beef's poor, inconsistent quality harmed its esteem as a food item, making it less desirable, thereby reducing the value that consumers derived and associated with it. As the profile of Australian households changed, particularly in the 1980s, with greater numbers of single parent families, smaller households and working women

beef's outdated value proposition lost its attractiveness compared to the convenience and variety that chicken meat products offered.

Another major contrast between Australia's beef and chicken meat marketing systems are the products' final market destination. This difference between the export market dependence of beef and domestic market orientation of chicken is important for several reasons. Firstly, beef's high dependence on overseas markets, especially the UK, US and Japan, relative to the small proportion of world beef production that enters international trade, positioned producers and processors as price takers. External forces like the impacts of global production patterns (ie gluts and shortages) are more dramatic. As the beef crisis demonstrated, the market for beef cattle is volatile and price variation for beef cattle livestock is more dynamic than for chickens. Since overseas buyers compete with local trade customers for beef, changes in overseas markets impact on local availability and prices through to end consumers at retail. Supermarkets can smooth the fluctuations in retail prices, but the difference is inevitably passed back through the value chain first to wholesalers, then processors, and ultimately to farmers. As a result, the dependency of local production on overseas markets impacts upon all links in the value chain and frequently disrupts the delivery of value and distribution of returns.

Secondly, unlike beef, the chicken meat segment did not enter international trade prematurely as a solution to oversupply to be configured as a speculative activity. Whereas beef was among Australia's first agricultural products to be traded as a bulk commodity, markets for chicken meat were domesticated due to self-sufficiency and quarantine restrictions. Chicken's domestic market focus and its protection by quarantine regulations have assisted to stabilise prices, largely unconnected to international fluctuations. Consequently, international crises have limited impact on local prices. Unlike beef's long term dependency on diverse and distant overseas markets, exports of poultry to the UK during World War Two were short-lived. Like beef, only a small proportion of total chicken production is traded internationally as it is a multi-domestic industry. However, Australian product faces strong competition from low cost producers like Thailand. Higher value niche markets in Asia are keenly contested and protected. Australian chicken meat processors, cognisant of their limitations and the market entry barriers, have not pursued these markets with the same vigour as beef exporters. Neither have they actively sought government export assistance to penetrate overseas markets.

Finally, overseas buyers of Australian beef require more explicit quality control requirements (ie hygiene and product specification) and verification at the processing stage. Japan and the

US in particular place stringent requirements on the quality of foods entering their markets and are in a position to dictate market access arrangements. Unlike many standards and regulations placed on beef exporters by external government authorities, the chicken meat segment achieved rapid consensus internally on quality control processes and procedures. Rapid internal consensus facilitated the standardisation of product quality to minimise variation between chicken carcasses. This constraint, identified by Breyer (1931), is still a major factor limiting the development of value added products in the beef segment.

Coordination Mechanisms

Comparison of the mechanisms for coordinating flows of information, physical products and financial returns indicate the organisation of marketing functions and how value is delivered in both meat marketing systems. Variations were observed for each coordination mechanism specified in the literature review, over time and between marketing systems. Firstly, significant differences in quality standards and grading systems were demonstrated. Construction of quality control and assurance systems in the chicken meat segment provided a reliable process to mitigate and contain potential hazards and risks to product quality. The yield, quality, and consistency of meat from birds were drastically improved through investment in genetic research programs to obtain desired attributes. As a result, chicken meat birds achieved higher feed conversion efficiencies than beef thereby lowering the cost of live birds, relative to beef cattle. This investment in R&D was a long term undertaking by individual breeders and later integrated companies to control the conditions for intensive poultry production. Supporting this R&D the Federal government provided a dollar for dollar grant under the Chicken Levy Act. Apart from protection from imports, this is the only major form of assistance provided to the production and processing elements of the segment. Uniformity in size and taste of birds through standardisation of production methods ensured quality consistency. This standardisation of the core product was achieved rapidly through minimisation of gene stock to two breeds and two grade standards – A and B. Prices paid for live birds are negotiated between growers and processors using a standard contract that rewards growers for their relative efficiency. Growers' collective bargaining power is boosted through legislation at the State level that regulates fee setting arrangements for growing birds under contracts with processors. This formal collective bargaining structure has made the negotiation process more transparent and improved relations between growers and processors. Prices for quantities of chicken meat cuts are more discretely negotiated between processors' sales managers and their retail meat buyers and foodservice trade customers with the invisible hand playing a minor role.

Contrastingly, there is little evidence of uniformity in beef production, or consensus on preferential quality traits, breeds and grading standards. Recurrently issues related to beef quality have been labelled as endemic problems and responsibility has been assigned to external authorities to resolve. As government authorities have been hesitant to regulate to improve beef quality, other than for health and hygiene, less progress has been made. Most initiatives are directives imposed by overseas importers and domestic trade customers. In the absence of a universal scheme for grading beef, information concerning product quality has been transmitted via an imperfect price mechanism. Buyers and sellers of livestock, carcasses, and cuts of beef apply their own subjective interpretations of quality. Operation of this mechanism is particularly flawed for trade over long distances and between markets where quality specifications differ. This is demonstrated in the case of the incongruity of Australian and Japanese grading schemes and the low ranking of lean Australian beef as manufacturing quality in the US. Specific product attributes, like marbling and fat cover, are valued differently in each market and scheme. These subjective differences reflect the differences in consumer perceptions of meat quality that offer utility. Differing grade standards were also barriers to accessing overseas markets as the case of the Japanese market demonstrated. Whereas quality standards have streamlined the exchange process for chicken, they are still contested mechanisms for exchange of value in beef's marketing system in local and overseas markets. Further, the scientific knowledge underlying these standards is incomplete and disputed. Participants in the beef value chain have different perceptions of added value and thus favour different quality attributes. Further, in contrast to chicken meat, there are still many uncontrollable factors that affect beef's eating quality.

Price reinforces a one way, opaque flow of information about quality that does not provide suppliers with specific feedback on their ability to meet consumer preferences. Since retailers average prices to smooth fluctuations, without explicit indicators of product quality, consumers also receive limited information on which to base their purchase decisions. This lack of transparent and meaningful quality information is a source of resentment and confusion for consumers. Limited adoption of the MSA grading scheme by the major supermarkets that apply inconsistent and confusing trade classifications like budget and prime beef has not supported domestic beef consumption in Australia. Supermarket retailers' imposition of quality specifications outside the MSA system was a mechanism to retain control over the definition of value and appropriation of returns in the beef value chain. Evidence presented at the Industry Commission (1994) shows that retail prices for beef have declined by 10 per cent from 1971 to 1990, compared to a 30 per cent decline in livestock prices. This demonstrates that the cost of livestock has accounted for a declining proportion of retail costs whereas processing and retailing activities account for an increasing proportion.

Secondly, marked differences exist between the mechanisms for coordinating and regulating supply in each system. Control over supply of chicken meat became rapidly concentrated through purposeful organisation of primary production and marketing functions by processing companies as shown previously in Figure 7. Comparison of this value chain with the generic value chain structure of agri-food value chains in Figure 1 explicitly shows the purposeful reorganisation featuring significant vertical integration and coordination that has taken place in the chicken meat marketing system. By retaining ownership of critical inputs like seedstock, feed, but outsourcing the growing function to independent farmers under contract, the integrators controlled the flow of supply of chicken meat. Intermittent phases of oversupply did occur. But tight control by a small number of processors meant that they could rectify imbalances through negotiated rationalisation. The development of close relationships and long term procurement agreements with supermarkets streamlined supply flows.

The reconfiguration of the beef value chain, as shown in Figure 5 is more similar to the generic framework in Figure 1. Compared to the previous configuration depicted in Figure 3 there has been increasing integration and coordination among all participants. For over a century most producers relied on stock and station agents to provide advice about cattle buyers and to coordinate their sales. They also acted as intermediaries to facilitate overseas consignments and large orders from red meat processors and institutional buyers. Processing firms also relied on a large number of independent overseas agents to negotiate sales with wholesalers and retailers. These roles were centralised during the Second World War when government departments and agencies in each country become responsible for coordinating sales of Australian beef under bulk supply contracts. Up to the early 1990s supply arrangements in beef's value chain were characterised by arm's length relationships between the major participants in the value chain – beef cattle producers, meat processors and food manufacturers, and retailers of beef products. Saleyard auctions still remain a major form of coordinating cattle sales, supported by services and information provided by local stock and station and station agents. Cattle buyers of processing companies and retail meat buyers also supplement their purchases in this way. Price remained as the major mechanism for allocating supply of livestock, and distributing meat products between buyers and sellers. This mechanism proved especially ineffective in long distance trade which fuelled speculation and produced spectacular imbalances between supply and demand. Like the flawed operation of the price mechanism to transfer information about the quality and quantity of supplies, logistical systems did not properly support the physical flow of products. Misalignment of mechanisms for transporting beef between the centres of production and consumption, particularly in refrigeration, handling and cold storage, further diminished its eating quality.

Unlike the chicken segment, market access arrangements for beef have been constant threats to sustaining access to supply overseas markets. Negotiation of these requirements has been largely the domain of government authorities representing their national interests. Exercise of control has been more rigid during times of crisis and emergency such as during both world wars, periods of chronic oversupply and animal disease outbreaks. Involvement of individual companies in the process of selecting markets and securing access has been less common. Consequently, the choices made and the negotiated terms of agreements have not always benefited their interests. Griffiths (2000) argued that the Australian government's role in securing trade deals was a strategic resource that benefited the segment. On reflection, this role appears to have propagated a culture of mediocrity and indifference to demand and specific consumer preferences. Instead, conformity to minimum standards set by external authorities became the norm for participants in the beef segment. Thus maintaining minimum access requirements, like the Level 1 disease free status of livestock and beef products, is a generic product attribute that does not differentiate Australian beef in competitive export markets. Neither does it provide a sustainable source of product differentiation as other countries can replicate it and can erode Australia's market share by marketing their product at a lower cost.

Another defining continuity in beef's marketing system is the unwillingness and inability of local firms to assume risk in marketing their goods, particularly for sale in distant overseas markets. By transferring title of their goods to intermediaries participants forfeited the opportunity to learn about markets for their goods, to add value and to reap the rewards. This finding supports Ville & Merretts' (2000) assertion that local red meat exporters were less willing to integrate forward along the marketing channel. In a recurring pattern overseas agents and foreign MNCs took control of the food in bulk commodity form. With greater financial resource backing they were able to assume and manage the risk of overseas trade. The pattern of greater concentration of foreign ownership and involvement in the beef segment was most pronounced following the collapse of overseas markets and before the opening and assurance of access to these markets. Following the major collapse in world markets in the 1970s there has also been greater concentration of ownership in processing and an increase in the scale of output. From 1972 to 1992, average annual throughput of red meat processors rose from 4.4kt to 8.8kt, or 82 per cent (Industry Commission, 1994). Contrastingly, chicken meat processors have a secure domestic market protected from directly competing imported products. Although, unlike beef, chicken meat processing companies recognised the competition they faced from rival meat categories in the domestic market and focused on meeting and exceeding their value propositions. Similar to large agri-food companies in the beef segment, the major chicken meat processors were able to rationalise

supply by acquiring smaller and less competitive firms following periods of oversupply. Although the supply of livestock and beef has not achieved the same level of concentration as chicken, in the final phase, from 1990 to 2002, there were signs of more permanent procurement arrangements through long term contracting and backward and forward integration by some participants in each sector.

Thirdly, the mechanisms for coordinating information about product and market conditions, including product specifications, and consumer preferences displayed several key differences. Participants in the beef segment faced greater difficulty obtaining information about domestic and export markets due to the longer relative distance between those involved in delivering the core product and the end users or consumers. Producers and meat processors began to rely on intermediaries such as overseas intermediaries, stock and station agents, and central authorities like the AMB and MLA. The quality of this information in terms of its timeliness, relevance and cost to participants was questionable. Likewise access and dissemination of market intelligence to levy paying members has been criticised (Industry Commission, 1994). More proactive participants began to seek tailored market intelligence by conducting or commissioning market research, but most knowledge of overseas markets is built from experience gained in-market. As direct involvement in markets has been limited, the opportunity to acquire this knowledge has been constrained. Since price has been a substitute mechanism for communicating market information, the ability to identify, let alone respond to, trends and changes in market conditions or consumer preferences has been severely restricted. As a result, until the beef segment began to conduct specific market research such as the segmentation studies in the mid 1980s, it lagged behind the chicken meat segment in terms of its responsiveness to changing trends in consumer tastes and lifestyles.

Participants in the chicken meat marketing system were more active in seeking market information. In the early 1960s members lobbied government officials to collect basic statistical data relating to production and consumption of chicken meat in Australia. Early in the segment's emergence members displayed a greater willingness to meet informally and in more formal arenas like seminars and conferences to exchange vital product and market information. More aware of basic market conditions and product requirements, participants were better placed to respond to this intelligence. As the integrators attained control of the supply of chicken meat products they gained knowledge of markets through direct participation with retail buyers and trade distributors and by commissioning tailored market research. The character of their responsiveness to markets shifted from more proactive engagement to submission as they began to rely solely on trade buyers for market intelligence. Due to their strategic position in the value chain, retailers were better positioned

to acquire intelligence on purchases of meat products in particular and food generally. This access to consumer trends and buying behaviour gave them a distinct advantage and the ability to dictate their specifications to their suppliers, in the case of both chicken meat and beef product categories. Even though they have greater access to acquire and disseminate this intelligence, retailers' responsiveness to this intelligence has shifted from a proactive character in the mid 1980s to a more passive form in the 1990s in the case of the chicken meat segment. Only in the late 1990s and early 2000s have the major supermarket chains begun to respond to this intelligence in a more active way by introducing new beef products. Alternative retail outlets such as Lenards and Polkinghorne's are more proactive in responding to this information by developing and extending their ranges of added value products and are challenging the mass markets.

A striking difference between the two cases relates to the control of product promotion between participants and the differing approach taken to build an image for each product category. In the case of chicken meat marketing communication activities were shared between private organisations, the major processors and retailers, with minimal involvement of the ACMF. Through their production and marketing cartel, the major integrators and supermarkets took the lead in positioning chicken as an accessible, low cost meal. Both were proactive in presenting chicken consistently in an attractive way that kept pace and shaped consumer expectations and concerns about nutrition and food safety. The spawning chains of fast food outlets offering chicken as a convenient, informal restaurant meal reinforced these messages. Meanwhile the ACMF inconspicuously promoted the image of chicken through discrete public relations campaigns that sought to build an image of chicken as the healthy white meat alternative. The major chicken meat processors, particularly Steggles, selected the same generic attribute when attempting to create a unique brand image for their products. Despite investing in brand development and promotion, their efforts failed to communicate a unique point of differentiation to their trade customers and ultimately to consumers. In this way these companies failed to effectively integrate their pull and push communications strategies to create a brand that consumers valued and their distribution partners would support (Webster, 2000). At the same time that the integrators were investing in brand advertising, retailers were centralising and further integrating their procurement systems and lifting awareness of their identities with consumers. This increased their store brand equity which they leveraged to fresh produce categories like meat.

As demonstrated, the use of generic appeals has been more extensive in the promotion of beef and veal. This is related to the segment's treatment of the food as a commodity. Individual firms have used their corporate names and logos on processed products since the trade in

canned meat. However, since this foodstuff was considered a commodity or at best a generic product and was purchased on the basis of price alone, most firms in Australia failed to create distinguishable products and unique brand images. Like the case of chicken meat products, retailers, fast food chains and restaurants assumed this role. Whereas chicken meat processors had attempted to establish brand images since the early 1980s, no genuine attempt was made to endorse brand advertising in the beef category until the mid 1990s. This was a reaction to internal criticism by processors of the ineffectiveness and negative image effects of extensive generic promotion of Australian beef in Japan. Some beef processors even argued that generic advertising removed the benefits derived from investment in brand specific advertising (Industry Commission, 1994). In comparison to chicken, generic promotion of beef overall has been less effective due to the diverse segments across domestic and export markets. When the AMLC focused on domestic promotion in the mid 1980s and targeted specific segments of the Australian population its campaigns were judged overall to be successful, at least in the short term (Ball et al., 1989).

It has been more difficult to transform consumer perceptions of beef's established image. This is due in part to the early loss of control over the product's identity as local producers and processors were unwilling to assume title for export consignments and lost the ability to associate their image and identity with the product. Consequently, the commodity's origin and the specific producer's identity were disconnected from the product. In the absence of regulation to restrict the misrepresentation of Australian beef abroad, overseas buyers - food manufacturers, retailers and government purchasing authorities - were at liberty to label the final food products at the point of purchase and establish new identities and images for them. Where an Australian identity was retained, due to its negative associations, it did not provide added value for final consumers. Further, attempts to transform the image of Australian beef in Japan failed due to the continuity of low quality product underlying the Aussie Beef logo. Subsequent attempts to reposition the logo were largely unsuccessful for the same reasons.

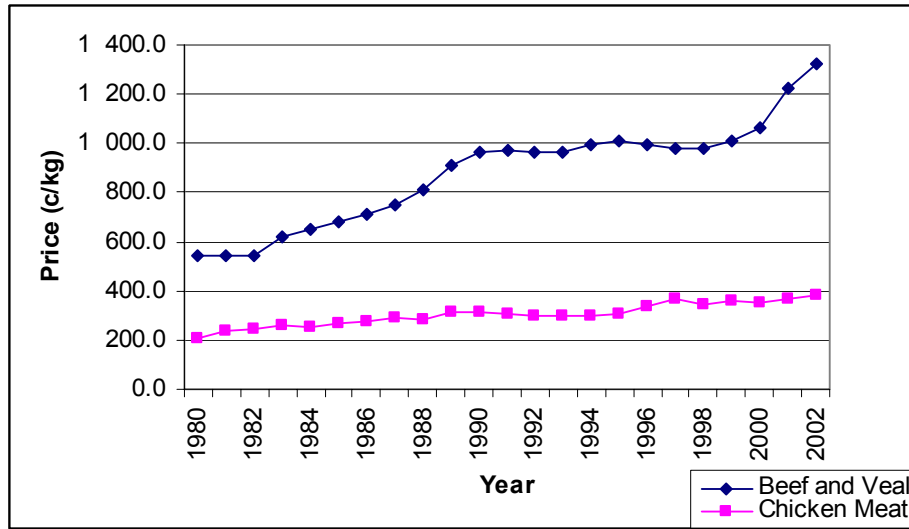
In both cases, the retailers - supermarkets and fast food chains - built their identities through integrated marketing communications. This served to remind consumers of the benefits they offered as modern food providers. Choosing the most obvious and relevant added values – freshness and convenience – their promotion overshadowed investment in generic advertising by either the AMLC or ACMF and the brand specific promotion of the integrators. Dominance of retail identities was replicated in the fast food arena through sustained, intensive advertising to mass markets for food.

Organisation and Functioning of Marketing Systems

Several distinctions in the organisation and functioning of each marketing system were detected by analysing the interrelationships between the mechanisms for coordinating marketing functions. Differences in the role of these mechanisms and their alignment contributed to the variances in outcomes - patterns of value delivery. These patterns are discerned in terms of the dominant forms of value exchanged in the system – commodity goods, generic products, value added products, and added value branded products. Broad indicators like trends in consumption, production and exports are also used along with more specific indicators of system functioning in terms of their efficiency, effectiveness and adaptability. Evidence from both cases revealed a tendency to evaluate the functioning or performance of a meat marketing system and its components with respect to efficiency, above other indicators. Longitudinal data on retail prices were used by participants to indicate the relative efficiency of each system in distributing value to consumers as shown in Figure 9. This highlights the relative efficiency that participants in the chicken meat value chain have achieved over the past two decades. Indeed, the chicken meat segment is the most efficient of Australia's meat industry mirroring overseas meat chicken meat industries.

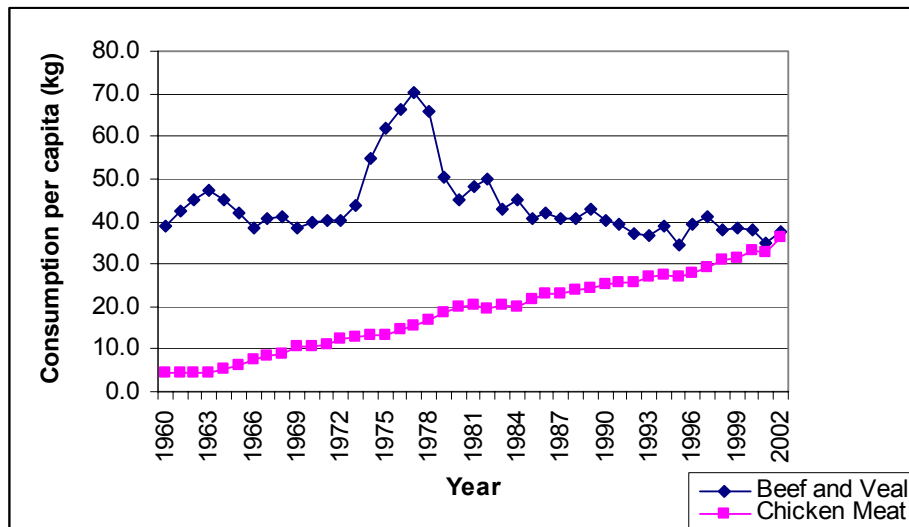
The highly integrated nature of value adding functions in this meat value chain and the concentration of ownership in processing and retailing can explain the relative economic efficiency of chicken meat production and distribution. This concentration and size aggregation of value chain components of chicken meat production into larger and more efficient operational units has been evident in other countries, particularly developed countries. Several benchmarking studies were commissioned by industry participants and government agencies over the study period to assess the performance of each meat value chain primarily in terms of their cost competitiveness relative to major overseas competitors (Booz et al., 1993; Bureau of Agricultural Economics, 1981; Instate Pty Ltd, 1997). Measures of effectiveness and adaptability were given less attention in independent reviews and industry self-assessments. A similar lack of consideration was given to the reasons, apart from price, to account for the declining consumption of beef relative to chicken meat as shown in Figure 10. This emphasis shows the production-driven or value added philosophical underpinnings of these evaluations as reflected in the mindsets of value chain participants and outside authorities.

Figure 9: Retail Prices of Beef and Veal, and Chicken Meat, Domestic Market, 1980-2000



Source: Based on data from Australian Bureau of Agricultural and Resource Economics (2005).

Figure 10: Consumption of Beef and Chicken Meat, Domestic Market, 1960-2000



Source: Based on data from Australian Bureau of Agricultural and Resource Economics (2005).

Looking at the mechanisms coordinating flows in the beef marketing system for over a century from 1860-1974 a consistent feature was their misalignment. Throughout its development, the chicken meat system exhibited tighter inter-functional coordination of marketing activities. This contrasted with beef's long, complex and loosely connected value

chain. Marketing functions were performed independently, usually at arm's length, as traditional agricultural marketing systems. Organisations in each sector of the value chain interacted under conditions which did not support transparency in information flows. There was minimal coordination of marketing activities through cooperation between participants in each sector of the beef value chain, encouraging opportunistic behaviour. Beef cattle producers were often anonymous to livestock buyers, processors, their overseas agents and retail distributors. Repeated attempts to achieve greater alignment like standardised shipping contracts, grading schemes and targeted promotion within the segment failed. Identifying the opportunity to add greater value by aligning strategic functions, the large, often foreign-owned MNCs targeted the segment repeatedly as a supply base for a low cost commodity. Firms such as Vestey with integrated distribution networks of processing plants, shipping lines, wholesalers and retailers directed the internal functioning of Australia's beef value chain for over a century.

A second, related feature of the beef value chain was the marginal investment in maintaining the marketing infrastructure to support changes to modernise methods of creating and distributing value. As the system's production base was built for extensive production in adverse natural environments, most of the segment's internal resources were channelled to maintain high volumes of output. R&D was production focused and quality control was confined to minimal compliance to external standards. Few resources were dedicated to other coordinating mechanisms. Consequently, most marketing activities were quickly transferred to participants that were not directly involved in producing the core product - overseas agents, government authorities or foreign-owned MNCs. Since most resources were devoted to increasing production, investment in coordinating mechanisms did not keep pace with changes in production, distribution or product market conditions. In particular, as producers became dislocated from consumers, the mechanisms for communicating information about the quality of goods (ie grading systems), R&D to preserve meat, shipping and handling of consignments, gathering and disseminating relevant market intelligence and promoting the product were not maintained. As a result, Australia's beef marketing system was only capable of delivering minimal value in the form of commodity goods through complex chains of intermediaries.

In the case of chicken, these mechanisms were relatively integrated and control was concentrated through ownership by the major integrators and retailers. Systems for assuring quality and supply were streamlined and coordinated to sustain the rapid expansion of chicken meat production. This allowed efficiency gains in producing meat chickens to be delivered to consumers in the form of cheap, frozen whole birds. Continual investment in the marketing

infrastructure provided an adaptable set of coordination mechanisms that supported changes in production and could detect and respond to trends in market segments. This configuration of coordinating mechanisms allowed swift advancement from commodity goods and generic products to a system able to deliver standardised value added products in the second phase from 1968 to 1979. This was underpinned by the installation of uniform systems to assure the quality and regularity of supply of chicken meat in a diversity of retail outlets.

To progress to a system able to deliver added value brands, the integrators and retailers invested heavily in electronic technology to support the gathering and dissemination of market intelligence and marketing communications. Together these investments enhanced their responsiveness to consumer needs and built up reputations that served to reassure consumers of the consistency and relevance of value incorporated in their products. In the beef marketing system, foreign MNCs from the UK, US and Japan that sourced Australian beef in commodity form were more able to add value and capture the returns due to their superior knowledge of consumer preferences and conditions in export markets, and their established reputations. As the focus of beef's marketing system was on low cost production for export markets with minimal concern for market specifications, this commodity mindset reinforced its position in bottom tier segments. Australian exporters have consistently faced difficulty in competing with better organised and export oriented producers like Argentina and the US for higher value segments.

In spite of regular concerns about the weaknesses of coordination mechanisms impeding the quality, image and competitive success of Australian beef in domestic and overseas markets, piecemeal attempts were made to address underlying problems. On several occasions, often as a reaction to instability in market conditions, formal marketing arrangements were restructured. This reorganisation did not affect the deeper operational levels of the marketing system and configuration of value chains failing to improve the synchronisation or programmability of marketing activities. Thus expected improvements in efficiency, effectiveness and adaptability were not realised. Even during periods of complete control by government authorities, marketing functions remained disjointed and misaligned. During the Second World War, supply and demand were out of sync and temporary initiatives such as rationing and price fixing proved ineffective. Serious efforts to rationalise and align functions did not occur until a major enquiry in 1994 and realignment of the system from 1996 onwards. As chapter four showed, real change in the organisation of beef's marketing system initiated by the retailers has been more pervasive than the scattered attempts of official external authorities.

Dynamics and Constrains of Marketing Organisation

The proceeding section examined the general patterns of value delivery in each marketing system in relation to the roles of different participants and forms of marketing organisation. While the tendency of research is to look for patterns, the real test of an explanatory method's usefulness is the ability to account for divergence within abstract understandings of form (Meat & Livestock Australia, 2004). The following section concentrates on the contrasts between the patterns of value delivery in each meat marketing system to explain the divergences in the forms of value exchanged. From synthesis of the findings, the major points of divergence cluster around the locus of control over the coordination mechanisms – whether they are externalised or internalised. The second differences across phases and cases relates to the responsiveness of the system to changing product market conditions. This is observed through the role and alignment of the coordination mechanisms to meet buyer expectations about the benefits, or added values sought in meat products as discussed previously in chapter two. Together these factors explain the similarities and differences observed during the major phases of configuration and reconfiguration of these marketing systems. These factors are combined to develop a typology of four different modes of value delivery aligned with the major forms of value exchanged in meat value chains. This typology is shown in Table 8. Each phase is discussed in turn to explain the changes and continuities in forms of marketing organisation and patterns of value delivery in each system.

Table 8: Types of Meat Marketing Systems

	Externalised Control	Internalised Control
Passive Response	Inactive <i>Commodity Goods</i>	Submissive <i>Value Added Products</i>
Active Response	Generic Products <i>Reactive</i>	Added Value Brands <i>Proactive</i>

Comparison to Evolutionary Patterns in Food Marketing Organisation

Comparing patterns of marketing organisation reveals that divergence from existing models of food marketing system evolution is more pronounced in the case of beef than chicken's marketing system. Major differences relate to the rapid modernisation of Australia's chicken meat marketing system, compared to beef. This is indicated by the move to direct sourcing of

chicken meat by large retail chains in the early 1960s. For beef this occurred a decade later when the two major chains, Woolworths and Coles acquired their franchise butchers and also built their own meat distribution facilities and began to integrate supply chains through long term contracts with suppliers to assure their supply of meat. In contrast to Australia's domestic beef value chains, independent wholesalers are more active in overseas markets like Japan and earlier in the UK imported meat trade, consistent with the evolutionary model of food marketing systems development. In contrast to many Asian markets, Australian meat processors have integrated their operations with their retail buyers. This has eliminated separate wholesaling organisations and markets in the domestic market whose functions are shared between meat processors and retailers. Meat halls have been eliminated. Some retailers have integrated backwards into boning and further meat processing of wholesale cuts with subsidiaries that are linked to large contracts with abattoirs (eg Coles and ACC) as discussed in chapter 4. This emulates the relationships between chicken meat processors and retailers established several decades earlier. However, unlike the beef segment in Australia, large retail chains did not integrate backwards into chicken meat processing. One major chicken meat processor, Steggles, integrated forward into fast food retailing.

Apart from a brief period up to the 1950s when chickens were sold at auction markets, direct contracts between farmers and processors have dominated. There has been a slight reduction in regional saleyard auctions for sale of beef cattle. Instead of bidding at auction for livestock lots, they enter into forward contracts with producers. Sales can be off the paddock, which is, based on the physiological characteristics of the animals, or 'over the hooks'. Large supermarket chains like Woolworths have also formed forward contracts with farmers. Animals are slaughtered under a kill contract with specific abattoirs. Some cattle farmers now have preferred supplier status with retail meat buyers and receive payment based on meat yield and other attributes 'over the hook'. The other major change in the beef value chain was the increase in lotfeeding and vertical integration of overseas meat processors in this function. Local abattoirs also contract with lotfeeders for cattle placed on feed for specified periods (eg 120 days etc). Outside the direct linkages between value chain participants, since the mid 1980s, there has been convergence towards greater corporatisation of organised marketing. The peak organisation representing interests in the beef segment – AMLC – was devolved from direct government control to encourage greater ownership and participation of members.

Australia's chicken meat and beef marketing systems contain a variety of different value chains. Some chain or channels are more direct than others, especially those operating solely in the domestic market. However there has been a general convergence in the organisation of meat marketing channels, or value chains, driven by large retail chains seeking a more

consistent and flexible flow of product. Alternative channel configurations are slowly being built to circumvent these retail outlets. Typically they are more direct and like Polkinghorne's butchers for example, feature complete corporate ownership from paddock to retail outlet. Such channels are purpose-built to ensure ownership of the product to build niche brands and attract consumers outside the mass markets. Rather than representing a new phase, these channels may be an emergent characteristic of the final phase of food marketing system evolution.

Forms of Value Exchanged

Compared to the definitions of forms of value embodied in meat as discussed in the literature, a finer distinction in the product category between generic products and value added products emerged. Generic products represent standard, minimally transformed consumer meat products. They are of a roughly standard quality, unlike commodity goods. But, they are homogenous with minimal differentiation unlike value added products. Frozen whole chickens in *Cry-o-Vac* packaging and standard cuts of chicken and beef are generic products. Like their label suggests, value added products are further transformed and differentiated products like marinated fresh cuts and HMR heat-and-eat products such as seasoned mini roasts. This category is also commonly named value enhanced products in the chicken meat segment. MLA classifies a product as value added 'if its raw material has been processed to achieve an increased market value' (Meat & Livestock Australia, 2004). From the evidence presented, products falling into this category were differentiated in terms of their tangible and intangible attributes. However the range of different types of value added products, especially in the chicken segment, had become fairly standardised in the last phase. There was more scope for product differentiation in the beef category since the segment had not reached the same level of sophistication or maturity in product development as the chicken meat segment. In both segments, retailers in the fast food sector were more advanced in the management of their added value food product brands compared to supermarket retailers. These outlets had begun to fortify their labels on value added products, rather than building added value beef branded products. They were also hesitant to distribute manufacturers' niche brands in the fresh meat and deli categories. Chicken meat processors, Steggles and Inghams, had greater access to market their branded products in the frozen meal category. Likewise in the smallgoods and preserved meat categories, national and State based companies like Hans, KR, Castlemaine, Primo and Dons had space to promote their brands in the chilled cabinet. Smaller niche beef brands in both the foodservice and retail sectors were

in a nascent state and their limited resources for promotion and market research constrained their growth and development.

Responsiveness to Product Market Conditions

Another novel insight from the empirical analysis was the identification of a passive response to product market conditions in addition to the dominant concept of active responsiveness – market orientation – prevalent in the literature. Proactive and reactive responsiveness were also identified and these were supplemented by two passive modes of responsiveness to value delivery – inactive and submissive modes. This finding complements and balances existing profiles of firms and marketing systems in terms of their market orientation. Further, it relates the different types of responsiveness to the locus of control exercised in a meat marketing system as a key factor influencing the different modes of value delivery.

Development of Coordination Mechanisms

Analysis of the development of systems for assuring quality across the cases revealed that the internalisation of control over their definition in the chicken meat segment afforded the segment with the base to create and capture added value. The reluctance and failure to agree on uniform grading standards and a quality assurance system in the beef segment left it vulnerable to direction by external participants like government authorities and overseas trade and institutional buyers. Rather than being driven by participants themselves, overseas buyers, UK multiple retailers, encouraged the development of early grading schemes to facilitate forward contracting and long term contracts. This suggests that retailer-driven marketing development is not just a new phenomenon as suggested in the food retailing literature.

The multiplicity of markets in which beef was sold encouraged a range of different grading standards and quality control systems, in contrast to chicken's uniform grades and standardised quality control procedures. This complicated and delayed efforts to reach higher value market segments through adding value. The dominance of large supermarket chains in the final phase of beef's reconfiguration process demonstrates their control over meat eating quality in the domestic market. By contrast, external authorities like the USDA and State and Federal Departments of Agriculture in Australia set and enforced quality standards for the export beef segment. This pattern is similar to the use of informal grades and the USDA regulation of sanitation and hygiene standards for beef export and domestic consumption in

the US (Clayton & Preston, 2003). As quality control of beef was internalised, the role of supervision and enforcement passed to meat processors and retail buyers in a similar fashion as instituted in the chicken meat segment 40 or so years before.

Methods of promoting both categories revealed similarities and differences that illuminate the long term impacts of generic advertising and positioning on each category's product image. The case of beef illustrates that the use of sporadic short term campaigns in the domestic market and more extensive campaigns in overseas markets did not meet expectations and appeared to further compromise beef's image. In the domestic market, the attempt to match chicken's positioning as the healthy meat was an expensive exercise delivering short term gains. Similarly, the positioning of Australian beef in Japan as everyday meat contradicted Japanese attitudes toward beef as a luxury food and the strong preference for local marbled product. Belated attempts to reposition the product as high quality was inconsistent with previous efforts and was met with dissatisfaction by levy paying members (ie beef cattle farmers and red meat processors). Participants in the beef segment were even discouraged from investing in R&D to develop differentiated products and from promoting their brands due to the strong use of generic advertising. Although use of generic advertising was less pervasive in the chicken meat segment, the major meat processing companies failed to develop a unique positioning for their products. Retailers used chicken as a strategic component of their branded identities to dominate this space. Ironically efforts of the fast food giants, like KFC, to reposition their images, developed over several decades, were difficult to shift as they were still perceived as unhealthy meal choices.

Value Delivery Modes

From the analysis of beef's marketing system in chapters three and four, three distinct modes of value delivery are identified as tabulated in Table 9. The first phase from the early beginnings of the segment up to the mid 1970s is characterised by an inactive mode of value delivery. The second phase from 1975 to 1996 featured a reactive mode. The third and final phase from 1997 to 2002 is classified as a submissive mode. Five different phases can be discerned from the analysis of its processes of configuration and reconfiguration detailed in chapters five and six. The first phase of configuration up to the late 1950s exhibits the features of an inactive system. This phase is followed by a brief phase in a reactive mode from 1960 to 1967. The next phase, from 1968 to 1979 is classified as submissive. A fourth phase in proactive mode proceeds from 1980 to 1989. The fifth and final phase from 1990 to 2002 is categorised as a submissive mode.

Table 9: Value Delivery Modes for Major Phases of Configuration and Reconfiguration

	Externalised Control	Internalised Control
Passive Response	(Phase 1) Beef (to mid 1970s) (Phase 1) Chicken (to late 1950s) <i>Inactive</i>	(Phase 3) Beef (1997-2002) (Phase 3) Chicken (1968-1979) (Phase 5) Chicken (1990-2002) <i>Submissive</i>
Active Response	(Phase 2) Beef (1975-1996) (Phase 2) Chicken (1960-1967) <i>Reactive</i>	(Phase 4) Chicken (1980-1989) <i>Proactive</i>

Initial analysis of the evidence drawn from the cases suggested that the configuration and reconfiguration of Australia's meat marketing systems did not fit existing models. Firstly, the pattern of value delivery did not exactly follow a forward progression between the stages depicted in studies of food marketing system evolution (eg Kaynak, 1999; Kim, 1989; Mittendorf, 1986). Australia's beef marketing system became stuck as a commodity supplier for over a century and pursued mass production techniques that were not matched by modern food retailing sourcing methods. Instead, foreign firms that sourced the raw ingredient for further value adding overseas pursued these marketing activities and strategies. In Australia's model of beef marketing the continuity of its low cost, low quality value orientation was stronger than conditions for change. A production focus crafted the segment's configuration which in turn infused a market dependency instead of a market orientation. Participants in Australia's beef marketing system were heavily protected by exposure to outside competitive pressures and the geographical barrier of distance and did not demonstrate responsiveness to market conditions until a major crisis in the 1970s. This was reinforced by the removal of government insulation from market forces which provoked a reactive response.

Secondly, this typology identifies four modes of value delivery in Australia's meat marketing systems which specify the major form of value delivered in each. This complements existing models of food marketing system evolution that focus on the forms of organisation, but not on the effects on value delivery. Compared to other country contexts, there was a closer resemblance between Australia's chicken meat segment with this model in general and development of the US poultry marketing system in particular. Firstly, chicken meat processing firms and large retail chains moved to direct sourcing agreements much earlier than the beef segment. Secondly, like its US counterpart, Australia's chicken meat marketing system quickly moved from a subsistence base to a modern food distribution system after World War Two. Thirdly, firms in Australia's chicken meat segment moved from serving

local State based markets, to interstate and national markets and then towards more segmented markets, but not to the same extent as firms and chicken meat value chains in the US. Production and distribution of chicken meat products became localised as it was more cost efficient and effective in preserving the freshness of the product to construct State based production and distribution centres.

Unlike the American experience, export markets for Australian chicken meat products have not been actively sought. The Australian integrators have not achieved the same level of brand awareness and penetration as US meat processors like Tyson or more advanced consumer branded food product manufacturers. In the chicken meat segment a small number of firms in the processing and retail sectors came to dominate first through horizontal integration and then tight vertical coordination. This appears to be consistent with Slater's market integration thesis. Like the US poultry segment, Australian firms used a combination of contractual and corporate forms of vertical marketing coordination (Kim & Curry, 1993). This similarity is associated with the purposeful emulation of US marketing strategies by Australian chicken meat processors. In this way Australia's chicken meat segment has followed the dominant model integrated agribusiness development and modernisation of food marketing systems more closely than the beef segment.

While intensive chicken meat industries around the world exhibit common features and there is little variation in their operational characteristics, there are several distinct features of Australia's marketing environment that distinguish it from its mentor the US. Variations between the two countries' industries are linked to differing input costs, labour practices and economies of scale. As with beef, the efficiency of Australia's chicken meat segment has been hindered by the combination of a small population and a large land mass that constrains economies of scale and efficiencies in production and distribution available in other countries. Lack of large markets and sheer physical distance impeded the achievement of scale in Australia which in turn constrained production costs. Processing capacity in the chicken meat segment and in food retailing in Australia is more concentrated than the US. The Australian production base is also largely disease free unlike the US and is not supported by direct production subsidies. Product market conditions are powerful factors to account for differences in the organisation of marketing in meat value chains and patterns of value delivery in different countries' meat marketing systems (Breyer, 1931).

Australia's beef segment faced greater uncertainty as a consequence of its early entry into export markets. Unlike the chicken meat segment or the pattern of American business development where firms were able to focus on the domestic market first to develop

appropriate coordination mechanisms, the beef marketing system was crudely constructed for the production of low value products. In contrast to the documented internationalisation process of Australian MNCs by Merrett (2002) and Ville & Merrett (2000) the overseas beef trade developed suddenly to serve buyers in distant, dislocated markets. The failure of the price mechanism to convey appropriate information back and forward along the beef value chain severed production from consumption. Production in Australia remained divorced from consumer preferences. After the failure of speculators to further develop the trade, foreign companies based in the UK and US gained control of export processing capacity and externalised control of the value chain. Dominant firms like Vestey were integrated throughout the entire chain, while others were more loosely connected to livestock agents, shipping agents and retail distributors. Integrated chains, like Vestey, operated as closed value chains that outsourced the procurement of low cost cattle, contributing to fix the segment as a commodity supplier.

Similar patterns of coordination by foreign-owned MNCs were observed with each additional wave of FDI in the segment. This evidence suggests that the actions of these foreign firms were influential in shaping Australia's economic development. While this process was directed by local participants and authorities as posited by Butlin (1964), the commodity base of Australia's beef segment was accentuated by agri-food MNCs investment decisions. US and Japanese firms located Australian beef as a strategic source of meat for further processed products for sale in their home and third country markets. By virtue of their superior market knowledge of export markets, these firms were able to deliver superior value. This dependency on foreign firms with a more attuned market orientation constrained the value orientation of the segment that was content to secure a guaranteed, and often artificially high, return for their output. Thus the segment was for most of its history wedged within the popularised model of western business development, rather than replicating or rivalling the model as a serious competitor in global beef markets. For those local meat processors that sought to export directly, they typically formed joint ventures with overseas firms in the later phase, similar to the findings of Ville & Merrett (2000) for Australian firms up to the mid 1960s.

Explaining Patterns of Value Delivery in Australian Meat Marketing

Each of the major phases in the configuration and reconfiguration of Australia's meat marketing systems are discussed in turn detailing the defining features of each mode and the

factors enabling and impeding movement between modes. In doing so, the dynamics and constraints of change and continuity in their marketing organisation are linked to the observed patterns of value delivery. This reveals several key features of the process underlying the transition between different modes of value delivery. The first mode is an inactive value delivery system. This type of meat marketing system is characterised by external control of marketing functions and coordination mechanisms. The system is configured such that participants from outside the value chain direct and delegate marketing roles to participants in the value chain. A second defining feature of this mode is the passivity in the nature of responsiveness of value chain participants to market conditions and consumer preferences. Combined these two characteristics mould an inactive meat marketing system that delivers commodity goods sold on the basis of availability, treated homogenously and exchanged on the basis of price. These goods are not produced for a specific target market and are uneven in quality and quantity of supply. Specific producer identities of these goods are lost once they were transferred or sold to intermediaries. Progressively as other participants secured ownership of intermediate and final meat products they are able to associate their images and reputations with the product. The Australian beef segment can be categorised as having an inactive marketing system throughout its configuration, from its inception to the beef crisis of the mid 1970s. The origins of the chicken meat segment from the early 1900s and its development through to the late 1950s is classified as inactive.

Three interrelated factors contributed to beef's languish in an inactive mode for over 100 years and explain why the chicken meat segment made the transition to the next mode relatively quickly. The first reason was the complex administrative machinery representing Australia's beef marketing system. Conflicting interests were slow to allocate and coordinate marketing activities. Consequently, in the early stages of development, independent intermediaries assumed essential marketing roles, with little opportunity for local producers and processors to learn about markets or to develop necessary marketing capabilities to serve them. After repeated attempts to self-organise and establish a central coordinating authority, external pressure was placed on this meat marketing system to coordinate marketing functions. This formalised control to direct participants to coordinate and align their activities through a SMA – the Australian Meat Board. The disarray contrasts with the level of cooperation between participants in the chicken meat marketing system. Following the emergence of interest in chicken meat birds after the First World War participants began to collaborate and formal co-operatives were established to better organise marketing functions. An ethos of coordination, both formal and informal, and acceptance of marketing responsibilities continued to be a cornerstone of the segment's configurative process.

The second reason for the beef segment remaining in an inactive mode was the artificial stimuli from external sources - speculators and government agencies - that fuelled expansion of the production base, geared for high volume, low value agricultural produce. When the local market soon became saturated in the early 1800s, export markets were desperately sought to absorb the surplus, without first properly configuring the meat marketing system to support this trade. Recurrent control of the beef marketing system by Australian and overseas government authorities prolonged the segment's immunity from market forces. External authorities constructed the beef marketing system for commodity outsourcing rather than active orientation to final user needs and preferences. Attention was placed on production and quantity over market specifications and quality.

This artificial environment was pronounced during periods of Australia's long term supply agreements with the UK during the First and Second World Wars and up to the mid 1950s. These agreements discouraged and even precluded participants from developing more suitable market outlets for their products. Near absolute control of the beef value chain by external organisations insulated participants from competitive forces and blinkered them from consumer preferences. In contrast, Australia's bulk purchase agreement for chicken meat with the UK government was limited to 2 years. Without the security of guaranteed purchases and the collapse of overseas markets, the segment focused on the domestic market. As this market soon became saturated and faced competition from other meat product categories, the segment became more engaged with local needs, at first in a reactive manner.

A third factor explaining chicken's swift transition to a reactive mode of value delivery was the synchronisation of supply arrangements to guarantee the regularity of supply. This intensified price based competition among suppliers encouraged by the loss leader strategy of retail buyers. Seeking to assure supplies of low cost frozen chicken, supermarket chains harboured price wars between suppliers. Similarly as the beef marketing system was fully exposed to market forces following the beef crash in the mid 1970s, price became the universal arbitrator and signal of value. Consequently, the beef segment tightened its focus on lowering costs to the exclusion of other value adding activities such as quality improvement. A culture of minimum compliance to external standards became entrenched that was difficult to dislodge.

The second mode is a reactive value delivery system. Again, control of marketing functions and coordination mechanisms are externalised. The active character of responsiveness to market conditions differentiates a reactive system from an inactive one. Participants demonstrate an increasing awareness of market conditions and specifications and respond by

delivering minimum value. Compliance with minimum standards is required to maintain market access and thus the ability to compete for market share. Since participants are react to market demands they do not deliver a real point of differentiation from competing products. Generic products are the dominant form of value created and distributed in a reactive meat marketing system. These products are characterised by minimum compliance to user requirements and thus are standard, so do not target specific segments or niches. Price is again the main arbitrator between buyers and sellers, but buyers may develop loyalty to suppliers that are better able to provide consistent supply at competitive prices. Periodically buyers may switch between suppliers to initiate price competition. Suppliers might also initiate a price war to undercut competitors. Australia's beef segment moved into a reactive mode of value delivery following the fallout from the beef crisis in the mid 1970s up to the late 1990s. The chicken segment remained in a reactive mode between 1960 and 1967 as it made a swift transition to a submissive mode.

Three key factors explain the rapid shift of the chicken meat marketing system between reactive and submissive modes and beef's slow transition. The first reason is the relative ease of attaining agreement on joint efforts to standardise product quality, improve the product and coordinate marketing through internal consensus based on voluntary self-organisation. In contrast to beef, the chicken meat segment quickly established an umbrella organisation that defined and unified the different interests in each sector of the value chain. Rapid and universal adoption of a simple grading scheme by chicken meat processors provided the platform for product proliferation and limitless value added variations to the standard core product which was an effective carrier of added flavours and textures.

Varied interests in the beef segment were reluctant to converge to support solutions to standardise product quality, or to improve coordination and in turn the internal functioning of this meat marketing system. In the absence of internal consensus the segment relied upon external government authorities and MNCs to direct basic flows of resources in meat value chains. This resilience to internalise control is demonstrated in by persistence of compulsory levy based marketing schemes and the enduring presence of foreign-owned agri-food firms. Levies were collected from producers and processors in the beef segment to fund collective generic promotional campaigns in domestic and export markets. These efforts did not address the weaknesses in coordinating the beef value chain underlying negative perceptions of beef's eating quality. Roles remained hard to delineate and where local organisations were unwilling, unable, or slow to perform them, they were outsourced to independent or corporate intermediaries by choice or default. This can be explained in part by the lack of resources to invest in developing these capabilities due to the focus on increasing throughput. It was not

until the 1990s when serious failings with quality control restricted access to major export markets that more stringent internal quality assurance standards were introduced. Responsibility for assuring beef product quality was also gradually internalised and a uniform trading language (ie AUS-MEAT) was developed first through regulation of quality control in the export sector. Accountability for quality control was incrementally devolved to companies based on generic HACCP principles. These systems were complemented and superseded by retailers' proprietary QA systems that dictated standards of quality in production, processing and distribution at all points along the value chain through to end users.

The second factor that enabled chicken's transition was purposeful reinvestment of earnings from the proliferation of sales of a generic product - frozen chicken - into product differentiation. After configuring a system capable of delivering a high volume, low cost standard product the integrators built facilities for producing further processed products and devoted scarce resources to develop new product ideas into a variety of differentiated products. Steggles also expanded into the fast food sector extending its product range for the ready-to-eat market. As revealed in the major industry enquiry in 1994 into the red meat industry the beef segment, particularly the processing element, made minimal investments in R&D to develop new products and adopt new technologies. This role had been assumed by the segment's statutory marketing and research corporations – the AMLC and the MRC – but their success in commercialising new technologies was limited.

The final factor explaining the transition of both segments to deliver value added products is the application of the whole-of-carcass concept. Rather than aiming to earn higher prices for the whole carcasses, the integrators, in concert with their retail customers sought to increase the total value of the chicken carcass through disassembly and reassembly by adding greater value to individual cuts. As a result, the processors drove a proliferation of value added products, transforming the whole chicken into an array of offerings from frozen microwave dinners to chicken nuggets – a staple in the nation's leading hamburger chain. The beef segment discovered this concept much later. Independent butchers first applied the concept inspired by the 'short cuts' advertising campaign in the mid 1980s and then supermarkets a decade later with pre-cut packs like stir-fry strips.

The third mode is a submissive value delivery system. Unlike the previous two modes, the submissive mode is characterised by internalised control of the meat value chain. The responsiveness of the system to changing trends and user requirements takes a passive form. The dominant link or participant in the meat value chain controls the flows of resources and

delegates marketing roles and responsibilities to other participants. Mechanisms to collect and disseminate market intelligence are in place to detect changes in the product market environment. However the nature of the response to changes therein takes a passive form resembling submission to customer demands. Suppliers focus on customer satisfaction in a cost effective manner to deliver value added products. Buyers are willing to pay for the perceived value of products. Price setting is a process of negotiation between buyers and suppliers. As quality assurance systems have been put in place, products are relatively standardised in terms of quality and additional benefits. Thus the quality and quantity of supply is assured and participants may formalise their procurement arrangements in contract form like preferred supplier and long term purchase agreements. As the benefits that these value added products offer are relatively standardised, similar products can be substituted relatively easily and do not engender strict buyer loyalty to suppliers. This value delivery mode characterises the final phase for beef from 1997 to 2002. It was also demonstrated in the case of the chicken meat segment between 1968 and 1979 and again between 1990 and 2002.

A critical factor explaining the transition of the chicken meat segment to a proactive mode is sustained investment in integrated marketing communications to support the promotion of brand identities. After securing retail outlets for their products and creating a range of differentiated value added products, the integrators began to build their brands. They targeted Australian consumers in a pull strategy that was designed to persuade them to demand that retailers carry their brand. Through their extensive advertising campaigns consumers did become more familiar with and aware of the nation's two major chicken meat processing companies. Although in the long term these companies failed to sustain a brand presence due to the generic positioning of their brand associations as in the case of beef's 'Aussie beef' campaign in the Japanese market. At the same time, supermarkets and fast food chains competed to build their identities as superior food providers. Through intensive, integrative marketing communications supermarkets managed to create and invigorate their fresh food identities and reinforce their direct relationships with consumers. They increased the visibility and awareness of their store brands, placing their logos and slogans on product packaging, direct mail, television and print advertising. Chicken products have consistently been a strategic component of their fresh food identities. Fast food chains retailing chicken and beef products as their primary meals invested heavily in corporate promotion in the 1980s and through the 1990s. The promotional activities of all retailers became more conspicuous from the mid 1990s as the chains competed to maintain market share in crowded retail mass markets.

The fourth mode is a proactive value delivery system. Like the submissive mode, control is internalised, but responsiveness is active in nature. Participants in the value chain actively seek and respond to market intelligence on consumer trends and target more narrowly defined niche segments with added value brands that meet or exceed notions of value that buyers seek in meat products. In some cases providers of added value meat products attempt to drive and lead product innovation and consumer preferences. Added value brands offer a unique, novel and/or exclusive form of value to meat consumers. This is incorporated in the set of associations attached to the brand's identity. Branded meat products typically attract a premium price from buyers that perceive the brand as delivering them added value. Brands that can sustain their unique point of differentiation valued by consumers are able to develop purchase loyalty. Retailers seeking to guarantee their customers access to the brand secure supply through long term purchase agreements. Prices are determined through negotiation between suppliers and retail buyers.

While there are a handful of firms and alliances attempting to build branded products in the beef category from the mid 1990s, these limited cases do not represent the dominant value delivery mode for the segment. Chicken's marketing system from 1980 to 1989 fits this mode most closely. Early figures in the segment sought inspiration from more mature overseas markets and leveraged these product ideas and translated them for the Australian market with varying success. Consumers seeking variety, convenience and nutrition responded positively to the new products. The sequence of investments made to lower chicken production costs, ensure consistent quality, develop new products and promote their identities centralised processors' control over added value in the chicken meat marketing system up to the late 1980s. However, retailers' control of the chain during the 1990s confined chicken meat processors to associate their name with value added products like frozen HMR products. Fast food chains were most prominent in establishing their brand identities through franchise agreements. Although their attempts to retain market share in a crowded marketplace through repositioning their corporate images and revitalise product assortments were judged less effective.

The major factor shaping the rigidity of beef's marketing system in a submissive mode and the shift back to this mode for chicken is the concentration of retail authority in the meat value chain. Increasing investment by retailers from the mid 1980s shifted the balance of power in their favour and enforced new rules on their suppliers. Their internalised control of the value chain was visible in specified quality standards placed on suppliers, delegation of roles in value adding and restricted access to consumer markets for some smaller suppliers that could not meet their standards. As suggested by resource dependency theory, this was

designed to increase suppliers' dependency on retail buyers and reduce their dependency on individual suppliers. This has been assisted by their strategic position in the meat value chain, closest to consumers. As a result, retailers' efforts to organise the marketing system have been more pervasive than other participants or external authorities akin to the development of food value chains of other western markets in the US and western Europe. As many consumers face more time pressures regarding their food choices and meal decisions the supermarket space where these decisions take place has become a tightly controlled, scheduled atmosphere. Retailers have built an enviable knowledge of food buying behaviour and the added values their customers prefer. This market intelligence is applied to place them as the most influential link in the meat value chain conditioning consumers' expectations of value in meat marketing systems.

Catering largely for mass markets, retailers have focused on a narrow range of shared values sought by consumers like freshness, convenience and low prices, and have constructed and moulded their value chains to deliver these benefits. Their responsiveness to market intelligence has been passive rather than active. This is evidenced by the limited development or introduction of new product lines in either the fresh beef or chicken meat product categories. For each of the major supermarket chains, Coles and Woolworths, and fast food chains like Red Rooster, KFC and McDonalds there is lack of differentiation between their products or positioning based on unique attributes. Thus both segments have become categorised by wide access to a range of value added, standardised meat products and meals.

As the division between home meal preparation and eating out becomes even more blurred, retailers have tried to broaden their appeal through repositioning and heavy promotion. But they cannot succeed in creating added value without first developing uniquely differentiated products that deliver additional benefits. Products that offer a clear point of differentiation and superior value target niche markets in both product categories in an attempt to develop added value brands. In the chicken meat segment, Lenards franchise retailer has been the most successful at building an identifiable store brand. In the free-range, fresh chicken segment Baiada has attempted to build a brand image for its range of added value free-range chicken products. As other retailers try to replicate Lenards' and Lilydale's unique value propositions, these brands face dilution and absorption into mass markets. Similarly in the beef segment, a handful of participants are attempting to develop added value brands, but face constant pressure from more powerful retail identities confining them to the periphery. As retailers operate as enclosed value chains to promote their store labelled products and brands, it is difficult for niche players to enter via retail mass markets. Although corporate ownership and franchising in retailing have been pervasive forms of vertically coordinating marketing

systems, the resources required prevent most upstream participants from controlling their products up to the point of purchase and consumption. As a result, their distribution has been restricted to smaller, often independent retail butchers and specialist poulterers.

Conclusion

Synthesis of the findings from the two in-depth cases revealed that the observed patterns of marketing organisation and value delivery differed between Australia's beef and chicken meat marketing systems. As demonstrated, the chicken meat marketing system mirrored rapid changes in the marketing organisation of other major poultry value chains, especially the US. While it did not follow the exact progression in its evolution as indicated in previous studies of food marketing system organisation it did move quickly to the final phase of these models. This was characterised by a continuous process of rationalisation, restructuring and concentration into larger and more efficient operational units in processing and retailing. These elements were linked through long-term direct sourcing agreements that have been a distinctive feature of this meat marketing system. Overall this supports Slater's (1970) market integration thesis of successive phases of horizontal and vertical integration in food marketing channels. Due to marked differences in product market conditions as discussed Australia's beef marketing system followed a different path of marketing organisation and value delivery. This meat marketing system moved through different modes of value delivery at a much slower pace and does not support the glorified description of Australia's beef segment by many economic and business historians. The beef segment was stuck in a low cost, high volume value orientation and depended on overseas markets for its survival. As marketing functions were of secondary importance to maintaining large volumes of supply, marketing of Australian beef did not develop in the same fashion as the chicken meat product category. By contrast, the chicken meat segment remained focused on the domestic market. Both meat segments returned to a submissive mode in the final phase of their evolution. In this value delivery mode value added product dominates Australia's meat value chains as supermarket retailers internalise and tighten their control over marketing activities in vertically coordinated marketing systems. This is similar to the dominance of large retail chains in other western economies and increasingly in less developed countries' markets.

Since existing models have been unable to explain these patterns, an alternative typology of modes of value delivery was developed. In doing so, this typology crystallised the factors responsible for the dynamics and constraints of marketing organisation and value delivery in

Australia's meat marketing systems. As demonstrated, meat value chains are more able to adjust to changing conditions when the drive for reconfiguration comes from within. However, internally driven change was insufficient to enable the transition between modes. Responsiveness to dynamic product market conditions also needs to be taken into account to explain the ability of value chains to deliver higher forms of value. Passive response profiles were revealed that have largely been ignored by researchers and require further examination. Together these two factors offered a finer distinction in modes of value delivery and the forms of value exchanged in meat marketing systems than defined in prior literature.

By examining the sequence of the role and alignment of coordination mechanisms Australia's primary meat marketing systems, preconditions for transition between value delivery modes were specified. These include the installation of effective and adaptable mechanisms for guaranteeing the supply and quality of products to permit movement between reactive and submissive modes. The analysis and synthesis also revealed that efforts to transform the image of meat product categories and specific products depend on the adaptiveness of quality and supply assurance mechanisms to ensure the substance underlying the image are aligned to meet market specifications for meat products. Progression to forms of value that seek high value segments and sustainable returns relied on the purposeful integration of marketing functions through the alignment and integration of coordination mechanisms. This was characteristic of the chicken meat segment as marketing functions were tightly controlled and synchronised to support increasing production and quality standards. Typically this involved sustained investment in each component of the marketing infrastructure. Maintenance of these components affected the responsiveness of organisations to product and market conditions, the ability to control marketing functions, and in turn to direct patterns of value delivery in each meat marketing system. This was demonstrated in the gradual shift in the balance of power downstream from farmers, to meat processors, and finally to retailers in both meat value chains. Beef cattle and bird farmers in Australia have not used voluntary forms of horizontal or vertical integration to achieve the level of bargaining power of meat processors or retailers that has underpinned the shift in power in Australia's meat value chains.

Through their horizontal and vertical dominance retailers were able to assign marketing roles and control the creation and distribution of value. While corporate ownership was pervasive in each system over consecutive phases it was not a precondition for attaining added value brands for beef or chicken meat products. Neither were high levels of corporate ownership by one participant or sector synonymous with the delivery of added value. Control was an important factor, but progression to deliver higher valued products also depended upon the

interplay of responsiveness to market conditions. As supermarket chains fell into a passive mode of responsiveness to serve mass markets of food consumers, innovative organisations sought alternative outlets to distribute their added value meat products. These products typically targeted niche segments through more specialist outlets affording limited access. Although with limited resources these organisations grapple to extend the awareness and penetration of their niche products and brands to capture high value segments from the major retail chains. The final chapter of the thesis that follows reflects on the major contributions of this research to existing knowledge and practice including the primary implications for managers and public policy makers in Australia's beef and chicken meat marketing systems. Suggestions for future research following the outcomes of this study are also discussed.

Chapter Eight: Conclusions & Implications

Introduction

Rising global demand for animal protein products, outbreaks of deadly livestock diseases and restrictions on meat imports in several markets are a few of the events and forces reshaping marketing organisation in meat marketing systems. Increasing uncertainty and competition is driving participants in meat value chains to improve the coordination of marketing activities in order to assure delivery of high value products to end consumers. They are also seeking ways to increase their influence and control over marketing coordination mechanisms to capture the returns for their efforts. Researchers in Australia and overseas have signalled the beginning of the transition of many agri-food marketing systems to a market orientated approach to deliver customer value (Meulenbergh & Viaene, 1998). While knowledge is limited on how to achieve this quickly and effectively, this research suggests that it is premature to classify Australia's beef and chicken meat segments as actively market oriented, given their dependency on export and local markets respectively.

As this thesis has demonstrated Australia's beef and chicken meat value chains have followed different patterns of marketing organisation and value delivery. Australian beef has been singled out repeatedly as inconsistent in quality. Coordination of resource flows between cattle producers, meat processors and distributors was often misaligned and relations among participants were adversarial. The segment has been frequently criticised as limited in its ability to add value to the raw material and develop further processed, value enhanced products (House of Representatives Standing Committee on Industry, 2000; Senate Rural and Regional Affairs and Transport Committee, 1997). Just five per cent of beef sold in the domestic market is sold as branded products (Cawood, 2003). Added to these concerns there has also been a gradual shift to consumption of chicken meat, displacing beef, in Australian and other western markets. In contrast to the early development of Australia's beef segment at the end of the nineteenth century, the chicken meat segment emerged after World War Two and modernised quickly to become a serious competitor to beef.

To understand the shifting patterns of value delivery in Australia's two major meat segments this thesis explored and analysed how the underlying organisation of marketing activities has affected the value embodied in meat delivered to end consumers. In particular the influence that the alignment and control of mechanisms to coordinate marketing activities have in this

process was investigated empirically. The main findings in relation to this research problem and central research question are explicitly restated along with the contributions and implications for theory and practice in the disciplines of agribusiness, marketing and business history.

Major Findings and Contributions of the Research

This study of how the organisation and coordination of marketing activities in meat marketing systems affects the ability of participants to deliver value makes a number of important contributions to research in the disciplines of agribusiness, marketing and business history. The research developed a typology of modes of value delivery in meat marketing systems. Hunt (1983: 349) explained that a typology is a scheme for classifying phenomenon that is often ‘the first step in theory development’. This typology is based on the different types of responsiveness observed in meat marketing systems – passive or active, and the locus of control over marketing coordination mechanisms – external or internal. Together these two elements are combined to create four types of value delivery modes for Australia’s meat marketing systems. These four modes are: inactive, reactive, submissive and proactive, and fit distinct phases in the evolution of Australia’s beef and chicken meat marketing systems. Each mode is aligned with the major forms of value exchanged in each – commodities, generic products, value added products and branded products.

This typology crystallized two forms of control in terms of the locus of control over marketing decision making – internal and external – as a key to understanding the differences in patterns of value delivery between meat marketing systems. In making this distinction it stresses the importance of participating organisations’ strategic position in meat marketing systems and illuminates how meat value chains are susceptible to capture by external participants seeking to source lower value intermediate meat products. As shown in the case of beef, early control of supply by off-shore intermediaries and government authorities fostered a dependence on these participants to coordinate resource flows between production and consumption. As beef cattle producers and meat processors were unable and unwilling to develop the necessary marketing capabilities and make the required investments in each of the marketing coordination mechanisms, control passed to independent intermediaries and government authorities outside the immediate value chain. Value chain participants did not designate a leader and lacked the internal drive or consensus required to coordinate marketing

functions internally. This contrasts with the emergence and evolution of Australia's chicken meat marketing system detailed in chapters five and six.

Comparing the evidence from these two critical cases in chapter seven there is support for the notion that voluntary forms of organised agri-food marketing and internalised control of coordination mechanisms by value chain participants are more effective in driving the progression to deliver higher forms of value. This is linked to the fact that value chain participants retain ownership of the outcomes and are therefore more involved and willing to support initiatives to improve the coordination of the meat marketing system. This observation must be confirmed through examining and analysing additional cases of agri-food marketing systems in other settings.

The typology crystallised the major findings of this study to address the research question at the centre of this thesis, stated as follows:

how does the configuration and control of coordination mechanisms influence the delivery of value in a meat marketing system over time?

Tracing the development of the four coordination mechanisms - quality assurance systems, supply coordination, market orientation and integrated marketing communication - provided insight into how their configuration and control affected the ability of each meat marketing system to deliver value at each phase of their evolution. The findings demonstrate that marketing coordination mechanisms require purposeful integration and alignment with their dynamic market environment. While it is difficult to link specific forms of organisation to the delivery of higher forms of value, the evidence from Australia's beef and chicken meat marketing systems indicated that alignment of coordination mechanisms underpinned the delivery of value. Consistent with previous research, vertical alignment was identified as a prerequisite for effective coordination of flows in agri-food value chains (Streeter et al., 1991). Vertical coordination reduces the complexity and uncertainty inherent in marketing agriculture based food products that face hazards less prevalent in other product markets (Schaffner et al., 1998; Tomek & Robinson, 1990).

Integration and alignment of these mechanisms was more pervasive in the chicken meat segment than for beef. This was achieved to a large extent by investment in the marketing infrastructure by the integrators in concert with their retail and foodservice buyers. In the case of beef this role was left largely to marketing service providers, intermediaries and government authorities. Each of these groups demonstrated little concern with making

permanent investments in the marketing infrastructure. The latter group focused more on investing to maximise output than on improving the coordination of supply and demand. As shown in the last phase of beef's marketing system evolution, through devolution of responsibility for quality assurance meat processors and retailers began to invest more in marketing functions and started to internalise their control of the coordination mechanisms. As these participants made investments in systems to assure the quality of their products they were more willing to invest in programs to promote their associated identities.

Evidence from the comparative analysis also suggests that resources devoted to market intelligence and marketing communications should be sustained as much as on-farm R&D to maintain internal control of the chain. These mechanisms should also be aligned to ensure that unique value propositions are created for specific market segments rather than producing commodities or generic products searching for low cost, high volume markets. Overall, the locus of control of marketing coordination did appear to manifest in differing patterns of value delivery in the two meat marketing systems. External control of marketing coordination was associated with commodities and generic products whereas internal control was associated with value added products and added value branded products. As only one phase of internalised control was associated with added value branded products, further evidence is required to support the generalisability of these findings. In addition these value modes also need to be interpreted with proper regards to the responsiveness of each marketing system, the other element of the typology. In terms of the alignment of coordination mechanisms with the marketing environment, this study revealed that the responsiveness or adaptability of coordination mechanisms was as important to the long term development of each segment as efficiency and effectiveness criterion.

The experience of Australia's beef segment also illustrated that some coordination mechanisms like quality assurance systems were resistant to internal control due to the variety of interests involved. Large numbers of diverse participants made it more difficult to achieve agreement and support for system wide initiatives. At the same time external control of the beef value chain during the Second World War demonstrated that some mechanisms, like price, and practices like standardisation of meat cuts, were adverse to direct external control by government authorities through regulation.

The aim of this study was not to examine participants' motives underlying forms of organisation or investments made in coordination mechanisms, but rather to focus on the impacts and value outcomes. As argued in chapter two resource dependency theory offered a suitable theoretical lens to understand the mechanics of the shifts in participants' influence

and attempt to gain control over marketing coordination mechanisms to strengthen their power in the value chain. The dependency on external sources of resources and loss of marketing control in Australian beef value chains fit the theory's basic premise (Pfeffer & Salancik, 1978). In the case of both beef and chicken meat value chains, large supermarket chains made strategic investments in information technologies, inventory control and scheduling, quality assurance systems, store brand advertising and promotion to control the coordination mechanisms that directed the flow of resources between them and their suppliers. In doing so they effectively increased their power by raising the dependence of their supplier on them as major customers. These findings accord with the evidence from studies of contemporary agri-business, food marketing and retailing that the power has shifted to food retailers, particularly large national supermarkets in the past twenty years on the basis of purposeful investments they made (Shaw, Burt & Dawson, 1989; Burch & Goss, 1999). Tracking the investments made by Australia's two major supermarket chains, Woolworths and Coles, in chapter four in the case of beef and in chapter six in the case of chicken meat, revealed that they first built and expanded their outlets to achieve greater horizontal integration and then gradually acquired their franchise butchers and major wholesaler and established meat processing subsidiaries to achieve greater vertical integration. Investments made in electronic technologies to further integrate their supply chains and streamline physical inventory flows consolidated their power in the meat value chain. At the same time the integrators purposefully consolidated processing capacity to achieve greater horizontal integration. With fewer resources available to vertically integrate forward and backward along the value chain, Australia's major chicken meat processing companies coordinated supply through contracts with chicken farmers and forged long-term supply agreements with the major supermarket chains. They were then able to invest slack resources into further processing and product promotion.

This thesis links contemporary changes in the marketing organisation of two of Australia's major food products to their early origins and identified the specific changes and continuities in their evolution. Synthesis of the historical evidence in chapter seven confirmed, as posited in chapter two, that the phases and progression of marketing organisation in Australia's meat marketing systems did not exactly match the descriptive models of food marketing system evolution in general or forms of organised agri-food marketing in particular. While the general pattern of food marketing system organisation broadly fit the evolutionary descriptive phases advanced by scholars of economic and marketing development, the timing of shifts and reorganisation differed between Australia's beef and chicken meat marketing systems. While the transition between modes of value delivery was sequential, it was not a deterministic progression as evidenced by the chicken meat segment's return to a submissive

mode and the inability of the beef segment to move beyond this mode. Timing of the transitions also differed, with the beef segment remaining stuck in an inactive mode for over a century and the chicken meat segment moving quickly between modes. Understanding the sequence and timing of transitions could be enhanced through application of the typology to additional cases. This opens up a field of research on the organisation of agri-food marketing systems in countries like Australia which are under-represented in research in business and marketing history.

This study confirms, as argued, that historical research in food marketing and business history needs greater delineation between product categories, as product market conditions differ and in turn are significant in explaining differences between segments of an industry. Despite the claim by Ville & Merrett (2000: 13) that 'Australia has been an outlier from the major industrial economies in many respects', patterns in organisation and coordination within Australia's chicken meat marketing system were similar to its mentor, the US industry. Similarities in the use of vertical coordination by chicken meat processing firms meant that the segment did not require a marketing board to align production and sales. Instead, a voluntary inter-sectoral organisation was established to coordinate the segment's varied interests. The relative ease with which the ACMF was formed contrasted to the lack of support for organised representation of interests across on-farm producers and meat processors. Instead, coordination of certain marketing activities was mandated and there was initially a strong lack of grassroots support for compulsory levies and participation. As this statutory institution became entrenched, there was a general acceptance of the status quo and reluctance to replace it, except through legislative changes to statutory marketing arrangements. This accords with Veeman's (1990) argument that there is a tendency for continuation of the status quo in agricultural policy, even temporary measures, due to pressure exerted by beneficiary interest groups and policy administrators.

The detailed descriptive, contextual analysis presented in the four chapters revealed different forms of marketing organisation operating in and across meat value chains. Different forms of integration and alternative methods of coordination were seen to co-exist within value chains. In his history of the management of modern forms of production and distribution in the US, Chandler (1977: 401) argues that the organisation of the meat packing industry

tells much about the competition between and the growth of vertically integrated enterprises that came into being in order to coordinate high volume flows from the raw materials suppliers to the ultimate consumers. Profits resulted from continued cost cutting, improved administrative coordination, greater use of existing facilities, and

expansion overseas. Such growth into new products and new markets often required the building of new suborganizations to coordinate the flow of goods.

However such complete ownership of production and marketing functions through vertical integration was not as prominent in Australia's beef value chains. Nor was it synonymous with the delivery of higher forms of value or more sophisticated marketing techniques. Although high levels of ownership at specific links in the value chain were pervasive throughout the phases it did not guarantee a proactive mode of value delivery. Retailers serving mass markets, particularly in the final phase of each system's reconfiguration, were slow to respond to the emergence of niche markets and develop more targeted product concepts. Instead they focused on driving greater programmability, efficiency and cost savings in product procurement by reversing supply flows from a push to a pull driven system. Their focus on low cost and supply regularity encouraged more innovative suppliers to seek alternative distribution outlets like boutique butchers for their added value products. The unresponsiveness of major food retailers to the entry of new meat products is linked to the tight control they exercise over marketing systems that restricts access to consumers. This has the undesirable effect of limiting the range of consumer choice (Bucklin & Stasch, 1970).

Since corporate forms require substantial commitment of resources across production and marketing functions, this may leave insufficient resources to proactively lead customers or respond to unexpected changes in product market conditions. Individual companies and collectively value chains need to achieve an appropriate balance between ownership and outsourcing to provide the flexibility needed to lead the market instead of simply serving customers. As Sanchez (1995: 140) explains, 'in dynamic product markets that require frequent adjustments in product strategies, flexibility in coordinating the uses of product creation resources consists of flexibilities to *redefine* product strategies, *reconfigure* chains of resources, and *redeploy* resources effectively'.

In the case of chicken, advancement to higher forms of value was achieved through a combination of corporate ownership of functions and outsourcing, through vertical coordination. Strategic investments made by the integrators and retailers in each coordination mechanism demonstrated that they could still maintain control of marketing functions without owning every element of the value chain. In moving away from a traditional agricultural marketing system, each link in the chain became more specialised and outsourced functions that could be performed more effectively by other links. To maintain control over these functions some links, particularly meat processors and retailers, forged long term contractual agreements to assure supply of critical raw ingredients and further processed products. These

forms of quasi-integration are more flexible than corporate ownership and may explain retailers' preference for long term supply agreements instead of backward integration.

Implications for Managers

For managers in different sectors of Australia's beef and chicken meat segments the typology developed here offers a valuable tool to analyse how patterns of marketing organisation develop over time and what impacts this has on the forms of value they are capable of delivering. The conceptual framework presented in chapter two can be adapted to identify the components of their particular value chains and more broadly the external elements of the marketing system. This systems level conceptualisation supplements the often narrow micro organisational perspective taken by marketing managers on a daily basis to understand the operation and functioning of their industry. This conceptual framework allows managers to identify their role in shaping and maintaining each coordination mechanism. Drawing on their own experiences and the experience and memories of colleagues and business partners they can gain a better understanding of how their investments and actions affect the development of marketing infrastructure in their particular agri-food marketing system. By analysing each component and how they function together will assist in planning future investment decisions.

Managers can use the typology as the basis for evaluating the type of marketing systems their firms and value chain partners operate and to assess their role and position within it. Furthermore, chain captains and leaders of marketing authorities and voluntary co-operative organisations can take into account the strategic resources and investments required to construct marketing infrastructures that support the delivery of higher value products and brands. This will assist to ensure scarce resources are not spread thinly across multiple markets or marketing functions rendering them unable to respond to changes in product markets. Organisations should also consider the long term investments needed to internalise marketing functions and to reposition themselves within a meat value chain. At a broader strategic level, participants located at different links in the value chain need to consider the collective pool of resources available to maintain each coordination mechanism and reconfigure the system where appropriate. Decisions need to be made about how resources are allocated to update and upgrade the capacity of the marketing system to deliver superior forms of value to all participants within the chain. Support for and adoption of such whole-of-chain initiatives can be improved by demonstrating the benefits and returns for participants. This is pertinent to the introduction of on-farm quality assurance systems like the NVDS and

NLIS where beef cattle farmers find it difficult to see the financial benefits they could receive from their expenditure and adoption of new technologies and procedures.

Evidence of the growing power of Australia's major supermarket retailers compared to their suppliers may indicate to marketing managers of meat processing and food manufacturing companies that investing in independent new product and brand development may be a long and financially detrimental process. Supermarket meat buyers are reluctant to accept new products unless they are developed in partnership with food suppliers and less willing to support new brands. Consequently, innovative food manufacturers should target niche markets in Australia and overseas where they can compete. In contrast to the experiences of many of the large meat processors presented in this thesis, these companies should invest in market research to initially determine the match between their product or brand and customer preference and acceptance. Meat processors and manufacturers may also need to consider further diversification to cater for the growing food service demand for value enhanced and portion controlled meat products in Australia and elsewhere.

Implications for Public Policy

A common criticism levelled at facilitating agencies and public policy officials is the focus given to initiatives that support production and maximising output, at the expense of investing in the marketing infrastructure (Mittendorf, 1986). This imbalance of public funding to support agri-food value chains is common in many less developed countries, but was also demonstrated in Australia's beef marketing system for over one hundred years. Continuity in this production focus was the high levels of funding allocated to on-farm R&D while funding for off-farm research, like consumer sensory evaluations of beef quality and retail market research was neglected. This underinvestment proved detrimental in the long-term when efforts were made in the late 1980s to move into higher value segments. It also damaged the perception of beef in the domestic market. As alternative meats became more readily available, abundant beef that was inconsistent in quality did not generate greater utility for many Australian consumers. Instead, as predicted by Jevon's theory of diminishing marginal utility, alternatives were favoured and beef consumption was gradually displaced by chicken. Investment in the marketing coordination mechanisms was more evenly spread and maintained in the chicken meat segment. Most participants in the beef value chain remained fixed on value in terms of its exchange value and neglected consumers' value in use as the basis for their value creating activities. Investment in the marketing coordination mechanisms

was more evenly spread and maintained in the chicken meat segment. Public policy decision makers and managers of industry associations that allocate funds for agri-food R&D must ensure that resources are apportioned between on-farm and off-farm research, particularly to whole-of-chain initiatives to facilitate the coordination of marketing functions.

As well as maintaining funding for marketing, evidence presented from the experience of Australia's two major meat marketing systems clearly demonstrated that managers and administrators of public research organisations, industry organisations and jointly funded public private organisations need to integrate on-farm R&D with market research. This will ensure that research projects aiming to enhance on-farm productivity and livestock attributes actually contributes to enhance the utility for the end consumer. There are indications that the red meat sector is beginning to reorient its production focus to consider the meat product attributes valued from the consumer's perspective and this should be maintained.

With the imposition of compulsory levies and organised marketing schemes, there is the potential for the status quo in national agricultural support policies to be maintained. The legislated control of Australian red meat marketing which became established after the Ottawa agreement encouraged the continuation of compulsory participation through the payment of levies. Unlike the beef segment, participants in the chicken meat segment followed a path of voluntary self-organisation and were more active due to the desire to organise and participate in this way. Differing forms of organised marketing schemes and coordination of interests offers several important lessons for public policy makers in agri-food industries. Firstly, the evidence suggests that self-organisation, where efforts are supported by participants, have a greater chance of adoption and participants making positive contributions than when imposed through formal regulation. Secondly, continuation of funding for generic advertising as the main form of promoting consumption of meat products can harm the long-term image of the product category and potentially discourage innovative firms and organisations from investing in product and brand promotion programs. This was voiced by meat processing firms in Australia's beef segment and requires further examination to confirm whether generic advertising of agri-food products is a major disincentive to private investment in product and brand specific advertising and promotion.

Whereas research in agribusiness has tended to assume that certain marketing roles can be performed better by government agencies, this view is increasingly being challenged. Dependency on external authorities as indicated in the case of beef can prove unhealthy in the long run as internal marketing capabilities and coordination mechanisms are not encouraged to develop. Where government involvement and support is appropriate, statutory marketing

authorities should not duplicate individual firms' marketing activities or participants' interdependent efforts. In particular self-directed corporate authorities like MLA should provide marketing services only to those firms that are unable to perform them independently. This may suggest a re-examination of existing marketing programs to locate services that could be outsourced to independent marketing service providers that operate on a fee for service basis. Duplication of promotion, branding, grading schemes and quality control systems has the potential to discourage investment by firms and to create confusion among end consumers. At the same time, as demonstrated by the integrators in the early 1980s, replication of generic messages by firms seeking to promote differentiated products will fail to create and sustain unique brand identities.

Control of marketing and regulation of meat supply by external authorities in the form of long term government-to-government contracts and preferential trade agreements do not encourage the development of market oriented meat marketing systems. Reliance on price as the key coordinating mechanism in beef's marketing system did not encourage quality improvement since it failed to appraise quality and reward participants appropriately. Long term impacts of insulation from changing product market conditions should be given equal weight as the benefits of purchase agreements and guaranteed returns. Short term benefits like market access for surplus production are alluring but need to be offset against systemic weaknesses that build up through disengagement from buyers over time.

Similarly, the long run effects of generic promotion to raise awareness of and reposition the image of meat products should be given detailed consideration before extensive campaigns are launched. As the Aussie Beef logo campaign in Japan illustrated these efforts are expensive and if a scattergun approach is taken investments can be misdirected, ineffective and serve merely a symbolic role for producers. A more targeted approach as well as more balance between push and pull marketing communication strategies was needed in beef value chains. Likewise, short term generic advertising campaigns in the domestic market appeared only to yield short term gains in market share. The goal of transforming the product category image to secure a larger, more stable share of the domestic meat market was more difficult to achieve. The evidence also suggests that generic advertising may have dissuaded firm specific investment in beef product development and brand promotion. Investment in these marketing activities is important to sustain consumer interest in the category as it affects consumer attitudes towards meat and food consumption. Since the balance of power has shifted to reside with large retail chains, this link has the authority to delegate marketing activities and direct investments made by other participants in the value chain. Their decisions have repercussions up and down value chains so the interdependencies among participants need to be taken into

account. Even though retailers wield greater power, they too depend on their supply partners. Therefore they must ensure this authority is not exploited and their leadership is respected in order to drive realistic initiatives to effectively coordinate meat value chains.

As meat segments aim to achieve higher, more sustainable returns for participants there should be clearer specification of whose role it is to invest in and undertake product development and promotional programs to avoid duplication and conflicting messages. This demarcation appears clearer in the case of chicken meat than beef. Roles are still overlapping in the beef segment, especially the design and installation of quality control systems and grading standards. Investments made in these and other coordination mechanisms may prove ineffective if consideration is not given to investments made by other organisations to direct the dynamic processes of value creation and distribution. Further research is needed to investigate the sequence and direction of investments in coordination mechanisms to determine whether this is a decisive factor explaining the timing of transitions between modes of value delivery.

Successive government inquiries have found that the obstacles to adding greater value in Australia's agricultural and natural resource sectors are endemic (House of Representatives Standing Committee on Industry, 2000; Senate Rural and Regional Affairs and Transport Committee, 1997). However, these short term economic analyses favoured by policy makers offer a restricted view of the organisation and functioning of these marketing systems. The historical comparative research design adopted in this study is an appropriate method of inquiry to address these problems which are systemic and longitudinal in nature. Further, the typology developed offers a more precise framework to assess meat marketing systems and explain why they can become stuck in inactive, reactive and submissive modes unable to deliver higher and more sustainable forms of value. Conceptualising meat and food segments as an interconnected food marketing system allows holistic models to be developed to solve problems requiring a systems level approach which research focused on individual firms and supply or value chains has avoided. By ignoring the strategic role of coordination mechanisms and the broader effects of marketing organisation on the delivery of value, the potential to add value might be lost through configuring misaligned and outmoded food marketing systems.

Suggestions for Future Research

The typology presented in this thesis is based on analysis of the evidence from Australia's beef and chicken meat segments. Due to the importance of context and the variance in product market conditions across individual food product categories the typology is potentially limited in its application to other contexts. While the findings offer a convincing explanation for the different patterns of value delivery in the specific cases examined the typology is tentative and requires confirmation or revision through examination of additional cases in other settings. A logical starting point would be to examine other meat product categories in Australia and in overseas settings like New Zealand that exhibit similarities and differences in product market conditions. The incidence and form of organised marketing schemes, or marketing boards, also differs between agri-food segments and countries and can be used as one theoretical criterion for selecting cases. For example, producer-processor cooperatives are more common in New Zealand's beef and sheep meat segments than in Australia. Similarly, provincial marketing boards in Canada's poultry industry manage the supply of live birds, whereas they are absent in Australia. Next, the examination of other animal-based and non-animal based agri-food product categories like dairy products, sugar, wheat and wine, which differ in their paths of marketing organisation and patterns of value delivery, should follow.

Where a customer's pull is stronger than a supplier's capacity to control how their products are marketed a passive dependency on markets can develop. This passive type of responsiveness was seen as the continued dependency of Australia's beef segment on overseas markets. Further research is needed to describe the features of market dependent agri-food marketing systems to understand how supplier organisations may become locked out of higher value market segments by those occupying strategic positions in agri-food value chains. Future studies of the dynamics of agri-food value chains would benefit from holistic, longitudinal approaches to understand how they develop over time. This study also analysed the role of external participants in shaping the organisation of meat marketing systems, a critical dimension that requires further examination due to continued protection and other forms of government intervention in national meat industries. A potential avenue to pursue is the comparative analysis of agri-food segments that feature government support due to their dependency on overseas markets with those featuring protection in their domestic market. This would strengthen the findings based on the evidence of Australia's externally dependent beef segment with the internally focused and protected chicken meat segment as presented in this thesis.

APPENDIX 1 - List of Participants and Experts Consulted

Participant Name and Position	Organisation (Location)	Date and Time
Devinka Wanigesekera, General Manager, Rural Market Development	Queensland Department of Primary Industries (Office, Brisbane)	26/03/2003, 11.15am-12:00pm
Bronwyn Warfield, Account Manager Marketing Services, Rural Market Development	Queensland Department of Primary Industries (Office, Brisbane)	26/03/2003, 11.15am-12:00pm
Professor David Burch, School of Science	Griffith University (Nathan Campus, Nathan)	4/04/2003, 11.00am-12.05pm
Turner Family	Property No. 1 (Wandoan, QLD)	6/04/2003, 2.30pm-4.30pm
Dr. Bevan Peters, Veterinarian	Wandoan Veterinary Practice, (Wandoan, QLD)	09/04/2003, 3.45pm-5.00pm
Bouck Family	Property No. 3 (Wandoan, QLD)	10/04/2003, 9.00am-11.15am
Hall Family	Property No. 2 (Wandoan, QLD)	10/04/2003, 11.30am-11.45am
Erbacher Family	Property No. 4 (Wandoan, QLD)	11/04/2003, 2.00pm-4.45pm
Jocelyn Coventry, District Animal Production Officer	Northern Territory Department of Business, Industry & Resource Development (Beef 2003, Rockhampton, QLD)	27/04/2003, 12.20pm-1.15pm
Renata Paliskis-Bessell, Manager, Rangeland & Intensive Animal Industries	Department of Agriculture, Government of Western Australia (Beef 2003, Rockhampton, QLD)	27/04/2003, 4.15-5.20pm (55 min)
Lauren Pearce, Market Development Officer	Kimberley Red (Rockhampton, QLD)	28/04/2003, 11.30am-11.55am
Geoff Phillips, Marketing Manager	The Angus Society of Australia (Beef 2003, Rockhampton, QLD)	28/04/2003, 1.20pm-2.10pm
Bill Synnot, Principal	Aurora Consulting Group (Beef 2003, Rockhampton, QLD)	28/04/2003, 4.20pm-5.25pm
Dr. W. P. (Barry) Osborne, Managing Director	Nature's Beef (Beef 2003, Rockhampton, QLD)	29/04/2003, 4.15pm-5.05pm
Carol Petherick, Senior Scientist, Animal Behaviour and Welfare	Queensland Department of Primary Industries (Beef 2003, Rockhampton, QLD)	1/05/2003, 10.20am-10.55am
Tom Joiner, National Advertising Manager	Australian Beef Improvement News (Beef 2003, Rockhampton, QLD)	1/05/2003, 11.00am-11.25am
Kathryn Tyrrell, Marketing & Business Development Executive	Port of Brisbane Corporation (Beef 2003, Rockhampton, QLD)	1/05/2003, 11.55am-12.15pm
Vivienne Todd, Food Technology Manager	Meat and Livestock Australia (Headquarters, North Sydney)	Interview 1: 21/01/2003, 9.05am-10.00am Interview 2: 21/05/2004, 9.00am-10.20am
Tony Camphin, Director	Agricultural Equity Investments Property Ltd (Phone calls)	Interview 1: 14/05/2003; 10:13am -10:40am

Participant Name and Position	Organisation (Location)	Date and Time
		Interview 2: 15/01/2004, 1.20pm-2.17pm
Identity withheld, State Sales Manager	Steggles-Bartter Pty Ltd Interview 1: Nathan Campus, Nathan Interview2: Steggles Plant, Walkuraka, QLD	Interview 1, 14/05/2003, 4:45pm-5.55pm Interview 2, 7/01/2004, 12pm-2.30pm
Helen Carrell, Holistic Management Certified Educator	Upfront Outback Strategic Services (Innovation Conference, Melbourne)	23/05/2003, 2.15pm-2.45pm
Austin Reid, Rural Counsellor	Fleurieu & Adelaide Hills Rural Counselling & Information Service Inc. (Innovation Conference, Melbourne)	23/05/2003, 3.00pm-3.34pm
Andrew Harris, Industry Development Manager, Red Meat Innovation	Meat and Livestock Australia (Office, South Brisbane)	8/08/2003, 11.00am-1.15pm
Cameron Dart, Manager Meat Standards Australia Meat and Livestock Australia	Meat and Livestock Australia (Office, Fortitude Valley, Brisbane)	20/08/2003, 1.30pm-2.15pm
Glenn Barker, Product Description Manager	Manager AUS-MEAT (Office, South Brisbane)	20/08/2003, 10.00am-10.45am
Ian King, CEO	AUS-MEAT (Office, South Brisbane)	20/08/2003, 11.00am-11.30am
Terry McMahon, National Marketing Manager	Hans Continental Smallgoods Pty Ltd (Comsle Plant, Brisbane)	13/12/2003, 1.30pm-2.25pm
Matthew Bosnjak, Marketing Manager	Baiada Select Poultry Pty Ltd (Phone call)	27/02/2004, 9.15am-9.45am
Alister Lugsdin, National Retail Account Manager	Meat and Livestock Australia (Headquarters, North Sydney)	21/01/2004, 10:00am-12.00pm
David Thomason, General Manager, Marketing	Meat and Livestock Australia (Headquarters, North Sydney)	21/01/2004, 1.15pm-2.20pm
Ian Jenson, Manager, Food Safety Research	Meat and Livestock Australia (Headquarters, North Sydney)	21/01/2004, 3.00pm-3.45pm
John Elias, Information Services Coordinator	Meat and Livestock Australia (Headquarters, North Sydney)	21/01/2004, 3.50pm-4.45pm
Timothy L. Kelf, Regional Manager South Asia	Meat and Livestock Australia (Headquarters, North Sydney)	21/01/2004, 4.50pm-5.25pm (35min)
Rod Polkinghorne, Managing Director	Polkinghorne's Butchers Albert Park Store, Melbourne)	29/01/2004, 2.00pm-3.00pm
Judy Philpott, Managing Director	Polkinghorne's Butchers (Albert Park Store, Melbourne)	29/01/2004, 2.00pm-3.00pm
Annette Karantoni, Business Manager Meat	Woolworths (Administration Centre, Yennora, Sydney)	19/05/2004, 2.00pm-2.45pm
Alan Nunan, Assistant Manager, Meat	Woolworths (Administration Centre, Yennora, Sydney)	19/05/2004, 2.00pm-2.45pm
Graeme Haynes, Assistant Branch Secretary	Australasian Meat Industry Employee's Union (MINTRAC Conference, Sydney)	16/03/2005, 12.15pm-12.55pm

Participant Name and Position	Organisation (Location)	Date and Time
Earl Gibbons, Manager, Organisational Development	Teys Bros (Holdings) Pty Ltd (MINTRAC Conference, Sydney)	16/03/2005, 1.00pm- 1.32pm
Rajesh Margapuram, Project Coordinator Food Safety Meat and Livestock Australia	Meat and Livestock Australia (MINTRAC Training Seminar, Sydney)	16/03/2005, 1.45pm- 2.45pm

List of participants contacted which declined or were unable to participate

Participant Name and Position	Organisation
Jeff Fairbrother, Executive Director	Australian Chicken Meat Federation
Lee Shipley, National Beef and Veal Buyer	Coles Supermarkets
Nick Harvey, National Retail Account Manager	Meat and Livestock Australia
Peter Small, Meat Buyer	Action Supermarkets
Challen Edwards, Own Brand for Meat	Coles Supermarkets

APPENDIX 2 - Supporting Secondary Data

Table 10: Top 25 Red Meat Processors (by throughput), 2000

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print copy of the thesis held in
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Source: Meat and Livestock Australia (2000b)

Figure 11: Representative Costs and Gross Revenues for Carcass Meat and By-Products, Domestic Market, 1998

Costs	Component Percent of Total Costs (%)
Farm Sector	
Purchase of livestock at saleyards/direct cost of purchase	65.0
<i>Total</i>	<i>65.0</i>
Abattoir Sector	
Freight to abattoir	1.5
Labour	4.5
Overheads	1.0
Materials	1.0
Meat Inspection	0.5
AMLC	0.5
Services	1.5
Transport to wholesaler	2.5
<i>Total</i>	<i>12.0</i>
Wholesale Sector	
Boning labour	4.5
Overheads	1.5
Materials	1.5
Services	1.5
Cold Store	1.0
Transport to retailer	2.0
<i>Total</i>	<i>12.0</i>
Retail/End User Sector	
Labour	6.0
Overheads	3.0
Services	1.0
Materials	1.0
<i>Total</i>	<i>11.0</i>
<i>Total Costs</i>	<i>100.0</i>
Gross Revenue	Component Percent of Gross Revenue (%)
Meat cuts	92.0
By-products	
Skin/hides	7.0
Offal and rendered products	1.0
<i>Total</i>	<i>8.0</i>
<i>Total Gross Revenue</i>	<i>100.0</i>

Source: Hayes et al. (1998)

Figure 12: Farmgate, retail and wholesale price trends, cents/kg, 1998–2003

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print copy of the thesis held in
Griffith University Library

Assumptions used in this analysis are:

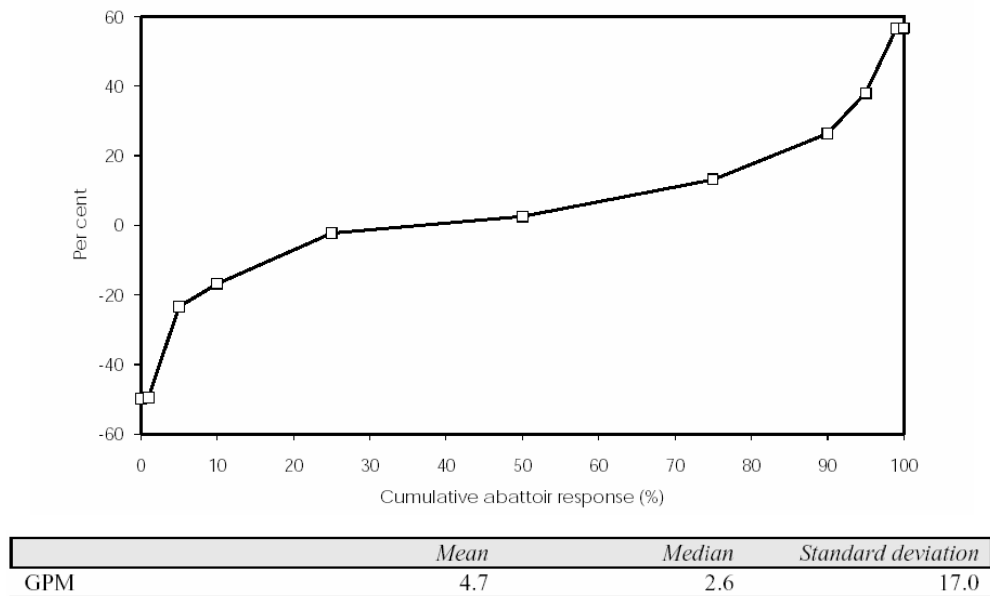
- over the hooks sales have been based on 230kg yearling heifer sales as reported by National Livestock Reporting Service (NLRS);
 - wholesale prices for carcasses and rump portions are based upon NLRS wholesale market data from the Sydney wholesale market; and
 - retail prices for rump steak, silverside and chuck steak are based on ABS surveyed data.
- Wholesale markets for beef carcasses and portions of beef are used in the minority of cases and provide a valid guide as to the level at which the market is operating. However, the vast majority of volume of meat reaching the market is flowing through integrated arrangements between producer, processor and retailer, in view of the size of the major retail portion of the market and its increasing use of direct supply arrangements with producers.

Observations:

The price comparison shows that there is a general price trend which sees broad consistency in movement across farmgate, wholesale and retail prices. Yet the complexity of carcass usage and diversity of end retail products within cuts renders this type of broad comparison relatively meaningless in terms of an analysis of the drivers of individual retail product prices and livestock prices.

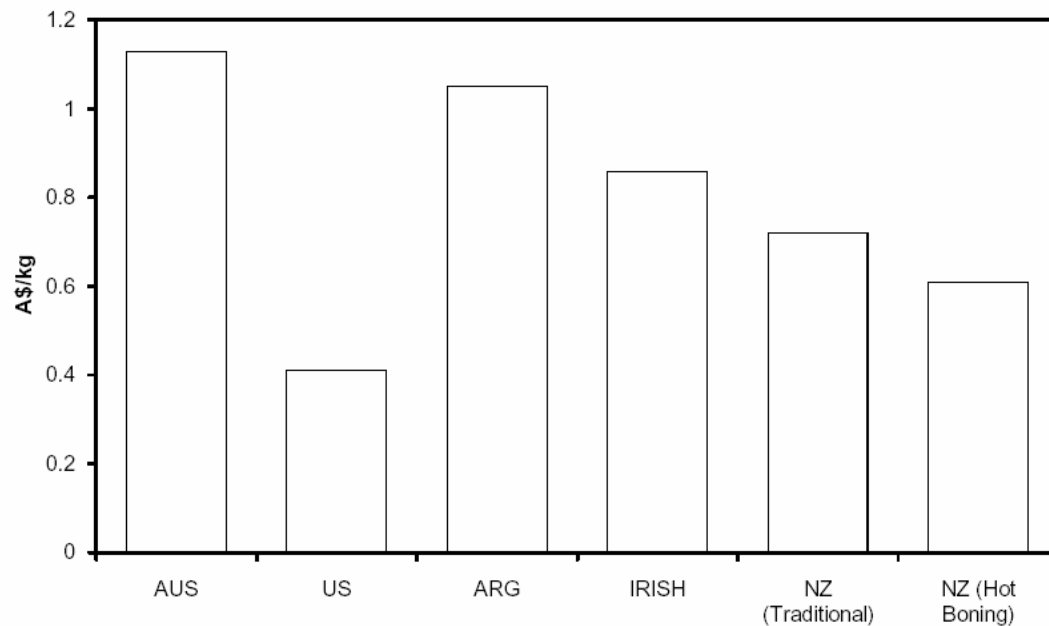
Source: MLA and NLRS in Spencer (2004).

Figure 13: Cumulative Distribution of Abattoirs by Gross Profit Margin, 1992-93



Source: Industry Commission (1994) estimates.

Figure 14: Cost of best in-class processing facilities, selected countries, 1991-92



Source: Booz-Allen & Hamilton 1993, p. IV-4 in Industry Commission (1994)

Figure 15: Cost profiles of delivering market ready meat to the United States, 1991-92, A¢/kg

<i>Value chain</i>	<i>Australia</i>	<i>United States</i>	<i>Argentina</i>	<i>Ireland</i>	<i>NZ Traditional</i>	<i>NZ Hot boning</i>
Animal Cost	340.5	465.8	269.7	736.9	291.0	329.9
By-product revenue	56.2	82.0	41.5	94.2	58.9	65.7
Animal Cost net of revenue received for by-products	284.3	383.8	228.2	642.7	232.1	264.2
Processing	112.7	41.2	105.1	85.7	71.7	60.6
Transportation	37.1	9.7	50.9	15.1	28.4	29.3
Total Costs	434.1	434.7	384.2	743.5	332.2	354.1

Source: Booz-Allen & Hamilton 1993, IV-6 in Industry Commission (1994)

Figure 16: The characteristics of the comparison partners

	<i>Australia</i>		<i>New Zealand</i>
	<i>Existing</i>	<i>Best-practice</i>	
Beef abattoir			
Carcases per hour (Head)	82	82	91
Average length of shift (Hours)	6.6	6.6	10
Employees	79	72	79
Carcases/person/hour	1.04	1.14	1.15
Sheep abattoir			
Carcases per hour (Head)	600	600	555
Average length of shift (Hours)	6.5	6.5	na
Employees	94	78	99
Carcases/person/hour	6.4	7.7	5.6

Source: Data supplied by participating abattoirs and ProAnd in Industry Commission (1994)

Figure 17: Components of value of transformation in Australian red meat processing (%), 1992-93

<i>Cost</i>	<i>Mean</i>
Labour	44.9
Depreciation	3.0
Materials	16.8
Govt levies	5.2
Inspection	4.4
Other costs	19.7
Surplus (residual)	6.1

Source: Industry Commission (1994) estimates

Figure 18: Components of unit processing cost (%), 1992-93

<i>Cost</i>	<i>Abattoirs with killing floor only</i>	<i>Abattoirs with killing floor and boning room</i>
Labour	42.1	34.4
Labour on-costs	5.3	4.6
Depreciation	3.5	1.5
Materials	19.3	21.4
Govt levies	7.0	2.3
Inspection	5.3	2.3
Other costs	17.5	33.6

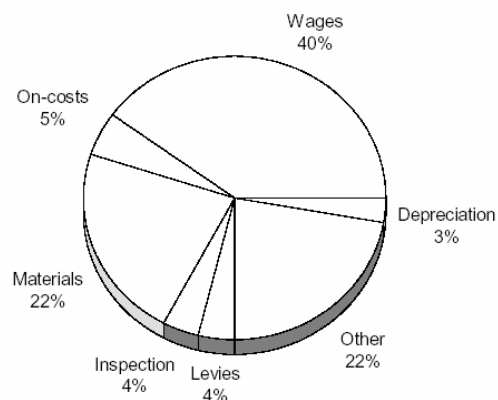
Source: Industry Commission (1994) estimates

Figure 19: Direct costs to slaughter and chill cattle^a (Index: Total cost equals 1.00)

	<i>Cattle</i>
Labour ^b	0.58
Capital and buildings ^b	0.11
Slaughter services ^c	0.00
Inspection ^d	0.09
Energy and water	0.08
Other	0.14
Total	1.00

a All costs directly attributable to slaughtering and chilling. This excludes overheads and other costs that relate to other parts of the business. b Excludes labour and capital costs involved in slaughter services, inspection or the provision of energy and water. c Slaughter services are expenses that are not applicable to any one chain in a multi-species abattoir but are directly attributable to slaughter and chilling costs. d Includes levies. Source: Industry Commission (1994) estimates.

Figure 20: Individual cost components of total processing costs (excluding livestock purchases) (%), 1992-93



Source: ABS 1993e in Industry Commission (1994)

Figure 21: Indicative costs in the beef value chain (%)

<i>Component</i>	<i>Beef</i>	
	Domestic	Export
Livestock costs		
• Purchases	67	61
• Procurement costs	5	4
Processing costs		
• Labour ^a	10	12
• Materials and services	11	10
• Fixed costs ^b	2	1
Total processing	23	23
Delivery costs	5	12
Total	100^c	100^d

a Includes labour on-costs.

b Fixed costs includes returns to capital and management.

c Wholesale value - Metropolitan area.

d CIF value- Japan.

Source: Commission estimates based on ABS survey data, various submissions, ABARE data and data supplied by various Departments of Agriculture in Industry Commission (1994)

Table 11: Overall and food safety component industry contributions

Agency	Industry levies and charges (\$m)	Food safety/hygiene costs (\$m)
Australian Meat and Live-stock Corporation	78.3	5.0*
AUS-MEAT	7.5	nil
Meat Research Council	23.4	3.0
Australian Quarantine and Inspection Service	77.0	77.0
Victorian Meat Authority	0.83	0.83
NSW Meat Industry Authority	2.28	0.71
Queensland Livestock and Meat Authority	5.05(a)	5.05(a)
TAS	n/a	n/a
SA	n/a	n/a
WA	n/a	n/a
National Residue Survey	5.1	5.1
National Registration Authority	13.6(b)	0.2
Approximate totals	213.1	96.89

Source: Meat Industry Council submission to Task force in Australian Meat and Live-stock Steering Committee (1996). Note: Figures are founded and in some cases approximate. Food safety expenditure by the AMLC and MRC are approximate only and related to communication/promotion activities and R&D respectively. Figures for Tasmania, South Australia and Western Australia are not separately available for meat-related food safety alone. *estimate only (a) slaughter and accreditation fees (b) chemical industry levies.

Appendix 3 - Chronology and Summary of Major Events

Table 12: Chronology and Summary of Major Events in Beef's Marketing System, Responses and Impacts

Date	Major Event	Responses & Impacts
1880	First Australian shipment of frozen beef aboard the <i>Strathleven</i>	Venture produced a loss as did a second shipment. Despite the logistical feat, frozen beef was a marginal enterprise for Australia.
1890	First attempt to introduce a grading system to facilitate forward sales overseas to English 'Multiple Stores'	Confusion over the meaning of Australian standards. Buyers demanded price concessions to compensate for inferior quality.
1893	Meat and Dairy Produce Encouragement Act (Qld)	Government misreading of market and growth in number of meatworks in Queensland.
1916-21	Bulk supply contract formed with the UK	Private companies not permitted to sell meat outside of the UK market or to contract independently. Imperial contract rates received as well as guaranteed markets.
1922	Meat Export Bounties Bill	Introduced to assist the industry to trade after the crash in frozen beef prices in 1921. 1/4d. subsidy per lb. dependent on the formation of a Meat Board.
	Formation of the Australian Meat Council to organise the industry for trade	Council disbanded less than 4 years later as a lack of producer support resulted in financial insolvency. Groups were opposed to levies.
1924-25	Virtual closure of the UK market to Australian exporters	Vesteys control of the London beef trade precipitates the lock-out.
1924	Removal of the Meat Industry Encouragement Act	Brought about by producer lobbying.
1928	Royal Commission into the Beef Industry in Queensland	Criticism of the absence of a price premium for first grade export cattle to encourage herd quality improvement. Little action taken to remedy this.
1930-35	Significant influx of FDI in red meat processing	Borthwicks, Vestey's and Swifts make significant purchases in Australia's red meat processing sector.
1931	Queensland Meat Industry Board (QMIB) established following recommendation of the Royal Commission in 1928	Set up to regulate the Brisbane trade and local market.
1932	Imperial Conference in Ottawa, Canada	Ottawa Agreement – preferential trade in commodities like meat in return for representation through a central meat board.

Date	Major Event	Responses & Impacts
1934	First experimental shipment of chilled beef to the UK sponsored by the QMIB	Even though this achievement signified a major milestone in the export trade, it lagged behind the Argentines who dominated imports of prime chilled beef in the UK since 1875.
1936	Australian Meat Board established	Built up knowledge of export license management and quota administration. Could regulate meat exports and negotiate uniform contracts, but minimal influence in the local trade.
1939-48	Bulk supply contract formed with the UK government	UK agrees to purchase whole of meat surplus for civilian population and armed forces.
1940-45	War time control of meat under the National Security Act and associated legislation	Private trade of meat is suspended. Department of Commerce and associated agencies and the Australian Meat Board control the purchase and distribution of meat. Controller of meat supplies armed with authority to compulsorily acquire meat and curb slaughtering.
1944-48	Consumer coupon rationing of meat is introduced	Consumers were agreeable to the coupon system. But, Australian meat consumption was still substantially higher than the UK or the US.
1945	Royal Commission on Abattoirs and Meatworks held in Queensland	Described the processing sector as a 'moribund state'. Plant and equipment on farms and in meat works is run down and there is a general attitude of complacency.
1952	15 year agreement signed with the UK	Guaranteed markets and prices for Australian beef.
1958	Opening of US hamburger beef trade	15 year agreement was relaxed for lower grade beef so that Australia could export to the US where meat shortages were increasing prices. In 1959 the US succeeded the UK as Australia's major overseas market destination.
1964	US government passed the Meat Import Act to limit imported meats, mostly beef to 5% of domestic consumption.	Signing of the US-Australia Meat Agreement. This voluntary agreement with the US set quotas to protect local US beef producer interests. Protection extended in 1973.
1959-64	Installation of Can Pak in meatworks throughout Australia	Automated beef dressing system marks the cementing of mass production in Australian beef processing. This is supported by FDI by integrated meat processing and wholesaling companies.
1964	Meat Inspection Arrangements Act 1964	Equivalent USDA hygiene standards for imported meat introduced in Australia. Meat inspection enforced through the Department of Primary Industries. Expensive modernisation of many abattoirs and cancellation of export licences.

Date	Major Event	Responses & Impacts
1968	US embargo on Australian meat imports	Quota is limited by 4 per cent. In reaction the Australian Meat Board introduced the Meat Export Diversification Scheme.
1968-70	Two major Australian supermarket chains purchased their franchisee butchers	Introduction of new systems of coordinating meat supply and merchandising techniques. Meat distribution facilities were constructed and integration of supply chains through long term contracts with beef suppliers.
1972-74	Downturn in global economic conditions and rise in retail beef prices	EEC and Japan imposed an embargo on beef imports. Local cattle prices fell. Rush to turn-off cattle.
1975	Beef Crash - global collapse in beef prices	US restricted imports, the EEC banned imports, Japan and Korea imposed quotas on beef imports and Canada established an import scheme. Australian government provides short term financial assistance to farmers. Many exit the industry. Tension over systems for grading and schemes for promoting Australian beef. Demonstrated preference for the status quo.
1976	Cattlemen's Union established	Formed through dissatisfaction among cattle farmers with the effectiveness of Australian Meat Board.
1977	Australian Meat and Livestock Council replaced the Australian Meat Board	Hostile groups – processors and livestock exporters and cattle producers – govern this new body. The Council's power is extended to domestic market promotion.
1981-82	Meat substitution scandals known as 'roo in the stew'	USDA ban on all beef imports from Australia. Export Inspection Service replaces Department of Primary Industry's export control powers. Royal Commission instituted.
1984	Australian Meat and Livestock Council reorganised to form the Australian Meat and Livestock Corporation	Responsibilities reduced to marketing and promotion. Responsibility for policy development and R&D passed to two separate authorities. Minimal funding for marketing.
	EU bans use of hormone growth promotants	Procedures developed to meet new EU requirements. Market diversification sought by those unable to meet new entry requirements.
Mid 1980s	Australian Meat and Livestock Corporation invested heavily in a series of five ad campaigns	Updating image of beef and improved accessibility to a wider range of segments. Difficult to directly link ad spend to increased consumption, but assisted to reverse the declining consumption of beef in Australia.
1987	Meat residue crisis	Trigger for greater specification of meat products and stricter quality control. Implementation of trade language to describe meat passed to AUS-MEAT.

Date	Major Event	Responses & Impacts
1988	BSE notifiable in the UK Ban on ruminant protein from sheep and cattle feeds in the UK	Australia bans imports of live cattle from the UK and Ireland. Imported cattle still alive are placed under quarantine surveillance and not allowed to enter the animal or human food chain.
1989	Launch of the 'Aussie Beef' logo by the Australian Meat and Livestock Corporation	\$120 million spent on promoting the logo over 10 years from 1989 to 1999. Despite intensive promotion, Aussie beef was still perceived as inferior to US and New Zealand product.
1990	EU restricted imports of British cattle to those aged fewer than six months	Australia introduces a surveillance program involving the examination of the brains of cattle to identify BSE.
1989- mid 1990s	FDI in meat processing and feedlots by Japanese and American agri-food companies	Low cost Australian beef viewed as a strategic source to supply for the Japanese 'everyday beef' market. Investments in each sector are linked through vertical integration of operations. Encouraged local investment in feedlotting to supply the Japanese market.
1991	Partial liberalisation of Japanese beef imports	Viewed as a boost to Australia's livestock sector. But Australia still faced numerous barriers to Japan's high value beef segments.
	Australian Quarantine Inspection Service commercialised	Reform package included full cost recovery for export inspection and certification services. Standards for meat inspection gradually harmonised and responsibility centralised at the federal level following a major review in 1994.
1993	US introduced stringent import requirements	Rejections of Australian beef imports doubled. Gradual introduction of HACCP QA based quality control in export processing sector and then in domestic-focused establishments led by retailer requirements.
	Coles supermarkets formalised an exclusive supply contract with Australian Country Choice	This agreement made ACC a dedicated Coles' meat supplier, managing the chain's Northern supply chain covering Queensland and the Eastern Seaboard. Woolworths also establish preferred supply agreements with producers and processors.
1994	Royal Commission into the red meat processing sector	Concerns raised about the effectiveness of the Aussie beef logo campaign, organisation of centralised marketing functions and overall effectiveness of the beef marketing system.
	Meat residue crisis II	Three major QA systems – HACCP, the National Vendor Declaration System (NVDS) and Cattlecare installed to defend quality standards.
	Attempts to reposition the Aussie beef logo	Following criticism, use of the logo was restricted to higher quality marbled beef

Date	Major Event	Responses & Impacts
		under the revised 'Aussie Gold' label as a joint venture promotion program.
1996	National Plant Management System (NPMS) introduced	Review of existing systems revealed numerous faults. NPMS introduced as a standard QA management tool for AQIS auditors. Mutual recognition of standards allows AQIS to gain international recognition of Australian meat inspection standards and procedures.
1996	BSE crisis emerged in its most serious public forum Findings of UK CJD Surveillance Unit's investigation of 10 cases of vCJD published in medical journal <i>The Lancet</i> , proposing a link between vCJD and BSE UK banned cattle older than 30 months from the food chain	EU imposes world-wide ban on British beef. Australia's livestock segment adopts voluntary ban on the feeding of ruminant-derived meat-and-bone-meal (MBM) to ruminants. Importation of specified foods containing British beef and beef products banned in Australia because of potential risk of vCJD in humans.
	Woolworths instituted their Vendor Quality Management System McDonalds introduced a similar program	Large scale food retail chains introduce a HACCP verification program for dedicated suppliers to ensure the quality of products in every outlet.
1998	Meat and Livestock Australia formed	Restructuring of the previous body. R&D and promotion functions reunited. Processor and live exporters removed and form separate organisations. Marketing funds are reduced.
2000	Concerns over BSE in Europe grow after a rise in cases in France, the detection of the first case in German and Spain and the discovery in the French meat value chain of beef from a BSE contaminated herd	Australia introduces further bans on a range of animal feeds, import restrictions, development of rapid BSE testing methodologies, auditing of management systems, emergency training, scientific reviews and campaigns to raise awareness domestically and overseas.
2001	National rollout of Meat Standards Australia (MSA)	After several years of R&D and commercial trials MSA launched nationally. Failed to gain support from major supermarket chains.
	Identification of BSE in Japanese Dairy cow	Average Japanese household beef consumption declined by 60 per cent. Sales of Australian beef to Japan fell by 82 145 tons, worth an estimated \$520 million. Recovery campaign initiated to restore confidence in the status of Aussie Beef. Three days after the notification of BSE in Japan on 21 September 2001, Australia suspended imports of Japanese beef and beef products and advised Australian retailers and consumers to discard these items.
2002	Meat and Livestock Australia's 'Red Meat. Feel Good' campaign launched	Backed by further scientific evidence of an independent expert committee that it is ok to eat red meat 3 to 4 times a week.

Table 13: Chronology and Summary of Major Events in Chicken Meat Marketing System, Responses and Impacts

Date	Major Event	Responses & Impacts
1917-20	First poultry breeders' associations and co-operatives formed and two major poultry processors enter poultry farming	Development of poultry feed designed for backyard growers and commercial layer production. Purposeful integration of stock feedmill business and broiler production. Experiments with dressing birds
1945-48	Processors invest in semi-automated plucking equipment and install chain system of processing	Growth in overseas markets for spent hens, especially during the second world war with the UK.
1959	Australia's first meat chicken 'TM1' is introduced at a field day by Bert Tegel	Competition among private and public breeding organisations to improve meat yields.
1960	Improved meat chicken 'T4' is introduced	Franchise agreements with hatcheries established. Enables specialised commercial poultry production.
	Coles and Woolworths open their first freestanding supermarkets in Australia.	Competition between the major supermarket chains to expand number of stores. Long-term preferential supply agreements forged with Steggles and Inghams. Price wars and frozen chicken as 'loss leader' item. Positive response by consumers as consumption begins to increase.
1960-63	The 'integrators' secure control over nucleus breeding stock	Integrators expanded their breeding and rearing farms over the next few years and augmented their growing operations by contracting-out chicken rearing.
1960-66	Adoption of the contract growing system by the major processors	Up to 90 per cent of broilers produced under contracts. Enabled these firms to reduce their investment in growing and reinvest in further processing and distribution.
1961	Introduction of the first commercial viable, continuous chain processing system	Marked increase in scale and efficiency in poultry processing.
1964	Establishment of the Australian Chicken Meat Federation	National representative organisation formed to coordinate the varied interests of growers, processors, service providers, and related enterprises.
1967	Consolidation in the chicken meat processing sector	Integrators acquire small local operators to distribute fresh product.
1968	Kentucky Fried Chicken opened its first store in Guildford, Sydney's western suburbs	Beginning of the rapid expansion of fast food retailing. Australia's own fast chicken outlet 'Henny Penny' also opened in Newcastle by Steggles.
	Australian Poultry Industries Association formed	Managing directors from nine major processing firms joined to control stock levels. Mandate expanded to address issues facing the segment and to lobby government.

Date	Major Event	Responses & Impacts
1968-69	Retail price wars with frozen chicken prices dropping as low as 60¢/kg	Processors increase the water content of their frozen birds to increase the weight of birds.
1969	KFC opened its first store in Queensland at Kedron	Inghams formed a long association with KFC. Within 18 months of its arrival, KFC had opened another 20 stores including Queensland.
1969-mid 1970s	Tension between growers and processors over growing fees paid	Farmers strike. State governments intervened. Informal agreements followed by setting up of chicken meat councils and arbitration process for negotiating growing fees.
1969	First voluntary agreement to lower the free moisture content of frozen chicken to a maximum of 8 per cent of total carcass weight	Formalised in legislation as recommended by the Australian Agricultural Council in 1970. Introduction of a uniform scheme for measuring and communicating bird carcass size.
1970	Introduction of a new product – the fresh or chilled chicken	Standardised core product provided the basis for product differentiation. Steggles and Inghams begin to invest in further processing technology, facilities and borrow overseas product concept to expand their range of value added products.
1970-71	KFC opened 75 outlets	Responsible for a 38% increase in chicken production in this period. Following this success Red Rooster opened its first store in Kelmscott, Western Australia
1970-75	Collaborative R&D organisations established with support from the government	Continuing advances in refinement of chicken meat genetics achieved to provide greater consistency in eating quality. Adoption of uniform hygiene standards at processing plants.
1972-80	Consolidation in the chicken meat processing sector	Two major integrators increased their market share and range of value added products to address oversupply of raw chicken meat.
1975	Beef crash and stabilisation of chicken meat consumption	National generic promotion campaigns initiated to counter rise in beef consumption.
1976	Victorian Broiler Industry Chicken Industry Act introduced	Establishing the Victorian Broiler Industry Negotiating Committee (VBINC). Illegal for individuals to grow more than 500 chickens at a time without a contract approved by the committee.
1980	Oversupply of chicken meat and over-capacity in chicken growing and processing	Rationalisation of chicken farming and consolidation in the processing sector.
1980s	Expansion in grocery retailing and fast food retailing of chicken. Retailers begin to invest in electronic data recording and inventory systems. Repositioning and promotion of retail images.	Woolworths became Australia's largest food retailer. Coles and Woolworths diversify and expand number of retail outlets. Cost pressures on growers are felt and creates and uneasy tension between growers and processors.
1981	Steggles sold to Amatil (British Tobacco)	A near duopoly arrangement in chicken meat processing

Date	Major Event	Responses & Impacts
1982, 1987	Generic advertising campaigns launched	Six week national ad campaign to promote chicken's low fat status. Second campaign features a well known nutritionist to promote meal ideas featuring chicken as low fat. Australian Meat and Livestock react by placing a 60 page supplement in Food Australia (AMLC). AIPA counters claims against chicken meat made by AMLC.
1985	Prices Surveillance Authority Inquiry into prices of table chickens	PSA elected to oversee all future live bird price decisions of the major processors. A number of MNCs to left the segment. Increasing concentration in processing
1987	Lenards opened first store in Queensland	Lenards' growth continued. In 2000 there were 150 stores that typically serve 165 000 customers a week.
1989	Sale of Steggles to Goodman-Fielder by AMATIL	Steggles become a subsidiary of a publicly traded company
1989-	Two major processors, Inghams and Steggles begin heavy promotion of their brands and products	Generic attributes selected to base promotion do not effectively differentiate competing brands. Generic positioning strategy and promotion is not chosen in later campaigns.
	The Torrens Island Quarantine Station opened	Allows independent operators to access to bird stock, without relying on Inghams and Steggles. Facilitates the expansion of the second tier of the segment.
1990s	Capital investment by integrators in plant and acquisition of small food manufacturers	Inghams enters the New Zealand market by purchasing the second largest processor.
mid 1990s – early 2000s	Two major supermarket chains expand and increase their share of chicken meat sales.	Low profit margins and continued positioning of chicken meat as a loss leader item fuels fierce competition among retailers and between retailers and their suppliers. They reposition their image with a convenience store format.
1992	KFC initiated a repositioning strategy	Despite capital investment and a major new product launch, perceptions of KFC remained on its fried king image.
1994	Australian Quarantine Inspection Service (AQIS) released position paper on importation of cooked chicken meat from USA, Thailand, and Denmark released	After lobbying from various groups supporting and those opposed to the notion of chicken meat imports, AQIS concludes that cooking chicken meat at the temperature and time specified would eliminate all suspect pathogens.
1997	Senate Inquiry into the ban on imported chicken meat	Report did not indicate support for the heat treatment process and ordered further tests. Importation of chicken meat from Denmark and USA allowed under conditions that render it fit for pet food only (70 degrees at 140 minutes).
1998-99	Outbreak of Newcastle disease in Mangrove Mountain, NSW	Approximately two million birds were destroyed to eradicate the disease which was not completed until mid 2001. 70 chicken

Date	Major Event	Responses & Impacts
		farmers and two major processing companies suffered major financial losses and two primary processing plants were closed permanently.
1999	Bartter bought Steggles from Goodman Fielder	Acquisition is allowed by the ACCC despite concerns about increasing concentration in the processing sector. Bartter-Steggles become the second largest integrator in Australia. Price competition in the segment strengthened as smaller companies lowered their prices to compete.
1999	Woolworths initiated 'Project Refresh' as a 5 year plan to provide greater shareholder wealth	Woolworths make investments in state-of-the-art distribution centres (DCs) and information technologies for JIT sourcing. Cross-docking system reverses control over flow of chicken meat between processors and retailers. Continued investment to promote store brand.
2001-02	Bartter staged campaign to promote their products as hormone-free and barn-reared	Australian chicken Meat Federation challenges promotion as confusing consumers and strengthening misconceptions of chicken as containing added hormone growth promotants.
2002	Baiada launched Lilydale farm's range	This premium priced 'free-range' brand gains mass market access through Coles supermarkets, as well as through smaller independent chains and specialist butchers and delis.

References

- A.C. Nielsen Company (Australia). (1999a). *Top 25 Umbrella Brands, 1999*. Retrieved 14 June 2003, from http://www.acnielsen.com.au/file_download_pdf.asp?ID=30
- A.C. Nielsen Company (Australia). (1999b). *Top 100 Brands, 1998-99*. Retrieved 14 June 2003, from http://www.acnielsen.com.au/file_download_pdf.asp?ID=29
- A.C. Nielsen Company (Australia). (2000). *Top 100 and Top 25 Umbrella Brands, 2000*. Retrieved 14 June 2003, from http://www.acnielsen.com.au/file_download_pdf.asp?ID=78
- AACM International. (1996). *Enterprise Benchmarking: Final Report*. Canberra: Meat Research Corporation.
- AACM International. (1997). *Measurement of Meat Industry Productivity Growth*. Canberra: Meat Research Corporation.
- Aaker, D., & Keller, K. (1990). Consumer Evaluations of Brand Extensions. *Journal of Marketing*, 54(January), 27-33.
- Aaker, D. A. (1991). *Managing Brand Equity*. New York: The Free Press.
- Aaker, D. A. (1996a). *Building Strong Brands*. New York: The Free Press.
- Aaker, D. A. (1996b). *Managing Brand Equity: Capitalizing on the Value of the Brand Name*. New York: Free Press.
- Abbott, A. (1990). A Primer on Sequence Methods. *Organization Science*, 1, 375-392.
- Abbott, J. C. (1986). Building food marketing infrastructure for development. In E. Kaynak (Ed.), *World Marketing Systems* (pp. 39-53). London: Butterworths.
- Abbott, J. C. (1987). *Agricultural Marketing Enterprises for the Developing World with Case Studies of Indigenous Private, Transnational, co-operative and Parastatal Enterprises*. Cambridge: Cambridge University Press.
- ABS. (1991). *Research and Experimental Development, Business Enterprises, Australia, Cat. No. 8104.0*. Canberra, ACT: ABS.
- Achrol, R. S., & Stern, L. W. (1988). Environmental Determinants of Decision-Making Uncertainty in Marketing Channels. *Journal of Marketing Research*, 25(February), 36-40.
- Acres, S. (1995). Leading and Lagging Indicators of Brand Health. In S. Sood (Ed.), *Brand Equity and the Marketing Mix: Creating Customer Value*. Cambridge, MA: Marketing Science Institute.
- Adam, M., & Adam, S. (2002). *Failing Food Concepts*. Retrieved 4 February 2003, from <http://myphlip1.pearsoncmg.com/phlip/mpviewce.cfm?vceid=3355&vbcid=2501>
- Addudell, R. M., & Cain, L. P. (1981a). The Consent Decree in the Meatpacking Industry, 1920-1956. *Business History Review*, 55(3), 359-378.
- Addudell, R. M., & Cain, L. P. (1981b). Public Policy Toward "The Greatest Trust in the World". *Business History Review*, 55(2), 217-242.
- Ailawadi, K. L. (2001). The retail power-performance conundrum: What have we learned? *Journal of Retailing*, 77, 299-318.
- Aksoy, S., & Kaynak, E. (1994). Export Behaviour of Fresh Produce Marketers: Towards a Co-ordination with General Theory of Exporting. *International Marketing Review*, 11(2), 16-32.
- Alderson, W. (1954). Factors governing the development of marketing channels. In R. W. Clewett (Ed.), *Marketing Channels for Manufactured Products* (pp. 5-34). Homewood, IL: Richard D. Irwin.
- Alderson, W. (1978). *Marketing Behaviour and Executive Action: A Functionalist Approach to Marketing Theory* (Reprinted ed.). New York: Arno Press.
- Alderson, W., & Martin, M. W. (1965). Toward a Formal Theory of Transactions and Transvections. *Journal of Marketing Research*, 2(May), 117-127.

- Alkerlof, G. (1970). The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84, 488-500.
- Amanor-Boadu, V., & Martin, L. J. (1992). *Vertical Strategic Alliances in Agriculture*. Gelfh, Ontario: George Morris Centre.
- AMLC. (1993). *Annual Report, 1 July 1992 - 30 June 1993*. Sydney: Australian Meat and Live-stock Commission.
- AMLC, & MRC. (various). *Meat Marketing Trends*. Sydney: AMLC & MRC.
- Anderson, J. C. (1995). Relationships in Business Markets: Exchange Episodes, Value Creation, and Their Empirical Assessment. *Journal of the Academy of Marketing Science*, 23, 346-350.
- Anderson, J. C., Jain, D. C., & Chintagunta, P. K. (1993). Customer value assessment in business markets: a state-of-practice study. *Journal of Business-to-Business-Marketing*, 1(January), 3-29.
- Anderson, J. C., & Narus, J. A. (1999). *Business market management: understanding, creating, and delivering value*. Upper Saddle River, NJ: Prentice Hall.
- Anderson, K. (1982). *On the Gains and Losses from Beef Import Quotas in Japan and Korea* (Pacific Economic Papers No. 90). Canberra: Australia-Japan Research Centre, Research School of Pacific Studies, Australian National University.
- Anderson, P. F. (1982). Marketing, Strategic Planning and the Theory of the Firm. *Journal of Marketing*, 46(Spring), 15-26.
- Animal Health Australia. (2004). *Animal Disease Surveillance: National Livestock Identification Scheme*. Retrieved 31 December 2005, from <http://www.aahc.com.au/nlis/>
- Anon. (1935, 23 February). The Government and Beef. *The Economist*, CXX, 411.
- Anon. (1953). Complaints over Australian Canned Meats. *The Meat Industry Journal of Queensland*, July-August, 15.
- Anon. (1956). Borthwicks says "Sell Meat to Soviet Union". *The Meat Industry Journal of Queensland*, November, 12-13.
- Anon. (1957a, 31 October). Big Australian Meat Sales Drive in U.K. "Useless". *The Land*, p. 6.
- Anon. (1957b). Branch Secretary's State Tour. *The Meat Industry Journal of Queensland*, July, 3-4.
- Anon. (1957c). Conference on Meat Industry Problems. *The Meat Industry Journal of Queensland*, August, 3.
- Anon. (1957d, 24 October). Disgusted with U.K. Meat Trade. *Queensland Country Life*, p. 9.
- Anon. (1957e). Untitled. *The Meat Industry Journal of Queensland*, April, 12.
- Anon. (1958). Federal Council Decisions: Price Control. *The Meat Industry Journal of Queensland*, September, 6.
- Anon. (1959a). Controls or Crisis? *The Meat Industry Journal of Queensland*, August, 7.
- Anon. (1959b). Meat Grading Must be Reintroduced. *The Meat Industry Journal of Queensland*, February, 10.
- Anon. (1959c). Meat Industry Interests Confer in Sydney. *The Meat Industry Journal of Queensland*, August, 8.
- Anon. (1959d). Rise in Local Beef Prices. *The Meat Industry Journal of Queensland*, January, 11.
- Anon. (1965). New Stress on Chilled Beef. *The Meat Industry Journal of Queensland*, May, 3-4.
- Anon. (1966). Union claims \$1.60 per day rise at Brisbane Abattoir. *The Meat Industry Journal of Queensland*, July-August, 11.
- Anon. (1985). *Retail Trade International* (Vol. 2). London: Euromonitor Publications.
- Anon. (1988a, 30 June). Billion dollar bonus in new Japan market. *Queensland Country Life*, p. 3.
- Anon. (1988b, 22 July). Smoked chicken. *Business Review Weekly*, 10, 16, 18.
- Anon. (1989, 4 May). AMLC Japan Tour: Cattlemen urged to lift quality. *Queensland Country Life*, p. 13.

- Anon. (1992a, 14 May). Global report: who are Japan's meat giants? *Cattle Buyers Weekly*, May.
- Anon. (1992b). Globe-trotters: US food companies go international. *Beef Today*, February.
- Anon. (1992c). *The history of Australian cooking* (Kitchen ed.). Epping, NSW: R & R Publishing.
- Anon. (1993, 26 November). KFC gets the Body. *B&T Weekly*, 29.
- Anon. (1997, 11 November). Coles' food, liquor sales up 9.2% for like stores. *Foodweek*.
- Anon. (1998a, 2 September 1998). Labelling Under Fire. *Herald and Weekly Times*, p. 59.
- Anon. (1998b, 18 March 1998). The Market News. *Herald and Weekly Times*, p. 49.
- Anon. (2001a). *NT Country Hour Summary, Chicken Labelling - Raston*. Retrieved 29 December 2003, from <http://www.abc.net.au/rural/nt/stories/s398297.htm>
- Anon. (2001b). *Rural News - Steggles owners: time to be upfront*. Retrieved 29 December 2003, from <http://www.abc.net.au/rural/news/stories/s398134.htm>
- Anon. (2002a). 2002 Annual Report: Market Sizes and Shares. *Retail World*, 55(December), 40, 74.
- Anon. (2002b). *Aussie beef under the Japanese media spotlight*. Retrieved 6 May 2003, from http://www.hoogies.ruralco.com.au/CRT_future/news_pages/rural_news_japanesedia.htm
- Anon. (2002c, 10 April). Entrees - Entrees. *Daily Telegraph*.
- Anon. (2002d, 3 June). Product Announcement. *International Product Alert*.
- Anon. (2002e). *Snow Brand beef scam spreads to Tokyo*. Retrieved 6 May 2003, from <http://mdn.mainichi.co.jp/news/archive/200201/29/20020129p2a00m0dm017002c.html>
- Anon. (2002f, 12 August). Suppliers showcase new jewels to boost independents' offer. *Foodweek*, pp. 8-9.
- Anon. (2003a). *Balwyn & Balwyn North, Victoria*. Retrieved 1 October 2004, from <http://www.arts.monash.edu.au/ncas/multimedia/gazetteer/list/balwyn.html>
- Anon. (2003b). Interview 1 with State Sales Manager. In A. Inch (Ed.). Brisbane.
- Anon. (2004). Interview 2 with State Sales Manager. In A. Inch (Ed.). Brisbane.
- Anon. (2005, 7-18 March). Coles delists major brands under new ranging policy. *Retail World*, 58, 7.
- AQIS. (1994). *Importation of Cooked Chicken Meat from the USA, Thailand and Denmark* (Position Paper). Canberra: AQIS.
- Asia Pulse. (2003, 3 November). Australian Agricultural Co Reports Weak Q1 Trading Performance. *Asia Pulse*, 13-14.
- Atuahene-Gima, K. (1996). Market orientation and innovation. *Journal of Business Research*, 35, 93-103.
- Australia and New Zealand Banking Group, E. D. (1974). *The outlook for the Australian beef industry, 1974-75 & 1975-76*. Melbourne: Australia and New Zealand Banking Group.
- Australian Agribusiness Group. (2002). *Market Overview - The Australian Beef Cattle Industry, Independent Assessment*. Melbourne: Australian Agribusiness Group.
- Australian Bureau of Agricultural and Resource Economics. (1994). *Commodity Statistical Bulletin*. Canberra: Commonwealth Government.
- Australian Bureau of Agricultural and Resource Economics. (1995a). *The Australian Beef Industry*. Canberra: Commonwealth Government.
- Australian Bureau of Agricultural and Resource Economics. (2001a). *Australian Commodity Outlook 2001, March Quarter 2001*. Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2001b). *Australian Commodity Statistics*. Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2001c). *Meat - Outlook to 2005-06* (Vol. 8). Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2002a). *Beef Industry 2002*. In D. Riley, T. Gleeson, P. Martin, S. Hooper & W. Shafron (Eds.), *Report on the*

- Australian Agricultural and Grazing Industries Surveys of the Beef Producers*. Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2002b). Livestock Products: Outlook for 2002-2003. In S. Brittle, D. Ashton & A. Davidson (Eds.), *Australian Commodities: Forecasts and Issues* (Vol. 9, pp. 326-332). Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2003). Beef Industry 2003. In T. Gleeson, D. McDonald, S. Hooper & P. Martin (Eds.), *Report on the Australian Agricultural and Grazing Industries Surveys of the Beef Producers*. Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2004). *Australian Commodity Statistics*. Canberra: Commonwealth of Australia.
- Australian Bureau of Agricultural and Resource Economics. (2005). *Australian Commodity Statistics*. Canberra: Commonwealth of Australia.
- Australian Bureau of Statistics. (1961). *Official Yearbook of Australia No 47*. Canberra: Australian Government Publishing Service.
- Australian Bureau of Statistics. (1978). *Official Yearbook of Australia No 62*. Canberra: Australian Government Publishing Service.
- Australian Bureau of Statistics. (1980). *Year Book Australia, No. 64*. Canberra: Commonwealth Government.
- Australian Bureau of Statistics. (1985). *Year Book Australia, No. 69*. Canberra: Commonwealth Government.
- Australian Bureau of Statistics. (1989). *Year Book Australia, No. 73*. Canberra: Commonwealth Government.
- Australian Bureau of Statistics. (2002). *Year Book Australia, No. 84*. Canberra: Commonwealth Government.
- Australian Bureau of Statistics. (2004a). *Retail Trade, cat. no. 8501.0*. Canberra: Commonwealth Government.
- Australian Bureau of Statistics. (2004b). *Year Book Australia, No. 86*. Canberra: Commonwealth of Australia.
- Australian Chicken Growers' Council Limited. (2004). *Submission to the Productivity Commission Review of National Competition Policy Arrangements*. Canberra: Australian Chicken Growers' Council.
- Australian Competition and Consumer Commission. (1999, 21 May 2004). *ACCC not to intervene in Bartter/Steggles poultry acquisition*. Retrieved 3 March 2004, from <http://www.accc.gov.au/content/index.phtml/itemId/322905>
- Australian Consumers Association. (1990). The new breed. *Choice*, March, 36-37.
- Australian Consumers Association. (1994). Putting fast food to the test. *Choice*, April, 7-12.
- Australian Forestry and Fisheries Department. (2002). *Australian Food Statistics*. Canberra: Commonwealth of Australia.
- Australian Industrial Relations Commission. (1991). *Inquiry into the Meat Industry*. Sydney: Australian Industrial Relations Commission.
- Australian Meat & Live-stock Corporation. (1983a). *An assessment of meat and livestock markets in Saudi Arabia and Gulf states* (Economics information paper No. 11). Sydney: Australian Meat & Live-stock Corporation, Economics and Finance Division.
- Australian Meat & Live-stock Corporation. (1983b). *Some effects of and alternatives to Australia's anti-dumping and countervailing legislation* (Economics information paper No. 11). Sydney: Australian Meat & Live-stock Corporation, Economics and Finance Division.
- Australian Meat & Live-stock Corporation. (1986a). *Quota administration schemes: a new approach* (Economics information paper No. 17). Sydney: Australian Meat & Live-stock Corporation, Market Analysis and Policy Division.

- Australian Meat & Live-stock Corporation. (1986b). *Swedish beef exports in the Pacific Basin* (Economics information paper No. 15). Sydney: Australian Meat & Live-stock Corporation, Economics and Finance Division.
- Australian Meat & Live-stock Corporation. (1988). *Annual Report 1987-88 and previous issues*. Sydney: AMLC.
- Australian Meat and Live-stock Corporation. (1991a). The 'Top 20' Processors. *Feedback*, 4, 13-23.
- Australian Meat and Live-stock Industry Policy Council, & Australian Department of Primary Industries and Energy. (1989). *Foreign investment in the Australian meat and livestock industry: interim report to the honourable John Kerin Minister for Primary Industries and Energy, October 1989*. Barton, ACT: Australian Meat and Live-stock Industry Policy Council.
- Australian Meat and Live-stock Policy Council. (1991). *Foreign Investment in the Australian Meat and Livestock Industry* (Policy Report No. 10). Canberra: Australian Meat and Live-stock Policy Council.
- Australian Meat and Live-stock Steering Committee. (1996). *Australian meat and livestock reform for the future: Steering Committee and Task Force Report*. Canberra: Meat and Live-stock Industry Reform Task Force.
- Australian Meat and Live-stock Steering Committee. (1996). *Australian meat and livestock reform for the future: Steering Committee and Task Force Report*. Canberra: Meat and Live-stock Industry Reform Task Force.
- Australian Meat Board. (1936). *First Annual Report*. Sydney: AGPS.
- Australian Meat Board. (1950). *Fifteenth Annual Report*. Sydney: AGPS.
- Australian National Audit Office. (1998). *Restructuring of meat and livestock statutory organisations*. Canberra: Australian National Audit Office.
- Axelsen, C. (1968). *A Commercial and Economic Study of the Growth Prospects of the Major Food Industries of Australia*. Geneva: Medicine et Hygiene.
- Bagozzi, R. P. (1975). Marketing as Exchange. *Journal of Marketing*, 39(October), 32-39.
- Baiada Poultry. (2003a). *History*. Retrieved 14 March 2003, from http://www.baiada.com.au/history_frame.htm
- Baiada Poultry. (2003b). *Lilydale Select Free Range*. Retrieved 20 March 2003, from http://www.baiada.com.au/lilydale_final/faqs_frame.htm
- Baiada Poultry. (2003c). *Lilydale Select Free Range Stockists*. Retrieved 20 March 2003, from http://www.baiada.com.au/lilydale_final/stockist.htm
- Baiada Poultry. (2003d). *Who are we?* Retrieved 14 March 2003, from http://www.baiada.com.au/who_frame.htm
- Baker, M. J. (1991). *Marketing: An Introductory Text* (5th ed.). Basingstoke, UK: Macmillan.
- Ball, K., Dewbre, J., & Australian Bureau of Agricultural and Resource Economics. (1989). *An analysis of the returns to generic advertising of beef, lamb and pork* (Discussion paper No. 89.4). Canberra: Australian Bureau of Agricultural and Resource Economics.
- Ball, M. (1998a, 4 February). Critical Eye on Meat. *Herald and Weekly Times*, p. 53.
- Ball, M. (1998b, 19 August 1998). Grade Plan Goes Ahead. *Herald and Weekly Times*, p. 55.
- Ball, M. (1998c, 29 July 1998). Seal of Approval for Meat Grade Plan. *Herald and Weekly Times*, p. 10.
- Ban, E. (1998). Grocery Shopping Survey. *Retail World*, 51(October), 6-7.
- Barkema, A., & Drabenstott, M. (1995). The many paths of vertical coordination: structural implications for the US food system. *Agribusiness*, 11, 483-492.
- Barksdale, H. C., & Darden, B. (1971). Marketers' Attitude Towards the Marketing Concept. *Journal of Marketing*, 35(October), 29-36.
- Bartter Enterprises. (2003). *Information Memorandum: Agribusiness Properties for Sale and Lease-Back or Broiler Growing Contract*. Retrieved 2 January 2003, from <http://www.bartter.com.au/Depth%20Doc-V3.pdf>
- Bartter Enterprises Pty Ltd. (2002). *National Packaging Covenant Action Plan, March 2003*. Sydney: Bartter Enterprises Pty Ltd.

- Barwise, P., & Robertson, T. (1992). Brand Portfolios. *European Management Journal*, 10(September), 277-285.
- Beckett, R. (1984). *Convicted tastes: food in Australia*. Sydney: Allen & Unwin.
- Beckman, T. N. (1957). The Value Added Concept as a Measurement of Output. *Advanced Management*, April, 6-9.
- Beere, G., & Northern Territory Department of Primary Production. (1985). *The potential for Northern Territory beef and cattle exports to East Malaysia and Brunei*. Darwin: Northern Territory Department of Primary Production.
- Beeton, I. (1880). *Book of Household Management*. London: Ward, Lock & Co.
- Beever, E. (1967). *A history of the Australian meat export trade, 1865-1939*. Unpublished Doctoral Thesis, Melbourne University, Melbourne.
- Bennett, S. (2002, 19 June). Holmes on the range - Business dynasty steaks its future on your dinner plate - Steak in a bonanza. *Daily Telegraph*, p. 3.
- Bentham, J. (1967). An Introduction to the Principles of Morals and Legislation. In A. I. Melden (Ed.), *Ethical Theories: A Book of Readings*. Englewood Cliffs, NJ: Prentice-Hall.
- Beverland, M. (2005). Creating value for channel partners: the Cervena case. *Journal of Business & Industrial Marketing*, 20(3), 127-135.
- Biggs, A. P. (1975). Beef Carcass Classification: Current Research and Implications for Marketing. *Quarterly Review of Agricultural Economics*, XXVIII(2), 67-79.
- Bindon, B. M. (2001). Genesis of the Cooperative Research Centre for the Cattle and Beef Industry: integration of resources for beef quality research (1993-2000). *Australian Journal of Experimental Agriculture*, 41(7), 843-853.
- Bindon, B. M., & Jones, N. M. (2001). Cattle supply, production systems and markets for Australian beef. *Australian Journal of Experimental Agriculture*, 41(7), 861-877.
- BIS Shrapnel. (1999). *Fast food in Australia: 1998-1999*. Sydney: BIS Shrapnel.
- BIS Shrapnel. (2000). *Fast food in Australia: 1999-2000*. Sydney: BIS Shrapnel.
- BIS Shrapnel. (2004). *The Australian Foodservice Market, 2002-2004*. Sydney: BIS Shrapnel.
- Blackett, D. (1970). "Quo Vadis" - The Poultry Industry in Australia 1970. *Food Technology in Australia*, August, 446-447.
- Blainey, G. (1966). *The tyranny of distance: how distance shaped Australia's history*. Melbourne: Sun Books.
- Blyth, N., Parsons, A., & Spence, J. (1986). *South American beef and Asian markets implications for Australia* (Economics information paper No. 16). Sydney: Australian Meat and Live-stock Corporation, Economics and Finance Division.
- Bockstael, N. E. (1987). Economic Efficiency Issues of Grading and Minimum Quality Standards. In R. L. Kilmer & W. J. Armbruster (Eds.), *Economic Efficiency in Agricultural and Food Marketing* (pp. 231-250). Ames, IA: Iowa State University Press.
- Boehm, E. A. (1979). *Twentieth Century Economic Development in Australia*. Melbourne: Longman Cheshire.
- Bolt, C. (2001, 22 October). News - Labels State Chicken are Hormone-free, Barn-reared. *Australian Financial Review*, p. 9.
- Bolton, G. (1990). *The Middle Way: Volume 5 1942-1988*. Melbourne, Australia: Oxford University Press.
- Booz, Allen, & Hamilton. (1993). *International Comparisons in the Beef Processing Industry: An Executive Summary*. Sydney: Cattle Council of Australia and Meat Research Corporation.
- Bowden, B. (1996). *A Breed Apart: The History of the Bacon Factories' Union of Employees 1946-1996*. Moorooka, QLD: Boolarong Press.
- Boyce, G., & Ville, S. P. (2002). *The development of modern business*. Houndmills, England: Palgrave.

- Boyd, W., & Watts, M. (1997). Agro-industrial just-in-time: the chicken industry and postwar American capitalism. In D. Goodman & M. Watts (Eds.), *Globalizing Food, Agrarian Questions and Global Restructuring* (pp. 192-225). London: Routledge.
- Braudel, F. (1973). *Capitalism and material life, 1400-1800* (Translated from the French by Kochan, M.). New York: Harper and Row.
- Braund, C. (1999). Supermarket debate continues. *Beef Improvement News*, June.
- Breyer, R. F. (1931). *Commodity Marketing*. New York: McGraw-Hill.
- Breyer, R. F. (1934). *The Marketing Institution*. New York: McGraw-Hill.
- British Economic Mission. (1929). *Report of the British Economic Mission*. Canberra: Commonwealth of Australia.
- Brooks, M. R., & Rosson, P. J. (1982). A study of export behaviour of small and medium-sized manufacturing firms in three Canadian Provinces. In M. R. Czinkota & G. Tesar (Eds.), *Export Management: An International Context* (pp. 39-54). New York: Praeger Publishers.
- Brooks, P. C. (1969). *Research in Archives: the use of unpublished primary sources*. Chicago: University of Chicago Press.
- Brooksbank, R. (1991). Successful marketing practice. *European Journal of Marketing*, 25(May), 20-29.
- Brown, D. (1997a, 5 November 1997). Beef Scheme 'Bias'. *Herald and Weekly Times*, p. 3.
- Brown, D. (1997b). Star Rating for Beef. *Herald and Weekly Times*, p. 62.
- Brown, W., & Jacques, E. (1964). *Product Analysis Pricing*. London: Heinemann Educational Books Ltd.
- Bucklin, L. P. (1966). *A Theory of Distribution Channel Structure*. Berkeley, CA: University of California.
- Bucklin, L. P., & Stasch, S. F. (1970). Problems in the Study of Vertical Marketing Systems. In L. P. Bucklin (Ed.), *Vertical Marketing Systems* (pp. 1-15). Glenview, IL: Scott, Foresman and Company.
- Burch, D., & Goss, J. (1999). Global Sourcing and Retail Chains: Shifting Relationships of Production in Australian Agri-Foods. *Rural Sociology*, 64(2), 334-350.
- Bureau of Agricultural Economics. (1953). *The Beef Situation*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1973). *National Agricultural Outlook Conference*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1975a). *The Australian beef cattle industry: an examination of the current situation, future prospects and possible policy options*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1975b). *The Australian Beef Cattle Industry: Submissions to the Industries Assistance Commission Inquiry*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1975c). *Developments in the Japanese beef market: their implications for production systems in the Australian beef cattle industry incorporating findings of a BAE study tour*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1975d). *National Agricultural Outlook Conference: The Outlook for Meat*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1975e). *Statistical handbook for the meat industry* (2nd ed.). Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1976). *Developments in Beef Carcass Classification*. Canberra: Commonwealth Government.
- Bureau of Agricultural Economics. (1981). *Livestock and meat marketing in Australia: An economic evaluation*. Canberra: Commonwealth Government.
- Burt, S. (2000). The strategic role of retail brands in British grocery retailing. *European Journal of Marketing*, 34(8), 875-890.
- Butland, G., & Rabobank International. (2002). *What a difference a year makes for the poultry exporters of the world* (No. 072-2002). Thailand: Rabobank International.

- Butlin, N. G. (1964). *Investment in Australian Economic Development: 1861-1900*. Cambridge: Cambridge University Press.
- Butlin, N. G., Barnard, A., & Pincus, J. J. (1982). *Government and Capitalism: Public and Private Choice in Twentieth Century Australia*. Sydney: Allen & Unwin.
- Butlin, S. J., & Schedvin, C. B. (1955). *War Economy 1939-42* (Vol. V). Canberra: Australian War Memorial.
- Butlin, S. J., & Schedvin, C. B. (1977). *War Economy 1942-45* (Vol. IV). Canberra: Australian War Memorial.
- Cahn, A. (1977). Australians in the Early Twentieth Century. In B. Wood (Ed.), *Tucker in Australia*. Melbourne: Hill of Content.
- Cain, D., & Ball, J. (1990). *The Australian chicken meat industry*. North Sydney: Australian Chicken Meat Federation.
- Capie, F. (1978). Australian and New Zealand Competition in the British Market 1920-39. *Australian Economic History Review*, 18(2), 46-63.
- Cavusgil, S. T. (1980). On the internationalization process of firms. *European Research*, 8(6), 273-281.
- Cavusgil, S. T. (1984). Differences Among Exporting Firms Based on Their Degree of Internationalization. *Journal of Business Research*, 12, 195-208.
- Cawood, M. (2003, July 10). Beef brands bring rivals together. *The Land*, p. 43.
- Chandler, J., Alfred Dupont. (1977). *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, MA: Harvard University Press.
- Chandler, J., Alfred Dupont. (1990). *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Harvard University Press.
- Chicken Meat Research Committee. (1974-75). *6th Annual Report of the Chicken Meat Research Committee 1974-75*. Canberra: Chicken Meat Research Committee.
- Christensen, C. H., Rocha, A., & Gertner, R. K. (1987). An Empirical Investigation of the Factors Influencing the Success of Brazilian Firms. *Journal of International Business Studies*, 18(3), 61-77.
- Christy, R., & Norris, G. (1999). Discovery markets: Communicating product identities in specialised sectors. *British Food Journal*, 101(10), 797-808.
- Church, R. (1999). New Perspectives on the History of Products, Firms, Marketing, and Consumers in Britain and the United States Since the mid-Nineteenth Century. *Economic History Review*, 52(August), 405-435.
- Clark, F. E., & Clark, C. P. (1947). *Principles of Marketing* (3rd ed.). New York, NY: The Macmillan Company.
- Clark, J. B. (1907). *Essentials of Economic Theory*. New York: The Macmillan Company.
- Clayton, K. C., & Preston, W. P. (2003). The Political Economy of Differentiating Markets: Facing Reality Inside the U.S. Department of Agriculture. *American Journal of Agricultural Economics*, 85(3), 737-741.
- Clements, F. W. (1986). *A history of human nutrition in Australia*. Melbourne: Longman Cheshire.
- Coghlan, T. A. (1900). *Statistics of the Seven Colonies of Australia, 1861-1899*. Sydney: Government Printer.
- Coghlan, T. A. (1902a). *Statistics of the Seven Colonies of Australia, 1901-1902*. Sydney: Government Printer.
- Coghlan, T. A. (1902b). *The Wealth and Progress of New South Wales, 1900-01*. Sydney: Government Printer.
- Coles Myer. (2004). *About Coles Myer*. Retrieved 11 October 2004, from <http://corporate.colesmyer.com>
- Committee on Meat Industry Encouragement Bill. (1924). *Report and Minutes of Evidence*. Sydney: New South Wales Parliament.
- Commonwealth Bureau of Census and Statistics. (1970). *Official Year Book of the Commonwealth of Australia, No. 56*. Canberra: Commonwealth Government.

- Commonwealth of Australia. (1920). Control of Trade and Prices During the War. In Commonwealth of Australia (Ed.), *Official Year Book No. 13* (pp. 1097). Canberra: Government Printer.
- Commonwealth of Australia. (1942-43). *Official Year Book No. 35*. Canberra: Government Printer.
- Commonwealth of Australia. (1944). Commonwealth Food Control. In Commonwealth of Australia (Ed.), *Official Year Book No. 36* (pp. 921). Canberra: Government Printer.
- Commonwealth of Australia. (1960). *Year Book of Australia, 1960, No. 46*. Canberra: Commonwealth of Australia.
- Condon, T. (1999, 15 October). Australia: News and Features - Retailers adapt to a new environment. *Business Review Weekly*, 21, 98-103.
- Conroy, M. L. (1962). Some aspects of the broiler industry. *Quarterly Review of Agricultural Economics*, XV(4), 172-178.
- Cooper, R. G., & Kleinschmidt, E. J. (1987). Success factors in product innovation. *Industrial Marketing Management*, 16(August), 215-223.
- Corriveau, G., & Tamilia, R. D. (2002). Comparing transactional forms in administered, contractual and corporate systems in grocery distribution. *Journal of Business Research*, 55(9), 771-773.
- Cox, A. (1999). Power, value and supply chain management. *Supply Chain Management: An International Journal*, 4(4), 167-175.
- Cox, A. W. (1997). *Business Success: A Way of Thinking about Strategy, Critical Supply, Chain Assets and Operational Best Practice*. Boston, England: Earlesgate Press.
- Cramer, G. L., & Jensen, C. W. (1982). *Agricultural economics and agribusiness* (2nd ed.). New York: Wiley.
- Crawford, J. G., Donald, C. M., Dowsett, C. P., Williams, D. B., & Ross, A. A. (1954). *Wartime Agriculture in Australia and New Zealand 1939-50*. Stanford, CA: Stanford University Press.
- Crespi, J. M., & Marette, S. (2002). Generic Advertising and Product Differentiation. *American Journal of Agricultural Economics*, 84(3), 691-701.
- Critchell, J. T., & Raymond, J. (1912). *History of the Frozen Meat Trade: An Account of the Development and Present Day Methods of Preparation, Transport, and Marketing of Frozen and Chilled Meats*. London: Constable & Company Ltd.
- CSIRO. (1994). *Information Needs and Concerns in Relation to Food Choice*. Adelaide: CSIRO.
- Currie, L. (1968). Marketing organisation for underdeveloped countries. In R. Moyer & S. C. Hollander (Eds.), *Markets and Marketing in Developing Economies* (pp. 117-129). Homewood, IL: Richard Irwin Inc.
- Cutler, T. (1976). *The History of the Australasian Meat Industry Employees Union: A Study of the Internal Dynamics of a Labour Organisation*. Unpublished Doctoral Thesis, University of New South Wales (Wollongong), Sydney.
- D. McKinna et al Pty Ltd. (1994). *Product description and labelling system, draft report*. Melbourne: Meat Research Corporation.
- Davidson, B. R. (1972). *The northern myth: a study of the physical and economic limits to agricultural and pastoral development in tropical Australia* (3rd ed.). Carlton, VIC: Melbourne University Press.
- Davidson, B. R. (1981). *European Farming in Australia: An Economic History of Australian Farming*. Amsterdam, The Netherlands: Elsevier Scientific Publishing Company.
- Davis, J., & Goldberg, R. (1957). *A Concept of Agribusiness*. Boston: Division of Research, Graduate School of Business Administration, Harvard University.
- de Chernatony, L., & Dall'Olmo Riley, F. (1998). Defining A "Brand": Beyond the Literature With Experts' Interpretations. *Journal of Marketing Management*, 14, 417-443.
- de Chernatony, L., Harris, F., & Dall'Olmo Riley, F. (2000). Added value: its nature, roles and sustainability. *European Journal of Marketing*, 34(1/2), 39-56.
- de Chernatony, L., & McDonald, M. H. B. (1998). *Creating powerful brands in consumer, service and industrial markets*. Oxford: Butterworth-Heinemann.

- Department of Agriculture and Stock. (1950). *Annual Report, 1949-1950*. Brisbane: Queensland Government.
- Department of Health and Ageing. (2001). *Australia announces new measures to protect public from effects of BSE*. Retrieved 31 December 2005, from <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-mediarelayr2001-dept-mr01011.htm>
- Department of Health and Ageing. (02 December 2004). *Bovine Spongiform Encephalopathy (BSE) Chronology of Events and Responses*. Retrieved 31 December 2005, from <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-mediarelayr2001-dept-mr01011.htm>
- Department of Primary Industries. (1981). *Annual Report 1980-1981*. Canberra: Commonwealth Government.
- Department of Primary Industries. (1985). *Annual Report 1984-1985*. Canberra: Commonwealth Government.
- Department of Primary Industries. (1986). *Annual Report 1985-86*. Canberra: Commonwealth Government.
- Department of Primary Industries & Energy. (1992). *Annual Report 1991-1992*. Canberra: Commonwealth Government.
- Dickson, P., & Ginter, J. L. (1987). Market segmentation, product differentiation, and marketing strategy. *Journal of Marketing*, 51(April), 1-10.
- Dimitri, C. (2003). Agricultural Marketing Institutions: A Response to Quality Disputes. *Journal of Agricultural & Food Industrial Organization*, 1(1), 1-23.
- Dixon, D. F. (1990). Marketing as Production: The Development of a Concept. *Academy of Marketing Science Journal*, 18(4), 337-343.
- Dixon, J. (1999). Reflexive Accumulation and Global Restructuring: Retailers and the Cultural Processes in the Australian Poultry Industry. *Rural Sociology*, 64(2), 320-333.
- Dixon, J. (2002). *The changing chicken: chooks, cooks and culinary culture*. Sydney: UNSW Press.
- Dixon, J., & Burgess, J. (1998). When local elites meet the WTO: Chicken as meat in the sandwich. *Journal of Australian Political Economy*, 41, 104-133.
- Drummond, I. M. (1985). Marketing Boards in the White Dominions, with Special Reference to Australia and Canada. In D. C. M. Platt & G. di Tella (Eds.), *Argentina, Australia and Canada: Studies in comparative Development: 1870-1965* (pp. 194-206). London: Macmillan.
- Drummond, J. C., & Wilbraham, A. (1957). *The Englishman's Food* (New and Revised ed.). London: Jonathon Cape.
- Duguid, P. (2003). Developing the Brand: The Case of Alcohol, 1800-1880. *Enterprise and Society*, 4(3), 405-441.
- Duncan, R. (1956). The Demand for Frozen Beef in the United Kingdom, 1880-1940. *Journal of Agricultural Economics*, XII(1), 82-88.
- Duncan, R. (1959). The Australian beef export trade and the origins of the Australian Meat Board. *Australian Journal of Politics and History*, 5(2), 191-201.
- Duncan, R. (1962). The Australian export trade with the United Kingdom in refrigerated beef, 1880-1940. *Business Archives and History*, 2(2), 106-121.
- Egan, A. F., Ferguson, D. M., & Thompson, J. M. (2001). Consumer sensory requirements for beef and their implications for the Australian beef industry. *Australian Journal of Experimental Agriculture*, 41(7), 855-859.
- Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K. M. (1991). Better Stories and Better Constructs: The Case for Rigor and Comparative Logic. *Academy of Management Review*, 16(3), 620-627.
- El-Ansary, A. I., & Liebrez, M. L. (1984). Comparative Marketing Systems Analysis: Revisited. In E. Kaynak & R. Savitt (Eds.), *Comparative Marketing Systems* (pp. 34-50). New York, NY: Praeger Publishers.

- El-Ansary, A. I., & Stern, L. W. (1972). Power measurement in the distribution channel. *Journal of Marketing Research*, 9(February), 47-52.
- Elkington, B., Hall, M., & Kell, D. (2000). *Trade mark law in Australia*. Sydney: Butterworths.
- Ellul, M. (1999, 9 October). Chance to Purchase Albany Chicken Outlet. *The West Australian*, p. 84.
- Elton, G. R. (1967). *The Practice of History*. Sydney: U.P & Methuen.
- Etgar, M. (1977). Channel Environment and Channel Leadership. *Journal of Marketing Research*, 15(February), 69-76.
- Fabiansson, S., Cunningham, D., & Bureau of Rural Sciences Australia. (2000). *Evolution of Australian Food Quality Systems: A Brief Description of Industry Food Safety System Implementation*. Canberra: Commonwealth of Australia.
- Fairbrother, J. (1971). The Structure of the Poultry Industry in Australia. *Food Technology in Australia*(November), 552.
- Fairbrother, J. (1975). *Poultry Meat*. Paper presented at the Proceedings of National Agriculture Outlook Conference, Canberra.
- Fairbrother, J. (1988). The Poultry Industry: Technology's child two decades on. *Food Australia*(November), 456-462.
- Fairbrother, J. (1992). *Prospects for the Chicken Meat Industry*. Paper presented at the National Agricultural and Resource Outlook Conference, Canberra.
- Fairbrother, J. (1994). Chicken meat - an export or import replacement industry? *Food Australia*, 46(12), 570-573.
- Fairbrother, J. (2001). *Submission to The Department of Foreign Affairs and Trade on forthcoming Multilateral Trade Negotiations in the World Trade Organisation*. Sydney: The Australian Chicken Meat Federation.
- Farrer, K. T. H. (1980). *A settlement amply supplied: food technology in nineteenth century Australia*. Carlton, VIC: Melbourne University Press.
- Farrer, K. T. H. (1988). *Australian meat exports to Britain in the nineteenth century: technology push and market pull* (Working papers in Australian studies No. 32). London: Sir Robert Menzies Centre for Australian Studies, Institute of Commonwealth Studies, University of London.
- Fearne, A. (1998). The evolution of partnerships in the supply chain: insights from the British beef industry. *Supply Chain Management*, 3(4), 214-231.
- Fearne, A., & Hughes, D. (1999). Success Factors in the Fresh Produce Supply Chain: Insights from the UK. *Supply Chain Management*, 4(3), 120-128.
- Felton, A. P. (1959). Making the Marketing Concept Work. *Harvard Business Review*, 37(July/August), 55-65.
- Ferguson, A. (2003, 5 March). Solomon Lew's Counter Attack. *Business Review Weekly*, 25, 28-32.
- Fernández-Armesto, F. (2002). *Food: A History*. London: Pan Books.
- Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Fidler, D. (1998). Home Meal Replacements - the changing face of supermarkets. *Food Australia*, 6, 265.
- Fleming, G. A. (1999). Agricultural support policies in a small open economy: New Zealand in the 1920s. *Economic History Review*, LII(2), 2334-2354.
- Fogel, R. W., & Elton, G. R. (1983). *Which Road to the Past? Two Views of History*. New Haven, CT: Yale University Press.
- Food and Agriculture Organization of the United Nations. (2002). *Some Issues Associated With The Livestock Industries Of The Asia-Pacific Region*. Bangkok, Thailand: Regional Office for Asia and the Pacific, FAO.
- Francis, R. V. (1992). *Representations of restructuring in the Victorian meat packing industry* (Working paper, Monash - Melbourne Joint Project on Comparative Australian-Asian Development No. 92-3). Clayton, VIC: Monash University Development Studies Centre.

- Frazier, G. L. (1999). Organizing and Managing Channels of Distribution. *Journal of the Academy of Marketing Science*, 27(2), 226-240.
- Freebairn, J. W. (1967). Grading as a market innovation. *Review of Marketing and Agricultural Economics*, 35(3), 147-162.
- Freebairn, J. W. (1973). The value of information provided by a uniform grading system. *Australian Journal of Agricultural Economics*, 17(2), 127-139.
- Fullerton, R. A. (1987). The Poverty of Historical Analysis: Present Weakness and the Future Cure in U.S. Marketing Thought. In A. F. Firat, N. Dholakia & R. P. Bagozzi (Eds.), *Philosophical and Radical Thought in Marketing* (pp. 97-116). Lexington, MA: Lexington Books.
- Fulop, C. (1989). The Effect of Changing Channels of Distribution on Promotional Strategy in the Market for Liquid Milk in the UK. *International Journal of Advertising*, 8(4), 321-339.
- Galbraith, J. K. (1952). *American capitalism: the concept of countervailing power*. Boston, MA: Houghton Mifflin.
- Gardial, S. F., Clemons, D. S., Woodruff, R. B., Schumann, D. W., & Burns, M. J. (1994). Comparing consumers' recall of prepurchase and postpurchase product evaluation experiences. *Journal of Consumer Research*, 20(March), 548-560.
- Gardner, B. B., & Levy, S. J. (1955). The Product and the Brand. *Harvard Business Review*, 33(March-April), 33-39.
- Glatz, P., Critchley, K., & Lunam, C. (1996). The Domestic Chicken. *ANZCCART News*, 9(2), 14.
- Golder, P. N. (2000). Historical method in marketing research with new evidence on long-term market share stability. *Journal of Marketing Research*, 37(2), 156-172.
- Gollan, A. (1988). Salt Pork to Take-away. In V. Burgman & J. Lee (Eds.), *Making a Life: A People's History of Australia Since 1788* (pp. 1-17). Melbourne: McPhee Gribble and Penguin Books.
- Goodman, D., Sorj, B., & Wilkinson, J. (1987). *From Farming to Biotechnology: A theory of Agro-Industrial Development*. Oxford: Basil Blackwell.
- Gottschalk, L. (1969). *Understanding History: A Primer of Historical Method* (2nd ed.). New York: Alfred A. Knopf.
- Gregor, H. (1982). *Industrialization of U.S. Agriculture*. Boulder, CO: Westview Press.
- Grewal, R., & Tansuhaj, P. (2001). Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility. *Journal of Marketing*, 65(February), 67-80.
- Griffith, G. R. (1975). More on Meat Marketing Margins. *Meat Industry Bulletin*, 18(6), 31-32.
- Griffiths, A. (1998). Institutional Capacity and National Competitive Advantage: The Rise and Stagnation of the Australian Meat Industry. *Industry and Innovation*, 5(2), 181-196.
- Griffiths, A. (2000). *Sources of national competitiveness in the global meat industry: a comparative study of state and industry linkages and value adding chains in Australia, United States, Netherlands and Denmark*. Unpublished Doctoral thesis, University of New South Wales, Sydney.
- Gropp, L., Hallam, T., & Manion, V. (2000). *Single Desk Marketing: Assessing the Economic Arguments*. Canberra: Productivity Commission.
- Grunert, K. G., Fruensgaard, J. L., Risom, K., Sonne, A.-M., Hansen, K., & Trondsen, T. (2002). Market Orientation at Industry and Value Chain Levels: Concepts, Determinants and Consequences. *Journal of Customer Behaviour*, 1(2), 167-194.
- Grunert, K. G., Juhl, H. J., & Poulsen, C. S. (2001). Perception de la qualité en alimentaire et rôle des labels. *Revue Française du marketing*, 183/184(Mar/Apr), 181-176.
- Grunert, K. G., & Valli, C. (2001). Designer-made meat and dairy products: consumer-led product development. *Livestock Production Science*, 72(1-2), 83-98.

- Hale, P., & Ashton, P. (2002). *Raising the Nation: A History of Commonwealth Departments of Agriculture, Fisheries and Forestry: 1901-2001*. Canberra: Commonwealth of Australia.
- Halkett, I. P. B. (1976). *The Quarter Acre Block*. Canberra: Australian Institute of Urban Studies.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the future*. Boston, MA: Harvard Business School Press.
- Hanf, J. H., & Kühl, R. (2005). Branding and its Consequences for German Agribusiness. *Agribusiness*, 21(2), 177-189.
- Hardy, L. (1987). *Successful Business Strategy: How to Win in the Marketplace*. London: Kogan Page.
- Harris, D., & Australian Bureau of Agricultural and Resource Economics. (1990). *Effects of the liberalisation of North Asian beef import policies*. Canberra: AGPS.
- Harris, J. M., Kaufman, P., Martinez, S., & Price, C. (2002). *The U.S. Food Marketing System, 2002: Competition, Coordination, and Technological Innovations Into the 21st Century* (No. AER811). Washington, DC: Economic Research Service, USDA.
- Hartley, J. F. (1994). Cases Studies in Organizational Research. In C. Cassell & G. Symon (Eds.), *Qualitative methods in organizational research: a practical guide* (pp. 208-229). London: Sage.
- Hayes, G., Malcolm, B., Watson, A., O'Keeffe, M., & Thatcher, L. (1998). *Strategic Alliances and the Red Meat Industry in Australia*, Retrieved 1 December 2002, from <http://www.agribusiness.asn.au/Review/Perspectives/redmeat.htm>
- Hearnshaw, H., & Shorthose, W. R. (1994). *Tailoring beef yield and quality to meet retail and consumer preferences by nutritional and genetic means*. Canberra: Meat Research Corporation.
- Helibron, S., & Roberts, F. (1995). *Agribusiness structures vertical coordination in Australia and internationally* (RIRDC Research paper No. 95/16). Canberra: RIRDC.
- Henderson, P. W., & Cote, J. A. (1998). Guidelines for selecting or modifying logos. *Journal of Marketing*, 62(February), 14-30.
- Henderson, S., Epps, R., & Rural Industries Research and Development Corporation Australia. (2001). *Urban fringe land use conflict: two poultry case studies: a report for the Rural Industries Research and Development Corporation* (No. 00/174). Barton, ACT: RIRDC.
- Hennessy, D. A. (1995). Microeconomics of Agricultural Grading: Impacts on the Marketing Channel. *American Agricultural Economics*, 77(November), 980-989.
- Henny Penny. (2003). *Franchising*. Retrieved 1 October 2004, from <http://www.hennypenny.com.au/frame.html>
- Henry, R., & Rothwell, G. (1995). *The world poultry industry*. Washington, DC: World Bank.
- Hobbs, J. E., Spriggs, J., & Fearn, A. (2001). Institutional arrangements and incentive structures for food safety and quality assurance in the food chain. In N. Hooker & E. Murano (Eds.), *Interdisciplinary food safety research* (pp. 43-67). Boca Raton, FL: CRC Press.
- Hobbs, J. E., & Young, J. E. (2000). Closer vertical co-ordination in agri-food supply chains: a conceptual framework and some preliminary evidence. *Supply Chain Management: An International Journal*, 5(3), 131-142.
- Hollander, S. C., Rassuli, K. M., Dix, L. F., & Jones, D. G. B. (2003, May 15-18). *Periodization in Marketing History: A Narrative in N Chapters Redux*. Paper presented at the The Romance of Marketing History, Proceedings of the 11th Conference on Historical Analysis and Research in Marketing (CHARM), East Lansing, MI.
- Hollingsworth, A. (2004). Increasing retail concentration: Evidence from the UK food retail sector. *British Food Journal*, 106(8/9), 629-638.
- Holstius, K., & Paltschik, M. (1983). Brand names and perceived value. *European Research*, 11(October), 151-156.
- Hooten, J. (1960). The American Method. *Meat Trades Journal of Australia*, 21-23.

- House of Representatives Standing Committee on Industry, Senate Rural and Regional Affairs and Transport Committee. (2000). *Of material value? Inquiry into increasing the value added to Australian raw materials*. Retrieved 23 December 2002, from http://www.aph.gov.au/house/committee/isr/val_add/Fullrpt.pdf
- Hudson, M. A. (1990). Toward a Framework for Examining Agribusiness Competitiveness. *Agribusiness*, 6(3), 181-189.
- Hughes, D. (1994). *Breaking with Tradition: Building Partnerships & Alliances in the European Food Industry*. London: Wye College Press.
- Humphery, K. (1998). *Shelf life: supermarkets and the changing cultures of consumption*. Melbourne: Cambridge University Press.
- Hunt, S. D. (1983). *Marketing Theory: The Philosophy of Marketing Science*. Homewood, IL: Richard D. Irwin.
- Hutchinson, R. C. (1958). *Food for the people of Australia*. Sydney: Angus & Robertson.
- Hutton, J. G. (1997). A study of brand equity in an organizational-buying context. *Journal of Product & Brand Management*, 6(6), 428-439.
- Industries Assistance Commission. (1975). *Beef: Short Term Assistance to Beef Cattle Producers in Australia* (No. 59). Canberra: Industries Assistance Commission.
- Industries Assistance Commission. (1976a). *Financing Promotion of Rural Products* (No. 98). Canberra: Commonwealth Government.
- Industries Assistance Commission. (1976b). *Financing Rural Research* (No. 90). Canberra: Commonwealth Government.
- Industries Assistance Commission. (1983). *The abattoir and meat processing industry* (No. 313). Canberra: Commonwealth Government.
- Industry Commission. (1991). *Statutory Marketing Arrangements for Primary Products* (No. 10). Canberra: Commonwealth Government.
- Industry Commission. (1994). *Meat Processing: Volume 1 & 2* (No. 38). Canberra: Commonwealth Government.
- Inghams Enterprises. (2003). *Inghams Enterprises - The Inghams Story*. Retrieved 19 January 2003, from <http://www.ingham.com.au/ingham1/enterprises.asp>
- Insch, A. (2004, 26-29 May). *Using Complexity Theory to Explain Changes in Product-Country Images: the Case of Australian Beef Exports to Japan*. Paper presented at the Academy of Marketing Science, Vancouver, Canada.
- Instate Pty Ltd. (1997). *Asian Export Opportunities for Chicken Meat*. Sydney: Chicken Meat Federation.
- Inter-State Commission. (1917). *Report No. 4 - Meat - Further report dealing with meat in New South Wales and Queensland* (no. 70) (Parliamentary Papers). Melbourne: Commonwealth Government.
- Inter-State Commission. (1918). *Report No. 7 - Meat - Further report on re-investigation* (no. 88) (Parliamentary Papers). Melbourne: Commonwealth Government.
- Jaworski, B. J., & Kohli, A. K. (1993). Marketing Orientation: Antecedents and Consequences. *Journal of Marketing*, 56(July), 53-70.
- Jaworski, B. J., & Kohli, A. K. (1996). Market orientation: review, refinement and roadmap. *Journal of Market Focused Management*, 1(2), 119-135.
- Jereski, L. K. (1985). McDonald's strikes gold with Chicken McNuggets. *Marketing & Media Decisions*, Spring, 45-48.
- JETRO. (2003). *Japanese Market Report: 16. Fresh and Frozen Meat*. Tokyo: JETRO.
- Jevons, W. S. (1957). *The Theory of Political Economy*. New York: Kelly and Millman.
- Johansson, J. K. (2000). *Global Marketing: Foreign Entry, Local Marketing and Global Management* (2nd Edition ed.). Boston, MA: McGraw-Hill.
- Johns, M., & Bureau of Agricultural Economics. (1980). *The beef market in the Republic of Korea: prospects for demand, supply and imports*. Canberra: Commonwealth of Australia.
- Joint Committee on Prices. (1973). *Report from the Joint Committee on Prices, Stabilisation of Meat Prices*. Canberra: Parliament of the Commonwealth of Australia.
- Jones, J. (1986). *What's in a Name?* Aldershot, England: Gower.

- Juniper, L. V. (1949). The Export of Frozen Poultry. Part 1. The Marketing of Poultry on a Trader to Trader Basis. *CSIRO Food Preservation Quarterly*, 9, 57.
- Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review*, 80, 237-251.
- Kantrow, A. M. (1986). Why History Matters to Managers. *Harvard Business Review*, 64(January-February), 81-88.
- Kapferer, J.-N. (1997). *Strategic Brand Management* (2nd ed.). London: Kogan Page.
- Katz, J. P., & Boland, M. (2000). A new value-added strategy for the US beef industry: The case of US Premium Beef Ltd. *British Food Journal*, 102(9), 711-727.
- Kaynak, E. (1986). World food marketing systems: integrative statement. In E. Kaynak (Ed.), *World Food Marketing Systems* (pp. 3-14). London: Butterworths.
- Kaynak, E. (1999). Cross-National and Cross-Cultural Issues in Food Marketing: Past Present and Future. *Journal of International Food and Agribusiness Marketing*, 10(4), 1-11.
- Keep, W. W., Hollander, S., C., & Dickinson, R. (1998). Forces Impinging on Long-Term Business-to-Business Relationships in the United States: An Historical Perspective. *Journal of Marketing*, 62(February), 31-45.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(January), 1-22.
- Keller, K. L. (1998). *Strategic Brand Management*. Englewood Cliffs, NJ: Prentice-Hall.
- Kelly, J. J. H., & Crawford, J. (1971). *Beef in Northern Australia*. Canberra: Australian National University Press.
- Kelly, J. J. H., & Williams, D. D. B. (1953). The Beef Industry in Northern Australia. *Economic record*, XXIX(57), 189-210.
- Kentucky Fried Chicken. (2003). *KFC Queensland - About Us*. Retrieved 14 March 2003, from http://www.kfcqld.com.au/cfg_background.htm
- Kim, C., & Curry, J. (1993). Fordism, Flexible Specialisation and Agri-Industrial Restructuring: the case of the US Broiler Industry. *Sociologia Ruralis*, XXXIII(1), 61-80.
- Kim, S. H. (1989). *Agricultural Marketing in Asia*. Paper presented at the Marketing Farm Products in Asia and the Pacific. Proceedings of the Seminar on Marketing Farm Products, Tokyo.
- Kirby. (1999, 29 March). Supermarkets in a double bind. *Business Review Weekly*, 40-41.
- Kirpalani, V. H., & McIntosh, N. B. (1980). International Marketing Effectiveness of Technology Oriented Small Firms. *Journal of International Business Studies*, 10(Winter), 81-90.
- Klinger, P. (2002, 6 July). Buyers Find Something to Crow About. *Australian Financial Review*, p. 10.
- Knightley, P. (1981). *The Vestey Affair*. London: McDonald Futura publishers.
- Knowles, P. J. (2004). *Trials and Tribulations, 10 February 1951*. Retrieved 3 December 2004, from <http://www.kmike.com/oz/knowles/diary.html>
- Kobayashi, K. (2000, 27-30 November). *Development of Wholesale Markets in Asian Selected Countries in View of International Comparison of Wholesale Marketing for Fruit and Vegetables*. Paper presented at the Feeding Asian Cities. Proceedings of the regional seminar, Bangkok.
- Kohli, A. K., & Jaworski, B. J. (1990). Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing*, 54(April), 1-18.
- Kohls, R. L., & Uhl, J. N. (1998). *Marketing Agricultural Products* (8th ed.). New York: Macmillan Publishing Company.
- Kotler, P. (2001). *Principles of Marketing* (3rd European ed.). Harlow, England: Financial Times Prentice Hall.
- Lancaster, K. J. (1966). A New Approach to Consumer Theory. *Journal of Political Economy*, 74, 132-157.
- Lancaster, K. J. (1979). *Variety, Equity and Efficiency*. Oxford: Basil Blackwell.
- Langlois, C. V., & Seignobos, C. (1898). *Introduction to the Study of History*. New York: Henry Hold and Co.

- Larkin, J., & Associates. (1991). *The Australian Poultry Industry*. Sydney and Melbourne: Instate Pty Ltd and SG Heilbron.
- Larkin, J., & Heilbron, S. G. (1997). *The Australian Chicken Meat Industry: International Benchmarking Study*. Sydney and Melbourne: Instate Pty Ltd and SG Heilbron.
- Laurie, R. (2003, 3-5 October 2003). 'Cheap Meat to the People': *The Queensland Government Butcher Shops*. Paper presented at the Eighth National Labour History Conference, Brisbane.
- Lawrence, J. D. (2002). *Quality Assurance "Down Under": Market Access and Product Differentiation*. Ames, IA: Midwest Agribusiness Trade Research and Information Center (MATRIC), Iowa State University.
- League of Nations Economic Committee. (1913). The Agricultural Crisis. *I*, 35, 37.
- Lenards Pty Ltd. (2002). *Lenard's Franchising*. Retrieved 14 November 2002, from <http://www.lenards.com.au/whychooselenards.aspx>
- Lesser, W. (1993). *Marketing livestock and meat*. New York and London: Food Products Press.
- Longworth, J. W. (1972). The problem of meat marketing: are marketing boards the answer? *The Australian Quarterly*, 44(1), 52-63.
- Low, G. S., & Fullerton, R. A. (1994). Brands, Brand Management and the Brand Manager System: A Critical-Historical Evaluation. *Journal of Marketing Research*, 31(May), 173-190.
- Lusk, J. L. (2001). Branded beef: Is it what's for dinner. *Choices*(2nd quarter), 27-30.
- Macdonald, S. (1995). Too Close for Comfort? The Strategic Implications of Getting Close to Customers. *California Management Review*, 37(4), 8-27.
- Marketing Editor. (2002, 8 April). Marketing editor - The poultry market is heading for a shake-out. *Foodweek*.
- Marshall, A. (1932). *Elements of Economics of Industry* (Vol. 1). London: Macmillan.
- Marshall, A. (1982). *Principles of economics: an introductory volume*. London: Macmillan.
- Martin, C. (2000). *Stock and Station Agents as Information Providers*. Kingston, ACT: Rural Industries Research and Development Corporation.
- Martin, L. J., & Warley, T. K. (1978). The Role of Marketing Boards in Stabilizing Commodity Markets. *American Agricultural Economics*(December), 878-884.
- Marx, K. (1954). *Capital: A Critical Analysis of Capitalist Production* (Vol. 1). Moscow: Foreign Languages Publishing House.
- McCallum, J. (2001, 15 June). Discount Rivals Boost the Brands. *Business Review Weekly*, 23, 36.
- McCammon, B. C. (1970). Perspectives for Distribution Programming. In L. P. Bucklin (Ed.), *Vertical Marketing Systems* (pp. 32-51). Glenview, IL: Scott Foresman.
- McCarthy, E. J. (1988). Marketing Orientation and Economic Development. In T. Nevett & R. A. Fullerton (Eds.), *Historical Perspectives in Marketing: Essays in Honor of Stanley C. Hollander* (pp. 133-146). Lexington, MA: Lexington Books.
- McConnell, D. (1966). Contract Farming and the Broiler Industry. *Australian Journal of Agricultural Economics*, 10(2), 158-168.
- McCracken, J. (2001, 17 November). Perspective - Organic Food and the Crook Chook. *Australian Financial Review*, p. 25.
- McCullagh, C. B. (1984). *Justifying Historical Descriptions*. New York: Cambridge University Press.
- McDonald, C. M. (1967). Innovation in Australian Agriculture. In D. B. Williams (Ed.), *Agriculture in the Australian Economy* (pp. 57-86). Sydney: Sydney University Press.
- McDonald, L. (1988). *Cattle country: the beef industry in Central Queensland 1850s-1980s*. Brisbane: Boolarong Press.
- McDonalds Australia Limited. (2003). *MacPac: the answers to all your questions about McDonalds*. Thornleigh, NSW: McDonalds Australia Limited.
- McGregor, K. (2002, 01/05/2002). Baiada moves into free range poultry. *Food Management News*, 7.

- McKean, C. A., & Australian Food and Grocery Council. (1999). *Australian food: the complete reference to the Australian food industry* (2nd ed.). East Melbourne, VIC: Agri Food Media in association with Australian Food and Grocery Council.
- McKee, D. O., Varadarajan, P. R., & Pride, W. M. (1989). Strategic Adaptability and Firm Performance: A Marketing Contingency Perspective. *Journal of Marketing*, 53(July), 21-35.
- McNamara, C. (2000, 29 July). Raising the STEAKS. *The Courier Mail*, pp. 24-25.
- McNamara, C. P. (1972). The Present Status of the Marketing Concept. *Journal of Marketing*, 36(January), 50-57.
- Meat & Livestock Australia. (2004). *Value Added Products*. Retrieved 12 August 2004, from <http://www.mla.com.au/content.cfm?sid=905>
- Meat and Livestock Australia. (2000a). *Briefing Notes on Red Meat and Health Issue*. Sydney: Meat and Livestock Australia.
- Meat and Livestock Australia. (2000b). Top 25 Meat Processors, Calendar Year 2000. *Feedback*, 13, i-xiv.
- Meat and Livestock Australia. (2001). 'Red Meat Vitality Boogie' to sell nutrition story. Retrieved 30 November 2001, from <http://www.mla.com.au/content.cfm?sid=25&newsid=504&archive=show>
- Meat and Livestock Australia. (2002a). *Delicious, tasty Aussie Beef key to boost Japan sales*. Retrieved 11 May 2003, from <http://www.mla.com.au/printerversion.cfm?sid=25&newsid=1439>
- Meat and Livestock Australia. (2002b). Market Briefs, Domestic Market: Update (Vol. June). Sydney: Meat and Livestock Australia.
- Meat and Livestock Australia. (2002c). *The MSA Story*. Brisbane: Meat and Livestock Australia.
- Meat and Livestock Australia. (2003a, 7 January 2003). *Beef exports to Japan improve*. Retrieved 6 May 2003, from <http://www.mla.com.au/content.cfm?sid=1017&newsid=1553>
- Meat and Livestock Australia. (2003b). *Progress Report for period ending 31 December 2002*. Sydney: Meat and Livestock Australia.
- Meat and Livestock Australia. (2004). *Australian Beef: Safe, Healthy and Delicious*. Sydney: Meat and Livestock Australia.
- Meat Research Corporation. (1993). *Research and Development Plan 1991-92 to 1995-96, Research for Profit, May 1993 update - incorporating 1996-97 and 1997-98*. Sydney: Meat Research Corporation.
- Mellish, M. (1999, 20 July). Goodman - Steggles buyer in wings. *Sydney Morning Herald*, p. 25.
- Mellor, D. P. (1958). *The Role of Science and Industry* (Vol. 5). Canberra: Australian War Memorial.
- Merrett, D. (2002). Australian firms abroad before 1970: why so few, why those, and why there? *Business History*, 44(2), 65-87.
- Meulenberg, M. T., G., & Viaene, J. (1998). Changing food marketing systems in western countries. In W. M. F. Jongen & M. T. Meulenberg, G. (Eds.), *Innovation of Food Production Systems. Product Quality and Consumer Acceptance* (pp. 5-36). Wageningen, The Netherlands: Wageningen Pers.
- Mighell, R. L., & Jones, L. A. (1963). *Vertical Coordination in Agriculture* (Agricultural Economic Report No. 19). Washington, DC: Economic Research Service, United States Department of Agriculture.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Milne, N., Burton, H., & Marshall, D. (1989). *A new life: the history of the poultry industry in Queensland*. Brisbane: The Poultry Advisory Board.
- Mitchell, S. (1999, 30 August). Companies and Markets - Poultry Problems not just chicken feed. *Australian Financial Review*, p. 25.
- Mitchell, S. (2002, 8 February). Super Market Forces. *Australian Financial Review*, pp.43-44.

- Mittendorf, H. J. (1986). Role of government in improving food market centres in less developed countries. In E. Kaynak (Ed.), *World Food Marketing Systems* (pp. 54-72). London: Butterworths.
- Mizik, N., & Jacobson, R. (2003). Trading off between value creation and value appropriation: The financial implications of shifts in strategic emphasis. *Journal of Marketing*, 67(January), 63-73.
- Moll, K. (1986). Stimulation of industrial development through modern management of food distribution. In E. Kaynak (Ed.), *World Food Marketing Systems* (pp. 17-25). London: Butterworths.
- Möller, K. K. E., & Törrönen, P. (2003). Business suppliers' value creation potential: A capability-based analysis. *Industrial Marketing Management*, 32(2), 109-118.
- Morcombe, I. (1978). *Christmas dinner every day: scientific and technological developments in six food industries in Australia, 1950-1975*. Unpublished Masters thesis, Griffith University, Brisbane.
- Morey, J. A. (1959). *The Role of the Statutory Marketing Board in the Organised Marketing of Australia's Primary Products*. Unpublished Masters thesis, University of Sydney, Sydney.
- Morgan, N. A., & Vorhies, D. W. (2001). Product quality alignment and business unit performance. *The Journal of Product Innovation Management*, 18(6), 396-407.
- Mullen, J. D. (1982). Evaluating a pig carcass classification service using willingness to pay techniques. *Review of Marketing and Agricultural Economics*, 50(2), 181-192.
- Narver, J., & Slater, S. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54(October), 20-35.
- Narver, J. C., & Savitt, R. (1971). *The Marketing Economy: An Analytical Approach*. New York: Holt, Rinehart and Winston Inc.
- National Association of Retail Grocers of Australia. (1999). *Submission No. 201, Part 1 to Joint Select Committee on the Retailing Sector* (Vol. 8). Canberra: Parliament of Australia.
- National Competition Council. (2002). Chapter 10 - Retail trading arrangements. In N. C. Council (Ed.), *2002 Assessment of governments' progress in implementing the National Competition Policy and related reforms - Volume One: Assessment* (pp. 10.11-10.36). Canberra: Commonwealth of Australia.
- National Meat Association of Australia. (2001). Submission to the Parliamentary Joint Select Committee on the Retailing Sector. In Parliamentary Joint Select Committee on the Retailing Sector (Ed.), *Fair Market or Market Failure?: A review of Australia's retailing sector*. Canberra: Commonwealth of Australia.
- Naumann, E. (1995). *Creating Customer Value*. Cincinnati, OH: Thompson Executive Press.
- Neal, W. D. (2000). Branding in the third millennium. *Marketing Management*, 9(2), 64.
- New South Wales Government Overseas Trade Authority. (1981). *An Overview of the Relevant Reports, Studies and Proposals Floated in the Meat and Livestock Industry During and Following the Beef Recession (from late 1973-1978)*. Sydney: NSW Government.
- New South Wales Parliament Legislative Assembly, Select Committee upon the Meat Industry. (1972). *Report from the Select Committee of the Legislative Assembly Upon the Meat Industry*. Sydney: Government Printer.
- Nisbett, R., & Ross, L. (1980). *Human Inference: Strategic and Shortcomings of Social Judgment*. Englewood Cliffs, NJ: Prentice Hall.
- Nitschke, T., & O'Keefe, M. (1997). Managing the linkage with primary producers: experiences in the Australian grain industry. *Supply Chain Management*, 2(1), 4-6.
- Northern, J. R. (2000). Quality attributes and quality cues: Effective communication in the UK meat supply chain. *British Food Journal*, 102(3), 230-245.
- O'Keefe, M. (2002). Lenards: The secrets to success. *Retail World*, 55(August), 29.
- Onkvisit, S., & Shaw, J. J. (1989). The International Dimension of Branding: Strategic Considerations and Decisions. *International Marketing Review*, 6(3), 22-34.

- Palamountain, J. C. (1955). *The Politics of Distribution*. Cambridge, MA: Harvard University Press.
- Papavassiliou, N., & Stathakopoulos, V. (1997). Standardization versus adaptation of international advertising strategies. *European Journal of Marketing*, 31(7), 504-527.
- Parasuraman, A. (1997). Reflections on gaining competitive advantage through customer value. *Journal of the Academy of Marketing Science*, 25(2), 154-161.
- Parliamentary Joint Select Committee on the Retailing Sector. (2001). *Fair Market or Market Failure?: A review of Australia's retailing sector*. Canberra: Commonwealth of Australia.
- Parliamentary Library. (2004). *Avian Influenza - Is Australia a Sitting Duck?* (No. 40, 1 March 2004 ed. Vol. 2003-04). Canberra: Commonwealth of Australia.
- Parsonson, I. M. (1998). *The Australian ark: a history of domesticated animals in Australia*. Collingwood, VIC: CSIRO Publishing.
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage.
- Peel, L. (1973). History of the Australian pastoral industries to 1960. In G. Alexander & O. B. Williams (Eds.), *The Pastoral Industries of Australia* (pp. 41-75). Sydney: Sydney University Press.
- Perren, R. (1985). The retail and wholesale meat trade, 1880-1939. In D. Oddy & D. Miller (Eds.), *Diet and health in modern Britain* (pp. 46-65). Beckenham, Kent: Croom Helm Ltd.
- Perry, C. (2000). Case Research in Marketing. *The Marketing Review*, 1(3), 303-323.
- Pfeffer, J. (1981). *Power in Organisations*. Marshfield, MA: Pitman.
- Pfeffer, J., & Salancik, G. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.
- Pickard, D. (1967). Advertising and Market Research in Agriculture. In T. K. Warley (Ed.), *Agricultural Producers and Their Markets* (pp. 514-518). Oxford: Basil Blackwell.
- Pope, J., Cullwick, D., & Kennelly, J. (1998). Commodity Branding. In *Brands: The New Wealth Creators* (pp. 161-175). New York: New York University Press.
- Porter, G., & Livesay, H. C. (1989). *Merchants and Manufacturers: Studies in the Changing Structure of Nineteenth-Century Marketing*. Chicago: Ivan R. Dee Inc.
- Porter, M. E. (1980). *Competitive Strategy: Techniques for Analysing Industries and Competitors*. New York: Free Press.
- Porter, M. E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Prices Surveillance Authority. (1986). *Inquiry in Relation to the Table Chicken Industry* (No. 7). Canberra: Prices Surveillance Authority.
- Pritchard, W. N. (2000). Beyond the Modern Supermarket. Geographical Approaches to the Analysis of Contemporary Australian Retail Restructuring. *Australian Geographical Studies*, 38(2), 204-218.
- Queensland Department of Primary Industries. (1975). *Submission to Industries Assistance Commission inquiry into short term assistance for the Australian beef industry*. Brisbane: The Queensland Department of Primary Industries.
- Queensland Farmers' Federation. (2001). *Case Study: Australian Country Choice: A Consumer Driven Approach From the Paddock to the Plate*. Retrieved 4 October 2003, from <http://www.qff.org.au/Hot%20Issues/Aust%20Country%20Choice.htm>
- Queensland Meat Industry Board. (1932). *Annual Report*. Brisbane: Queensland Government.
- Queensland Meat Industry Board. (1934). *Annual Report*. Brisbane: Queensland Government.
- Queensland Royal Commission on Abattoirs and Meatworks. (1945). *Report [of] the Royal Commission appointed to inquire into proposals for the establishment of additional abattoirs or meatworks: and matters pertaining to the welfare of the livestock and meat industry: together with minutes of evidence not printed*. Brisbane: Queensland Government.
- Rabobank International. (2002). *Australia and Argentina's Beef Industries: Contrasting Structures and Strategies* (Industry Note 067-2002). Sydney: Rabobank International.

- Ramsay, R. (1999, 13 September 1999). Aussie beef comes up smelling roses. *Business Asia*, 7, 8.
- Ravald, A., & Grönroos, C. (1996). The value concept and relationship marketing. *European Journal of Marketing*, 30(2), 19-30.
- Red Rooster. (2003). *Franchising Pamphlet* (Vol. 2003). Perth: Red Rooster.
- Report of the Joint Committee of Australian and UK Officials. (1945). *Food Consumption Levels in Australia and the UK* (No. 41). Canberra: Commonwealth of Australia.
- Report on Select Committee of the House of Assembly with Minutes of Proceedings. (1974). *Meat Production Processing Marketing: Abattoir Facilities and Fees: Desirability of a Government Supervisory Authority*. Hobart: Parliament of Tasmania.
- Ries, A., & Trout, J. (1979). *Positioning: the battle for Your Mind*. New York: McGraw-Hill Inc.
- Risdale, G. S. (1959). 1959 Season Promises to Beat 1958 Records. *The Meat Industry Journal of Queensland*, January, 13.
- Ritzer, G. (1993). *The McDonaldization of Society*. Thousand Oaks, CA: Pine Forge Press.
- Roepken, K. (1988). Consumer trends in the 1980s and implications for the dairy industry. *Food Australia*, 40, 125-135.
- Rolfe, J., & Reynolds, R. (1999). Competition and Exit in Meat Processing: A Queensland Case Study. *Australian Agribusiness Review*, 7(1), 1-16.
- Rosewarne, S. (1983). The political economy of retailing into the eighties - part 1. *Journal of Australian Political Economy*, 15, 18-38.
- Rossiter, J. R., & Percy, L. (1997). *Advertising Communications & Promotion Management* (2nd ed.). New York: McGraw Hill.
- Ross-Smith, A., Walker, G., National Working Party on the Portrayal of Women in the Media, & Office of the Status of Women, A. (1991). *Women and advertising resource package*. Barton, ACT.: Office of the Status of Women Department of the Prime Minister and Cabinet.
- Rural and Allied Industries Council. (1983, February 11). *The potential for the export of live cattle from Australia proceedings of a seminar*, Austin Lecture Theatre, University of Western Australia, Perth.
- Rural Industries Research and Development Corporation Australia. (1994-2002). *Annual Reports 1994-2002*. Canberra: RIRDC.
- Rural Industries Research and Development Corporation Australia. (2000). *Annual Report 1999-2000*. Canberra: RIRDC.
- Rural Industries Research and Development Corporation Australia. (2004). *Five Year R&D Plan for the Chicken Meat Program 2004-2009*. Canberra: RIRDC.
- Ryan, R. (1997, 19 March). KFC Drums up image. *Daily Telegraph*, p. 41.
- Sanchez, R. (1995). Strategic Flexibility in Product Competition. *Strategic Management Journal*, 16(Summer), 135-159.
- Santich, B. (1995). *What the Doctors Ordered: 150 Years of Dietary Advice in Australia*. Melbourne: Hyland House.
- Savitt, R. (1980). Historical Research in Marketing. *Journal of Marketing*, 44(Fall), 52-58.
- Schaffner, D. J., Schroder, W. R., & Earle, M. D. (1998). *Food Marketing: An International Perspective*. Boston, MA: WCB McGraw-Hill.
- Schatzman, L., & Strauss, A. (1973). *Field Research*. Englewood Cliffs, NJ: Prentice Hall.
- Schlosser, E. (2002). *Fast Food Nation*. London: Penguin Books.
- Schmalkuche, P. (1990). *Cattlemen's Union: The First Decade*. Moorooka, QLD: Brolga Publishing.
- Schmidt, L. (1999a, 24 September). Bartter's big challenge. *Business Review Weekly*, 21, 90.
- Schmidt, L. (1999b, 24 September). Ingham birds ready their legal eagles. *Business Review Weekly*, 21, 86-91.
- Schroder, M. J. A., & McEachem, M. G. (2002). ISO 9001 as an audit frame for integrated quality management in meat supply chains: the example of Scottish beef. *Managerial Auditing Journal*, 17(1/2), 79-85.

- Scientific Steering Committee of the European Commission. (2000). *Report on the Assessment of the Geographical BSE-Risk (GBR) of Australia*. Brussels: Directorate General of Health and Consumer Protection, European Commission.
- Scott, E. (1936). *Australia During the War: The Official History of Australia in the War of 1914-1918* (Vol. 11). Sydney: Angus & Robertson.
- Select Committee on Territory Food Prices. (1999). *Price, Quality and Choice: Striking a Fair Balance - Inquiry into Food Prices in the Northern Territory* (Vol. 2). Darwin: Legislative Assembly of the Northern Territory.
- Senate Rural and Regional Affairs and Transport Committee. (1996). *Report on the Importation of Cooked Chicken Meat Into Australia*. Canberra: Commonwealth of Australia.
- Senate Rural and Regional Affairs and Transport Committee. (1997). *Value-adding in Agricultural Production*. Retrieved 23 December 2002, from http://www.aph.gov.au/senate/committee/rrat_ctte/completed_inquiries/1996-99/value/report/index.htm
- Seperich, G., Woolverton, M., & Beierlein, J. (1994). *Introduction to Agribusiness Marketing*. Englewood Cliffs, NJ: Regents/Prentice Hall.
- Shafer, R. J. (1974). *A Guide to Historical Method*. Homewood, IL: The Dorsey Press.
- Shann, E. O. G. (1948). *An Economic History of Australia*. Melbourne: Georgian House.
- Shapiro, B. P. (1988). What the Hell is 'Market Oriented?' *Harvard Business Review*, 66(November/December), 119-125.
- Shaw, A. G. L. (1970). History and Development of Australian Agriculture. In D. B. Williams (Ed.), *Agriculture in the Australian Economy* (pp. 1-28). Sydney: Sydney University Press.
- Shaw, S. A., Burt, S. L., & Dawson, J. A. (1989). Structural Changes in the European Food Chain. In B. Traill (Ed.), *Prospects for the European Food System* (pp. 3-32). London.: Elsevier Applied Science.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: a theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- Shimp, T. A. (2003). *Advertising, Promotion and Supplemental Aspects of Integrated Marketing Communications* (6th ed.). Publication Mason, OH: Thomson South-Western.
- Shoebridge, N. (1992a). Beef and Lamb. In N. Shoebridge (Ed.), *Great Australian Advertising Campaigns* (pp. 97-116). Sydney: McGraw-Hill Company.
- Shoebridge, N. (1992b, 22 May). New-Look KFC Shakes off its Fried Foundations. *Business Review Weekly*, 154-156.
- Shoebridge, N. (1994, 18 July). Fresh food boom demands quick action. *Business Review Weekly*, 40-44.
- Shoebridge, N. (1996, 19 February). KFC Finds Real Meals More Satisfying. *Business Review Weekly*, 64-67.
- Sindall, C., Wright, J., & O'Dea, K. (1994). Food production and human nutrition: The impact of health messages. A public health perspective. *Proceedings of the Nutrition Society of Australia*, 18, 156-166.
- Skurray, G., & Newell, G. (1993). Food consumption in Australia 1970-1990. *Food Australia*, 45(9), 434-438.
- Slater, C. C. (1970). Market Channel Coordination and Economic Development. In L. P. Bucklin (Ed.), *Vertical Marketing Systems* (pp. 135-157). Glenview, IL: Scott, Foresman and Company.
- Slater, S. F., & Narver, J. C. (1993). Product-market strategy and performance: an analysis of the Miles and Snow strategy types. *European Journal of Marketing*, 27(10.), 33-51.
- Slater, S. F., & Narver, J. C. (1994). Market orientation, customer value, and superior performance. *Business Horizons*, March-April, 22-28.
- Slater, S. F., & Narver, J. C. (1995a). Market Orientation and the Learning Organisation. *Journal of Marketing*, 59(March), 63-74.

- Slater, S. F., & Narver, J. C. (1998). Customer-Led and Market-Oriented: Let's Not Confuse the Two. *Strategic Management Journal*, 19(10), 1001-1006.
- Slater, S. F., & Narver, J. C. (1999). Market-oriented is more than being customer-led. *Strategic Management Journal*, 20(12), 1165-1168.
- Slater, S. F., & Narver, J. C. (2000). Intelligence generation and superior customer value. *Journal of the Academy of Marketing Science*, 28(1), 120-127.
- Small, F. (1995). *Food Quality Program: A Customer Focus to Food Quality*. Canberra: Frank Small and Associates and AusIndustry.
- Smith, A. (1974). *The Wealth of Nations, Books I-III*. Middlesex, England: Penguin Books.
- Smith, R. A., & Lux, D. S. (1993). Historical Method in Consumer Research: Developing Causal Explanations of Change. *Journal of Consumer Research*, 19(March), 595-610.
- Smith, W. M., & Coatman, J. (1936). *The Marketing of Australian and New Zealand Products*. London: Sir Isaac Pitman & Sons Ltd.
- Smithers, R. (1992, 27 February). KFC slims down name and image. *The Age*, p. 23.
- Soucie, W. G. (1997). Efficient Consumer Response Meets the Industrialization of Agriculture. *Agribusiness*, 13(3), 349-355.
- Spearitt, P. (1994). I Shop, Therefore I Am. In L. Johnson (Ed.), *Suburban Dreaming: An Interdisciplinary Approach to Australian Cities* (pp. 129-140). Melbourne: Deakin University Press.
- Spencer, S. (2004). *Price Determination in the Australian Food Industry, A report* (Vol. 2). Canberra: Australian Government Department of Agriculture, Fisheries and Forestry.
- Steenkamp, J.-B. E. M. (1997). Dynamics in Consumer Behavior with Respect to Agricultural Food Products. In B. Wierenga, A. van Tilburg, K. Grunert, J.-B. E. M. Steenkamp & M. Wedel (Eds.), *Agricultural Marketing and Consumer Behavior in a Changing World* (pp. 143-188). Boston, MA: Kluwer Academic Publishers.
- Steenkamp, J.-B. E. M., & van Trijp, H. C. M. (1998). Consumer-Oriented New Product Development: Principles and Practice. In W. M. F. Jongen & M. M. G. Muelenberg (Eds.), *Innovation of Food Marketing Systems: Product Quality and Consumer Acceptance* (pp. 37-66). Wageningen, the Netherlands: Wageningen.
- Steggles. (2003). *Profile*. Retrieved 13 March 2003, from http://www.bartter.com.au/content/template_14.asp?ID=3
- Stern, L. W., Ansary, A. I., & Coughlan, A. T. (1996). *Marketing channels* (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Stern, L. W., & Reve, T. (1980). Distribution Channels as Political Economies: A Framework for Comparative Analysis. *Journal of Marketing*, 44(Summer), 52-64.
- Strasser, S. (1995). *Satisfaction guaranteed: the making of the American mass market*. New York: Pantheon Books.
- Streeter, D. H., Sonka, S. T., & Hudson, M. A. (1991). Information technology, coordination and competitiveness in the food and agribusiness sector. *American Journal of Agricultural Economics*, 73, 1465-1471.
- Strickland, K. (1996, 5 December). Pizza images slim on reality. *The Australian*, p. 34.
- Svensson, G. (2003). Consumer driven and bi-directional value chain diffusion models. *European Business Review*, 15(6), 390-400.
- Swait, J., & Erdem, T. (2002). The effects of temporal consistency of sales promotions and availability on consumer choice behavior. *Journal of Marketing Research*, 39(3), 304-320.
- Symons, M. (1982). *One Continuous Picnic: A history of eating in Australia*. Adelaide: Duck Press.
- Syvret, P. (1993, 16 July). KFC expands with a roast-chicken touch. *Australian Financial Review*, p. 25.
- Takahashi, N. (2002, 29 June). Beef about McDonald's in Japan. *Asia Times Online*, pp. 1-3.
- Taylor, C. R., & Omura, G. S. (1994). An Evaluation of Alternative Paradigms of Marketing and Economic Development, Part I. *Journal of Macromarketing*, 14(2), 6-20.
- Taylor, L. (1997, November 7). Industry Crows Over Chook Ruling. *Australian Financial Review*, p. 7.

- The Beef Cattle Industry Commission. (1928). *Report of the Royal Commission appointed to inquire into the Queensland Beef Cattle Industry* (Vol. 2). Brisbane: Government Printer.
- Thompson, J. M. (1998, February). *Grading - the Meat Standards Australia (MSA) Experience*. Paper presented at the Armidale Feeder Steer School, Armidale, NSW.
- Todd, M. C., & Cowell, M. D. (1978). *Issues in the evaluation of the proposed carcass classification schemes* (Occasional paper No. 45). Canberra: Australian Bureau of Agricultural Economics.
- Tomek, W. G., & Robinson, K., L. (1990). *Agricultural Product Prices* (3rd ed.). Ithaca, NY: Cornell University Press.
- Tovia, J. (2002, 8 October). Take your pick - Buy a franchise and take the risk out of running a small business - Be your own boss without the risks. *Daily Telegraph*, p. 27.
- Trollope, A. (1967). *Australia*. Brisbane: University of Queensland Press.
- Trout, J., & Ries, A. (1985). Positioning cuts through chaos in marketplace. In B. Enis & K. Cox (Eds.), *Marketing Classics* (5th ed., pp. 293-308). Boston, MA: Allyn & Bacon.
- Turner, J. W. (1980). *Manufacturing in Newcastle, 1801-1900* (No. 8). Newcastle, NSW: Newcastle City Council.
- Tyers, R., Anderson, K., & ASEAN-Australia Joint Research Project. (1985). *Economic growth and agricultural protection in East and Southeast Asia: implications for international grain and meat trade*. Kuala Lumpur & Canberra: ASEAN-Australia Joint Research Project.
- Ufkes, F. M. (1993). Trade liberalization, agro-food politics and the globalization of agriculture. *Political Geography*, 12(3), 215-231.
- Ulrich, D., & Barney, J. B. (1984). Perspectives in Organizations: Resource Dependence, Efficiency, and Population. *Academy of Management Review*, 9(3), 471-481.
- USDA. (2001). *Poultry Meat Summary - Selected Countries 2001*. Retrieved 12 November 2004, from <http://www.fas.usda.gov/dlp2/circular/2001/01-10LP/poultsum.pdf>
- USDA. (2002). *The US Food Marketing System, 2002: Competition, Coordination, and Technological Innovations Into the 21st Century*. Washington, DC: USDA Foreign Agricultural Service.
- van Riel, C. B. M., van den Ban, A., & Heijmans, E.-J. (2001). The added value of corporate logos: An empirical study. *European Journal of Marketing*, 35(3/4), 428-440.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(January), 1-17.
- Veeman, M. (1990). The Political Economy of Agricultural Policy. *Canadian Journal of Agricultural Economics*, 38, 365-383.
- Victorian Department of Agriculture. (1973). *Enquiry into the economics of marketing of livestock and meat in Victoria*. Melbourne: Department of Agriculture.
- Ville, S. (2000). *The Rural Entrepreneur*. Cambridge, England: Cambridge University Press.
- Ville, S., & Merrett, D. T. (2000). The Development of Large Scale Enterprise in Australia, 1910-1964. *Business History*, 42(3), 13-46.
- Walker, R. B., & Roberts, D. (1988). *From scarcity to surfeit: a history of food and nutrition in New South Wales*. Kensington, NSW: New South Wales University Press.
- Walter, A., Ritter, T., & Germünden, H. G. (2001). Value-creation in buyer-supplier relationships: theoretical considerations and empirical results from a supplier's perspective. *Industrial Marketing Management*, 30(4), 365-377.
- Walters, D., & Lancaster, G. (1999). Value and information - concepts and issues for management. *Management Decision*, 37(8), 643-656.
- Ward, R. W. (1997). Advertising and Promotions. In D. I. Padberg, C. Ridson & L. M. Albisu (Eds.), *Agrofood Marketing*. Oxon, England: CIEAM-Cab International.
- Watt, R. D. (1955). *The Romance of the Australian Land Industries*. Sydney: Angus and Robertson.
- Webber, J. J., & Nicholls, T. J. (1998, May). *Chemical Residue Testing - Regulation or Quality Assurance?* Paper presented at the Australian Veterinarians in Public Health Conference, Sydney.

- Webster, F. E. (1992). The changing role of marketing in the corporation. *Journal of Marketing*, 56(October), 1-17.
- Webster, F. E. (2000). Understanding the Relationships Among Brands, Consumers, and Resellers. *Journal of the Academy of Marketing Science*, 28(January), 17-23.
- Weeks, P. (1990). *Abattoir Ownership in Australia*. Canberra: Cattle Council of Australia.
- Weld, L. D. H. (1916). *The Marketing of Farm Products*. New York: Macmillan Company.
- Weld, L. D. H. (1917). Marketing Functions and Mercantile Organization. *American Economic Review*, VII(June), 304-318.
- Whan, P. C., & Zaltman, G. (1987). *Marketing Management*. Chicago, IL: Dryden.
- Wikström, S., & Normann, R. (1994). *Knowledge and Value*. London: Routledge.
- Wilkins, M. (1992). The neglected intangible asset: the influence of the trade mark on the rise of the modern corporation. *Business History*, 34(1), 66-99.
- Wilkins, M. (1994). When and why brand names in food and drink. In G. Jones & N. J. Morgan (Eds.), *Adding value: brands and marketing in food and drink* (pp. 15-41). London: Routledge.
- Wilkinson, I. (2001). A History of Network and Channels Thinking in Marketing in the 20th Century. *Australasian Journal of Marketing*, 9(2), 23-53.
- Williams, D. B. (1967). *Agriculture in the Australian Economy*. Sydney: Sydney University Press.
- Williams, S. D. (1872). The nutritive value of Australian preserved meat. *Lancet*, 99(2531), 287-288.
- Windett, N. (1933). *Australia as Producer and Trader*. London: Oxford University Press.
- Wissman, R. A. (1997). *Marketing Coordination in Agricultural Cooperatives, Rural Business-Cooperative Service* (No. 159). Washington, DC: USDA.
- Wolfe, A. R. (1977). Commodity marketing and generic promotion. *European Journal of Marketing*, 11(7), 532-547.
- Wood, B. (Ed.). (1977). *Tucker in Australia*. Melbourne: Hill of Content.
- Woodruff, R. B. (1997). Customer value: the next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139-153.
- Woodside, A. G., & Wilson, E. J. (1986). Combining Macro and Micro Industrial Marketing Segmentation. In A. G. Woodside (Ed.), *Advances in Business Marketing* (Vol. 1, pp. 241-257). Greenwich, CT: JAI Press.
- Woodward Royal Commission. (1982). *Report of the Royal Commission into the Australian Meat Industry*. Canberra: Commonwealth Government.
- Woolworths. (1999a). *Woolworths Ltd to Renew, Refresh and Reinvigorate for Customers, Suppliers and Shareholders*. Retrieved 3 November 2004, from http://www.woolworthslimited.com.au/news/mediareleases/publicdocuments/28-06-1999_a.asp
- Woolworths. (1999b). *The Woolworths Way*. Sydney: Woolworths.
- Woolworths. (2001). *Woolworths Meat Industry Commitment*. Retrieved 12 August 2003, from http://www.woolworthslimited.com.au/news/factsheets/publicdocuments/06-08-2001_b.asp
- Woolworths. (2002). *How Woolworths Started and Grew*. Retrieved 12 September 2004, from http://www.bigw.com.au/PICS/whatsnew_may_2002/woolworths-history.pdf
- Wortzel, L. H., & Wortzel, H. V. (1981). Export marketing Strategies for NIC and LCD Based Firms. *Columbia Journal of World Business*, 16(1), 51-59.
- Yaprak, A. (1986). An Empirical Study of the Differences Between Small Exporting and Non-Exporting US Firms. *International Marketing Review*, 2(2), 72-83.
- Yin, R. K. (1994). *Case Study Research Design and Methods* (2nd ed.). Beverly Hills: Sage.
- Young, J. H. (1989). *Pure Food*. Princeton: Princeton University Press.
- Young, L. M., & Sheales, T. C. (1991). Foreign investment in the Australian beef industry. *Agriculture and Resources Quarterly*, 3, 66-75.
- Yum! Brands. (2004). *Yum! Brands International Markets, Traditional Stores By Brand, As of December 27, 2003*. Retrieved 5 November 2004, from http://www.yum.com/investors/media/units_int.pdf

