

**An inquiry into evolving supply chain governance structures in South  
African agribusiness**

by

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Tobias Doyer  
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**ABSTRACT**

Supply chain management is emerging as an important source of competitive advantage for agribusinesses globally and in South Africa. The objective of this study was to describe and analyse the emerging governance structures in agribusiness supply chains. Governance structures are the formal and informal institutions that prohibit, permit, or require certain actions and provide the incentives for exchange. Agribusiness managers can choose from a continuum of governance structures which include spot or cash markets, specifications contract, relation-based alliance, equity-based alliance and vertical integration. These structures are distinguished by the composition of market and managed control of the transaction processes.

In this study the constructivist and positivist inquiry paradigms were adopted to address the complexity and interrelation of factors involved in the choice of governance structure. The study was conducted in two stages. The first stage entailed a survey of agribusiness managers to elicit their opinions and perceptions on the strategic direction, preferred present and future coordination mechanisms, strategic focus, the future shape of the agro-food industry and the major factors driving these trends in the South African agribusiness complex. These were compared with global trends. This section was conducted in the positivist paradigm to extend the validation and generalisation of the second stage which was conducted in the constructivist

paradigm. The second stage entailed the analysis of three case studies to identify the drivers for supply chain formation and the expression of these drivers, strategic considerations and transaction characteristics in appropriate governance structures.

The choice of governance structure is influenced by the drivers of change, product characteristics, processes of the supply chain, transaction characteristics and costs. The most significant drivers of change were company competency, consumer behaviour and technology. The perishable nature of most agricultural products, in particular, requires special control and traceability systems to ensure chain transparency in order to certify and assure consumer safety and product quality. These drivers, product characteristics and systems determine the characteristics of the required transaction to facilitate the creation of customer value. Key concepts that emerged in the description of transaction costs are bounded rationality, opportunism, asset specificity and information asymmetry. The optimal governance structure maximises desired transaction requirements while minimising the costs of exchange. The analysis of the case studies showed that these factors cannot be considered in isolation. In each of the cases a different factors was instrumental in the determination of the optimal governance structure. The study identifies a six step decision process for agribusiness managers and researchers to relate drivers of competitiveness to appropriate governance structures.

The emergence of supply chains is driven by evolving consumer demands and societal values on the one hand and the need for agribusiness and inter-agribusiness competency to transform these needs and values into consumer value on the other hand. South African agribusiness are employing technology and closer vertical coordination to improve production processes, quality assurance, traceability and process transparency. In line with global trends South African agribusiness will have to establish ever more sophisticated systems to satisfy consumer needs and societal values as these evolve to include less tangible needs and values such as environmental and ethical concerns.

‘n Onderzoek na die evolusie van voorsieningskettingsbeheerstrukture in  
Suid-Afrikaanse agribesighede

deur

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**UITTREKSEL**

Agribesigheidskettingbestuur is besig om na vore te tree as een van die belangrikste stelsel van mededingende voordeel vir agribesighede in ‘n globale konteks en ook binne Suid-Afrika. Die doel van hierdie studie was om die verskynsel van beheerstrukture in agribesigheidsvoorsieningskettings te beskryf en te analiseer. Beheerstrukture is die formele en informele institusies wat sekere aksies verbied, toelaat of vereis en die aansporing voorsien vir ruilverkeer. Agribesigheidsbestuurders kan kies van ‘n kontinuum van beheerstrukture wat kontantmarkte, spesifikasiekontrakte, verhoudingsgebaseerde alliansies, ondernemerskapitaalgebaseerde alliansies, en vertikale integrasie insluit. Hierdie strukture word onderskei deur die samestelling van mark- en bestuurbeheer van transaksie prosesse.

Die konstruktivistiese en positivistiese navorsingsparadigmas was aangewend om die kompleksiteit en onderlinge verbande in die keuse van beheerstruktuur te ondersoek. Die studie was uitgevoer in twee fases. Die eerste fase het ‘n opname onder agribesigheidsbestuurders behels om hulle opinies en persepsies te verkry oor die strategiese fokus, huidige en toekomstige voorkeurkoordinasiemeganismes, die toekomstige vorm van die agri-voedselindustrië en die belangrikste faktore wat die tendense aandryf in die Suid-Afrikaanse agribesigheidskompleks. Hierdie tendense

was ook vergelyk met internasionale tendense. Hierdie fase was uitgevoer in die positivistiese paradigma om die validasie en veralgemening van die tweede fase, wat in die konstruktivistiese paradigma uitgevoer was, te ondersteun. Die tweede fase het die analise van drie gevallestudies behels om die drywers van voorsieningskettingvorming te identifiseer en die beslag van die drywers, strategiese aspekte en transaksiekoste in gepaste beheerstrukture te beskryf.

Die keuse van beheerstrukture word beïnvloed deur die drywers van verandering, produkeienskappe, voorsieningskettingprosesse, transaksie-eienskappe en –koste. Die belangrikste drywers was ondernemingskompetensie, verbruikersgedrag, en tegnologie. Veral die bederfbare aard van meeste landbouprodukte vereis spesiale kontrole en nasporingssisteme om kettingdeursigtigheid te verseker om sodoende verbruikersveiligheid en produkkwaliteit te verseker en te sertifiseer. Hierdie drywers, produkeienskappe en sisteme bepaal die eienskappe van die vereiste transaksie om die verbruikerswaarde te skep. Sleutelkonsepte wat na vore getree het in die beskrywing van transaksiekoste is begrensde rasionaliteit, opportunisme, spesifisiteit van bates en inligtingsassimetrie. Die optimale beheerstrukture maksimeer die vereiste transaksie-eienskappe terwyl dit die koste van uitwisseling minimiseer. Die analise van die gevallestudies het uitgewys dat die faktore nie in isolasie beskou kan word nie. In elk van die gevalle was 'n ander faktor instrumenteel om die optimale beheerstruktuur te bepaal. Die studie identifiseer 'n ses stap besluitnemingsproses waarmee agribesigheidsbestuurders en navorsers die drywers van mededingendheid in verband kan bring met gepaste beheerstrukture.

Die toenemende van voorsieningskettings word aangespoor deur die veranderende verbruikersbehoefte en sosiale waardes aan die een kant en die behoefte vir agribesigheids en inter-agribesigheids kompetensies om hierdie behoeftes en sosiale waardes om te skakel tot verbruikersnut aan die ander kant. Suid-Afrikaanse agribesighede gebruik tegnologie en nader vertikale verhoudinge om produksieprosesse, kwaliteitsversekering, nasporing en prosesdeursigtigheid te verseker. Ooreenkomstig met globale tendense sal Suid-Afrikaanse agribesighede steeds meer gesofistikeerde sisteme moet skep om verbruikersbehoefte en sosiale waardes aan te spreek soos hierdie waardes evolueer na minder tasbare waardes soos omgewings en etiese besorgdheid.

## TABLE OF CONTENTS

CONTENTS	PAGE
Acknowledgements.....	i
Abstract.....	ii
Uittreksel.....	iv
Table of contents.....	vi
<b>CHAPTER 1 INTRODUCTION.....</b>	<b>1</b>
1.1 THE EMERGENCE OF VERTICAL COORDINATION IN THE AGRO-FOOD COMPLEX	2
1.2 PROBLEM STATEMENT .....	10
1.3 FRAMEWORK OF ANALYSIS .....	13
1.4 OBJECTIVES .....	18
1.5 DELIMITATIONS .....	19
1.6 OUTLINE .....	21
<b>CHAPTER 2: A NEW RESEARCH APPROACH FOR AGRIBUSINESS</b>	
<b>RESEARCH .....</b>	<b>23</b>
2.1 INTRODUCTION .....	24
2.2 TOWARDS A NEW INQUIRY PARADIGM.....	26
2.3 INQUIRY TOOLS FOR THE SUPPLY CHAIN .....	31
2.4 RESEARCH IN SUPPLY CHAINS .....	33
2.5 METHODOLOGY .....	36
2.6 CONCLUSION.....	40
<b>CHAPTER 3: SUPPLY CHAIN MANAGEMENT IN AGRICULTURE .....</b>	<b>42</b>
3.1 INTRODUCTION .....	43
3.2 DEFINING SUPPLY CHAIN MANAGEMENT .....	43
3.2.1 <i>Supply chain management definition caveats</i> .....	48
3.2.2 <i>Critical dimensions in the supply chain</i> .....	50
3.2.3 <i>Synopsis</i> .....	53
3.3 PRODUCT FLOW DIMENSION .....	54
3.3.1 <i>Introduction</i> .....	54



3.3.2	<i>Background</i> .....	54
3.3.3	<i>Challenges for the logistical control of agricultural supply chains</i> ....	55
3.3.4	<i>Supply chain decisions</i> .....	57
3.3.5	<i>Conclusion</i> .....	60
3.4	INFORMATION DIMENSION.....	61
3.4.1	<i>Introduction</i> .....	61
3.4.2	<i>Definition</i> .....	61
3.4.3	<i>Information technology and information</i> .....	62
3.4.4	<i>Conclusion</i> .....	64
3.5	TRUST .....	65
3.6	CONCLUSION.....	70
<b>CHAPTER 4: GOVERNANCE STRUCTURES IN AGRIBUSINESS.....</b>		<b>71</b>
4.1	INTRODUCTION .....	72
4.2	RELATIONSHIPS IN AGRICULTURAL SUPPLY CHAINS.....	73
4.3	THEORETICAL APPROACHES FOR ANALYSING GOVERNANCE STRUCTURES ....	79
4.3.1	<i>Transaction cost approach to governance</i> .....	79
4.3.2	<i>Agency theory approach to governance</i> .....	89
4.3.3	<i>The vertical coordination continuum: combining transaction cost and agency theories</i> .....	91
4.3.4	<i>Strategic management approach to governance</i> .....	95
4.4	CONCLUSIONS.....	99
<b>CHAPTER 5: DRIVERS OF CHANGE IN SOUTH AFRICAN AGRIBUSINESS.....</b>		<b>100</b>
5.1	INTRODUCTION .....	101
5.2	CHANGES IN THE DEMAND FOR AGRICULTURAL PRODUCE .....	102
5.2.1	<i>Consumers and retailers</i> .....	102
5.2.2	<i>Chain Reversal</i> .....	103
5.2.3	<i>New Consumer Demands</i> .....	103
5.2.4	<i>Societal Values</i> .....	104
5.2.5	<i>Concentration</i> .....	105
5.2.6	<i>Consumer demand meet concentration</i> .....	106
5.2.7	<i>Biotechnology</i> .....	106



5.2.8	<i>Communication and Information Technology</i> .....	107
5.2.9	<i>Traceability, transparency and assurance</i> .....	107
5.2.10	<i>Synopsis</i> .....	108
5.3	THE SOUTH AFRICAN SITUATION .....	108
5.3.1	<i>Introduction</i> .....	108
5.3.2	<i>The evolution of South African agricultural policy</i> .....	109
5.3.3	<i>Pre 1900</i> .....	111
5.3.4	<i>Segregation and support: 1910-1947</i> .....	112
5.3.5	<i>Consolidation to Maturity: 1947-1980</i> .....	114
5.3.6	<i>Maturity to independence: 1980-1994</i> .....	114
5.3.7	<i>Post-independence 1994-</i> .....	115
5.4	CO-OPERATIVES: THE AGENTS OF THE 1937 MARKETING ACT .....	116
5.5	THE IMPACT OF THE MARKETING ACT OF 1937 ON STRUCTURES IN THE AGRICULTURAL SECTOR.....	119
5.6	SOUTH AFRICAN AGRIBUSINESS STRATEGIC RESPONSE .....	121
5.6.1	<i>South Africa Agribusiness Survey</i> .....	124
5.6.2	<i>Growth strategies and coordination preferences</i> .....	124
5.6.3	<i>Strategic focus areas of South African agribusiness</i> .....	127
5.6.4	<i>Shape of the agrofood sector</i> .....	129
5.6.5	<i>Major Factors Driving the Agrofood Sector</i> .....	132
5.7	CONCLUSIONS.....	134
<b>CHAPTER 6: CASE STUDY: CONSIDERATIONS FOR MANAGING THE SANDVELD POTATO SUPPLY CHAIN.....</b>		<b>136</b>
6.1	INTRODUCTION .....	137
6.2	THE POTATO INDUSTRY IN THE SANDVELD .....	138
6.3	MARKETING CHANNELS.....	140
6.4	DRIVERS OF CHANGE.....	143
6.5	ANALYSING THE SITUATION.....	147
6.6	ALTERNATIVE GOVERNANCE STRUCTURES FOR THE SANDVELD POTATO CHAIN	149
6.7	OBSERVATIONS AND CONCLUSIONS: CHALLENGES TO CHAIN FORMATION .	152

<b>CHAPTER 7: CASE STUDY: CLOSER VERTICAL COORDINATION IN THE SOUTH AFRICAN VEGETABLE SUPPLY CHAIN: AN EXPLORATORY ANALYSIS .....</b>	<b>157</b>
7.1 INTRODUCTION .....	158
7.2 AN OVERVIEW OF THE SOUTH AFRICAN VEGETABLE SUPPLY CHAIN.....	159
7.3 APPLICATION OF THE THEORETICAL FRAMEWORK TO FRESH PRODUCE SUPPLY CHAINS	163
7.4 METHODOLOGY .....	166
7.5 MOTIVATION FOR ENGAGING IN CLOSER COORDINATION WITH RETAILERS: PERCEPTIONS AND EVIDENCE .....	167
7.6 IDENTIFYING THE MOST APPROPRIATE GOVERNANCE STRUCTURE.....	170
7.7 THE NATURE AND RESULT OF VERTICAL COORDINATION IN THE FRESH PRODUCE SUPPLY CHAIN .....	174
7.8 CONCLUSION.....	177
<b>CHAPTER 8 STRUCTURAL CHANGE IN AGRIBUSINESS: THE CASE OF POTGIETERSRUSSE TABAK KOÖPERASIE (PTK) .....</b>	<b>179</b>
8.1. INTRODUCTION .....	180
8.2 BACKGROUND.....	182
8.3 APPLICATION OF THEORETICAL FRAMEWORK TO PTK CASE .....	184
8.4 TOBACCO AGRIBUSINESS: APPLICATION AND OBSERVATIONS .....	187
<b>CHAPTER 9 CONCLUSIONS .....</b>	<b>191</b>
9.1 INTRODUCTION .....	192
9.2 THE EMERGENCE OF SUPPLY CHAINS IN THE SOUTH AFRICAN AGRIBUSINESS COMPLEX .....	193
9.3 THE SANDVELD POTATOES CASE STUDY .....	195
9.4 THE VEGETABLE CASE STUDY.....	198
9.5 THE POTGIETERSRUSSE TABAKKOÖPERASIE CASE STUDY.....	200
9.6 CONTRIBUTION OF THIS STUDY .....	203
9.7 CONCLUSIONS AND OBSERVATIONS FOR THE FUTURE .....	205
<b>BIBLIOGRAPHY .....</b>	<b>208</b>

## LIST OF TABLES

TABLE 2.1: BASIC BELIEFS (METAPHYSICS) OF ALTERNATIVE INQUIRY PARADIGMS	.28
TABLE 2.2: PARADIGM POSITIONS ON SELECTED PRACTICAL ISSUES	29
TABLE 2.3: MEASUREMENT OF ECONOMIC PERFORMANCE	32
TABLE 2.4: POSSIBLE CONTRIBUTIONS OF DIFFERENT THEORETICAL FRAMEWORKS TO SUPPLY CHAIN ANALYSIS	33
TABLE 2.5: EXAMPLES OF THEORY ELEMENTS OF VARIOUS SCIENTIFIC APPROACHES TO VERTICAL CO-ORDINATION	34
TABLE 2.6: RELEVANT SITUATIONS FOR DIFFERENT RESEARCH STRATEGIES	38
TABLE 2.7: A SCHEMATIC COMPARISON OF CASE STUDY WITH EXPERIMENTAL AND SURVEY APPROACHES	39
TABLE 3.1: AN ILLUSTRATION OF PURCHASING'S NEW ROLE	46
TABLE 3.2: LEVELS OF SUPPLY CHAIN OPTIMISATION	52
TABLE 3.3: SUPPLY CHAIN IOIS (INTER ORGANISATIONAL INFORMATION SYSTEMS) INFORMATION CATEGORIES	63
TABLE 3.4: SOURCES OF COOPERATION	67
TABLE 4.1 TRANSACTION COSTS IN A COMMODITY TRADING SETTING	82
TABLE 4.2: DISTINGUISHING ATTRIBUTES OF MARKET, HYBRID, AND HIERARCHY GOVERNANCE STRUCTURES	85
TABLE 4.3: ORGANISATIONAL THEORY AND CONTROL STRATEGY	91
TABLE 4.4: PREDICTING THE ORGANISATIONAL FORM OF VERTICAL CONTROL	93
TABLE 4.5 CONTROL INTENSITY ACROSS THE VERTICAL COORDINATION CONTINUUM	95
TABLE 5.1: ECOLOGY, ETHICS AND ECONOMY IN AGRICULTURAL SUPPLY CHAINS	105
TABLE 5.2 THE EXTENT OF CO-OPERATIVES IN THE SOUTH AFRICAN AGRICULTURAL SECTOR (1990)	117
TABLE 5.3: PERCENTAGE SHARE IN THE RETAIL PRICE OF WHITE BREAD	123
TABLE 5.4: PERCENTAGE SHARE IN THE RETAIL PRICE OF BROWN BREAD	123

TABLE 5.5: RESPONSE DISTRIBUTION AND CONTRIBUTION OF THE DIFFERENT SECTORS TO THE GROSS VALUE OF AGRICULTURAL PRODUCTION IN SOUTH AFRICA (1999/2000 SEASON)(%).....	124
TABLE 5.6: IMPORTANCE (% CHOICE) OF STRATEGIC FOCUS AREAS TO SOUTH AFRICAN AGRIBUSINESS .....	128
TABLE 5.7: THE IMPORTANCE OF CORE PERFORMANCE AREAS IN STRATEGIC FOCUS AREAS.....	129
TABLE 5.8: THE FUTURE SHAPE OF THE SOUTH AFRICAN AGROFOOD SECTOR .....	130
TABLE 5.9: THE SHAPE OF THE AGROFOOD SECTOR.....	131
TABLE 5.10: MAJOR FACTORS DRIVING THE INTERNATIONAL AGROFOOD SECTOR .....	133
TABLE 5.11: MAJOR FACTORS DRIVING THE SOUTH AFRICAN AGROFOOD SECTOR .....	134
TABLE 6.1: THE PRODUCTION OF POTATOES IN THE SANDVELD REGION IN COMPARISON TO THE TOTAL PRODUCTION OF POTATOES IN SOUTH AFRICA. ....	139
TABLE 6.2: PERCENTAGES OF SANDVELD POTATOES SOLD DIRECTLY IN THE WESTERN CAPE IN COMPARISON TO THE TOTAL DIRECT SALES IN THE REGION.....	142
TABLE 6.3: POTATOES QUANTITIES (ALL CLASSES) PRODUCED AND AVERAGE PRICE RECEIVED ON THE FRESH PRODUCE MARKET OF CAPE TOWN; 1996 – 2000. ....	143
TABLE 6.4: THE SANDVELD POTATO GROWERS COMPILED THE FOLLOWING SWOT ANALYSIS .....	148
TABLE 7.1: MARKET SHARE OF THE VARIOUS FRESH PRODUCE MARKETS IN SOUTH AFRICA .....	161
TABLE 7.2: VEGETABLE BUYERS FROM FARMERS: DIFFERENCE BETWEEN NATIONAL DEPARTMENT OF AGRICULTURE AND OWN SURVEY.....	167
TABLE 7.3: REASONS FOR DELIVERY/NON-DELIVERY TO AUCTION MARKETS (NATIONAL FRESH PRODUCE MARKETS) .....	168
TABLE 7.4: REASONS FOR DELIVERING TO A RETAIL COMPANY (DIRECT MARKETING) .....	169
TABLE 7.5 IMPORTANT CHARACTERISTICS TO DEAL DIRECTLY WITH RETAILERS .....	172



TABLE 7.6 DEDICATION OF FINANCIAL RESOURCES DUE TO CLOSER VERTICAL  
COORDINATION ..... 172

TABLE 7.8 PERCEPTIONS ON RISK REDUCTION THROUGH CLOSER VERTICAL  
COORDINATION ..... 175

TABLE 7.9 RELATIONSHIP CHARACTERISTICS OF CLOSER VERTICAL COORDINATION.. 176

## LIST OF FIGURES

FIGURE 1.1: FRAMEWORK OF ANALYSIS .....	17
FIGURE 2.1: SCHEMATIC ORGANISATION OF ISSUES IN AGRICULTURAL MARKETING.....	25
FIGURE 2.2: CRITICAL DIMENSIONS OF A VALUE CHAIN .....	32
FIGURE 3.1: CHANGES IN PROCUREMENT WITH SHIFT TO SUPPLY CHAIN MANAGEMENT .....	47
FIGURE 3.2: DIMENSIONS OF THE SUPPLY CHAIN .....	49
FIGURE 3.3: COMPONENTS OF A TWO-WAY INFORMATION FLOW IN FOOD CHAINS .....	62
FIGURE 3.4: A THEORETICAL MODEL OF ANTECEDENTS AND CONSEQUENCES OF TRUST AND SATISFACTION IN BUYER-SELLER RELATIONSHIPS.....	68
FIGURE 4.1: THE KEY TRANSITION FROM OPEN MARKET NEGOTIATIONS TO COLLABORATION.....	74
FIGURE 4.2: GENERAL ALLIANCE DEVELOPMENT MODEL.....	76
FIGURE 4.3: GOVERNANCE COST AS A FUNCTION OF ASSET SPECIFICITY.....	87
FIGURE 4.4: ORGANISATION FORM RESPONSES TO CHANGES IN FREQUENCY .....	88
FIGURE 4.5: THE VERTICAL COORDINATION CONTINUUM .....	94
FIGURE 5.1: THE POLITICAL-ECONOMICAL CYCLE.....	110
FIGURE 5.2: ANNUAL NEW COMPANY REGISTRATIONS IN THE AGRICULTURAL SECTOR: 1980 – 1999*.....	122
FIGURE 5.3: ANSOFF’S PRODUCT-MARKET EXPANSION GRID .....	125
FIGURE 5.4: COORDINATION PREFERENCES OF SOUTH AFRICAN AGRIBUSINESS.....	127
FIGURE 6.1: THE POSITION OF THE SANDVELD POTATO GOVERNANCE STRUCTURE ON THE VERTICAL COORDINATION CONTINUUM.....	138
FIGURE 6.2: AVERAGE MEAN MAXIMUM AND MINIMUM TEMPERATURES FOR THE COASTAL AND INLAND REGION.....	140
FIGURE 6.3: THE SANDVELD POTATO SUPPLY CHAIN (2000) .....	141

FIGURE 6.4: WARE PRODUCTION AND DELIVERY TO THE FRESH PRODUCE MARKET FROM THE SANDVELD REGION .....	146
FIGURE 6.5: PARTIAL HORIZONTAL COORDINATION BETWEEN GROWERS.....	150
FIGURE 6.6: TOTAL HORIZONTAL COORDINATION BETWEEN GROWERS.....	150
FIGURE 6.7: VERTICAL COORDINATION BETWEEN GROWERS-PROCESSORS-RETAILERS .....	151
FIGURE 7.1: THE POSITION OF THE VEGETABLE GOVERNANCE STRUCTURE ON THE VERTICAL COORDINATION CONTINUUM.....	159
FIGURE 7.2: SCHEMATIC REPRESENTATION OF THE DISTRIBUTION STRUCTURE OF FRESH FRUIT AND VEGETABLES IN SOUTH AFRICA .....	160
FIGURE 8.1: THE POSITION OF THE AFTOBACCO GOVERNANCE STRUCTURE ON THE VERTICAL COORDINATION CONTINUUM.....	181
FIGURE 8.2: INTEGRATION PERFORMED BY PTK.....	183
FIGURE 8.3: ILLUSTRATION OF THE STRATEGY FRAMEWORK FOR VERTICAL INTEGRATION WITHIN ESTABLISHED INDUSTRIES .....	187