Exploring the nature of long-term buyer-seller relationships in the Western Australian wine industry[1]

Abstract

The nature of the relationship between wineries and wine grape growers is largely one of interdependence; to produce good quality wines, wineries need a reliable supply of good quality grapes. Both the wineries and grape growers report a high degree of trust, satisfaction and commitment in their relationship with their most preferred trading partner. While the wineries exercise the majority of power in the relationship, when accompanied by constant communication that seeks to improve wine quality and to coordinate harvest dates, grape growers are not subjected to any coercive influence strategies that might otherwise undermine the relationship.

Introduction

The Australian wine industry has experienced unprecedented growth over the past decade, fuelled by the rapid expansion in export sales. In the past, wineries have often experienced significant shortfalls in procuring sufficient quantities of good quality grapes. Competition between the wineries for the limited supply has understandably increased prices to the extent where many market analysts believe that sales have been adversely affected, especially in those price conscious segments of the market where the majority of Australian wines compete (Reedman 2000). Not unexpectedly, there has also been a dramatic increase in the area of wine grapes planted to meet the increased demand, so much so, that Stanford and Strachan (1999) estimate that there is currently a surplus of some 120,000 tonnes of wine grapes. In disposing of this surplus, wine grape prices will inevitably decline, providing the major wine producers with the opportunity to recapture a larger share of the market. However, if Australia wants to maintain its position in the market against increasing price competition, continual improvements in the quality of the wine produced will also be required.

If quality wines are to be produced, quality grapes must be sourced from the vineyard. In the past, wineries have sought to control the quality of the grapes produced through direct ownership. Grapes produced on the property have been used to manufacture wines on the property, often under the direction of the owner-manager who is both viticulturist and winemaker. However, as the industry has expanded to take advantage of the opportunities presented in both domestic and export markets, in order to control overhead costs and to concentrate on core competencies, wineries are looking towards contract grape growers as a way of facilitating their expansion. This effectively means that if wineries are to obtain grapes of the desired quality, growers and winemakers need to work cooperatively (Donald and Georgiadis 2000). Growers need to know what varieties of grapes to grow and how to grow them. By regularly visiting and working closely with grape growers, the winemaker is not only able to source fruit of the desired variety, ripeness or quality, but

---

[1] Batt, Peter J. and Helen Wilson (2001), Exploring the nature of long-term buyer-seller relationships in the Western Australian wine industry, *Australia New Zealand Wine Industry Journal*, Vol 16 (6), 87-96.

by assisting the grape grower in monitoring costs and improving grape quality, to significantly improve returns for the grower (Osborn 2000). This interdependence between grape growers and winemakers suggests that long-term relationships need to be developed and maintained for each to remain competitive (Beuman and McLachlin 2000).

The emergence of buyer-seller relationships

In the pursuit of superior quality and improved competitiveness, firms are establishing closer relationships with their suppliers because it enables them to be more efficient and cost effective (Kalwani and Narayandas 1995). By developing relationships with their suppliers, buyers and sellers can achieve cost savings through reduced search and evaluation costs, reduced transaction costs (Hakansson 1982) and the learning effects and relationship specific scale economies (Gundlach, Achrol and Mentzer 1995).

However, the primary reason for establishing relationships with suppliers is that customers realise that suppliers create value (Evans and Laskin 1994). By developing long-term relationships, customers can anticipate improved access to a more reliable supply of production inputs (Hakansson 1982), improved product quality and performance (Han, Wilson and Dant 1993), and a higher level of technical interaction and technical assistance (Cunningham and Homse 1982). Through better understanding and satisfying customers needs, suppliers can achieve greater customer loyalty and higher repeat sales (Evans and Laskin 1994). Buyers may become less sensitive to price competition and suppliers may benefit from higher prices (Kalwani and Narayandas 1995). Both parties are better able to plan and forecast production schedules (Lohtia and Krapfel 1994) and to coordinate deliveries (Easton and Araujo 1994). However, the greatest benefit arising from long-term relationships is the reduction in uncertainty (Dwyer, Schurr and Oh 1987; Hakansson 1982; Heide and John 1990; Noordewier, John and Niven 1990; Oliver 1990; Han, Wilson and Dant 1993).

While an extensive amount of literature has appeared in recent years identifying the various factors impacting upon the establishment and maintenance of long-term buyer seller relationships (Ford 1980; Dwyer, Schurr and Oh 1987; Wilson 1995), the greatest support has emerged for the key constructs of satisfaction, trust and commitment (Anderson and Narus 1990; Anderson and Weitz 1992; Han, Wilson and Dant 1993; Morgan and Hunt 1994). More recently, communication has emerged as the principal mechanism for the exchange of information that may reduce certain types of risk perceived by either one of the parties to the transaction. Any uncertainty about a customer’s or supplier’s organisational structure, viability, methods of operation, technical expertise or competence can be resolved by communication between the firms (Cunningham and Turnbull 1982). Furthermore, wherever a firm wishes to improve its relationship with a partner, the firm must commit various resources to the relationship. Any resource committed above and beyond that required to execute the current exchange can be regarded as an investment (Campbell and Wilson 1996). By their very nature, such relationship specific investments are seldom deployable in an alternative relationship, thereby exposing the firm to the possibility of exploitation by a more opportunistic trading partner (Anderson and Weitz 1992). However, the extent to which a firm will be influenced by, or have influence over, its partner will be a function not only of the magnitude of those investments (Lohtia and Krapfel 1994), but also the benefits the firm can obtain by maintaining the relationship (Heide and John 1988).

Using the key dimensions of satisfaction (Frazier 1983; Anderson and Narus 1990), trust (Moorman, Deshpande and Zaltman 1993; Ganesan 1994; Morgan and Hunt 1994) and commitment (Anderson and Weitz 1992; Gundlach, Achrol and Mentzer 1995; Morgan and Hunt 1994), dependence (Heide and John 1988) and communication and information exchange (Cunningham and Turnbull 1982; Frazier and Summers 1984), we propose to investigate the nature of the long-term relationships that exist between grape growers and winemakers in the Western Australian wine industry.

Satisfaction

To succeed in the industrial market, a supplier must understand the wants and needs of its customers and aim to satisfy those needs more effectively than the competition. To become more competitive, firms need to provide augmented products (and services) which offer customers more than they think is necessary or have come to expect.

Expectations are beliefs about the likelihood that a product is associated with certain attributes, benefits or outcomes (Spreng, MacKenzie and Olshavsky 1996). According to the disconfirmation of expectations model, customer satisfaction is the result of a comparison between the firm’s performance and customer’s expectations. Whenever performance exceeds perceived expectations, satisfaction will emerge. Conversely, whenever performance falls below expectations, customers will become dissatisfied.

However, Fornell et al (1996) believe that overall customer satisfaction is influenced by the customer’s perceived quality, perceived value and the customer’s expectations. Perceived quality or performance is derived from the manner in which the product performs (technical quality) and the manner in which the customer receives the product (functional quality). In the context of the wine industry, such would imply that a winery not only receives grapes of the desired maturity, substantially free of material-other-than-grapes and within the desired temperature range, but it receives the grapes when it wants them.

Perceived value is the perceived level of product quality relative to the price paid. Value is achieved when the proper function is secured for the proper cost. Here, the concept of value-in-use constitutes the price that will equalise the overall costs and benefits of using one product over another (Hutt and Speh 1995). Throughout the wine industry, the concept of end wine quality and the desired trade-off between yield and price is reflected in both the proportion of costs that the grapes contribute to the end product and the subsequent price position that the wine occupies on a retail shelf.

Finally, the customer’s expectations will relate favourably or unfavourably, to whatever prior experience the customer may have had with the supplier’s offer and a forecast of the supplier’s ability to continue to meet those expectations in the future. Cardozo and Cagley (1971) and Puto, Patton and King (1985) demonstrate that buyers are strongly attracted to well-known or existing suppliers, for current suppliers are perceived as being less risky.

Channel conflict is the only construct that is considered to have a direct negative effect on satisfaction (Frazier, Gill and Kale 1989). Firms that are able to lower the overall level of conflict in their working relationship experience greater satisfaction (Anderson and Narus 1990). Conflict in channel relationships occurs most often over economic issues (Geyskens, Steenkamp and Kumar 1999). Channel members that are satisfied with the economic rewards that flow from their relationship perceive their partner as advancing their goals as opposed to impeding or preventing them. Consequently, satisfaction has been described as the buyer's belief that they will be adequately rewarded for the sacrifices they have undergone in facilitating the exchange (Yi 1990). Both Frazier (1983) and Anderson and Narus (1990) suggest that satisfaction with past outcomes will indicate equity in the exchange. Equitable outcomes provide confidence that neither party has been taken advantage of in the relationship and that both parties are concerned about their mutual welfare.

Satisfaction will also decrease when coercive sources of power are employed (Frazier 1983). Coercive influence strategies typically include threats and promises. When a channel partner frequently pressures or coerces another firm into taking some action that it would not have otherwise taken or to forgo some positive outcome, the focal firm will feel tension and frustration because its decision autonomy is constrained. While the use of coercive influence strategies is often associated with organisational size, the more significant influences arise from the relative dependence one firm has upon another (Heide and John 1988).

Trust

If there is to be a meaningful long-term relationship, buyers and sellers must learn to trust their opposite partner to fulfil their obligations (Han, Wilson and Dant 1993; Morgan and Hunt 1994). Anderson and Narus (1990) view trust as the belief that a partner will perform actions that will result in positive outcomes for the firm and not to take unexpected actions that may result in negative outcomes. Moorman, Deshpande and Zaltman (1993) define trust as the willingness to rely upon an exchange partner in whom one has confidence. Both of these definitions view trust as a behavioural intention that reflects reliance on the other partner, but in so doing, involves uncertainty and vulnerability.

High levels of trust enable both firms to focus on the longer-term benefits of the exchange (Ganesan 1994). When trust exists, both buyers and suppliers believe that long-term relationship specific investments can be made with limited risk because both parties will refrain from using their power to renege on contracts or to use a change in circumstances to obtain profits in their own favour. Trust reduces the need for structural mechanisms of control (Achrol 1997) and firms learn to become more interdependent (Kumar 1996). Trust increases the partners tolerance for each others behaviour, facilitating the informal resolution of conflict, which in turn, allows the partners to better adapt to the needs and capabilities of their counterpart (Hakansson and Sharma 1996).

Trust is developed from the constant and detailed exchange of information which reduces the uncertainty of performance and the continued exhibition of commitment which nurtures and maintains the exchange relationship (Han, Wilson and Dant 1993).

Meaningful communication and cooperation between firms in a working partnership is a necessary antecedent of trust (Anderson and Narus 1990). Once trust is established, firms learn that coordinated joint efforts lead to outcomes that exceed those that the firm could achieve if it acted solely in its own best interests.

However, trust between firms does not occur automatically. Experience with the channel partner breeds trust (Dwyer, Schurr and Oh 1987; Anderson and Weitz 1989). Achieving a trusting relationship and a reputation for trustworthiness, requires a deliberate strategy of forbearance with a view towards future pay-offs and accumulated evidence of non-reneging behaviour (Parkhe 1993). With trust, there is an increasing willingness to put oneself at risk, be it through intimate disclosure, reliance on another's promises or sacrificing present rewards for future gains. Trust therefore results from the expertise, reliability or intentionality of the partner. Swan, Trawick and Silva (1985) indicate how competence, customer orientation, honesty, dependability and likeability are the key dimensions in developing trust between sales representatives and their customers. Moorman, Deshpande and Zaltman (1993) argue that the interpersonal factors that most affect trust include perceived expertise, sincerity, integrity, tactfulness, timeliness and confidentiality.

Commitment

Firms that trust their partner are more committed to their relationship (Anderson and Narus 1990; Gundlach, Achrol and Mentzer 1995). Trust and commitment encourage firms to work at preserving relationship investments by cooperating with exchange partners, to resist short-term alternatives in favour of expected long-term benefits and to view potentially high risk actions as being prudent because of the belief that partners will not act opportunistically (Morgan and Hunt 1994).

Moorman, Deshpande and Zaltman (1993) define commitment as an enduring desire to maintain a valued relationship. Morgan and Hunt (1994) propose that a firm will commit to an exchange partner when the relationship is considered so important as to warrant maximum efforts to maintain it. Such implies that the relationship is important and that there is a desire to continue the relationship into the future (Wilson 1995). Hakansson and Snehota (1995) see commitment as the tendency to persist with a course of action, often without an apparent causal motive, on the basis of some vague expectation. Thus, to some extent, a commitment is an act of faith by which the respective parties handle uncertainty and complexity.

However, commitment is comprised of at least two components; an attitudinal component and an instrumental component (Gundlach, Achrol and Mentzer 1995). Commitment is most often seen as an attitudinal construct described in terms of affective commitment, psychological attachment, identification, affiliation and value congruence. This type of commitment represents a partisan affective attachment to the goals and values of an organisation. People develop affective commitment towards organisations they feel they belong to, which provide them with assistance and support during difficult times, offer long term security or returns and employment and whose future and fortunes they feel they can actively influence (Achrol 1997). Osborn (2000) describes how by informing growers of the accolades given to a particular wine, recognising and praising the grower, growers find comfort and winemakers achieve the desired quality. Avery (2000) describes how grape growers proudly display and introduce others to the wines their grapes were used to produce.

However, attitudinal commitment alone is often insufficient. Commitments that are not supported by investments lack staying power (Achrol 1997). Such investments have been described variously to include pledges, credible commitments, idiosyncratic investments and the dedicated allocation of resources (Anderson and Weitz 1992). Such credible commitments act as powerful self-interest stakes in exchange relationships. All things being equal, these investments reinforce and escalate commitment over time. However, each firm's commitment to the relationship is based on its perception of its partner's commitment. The larger the resources pledged by both firms, the more significant the self-interest stakes created for each, but when firms commit disproportionately to the relationship, the less committed party may enjoy a relative advantage (Gundlach, Achrol and Mentzer 1995).

Dependence

Dependence refers to the firm's need to maintain the channel relationship in order to achieve desired goals (Frazier, Gill and Kale 1989). Dependence can therefore be regarded as the price the focal firm has to pay for the benefits that the relationship bestows (Easton 1992). As such, dependence is partly a matter of choice and partly a matter of circumstances.

When the outcomes obtained from the relationship are important or highly valued, the focal firm is said to be more dependent upon its partner (Heidi and John 1988). The same is true when the magnitude of the exchange is higher. The higher the percentage of sales and profits that a supplier's product line provides and the greater the expectations of sales and profits in the future, the greater the focal firm's dependence (Frazier, Gill and Kale 1989).

Dependence is also increased when the outcomes available from the relationship are comparatively higher than or better than the outcomes available from any alternative relationship. Firms dealing with the best supplier are more dependent because the outcomes associated with dealing that supplier are better than those available from poor performing suppliers (Heidi and John 1988). In this respect, Anderson and Narus (1990) view dependence in the relationship as the outcomes given comparison level for alternatives. In this context, dependence is a measure that represents the overall quality of outcomes available to the focal firm from the best alternative exchange relationship.

When fewer alternative sources of exchange are available to the focal firm, or when replacing or substituting a current exchange partner is difficult because there are fewer potential alternatives, dependence will increase (Heidi and John 1988). Furthermore, the investment the firm needs to put into the relationship in terms of time, effort and money, as well as the perceived costs of switching to and commencing an alternative exchange relationship, can also contribute to its dependence on another firm (Frazier 1983).

However, it is the firm's perception of its dependence relative to its partner that is of most interest in channel relationships. With increasing dependence comes greater vulnerability, making one firm more susceptible to the power and influence of another (Frazier, Gill and Kale 1989). In general, firms will seek to reduce their dependence on other firms (Heidi and John 1988) and to increase the dependence of other firms upon itself (Lohtia and Krapfel 1994). Firms may either seek to reduce and manage dependence by purposely structuring their exchange relationships with other firms (Heidi 1994), or to deal with multiple entities (Ganesan 1994).

Communication

Communication has been described as the glue that holds together a channel of distribution (Mohr and Nevin 1990). Communication in marketing channels serves as the process by which information is transmitted (Frazier and Summers 1984), programs are coordinated (Anderson and Narus 1990), power is exercised (Gaski 1984) and commitment and loyalty are encouraged (Anderson and Weitz 1992). Communication improves a supplier's credibility, but may also provide a convenient and simple means of gaining knowledge of the supply market (Cunningham and Turnbull 1982). Communication will facilitate other elements of the interaction such as adaptations by suppliers and customers to the design or application of a product, or, the modification of production, distribution and administrative systems by either party (McQuiston 1989).

Personal contact serves as the medium through which most communication between buying and selling firms occur. In the majority of cases, personal contacts and information exchange precedes the exchange of money and products (Ford 1982). Personal contacts are the normal means of persuasion and negotiation. Both buyers and sellers prefer personal contacts to written communications. However, personal contacts may also be established as a form of crisis insurance. In times of extreme difficulties, firms utilise these contacts as a means of obtaining more rapid or dramatic action (Cunningham and Turnbull 1982). Other relationships may exist purely for social reasons and are not necessary for the business objectives of either firm. Social contacts are an inevitable consequence of good functional contacts and will persist for as long as the individuals involved find it advantageous.

Methodology

The data for this project was obtained using a questionnaire mailed out to all members of the Wine Industry Association of Western Australia in November 1999. Given that the list contained the names and addresses of both wine grape growers and wineries, the list was cross-referenced against the list of all registered wineries to effectively place respondents into one of two groups.

Two survey instruments were developed. Each of the wineries received a questionnaire asking them about the nature of the relationship they had with their most preferred grape grower. Conversely, each of the grape growers received a questionnaire asking them about the nature of their relationship with their most preferred winery. Understandably, because of the manner in which the respondents were selected, we were unable to ascertain the extent to which, if at all, the responses received reflected the views of respondents in the same relationship.

The questionnaire asked respondents to provide information about themselves, their current viticulture practices and the criteria they used in choosing appropriate trading partners. In order to minimise the halo effect, the questionnaire was divided into five blocks containing multiple item measures for each of the relationship variables being considered (Garbarino and Johnson 1999). Information was sought on satisfaction, trust and commitment, dependence and communication. Respondents were asked to respond to each statement on a six point scale from 1 (I disagree a lot) to 6 (I agree a lot).

Satisfaction was evaluated by 6 items. With minor modifications to reflect the nature of the industry and the participants, the measures were adapted from previous research reported by Anderson and Narus (1990), Anderson and Weitz (1992), Ford (1984), Frazier (1983) and Ganesan (1994)(Appendix 1).

Trust was assessed by 5 items based on the literature reported by Anderson and Narus (1990), Anderson and Weitz (1992), Ganesan (1994), Moorman, Deshpande and Zaltman (1993) and Morgan and Hunt (1994).

Commitment was measured by 3 items, developed from the literature reported by Anderson and Weitz (1992), Ganesan (1994), Gundlach, Achrol and Mentzer (1995), Moorman, Deshpande and Zaltman (1993) and Morgan and Hunt (1994).

Communication was measured by 8 items developed from the literature reported by Athaide, Meyers and Wilemon (1996), Anderson and Weitz (1992) and Ford (1984).

Dependence was measured using 10 items developed from the literature reported by Frazier, Gill and Kale (1989), Heide and John (1988), Morgan and Hunt (1994) and Ganesan (1994).

The responses were then analysed using principal component analysis (with varimax rotation and Kaiser normalisation). Those items with factor loadings below 0.5 or with cross-loadings greater than 0.4 were excluded (Nunnally 1978). Further clarification of the items contributing to each factor was achieved by applying the reliability coefficient (Cronbach's alpha).

In order to examine any differences in the constructs between the grape growers and wineries, the respondents were separated into their two respective groups and the items comprising each construct investigated independently using principal component analysis. The analysis was undertaken in this manner to confirm the unidimensionality of the constructs (particularly relational quality), but also because the sample size for each respective group was below the minimum number considered necessary for principal component analysis to be undertaken reliably (Hair, et al. 1992).

Sample characteristics

A total of 32 wineries responded to the questionnaire. Responses were obtained in similar proportions from each of the four major wine grape growing districts in WA. The majority of respondents (63%) were currently growing less than 15 hectares of wine grapes, although most (64%) had been growing grapes and producing wine for more than 10 years. Most wineries (67%) did not produce wine from grapes other than those they had grown themselves. However, for the 33% of wineries that did purchase wine grapes, 54% purchased more than 50% of their total crush from other grape growers. For those respondents who did purchase wine grapes, 62% sourced fruit from three or more growers. In the majority of cases (75%), the winery had been purchasing grapes from the same growers for more than 5 years.

A total of 26 wine grape growers responded to the questionnaire. The majority of respondents (43%) were from the emerging wine grape growing districts in the Warren Valley and South West Coast (27%) (which includes Margaret River). The majority of respondents (81%) were currently growing less than 10 hectares of wine grapes and most (58%) had been producing wine grapes for less than four years. Ordinarily, one would expect wine grape growers to endeavour to sell all of their fruit, however, only 45% of respondents sold their entire harvest. Some 31% of wine grape growers retained between 1-25% of their harvest, presumably for the manufacture of wine under contract, with some 19% of grape growers retaining more than 51% of their harvest. Most respondents (92%) supplied fewer than 2 wineries. In only 31% of cases had the grape growers been supplying the same customers for more than 5 years.

Results

From the combined sample of 58 respondents, principal component analysis provided a four factor solution, rather than the five factor solution as anticipated (Table 1).

Factor One (relational quality) was found to be a composite measure containing elements of satisfaction (3 items), trust (4 items) and commitment (1 item). The construct captured the partner's perceptions of being treated fairly and equitably, the extent to which the relationship met the partner's expectations and the extent to which the partner's cooperated with one another. The construct also captured the partner's reputation for being fair, the extent to which the partner's trusted one another, always kept their promises and the belief each partner had in the information provided by the other. The final item, drawn from commitment, was a measure of the extent to which the relationship was based on mutual benefit and trust. With a Cronbach's alpha of 0.962, this construct was considered very robust.

Factor Two (continuity) captured the partners desire to maintain the relationship. One item (more cost effective) was derived from satisfaction, one items (reduced risk) from commitment and one item (benefits exceed other offers) was derived from the dependence theory; in particular, the comparison to alternatives (C_{alt}) (Anderson and Narus 1990). With a Cronbach's alpha of 0.883, this construct was also sufficiently robust.

Factor Three (power) was comprised of three items from dependence which suggested that one or either party was susceptible to the power and influence of the other, that it had to adhere to the other's demands and that one or either party controlled the flow of information in the relationship.

Table 1. Relationship factors in the WA wine industry.

	Factor scores			
	1	2	3	4
Treated fairly and equitably	0.927			
Relationship based on mutual benefit/trust	0.890			
Partner meets expectations	0.889			
Trust partner	0.873			
Believe information provided by partner	0.851			
Good cooperation	0.835			
Partner has a good reputation for being fair	0.815			
Partner keeps promises	0.786			
Less risky dealing with this partner		0.882		
More cost effective to stay with this partner		0.870		
Benefits exceed other offers		0.816		
Partner controls information			0.903	
Partner has all the power			0.819	
Must adhere to partners demands			0.804	
Discuss when to harvest grapes				0.916
Discuss how to improve grape quality				0.854
Eigen value	6.099	2.715	2.230	1.817
Percent variance	38.12	16.97	13.94	11.36
Cumulative variance	38.12	55.09	69.03	80.39
Cronbach's alpha	0.962	0.883	0.812	0.685

Factor Four (communication) indicated that there was a substantial amount of information exchange in the relationship, particularly with regard to the harvesting of the grapes and discussion on various ways to improve the quality of the grapes offered for sale. While the Cronbach's alpha was below that considered desirable, because of the exploratory nature of this research, it was retained.

For Factor One, no significant differences could be detected between the growers' responses and the wineries' responses (Table 2). In both cases, the Cronbach's alpha was particularly good, indicative of a very robust, although multi-dimensional construct.

Similarly for Factor Two, no significant difference could be detected between the growers' responses and the wineries' responses (Table 3). Again, the Cronbach's alpha was sufficiently high for both constructs to be considered reliable.

For Factor Three, there was a significant difference in the items that comprised the construct between wineries and grape growers (Table 4). Whereas the grape growers indicated that they were obligated to adhere to the wineries' demands, the wineries indicated no such reciprocal demands from the grape growers. Nevertheless, in both cases, the Cronbach's alpha was sufficiently high to provide some degree of confidence in the item measures.

Table 2. Relational quality between wineries and grape growers.

	Factor scores	
	Winery	Grape growers
Treated fairly and equitably	0.966	0.931
Relationship based on mutual benefit/trust	0.834	0.893
Partner meets expectations	0.897	0.920
Trust partner	0.841	0.938
Believe information provided by partner	0.818	0.827
Good cooperation	0.760	0.900
Partner has a good reputation for being fair	0.876	0.788
Partner keeps promises	0.686	0.909
Cronbach's alpha	0.935	0.961

Table 3. The desire to maintain the relationship between wineries and grape growers

	Factor scores	
	Winery	Grape growers
Less risky dealing with this partner	0.909	0.932
More cost effective to stay with this partner	0.824	0.887
Benefits exceed other offers	0.949	0.881
Cronbach's alpha	0.847	0.864

Table 4. Dependence between wineries and grape growers.

	Factor scores	
	Winery	Grape growers
Partner controls information	0.939	0.910
Partner has all the power	0.936	0.794
Must adhere to partners demands	*	0.852
Cronbach's alpha	0.904	0.808

For Factor Four, while there was no difference in the item measures that comprised the construct between wineries and grape growers, there was a significant difference in the value of the Cronbach's alpha (Table 5). Although the construct was considered sufficiently reliable for the wineries' (0.869), for the grape growers, it was well below that considered acceptable.

Table 5. Communication between wineries and grape growers.

	Factor scores	
	Winery	Grape growers
Discuss when to harvest grapes	0.941	0.872
Discuss how to improve grape quality	0.941	0.872
Cronbach's alpha	0.869	0.607

Discussion and implications

In undertaking what we believe to be the first empirical study into the nature of long-term relationships in the Australian wine industry, we found a remarkably high level of agreement between the wineries and grape growers for each of the four relational factors found in the Western Australian wine industry. Such is not entirely unexpected, for various authors including Beuman and McLachlan (2000), Donald and Georgiadis (2000) and Osborn (2000) have described how through building relationships between grape growers and wineries, it is possible to improve the quality of the grapes received and to improve grape growers returns. Since such relationships are mutually beneficial, both parties are expected to seek to maintain the relationship, even although there is strong evidence that the wineries exert the majority of the power in the relationship.

Where power is applied to pursue outcomes that are beneficial for both partners, such is unlikely to result in a deterioration of relational quality. When supported by constant communication that seeks to improve the quality of the grapes harvested and to advise grape growers of proposed harvest dates, growers' are unlikely to feel that they have been the target of coercive influence strategies. For those who feel they have been mistreated, at least in the short-term, there are opportunities to pursue alternative relationships. However, as the supply of grapes increases and wineries are able to exercise more choice, those growers unable to produce quality grapes will find it increasingly more difficult to sell their harvest.

While the majority of authors including Han, Wilson and Dant (1993), Ganesan (1994), Morgan and Hunt (1994) and Wilson (1995) model satisfaction, trust and commitment as separate constructs, Dorsch, Swanson and Kelley (1998) describe relationship quality as a higher-order construct containing dimensions of all three constructs. Conversely, while Crosby, Evans and Cowles (1990) and Leuthesser (1997) model relational quality as a composite measure derived from both satisfaction and trust, Kumar, Scheer and Steenkamp (1995) conceptualise relational quality as being comprised primarily of trust and commitment.

While evidence for this single construct (relational quality) is derived primarily from the relationship theory in consumer markets, we have also demonstrated its existence in an industrial market. We believe we have captured the construct in the context of this study because of the strong interdependency between business expenditure and household expenditure. Since the vast majority of respondents were small business enterprises with less than 15 hectares of grapes, given a particular level of income, an increase in the expenditure on production inputs can only be made at the expense of household consumption and vice versa. However, the extent to which this construct might be found in the corporate environment prevalent amongst the larger wine producers in South Australia, Victoria and New South Wales warrants further investigation.

Furthermore, we must acknowledge that with such a small data set, we were unable to test the reliability and validity of both the constructs and the various item measures to the full extent considered necessary. Ideally, for any other research group who may wish to follow our lead, it would be more appropriate to investigate the nature of the relationships within the dyads themselves, but such will, by necessity, significantly increase the costs.

References

Achrol, R. S. (1997). Changes in the Theory of Interoganisational Relations in Marketing: Toward a Network Paradigm. *Journal of the Academy of Marketing Science.* 25 (1). 56-71.

Anderson, E. and B. A. Weitz (1989). Determinants of Continuity in Conventional Industrial Channel Dyads. *Marketing Science.* 8 (Fall). 310-323.

Anderson, E. and B.A. Weitz (1992). The Use of Pledges to Build and Sustain Commitment in Distribution Channels. *Journal of Marketing Research.* 29. 18-34.

Anderson, J.C. and J.A. Narus (1990). A Model of Distributor Firm and Manufacturing Firm Working Relationships. *Journal of Marketing.* 54 (January). 42-58.

Athaide, G.A., P.W. Meyers and D.L. Wilemon (1996). Seller-Buyer Interactions During the Commercialisation of Technological Process Innovations. *Journal of Product Innovation Management.* 13. 406-421.

Australian Bureau of Statistics (2000). *Australian Wine and Grape Industry.* 1329.0. Canberra.

Avery, B. (2000). A grower’s viewpoint in Davies, C. C. Dundon and R. Hamilton (eds). *Proceedings ASVO Viticulture Seminar. Modern Viticulture - Meeting Market Specifications.* Australian Society of Viticulture and Oenology. Adelaide. 56-57.

Beuman, K and E. McLachlan (2000). Grower feedback and developing relationships – Orlando Wyndhams perspective in Davies, C. C. Dundon and R. Hamilton (eds). *Proceedings ASVO Viticulture Seminar. Modern Viticulture - Meeting Market Specifications.* Australian Society of Viticulture and Oenology. Adelaide. 50-51.

Campbell, A.J. and D.T. Wilson (1996). Managed Networks: Creating Strategic Advantage in Iacobucci, D. (ed). *Networks in Marketing*. Sage Publications. 125-143.

Cardozo, R.N. and J.W. Cagley (1971). Experimental Study of Industrial Buyer Behaviour. *Journal of Marketing Research.* 8. 329-334.

Crosby, L.A., K.R. Evans and D. Cowles (1990). Relationship Quality in Services Selling: An Interpersonal Influence Perspective. *Journal of Marketing.* 54 (July). 68-81.

Cunningham, M.T. and E. Homse (1982). An Interaction Approach to Marketing and Purchasing Strategy in Hakansson, H. (ed). *International Marketing and Purchasing of Industrial Goods. An Interaction Approach.* IMP Project Group. Wiley. 323-328.

Cunningham, M.T. and P.W. Turnbull (1982). Inter-organisational Personal Contact Patterns in Hakansson, H. (ed). *International Marketing and Purchasing of Industrial Goods. An Interaction Approach.* IMP Project Group. Wiley. 304-315.

Donald, F. and P. Georgiadis (2000). Setting quality categories for particular markets in Davies, C. C. Dundon and R. Hamilton (eds). *Proceedings ASVO Viticulture Seminar. Modern Viticulture - Meeting Market Specifications.* Australian Society of Viticulture and Oenology. Adelaide. 15-17.

Dorsch, M.J., S.R. Swanson and S.W. Kelley (1998). The Role of Relationship Quality in the Stratification of Vendors as Perceived by Customers. *Journal of the Academy of Marketing Science.* 26(2). 128-142.

Dwyer, F.R., P.H. Schurr and S. Oh (1987). Developing Buyer-Seller Relationships. *Journal of Marketing.* 51(April). 11-27.

Easton, G. 1992. Industrial Networks: A Review in Axelsson, B. and G. Easton (ed). *Industrial Networks. A New View of Reality*. Routledge. London. 3-27.

Easton, G. and L. Araujo (1994). Market Exchange, Social Structures and Time. *European Journal of Marketing.* 28(3). 72-84.

Evans, J.R and R.L. Laskin. (1994). The Relationship Marketing Process: A Conceptualisation and Application. *Industrial Marketing Management.* 23. 439-452.

File, K.M., J.L. Mack and R.A. Prince (1994). Marketing to the Family Firm: A New Consideration for Business-to-Business Marketers. *Journal of Business and Industrial Marketing.* 9(3). 64-72.

Ford, D. (1980). The Development of Buyer-Seller Relationships in Industrial Markets. *European Journal of Marketing.* 14 (5/6). 339-353.

Ford, D. (1982). Development of Buyer-Seller Relationships in Industrial Markets in Hakansson, H. (ed). *International Marketing and Purchasing of Industrial Goods. An Interaction Approach.* IMP Project Group. Wiley. 288-303.

Ford, D. (1984). Buyer/Seller Relationships in International Industrial Markets. *Industrial Marketing Management.* 13. 101-112.

Fornell, C., M.D. Johnston, E.W. Anderson, J. Cha and B.E. Bryant (1996). The American Customer Satisfaction Index: Nature, Purpose and Findings. *Journal of Marketing.* 60 (October). 7-18.

Frazier, G.L. (1983). Interorganisational Exchange Behaviour in Marketing Channels: A Broadened Perspective. *Journal of Marketing.* 47 (Fall). 68-78.

Frazier, G.L and J.O. Summers (1984). Interfirm Influence Strategies and Their Application within Distribution Channels. *Journal of Marketing.* 48 (Summer). 43-55.

Frazier, G.L., J.D. Gill and S.H. Kale (1989). Dealer Dependence Levels and Reciprocal Actions in a Channel of Distribution in a Developing Country. *Journal of Marketing.* 53 (January). 50-69.

Ganesan, S. (1994). Determinants of Long-Term Orientation in Buyer-Seller Relationships. *Journal of Marketing.* 58 (April). 1-19.

Garbarino, E. and M.S. Johnson (1999). The Different Roles of Satisfaction, Trust and Commitment in Customer Relationships. *Journal of Marketing.* 63 (April). 70-87.

Gaski, J.F. (1984). The Theory of Power and Conflict in Channels of Distribution. *Journal of Marketing.* 48 (Summer). 9-29.

Geyskens, I., J-B E.M Steenkamp and N. Kumar (1999). A Meta-Analysis of Satisfaction in Marketing Channel Relationships. *Journal of Marketing Research.* 36 (May). 223-238.

Gundlach, G.T., R.S. Achrol and J.T. Mentzer (1995). The Structure of Commitment in Exchange. *Journal of Marketing.* 59 (January). 78-92.

Hair, J.F. Jnr., R.E. Anderson, R.L. Tatham and W.C. Black (1992). *Multivariate Data Analysis.* Macmillan Publishing. Ontario.

Hakansson, H. (ed) (1982). *International Marketing and Purchasing of Industrial Goods: An Interaction Approach.* IMP Project Group. John Wiley and Sons. 406 pp.

Hakansson, H. and I. Snehota (1995). *Developing Relationships in Business Networks.* International Thomson Business Press. London. 412 pp.

Hakansson, H. and D.D. Sharma (1996). Strategic Alliances in a Network Perspective in Iacobucci, D. (ed). Networks in Marketing. Sage Publications. 08-124.

Hallen, L., J. Johanson and N. Seyed-Mohamed (1991). Interfirm Adaptation in Business Relationships. *Journal of Marketing.* 55 (April). 29-37.

Han, S.L., D.T. Wilson and S.P. Dant (1993). Buyer-Supplier Relationships Today. *Industrial Marketing Management.* 22. 331-338.

Heide, J.B. and G. John (1988). The Role of Dependence Balancing in Safe-Guarding Transaction-Specific Assets in Conventional Channels. *Journal of Marketing.* 52 (January). 20-35.

Heide, J.B. and G. John (1990). Alliances in Industrial Purchasing: The Determinants of Joint Action in Buyer-Seller Relationships. *Journal of Marketing Research.* 54 (February). 24-36.

Heide, J.B. (1994). Interorganisational Governance in Marketing Channels. *Journal of Marketing.* 58 (January). 71-85.

Hutt, M.D. and T.W. Speh (1995). *Business Marketing Management. A Strategic View of Industrial and Organisational Markets.* Fifth Ed. Dryden Press.

Jackson, B. B. (1985). Build Customer Relations That Last. *Harvard Business Review.* November-December. 120-128.

Kalwani, M.U. and N. Narayandas (1995). Long-Term Manufacturer-Supplier Relationships: Do They Pay Off for Supplier Firms? *Journal of Marketing.* 59 (January). 1-16.

Kumar, N., L.K. Scheer and J.B.E.M. Steenkamp (1995). The Effects of Supplier Fairness on Vulnerable Resellers. *Journal of Marketing Research.* 32 (February). 54-65.

Kumar, N. (1996). The Power of Trust in Manufacturer-Retailer Relationships. *Harvard Business Review.* November-December. 92-106.

Leuthesser, L. (1997). Supplier Relational Behaviour: An Empirical Assessment. Journal of Marketing Management. 26. 245-254.

Lohtia, R. and R.E. Krapfel (1994). The Impact of Transaction-Specific Investments on Buyer-Seller Relationships. *Journal of Business and Industrial Marketing.* 9(1). 6-16.

McQuiston, D.H. (1989). Novelty, Complexity and Importance as Causal Determinants of Industrial Buyer Behaviour. *Journal of Marketing.* 53 (2). 66-79.

Matthyssens, P. and C. van den Bulte (1994). Getting Closer and Nicer: Partnerships in the Supply Chain. *Long Range Planning.* 27(1). 72-83.

Mohr, J. and J.R. Nevin (1990). Communication Strategies in Marketing Channels: A Theoretical Perspective. *Journal of Marketing.* 54 (October). 36-51.

Moorman, C., R. Deshpande and G. Zaltman (1993). Factors Affecting Trust in Market Research Relationships. *Journal of Marketing.* 57 (January). 81-101.

Morgan, R.M. and S.D. Hunt (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing.* 58 (July). 20-38.

Noordewier, T.G., G. John and J.R. Nevin (1990). Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships. *Journal of Marketing.* 54 (October). 80-93.

Nunnally, J.C. (1978). *Psychometric Theory.* Second Ed. McGraw Hill. New York.

Oliver, C. (1990). Determinants of Interorganisational Relationships: Integration and Future Directions. *Academy of Management Review.* 15 (2). 241-265.

Osborn, C. (2000). Grower feed back and developing relationships in Davies, C. C. Dundon and R. Hamilton (eds). *Proceedings ASVO Viticulture Seminar. Modern Viticulture - Meeting Market Specifications.* Australian Society of Viticulture and Oenology. Adelaide. 52-53.

Parkhe, A. (1993). Strategic Alliance Structuring: A Game Theoretic and Transaction Cost Examination of Interfirm Cooperation. *Academy of Management Journal.* 36 (4). 794-829.

Puto, C.P., W.E. Patton III and R.H. King (1985). Risk Handling Strategies in Industrial Vendor Selection Decisions. *Journal of Marketing.* 49 (Winter). 89-98.

Reedman, P. (2000). Market demands on wine styles in Davies, C. C. Dundon and R. Hamilton (eds). *Proceedings ASVO Viticulture Seminar. Modern Viticulture-Meeting Market Specifications.* Australian Society of Viticulture and Oenology. Adelaide. 6-8.

Spreng, R.A., S.B. Mackenzie and R. W. Olshavsky. 1996. A Re-examination of the Determinants of Consumer Satisfaction. *Journal of Marketing*. 60 (July). 15-32.

Stanford, L. and S. Strachan (1999). Projections of Australian exports and domestic sales to 2003. *The Australia and New Zealand Wine Industry Journal.* 14 (1). 35-40.

Swan, J.E., I.F. Trawick and D.W. Silva (1985). How Industrial Salespeople Gain Customer Trust. *Industrial Marketing Management.* 14 (August). 203-211.

Wilson, D.T. (1995). An Integrated Model of Buyer-Seller Relationships. *Journal of Academy of Marketing Science.* 23(4). 335-345.

Yi, Y. (1990). A Critical Review of Consumer Satisfaction in Zeithaml, V.A (ed). *Review of Marketing. 1990.* American Marketing Association. Chicago.

Appendix 1. Item measures.

	Mean	
	Winery	Grower
Satisfaction		
My preferred partner often meets my expectations	4.85	4.38
There is good cooperation between myself and my preferred partner	5.00	4.65
My preferred partner is quick to handle complaints *	4.08	3.92
I feel I am adequately rewarded by my preferred partner *	4.23	4.69
My preferred partner treats me fairly and equitably	4.69	4.46
It is more cost effective to rely on my preferred partner	4.54	4.38
Trust		
My preferred partner has a reputation for being fair	4.92	4.65
I trust my preferred partner	4.69	4.69
I have confidence in my preferred partner *	4.69	4.77
My preferred partner always keeps their promises	4.54	4.19
I believe the information provided by my preferred partner	4.69	4.42
Commitment		
It is less risky dealing with my preferred partner	4.62	4.62
My relationship with my preferred partner is based on mutual benefit and trust	4.92	4.46
I expect to continue to transact with my preferred partner in the future * ^{S}	5.46	4.58
Communication		
My preferred partner frequently visits with me *	4.69	4.00
My preferred partner and I discuss when to harvest the grapes	5.23	5.54
My preferred partner and I discuss how we might improve grape quality	4.77	4.92
My preferred partner and I discuss how we might coordinate schedules * ^{HS}	4.92	3.54
My preferred partner takes a long time to agree on price *	2.85	3.04
My preferred partner keeps me informed on technical matters *	3.77	3.46
Its relatively easy to contact my preferred partner * ^{S}	5.46	4.69
My preferred partner advises me of grape quality *	4.00	4.00
Dependence		
I choose to transact with many partners *	4.85	3.12
I re-evaluate my preferred partner's every season *	3.62	3.65
I frequently reject other offers to buy grapes * ^{HS}	4.08	2.46
My preferred partner has the best offer *	4.08	4.12
The benefits I obtain from my relationship with my preferred partner exceed those I could obtain elsewhere	4.69	4.38
I am free to choose another partner at any time *	4.85	4.23
My preferred partner has all the power	2.62	3.27
My preferred partner controls all the information in our relationship	1.92	2.85
I must adhere to my preferred partner's demands ^{HS}	1.69	3.12
Over time I have become dependent on my preferred partner *	2.38	3.12

the term "partner" was replaced with "winery" or "grape grower" depending on the target group
* item was deleted
^{S} a significant difference exists between the factor means at $p = 0.05$
^{HS} a significant difference exists between the factor means at $p = 0.01$