Towards Sustainable Wine in South Africa

A Case Study on Strategy Formulation of an Organic and Biodynamic Winery

Copenhagen Business School

Author:	Luna Sünkel (125317)
Exam:	Master Thesis (30 ECTS)
Program:	M.Sc. Business, Language & Culture Business & Development Studies
Handin:	15 May 2020
Supervisor:	Søren Jeppesen Department of Management, Society & Communication
Pages:	78 (STU 181843)

CBS COPENHAGEN BUSINESS SCHOOL
HANDELSHØJSKOLEN

Acknowledgements

I want to dedicate a special thank you to everyone who helped making this thesis possible. This includes all the respondents who took their valuable time during the South African harvest period to participate in this research. Especially, Johan Reyneke and his team who gave me all the insights on their farming philosophy. I would also like to thank Anna-Maria Oberholster for hosting me in Stellenbosch and giving me a home for the time of research.
A big thank you also goes to Søren Jeppesen, my supervisor who guided me in this time.
Last but not least, thanks to family and friends who always had my back and encouraged me!

Abstract

Integrating sustainability concerns in the strategy formulation has received wide-spread attention in strategic management literature. Especially in industries that are closely linked to agriculture, the sustainable use of resources is experiencing increased attention by consumers who are becoming more aware of wider social issues such as the environment and its protection. The wine industry, which depends on natural resources, is seeing shifts in the demand and newly arising trends. Organic wines, biodynamic wines and natural wines have enjoyed increased popularity.

This thesis focuses on the South African wine industry, which is part of the so-called 'New World' and finds itself confronted with climate change and rising sustainability concerns. As an emerging economy, it is facing a different point of departure compared to the 'Old World' wine making nations and is struggling to access export markets profitably.

Due to the recent rise of the industry, research on strategic options South African organic wineries have in the global and in the domestic market is scarce. By integrating the resource-based view, the industry-based view and the institution-based view in a strategy tripod approach, this thesis investigates *how South African wineries develop strategic responses to external conditions based on environmental competencies.*

Through a qualitative single case study on the organic and biodynamic winery Reyneke Wines, the phenomenon of rising environmental awareness in the South African wine industry is illuminated. By conducting in-depth interviews with industry experts, the industrial conditions and the institutional environment are revealed. For the in-depth knowledge on the case firm's development of strategic responses to the latter, interviews with the case firm were conducted.

The findings reveal how South African wine farms can identify opportunities from the newly emerging sustainability demand and present the underlying external and internal factors that influence the strategy formulation. It emerged that there are several institutional voids arising from a lack of government support for the wineries, which aggravate to access export markets profitably. Numerous domestic industry associations stepped in, trying to fill such voids. For the strategy, environmental competencies proved to be of tremendous importance as such can be the basis of competitive advantages regarding differentiation and production cost advantages.

Table of Contents

List of Figures

List of Tables

Abbreviations

IBV	Institution-based View
RBV	Resource-based View
IPW	Integrated Production of Wine
OIV	Organisation Internationale de la Vigne et du Vin
SAWIS	South African Wine Information System
UNEP	United Nations Environment Programme
WIETA	Wine Industry Ethical Trade Association
WISE	Wine Industry Strategic Exercise
WOSA	Wines of South Africa
WSB	Wine & Spirit Board
kha	thousands of hectares
mha	millions of hectares
khl	thousands of hectolitres
mhl	millions of hectolitres
bn	billion
m	million

1) Introduction

In 1987, the concept of sustainable development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" was popularized by the Brundtland Commission (World Commission on Environment and Development, 1987, p. 54). Here, a positive relation between economic performance and reduction of environmental impact was introduced (Sharma & Vredenburg, 1998). This has been revived by COP21, the 2015 UN Climate Change Conference, which brought the concept of environmental sustainability back on the agenda with renewed vigour (UNFCCC, 2020).

Over the last thirty years, sustainability concerns have found their way into many domains of our modern world, questioning status quos of production and manufacturing practices. Especially in agriculture-based industries, where natural resources constitute the main assets, sustainable practices are starting to arrive (UNEP, 2016).

The wine industry, as an agriculture-based industry, is facing challenges like climate change and is increasingly pressured by concerns about the employment of chemicals, water scarcity and energy use (Christ & Burritt, 2013; Gilinsky, Newton & Vega, 2016). In order to respond to these issues, wine producers started to implement programmes such as environmental management plans, which entail water management, soil management, the protection of biodiversity and energy reduction. This has led to a business case for sustainability evolving in the global wine industry, introducing new product categories such as organic wine, biodynamic wine or natural wine (Gilinsky et al., 2016). The global share organic wine is taking away from conventional wine is estimated at a compound annual growth rate of 9.2% (Pellechia, 2019).

This thesis aims at identifying the economic implications of implementing environmental strategies for wineries by analysing facilitating as well as impeding external factors that are affecting wineries. Further specific focus is set at the environmental competencies wine firms develop internally in response to the external trends and challenges.

The wine industry of South Africa was chosen as a case setting in order to add the perspective of an emerging economy. South Africa, a rather "new player in international wine markets" (Ponte & Ewert, 2009, p.1639), which counts to the so-called 'New World' producing countries (Alonso Ugaglia, Cardebat & Cosi, 2019) has recently embarked on its own journey towards sustainable wine production. This thesis explores trends of environmental sustainability while empirically looking at the South African wine industry and illustrates firm-level decisions on how to develop strategic responses based on environmental competencies through a case study.

1.1) Problem Formulation & Research Question

Besides climate change and environmental challenges such as drought and water scarcity, the South African wine industry is facing structural challenges such as low profitability resulting from a historical focus on low-value bulk wine production, which jeopardizes international competitiveness (Steyn, 2019).

Despite the difficult conditions, quite a few South African wineries have decided to farm organically, or even biodynamically. Drivers behind engaging in pro-environmental farming techniques are mostly the management's environmental responsibility but also the identification of environmental sustainability as an opportunity for competitiveness gains (Hamman, Smith, Tashman & Scott Marshall, 2017).

As the literature review identifies a lack of research on how South African organic and biodynamic wine firms develop strategic responses to the challenges they are facing domestically and internationally, the purpose of this paper is to investigate the underlying external and internal factors that impact the wineries' strategic considerations and identify to which extent the strategy may be based on certain environmental competencies.

By applying a strategy tripod tool to a case firm, industrial conditions, which determine the competitiveness within an industry, as well as the institutional pressures that exist across global industries will be contrasted with the resources and capabilities the case firm needs to develop. By gaining insights from these three perspectives, the thesis aims to answer the research question:

How do South African wineries develop strategic responses based on environmental competencies? The case of Reyneke Wines.

By specifically looking at a case firm, which has implemented a clear business case for pro-environmental production, this thesis tries to shed light on the impact environmental competencies as the "abilities of the firm to develop environment related resources, skills and capabilities and hence competencies that improve the competitive position of the firm" (Jeppesen & Hansen, 2004, p.269), can have on the strategy.

1.2) Delimitation & Definitions

Space limitations militate against examining the whole spectrum of sustainability in the wine industry. In general, the triple bottom line of corporate social responsibility encompasses economic, social and environmental responsibility. Consequently, besides the concept of environmental sustainability, economic and social sustainability are points of interest in the wine industry as well (Gilinsky et al. 2016). Especially social aspects like labour conditions and Black Economic Empowerment in the South African wine industry constitute valuable research topics. However, this thesis will not focus further on the social aspect of sustainability but put an emphasis on the environmental domain in the wine industry.

There is a multitude of nuances of environmental sustainability in the wine industry. In a broader sense, eco-friendly products may range from conventional wine farmed adhering to voluntary environmental principle, to carbon-neutral, vegan, natural, organic and biodynamic wine. It is therefore necessary to point out that sustainable farming must not be confused with organic or biodynamic farming, which follow strict regulations. The specific definitions of wine-related products and the relevant product categories can be found in Appendix 1.

1.3) Structure

The thesis is structured as follows:

Chapter 2 presents the concept of environmental sustainability and attempts to align sustainability with theories of strategy formulation. This chapter provides a literature review and introduces relevant research streams. It concludes with the presentation of the conceptual framework for the thesis.

Chapter 3 describes the applied research methods and gives insights on the data collection for the case study.

Chapter 4 introduces the case study setting. Trends in the global wine industry are presented with particular focus on rising sustainability demands. The chapter further gives an overview of the characteristics of the South African wine industry, shedding light on the historical development and today's dynamics among the most relevant actors. Thereafter, environmental sustainability in South Africa is addressed.

Chapter 5 introduces the winery which serves as the case firm and presents an analysis of the findings from the data collection according to the three legs of the strategy tripod: institutions, industry conditions and resources and capabilities and their impact on the case firm.

Chapter 6 discusses the findings by identifying the challenges and opportunities that arise due to the external influences. It elaborates on the implications the findings of the strategy tripod have on the case firm's strategy formulation based on environmental competencies. It further provides a reflection on the research design and usefulness of the framework.

Chapter 7 draws conclusions with final answers.

2) Review, Theoretical Foundations & Conceptual Framework

This chapter will give an overview of the underlying concepts relevant to this study. It begins with a review of research conducted on environmental sustainability in the wine industry. The review enables the identification of distinct possible approaches on how to analyse the topic. It further provides an insight into relevant theoretical concepts that lead to the choice of a suitable conceptual framework for this research.

2.1) Review of Environmental Sustainability Research in the Wine Industry

In the emerging market context, environmental standards tend to be introduced by transnational corporations. Nevertheless, environmental concerns may also arise within domestic and internal sources (Jeppesen & Hansen, 2004). The emergence of environmental sustainability in the wine industry is therefore discussed here, contrasting an inside-out versus an outside-in perspective.

Research streams on sustainability in wine businesses can be divided into the literature investigating the drivers of pursuing environmental sustainability, and the literature analysing the implementation of an environmental strategy (Santini, Cavicchi & Casini, 2013).

The analysis of the drivers behind sustainability also reveals external pressures arising from institutions, associations, regulators, competitors and customers as well as pressures arising from inside like entrepreneurial commitment to sustainability (Santini et al., 2013).

Better product quality or enhanced competitiveness have been identified as internal drivers for sustainability as well as cost and waste reduction, access to new markets and improved reputation (Gabzdylova, Raffensberger & Catska, 2009). The research on motivations for sustainability in the American wine industry revealed entrepreneurial behaviour as a decisive factor, followed by industry associations, which can have a conducive influence on adopting sustainability practices through providing information and knowledge (Marshall et al., 2005; Marshall et al., 2010; Silverman et. al., 2005). Also studies in Australia and New Zealand identified the winery owner or wine maker's personal values as the main drivers (Dodds, Graci, Ko & Walker, 2013; Gabzdylova, et al., 2009), as the interviewed wineries did not expect to receive a price premium on organically or sustainably grown wine (Gabzdylova, et al., 2009). This was supported by other studies concerned with price premium on organic wine, which have not been successful in finding a price premium in most consumer markets (CBI, 2014). In contrast to the analyses just mentioned, Forbes et al. (2009) and Berghoef & Dodds (2011) identified a willingness among consumers in New Zealand and the US to pay a small percentage

more for environmentally sustainable produced wine. Thus, the potential of a price premium on organic wine remains debated among scholars and it can be derived from the literature that it is currently not among the main drivers of implementing environmentally sustainable practices.

Since the wine industry is dependent on natural resources, land and water, the industry is facing external pressures related to the use of pesticides, the impact on ecosystems, energy use and water management (Christ & Burritt, 2013). However, customer demand and community pressures only play a secondary role as drivers of sustainability in the US wine industry (Marshall et al., 2005). Nevertheless, among studies on the consumer attitudes regarding sustainable wine, one study in New Zealand revealed a strong demand for environmentally friendly produced wine and thus, consumer demand cannot be neglected as a decisive factor for implementing sustainable wine growing practices (Forbes et al., 2009).

Another research stream on external pressures focuses on certification. Here, the implementation of standards for sustainable wine production and environmental management plans is analysed (McEwan & Bek, 2009). This approach points in the direction of global value chain analysis, where pressures of lead firms such as supermarket chains are analysed in their impact on demanding certain sustainability standards from their supplying wine farms, which often struggle to comply with the complex requirements of certifications (Fearne et al., 2009; Humbert & Polotzek, 2017; Ponte, 2018).

Further, the way sustainability can be integrated in the strategy of wineries has received widespread attention in relation to achieving competitive advantages in form of cost leadership or differentiation by comparing wineries that have implemented environmental management systems with those that have not (Atkin et al., 2012; Flint & Golicic, 2009; Santini et al., 2013). In this field, firm-level decisions and the way firms deal with external and internal drivers are analysed mostly through case studies (Bonn & Fisher, 2011; Novaes Zilber et al., 2010). Other studies focused on the marketing aspect of eco-labelling or eco-branding (Brugarolas et al., 2005).

Research on strategic factors, whether internal or external, for implementing environmental management systems is mostly conducted in ‘New World’ wine producing countries such as Chile, Australia, the US, Argentina and New Zealand. Interestingly, these are the countries where the pressures of external drivers are stronger compared to traditional ‘Old World’ wine producing countries (Santini et al., 2013). The plethora of research on sustainability in wine on

different continents clearly shows a global trend. Surprisingly, research on environmental sustainability particularly in South Africa is scarce.

2.2) Environmental Sustainability Research in the South African Wine Industry

Similar to the studies in the US, Australia and New Zealand, a recent study by Hamman et al. (2017) revealed that one of the main drivers behind environmental responsibility in South Africa is the philosophy of the winery management itself. This firm-level investigation on South African wine firms analysed the drivers behind their environmental responsiveness and identified that state regulation had a rather minor influence on pro-environmental behaviour in the South African context. The integration of environmental competencies in the firm strategy has been brought up by Vink, Deloire, Bonnardot & Ewert (2010), suggesting that further research should consider environmental upgrading strategies as potential opportunities for mitigating the effects of climate change on the South African wine industry in order to sustain it.

The South African wine industry has been widely analysed through the lens of global value chain analysis (Ponte, 2007; Ponte, 2009; Ponte & Ewert, 2009). Here, however the environmental aspect of upgrading in particular has received little attention. Upgrading in general in the South African wine value chain was analysed by Ponte & Ewert (2009), focusing on the effects, rewards and risks upgrading can have on development. Upgrading strategies motivated by sustainability concerns were found as a means to differentiate on the market (Ponte, 2018). Similar to Hamman et al. (2017), the study found that sustainability elements in upgrading were not a consequence of institutional drivers or induced by lead firms but rather motivated by the South African wine producers themselves. In attempts to include environmental concerns in global value chain theory, Bolwig et al. (2009) suggest distinguishing environmental impact on a local and a global level in globalized industries. Analysing environmental upgrading from a global value chain perspective, however, poses some difficulties. The literature examines how firms from emerging markets are included in global markets, which has proven to be a useful framework for analysing power dynamics and governance among actors within a chain. However, as it provides a rather macro-level analysis tool, environmental concerns and considerations about firm strategy on a micro-level tend to be neglected (Bolwig et al. 2009).

Another, possibly more suitable, way of analysing external pressures on South African wineries is an institutional perspective. 20 years ago, Knowles & Hill (2001) researched institutional

pressures on wine farms regarding sustainability practices in a time where the application of voluntary environmental standards was a fairly new practice in the South African wine industry. Back then, consumers, import agents in Europe and the US and supermarkets were already enquiring sustainable practices from wineries in South Africa. However, the analysis revealed that especially small wineries at that time did not consider implementing ISO standards without being forced by market pressures, which in turn was regarded as very unlikely.

A decade later, again research was conducted on institutional pressures by examining the influence and impact of social and environmental certification (McEwan & Beck, 2009). Here, the institutional context was linked to the industry context as environmentally friendly industry initiatives such as the Integrated Production of Wine (IPW) seal or the Biodiversity and Wine Initiative (BWI) have been discussed as industry-led drivers, which could contribute to the reputation and image creation of South African wine (Knowles & Hill, 2001; Vink et al., 2010; Hamman et al., 2017).

2.3) Theoretical Foundations to a Conceptual Framework

The literature review indicates that both an internal and an external dimension have implications on a firm's strategic choices. In the field of Strategic Management, several views have emerged, which aim to provide a roadmap on how to formulate a successful strategy. This chapter will introduce relevant theoretical approaches that assist in answering the research question: *How do South African wineries develop strategic responses based on environmental competencies?*

2.3.1) The Resource-based View

As implied by the literature review, the formulation of a winery's strategy is often analysed in relation to developing a competitive advantage (Atkin et al., 2012; Flint & Golicic, 2009). One approach to analyse the development of such competitive advantage is provided by the resource-based view (RBV). Therefore, a look at this perspective and its underlying theoretical assumptions will be taken first in order to assess its suitability to answer the research question.

The RBV is based on the premise that a firm's set of resources and capabilities defines whether it is able to gain a competitive advantage (Barney, 1991). Underlying assumptions are the heterogeneity of firms in an industry and the fact that resources may not be equally accessible for them (Barney, 1991). Thus, when identifying the differences of organisations regarding internal aspects, the resource-based view can be applied. According to Barney (1991), the

definition of "resources" includes assets, capabilities, organisational processes, firm attributes, information and knowledge. If a firm's resources fulfil the criteria of being valuable, rare, not imitable and non-substitutional, the firm is supposed to gain a competitive advantage over its competitors.

Resources can be divided into tangible and intangible assets, as well as organisational capabilities (Pearce & Robinson, 2011). Tangible assets refer to a firm's physical and financial means, while intangible assets reach from brand to reputation to particular knowledge and certifications (Gilinsky et al. 2016). Organisational capabilities in turn, are the firm's ability to manage its resources and allocate them to the right employees (Smallwood & Ulrich, 2004).

In an early adaptation of the RBV, Hart (1995) presented the natural-resource-based view, in which the competitive advantage was "based upon the firm's relationship to the natural environment" (p.986). It proposed to develop the concept of RBV further by specifically focusing on a firm's environmental capabilities as source of success (Hart, 1995).

A more recent and continously further developed approach of the RBV, is the concept of *Dynamic Capabilities* introduced by Teece & Pisano (1994). It criticizes Barney's (1991) resource-based strategy for focusing on the accumulation of resources in a static environment. Teece & Pisano (1994) argue that this neglects the relevance of responsiveness and adaptability of capabilities. The concept of dynamic capabilities highlights the importance of demonstrating capabilities which adapt to dynamic changes in the contextual environment. Considering the changing conditions in the emerging market context in South Africa and the surge in sustainability concerns (Chapter 2.3.3), this orientation of the resource-based view is particularly suitable for the nature of this kind of research.

The dynamic capabilities perspective assumes that a firm has both static and dynamic competences and capabilities. In order to make sense of a changing business environment, firms require dynamic capabilities to enable transformational activity within the firm and adapt to dynamic changes (Teece, 2000).

Leveraging existing assets and knowing how to recombine assets is crucial for developing new business opportunities and expanding into new markets. Teece (2000) puts emphasis on examining a business's *Processes*, its *Positions* as well as its *Paths*.

Processes can take the form of *Coordination, Routinization, Learning and Transformation*. They give insight on how a firm turns its inputs into outputs. For instance, routines can have an impact on quality performance. Especially coordinative routines tend to be firm-specific. Due to a disruption in a market, an incumbent firm may experience disadvantages if it has to deal

with minor technological changes that deviate from routines. This is strongly linked to learning, which is induced by repetition and experimentation. Thus, from a successful learning process, new routines can be established. However, the process of transformation is most important in the organic wine industry. The willingness to learn from best practices and the ability to see things from a different perspective are crucial factors. Also, the firm must be aware of the costs of change and develop ways to minimize such (Teece, 2000).

By *Positions*, a company's tangible, intangible and difficult-to-trade assets are addressed, which contribute to a firm's profitability. Positions can be *Technological Assets* such as technological know-how and protection thereof, *Complementary Assets* like commercialisation activities, *Financial Assets* like access to funding and control over assets and lastly, *Locational Assets*, with regards to the regulatory and legal environment (Teece, 2000).

Through the category of *Paths, Path Dependencies* allow to take the historical context of a firm, and its past learnings into account. Further, the potential of expanding an industrial activity also depends on the existence of future *Technological Opportunities* for the firm. Eventually, this category allows to shed light on the importance to reassess resources and capabilities as it needs to be noted that a firm's processes, positions and paths can also constrain a firm (Teece, 2000).

New firms in comparison to incumbent firms often possess different capabilities. For instance, new entrants may be more flexible and less reluctant to change in process and routines compared to incumbent players that are not willing to risk changing their current procedures (Teece, 2000).

The assessment of a firm's dynamic capabilities can give insights regarding the replicability and imitability of a firm's resources and capabilities. Teece's notes that imitability of a firm's resources determines its potential for a competitive advantage (2000).

Each firm develops distinctive competencies from its resources, which can eventually become a competitive advantage if this is done particularly well (Pearce & Robinson, 2011). Whether a firm can develop the aforementioned environmental competencies is therefore dependent on the firm's ability "to develop environment related resources, skills and capabilities" (Jeppesen & Hansen, 2004). Consequently, if a firm has an environmental competence, which is widely unique in the industry and not imitable instantly, this could provide a competitive advantage (Flint & Golicic, 2009).

As the literature review revealed, applying the RBV for identifying opportunities to gain a competitive advantage in the wine industry is a suitable and popular approach (Gilinsky et al., 2016). The resource-based perspective serves as a useful tool to contribute to strategy

formulation as it allows to assess internal organisational processes and the combination of assets. Furthermore, its suitability to this research is also expressed in Barney's (1997) continuation of the RBV concept, stating that sustainability practices can contribute to performance (Gilinsky et al., 2016). Considering that one of the main drivers behind environmentally sustainable practices in South Africa seems to be the winery management itself (Hamman et al., 2017), it becomes interesting to look at the internal resources and capabilities needed for an environmental strategy.

However, it has been widely acknowledged in the literature that the resources a firm obtains and the capabilities it builds cannot be divorced from a firm's broader external context, which the RBV seems to be neglecting (Oliver, 1997; Peng, 2003; Peng, Li Sun, Pinkham, & Chen, 2009). Hoskisson, Eden, Lau & Wright (2000) stress that especially in the emerging market context, "a firm must understand the relationship between its company assets and the changing nature of the institutional infrastructure as well as the characteristics of its industry" (p.256). Thus, in order to assess the phenomenon of implementing environmental sustainability practices by wineries from an emerging market, another dimension that gives insights on the external conditions needs to be combined with the RBV.

2.3.2) The Industry-based View

An approach to analyse a firm's competitive advantage under consideration of the external context, is the industry-based view, coined by Porter in 1980. In his work on competitive strategy, Porter (1980) addresses two central questions: the attractiveness of an industry for long-term profitability and determinants of the relative competitive position of a company within an industry. Its focus lays on identifying the industry structure and the company's position within it. Therefore, it also considers the competitive environment of a firm and the firm's position relative to its competitors. Porter (1980) developed a structural model for industry analysis based on five components, namely *Rivalry,* the *Threat of New Entrants, the Threat of Substitutes, the Bargaining Power of Buyers and the Bargaining Power of Suppliers*.

One component to look at is the present *Rivalry* among industry competitors in order to assess the level of competition among existing firms. The number of incumbent firms may give insights on the potential of gaining market share or the competition for limited customer demand. Porter suggests considering whether the industry's growth is sufficient for sustaining profitability (Porter, 2008).

Another threat to incumbent firms in an industry are *Potential New Entrants*. However, the entry in new industries is usually balanced by barriers to entry. Entry barriers could be cost advantages, enjoyed by existing firms, that are not available to new firms or economies of scale which are needed in order to be profitable in the industry. High switching costs may also deter customers from changing from an existing product to a new offering. Thus, the new competitors first have to find ways to overcome these barriers (Porter, 2008).

The *Threat of Substitutes* from other industries has implications on an industry's profitability and attractiveness. Substitute products, especially low costs substitutes, contribute to the price sensitivity of the customers and may place a ceiling on prices (Porter, 2008).

The *Bargaining Power of Buyers* influences the profit that can be achieved from a product. If customers are powerful, they can exert demands regarding price and quality of a product on the market. A small number of buyers of large volumes in bulk, for instance, will push the price down. Furthermore, low switching cost may decrease brand loyalty (Porter, 2008).

The *Bargaining Power of Suppliers* is relevant as well, as they influence the production costs of a product. If there is a limited number of suppliers or the suppliers are aware that there is no existing substitute for their product, there is a high dependence on the suppliers. This can result in an inflated price structure dictated by the supplier base, which has negative implications on the sourcing operations of a firm (Porter, 2008).

These *Five Forces* can help determine the intensity of competition and therefore enable an assessment of the attractiveness of an industry for the decision-making process whether or how to enter a specific industry.

By providing the subsequent strategic choices of cost leadership and product differentiation, Porter's competitive strategy is seen as an important contribution to strategic management literature. Through his cooperation with van der Linde (1995) on the relationship of national environmental legislation and competitive advantage, Porter further expanded his conception of competition to environmental strategies, which will be valuable to this research as well.

Nevertheless, the industry-based view has been criticized for only focusing on competition, neglecting the underlying histories and institutions that led to the state of the industry as well as ignoring the heterogeneity of firms in regard to their internal structure and access to resources (Peng et al., 2009). Since both the resource-based view as well as the industry-based view seem to fail to pay attention to contexts, this calls for a third perspective, the institution-based view (Peng et al., 2009).

2.3.3) The Institution-based View

In order to overcome the lack of attention to contexts, the institution-based view (IBV) of business strategy has emerged. The IBV argues that firms are not only driven by industry conditions and internal resources and capabilities but that institutions matter as well. Thus, the IBV advances the proposition that beyond industry and firm level analysis, institutional conditions and transitions should be considered in strategic considerations as well (Peng, 2003; Peng, Wang & Ying, 2008; Peng et al., 2009).

The IBV is based on underlying theories on institutions. North (1990) defined institutions as "the rules of the game in a society", or more formally as "the humanly devised constraints that structure human interaction" (p.3). Similarly, Scott's (1995) definition declares institutions as "regulative, normative, and cognitive structures and activities that provide stability and meaning to social behaviour" (p.33). The definitions imply that it can be distinguished between formal institutions such as written regulations with law enforcement and informal institutions like unwritten norms, values and culture (North, 1990).

According to North (1990), the emergence of formal institutions can be historically explained. Such formal constraints evolved during a transition from less to more complex societies, which required the formation of a legal system based on formal laws and economic rules such as property rights and contracts (North, 1990).

The existence of effective formal rules can contribute to lower information, enforcement and monitoring costs and consequently reduces uncertainty. Thus, in a decision-making process, rules are crucial to the enabling of exchange (North, 1990). Rules also imply the existence of compliance costs, which means measures must be in place that can identify and sanction the violation of a rule (North, 1990). In general, it can be argued that a stable and efficient political environment facilitates property rights, which, in turn, induces economic growth (North, 1990).

Regarding informal constraints, North (1990) advances that social interaction is governed by codes of conduct, norms of behaviour and conventions. These are more persistent than formal rules, considering that formal rules can change overnight, while informal constraints tend to be derived from culture and may remain (North, 1990).

While North promotes such dual categorization of institutions, Scott's (1995) framework *The Three Pillars of Institutions* consists of the regulatory, the normative and the cultural-cognitive pillar of social institutions. The formal constraints can be compared to Scott's regulatory system. However, what has been referred to as informal constraints in North's dual categorization, is split in the normative and the cultural-cognitive pillar in Scott's classification.

After outlining how institutions have been defined in the past, it must be noted that many institutionalists from different disciplines advanced distinct theories, sharing the notion that institutions matter. How and to which extent has taken several directions (Friel, 2017; Peng, 2003). Due to its "three-dimensional institutional profile" (Busenitz, Gómez & Spencer, 2000, p.995), Scott's categorization in the *Three Pillars of Institutions* will be applied in this thesis and is therefore outlined in the following.

The Regulatory Pillar

Scott's (1995) regulatory system includes formal rules such as laws, regulations and government policies. Similar to North's formal institutions, Scott (1995) identified the relevance of enforcement mechanisms by the state. The regulatory environment can have both an impeding and a facilitating impact on economic activity (Scott, 1995). This is because the regulatory dimension influences entrepreneurship in the way it provides or withholds support for the creation of business, reduces or increases the risk of entrepreneurs and supports or hinders access to resources such as capital (Busenitz et al., 2000).

In the wine industry, the regulatory pillar applies at different levels**.** First and foremost, each wine-producing country has to adhere to national environmental legislation (Rosenthal Duminy, 2004). As one of the most globalized products in the world, wine is exported and imported on a global scale and therefore has to fulfil the importing markets' legal requirements (Corsinovi & Gaeta, 2019). International bodies such as the Organisation Internationale de la Vigne et du Vin (OIV) provide recommendations and resolutions on viticulture and winemaking procedures. While the OIV's recommendations are voluntary, the EU implemented the OIV regulations on permitted substances and technical process in wine production in its own import regulations (Ponte & Ewert, 2009). In general, a lack of harmonization of standards and mutual recognition of standards poses a regulatory institutional challenge in the wine industry.

The Normative Pillar

The normative pillar comprises of norms and values (Scott, 1995). While values define what is preferred or desirable and therefore create standards "to which existing structures or behaviours can be compared and assessed", "norms specify how things should be done" (Scott, 2014, p.64). Within members of a collectivity, certain roles are assigned to actors from whom a certain behaviour is expected. These binding expectations constitute the basis of order (Scott, 2014).

Therefore, in this study, the normative system includes societal views on sustainability. In the wine industry, examples of emerging norms could be voluntarily implemented environmental management systems, accreditations and certifications that are promoted by industry associations and expected by customers (Scott, 2014). The emergence of these more or less voluntary social and environmental certification schemes has created a complex environment for wine producers to navigate in (McEwan & Bek, 2009).

The Cultural- Cognitive Pillar

The cultural-cognitive pillar is based on taken-for-granted beliefs of social actors, which derive from shared social conceptions. The internalization and imitation of such can be seen as the result of trends or uncertainty (Scott, 1995). Also, North acknowledged that cultural behaviour patterns are an "important source of continuity" as they provide solutions and guidance as to how to solve problems or situations of uncertainty (North, 1990, p.37). In addition, "culture defines the way individuals process and utilize information" (North, 1990, p.42). Thus, the cultural-cognitive system includes habits, routines and cultural beliefs (Scott, 2014).

In the wine industry, the cultural-cognitive pillar is especially important regarding the preferences and customs of the consumers, which are often shaped by their belief system. Following routines out of uncertainty or being reluctant towards buying unknown products can be explained by a cultural lack of knowledge (Scott, 2014) about a product category like organic wine for instance.

Institutional Change

A decisive feature of the institution-based view is its consideration of changes in society and the consecutive impact on actors within. With "changing rules of the game", marginal adjustments to the complex of rules, norms, and enforcement, which constitute the institutional framework, bring about institutional change (North, 1990, p. 83). This becomes particularly relevant to this research due to two prevalent characteristics of the research topic:

Firstly, emerging economies experience a transition from a relationship-based transaction structure towards a rule-based structure at a certain stage of development. In a rule-based, market-oriented economy, impersonal exchange is often facilitated by third party enforcement and a firm's strategy likely to be based on competitive resources and capabilities (Barney, 1991; Peng, 2003). Hoskisson et al. (2000) and Peng (2003) argue that when analysing an emerging

market in its first stages, the institutional view is the most relevant perspective to explain impacts on firm strategies. With increasing maturity of the market and a transition towards market-based strategies, the resource-based view becomes increasingly important as it focuses on firm-related capabilities.

However, during the transition period certain structures may not be in place yet. Khanna & Palepu (1997) find that emerging markets often suffer from weak institutions, or institutional voids in the product, capital and labour markets as well as in the regulatory system.

Insufficient access to information for consumers about the quality of a product or enforcement mechanisms if the product does not meet the expectations, create institutional voids in product markets, as building a credible brand in an emerging market may require higher investments than in advanced markets. In capital markets, limited access to information about businesses in need for capital deters investors from investing in such. Another challenge is the scarcity of well-trained labourers on the labour market. Due to absent unemployment mechanisms by the state, labour unions enforce rigid laws, which keep companies from adjusting their workforce to changing economic conditions. Concerning the regulatory environment, governments act differently in emerging markets compared to developed markets. Uncertainty and difficulties in predicting the actions of regulatory bodies pose challenges. Furthermore, corrupt practices and arbitrary preferences of the government may hinder market-based competition (Khanna & Palepu, 1997).

Mair & Marti (2009) define institutional voids as "situations where institutional arrangements that support markets are absent, weak, or fail to accomplish the role expected of them" (p. 422). Thus, institutions can both "enable and constrain market existence, participation and functioning" (Mair & Marti, 2009, p.421). According to Peng et al. (2008), industry-based factors such as competition depend on the underlying institutional forces which differ between countries. When studying an emerging market firm's strategy in a global market, it is therefore necessary to consider the institutional conditions and the stage of institutional development of the firm's home country. South African wine farms thus need to navigate around these institutional voids and develop their competencies according to the current institutional state.

Secondly, consumer behaviour and demand is increasingly influenced by global trends. An interesting phenomenon of this research is the rising environmental awareness within the consumer base and the following interest in sustainable production by wine producers. The increasing preoccupation with product quality and safety results in the extension of quality management and certification (Gibbon & Ponte, 2005). If quality concerns are changing

regarding environmental responsibility it must be assessed how firms govern their activities in a changing environment when the new rules are not completely known yet (Peng, 2003).

Implications on Organizational Behaviour

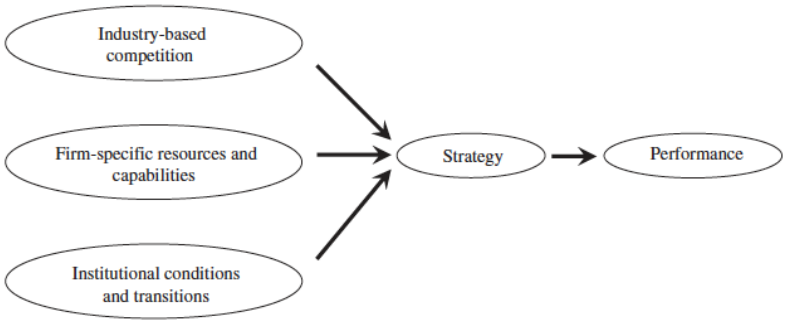
Institutional theory has proven to be a popular theoretical foundation to analyse how the constraints posed by the institutional framework affect the actions of firms (Meyer & Peng, 2016). According to Scott (1995) institutional theory highlights that the systems surrounding organisations influence social and organisational behaviour. This reveals the impact of institutional barriers on both the organisation's strategic choices as well as the consumers' behaviour. Institutionalists are especially interested in the institutionalisation of organisational structures and processes (Scott, 1987; Oliver, 1997).

The notion that institutions have a significant influence on the strategy and performance of a firm has become widely accepted especially among researchers who have contrasted the institutional environment of developed countries with the one in emerging economies (Peng et al., 2008). Shenkar & von Glinow (1994) even argued that the institutional perspective is the most suitable paradigm for analysing firm behaviour in emerging markets. However, the IBV proves to be less useful regading the analysis of internal organisational processes and it only provides a limited understanding of relations between firms in an industry.

Emergence of a Strategy Tripod

It has been acknowledged that all three views that have been presented, give a valuable contribution to the formulation of a comprehensive strategy. This realisation has led to the emergence of a *Strategy Tripod* (see Figure 1) (Peng et al., 2008), arguing that besides analysing a firm's industrial environment and a firm's resources and capabilities, one must look at the institutional environment as well (Peng et al., 2009). This approach is supported by Oliver (1991; 1997), arguing that firms should aim at developing 'institutional capital' in order to enable the most efficient use of its resources. Achieving a strategic fit between the strategy and the institutional environment due to the development of competitive capabilities is likely to lead to higher performance (Peng, 2003). The strategy tripod therefore combines the industry-based view, the resource-based view and the institution-based view in one framework (Peng et al., 2008).

Figure 1. The Strategy Tripod.



Source: Peng et al., (2008, p.923)

In conclusion, the institution-based view serves as a well-suited methodological tool in this research and complements the industry-based view for the analysis of the external context, while the resource-based view provides the insights on the firm-specific resources and capabilities.

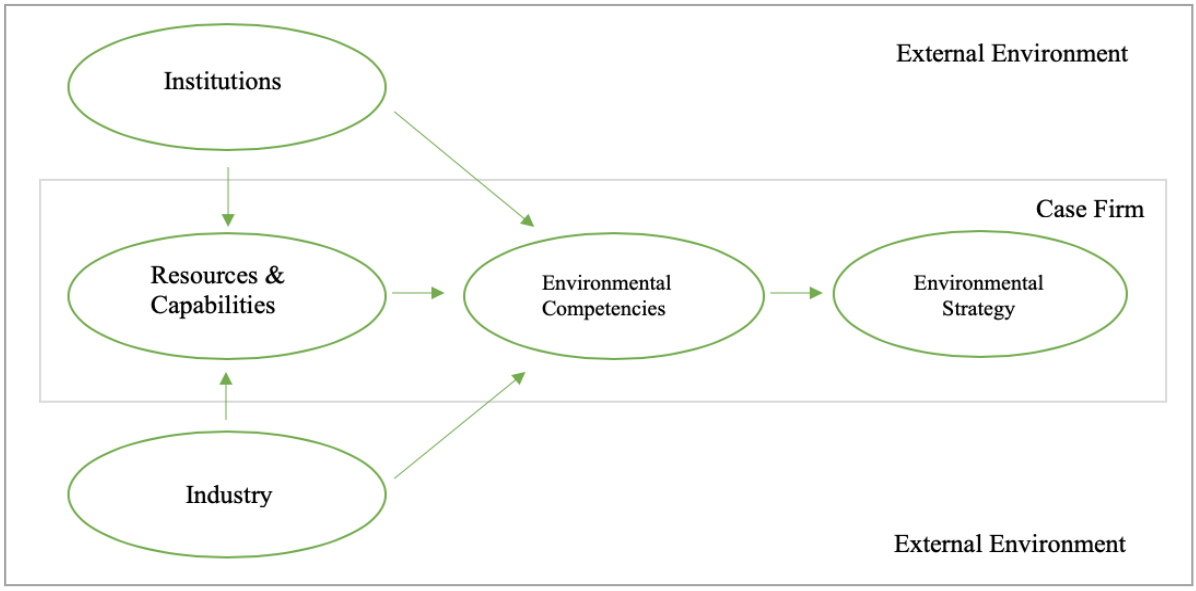
2.4 Summary: The Conceptual Framework

The main objective of this thesis is to identify the development of environmental competencies and an environmental strategy for wineries in an emerging market context. Therefore, the resulting framework for analysis is based on Peng et al.' (2008) recommendation to aim for a holistic approach in strategy formulation based on the strategy tripod.

To this point, little research has applied a framework that sheds light on the industry conditions, the institutional context and the resources and capabilities of a winery in South Africa equally.

In order to address the research question on *how South African wineries develop strategic responses based on environmental competencies*, an adaptation of Peng's strategy tripod tool will be applied (see Figure 2).

Figure 2. The Conceptual Framework.



This conceptual framework will enable an internal analysis of how the case firm builds environmental competencies through the resource-based view but will also assist in examining the impact the case study's external environment has on strategic considerations through the institution-based and industry-based view.

As Bonn & Fisher (2011) criticized that "sustainability [was] often a missing ingredient in strategy" (Santini et al., 2013), the adaptation of the strategy tripod adds a focus on environmental sustainability to the strategy.

For a detailed analysis of the findings, it will be necessary to support the tripod in its three legs with the previously presented approaches of each view in order to structure the findings.

Against this backdrop, the institutional context will be analyzed by consulting the *Three Institutional Pillars* introduced by Scott (1995) as they will assist in structuring the findings on the firm's institutional circumstances considering the *Regulatory, Normative* and *Cultural-Cognitive pillars.*

For the analysis of the industrial conditions, Porter's *Five Forces* (1980) will support the analysis of the competitive environment of the case firm. Since the case firm is specialized in organic and biodynamic wine production, the competition will be analyzed from the perspective of the case firm. Here, it is assumed that the environmental aspect of organic and biodynamic wine constitutes the main value for the consumer and differentiates the product from conventional wine. This consequently asks for a different analysis of competition compared to competition among conventional wine producers. The five categories of *Threat of New Entrants, Rivalry,* the *Threat of Substitutes,* the *Bargaining Power of Suppliers* and the *Bargaining Power of Buyers* will be applied.

In consideration of environmental concerns, Porter & van der Linde (1995) advanced the proposition that competitive advantage doesn't rest on static efficiency but on the ability to innovate within constraints. This calls for a dynamic approach in analysing the resources and capabilities of the winery like Teece's (2000) *Dynamic Capabilities* approach offers. Teece acknowledged that firms are embedded in institutional structures and have to adjust their knowledge according to rules laid down by government or other external actors. Hence, for analysing the internal resource dimension, this concept will be applied, categorizing the findings into *Processes, Positions & Paths.*

The analysis aims at identifying sustainability demands and trends in the wine industy, then it examines in which institutional circumstances the case firm operates and consequently assesses how the firm develops dynamic capabilities to meet these demands and responds to the challenges. Eventually, it will provide insights on the contribution environmental competencies have on the firm's strategy.

3) Methodology

Since the identification of a particular research problem usually asks for specific methods of analysing it, this chapter explains the necessary methodological considerations for developing a coherent research project including the choice of research philosophy, the research approach and design, as well as the case study strategy.

This thesis draws on a qualitative single-case approach including fieldwork for five weeks in the Western Cape, South Africa from January to March 2020. Since the majority of collected data in this project emerges from interviews, the data collection process will be illustrated. The qualitative nature of the data has methodological implications on the analysis. Hence, the data analysis process will be illuminated in this chapter as well. Concerns regarding the reliability and validity of the research design as well as the data collection will be addressed thereafter. Lastly, it will be reflected on the particular characteristic of this research, the field work.

3.1) Philosophy of Science

Choosing a research philosophy enables the researcher to reflect on her own beliefs and strengthen her reflexivity (Gouldner, 1970). This is especially relevant when undertaking field research in a foreign country. Moreover, the research philosophy has a significant impact on the choice of methods, research strategy, data collection techniques and analysis procedures (Saunders et al., 2016).

This thesis is rooted in the research philosophy of Pragmatism**.** Pragmatism evolved in the late 19th century when it was coined by Charles Sanders Pierce and further developed by William James and John Dewey when it became an approach of critical management research. It advances the principle that knowledge is measured in its outcome and the action it leads to rather than its causes. Therefore, it asserts that the interplay between knowledge and actions is not only a result of past experiences but influences future experiences as well. It sets a particular emphasis on future actions and how accumulated knowledge can be usefully applied to reality (Elkjaer & Simpson, 2011). The ontology in the pragmatic view refers to a world that is "in the making" (Kelemen & Rumens, 2008, p. 40) and in constant development. Thus, reality is the consequence of ideas, of processes and of experiences (Saunders et al., 2016).

Underlying epistemological assumptions in pragmatism are that the accumulated knowledge must be useful to the research in the way that it enables actions (Kelemen & Rumens, 2008; Saunders et al., 2016). A pragmatic research approach thus lays emphasis on the practical

consequences the research design and the findings have on answering the specific research question. A pragmatic researcher aims to identify practical strategies and solutions that are applicable to future practice (Saunders et al., 2016).

The pragmatic view is applied to this research because it enables to analyse an interplay between everyday experiences, rationality and knowledge (Kelemen & Rumens, 2008). Elkjaer and Simpson (2011) highlight the applicability of pragmatism to studies in which dynamic processes and organizational practices constitute the main research objects. This combined with the specific concern for experience and the resulting learning from experience (Kelemen & Rumens, 2008) complement the theoretical framework of dynamic capabilities, which guides the analysis of a firm's ability to adapt to a changing environment. The acknowledgement that learning is possible from both success and failure, and that both are useful experiences, becomes relevant in the analysis of the findings of the case study. Moreover, pragmatism acknowledges that reality is complex and rich and can be interpreted in many ways. Even though criticised for its simplicity, pragmatism nowadays has regained popularity in organizational studies, serving researchers with an approach that helps to accept limitations and obstacles in obtaining data and reminds of accessing only relevant and credible data, which becomes particularly important in field work (Elkjaer & Simpson, 2011; Kelemen & Rumens, 2008).

Peirce, who also coined pragmatism, further theorized methods of scientific discovery. There are three approaches to theory development, which are induction, deduction and abduction (Reichertz, 2014). An inductive research approach generates or builds theory from collected data while a deductive strategy takes an existing theory and aims at designing a data collection strategy in order to test the theory (Saunders et al., 2016).

An abductive approach to theory development entails an ongoing exchange between collected data and theory. Thus, it is a combination of induction and deduction. After the first data collection and identification of particular themes, existing theory may be modified or tested through additional data. Thus, sensemaking emerges from a continuous interplay of meanings drawn from past and future knowledge (Reichertz, 2014).

This thesis takes on an abductive approach to theory development as it includes both deductive as well as inductive research phases. The study took its point of departure exploring the concept of upgrading of wine farms in South Africa through the global value chain lens, identifying the emerging phenomenon of increasing environmental upgrading through a first literature review. The researcher thus combined a theoretical framework to the emerging themes. However, after the first primary data collection phase, the initial framework needed to be revised in its

compatibility with the findings. Contradicting previous assumptions about product and process upgrading leading to increased profitability, data suggested that environmental upgrading will not lead to a price premium for the wine farms. Nevertheless, abduction is particularly sensible when a surprising new phenomenon is unveiled that contradicts assumed knowledge. Consequently, the first hypothesis of this study had to be discarded and through an abductive approach the study could continue to investigate the newly gained insights by unravelling how wineries still develop environmental competencies and develop successful environmental strategies despite the lack of a price premium. Therefore, a new conceptual framework, which is based on known premises such as the industry-based view, the resource-based view and the institutional view was chosen. The strategy tripod, which was adapted from Peng et al., (2008), combines these three views and provides a suitable theoretical base for the research question. As an abductive approach always requires testing in experience (Rodriguez, 2011), consequently the interview guides had to be adjusted for the second round of primary data collection. Abduction therefore allowed uncovering knowledge and investigating an understudied phenomenon, which is why especially proponents of qualitative methods claim abduction as the most rewarding approach to theory development (Reichertz, 2014).

3.2) Research Design

The research design emerges from the interplay between the researcher's beliefs, assumptions and the research philosophy and has implications on the methodological choice and the research strategy (Saunders et al., 2016). Pragmatism allows a range of empirical research methods such as mixed and multiple qualitative and quantitative research, as long as the focus on applicable solutions and outcomes is maintained and the data collected advance the research (Kelemen & Rumens, 2008).

There are many ways of investigating an identified problem. One could conduct a survey on the sustainability drivers in the South African wine industry or develop a statistical model of sustainability trends in the industry. However, the research design depends heavily on the nature of the research question (Yin, 2014). As this thesis aims to investigate *how South African wineries develop strategic responses based on environmental competencies*, a distinctive need for an in-depth analysis of one case within the complex social phenomenon of the emergence of organic wine farms in South Africa was identified. Therefore, this thesis takes on a qualitative single case study approach combined with accumulated data from expert interviews, field observations and audit materials, which makes it a multi-method qualitative study. This

approach is chosen for the research setting because qualitative studies facilitate the exploration of fairly new research topics (Saunders et al., 2016; Gibbs, 2012).

When analysing an emerging phenomenon such as the organic wine market in South Africa, it is therefore useful to conduct interviews with different experts on the matter in order to get a first broad overview. As the research progresses, this broad spectrum is narrowed down. The research moves towards an explanatory nature, applying a single case study for the in-depth analysis because it aims at explaining the relationship between different variables, namely the factors that influence the strategic considerations of the case firm (Saunders et al., 2016).

3.2.1) Case Study as Research Strategy

A case study is a research strategy in which the researcher tries to shed light on present dynamics in a particular real-life setting (Yin, 2014; Eisenhardt, 1989). A case study is particularly effective when examining *how* a certain process is undertaken in an organizational environment. Thus, it can be a suitable research strategy for "understanding a phenomenon in-depth and comprehensively" (Easton, 2009, p.119).

In this thesis, the organic and biodynamic winery Reyneke is the case subject. A qualitative single case study aims at identifying subjective perceptions while considering the context of the case, namely the case firm's embeddedness in the South African and international wine industry as well as South Africa's institutional environment. Developing an understanding of the contextual environment of the case firm is crucial to the analysis of the case study because the internal findings will be interrelated with external factors (Saunders et al., 2016).

As a single case study can provide particularly significant insights into learning processes (Dubois & Gadde, 2002), the researcher decided against a multiple case study, where different wineries would have been compared on a certain level.

3.2.2) Case Selection

When conducting a case-based research, conscious case selection is of tremendous importance. In order to give external validity to a case study, the selection strategy must be transparent. At the stage of defining the case, it is necessary to determine its focus through the research question. According to Flyvbjerg (2006), there are two major strategies for the selection of cases, namely the random selection and the information-oriented selection. While random selection aims at gaining a representative amount of data which allows for generalization, the

information-oriented selection aims at identifying a case where the information content meets the researcher's expectations. This approach was applied for this thesis as it is aligned with the research philosophy of pragmatism.

For this thesis, a website[1] providing information on the current state of organic or biodynamic certification of South African wine farms was consulted to define the population. 23 potential organic wine farms were identified among which three have not continued to renew their organic certification. As discussed in the reflections on field work (Chapter 3.5), approaching and contacting the potential case firms proved difficult from Europe. However, when in the field, a snowballing technique could be applied, since personal contact to respondents opened new possibilities and contact points.

Eventually, after a preliminary data collection from some cases, the researcher gained access to the assistant winemaker of Reyneke Wines, which was later identified as the most relevant case firm, offering a more in-depth analysis. The case firm Reyneke Wines is particularly known in the South African wine industry as the pioneer of organic and biodynamic farming. It can be argued that it constitutes an extreme or unique case, which means that it allows "to obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense" (Flyvbjerg, 2006, p.230). Reyneke Wines, being one of the only two wine farms in South Africa that are currently certified biodynamic, is therefore extreme in its commitment to environmental sustainability. An extreme case further allows to remark that there is a diversity among South African wine farms in their environmental commitment, but nevertheless aims at investigating the single case that is particularly informative (Yin, 2014).

[1]Smith, M. (n.d.). Organic wine producers. https://biodynamicorganicwine.co.za/wine-producers/

3.3) Data Collection

The aim of this study is to identify data that can be applied to the concept of environmental competence building and environmental strategy formulation. This data is collected by both secondary data as well as primary data consisting of open and semi-structured interviews, field observations and audit materials.

3.3.1) Secondary Data

Secondary data are utilized for gaining a contextual understanding of the wine industry both in South Africa as well as internationally. The consulted literature entails research papers, statistical reports published by industry organizations and audit materials. For the interviews, secondary data from websites were collected before conducting interviews in order to adjust the interview guide to the specific position of the interviewee in the organization as well as the organization's purpose. For the analysis of the case firm, the latest sales reports were consulted (Reyneke, 2019).

3.3.2) Primary Data

Through a series of open and semi-structured interviews, questions on three main topics were asked. These categories were divided into sustainability trends in the wine industry in general, the institutional environment in South Africa concerning sustainability certificates and government regulations, and firm-specific factors such as internal capabilities and resources.

From January to March 2020, winemakers, winery employees, university lecturers and wine industry experts in South Africa were interviewed, which resulted in a total of twelve interviews (see attached appendices). The majority of the interviews lasted between 45 and 60 minutes. All interviews were carried out in English, the language of presentation here. English was not necessarily the mother tongue of the respondents, many being of Afrikaans heritage, however as English is an official language in South Africa, all respondents were fluent.

CASE FIRM INTERVIEWS

The data collection from the case firm was conducted in several steps, resulting in a total of three interviews at the premises of the wine farm. The first round entailed interviews with the assistant wine maker and the operations manager. Both were asked broad questions in semi-structured interviews aiming at identifying main institutional challenges and industry developments the winery faces. Semi-structured interviews permit to discover relevant themes that are only brought up by the respondent (Willis, 2006).

For the second round, the winery's founder and viticulturist was interviewed on specific processes within the firm, their learnings and main capabilities. This time, the questions were more in-depth. Issues identified in the first round could be addressed. Documents such as internal sales reports of the last three years, which were provided by the operations manager, supported the information.

ADDITIONAL WINERIES INTERVIEWS

Additional wine farms were interviewed only once. Thus, they were given a semi-structured interview guide, which entailed both broad questions regarding external factors as well as a few questions regarding internal processes. Visits and interviews at these wine farms with different characteristics in terms of size and sustainability policy brought valuable contributions in form of observations from inspecting the premises and the vineyards, the harvesting or the cellar processes.

INDUSTRY EXPERT INTERVIEWS

For insights in the wine industry and the institutional environment in South Africa, five interviews with industry experts, professors and industry representatives were conducted. The respondents were chosen through, snowballing which enabled cross-checking collected information from different sources (Willis, 2006; Mayoux, 2006). Before each interview, the respondent's background and the represented institution had been researched in order to avoid a knowledge gap between the researcher and the respondent.

Table 1. Overview of all the Interviews.

Respondent	Organisation	Participant position
A	Case Firm (Reyneke)	Founder, viticulturalist
B	Case Firm (Reyneke)	Assistant wine maker
C	Case Firm (Reyneke)	Operations manager
D	Certified organic wine farm (Longridge)	Sales manager
E	Uncertified organic wine farm (La Motte)	Farm manager
F	Conventional wine farm with organic section (Spier)	Wine maker organic wines
G	Conventional wine farm (Buitenverwachting)	Assistant wine maker (former assistant wine maker at Reyneke)
H	Stellenbosch University	Professor for Agriculture Economics
I	Stellenbosch University	Viticulture lecturer
J	UCT Graduate School	Wine Business lecturer
K	WOSA	Marketing manager
L	IPW	Director

3.4) Data Analysis

When evaluating qualitative data from interviews, the following two issues must be considered: the theoretical foundations the research is based on and subsequent analytical possibilities for structuring the findings.

3.4.1) Coding

After the data gathering, a comprehensive collection of the transcribed interviews was compiled. The most relevant interviews were coded in a two-step process. First, small parts of the interviews were summarized and given a heading, also called a code. In the second step,

emerging categories were identified. Especially in case study research, an abductive data gathering approach is recommended. Hence, a template analysis approach was utilized (Saunders et al., 2016). Here a coding template, which serves as analytical tool throughout the whole data set, is developed (see Table 2). As soon as subsequent transcripts revealed deficiencies in the initial coding template, a modification was undertaken. Eventually, the identified key themes emerged from both the conceptual framework as well as the collected qualitative data itself. Thus, the themes are both data- and theory- driven:

Table 2. Coding Template

Economic Challenge
Environmental Challenge
Institutional Challenge • Regulatory • Normative • Cultural-Cognitive
Industry • Competition • Trends • Support
Resources & Capabilities • Processes • Positions • Paths
Strategy
Opportunities

3.4.2) Reliability & Validity

Due to the qualitative nature of case studies, it is necessary to reflect on reliability and validity concerns in this research strategy.

Reliability means whether the research design produces reliable data that could be replicated through a similar research (Saunders et al., 2016). Here, internal reliability of the data evaluation can be provided through consistency in coding. External reliability was assured through several measures. For instance, by giving the respondents the possibility of staying anonymous and granting the confidentiality of the data, the probability of obtaining reliable data is higher (Saunders et al., 2016). The researcher is aware that the respondents may present

their firm or success more positively than it is in reality. Therefore, for the single-case firm, additional sources, such as internal sales reports, augment the information gathered in the interviews (Mills, Durepos & Wiebe, 2010). If two or more cases are shown to support the same theory, replication may be claimed (Yin, 2014). Thus, the researcher also interviewed other wineries of different background in comparison to the case firm, which were asked similar questions in order to get a different set of perspectives in the research. Also, the industry experts from different organisations were given the same interview questions. The findings show similar results in the way the respondents understood and answered the questions. Furthermore, the researcher was aware that her personal subjective views could bias the responses, thus the researcher tried to minimize her personal opinions when conducting the interviews.

The validity of a case study refers to the appropriateness of applied methods and the accuracy of data evaluation (Yin, 2014). There are several ways of addressing validity concerns.

Construct validity, according to Yin (2014), refers to overcoming the concern that the measures applied to a case study are insufficient or one-sided. Hence, for this study a variety of sources such as statistical reports, sales reports and field observation notes was consulted in order to confirm or dispute the findings from the interviews or to provide an alternative perspective. Accuracy in the process of data collection and evaluation was guaranteed by recording and transcribing all interviews.

Internal validity is concerned with inferences made by the researcher based on the evidence from the interviews (Yin, 2014). The case study is based on a conceptual framework, a strategy tripod, which provides assumptions on causes and effects and aims at finding explanations for identified phenomena. However, in order to maintain internal validity, this paper asked in open and semi-structured interviews how the wineries are impacted by external pressures and the circumstances they are operating in, so to consider all possible causes.

External validity is concerned with the extent to which the findings from a study can be generalized. Regarding external validity, this study does not aim at generalizing from the findings, instead it looks for further in-depth knowledge about environmental competencies in wine firm strategies and gives an illustration thereof through the case study. In coherence with the research philosophy of pragmatism, it strives to identify strategies or knowledge from one case that could possibly be applied to a future other real case (Maxwell & Chmiel, 2014).

3.5) Ethical Considerations & Reflections on Field Work

When embarking on field work, it is essential to consider that the cultural and organizational context in the foreign country is different to the context in the home country. Therefore, the researcher needs to be aware of the own socio-cultural background and how this may influence a biased attitude towards the research environment. Only by reflecting on own values and beliefs it is possible to minimize biases through accepting differences (Saunders et al., 2016). Field research may also pose unexpected challenges to the researcher, which can be overcome by preparation for the field and flexibility.

Timing of the research needs to be mentioned here (Binns, 2006). The data collection in the field was mainly conducted in the month of February, which is harvesting time in South Africa and thus, the busiest time of the year in the wine industry. Therefore, the time the wine makers and respondents took for participating in the interviews was valuable time during which they could not supervise the harvest and cellar operations.

One challenge in this study was to gain access to the identified potential case firms. While in the Danish professional culture it would have been possible to set up interview dates in advance via mail, this way of contacting did not prove successful in South Africa. Due to constraints such as a limited time frame and a limited personal network in the South African wine industry, the researcher had to be pragmatic and work with the respondents who were willing to participate and available at the time. Existing contacts and personal references proved to be of major importance in gaining access to the case firm and to further respondents. Since many wineries in South Africa recruit from Elsenburg Agricultural College and Stellenbosch University, especially contacts from these educational institutions were helpful to the researcher in gaining credibility when reaching out to the case firm (Binns, 2006).

The most important principle of conducting research is to collect fully informed consent from the respondents (Brydon, 2006; Gibbs, 2012). All respondents, including industry experts as well as employees of wineries, were informed that they were part of a research. They were also given the opportunity to stay anonymous. None of the respondents wished to stay anonymous. However, for the sake of uniformity, the interviewees will be referred to as Respondents A-L in the analysis.

Another challenge to consider when conducting field work is the infrastructural development in the field (Binns, 2006). In 2020 at the time of the field work, South Africa experienced severe energy shortages, which resulted in government induced energy cuts called ‘loadshedding’. The researcher experienced this almost every day with limited access to the Internet, libraries and

phone network when the power was switched off. Loadshedding also affects the wine makers in the cellars, where production and cooling needs to be maintained. Thus, this complicated the research in terms of scheduling meetings and conducting online research.

Nevertheless, conducting field work enables the researcher to uncover the context that is being studied (Flyvbjerg, 2006). Thus, field work contributes to the learning process of the researcher in dealing with challenges, adjusting to the new environment and eventually becoming more flexible and embracing diversity.

3.6) Limitations

In general, qualitative data collection has been criticized for two things: it may be open for bias and it may lack focus (Mayoux, 2006).

By choosing a case study as research strategy, the researcher tries to overcome this lack of focus. From a pragmatist rationale, a case study outlines the "boundary between a phenomenon and its context as a social construction" (Antoft & Houlberg Salomonsen, 2007).

It is necessary to note that there are certain limitations to case studies. Especially single case studies face criticism for being situation-specific and thus not suitable for generalisations (Dubois & Gadde, 2002). However, the power of the example should be stressed here and Flyvbjerg (2006) suggests a critical view on the concept of generalisation itself, questioning its purpose and relevance when conducting detailed research with the objective to find significant results to a specific research question. Yin (2014) furthermore stresses the risk of case studies becoming too descriptive without providing any conclusions. At this point, the importance of applied theory in order to structure and process the findings in a case study comes to light (Flyvbjerg, 2006). Another misconception of the case study is that it contains a bias toward verification. Qualitative data collection, in general, is confronted with this argument. Such criticism may be useful as it sensitizes the researcher to reflect on the veracity and validity of findings. It can be argued though, that especially in in-depth case studies, often the researchers' previous assumptions are proven wrong. Thus, it is rather falsification that scholars of case studies have to turn to (Flyvbjerg, 2006).

Often, in-depth case studies involve field work (Flyvbjerg, 2006). As an external researcher to a rather foreign field, the researcher experiences the limitations of field work concerning access to data and respondents.

3.7) Summary

The chosen research philosophy pragmatism is suitable for identifying useful strategies that can be applied to practice. The pragmatic view further recommends a case study as research strategy, as it provides in-depth examples of processes and actions on the one hand, but also the necessary overview of the context in which it is embedded in on the other hand. Since a case study analyses internal processes under the light of external factors, an abductive research approach is applied. This enables the conception of a framework, which combines a theory focusing on internal aspects (resource-based view) with theories that focus on external aspects (institution-based view and industry-based view).

Nevertheless, the limitations to single-case study approach must not be ignored. There is a fruitful debate regarding the veracity of case study outcomes among scholars. In order to ensure the quality of the research, multiple sources were applied for cross-checking information and the researcher acknowledges the limits of generalisability in case studies.

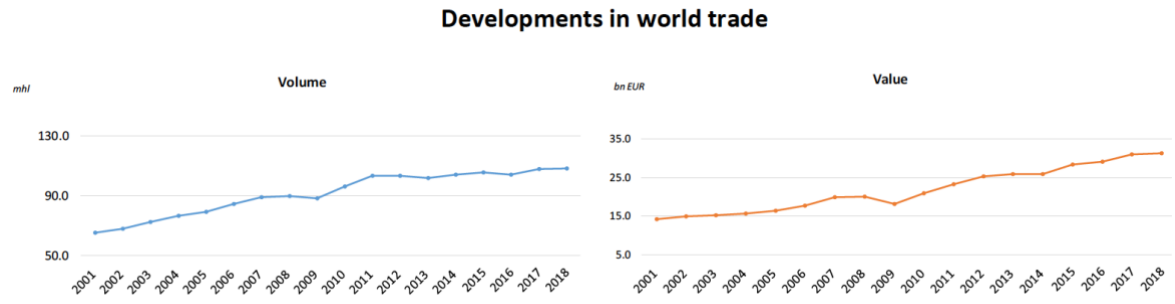
4) Introduction to the Context of the Case Study: The South African Wine Industry

In order to understand the dynamics in the South African wine industry, one must look at the global industry of wine beforehand. Thus, this chapter will give an introduction to the institutional, economic, social and environmental factors wineries are embedded in. Since these surroundings are constantly developing, taking cognisance of their dynamics is necessary to understand the findings of the case study on Reyneke Wines.

4.1) The Global Wine Industry

The global wine industry is often categorized into groups of producing countries depending on their historical context, differences in styles and differences in winemaking. France, Spain, Italy, Portugal, Greece and Germany are 'Old World' wine producing countries as they have been producing wine for centuries. 'New World' producing countries have emerged in the second half of the 20th century and did not engage in significant wine production before. Countries in that category are Australia, New Zealand, Chile, Argentina, the United States and South Africa. The new new producing countries, also 'New New World', such as China, which in recent years have seen a rapid expansion of their wine industry, should also be mentioned here (Alonso Ugaglia et al., 2019). In total, 292 mhl of wine, including sparkling and special wines, were produced in 2018 (OIV, 2019a).

Figure 3. Development of World Trade in Wine 2001-2018.

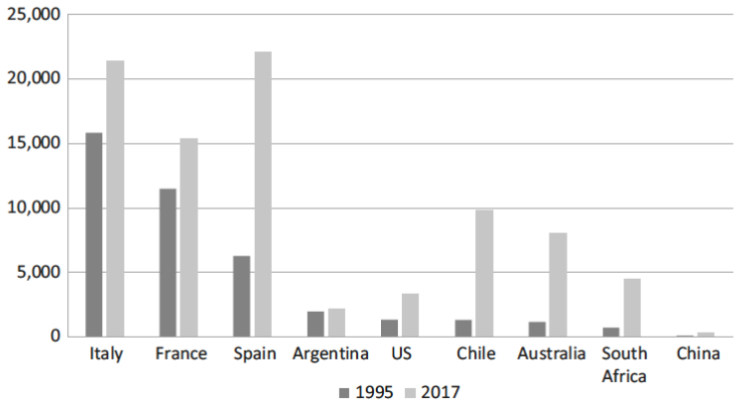


Source: OIV, 2019a.

A remarkable feature of the international wine industry is the strong growth in exports in the last 25 years, reaching 108 mhl in 2018 (see Figure 3) (Alonso Ugaglia et al., 2019). This has led to increased competition, also stimulated by the growth in exports from New World countries appearing on the international scene (see Figure 4). Old World countries like Spain,

Italy and France remain the top three exporting countries with Germany, the UK and the US as the main importing countries. However, the high concentration of trade among these six countries seems to decrease with the new players taking on market share, which is estimated at 36% of the export market share (Alonso Ugaglia et al., 2019; Gilinsky et al., 2016).

Figure 4. The Emergence of the New World in the World Wine Trade. (Exported vol. in khl)



Source: Alonso Ugaglia et al., 2019, p.5.

National industries pursue different strategies regarding their volume/value ratio in exports. Through focusing on the quality aspect of wine, France manages to maintain a leadership position in terms of exporting value. Spain, in contrast, leads in terms of export volume due to a very competitive pricing strategy (Alonso Ugaglia et al., 2019; OIV, 2019b). These strategies also depend on industry factors such as land and labour costs, as well as institutional factors like national regulations.

In order to harmonize practices and standards internationally and defend common interests of winemaking and wine-trading nations, the Organisation Internationale de la Vigne et du Vin (OIV) was founded in 1924. Today it serves as an intergovernmental wine organization and counts 48 member states. The OIV's activities are mostly of scientific and technical nature like setting standards for products derived from wine and giving recommendations for the production and trade of wine-related products (oenological practices, labelling rules, geographical indications, protection of varieties) (Compés López, 2019).

By promoting international standards and transparency, the OIV can help overcome challenges such as diseases and fraud in cooperation (Compés López, 2019). While the OIV is more Europe-oriented, the WWTG, a plurilateral group of both member states and industry representatives, consists mainly of New World producing countries. Its main goal is to ensure liberalization of trade and the reduction of trade barriers through mutual acceptance and recognition of standards in order to level the playing field for New World producers (Compés

López, 2019). Trade barriers like trade agreements, tariffs or non-tariff barriers influence the competitiveness gaps between the wine exporting countries (Mariani & Pomarici, 2019).

The wine industry has seen many changes in the last decades, not only in terms of production but also in terms of consumption. Demands of consumers have changed with new consumers coming from emerging markets like Brazil, China, India and Russia with different preferences each (Gilinsky et al., 2016). In the traditional 'Old Word' countries Spain, France and Italy consumption has decreased in the last two decades, shifting towards increased consumption in the UK and the US (Gilinsky et al., 2016). While there is a slight decrease in global consumption, some specific niches in the wine industry experience growth, for instance sustainably produced wine such as organic wine (OIV, 2019b; Pellechia, 2019).

4.2) Sustainability in the Wine Industry

Regarding sustainability in the wine industry, Fairtrade and organic wine are the biggest trends. This chapter will only focus on the emergence of environmental sustainability in wine production.

4.2.1) The Trend towards Organic Wine

The proportion of consumers conscious of organic products has increased, which reflects in the demand for organically produced wine. Global consumption has almost doubled from 349 million bottles to 676 million bottles within a five-year period from 2012 to 2017, now representing 3.6% of the global wine consumption. It is anticipated that the annual consumption will reach over 1 billion bottles by 2022 (de la Hamaide & Denis, 2018).

The producers are following the demand, which becomes visible in the augmenting number of organic vineyards from 284.000 hectares in 2012, to 408.000 hectares in 2017, reaching an estimated 545.000 hectares dedicated to organic wine in the world in 2022 (de la Hamaide & Denis, 2018). Since the conversion period takes a minimum of three years and four vintages, and as a number of vineyards are under conversion at the moment, it is expected that the production will further increase in the future (Arthur, 2018). There are more than 2000 organic wine producers globally, with 90% of the production taking place in Europe (Arthur, 2019). In 2018, the organic wine market was worth €3.3 billion with most consumption in Germany, France, Italy, the US and China (French, 2019; Pellechia, 2019).

In terms of price, numerous studies found that most consumers are not willing to pay a price premium for organic wine, however the outcomes vary among countries (CBI, 2014; Pellechia, 2019). Still, organic wines compete against conventional wines for the same consumer segment (CBI, 2014). This poses a challenge for organic wine producers as there remain prejudices about the quality of organically produced wine due to reduced shelf-life. The limited knowledge about organic production processes creates additional obstacles for the consumer (CBI, 2014; Vimont, 2017).

4.2.2) A Market for Sustainability Certifications

The wine industry has been characterized as a buyer's market, a term which illustrates that the market is driven by the bargaining power of buyers (Ponte, 2009). Lately, with the emergence of numerous certification schemes, the notion has changed towards seeing the wine industry as mainly dominated by certification agencies, institutionalizing standards and codes (McEwan & Bek, 2009).

Besides individual national environmental legislations and national initiatives, also international environmental initiatives have emerged. For instance, the ISO 14001 environmental management system certification was established in 1996. However, private certification schemes are more popular, also from a marketing point of view. Hence, private certification agencies are among the most influential players in the sustainable wine environment nowadays (Hamman et al., 2017).

CERTIFICATION FOR BIODYNAMIC WINE

Biodynamic agriculture is certified by Demeter International, the largest certification body for biodynamic agriculture. It verifies the compliance with international standards in biodynamic production and processing (Demeter, n.d.).

CERTIFICATION FOR ORGANIC WINE

Wine can only be certified organic if it is produced according to the criteria of certification bodies. These criteria vary across countries and agencies. For instance, in Europe and Canada, organic wine may contain a minimal amount of sulfites (SO2), while in the US no added sulfites are allowed. Thus, European organic wine must say "wine made from organic grapes" on the

label when sold in the US (Diva Wine, 2017). The wineries have to undergo strict controls in order to become certified by different accreditation bodies in different regions (see Table 3). In the EU, organic production has been regulated since 1991, added by the EC regulation 606/2009, which now also includes winemaking practices in cellars (Brandl, 2013).

Table 3. Overview of the Organic Certification Schemes.

Country	Chile	Argentina	USA	Europe	Australia	NZ	SA
Maximum use of SO2 during vinification	Red: 75mg/l White: 100mg/L	Red: 70mg/L White: 80 mg/L *Until 100mg/L for wine to keep for ageing*	The use of SO2 is forbidden	Red: 100mg/L White: 150mg/L	Red: 100mg/L White: 100mg/L	Red: 100 mg/L White: 150mg/L	Red: 90mg/L White: 100mg/L
% of organic vineyard *(data from 2015-2016)*	3% of Chilean vineyard	2% of Argentinian vineyard	4.1% of American vineyard	8,5% of European vineyard	No data to show	7% of New Zealand vineyard	2% of South African vineyard
Local organic or sustainable label	No specific label for organic wine Sustainable label:						No specific label for organic wine Sustainable label:

Source: Diva, 2017

In conclusion, credible environmental sustainability is likely to become a crucial competitive factor on the international market. Especially developing country firms may face the challenge of complying with international codes and standards imposed by importers and retailers, while also experiencing price pressures from them (McEwan & Bek, 2009).

Nevertheless, it can also be argued that New World countries can see an advantage for their younger and more flexible industries in adjusting to regulations and learning from such (Alonso Ugaglia, et al. 2019). Hence, South Africa constitutes an interesting case setting for looking at innovative farming practices as it is one of the youngest players on the international wine field.

4.3) The South African Wine Industry

This chapter gives an overview of the historical developments of the South African wine industry, its rise to the 9th largest wine producer in the world and provides background information on the industry's volume, its key consumer markets and the main players. It concludes with a presentation of recent trends towards more sustainable practices.

4.3.1) The Rise of the South African Wine Industry

Historically, the first wines produced in South Africa date back to the 17th century, however, South Africa belongs to the group of 'New World' producing countries because the local wine industry did not gain international foothold until the end of the 20th century (Vink, 2019).

Instead, it almost came to a halt during apartheid when international economic sanctions were imposed on South African exports. With the end of apartheid policies and the beginning of market liberalization by the end of the 1990s, the South African wine industry could be revitalized (Vink, 2019).

During the 20th century, the industry was dominated by a cooperative called the "Ko-öperatieve Wijnbouwers Vereniging van Zuid-Afrika" (KWV), which regulated the industry, set prices and engaged in surplus removal through production quotas (Vink, 2019). This system furthermore put emphasis on the production of bulk wine relying on the help of cheap black labour (Ponte & Ewert, 2007; Ponte & Ewert, 2009; Hamman et al., 2017). This historical context has induced a structural problem in the South African wine industry, which remains to have a focus on low-value bulk production. Due to a surplus of wine in combination with the deregulation of the market in the late 1990s, wine producers offered high volumes of wine at an under-priced price level in order to survive in the short-term (Humbert & Polotzek, 2017). With low margins, consequently the profitability decreased (Steyn, 2018).

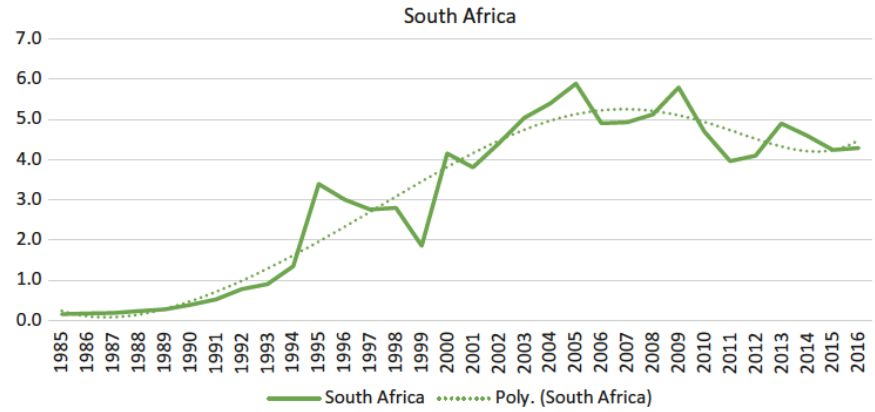
Once known as producing "cheap and cheerful" wine, South Africa remains stuck in this image of low-quality wine (Kasper-Clardige, 2019, Interview J). Steyn (2018) estimates a return on investment of South Africa's wine industry at less than 1% with only around half of the wine producers being profitable or at least breaking even (Steyn, 2019).

In 2018, South Africa was the ninth-largest wine producing country in the world with an output of 9,5 mhl and held rank six of the major exporters of wine in terms of volume, representing 3.89% of the global exports (4,2 mhl out of the total 108 mhl exports of all countries in 2018) (SAWIS, 2018).

However, measured in value, South Africa could only obtain rank 12 with an export value of wine of approximately 0.7bn € in 2018 (OEC, 2019; OIV, 2019a). As a developing country, South Africa seems to face difficulties in accessing export markets profitably (Vink et al., 2010). Thus, even though South Africa maintains a decent export performance, its exported products tend to be low-end wines with low prices, South Africa being among the three major bulk wine exporters (Alonso Ugaglia et al., 2019; OIV, 2019b). The three-year drought from 2017 to 2019 further led to a decrease in exports in 2019 by 24% (SAWIS, 2019).

The following figure shows South Africa's international competitiveness measured in the real comparative advantage. It compares the growth of net exports of a product (wine in relation to all agricultural products in South Africa) to the global growth of net exports of that product in relation to all agricultural products. A ratio above 1 indicates competitiveness. This was reached by South Africa for the first time after the end of apartheid in 1994 (Vink, 2019).

Figure 5. South Africa's Revealed Comparative Advantage in Wine.



Source: Anderson and Pinilla, 2018.

Growth has been stagnant in the last decade as South Africa is facing competition in the New World wine producing category especially from Australia and Chile. As indicated before, South Africa's unit prices in exports are lower than those of any competing economy (Vink, 2019; Interview J).

The main importing countries in terms of both volume and value were the UK, Germany and the Netherlands in 2019 (SAWIS, 2019). With the EU as main export market for South African wine historically, wine trade between South Africa and the EU has been regulated since 2002 in the bilateral "Agreement on trade in wine" (Ponte & Ewert, 2007). However, according to a study by PwC, Asia and Africa are increasingly replacing the export focus areas North America and Europe (PwC, 2015), which is also supported by WOSA's prediction of future trends in demand (WOSA, 2020d).

4.3.2) Domestic Industry Characteristics

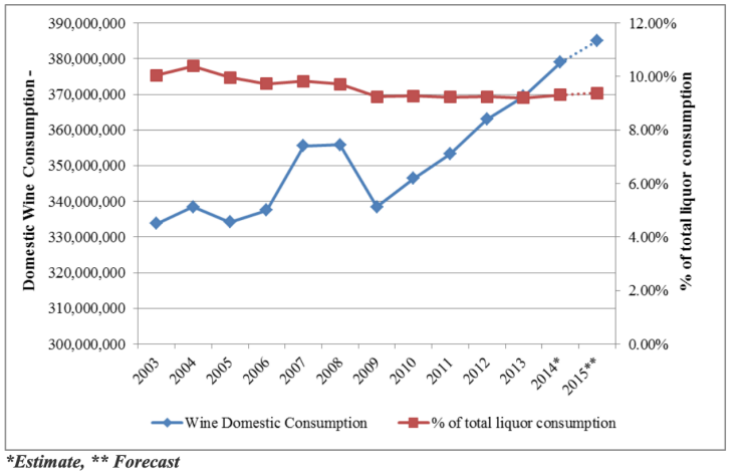
„The South African wine industry […] encompasses wine (still, fortified and sparkling), wine for brandy, distilling wine, brandy and other spirits distilled from distilling wine, grape juice and grape juice concentrate for use in wine and non-alcoholic products" (SAWIS, 2018, p. 1).

In South Africa, the wine industry comprises estate wineries, producer cellars, independent cellars and wholesalers. Estate wineries only produce wine from grapes grown on vineyards of their own land. These vineyards must be operated as one unit with a dedicated cellar for these vineyards on the premises. Producer cellars or co-operatives make up for the largest amount of wine production, about 80%, by pressing the grapes of their farmer member shareholders to wine. Independent cellars and wholesalers buy in wine and grapes which they then sell under their own brand (Kruger, du Toit & Ponte, 2008). In total, there are about 2880 grape farmers who cultivate about 93000 hectares of vineyards (WOSA, 2020a). Regarding the cellars, SAWIS counts 47 producer cellars, 468 private cellars of which 213 were registered as estate wineries and 27 producing wholesalers, which makes a total of 542 cellars in South Africa (SAWIS, 2018).

The cultivation is currently divided into 55.3% of white grape varieties and 44.7% of red grape varieties (SAWIS, 2018) with the majority of wineland being situated in the south-western part of South Africa in the Western Cape Province (Hamman et al., 2017).

On the consumer side, domestic wine consumption has been growing over the last 20 years due to an expansion of the middle class (see Figure 6) (Sikuka, 2015). However, beer remains the most consumed alcoholic beverage with a total of 3.2 billion liters in 2018 (OIV, 2019b). In 2018, South Africans consumed 4.3 mhl of wine, which constitutes a slight decrease from 4.5 mhl in 2017. Domestic wine consumption focuses on national products and wine imports to South Africa only amounted to 3 million litres in 2016 (James, 2019). Thus, foreign wine consumption only constitutes a small share of the total wine consumption.

Figure 6. Development of Wine Domestic Consumption in South Africa.



**Estimate, ** Forecast*

Source: Sikuka, 2015.

4.3.3) Key Institutions & Industry Associations

Even though the wine industry annually contributes around 36 billion Rand to South Africa's GDP and involves about 290 000 jobs, support by the government is scarce (Kriel, 2019). The reason for little government support may be a consequence of the interconnectedness of the history of the wine industry with apartheid. A picture of slavery-like working conditions for marginalized citizens, paternalism and high levels of exploitation remains, even after the official ending of the apartheid system (McEwan & Bek, 2009). Reports by NGOs continuously reveal poor working conditions on wine farms (Humbert & Polotzek, 2017). On top of this, the capital-intensive nature of viticulture promotes exclusivity of wine farm ownership, which poses high entry barriers into the industry (Kruger, du Toit & Ponte, 2008).

As a consequence of lacking support by the government, a handful of industry-led associations emerged after restructuring the wine industry in the course of the end of apartheid. Former elites like the KVW were privatized (Ponte & Ewert, 2007). A new independent industry association, which organizes stakeholders like grape producers, cellars, wine-related businesses and wineries in VinPro today, was formed. The non-profit company represents the concerns and interests of its members and provides consultation regarding industry trends and profitability (VinPro, 2016).

The wine and brandy industry developed the Wine Industry Strategic Exercise (WISE) in 2015, a strategy whose goals are to be achieved by 2025. Among the main objectives are driving profitability, growing local consumption and remaining globally competitive in a sustainable way. Specific targets include the growth of annual local sales from 325 million litres in 2015 to 425 million litres in 2025 and the decrease of the ratio of bulk wine sales from 60:40 to 40:60 (PwC, 2015; VinPro, 2019).

All of these objectives are only possible to achieve through strong industry cooperation. This includes research and qualified employees. Thus, education facilities in the middle of the winelands such as the Department of Viticulture and Oenology, Stellenbosch University, as well as Elsenburg Agricultural College, train the next generation of wine makers and viticulturalists. The ARC-Nietvoorbji serves as a research facility (WOSA, 2020a).

Further, the Wine and Spirit Board (WSB) serves as an umbrella organization and a supervisory body, which monitors the quality of the industry's output in accordance with the provisions of the Liquor Products Act of 1989. The Board is composed of members appointed by the government and experts in viticulture, oenology, distilling and food (WOSA, 2020e).

The Wine and Spirit Board is in charge of providing licenses for wines intended for export. For this, samples of each batch of wine for export are tested and chemically analysed. Each bottle will be given an official seal by the WSB that verifies that the information on origin, vintage and grape variety is true (WOSA, 2020a). This 'Wine of Origin' seal is based on the French AOC model, verifying the geographic origin of the product (Cholette & Castaldi, 2005).

Wines of South Africa (WOSA) is the business unit of the WSB in charge of export promotion of South African wines in key markets. WOSA is a non-profit organization recognized by the government as an export council, but it is not state-funded. Instead it is financed by a statutory levy per litre on all natural and sparkling wines exported paid by the wine producers. Its mission is to contribute to the global success of the South African wine industry through building the Brand South Africa, especially in the key importing markets UK, Germany, Sweden, the Netherlands and the newly developing markets US, China, Japan and Canada (Interview K; Ponte & Ewert, 2009; WOSA, 2020a).

The laws of apartheid, which were extremely discriminatory and disadvantageous to the majority of social groups as they for instance resulted in the dispossession of land from black people, still show their structural consequences today. Working conditions in the vineyards entail heavy physical labour, which is usually paid at a minimum wage (Vink, 2019). For social and ethical concerns, the Wine Industry Ethical Trade Association (WIETA) is a multi-stakeholder organization which promotes compliance with an ethical code of good conduct in wine production (WIETA, 2019a). WIETA introduced an ethical trade seal for South Africa, which certifies reasonable working conditions, enabled through its service as internationally recognized auditing body (WIETA, 2019b). Fairtrade wine is a major selling point for South African wine as three quarters of Fairtrade wine sold globally in 2018 originated in South Africa (McEwan & Bek, 2009; WOSA, 2020d).

Many of these initiatives are aiming at establishing voluntary standards and implementing sustainability programs in order to develop a new picture of awareness and transformation (McEwan & Bek, 2009). But not only ethical concerns receive a lot of attention, also environmental responsibility has attained a firm place in the industry organizations' objectives.

4.4) Environmental Sustainability in the South African Wine Industry

In general, the agricultural sector in South Africa shows a development towards sustainable practices through the Green Economy Accord, the National Strategy for Sustainable Development and the Industrial Policy Action Plan (UNEP, 2016). However, ten drafts by the

Department for Agriculture, Forestry and Fisheries on a National Policy for Organic Production, highlighting the benefits of organic farming to mitigate the effects of climate change on the agriculture industry, including the proposition of a domestic organic standard, a national inspection and certification programme as well as a regulatory framework and a support system for organic farmers, have been proposed to Parliament and not been implemented to date. The industry organisation South African Organic Sector Organisation presented a domestic organic standard in 2019, which, however, also has not been finalised in a government policy yet (SAOSO, 2020; UNEP, 2016; Kelly & Metelerkamp, 2015).

Due to the challenging climate conditions in South Africa, its wine industry realised the relevance of sustainable farming decades ago. Challenges like water shortage, droughts and power cuts have induced an awareness of the protection of indigenous wildlife, the use of renewable energy and the responsible use of natural resources (Gabreski, 2018).

The organic viticulture sector in South Africa comprises 20 fully-certified wineries and four grape growing farms, mostly certified by Ceres, EcoCert or Control Union. Only two out of four biodynamic wineries are currently certified biodynamic by Demeter, the case firm being one of the two (Smith, n.d.). According to WOSA, 1860 ha out of the 126 kha of vineyards in South Africa are organic, which currently accounts to less than 2% (Interview K refering to Ecocert). No official data is available on the produced amount of natural wine (Interview K). Despite wide-spread environmental awareness, only a small share of wine farms produces organically to date, which may be due to the long and costly conversion process (Kelly & Metelerkamp, 2015). An even smaller share of wine farms is officially certified organic. Many producers, especially small-scale wineries, decide against going through the costly and time-consuming process of becoming certified (Hamman et al., 2017).

In an attempt to provide South African wine producers with domestic and less costly schemes that verify sound environmental practices, several industry-led sustainability initiatives have emerged in the last two decades, of which the most important will be presented in the following.

In 1998, the Integrated Production of Wine (IPW) was founded by the WSB in order to provide wine farmers and producers with support and guidelines for their efforts in implementing environmental management systems. It is a semi-regulatory system, mostly conducted via self-monitoring by farms which wish to be IPW compliant (Ponte & Ewert, 2009).

A specific flagship for demonstrating South Africa's commitment to environmental sustainability and regulated production integrity is the seal that was introduced in 2010 (see Figure 8). It is a joint certification for Wine of Origin and Integrated Production of Wine, which

traces the wine from vine to bottle. Thus, in addition to the WO standard, this seal also certifies sustainable and environmentally friendly production and is a world's first of its kind (Vink et al., 2010; WOSA, 2020a).

Figure 7. Wine of Origin Seal

Source: both WOSA, 2020b

Figure 8. Joint Voluntary Seal for Wine of Origin and Integrated Production of Wine

This partnership formed by the Wine and Spirit Board (WSB), the Integrated Production of Wine (IPW) scheme and Wines of South Africa (WOSA) is called Sustainable Wine South Africa (WOSA, 2020b).

In addition to the IPW, the Biodiversity and Wine Initiative (BWI) promotes the incorporation of biodiversity best practices on the farmland (Vink et al., 2010). These guidelines were added to the IPW in order to protect the diversity of soils and plants (WOSA, 2020c). Nowadays the BWI is known as the WWF-SA Conservation Champion programme, which focuses on the industry leaders as biodiversity conservation leaders. These farms commit to outstanding efforts to improve their environmental footprint through conserving natural areas and reducing their water and energy use (WWF, n.d.). The latter has become more and more important according to a study by PwC in 2015, revealing that many wineries are concerned with energy prices and shortages in energy supply in South Africa (PwC, 2015).

Thus, numerous nuances of environmental sustainability have emerged in South Africa. Farms may implement other voluntary environmental management schemes such as eco-friendly wine farms or carbon-neutral wine farms, pursuing a zero-carbon footprint like Backsberg, a well-known vineyard in Stellenbosch (Gabreski, 2018; van Vuuren, 2018). Others may convert single vineyards to organic status in order to add an organic range or natural wine to their product portfolio like Spice Route Wines, which is not certified organic (Spice Route, 2019). In the absence of a national organic standard, these producers are marketing their products as organic, which consequently increases the public confusion about the actual meaning of organic production (UNEP, 2016). South Africa is one of the few African countries with a domestic market for organic products (UNEP, 2016). The emergence of organic product categories in the

leading supermarket chains Woolworths and PicknPay further indicates changes in the domestic consumer preferences and a potential towards moving out of a niche (Interview J).

4.5) Summary

The wine industry has developed into an extremely globalized market in the last decades. This has created many opportunities for new players on the field but also led to increased global competition (Alonso Ugaglia et al., 2019).

Global consumption and production of environmentally friendly produced wine has experienced significant growth in the last decade. Although it is emerging as a niche market, especially organic wine has been taking market share from conventional wine (Pellechia, 2019). With the rise of new product categories such as organic, biodynamic, and natural wine, also environmental regulations and a complex market for sustainability certifications have emerged (McEwan & Bek, 2009).

South Africa's rapid growth to the 9th biggest wine producer in the world can be attributed to a focus on low-quality high-yielding farming practices (Vink, 2019). However, as a 'New World' producing country, South Africa may benefit from being one of the youngest players in the international wine scene. South Africa was chosen as the case setting because it has received international recognition as a leading industry in terms of integrating sustainable farming practices (WWF, n.d.). De la Hamaide & Denis (2018) predict that South Africa will be one of the driving forces behind the growth of the market share of organic wine in the five-year period from 2017 to 2022.

This chapter has shown the characteristics of the South African wine industry. It can be derived that a fragmented industry has developed in South Africa with a plethora of organisations, certifications and standards, especially on the sustainability side, which could be interpreted as compensation for the government's limited support (Hamman et al., 2017). Whether this is a helpful and conducive development needs to be discussed. In general, these initiatives and their impact on the industry development and consumer behaviour will be relevant for the analysis of the case firm's strategic responses to the external and internal factors in which it is embedded in and help in assessing the relevance of environmental competences for the strategic considerations.

5) Analysis of the Case Study

In this chapter, the results of the field research will be presented. The qualitative interviews reveal the challenges the case firm Reyneke Wines specifically is facing in its industrial and institutional environment, as well as the case firm's approach to strategically respond by building its own resources and capabilities. First, the case firm will be presented (Chapter 5.1), followed by the findings on external dimensions that influence the case firm's organisational and strategic planning (Chapter 5.2). Thereafter, the internal dimension of the case firm will be illuminated (Chapter 5.3). Thus, this chapter provides thorough insights on the knowledge obtained on the three mainstays of the strategy tripod, the conceptual framework, which was developed and presented in Chapter 2.4.

5.1) Reyneke Wines

The biodynamic and organic wine estate Reyneke Wines is one of the pioneering wine farms in Africa (Platter's, 2020). Johan Reyneke inherited the farmland, which was established in 1863 outside of Stellenbosch, from his family. As a student, the founder was influenced by the writings of environmental philosophers like Rudolf Steiner, who coined the biodynamic farming philosophy and the Norwegian founder of the 'deep ecology' movement Arne Ness. When Reyneke took over the operations on the farm, he started to farm wine organically, establishing Reyneke Wines in 1998. Within the last 22, years the original farm was expanded to 60 hectares farmland, extended by another 40 hectares of a newly converted farm in 2019 and 20 hectares of a neighbouring farm that is also farmed by the Reyneke team (Interview A; Reyneke, n.d.) Reyneke Wines consists of a team of eight people at the Reyneke Wines premises. The winery is furthermore supported by the farm workers who are employed by the Reyneke Trust. Reyneke's shareholder, the Vinimark group mostly oversees the sales and provides its export team and distribution network to Reyneke Wines (Interview C).

To date, the company exports approximately 70% of its total production volume (260 000 bottles in 2019) to its key markets the UK, Germany, the Netherlands, Scandinavia and China. Reyneke's product portfolio encompasses three wine ranges, namely an organic entry level range, a mid-tier range and a premium reserve range. The latter are both produced from organically and biodynamically grown fruit from the own farmland. Reyneke is certified organic by Ceres and certified biodynamic by Demeter International. They obtained their biodynamic certification in 2006 as one of the first wineries in South Africa. Moreover, Reyneke holds the IPW certification for both farm and cellar (Interview B; C; Reyneke, n.d.).

5.2) Findings on External Dimension: Institutions & Industry

This chapter presents the findings on what Reyneke Wines experiences from its external environment. It depicts the most emerging pressures and challenges but also opportunities the winery is seeing in the market it is operating in.

5.2.1) Institutional Context

For the analysis of institutional pressures on Reyneke Wines, the concept of Scott's (1995) *Three Institutional Pillars* will be taken into account, categorizing the findings into the regulatory, normative and cultural-cognitive institutional environment (Chapter 2.3.3).

THE REGULATORY PILLAR

Environmental Legislation

First of all, any wine producer in South Africa has to adhere to the specific national environmental legislation such as the Conservation of Agricultural Resources Act, No. 43 of 1983, the National Water Act, No. 36 of 1998, the National Environmental Management Act, No.107 of 1998, the National Environment Management: Biodiversity Act, No. 10 of 2004, and the National Environmental Management: Waste Act, No. 59 of 2008 etc. (IPW 2018).

The importance for wine producers to be aware of what is expected of them was pointed out by Respondent L. On top of the legal compliance in South Africa, the OIV serves as the benchmark for international standards and good practice (Interview L). Since the OIV regulations are embedded in the EU's requirements on imported wine, South African producers aiming at exporting consequently need to adhere to these recommendations.

Regarding the export regulations, the Wine of Origin (WO) seal by the WSB is compulsory on the label for each exported bottle of wine in order to verify the conformity of label and content, however this seal does not give any indication on the environmental background of production or whether it is certified or not (Interview L).

The significant differences between conventional wine legislation and organic wine legislation concerning the allowed fertilization and fermentation techniques were pointed out by Respondent A. As the specificities of what constitutes organic production vary between import markets, sales managers from two organic wine farms both stated that they had to change their labels for the US market (Interview C; D). As the EU constitutes South Africa's biggest wine

importer, South African organic exports adhere mostly to European legislation regarding organic wine production. To date, there is no own official domestic organic standard in South Africa (UNEP, 2016).

Lack of Government Support

Several respondents confirmed that there is almost no support by the government for the wine industry. The programs that do exist tend to be considered too inefficient and bureaucratic to apply for (PwC, 2015) or not targeted towards environmental sustainability (Interview E; J; K; L). Without any government subsidies, Respondent J complained that the South African wine industry was put at an international disadvantage because other wine producing countries such as Australia, Germany or France were able to obtain government subsidies. Due to this, especially Australia and the US seem to be technically more advanced among the New World wine producers compared to South Africa (Interview E; J).

Respondent K pointed out that the marketing body WOSA only received 1 million Rand a year from the Department of Trade and Industry, while Australia was heavily subsidized and had a total marketing budget ten times as high as South Africa, according to Respondent J. Instead, Respondent L expressed his resentment, stating that the South African ANC-led government was benefiting more from the contributions of the taxes that were generated through the production and sales of alcohol than supporting the industry. On top of this come ongoing discussions about land reform, which create uncertainty regarding land rights among farm owners (Interview J).

Access to Funding

Access to capital constituted a problem when the founder of the case firm wanted to start farming. According to the founder, especially the plan to farm organically was not considered profitable by the bank. Thus, the founder had difficulties in getting a loan to expand the farm he inherited from his parents to a wine farm as the bank considered organic wine production as too risky (Interview A). Eventually, the case firm had to turn towards a private investor in order to be able to expand the business. There is no government policy highlighting the benefits of organic farming or a government support scheme for organic farmers yet (UNEP, 2016). Especially the lack of government support regarding the mitigation of financial risks during the

conversion period from conventional to organic deters South African wine producers from transforming their conventional production to organic production (Interview K).

Infrastructure

Infrastructural services such as access to water or electricity were addressed as main challenges in the interviews.

The drought of the last three years has led to a decrease of 2000 hectares vineland per year according to Respondent J. Since water was also named as one of the most important assets in the wine making process, a lack thereof was described as a huge challenge by Respondent K from the industry organisation WOSA. Irrigation systems that recycle water through reverse osmosis, such as the one implemented at the farm of Respondent E, are costly and the implementation takes several years.

Respondent E furthermore stated that "South Africa has a huge problem with electricity". Electricity constitutes a key resource in the wine industry and is needed for flawless production of any wine-related products. Due to the lack of energy supplies and the consequent power cuts in South Africa, wine firms have to invest in costly generators in order to maintain the cooling systems of the fermented grapes in the cellars and the water pumps of the irrigation systems (Interview E, Interview G).

THE NORMATIVE PILLAR

Certifications

Between the regulatory pillar and the normative pillar, the certification schemes need to be mentioned. All respondents stated that South African wine producers experienced pressure from international buyers to have internationally recognized certification. Even though it is a voluntary decision to apply for certification, there are normative pressures for wine producers in order to stay competitive and be considered by international agents that market their wines abroad.

In general, there is a certain "fatigue" in the industry towards certification schemes, citing Respondent J. The plethora of audits that certify organic and biodynamic wine, Fairtrade or WIETA has created a complex bureaucratic environment in which wineries struggle to comply with all the different regulations and requirements as explained by Respondent J.

In fact, the bureaucracy requires big producers for exported wine to have departments only for certifications and audits (Interview F). Especially the fact that the certifications are not coherently accepted in Europe and the US was highlighted as problematic, as consequently several audits have to take place, which increases the costs (Interview A, Interview D).
Even for market leaders like Spier, the organic wine maker explained that going through organic certification was a costly process while domestically, Spier is not even communicating that around 10% of their total output is organic (Interview F).
As the audits need to be paid in foreign currency such as US Dollar or Euro, Respondent A explained that the weak Rand constitutes a problem in staying "in the game of organic certification".
Furthermore, the lack of an internationally recognized certification body in South Africa requires international auditors to fly to South Africa, which also translates into higher costs. Thus, a professor of agriculture economics at University of Stellenbosch explained that many farms decided not to certify (Interview H). In an interview with a wine farm which used to be certified organic but did not renew the certifications, the farm manager outlined that there was no premium on their price when selling certified organic wine and thus, they decided against the costly certification process (Interview E).

The case firm identified a need for themselves to differentiate on the market, which sees more and more wineries claiming they were organic without any proof. Thus, communicating that farming organically means adhering to the regulations seemed to be important to Respondent A: "I felt that it was important to get third party endorsement for the credibility in the new phenomena of green-washing". However, he also remarks "I would love to stop certification tomorrow if I could". The case firm plans a budget of 100 000 Rand annually for certification. Concerning the biodynamic certification by Demeter, which the case firm obtains, challenges were identified as well. Even though Reyneke Wines is fully certified biodynamic, only the reserve range of wines use the logo on the label. Since Demeter has a requirement of demanding an additional payment of 2% on the turnover of bottles with Demeter logo, it is too expensive for the case firm to carry the logo on each biodynamically produced bottle (Interview A).

Industry associations

The data suggests that industry associations such as IPW or WOSA are an important factor in shaping the prevalent industry norms in South Africa. Since these organisations provide norms but also suggest roadmaps and guidelines, they can be seen as a regulatory and normative force.

IPW, for instance, serves as a platform that helps grape growers and wineries to understand the compulsory legal framework of environmental legislation in South Africa. Additionally, based on the legal guidelines, IPW provides a handbook with recommendations on how to farm as sustainably as possible with information regarding best practices in implementing environmental management plans. According to Respondent L, the Director of IPW, 80% of the handbook's content is legal requirement anyway (IPW, 2018).

Respondent L explained that it is voluntary to conduct an annual self-assessment pursuant to the IPW guidelines concerning environment, spray products, herbicides, pesticides, disease control products and to get a contract with the WSB. An independent audit company, Enviroscientifics, is contracted to visit 220 farms and 150 wineries every year in order to verify the self-audit by a third party. In contrast to international sustainability accreditation schemes this audit is free for the applicants and financed by IPW through a levy system paid by the wine producers in order to make it as accessible as possible. After successful completion of the audit, the wineries can attach the Scheme for the Integrated Production of Wine (IPW) on their bottles. According to Respondent K and L, 94% of WO certified wine is using the IPW seal. Respondent L further pointed out that considering the majority of producers being IPW certified, a certain peer pressure has evolved: "so if you are not a member, you are on your own, it's getting increasingly difficult to sell your wine to fellow producers in SA if you don't have IPW". He defended the high number of participants with the argument that when IPW was developed, the industry decided to support the environmental sustainability program as an industry that was going forward as one. Due to the high involvement of cooperatives which produce 75% of the crop, this participation rate could be reached. Other voices argue that the high participation in IPW is due to the low threshold and thus it was perceived as easy to obtain (Interview J). However, IPW advices the successful applicants to become independently verified, "so it gives the credibility & integrity to the system" (Respondent L).

Reputation of Organic Products

Respondent L expressed his concern that many producers of organic wine were struggling to bring high-quality products on the markets, which has contributed to the negative perception of some organic products (Interview L). Respondent A stated that 10 years ago, organic wines were seen as inferior to conventional wines. As a result, back then Reyneke Wines removed the description "organic" from the labels in the US and Europe because sales were better without. However, he believed that this has changed now.

THE CULTURAL-COGNITIVE PILLAR

The Organic Wine Market – a Nascent Market

According to Respondent B, the assistant wine maker at the case firm, the organic wine market, especially in South Africa, is still a nascent market and needs time to develop. This perception was shared by Respondent E, the farm manager at another wine farm that produces organically. Respondent F stated that "the whole world looks at it, just South Africa is a bit slow".

Most respondents shared the opinion that there was no price premium on organic wines achievable yet (Interview E; F; G; H; J; L). Some respondents stated that the willingness to pay a premium on organic wine is more likely to be found overseas. Domestically, however, Respondent J, a wine business lecturer, suggests that only with the formation of a category for organic products at big retail stores such as Woolworths, the product category could become mainstream.

An indicator for the growing interest in organic and sustainably produced wine however shows in trade fairs such as VinExpo Paris, where South African organic wines were voted as top wines by reclaimed sommeliers (Interview D). The marketing body WOSA contributes to promoting sustainably produced wines through an annual campaign called #Wineforgood and chose sustainability as theme at the trade fair ProWein. Domestically, the theme for 2021's Capewine Event was going to be sustainability as well, stressed Respondent K from WOSA.

The case firm reported an increase in domestic sales, which suits the statistics on a growing market for organic products in South Africa (UNEP, 2016). The public's interest in organically produced wine also shows in the massive media coverage the case firm has received in the past, according to Respondent A.

Millennials and Shifting Habits

"Younger people want products not just of quality, also backed by integrity, as a consequence we've seen a huge increase in our market share." This statement by Respondent A was supported by Respondent B who stated that Reyneke experienced more traction from the younger crowd and that there were more people who became aware of organic wines. In her opinion, younger people were more aware of sustainability than the older generation. This opinion was shared by the Director of IPW who acknowledged that the younger generation was getting aware about things like reducing greenhouse gases and eating healthier (Interview J).

5.2.2) Industrial Conditions

In order to structure the information on the current industrial conditions that are affecting Reyneke Wines, Porter's Five Forces will be utilized (Chapter 2.3.2). This allows to unveil the competitive environment for the case firm in the wine industry both globally and domestically.

INDUSTRY COMPETITORS

In general, many respondents were convinced that the global wine market as well as the South African wine market, especially for conventional wine, were extremely competitive. Moreover, switching costs for consumers are very low.

Looking at the domestic market from the perspective of the case firm, Respondent C stated that one source of their competitive advantage was that there is only one existing competitor who is certified organic and biodynamic in the South African market. According to Respondent A, the market was currently bigger than the supply and thus not saturated for organic wine, locally and internationally. However, as a result of the high competitiveness of the product category wine in general, Reyneke Wines predominantly turned towards markets overseas (Interview B).

THREAT OF POTENTIAL ENTRANTS

Due to the costly and long conversion period of turning vineyards organic or biodynamic, which can take three to eight years according to Respondent J, starting to farm organically or biodynamically was described as a risky venture by several respondents. As explained by Respondent A and J, the yields of biodynamically farmed vineyards decrease massively in the first years before they start going up again, thus it takes several years until the converted land becomes profitable. As Respondent F stated, "a lot of the farmers don't want to go the organic way because it's very labour-intensive. You need to put in a lot of money. It doesn't necessarily mean you're gonna get that money back".

According to the founder of the case firm (Respondent A), twenty years ago, nobody was interested in producing organic or biodynamic wine. This looks differently today, however, over the last 20 years only four biodynamic producers emerged in South Africa and only two of them are certified. Respondent A also stated that besides the risky conversion period, the costly certifications constitute a problem for many wineries, and many would refrain from applying. Here, he sees a first mover advantage for his firm as he was the first one to obtain biodynamic Demeter certification in South Africa in 2006.

However, he welcomed to see "a huge upswing" of other farmers turning towards him, asking for knowledge and support. This showed, according to Respondent A, how important consumer behaviour was and how it determined the production as well. For Reyneke Wines it even constitutes an advantage if neighbouring farms go organic, as this will positively impact Reyneke's soil as well (Interview A).

THREAT OF SUBSTITUTES

Since in South Africa the organic wine market has not matured yet and there is limited awareness about it, especially conventional wine and beer constitute the main substitutes. Wine imports are so low that they can be neglected as substitutes. So far, many supermarkets do not have organic wine sections and organic wines are sold between conventional wines. Thus, switching costs between the products are low, which may be a reason for the limited price premium possible on South African organic wine.

BARGAINING POWER OF BUYERS

Typically, when bottled wine is sold overseas, the buyers are international agents that import the wine and distribute it in their market. In the case of importing organically certified wine, these import agencies need to be certified organic as well (Interview C; D; F). Hence, these importers have to make an investment in organic certification before they can consider taking organic wine in their portfolio, which many are reluctant of, as explained by Respondent D. According to her, there are not many importers who are willing to go through this process which may cost up to € 4000, so the bargaining power of these buyers is relatively high.

Currently, 70% of the case firm's consumer base and thus buyers are situated overseas (Interview A; B; C). Especially in Sweden, government interference through Systembolaget, the Swedish alcohol retail monopoly, led to rising demand of sustainably produced wine where CSR is respected and adhered to. "First Systembolaget started with requiring 5% of the wines they were purchasing to be organic, then it became 10, then 15 and now it is up to 20% in Sweden." (Interview A). Also, China has become a big powerful export market (Interview C).

External challenges such as droughts have an impact on the yields and may lead to the result that the planned amount of cases could not be supplied to the international importers, explained Respondent C. In a case like this, the buying import agencies need to be informed well in

advance, in order to avoid the risk of them stopping to purchase from that supplier. In order to spread this risk, Reyneke plans to balance the export/domestic ratio to 50/50 (Interview C).

The bargaining power of buyers domestically is also high, considering the large amount of wine producers in South Africa that compete for shelf-space and the ones that can provide constant supply may be favoured over organic wineries. However, in order to increase its presence domestically, the case firm signed three South African supermarket chains Spar, PicknPay and Checkers as buyers through which it could diversify the consumer base from restaurants and boutique shops to retail and make the products more accessible to a broader base (Interview C).

BARGAINING POWER OF SUPPLIERS

Grape producers who farm conventionally have to buy in fertilizers and cooperatives source grapes from their growers. Suppliers of fertilizers hold high bargaining power as Bayer is the only one that supplies to South Africa. As mentioned before, this entails an exchange rate problem due to the weak Rand as the suppliers of pesticides sell in US Dollar. The case firm Reyneke, however stated that they only need to source a small amount of organic fertilizer when converting new farmland to organic farmland. Otherwise, they were not dependent on many suppliers due to their organic and biodynamic way of farming, which follows the principle of self-sufficiency (Interview B). Nevertheless, in South Africa the bottle supplier Consol holds a monopoly, thus the case firm was dependent on sourcing bottles from there (Interview B).

5.3) Findings on the Internal Dimension: Firm-specific Resources & Capabilities

The second set of results is based on the resource-based view and concerns the internal firm-specific resources and capabilities with a special focus on the environmental competencies of the case firm.

5.3.1) Dynamic Capabilities

In order to identify how the case firm develops its capabilities and environmental competencies, the founder and viticulturalist, the assistant wine maker and the operations manager were interviewed and asked about the firm's dynamic capabilities. The results are presented in the following, structured according to Teece's categorization of Dynamic Capabilities – Processes, Positions & Paths, with reference to the sub-categories in Teece's framework (Chapter 2.3.1).

PROCESSES

Coordination: Self-sufficiency

In terms of coordination and integration of external sources, Respondent A & B stressed the philosophy of being a biodynamic farm. "The whole thing about biodynamic is, you push to be as self-sufficient as possible." Instead of buying fertilizers, the farm maintains its own cattle and cultivates an own compost. "All the stems and skins from the grapes we worked with, we put it back, so the cows eat it. They eat it and we give that back to the vines" (Interview B). Thus, in terms of sourcing external inputs, Respondent B explained that they did not have to buy in as many costly fertilizers and additives from the Bayer monopoly as conventional farms. Thus, here Reyneke can overcome the dependence on suppliers as outlined in the category on bargaining power of suppliers before. As a consequence, the costs in the vineyard were lower according to Respondent A & B.

Routinization: Flexibility

In a discussion about whether incumbent firms or new market entrants would have more advantages concerning routinization, the founder of the case firm (Respondent A) explained that "bigger companies have bigger teams with a lot of opinions, for me it was easy as one-person show, it wasn't difficult to convince myself". It can be derived that he valued the flexibility of his relatively small and young venture. He expressed a concern that at bigger firms, "all sit in a room and discuss it, then the financial guy will want to know more about the risks and the benefits, and if their current system is working, then it is very difficult for them to change it". He outlined that the reluctance towards change in incumbent firms may hinder experimentation with new and innovative farming methods.

Hence, if the vineyard manager at the case firm wanted to employ a different methodology in the vineyard, the founder of Reyneke Wines would welcome this by saying "It's not binary thinking, not right or wrong, you're not sure. I'm happy with that but let's test it first on a small scale, if it is correct, we scale it to the business." (Interview A).

Even though he acknowledged the relevance of organizational routines for economies of scale, Respondent A stressed the diversity of each vineyard in their ownership by outlining that no vineyard was the same and thus needed special treatment.

Learning & Experimenting

The relevance of learning is a significant finding at the case firm. When starting the farm because he identified a business opportunity in experimenting with organically produced wine, the founder had no proper training in oenology or viticulture from an agricultural college or university. He admitted that in the beginning, "a lot went wrong" as he thought "that farming organically means not farming" (Interview A; B).

Learning from mistakes turned out to be an important factor of his knowledge accumulation. Especially the recognition that external advice was needed, leads to the social factor of learning. In Reyneke Wines' early years, the founder struggled to find expertise on organic and biodynamic farming in South Africa, as the practices were not yet widely spread. Eventually, the help from a professor at the German oenology college Geisenheim and from an expert in biodynamic farming from South Africa contributed to his learning on short-term and long-term effects of such farming practices. They also taught him on the implications on the wine firm's strategy and farm management techniques such as disease management, irrigation systems and fertilization. The founder explained that he realized there were many experienced people when looking at individual aspects, for instance for oenology expertise, financial management or logistical skills. Surrounding oneself with these more qualified people at Reyneke Wines, his role gradually turned into the one of a manager and motivator of a highly skilled team.

Another important aspect of implementing newly gained expertise in the firm's routines and practices was sharing the knowledge and forwarding it to employees and workers in the right way of communication. Reyneke Wines introduced programs and initiatives for the farm and cellar workers and sends them to wine making and cellar courses, called SKOP 1-4, but also ensures they get training in all necessary basic requirements such as having motor car and forklift licenses or courses like firefighting, first aid, working on high and confined spaces. The Operations Manager, Respondent C, trusted that these trainings made a difference in developing the employees' cognitive skills, working on their own, decision-making and leadership skills. As an effect, he saw "a more organized and happier team that works together effectively and that can handle working under high pressure situations" (Respondent C). By establishing a culture like this, the challenge of labour productivity is directly addressed.

For the operations in the cellar, Respondent B, the assistant wine maker, stated that asking questions and learning by doing was her way of improving her skills. This leads to another important factor of how to expand the set of competencies and enable innovation, namely experimentation. Through experimenting on a small scale, new activities and patterns can be

identified (Respondent A). Especially time and preservation were highlighted by the team when talking about the experience they accumulated over the years and the understanding for the different vineyards that only comes with time.

Reconfiguration & Transformation

Closely linked to experimentation is the observation of market developments and identification of trends or new practices. In order to adjust to the trend of growing demand for organic wine, a need for expansion of farmland and distribution network was identified at Reyneke Wines. In terms of reconfiguring the firm's asset structure, Reyneke Wines looked for an investor that would support the expansion which would lead to higher economies of scale (Interview A; C; J). Since changes in routines can become quite costly, Respondent A's philosophy of experimenting on a small scale is usually applied when trying out potential new practices. This mitigates the risk of affecting the business negatively. In order to minimize costs of change when converting newly acquired farmland, the case firm compensates by at least selling the fruit (Respondent B).

As organic farmers are operating under constantly changing environmental conditions and are exposed to the dynamics of nature, the ability to reconfigure helped Reyneke Wines when due to a disease in 2016, the Pinotage vineyards could not be continued to be farmed (Interview C).

POSITIONS

Technological Assets

Know-how was one of the most important assets stressed Respondent A. Especially the knowledge which comes from experience was important to him. Even though the process of obtaining certification is costly, Respondent A and C identified the certification as a specific asset that contributes to their credibility and reputation. Certification goes hand in hand with the underlying know-how and intellectual property the winery needs to have acquired in order to qualify for the certification.

Complementary Assets & Financial Assets

The complementary assets and financial assets can be one category for Reyneke Wines as both are especially provided through Reyneke's investor Vinimark. The investor's export sales agents maintain relationships with importing clients all over the world and have an infrastructure for logistical purposes, which adds the possibility of co-loading containers with other wine farms in Vinimark's distribution network. These are complementary assets that support the commercialisation of the actual product. Regarding the financial assets, Reyneke's access to funding is guaranteed over its tight collaboration with Vinimark. Still, the original farm is in possession of Johan Reyneke and a trust fund owned by the workers in order to maintain a certain degree of control (Interview C).

Locational Assets

Reyneke's entire farmland has been converted into biodynamical vineyards. As the conversion is very costly and takes a minimum of three years, the invested time and money contribute the worth of the farmland. It needs to be noted that after 20 years of its founding, Reyneke Wines is an established winery in the organic and biodynamic market in South Africa. Considering the historical entanglement of the wine industry with the birthplace of apartheid in Stellenbosch, any wine farm located in the Stellenbosch winelands is extremely embedded in this institutional environment and historical ties. The value of a farm inherited in this geographic location cannot only be seen as a valuable resource, it is also highly difficult to access for outsiders and it carries both heritage but also responsibility (Interview A).

The climate conditions also play a role in assessing the opportunities of farming organically. Respondent G, wine maker at a wine farm in the Constantia Winelands in Cape Town, explained that converting to organic production would not be an option for their farm as the climatic conditions in the area would not allow farming without any chemicals (Interview G).

PATHS

Path Dependencies

The path dependencies that evolved at Reyneke Wines were described through the example of the founder expanding the vineyards from a quarter of a hectare to almost 120 hectares within 22 years (Interview A). According to the Operations Manager, the sales in 2019 have grown by

80% compared to 2018 (Interview C). In 2019, the new farm, which had been in conversion since 2015, was finally ready to be used. Respondent B explained that due to the drought South Africa experienced in the past three years, the quantity of the grapes and consequently the yields had gone down. For this, the new vineyards were going to compensate by providing more quantity. Through the investor, new paths emerged as the distribution strategy for overseas sales benefits significantly from the partnership. Future opportunities lie in the growth of the organic wine niche domestically and globally.

Technological Opportunities

Constant learning about innovation and improvements of farming and fermentation processes, as well as investing in oenology graduates from the established universities helps Reyneke Wines to keep track with technical developments. Forming informal study groups, visiting each other's farms and discussing problems further creates a conducive environment for obtaining information on trends and developments (Respondent A).

5.3.2) Environmental Competencies

The interviews with the assistant wine maker and the founder and viticulturalist gave profound insight into the winery's application of knowledge. It emerged that the most significant competencies were related to building knowledge on the environmental aspects of farming. To Respondent A, the most important asset to organic farming was having a strategy that allows to find a balance between farming with vines and with soils. The philosophy was to have the least impact on the environment (Interview A; B). At the centre of this philosophy was "to work with nature and not against it" as Respondent B stated.

Soil Management

Changing conditions due to climate change pose major challenges to farming competencies. The wine region around Stellenbosch registered a considerable increase in the annual maximum temperature of 1.7°C. Constant temperature increase and diminished rainfall affect the soil and consequently impact the varieties of grapes that can be planted under the new conditions (Interview J). Respondent A highlighted the importance of maintaining the right humus content in the soil and pointed out that South Africa has a rather acidic low ph soil. "People using

inorganic fertilizers, all of these other chemicals just make it more acidic and more compact". In order to build the soil, organic matter is used to inoculate the soil with beneficial microbes. Through this, the soil becomes soft and loose and the water retainability improves. As an example, the assistant wine maker noted that in 2017, during heavy rainfalls, the water at Reyneke's vineyards was absorbed into the soil, while on neighbouring conventional farms the soil was too dry to soak in the water (Interview B). However, not finding the right balance of nitrogen in the soil can lead to tremendous plummets in yields. Thus, maintaining the right soil content is highly challenging (Interview A).

Water Management

The recent three-year drought and water scarcity have resulted in decreasing yields and loss in farmland, thus sustainable water management is crucial (Interview K). As the biodynamic farming philosophy aims for self-sufficiency and reducing external inputs, water management and recycling thereof are important components as well. Respondent B stated that "in general, we use a lot less water than conventional farms, we use around a third of water."

Waste Management

An important component of waste management in organic and biodynamic farming is compost. The waste that originates from grapes in the cellar, such as the stems and the skins, is fed to the 53 cows on the farm and in turn, the manure is given to the vineyards again. Eventually, the waste is turned into self-made fertilizer for the vines (Interview A; B).

Disease Control

As explained by the assistant wine maker, while "conventional farms make use of herbicides and pesticides and fungicides" to protect the vines in the vineyards, these sorts of chemicals are not allowed in organic farming. In organic and biodynamic farming only a small amount of spraying copper or Sulphur is allowed, which eventually washes off when it is raining. According to the assistant wine maker of Reyneke, this makes disease control more challenging (Interview B).

Cellar Management

"In biodynamics you are very limited in what you can do with your wine". Respondent B explained that, for instance, they cannot inoculate with organic yeast, as this would mean the wine loses the biodynamic status. The use of Sulphur is limited by legislation and it is much lower than for conventional wine. In all the processes they are only allowed to use sheet filters, which are cellulose based and thus a very natural product. Reyneke uses bentonite, cellulose filters and Sulphur in biodynamic wines (Respondent B). New ways of fermentation, experimenting with temperature and French oak barrels were developed which "changed wine completely" (Respondent A).

5.4) Summary: Key Findings

By structuring the findings according to the conceptual framework based on the strategy tripod, consisting of the institution-based view, the industry-based view and the resource-based view, both challenges and opportunities for the strategy of the case firm could be revealed. All three views helped uncover knowledge about the context the case firm is operating in and its strategic responses to the external circumstances.

Regarding the findings on the external dimension, the absence of government support for converting farmland to organic status as well as the unstable supply and cost of energy constitute institutional weaknesses. The lack of a domestic organic standard and an internationally recognized audit body lead to costly certification processes, which deters wineries from applying for certification. Additionally, industrial conditions do not seem to be advanced by the government in terms of support for wine exports and overseas marketing of the industry in order to strengthen South Africa's international competitiveness. Here, domestic industry associations tried to step in.

Regarding the findings on the internal dimension, learning and the ability to reconfigure and transform at the case firm turned out to be the most significant dynamic capabilities. Reyneke Wines demonstrated outstanding environmental competencies, which may help overcome climate change related challenges and may lead to reduced production costs. Moreover, the ability to identify new opportunities and to manage growth were perceived as important for the strategic considerations. Opportunities were identified in the nascent market for organic wine in South Africa with a growing awareness for sustainability among the new generation and the findings revealed that Reyneke Wines seems to refocus their sales towards a balance between sales in the domestic market and overseas markets in the future.

6) Discussion

This chapter draws on the knowledge on the background of the South African wine industry, obtained in Chapter 4, as well as on the empirical findings on the case study presented in Chapter 5. While the analysis in Chapter 5 revealed the main findings from the conceptual framework regarding the external and internal environment of the case firm, Chapter 6 discusses the interplay of the implications from the institution-based view, the industry-based view and the resource-based view on the case firm's strategic options for competing on both local and global scale (Saunders et al., 2016). It further identifies how the firm's strategic responses to the external and internal factors are based on environmental competencies in order to answer the research question.

6.1) Implications from the External Dimension: Industry & Institutions

The company in question is an established, experienced player that has built up a solid position in the market for over 20 years. Domestically, it holds a pioneer status for being the oldest and largest organic and biodynamic wine producer in South Africa (Interview B). To date, it has had a focus on export markets due to the strong domestic competition among the large number of wine producers. Yet, it finds itself coming from a home market that is a rather new player on the international field of wine production, which has yet to establish its reputation overseas.

Especially the institution-based view and the industry-based view revealed insights on the challenges and opportunities of both exporting to the global wine market but also building on the growing domestic wine market, which will be discussed in the following in order to identify the case firm's strategic options and responses.

The literature on the global wine industry and the interview data suggest that competition in the international wine market is extremely fierce. Having a potential to compete internationally depends on industry conditions like market access and entry barriers (Porter, 2008), but the institutional context (Peng et al., 2008) also plays a role as tariffs, non-tariff barriers, free trade agreements and private certification requirements determine such entry barriers.

Non-tariff barriers such as domestic regulations on the import of organic wine play a role in Scott's (1995) regulatory pillar. The difference of regulations for organic wine production for instance between the US and the EU forces wineries like Reyneke to either certify to both standards or refrain from labelling the product as organic in one of the markets.

A disadvantage for South African organic wineries on the international playing field is that there seem to be weaknesses on the regulatory institutional pillar such as a lack of government support regarding export agreements, an established domestic organic standard and facilitating policies for organic farmers (UNEP, 2016).

Even though South Africa has a trade agreement with its key market EU, the European Union also entered free trade agreements with other trading partners like the US or China, which pose further disadvantages to South Africa's position in accessing the export market profitably (Mariani & Pomarici, 2019; Vink, 2019).

Respondent J expressed that South African wineries find themselves competing against more developed highly subsidized wine industries, which affects South Africa's international competitiveness (Vink, 2019). While South African wineries like Reyneke depend on private investors, as identified from the findings on the resource-based view, international competitors may be government-supported in their conversion to organic farming practices. Since no active government policy for this has been finalised in South Africa, organic wineries carry the whole risk of yield losses on their own shoulders, which deters many from entering the organic market (UNEP, 2016; Interview K).

As outlined before, only about half of the wineries break even or achieve profit about 5% over the bottom line (Steyn, 2019). Without economic sustainability, conversion to organic production and competing against the other international organic wine producers who produce on much higher scale seems highly challenging.

The competition is amplified through the pressures for international certification and accreditation, identified through Scott's (1995) normative pillar, which also constitute high entry barriers to many wine importing countries (Porter, 1980).

Since there is no internationally recognized national organic standard or audit body in South Africa, valuable resources such as managerial time and costs (Barney, 1991), need to be spent on several audits per year, conducted by international agencies, in order to obtain all the relevant certifications for exporting (Kelly & Metelerkamp, 2015). The findings revealed that many South African wineries therefore produce organically, but do not hold the certification (Interview E; J).

The return on investment of the audits also depends on the exchange rate to Dollar or Euro and a stable economy supported by a stable political environment. South Africa's current rating at junk status does not facilitate here (Interview A; Cronje, 2020).

The plethora of standards that has emerged can be questioned as more hindering than facilitating international market access for a South African firm like Reyneke Wines, considering that Northern consumer pressures may require social sustainability certifications such as Fairtrade on top of the organic and biodynamic certification (McEwan & Bek, 2009).

Domestic industry associations emerging from the private sector have tried to compensate for the lack of a government regulated organic standard. With the creation of own certifications such as WIETA and IPW, which are less costly than the international certifications, the associations try to promote and facilitate coherence in practices regarding social and environmental sustainability within the industry. Thus, institutional support arises in form of industry associations instead of the government. However, the proliferation of numerous organisations with different goals led to the fact that the associations do not contribute as much as desired to the improvement of the state of the industry and its actors' profitability overseas. In fact, the fragmentation of associations created another complex environment for voluntary domestic standards and certifications like WIETA and IPW, which have not merged their audits to date as Respondent J pointed out.

On top of that, South Africa's poorly managed infrastructure puts wineries under additional strain. The lack of infrastructural support in electricity and water supply constitutes institutional voids. In total, Mair & Marti's (2009) definition of institutional voids as "situations where institutional arrangements that support markets are absent, weak or fail to accomplish the role expected of them" (p.422) applies to the South African government's weak support for the wine industry.

All these challenges give reason to look at the South African domestic market for organic wine as a second mainstay.

Regarding the institutional voids, all competing wine producers are likely to struggle with the same infrastructural problems. Barriers to funding or capability building, however, reveal who develops an advantage to overcome the institutional voids better, which shows a linkage between the institutional environment and the firm's response based on resources and capabilities (see Chapter 6.2). Reyneke Wines' philosophy of self-sufficiency, for instance, brings many advantages regarding the limited need for sourcing of globally traded fertilizers and it leads to cost savings regarding water and inputs.

Compared to the findings on the international competitive environment, the findings on the domestic competition revealed that among organic wine producers, a certain kind of collusion

or cooperation exists (Interview A; E; K). This may be a result of the lack of institutional support for organic farmers, who support each other instead in exchanging knowledge.

However, in the domestic industry, the findings show that entry barriers to organic production seem to be quite high. Especially organic production entails high risks that many incumbent conventional wine producers are not willing to take. The low yields in the beginning, the long conversion period and the costs of certifying may prohibit many potential entrants to actually enter the organic market officially. The case firm can therefore leverage its current position through expanding the organic and biodynamic certified vineyards (Respondent A).

On Scott's (1995) normative pillar within the domestic market, the relevance of internationally accredited certification schemes does not seem as high for the domestic retailers compared to the international importers and retailers (Interview F). Since a fee needs to be paid for each bottle sold with the Demeter logo, not being dependent on carrying the certification on each bottle but being able to sell the wine at a premium price because of the own reputation, a focus on the domestic market would offer opportunities to become less dependent on the international certification for Reyneke.

When looking at the domestic market, the findings showed that opportunities arise from the cultural-cognitive pillar. South Africa is one of the only African countries with a considerable market for organic products and growing demand (Kelly & Metelerkamp, 2015). Furthermore, the organic wine market seems to be in its beginnings and has not yet leveraged its potential. The findings revealed that especially among millennials, a growing awareness for organics has emerged (Interview B, J). Beer remains the South Africans' preferred alcoholic beverage but lately, wine consumption has been increasing due to a growing middle class (Sikuka, 2015).

The findings on buyers in South Africa revealed that Reyneke could seal a deal with three of the biggest supermarket chains. Thus, a demand for and development towards having organic products offered in the supermarkets, as identified by Kelly & Metelerkamp (2015), can be confirmed. Especially organic entry level wines sold in supermarkets may offer opportunities to attract new consumers.

On the buyer side (Porter, 1980), and the cultural-cognitive pillar (Scott, 1995), it may be stressed that a considerable market for organic wine exists overseas. This must not be neglected. However, the potential for achieving price premiums has also been debated in these markets. Also, South Africa still remains known for its bulk wine production and has yet to build a strong reputation in the bottled wine segment overseas. Considering that the generic marketing body WOSA finds itself weakly supported by the government, other wine producing countries have

an advantage in positioning themselves and building a reputation internationally (Interview J). However, the growing demand for New World and organic wine constitutes an opportunity and therefore international exports prove legitimate as a strategic goal.

In conclusion, opportunities in the global market for organic producers such as Reyneke Wines may be limited at a certain stage as they have to compete against other organic producer countries which may experience less institutional voids or have been established for a longer time. Reyneke's goal to move from 70% of exports to 50% and expand domestic sales from 30% to 50% can be seen as a consequence of an identified opportunity to diversify the end markets more and balance domestic sales and export ratio.

6.2) Responses from Internal Dimension: Environmental Competencies

This section will look deeper at the findings from the resource-based view as a leg of the strategy tripod and discuss how Reyneke's dynamic capabilities enable the development of environmental competencies and strategic responses to the external dimension.

For both export and domestic sales, firm-specific assets and capabilities are necessary (Gao et al., 2009). This research applied the adaptation of the RBV to the Dynamic Capabilities, as the external environment is characterized by several ongoing changes such as South Africa's wine industry's transition from going from a relationship-based transaction structure to a rule-based transaction structure in the last two decades as networks such as the KWV, which had determined trade before, no longer seem to be so dominant (Ponte & Ewert, 2009). Therefore, firms follow a shift from a network-based strategy towards a market-based strategy. In the latter, firms are concentrating on competitive resources and capabilities (Peng, 2003).

Teece & Pisano argue that especially in emerging markets and within contexts subject to dynamic changes, firms that possess or are able to develop dynamic capabilities are more likely to succeed (1994), because competitiveness is determined by the coherence of internal and external processes (Teece, 2000). Thus, dynamic capabilities are decisive in the matter that they determine how to profitably grow the business (Teece, 2000).

If Reyneke was to focus more on the domestic market, the external conditions would be similar for all domestic players and the heterogeneity of a firm's internal resources and capabilities gains relevance. Many respondents in the industry described the case firm as the pioneer in the market as being one of the only two certified organic and biodynamic wineries in South Africa

depicting extraordinary environmental competencies. This leads to the question, how these competencies were built.

According to Teece (2000), innovations tend to be introduced to an industry by new entrants due to their still flexible organisational processes. Reyneke entered the market as an organic producer from the beginning. In contrast to incumbent local competitors like Spier that have established purchase quantities with distributors and importers and could not afford to lose yields during a conversion to 100% organic farming (Interview A; F), Reyneke did not have to change incumbent organisational processes from conventional farming to organic farming. This is where new entrants have an advantage in their ability to innovate, as they will not experience a "mismatch […] between the organizational processes needed to support the conventional product/service and the requirement of the new" one (Teece, 2000, p.110; Gilinsky et al., 2016). However, environmental competencies emerge from a firm's resources and skills related to pro-environmental behaviour (Jeppesen & Hansen, 2004), which were scarce for Reyneke in the beginning of its operations (Interview A).

In that sense, learning constitutes one of the most important dynamic processes that enables growth (Teece, 2000). As revealed in the findings, the case firm has shown a focus on learning throughout its history. Learning from best practices and especially "learning from the best" (Smallwood & Ulrich, 2004; Teece, 2000) were among the priorities of the founder of the case firm. As Teece stressed that "history matters", the learnings from mistakes and failure led to the development of a strong set of environmental competencies at the case firm.

The ability to transform and reconfigure was stressed by Teece (2000) but also emerged as a crucial factor from the empirical data. Identifying growth opportunities from increasing demand in South Africa and abroad for organic wines and developing strategic responses to such requires questioning the status quo and considering potential changes to current processes. This also applies for identifying environmental challenges and adapting and finding responses to such. Since environmental processes tend to be highly dynamic and complex (UNEP, 2016), dynamic capabilities are indispensable for reacting adequately to environmental conditions. Changing climate conditions require adaptability, comprising a plethora of organisational processes. The ability to transform and reconfigure farming and fermenting processes due to changes in the climate and cultivars also shows the quality of a wine firm's environmental competencies and dynamic capabilities.

Regarding Reyneke's positions, ownership of its intellectual property in form of knowledge on organic and biodynamic farming is the major intangible and difficult-to-trade knowledge asset Reyneke possesses.

Especially in order to respond to the normative pressures for certifications by international importers, Reyneke has obtained the organic and biodynamic certification, which facilitates international market access. As the certifications are difficult to obtain, they constitute an intangible resource (Gilinsky et al., 2016), which is hard to imitate by local competitors. Teece (2000) notes that the difficulty of imitation of a firm's resources determines its potential and sustainability of a competitive advantage. Thus, in order to ensure credibility and fight against greenwashing practiced by some competitors not adhering to all of the regulations, the certifications are annually renewed by Reyneke. The founder of the case firm pointed out the advantages of the certifications as they protect the organic farmers in their competitiveness and legitimacy to demand slightly higher prices. Thus, the certifications are valuable from a marketing point of view (Hamman et al., 2017). On top, certification also contributes to informing the local buyers about organic products and may lead to a higher awareness among consumers in the future. Eventually, it may help overcome weaknesses concerning the customer's access to information in the product markets (Khanna & Palepu, 1997).

In comparison to their local competitors, the knowledge obtained through the certification and inspection processes further contributes to the learning and environmental competencies of Reyneke's staff. The acquired know-how necessary to be able to adhere to advanced international requirements leads to above average firm-specific capabilities. It can be derived that there is a high interdependence of dynamic capabilities of processes, positions and paths (Smallwood & Ulrich, 2004).

Especially for accessing export markets, the complementary asset of commercialisation agents in form of the investor firm Vinimark's distribution network in the export markets proved to be an important position for Reyneke (Teece, 2000). Also, in order to achieve a higher market share in the domestic market, the distribution network provided by the investor firm may contribute to the establishment of the desired reputation and market position as they enabled Reyneke to sign three of the biggest South African supermarket chains (Interview C).

6.3) Environmental Competencies' Impact on Strategic Considerations

The goal of the strategy tripod is to understand strategic options derived from the findings on the three legs of the tripod. There are several interpretations of what constitutes success or failure among the views of the strategy tripod. The industry-based view suggests that the competitiveness within an industry, among others, determines a firm's success (Porter, 1980). The resource-based view argues that the differences of a firm's organizational processes and resources towards its competitors determines its performance, while the institution-based view argues that institutional pressures shape a firm's performance (Peng et al., 2009).

Especially, the institutional and industrial analysis (Chapter 6.1) have shown that there are advantages and disadvantages for Reyneke Wines on competing on the international market but also advantages and disadvantages for competing on the domestic market. It was revealed that due to the obstacles for exporting, it may be a reasonable strategic consideration to move from a ratio of 70% exports and 30% domestic sales towards a more balanced 50/50% ratio and address the growing local market more.

By analysing the case firms's experience with reacting to external and internal factors that influence strategic considerations (Chapter 6.2), it emerged that the ability to arrive at strategic responses depends on dynamic capabilities. Such capabilities are necessary for adapting and responding to dynamic changes in the external environment. Especially organisational processes like learning and maintaining a certain degree of flexibility were relevant to navigate in an industry subject to environmental challenges and climate change. Remaining flexible and responsive also shows in the case firm's approach to strategic considerations. The ability to identify growth opportunities and to adapt to changes in consumer behaviour, such as an increasing awareness and demand for organic wine, enables them to realise that the domestic market is not leveraged yet but that there exists a growing target group. All these are strategic responses to the institutional and industrial environment.

In order to answer the research question: *How do South African wineries develop strategic responses based on environmental competencies?*, it will now be assessed, which impact environmental competencies have on the strategic considerations.

In the interviews, the case firm attributed its increased industrial performance to investments in environmental measures (Interview A; Jeppesen & Hansen, 2004). As Reyneke Wines protects its environmental competencies through certifications but also serves as a role-model to the domestic industry, hoping to attract more players in the organic market in South Africa, it can be assumed that the environmental competencies contribute to the way the firm develops

strategic responses and may even provide the firm's competitive advantage. This does not only show reactive environmental behaviour but indicates pro-active environmental engagement. The identified benefits of environmental competencies to Reyneke's performance support this argument:

Benefits of Environmental Competencies

Environmental competencies show in the ability for long-term planning and adaptability to environmental processes. Since the conversion from conventional to organic vineyards takes a minimum of three years until the farmland can be operated profitably again, a long-term strategy that considers the loss of yields for the years of conversion is important as well as a plan how to compensate for the lost harvest. In general, environmental competencies can provide several benefits and constitute the reasons for several differentiators in the industry:

Firstly, the biodynamic farming philosophy leads to a **cost advantage** in the long run. After high investments with low yields during conversion, the production costs sink due to the biodynamic self-sustaining philosophy. The profitability goes up due to healthier vineyards that do not require much input once converted. Compared to competitors, Reyneke can save costs on fertilizers, waste management and fermentation additives. This enables them to maintain competitive prices and offer different wine ranges (Interview A). This supports the notion that instead of creating costs, efforts to be environmentally sustainable can contribute to cost reduction, which leads to an optimised economic return on investment and to increased competitiveness (Gilinsky et al., 2016; Porter & van der Linde, 1995). Furthermore, a more sustainable rent emerges from the expansion. Similar to the findings of Gilinsky et al., 2016, economies of scale and consequent profitability arise from expanding the vineyards.

Secondly, the case firm's environmental competencies lead to a **differentiation** of the brand through the biodynamic and organic certifications, which are difficult to replicate or imitate by rivals due to the long and costly conversion time and certification process. Furthermore, the brand provides environmental value to the consumer (Atkin et al., 2012; Porter, 1980, Teece, 2000).

Thirdly, as Reyneke was one of the first wineries to start farming organically and biodynamically 20 years ago, they still maintain some kind of **first mover advantage** and enjoy being further down the learning curve thanks to their acquired experience in producing organically and biodynamically (Gilinsky et al., 2016; Porter & van der Linde, 1995).

Strategic Responses based on Environmental Competencies

This paper argues that under consideration of the external factors, Reyneke's environmental competencies impact the strategic considerations in that regards that they help overcome the institutional constraints for exporting by having the certifications as differentiator and a cost advantage regarding production costs due to the biodynamic philosophy of self-sufficiency. Since currently 70% of sales are targeted at export markets, the exports cannot be neglected. For the exports, a strategy is needed, which identifies in which markets the perceptions of organic wines are most mature, where market entry barriers are surmountable and competition acceptable. Moreover, it is necessary to identify which of Reyneke's ranges works best for what country's specific market (CBI, 2016; Interview C).

In order to spread the risk and leverage the potential of the domestic market, Reyneke can build on its leading position regarding environmental competencies in the domestic industry. The environmental competencies contribute in establishing a differentiated reputation and a pioneer effect. Through the production cost advantage and the investor's support, Reyneke Wines can offer three different wine ranges in their product portfolio, so different consumers and price segments can be tackled. Producing entry level wines that are fully organic brings a more affordable wine to the supermarkets at competitive prices. This may contribute to a change in the cultural-cognitive institutional pillar as sustainability awareness and the product category of organic wines may become more accessible to a broader customer base.

In conclusion, the strategy tripod allowed to consider relevant factors that affect a developing country winery and provided insights on how different views on strategic management and strategy formulation play together. It furthermore revealed the importance of dynamic capabilities in order to overcome challenges from the external and internal context and identify growth opportunities. Here, strategic considerations for the sales strategy could be derived but also the impact of specific resources like environmental competencies received attention. One may not be able to argue that the firm is pursuing a fully resource-based strategy "by which the firm can outperform the average competitor by being green alone" (Rugman & Verbeke, 1998, p. 825), as it still highly depends on the financial backing from the investor (Interview A; J). Nevertheless, it can be concluded that the environmental competencies Reyneke Wines built play a significant role for the strategic responses it develops for adapting to its environment.

The analysis of the case study gave profound knowledge on the particular case of an industry leader. However, since this study is rooted in pragmatism, obtained knowledge should be applicable to future cases. The research thus provided an assessment of the industrial conditions

and institutional context that all South African wineries, which incorporate pro-environmental practices, are facing and the researcher also included the experiences of such wineries in the data collection process. The following section will reflect on the way, results were achieved in this study and will assess the suitability of the applied conceptual framework and methodology.

6.4) Reflections on the Conceptual Framework & Methodology

This study is rooted in the pragmatic philosophy of science. This implies that both the methodological choices as well as the theoretical framework need to be evaluated in their usefulness to answering the research question. This last section aims at reflecting on the theory and methods applied for the collection of empirical data in their coherence and suitability.

The strategy tripod provided the theoretical foundation for this research. This tool helped gain comprehensive insights in the factors that influence strategy formulation in an emerging market context. However, it was necessary to support the strategy tripod with further concepts such as Teece's *Dynamic Capabilities*, Porter's *Five Forces* and Scott's *Three Institutional Pillars*, since the strategy tripod proved to be lacking in-depth analytical tools. When assessing these categories, several reflections need to be stressed.

Regarding the choice of Teece's *Dynamic Capabilities*, the concept proved to be applicable in industrialized as well as newly industrializing countries. The concept was helpful in identifying reactions to a dynamic environment however, it can also be questioned as it did not particularly enable the in-depth analysis of environmental competencies.

The application of Scott's *Three Institutional Pillars* allowed a well-suited categorization of institutional pressures. The categories are closely linked and influence each other. However, also this concept posed challenges. Due to the interdependence of the categories, it proved difficult to distinguish between the regulatory and normative pillar regarding the impact of certifications and regulations in the wine industry. Moreover, the normative pillar seems to be based on a rather Western understanding of norms like the concept of certifications.

Porter's *Five Forces* had to be applied on the domestic as well as on the global level, which posed a challenge.

The conceptual framework can be criticized for the plethora of categories that arose, which led to overlaps and repetitions in the content of the categories. However, this also shows the linkages of the three integrated views (institution-based, industry-based and resource-based view) and the necessity of considering all. Therefore, the framework proved to be well-suited

as it contributed to a comprehensive understanding of the interconnectedness of the tripod legs. Nevertheless, for researching environmental sustainability, the environment itself as influencing factor on the firm strategy did not receive close attention in this framework.

Besides the strategy tripod, there are competing ways of analysing sustainability concerns in an industry. Other approaches would have brought up different insights. For instance, a global value chain approach would have focused more on governance and the role of imposed standards for wine exports, or a focus on institutional theory could have provided deeper understandings of institutional voids. Nevertheless, for developing answers to the specific research question of this paper, the chosen conceptual framework proved to be a useful choice, especially due to the linkages of the three incorporated views on strategic management. It could also be applied for the analysis of a firm's development of strategic responses in another industry concerned with environmental sustainability, which would obviously generate different data, but the framework would still constitute a holistic analytical tool.

Regarding the choice of methods for generating scientific knowledge, a qualitative single-case study design was chosen, based on the Pragmatist philosophy of science. The epistemological conceptions of knowledge in Pragmatism imply that knowledge should be valued depending on its practical relevance and recommends case studies as they provide in-depth examples of processes and actions.

Case studies entail many challenges. Due to a lack of official statistics, a problem with the case selection emerged, as wine farms which produce organically, but without certification, were not considered in the population of organic wineries. In general, limited data is available on the development of the organic market in South Africa because it is still a new phenomenon. The abductive research approach helped overcome previous assumptions and enabled the revision of the research focus towards the most relevant research areas and the selection of a suitable and relevant case firm.

The purpose of working with a case study was to understand the concepts of environmental competency building and strategy formulation in the South African wine industry in-depth, through which certain complexities could be revealed. The case of Reyneke Wines is unique, however certain causalities and dynamics can be deduced from the case firm, which may also apply to other South African wineries.

The empirical data was mainly generated from interviews with the case firm and other relevant industry actors, supported by audit material and field observations. The qualitative data

collection was appropriate as it allowed to generate knowledge on the experiences of organic wine makers with environmental competency building and strategy formulation.

By providing transparency to the process and access to the raw data, the reliability of the findings is supported. In pragmatism, validity arises through the usefulness of generated knowledge to the research purpose (Antoft & Houlberg Salomonsen, 2007).

The case study enabled to uncover data on the context of the specific case such as external factors like industrial conditions and institutional voids but it also allowed going in-depth into the organizational context. Nevertheless, the focus of the empirical data lay on the organizational side. Thus, for instance data regarding the development of consumer preferences in South Africa were not collected due to the time and scope of this study, however this could have contributed to the analysis of the opportunities in the domestic market.

Overall, the research succeeded in gathering relevant empirical data and new insights. The chosen theoretical knowledge enhanced the empirical understanding of the given case. Hence, the research question could be answered and further conclusions were drawn. In accordance with pragmatism, the findings of the case study might be applicable to future practice.

Implications for Future Research

The market development for organics will reveal whether organic wine will remain a niche. Space and scope of this thesis were limited, and thus, consumer preferences were not explored in-depth in the interviews, which were mainly conducted with producers instead of consumers. A suggestion for future research addresses the identified research gap on South African consumer preferences of organic foods, especially wine in order to predict how the product category will perform in the future. Furthermore, there is a lack of statistical records on organics in South Africa in general. It would be interesting to investigate which impact a government policy for organics could have on the development of the wine sector in the future.

7) Conclusion

This thesis intended to contribute to the literature on integrating environmental sustainability in developing country wineries' strategies. Even though it is not possible to generalise to all developing country wineries from this study, the findings from this research should not be neglected. Concluding from the applied strategy tripod approach, this thesis supports the notion that it is necessary to understand internal and external factors for creating strategic responses.

For the external dimension, it was necessary to identify the trends and competitiveness in both the global and the domestic industry as well as the conditions the institutional environment evokes. For the South African case firm, external challenges included a lack of a legislative framework regarding facilitating policies for a domestic organic standard, an internationally recognized audit body, consequent high costs for certifications, fierce competition in the wine industry domestically and internationally, challenging infrastructure in South Africa and limited awareness about organic wine production in the consumer base.

By looking at internal factors however, it emerged that the case firm identified opportunities for itself, an ability which is most likely a consequence of its dynamic capabilities, which enable a firm to respond and to compete in a developing environment. Opportunities arose from considering a balance of the export and domestic sales strategy in order to leverage the potential of the domestic wine market, which shoes growing awareness about organically produced food and wine among producers, retailers and consumers.

Through basing the winery's strategy on distinct environmentally friendly farming practices like organic and biodynamic farming, Reyneke created its reputation, differentiated on the market domestically and overseas through obtaining certifications and furthermore experienced a cost advantage from the self-sufficient farming philosophy in the long run. These environmental competencies have been identified as a driving force for competitiveness.

In conclusion, in an agriculture-based and highly competitive industry like the wine industry, a clear business case for environmental sustainability may provide a competitive advantage. Even though organic or biodynamic wine may remain a niche market, currently the global trend promises growth of organic wine. Thus, it may continue to create opportunities for wineries, which want to offer a product that was produced with environmental responsibility.

Bibliography

Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (2019). Introduction. In Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (Ed.), *The Palgrave Handbook of Wine Industry Economics* (pp.1-15). Palgrave Macmillan. Doi: 10.1007/978-3-319-98633-3

Anderson, K. & Pinilla, V. (with the assistance of A. J. Holmes). (2017). Annual database of global wine markets, 1835 to 2015, freely available in Excel at the University of Adelaide's Wine Economics Research Centre. www.adelaide.edu.au/wine-econ/databases.

Antoft, R. & Houlberg Salomonsen, H. (2007). Studying Organizations by a pragmatic Research Design: the case of qualitative case study designs. Paper presented at European Group of Organization Studies "Beyond Waltz - Dances of Individuals and Organizations", Austria.

Arthur, R. (2018, August 8). Organic, natural, biodynamic… What next for wine? Beveragedaily. https://www.beveragedaily.com/Article/2018/08/08/Organic-natural-biodynamic-What-next-for-wine

Arthur, R. (2019, February 8). Organic wine market continues to grow. Beveragedaily. https://www.beveragedaily.com/Article/2019/02/08/Organic-wine-market-continues-to-grow

Atkin, T., Gilinsky, A. & Newton, S. K. (2012). Environmental strategy: Does it lead to competitive advantage in the US wine industry? *International Journal of Wine Business Research*, 24(2), 115-133. Doi: 10.1108/17511061211238911

Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.

Barney, J.B., (1997). Gaining and sustaining competitive advantage, Reading, MA: Addison-Wesley.

Berghoef, N. & Dodds, R. (2011). Potential for sustainability eco-labeling in Ontario's wine industry. *International Journal of Wine Business Research*, 23(4), 298-317. https://doi-org.esc-web.lib.cbs.dk:8443/10.1108/17511061111186488

Binns, T. (2006). Doing Fieldwork in Developing Countries: Planning and Logistics. In Desai, V. and Potter, R.B. (eds.) *Doing Development Research (*pp. 34-43). Sage Publications.

Bolwig, S., Ponte, S., du Toit, A., Riisgaard, L. & Halberg, N. (2010). Integrating Poverty and Environmental Concerns into Value-Chain Analysis: A Conceptual Framework. *Development Policy Review*. 28(2), 173-194. DOI: 10.1111/j.1467-7679.2010.00481.x

Bonn, I. & Fisher, J. (2011). Sustainability: the missing ingredient in strategy. *Journal of Business Strategy*, 32(1), 5-14. Doi: 10.1108/02756661111100274

Brandl, T. (2013). Organic Wine Boom continues. Prowein. https://www.prowein.com/en/Magazine/All_articles/Organic_wine_boom_continues

Brugarolas, M., Martinez-Carrasco, L., Martinez-Poveda, A., & Rico, M., (2005). Determination of the surplus that consumers are willing to pay for an organic wine. *Spanish Journal of Agricultural Research*, 3(1), 43-51.

Brydon, L. (2006). Ethical Practices in Doing Development Research. In Desai, V. and Potter, R.B. (eds.) *Doing Development Research* (pp. 25-33). Sage Publications.

Busenitz, L.W., Gómez, C. & Spencer, J.W. (2000). Country Institutional Profiles: Unlocking Entrepreneurial Phenomena. *The Academy of Management Journal*, 43(5), 994-1003.

CBI, Ministry of Foreign Affairs. (2016). CBI Product Factsheet: Sustainable wine in Europe. https://www.cbi.eu/market-information/wine/sustainable-wine/

CBI, Ministry of Foreign Affairs. (2014). CBI Product Factsheet: Organic wine in Europe. https://www.cbi.eu/sites/default/files/market_information/researches/product-factsheet-organic-wine-europe-wine-2013.pdf

Cholette, S. & Castaldi, R. (2005). The globalization of the wine industry: Implications for old and new world producers.

Christ, K. & Burritt, R. (2013). Critical environmental concerns in wine production: An integrative review. *Journal of Cleaner Production*, 53, 232-242. doi: 10.1016/j.jclepro.2013.04.007

Compés Lopez, R. (2019). International Wine Organizations and Plurilateral Agreements: Harmonization Versus Mutual Recognition of Standards. In Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (Ed.), *The Palgrave Handbook of Wine Industry Economics* (pp. 253-264). Palgrave Macmillan. DOI: 10.1007/978-3-319-98633-3

Corsinovi, P. & Gaeta, D. (2019). Introduction: regulations in the wine sector. In Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (Ed.), *The Palgrave Handbook of Wine Industry Economics* (pp. 249-252). Palgrave Macmillan.DOI: 10.1007/978-3-319-98633-3

Cronje, J. (2020, March 27). Moody's cut South Africa's credit ranking to junk. Fin24. https://www.fin24.com/Economy/just-in-moodys-cuts-south-africas-credit-rating-to-junk-20200327

De la Hamaide, S. & Denis, P. (2018, November 23). Organic wine market growing fast but to remain niche: study. *Reuters*. https://www.reuters.com/article/us-wine-organic/organic-wine-market-growing-fast-but-to-remain-niche-study-idUSKCN1NS149

Demeter. (n.d.). Biodynamisches. Demeter. https://www.demeter.de/biodynamisches

Diva. (2017). Overview of the organic wine market. Divawine. https://divawine.com/overview-organic-market/

Dodds, R. Graci, S., Ko, S. & Walker, L., (2013). What drives environmental sustainability in the New Zealand wine industry? An examination of driving factors and practices. *International Journal of Wine Business Research*, 25(3), 164-184.

Dubois, A. & Gadde, E. (2002). Systematic combining: an abductive approach to case

research. *Journal of Business Research,* 55, 553– 560.

Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management,* 39(1), 118-128.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532-550.

Elkjaer, B. & Simpson, B. (2011). Pragmatism: A lived and living philosophy. What can it offer to contemporary organization theory? in H. Tsoukas and R. Chia (Eds) *Philosophy and Organization Theory* (pp. 55–84). Bradford: Emerald Publishing.

Fearne, A., Soosay, C, Stringer, R. et al., (2009). Sustainable value chain analysis: a case study of South Australian wine. Project report.

Flint, D.J. & Golicic, S.L. (2009). Searching for competitive advantage through sustainability: A qualitative study in the New Zealand wine industry. *International Journal of Physical Distribution & Logistics Management*, 39(10), 841-860. https://doi-org.esc-web.lib.cbs.dk:8443/10.1108/09600030911011441

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2), 219-245. DOI: 10.1177/1077800405284363.

Forbes, S.L., Cohen, D. A., Cullen, R., Wratten, S.D. & Fountain, J. (2009). Consumer attitudes regarding environmentally sustainable wine: an exploratory study of the New Zealand marketplace. *Journal of Cleaner Production*, 17, 1195–1199.

French, P. (2019 December 11). Global Organic Wine Consumption to hit one billion bottles by 2023. The Drinks Business. https://www.thedrinksbusiness.com/2019/12/global-organic-wine-consumption-to-hit-one-billion-bottles-by-2023/

Friel, D. (2017). Understanding Institutions: different paradigms, different conclusions. Revista de Administracao, Vol. 52, 212-214.

Gabreski, L. (2018, February 14). Using South Africa's Wine Industry as a Paradigm for Sustainable Policy. *Cornell Policy Review*. http://www.cornellpolicyreview.com/using-south-africas-wine-industry-paradigm-sustainable-policy/

Gabzdylova, B., Raffensberger, J. & Catska, P. (2009). Sustainability in the New Zealand wine industry: drivers, stakeholders and practices. *Journal of Cleaner Production*. 17(11), 992-998. Doi: 10.1016/j.jclepro.2009.02.015

Gao, G.Y., Murray, J.Y., Kotabe, M. & Lu, J. (2010). A "strategy tripod" perspective on export behaviors: Evidence from domestic and foreign firms based in an emerging economy. *Journal of International Business Studies*, 41 (3), 377-396.

Gibbs, G. R. (2012). Analyzing Qualitative Data. London: Sage Publications Ltd.

Gilinsky, A., Newton, S. & Vega, R. (2016). Sustainability in the global wine industry: Concepts and cases. *Agriculture and Agricultural Science Procedia*, 8, 37-49. doi: 10.1016/j.aaspro.2016.02.006

Gouldner, A.W. (1970) The Coming Crisis of Western Sociology. New York: Basic Books.

Hamann, R., Smith, J., Tashman, P. & Scott Marshall, R. (2015). Why Do SMEs Go Green? An Analysis of Wine Firms in South Africa. *Business & Society*. 56(1), 23–56. DOI: 10.1177/0007650315575106

Hart, S.L. (1995). A natural resource-based view of the firm. *Academy of Management Review*, 20(4), 986–1014.

Hoskisson, R.E., Eden, L., Lau, C. & Wright, M. (2000). Strategy in Emerging Economies. *Academy of Management Journal.* 43(3), 249-267.

Humbert, F. & Polotzek, L. (2017). Sold Cheaply and Paid Dearly: The power of German supermarket chains and women's working conditions on wine and grape farms in South Africa. Oxfam Deutschland.

IPW. (2018). Integrated Production of Wine. Guidelines for Farms. http://www.ipw.co.za/content/guidelines/IPW%20Guidelines%20for%20the%20Farm%20Aug%202018%20DS.pdf

James, T. (2019, February 18). Tim James: How much wine does SA import and are there any bargains to be had? Winemag. https://winemag.co.za/wine/opinion/tim-james-how-much-wine-does-sa-import-and-are-there-any-bargains-to-be-had/

Jansen van Vuuren, L. (2018, September 10). Your Guide to sustainable wine farms in South Africa. https://www.visitwinelands.co.za/blog/2018/your-guide-to-sustainable-wine-farms-in-south-africa

Jeppesen, S. & Hansen, M. (2004). Environmental upgrading of third world enterprises through linkages to transnational corporations. Theoretical perspectives and preliminary evidence. *Business Strategy and the Environment.* 13(4), 261-274. Doi: 10.1002/bse.410

Kasper-Claridge, M. (2019, September 18). South Africa's winegrowers struggle against droughts and low prices. *Deutsche Welle.* https://www.dw.com/en/south-africas-winegrowers-struggle-against-droughts-and-low-prices/a-50469363

Kelemen, M. & Rumens, N. (2008). An Introduction to Critical Management Research. London: Sage Publications.

Kelly, C. & Metelerkamp, L. (2015). Smallholder Farmers and Organic Agriculture in South Africa. A Literature review commissioned by the Southern Africa Food Lab and funded by GIZ.

Khanna, T. & Palepu, K. (1997). Why Focused Strategies May be Wrong for Emerging Markets. *Harvard Business Review*, 75(4), 41-51.

Knowles, L. & Hill, R. (2001). Environmental Initiatives in South African Wineries: a comparison between small and large wineries. *Eco-Management & Auditing*, 8(4), 210-228.

Kriel, G. (2019, April 29). South African wine industry invests in its people. Wineland. https://www.wineland.co.za/south-african-wine-industry-invests-in-its-people/

Kruger, S., du Toit, A. & Ponte, S. (2008). Deracializing exploitation? 'Black Economic Empowerment' in the South African wine industry. *Journal of Agrarian Change*, 8(1), 6-32.

Mair, J. & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24, 419-435.

Mariani, A. & Pomarici, E. (2019). Barriers to Wine Trade. In Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (Ed.*), The Palgrave Handbook of Wine Industry Economics* (pp.291-315). Palgrave Macmillan. DOI: 10.1007/978-3-319-98633-3

Marshall, R.S., Cordano, M. & Silverman, M. (2005). Exploring individual and institutional drivers of proactive environmentalism in the US wine industry. *Business Strategy and the Environment,* 14(2), 92-109. Doi: 10.1002/bse.433

Marshall, R.S., Akoorie, M.E.M., Hamann, R. & Sinha, P. (2010). Environmental practices in the wine industry: an empirical application of the theory of reasoned action and stakeholder theory in the United States and New Zealand. *Journal of World Business,* 45, 405-414.

Maxwell, J.A. & Chmiel, M. (2014). Generalization in and from Qualitative Analysis. In: *The SAGE Handbook of Qualitative Data Analysis* (pp. 540-553). London: Sage Publications Ltd.

Mayoux, L. (2006). Quantitative, Qualitative or Participatory? Which Method, for What and When? In Desai, V. and Potter, R.B. (eds.) *Doing Development Research* (pp.115-129). Sage Publications.

McEwan, C. & Bek, D. (2009). The political economy of alternative trade: Social and environmental certification in the South African wine industry. *Journal of Rural Studies*, 25(3), 255–266. Doi: 10.1016/j.jrurstud.2009.0

Meyer, K.E. & Peng, M.W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(1), 3-22. DOI: 10.1057/jibs.2015.34

Mills, A.J., Durepos, G. & Wiebe, E. (2010). *Encyclopedia of Case Study Research*. Thousand Oaks: SAGE Publications

North, D. C. (1990). Institutions, Institutional Change and Economic Performance (Political Economy of Institutions and Decisions). Cambridge: Cambridge University Press. Doi: 10.1017/CBO9780511808678

Novaes Zilber, S., Friel, D. & Felipe Machado do Nascimento, L. (2010). Organic wine production: the case of Bodega Colomé in Argentina. *International Journal of Wine Business Research*, 22(2), 164-177. Doi: 10.1108/17511061011061720

OEC. (2019). Country Profile. https://oec.world/en/profile/country/zaf/

OIV. (2015). Code Sheet – Issue 2015/01

OIV. (2019a). 2019 Statistical Report on World Vitiviniculture.

OIV. (2019b). State of the Vitiviniculture World Market - State of the sector in 2018. April 2019.

Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16, 145- 179.

Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*. 18(9), 697-713. DOI: 10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C

Pellechia, T. (2019, April 16). A recent report takes a look at the global future for organic wine. *Forbes*. https://www.forbes.com/sites/thomaspellechia/2019/04/16/a-recent-report-takes-a-look-at-the-global-future-for-organic-wine/

Pearce, J. A. & Robinson (2011). Strategic Management: Formulation, Implementation, and Control. McGraw-Hill Irwin.

Peng, M.W. (2003). Institutional Transitions and Strategic Choices. *Academy of Management Review*, 28(2), 275-296. DOI: 10.5465/AMR.2003.9416341

Peng, M.W., Wang, D. & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920-936. DOI: 10.1057/palgrave.jibs.8400377.

Peng, M.W., Li Sun, S., Pinkham, B. & Chen, H. (2009). The Institution-Based View as a Third Leg for a Strategy Tripod. *Academy of Management Perspectives,* 23(3), 63-81. *DOI: 10.5465/AMP.2009.43479264*

Platter's. (2020). 2020 South African Wine Guide.

Ponte, S. (2007). Governance in the Value Chain for South African Wine. Working Paper. Danish Institute for International Studies.

Ponte, S. (2009). Governing Through Quality: Conventions and Supply Relations in the Value Chain for South African Wine. *European Society for Rural Sociology. Sociologia Ruralis.* 49(3), 236-257. Doi: 10.1111/j.1467-9523.2009.00484.x

Ponte, S. & Ewert, J. (2007). South African Wine. An Industry in Ferment. Tralac Working Paper No. 8. Available: www.tralac.org

Ponte, S. & Ewert, J. (2009). Which Way is "Up" in Upgrading? Trajectories of Change in the Value Chain for South African Wine. *World Development*, 37(10), 1637-1650. Doi: 10.1016/j.worlddev.2009.03.008

Ponte, S. & Gibbon, P. (2005). Quality standards, conventions and the governance of global value chains. *Economy & Society*, 34(1), 1-31. Doi: 10.1080/0308514042000329315

Ponte, S. (2018). Green Capital, Brown Environments - Business, Power and Sustainability in a World of GVCs. (Unpublished).

Porter, M.E. (1980). Competitive Strategy, Free Press, New York, 1980. /1997

Porter, M.E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard Business Review*, January 2008.

Porter, M.E. & van der Linde, C. (1995). Toward a New Conception of the Environment-Competitiveness Relationship. *Journal of Economic Perspectives*, 9(4), 97-118.

PWC. (2015). The South African Wine Industry – Insights Survey 2015. https://www.pwc.co.za/wine-insights-survey

Reichertz, J. (2014). Induction, Deduction, Abduction. In: *The SAGE Handbook of Qualitative Data Analysi*s (pp.123-135). London: Sage Publications Ltd.

Reyneke. (n.d.). Certifications. https://www.reynekewines.co.za/pages/certification.php

Reyneke. (2019). Vinimark Trading Export Sales Reports 2019. (Available on request).

Rodrigues, C.T. (2011). The method of scientific discovery in Peirce's philosophy: Deduction, induction, and abduction. *Logica Universalis*, 5(1), 127-164.

Rosenthal Duminy, H.N. (2004). Modern Ecological Wine Grape Production in South Africa. Dissertation. Cape Wine Masters Diploma.

Rugman, A.M. & Verbeke, A. 1998. Corporate strategy and international environmental policy. *Journal of International Business Studies*, 29(4), 819–834.

Santini, C., Cavicchi, A. & Casini, L. (2013). Sustainability in the wine industry: key questions and research trends. *Agricultural and Food Economics*, 1(9). doi: 10.1186/2193-7532-1-9.

SAOSO. (2020). SAOSO Call to Action – Draft Organic Policy and Draft Agroecology Strategy. https://www.saoso.org/call-to-action

Saunders, M., Lewis, P. & Thornhill, A. (2016). Research methods for business students. Pearson Education Limited.

SAWIS. (2018). South African Wine Industry 2018 Statistics Nr. 43. SAWIS. http://sawis.co.za/info/download/Book_2018_statistics_year_english_final.pdf

SAWIS. (2019). South African Export Report 2019.

Scott, R.W. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, pp. 493-511.

Scott, R.W. (1995). Institutions and Organizations. Ideas, Interests and Identities. Sage.

Scott, R.W. (2014). Institutions and Organizations. Ideas, Interests and Identities. 4th

Edition. Sage.

Sharma, S. & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729-753.

Shenkar, O., & von Glinow, M. A. (1994). Paradoxes of organizational theory and research: Using the case of China to illustrate national contingency. *Management Science*, 40, 56-71.

Sikuka, W. (2015). The South African Wine Industry: Production, Consumption and Trade. USDA. Foreign Agriculture Service.

Silverman, M., Marshall, R.S. & Cordano, M., (2005). The greening of the California wine industry: implications for regulators and industry associations. *Journal of Wine Research*, 16(2),151-169.

Smallwood, N. & Ulrich, D. (2004). Capitalizing on Capabilities. *Harvard Business Review*. 82(6), 119-27, https://hbr.org/2004/06/capitalizing-on-capabilities

Smith, M. (n.d.). Biodynamic Wine producers. Biodynamic and Organic Wine South Africa. https://biodynamicorganicwine.co.za/biodynamic-producers/

Smith, M. (n.d.). Organic wine producers. Biodynamic and Organic Wine South Africa. https://biodynamicorganicwine.co.za/wine-producers/

Spice Route. (2019, April 4). Back to the Future – Chapter Four. https://www.spiceroutewines.co.za/tag/natural-wines/

Steyn, J. (2019, April 25). *How SA wine can realise its true value*. Winemag. https://winemag.co.za/jonathan-steyn-how-sa-wine-can-realise-its-true-value/

Steyn, J. (2018, May 8). It's time the SA wine industry grew into itself. https://www.gsb.uct.ac.za/fo-wine-industry

Teece, D. & Pisano, G. (1994). The dynamic capabilities of firms: an introduction. *Industrial and corporate change*, 3(3), 537-556.

Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509–533.

Teece, D. (2000). Firm capabilities and economic development: implications for the newly industrializing economies. In Kim and Nelson, R. *Technology, learning and innovation: Experiences of newly industrializing economies* (pp. 105-128).

UNEP. (2016). Trade in Certified Organic Agriculture – Challenges and Opportunities for South Africa. Geneva: UNEP. https://unpage.org/files/public/unep_south_africa_2016_76pp1.pdf

UNFCCC. (2020). United Nations Framework Convention for Climate Change.

https://unfccc.int/process-and-meetings/conferences/past-conferences/paris-climate-change-conference-november-2015/cop-21#eq-14

Vimont, C. (2017). Organic Wines in the Netherlands: Trends, expectations and developments. Published in association with Sudvinbio (FR), in the perspective of Millésime Bio fair. Research by Pitch Communicatie & PR. file:///Users/lunasuenkel/Downloads/Organic%20Wines%20Dutch%20Market-ENG.pdf

Vink, N. (2019). The South African Wine Industry. In Alonso Ugaglia, A., Cardebat, J. & Corsi, A. (Ed.), *The Palgrave Handbook of Wine Industry Economics* (pp.201-224). Palgrave Macmillan. DOI: 10.1007/978-3-319-98633-3

Vink, N., Deloire, A., Bonnardot, V. & Ewert, J. (2010). Climate change and the future of South Africa's wine industry. *International Journal of Climate Change Strategies and Management.* 4(4), 420-441. DOI: 10.1108/17568691211277746

VinPro. (2016). About Us. https://vinpro.co.za/about-us/

VinPro. (2019, May 6). WISE State of the Industry at end 2018. file:///Users/lunasuenkel/Downloads/STATE%20OF%20THE%20SA%20WINE%20INDUSTRY%202018_19_6May2019_STATE_INFOGRAPHIC.pdf

WIETA. (2019a). Wine and Agriculture Ethical Trade Association. http://wieta.org.za/who-are-we/

WIETA. (2019b). Our Strategy. Wine and Agriculture Ethical Trade Association. http://wieta.org.za/our-strategy/

Willis, K. (2006). Interviewing. In Desai, V. and Potter, R.B. (eds.) *Doing Development Research* (pp.145-152). Sage Publications Ltd.

World Commission on Environment and Development. (1987). Our common future. Oxford University Press, Oxford.

WOSA. (2020a). The Industry. Overview. Wines of South Africa. https://www.wosa.co.za/The-Industry/Overview/

WOSA. (2020b). Joint Voluntary Seal for Wine of Origin and Integrated Production of Wine. https://www.wosa.co.za/The-Industry/Wines-Of-Origin/Joint-WO-IPW-Seal/

WOSA. (2020c). Environmentally Sustainable. Wines of South Africa. https://www.wosa.co.za/Sustainability/Environmentally-Sustainable/Intro/

WOSA. (2020d). Background Information on the South African Wine Industry. https://www.wosa.co.za/The-Industry/Overview/

WOSA. (2020e). Wine and Spirits Board. https://www.wosa.co.za/The-Industry/Wines-Of-Origin/Wine-and-Spirit-Board/

WWF. (n.d.). Conservation Champions.

https://www.wwf.org.za/our_work/initiatives/conservation_champions.cfm

Yin, R.K. (2014). Case Study Research: Design and Method (5th edn). London: Sage.

Appendices

Appendix 1. Definitions Wine Product Categories

DEFINITION OF WINE

The Organisation Internationale de la Vigne et du Vin (OIV) defines wine as "the beverage resulting exclusively from the partial or complete alcoholic fermentation of fresh grapes, whether crushed or not, or of grape must. Its actual alcohol content shall not be less than 8.5% vol." (OIV, 2015).

ORGANIC WINE

Organic wine is made from grapes which were grown according to organic farming principles. Organic wine production excludes the use of artificial chemicals such as fertilizers, herbicides, pesticides, and fungicides. Only organic fertilizers are allowed. In the vineyards, protection from pests and diseases takes place through planting grape varieties that are naturally resistant (CBI, 2016). The conversion period of conventionally farmed vineyards to organic vineyards takes three years (Novaes Zilber, Friel, & Felipe Machado do Nascimento, 2010). In the cellar, organic techniques are used. This means that little to no manipulation of wines is allowed (CBI, 2016). Sulphur, which is added in the conventional wine-making process in order to extend the wine's shelf life, can only be utilized in a much lower amount in organic wines compared to conventional wines. Depending on different regulatory systems, criteria differ and organic wine may contain a minimum amount of added Sulphur or none at all (CBI, 2014).

BIODYNAMIC WINE

In biodynamic viticulture, the organic farming principles are extended towards a more philosophical approach based on Rudolf Steiner. The focus lies on the vineyard's health and considers the vineyards as a "self-contained organism" (Novaes Zilber et al., 2010, p.172). This implies that biodynamic farming relies on own animals and plants to generate compost and manure as fertilizers (Novaes Zilber et al., 2010). Organic principles such as the exclusion of the use of chemicals apply, accompanied by practices like following the lunar calendar (Arthur, 2018; CBI, 2016).

NATURAL WINE

Natural wine is produced with minimal intervention in the wine making process in terms of chemical and technological treatment of the vines. There are no additives of any kind (CBI, 2016).

VEGAN WINE

To certify wine as vegan, no animal products can be added in the wine-making process. Conventional winemaking sometimes contains the addition of isinglass or egg white (Arthur, 2018).

Appendix 2. South African Wine Industry Factsheet

South African Economy	
GDP (2018)	$ 368 billion
GDP per capita (2018)	$ 6374
GDP Growth (2018)	+0,8
GDP per capita growth (2018)	-0,6

South African Trade	
Total exports (2017)	$ 108 billion
Wine exports (2018)	4.2 mhl (0,7 billion €)
Wine Export percentage of GDP (2017)	0,67%
Wine imports (2016)	3 m
US Dollar exchange Rate (23.04.2020)	18.7890

South African Demography	
Population (2018)	57,78 million
Wine consumption (2018)	4.3 mhl

Wine Production	
Total Wine Production Global (2018)	292 mhl
Total Wine Production SA (2018)	9,5 mhl

Organic Wine Production	
Area under wines global (2018)	7.4 mha
Area under organic wines global (2017)	408 000 ha (5,4%)
Area under wines in SA	126 kha
Area under organic wines in SA	1 860 ha (<2%)

Sources: OIV, 2019a; Ecocert SA, 2020; Worldbank 2020; OEC, 2017, SAWIS

Appendix 3. List of Interviews & Observation Sites

Reyneke Wines

- **Interview A***: Johan Reyneke*, Founder and Viticulturalist, Interviewed by Luna Sünkel on 25th of February 2020 in Stellenbosch, South Africa.
- **Interview B:** *Nuschka de Vos,* Assistant Wine Maker, Interviewed by Luna Sünkel on 5th of February 2020 in Stellenbosch, South Africa.
- **Interview C:** *Daniel Klerk*, Operations Manager, Interviewed by Luna Sünkel on 5th of February 2020 in Stellenbosch, South Africa.

Longridge Wine Estate

- **Interview D:** *Norah Hudson*, International Sales Director, Interviewed by Luna Sünkel on 29th of January 2020 in Stellenbosch, South Africa.
- *James Fourie*, Marketing Manager, Vineyard Tour on 29th of January 2020 in Stellenbosch, South Africa.

La Motte Wine Estate

- **Interview E:** *Jaco Visser,* Farm Manager, Interviewed by Luna Sünkel on 26th of February 2020 in Franschhoek, South Africa.

Spier Wines

- **Interview F***: Tanja Kleintjes-Moses,* Head of Organic Wine, Interviewed by Luna Sünkel on 3rd of February 2020 in Stellenbosch, South Africa.

Buitenverwachting

- **Interview G:** *Stephan Steyn,* Wine Maker, Interviewed by Luna Sünkel on 31st of January 2020 in Constantia, Cape Town, South Africa.

Stellenbosch University

- **Interview H:** *Nick Vink,* Professor for Agriculture Economics, Interviewed by Luna Sünkel on 04th February 2020 in Stellenbosch, South Africa.
- **Interview I:** *Erna Blancquaert, Lecturer for Viticulture,* Interviewed by Luna Sünkel on 27th of January 2020 in Stellenbosch, South Africa.

University of Cape Town Graduate School

- **Interview J:** *Jonathan Steyn*, Lecturer on Wine Business, Interviewed by Luna Sünkel on 21st of February 2020 in Cape Town, South Africa.

WOSA, Wines of South Africa

- **Interview K***: Maryna Calow,* Communications Manager, Interviewed by Luna Sünkel on February 20th 2020 in Stellenbosch, South Africa.

IPW, Integrated Production of Wine

- **Interview L***: Daniel Schietekat,* Manager, Interviewed by Luna Sünkel on 20th of February 2020 in Stellenbosch, South Africa.

Appendix 3. Example of Interview Guide for Wineries

BACKGROUND INFORMATION

- When was the farm established, and since when have you been producing organic wine?
- How big is the farm? (Hectars, employees)
- Where are the wines sold to? How is the export/domestic ratio?
- How have the sales of conventional vs. organic wine developed?
- What is your strategy and your vision and to what extent are they linked to sustainability and environmental impact improvement?
- Have you seen improvements in your industrial performance (market share, profitability, growth) from investing in environmental measures?

STRATEGY/ INTERNAL CAPABILITIES

- What are you doing in order to improve your environmental impact?
- What constitutes the most important assets when starting to farm sustainably? During transformation? (Know- how, Location, Relations…)
- Was there anything you realized you were missing when you started with sustainable/ organic farming? (technology, innovation, strategies...)
- When you are changing processes (Wine-making practices, viticulture practices, quality control) how do you implement the changes? (Learning and training…)
- How do you adapt if minor changes happen in your process routines?
- How do you manage your commercialisation? Agents?
- How important is access to financial assets? Investors?
- Which are the main challenges and limitations related to sustainable farming?
    - How do you overcome those?

INDUSTRY TRENDS

- Do you experience a growing demand for sustainability?
- What were the drivers for starting organic farming and producing sustainable wine? (product differentiation, competitiveness…?)

INSTITUTIONAL PRESSURES

- Do you feel pressured from import countries to improve your environmental impact?
- Have you tried to obtain a certificate that certifies your production? Why or why not?
- Do you perceive the regulatory framework (certifications for export) as a challenge or a helpful framework?

Thank you so much for your time!

Appendix 4. Example of Interview Guide for Industry Experts

Firm: WOSA
Interviewee: Maryna Calow, Communication Manager
Interviewer: Luna Sünkel, Copenhagen Business School
Location, Date: Stellenbosch, 20.02.2020

GENERAL

- Could you tell me a little bit about WOSA, please?
- What is your objective and your vision and to what extent are they linked to sustainability and environmental impact improvement?

INDUSTRY DEVELOPMENT

- What are the key market trends domestically, internationally?
- Do you experience a growing demand for sustainability?
- How do you perceive the competitive environment for farms that engage in sustainable, organic practices?
- Have you seen improvements in the industrial performance of wine farms (market share, profitability, growth) from investing in environmental measures?

INSTITUTIONAL ENVIRONMENT

- What are the drivers/ pressures for doing organic/sustainable farming?
- Are South African wine farms pressured from import countries to improve their environmental impact?
- Do regulations and the certification facilitate market access abroad?
- Could the regulatory framework be a challenge or an entry barrier for wine farms to engage in sustainable farming practices?
- Is sustainable production promoted/supported by the government? Institutional incentives?
- How is complying with the rules, regulations enforced? What happens if they fail?
- What are the main challenges for organic wine gaining acceptance in the consumer base?

FIRM'S INTERNAL CAPABILITIES

- How do the farms adapt to the formal environment? Reluctant or happy?
- What do farms need to start farming sustainably? (the most important assets)
- Do the farms need to have access to financial assets when applying for certification?

Thank you so much for your time!

Appendix 5. Example of Interview Transcript

Firm: WOSA
Interviewee: Maryna Calow, Communication Manager
Interviewer: Luna Sünkel, Copenhagen Business School
Location, Date: Stellenbosch, 20.02.2020

GENERAL

LS: Could you tell me a little bit about WOSA, please?

MC: Yeah, we are the generic marketing body for the South African wine industry. We are a not-for-profit organization. We are not government funded, but government recognized. The way our funding works is through levies that are raised on exports and that basically means that for each litre of either packaged or bulk wines a certain amount of tax goes back to our funding. 20% of that money goes to the transformation unit, so that what we give straight away, we don't even touch it and the 80% that we're left with we need to work with very strategically because it is not a lot of money. The funding model as it is is based on volume of exports and not value of exports. Unfortunately, we're seeing an industry here in South Africa that is shrinking, especially in terms of volume.

LS: Domestically?

MC: The whole market, vineyards have been uprooted and the volume is just going down. So the funding model does need to change in that regard at some point because it is not sustainable to carry on from our organization's perspective – interruption – So, yeah because the funding is so limited we have to work very cleverly and we can't have a global approach in the sense of the word. We have to work in key focus markets. We do that over a period over 3 years, our strategy is over 3 years, but we do do annual reviews to make sure that we are doing the right thing. So at the moment our key focus markets are Canada, US, UK, which is our biggest export market, Germany, Netherlands, Sweden, then Asia as a market, which really is only Hong Kong, mainland China, and Japan and the Africa as a market in which in certain countries we play. Those are the markets that we are active in. In each of these markets we have a dedicated market manager who lives and works there and it is their responsibility to have relationships with importers, agencies, retailers, media, all of those people and understand their market inside out. They then get an annual budget allocation and it's up to them how they spend the budget whether it is bringing in media to South Africa, doing events, all of those kinds of things, the really chose what the best approach would be for their market. As I'm sure you can imagine marketing to a German person versus a Chinese person your approach is very different. So those are the markets we spend money in, that's not to say we don't work in some form with other markets or other countries that have shown interest in South African wine, we are always willing to help from a resource perspective, or information or assistance with… say a Brazilian journalist were to contact us and say "I'm coming to South Africa, can you help me to set up an itinery and visits with the farms" we would gladly assist but we cannot spend money, we cannot set them up in a hotel or pay their flights. But yeah happy to help anyone, really. Because it's still beneficial to us to increase exports no matter where in the world they go to. So that's Wines of South Africa in a nutshell and how we work and who we are.

LS: What is your objective and your vision and to what extent are they linked to sustainability and environmental upgrading/improvement?

MC: Yes, that's definitely one of the pillars that we work on. Sustainability as a whole is a huge focus for us, both social and environmentally and it's definitely something we pride ourselves on from South African wine industry perspective. We were the first to have the system that we have in place now, and it has since been adopted by many other wine-producing regions. Our industry program is called IPW, and that is incorporated within our sustainability seal that goes on each bottle neck for both local and export wines, it doesn't go on bulk wine, that has to be highlighted. To think that 94% of our vineyards and cellars are IPW certified, that's incredible. It's really awesome. So yeah it's a huge focus for us in the industry. This year our theme at ProVine is Sustainability. Our theme for next year's Capewine Event is Sustainability. It's very important for us.

INDUSTRY DEVELOPMENT

LS: What are the key market trends domestically, internationally?

MC: So we don't do anything domestically at all, we only focus on export markets at WOSA, but I can allude to market trends here in South Africa, what we are seeing is definitely an increase of prices and this is something that we us industry have called for in order to insure sustainability in the long-run. From an export perspective, we're one of the cheapest wine exporters in the world. That is not proving to be sustainable for us, so there has to be price increases and this has been happening successfully. Some not so successfully, we have lost listings in international markets due to these price hikes.

LS: What about remaining competitive?

MC: Yeah, we're still competitive given that there have been price hikes. The fact that our quality is there, it's not that our quality is less than anyone else's and that our wine should be cheaper. Our wine is in fact in some instances better than our competitors' yet our wine is still being sold at cheaper rates. Which kind of ties into social sustainability in many ways because if you look at many of our competitors (abroad) they do a lot of machine harvesting whereas here in South Africa our producers chose to keep labor employed given our current unemployment situation and where we are sitting with over 29% of unemployment. Many of our farm workers have come from generations of workers that lived and worked in our industry. Our producers realized the importance of keeping them employed. So, while it would be in many instances cheaper and easier to have machine harvesting practices they chose to keep people employed. The problem is if you are not getting the right amount of money for your wine, you can't go down to ensure that you pay the workers a living wage. Herein lies the difference between living wage and minimum wage. And I think ultimately that's where most of our producers want to end up, they want to be able to pay their workers a living wage and not just the minimum wage, but right now for many of them it is not possible. There are many of them who do but there are others they can't. It's a very difficult situation.

LS: Do you experience a growing demand for sustainability?

MC: Definitely. Especially from Europe. Asia they don't really ask questions, it's not the focus for them really, also we don't see a lot in Africa. We see some movement towards

sustainability from Canada, but also not that much from USA either, so really Europe and Canada we see calls about sustainability all the time.

LS: How do you perceive the competitive environment for farms that engage in sustainable, organic practices?

MC: In fact, we see that they really want to work together to improve conditions, whether it's for the workers or the environment, they all realize that it needs to be done that it's important and that they all want to do the same thing. They are pretty much on the same page. I don't think there is anyone.
They all offer something different, there aren't many organic wineries, I think there is about 8 of them, so ultimately, I don't think it's a competition as such from an organic wine perspective at all. Most of them are located in different regions, so there is really not that much competition from them and if it is a specific retailer that focuses on organic wines I think, many of our producers realize it's about the bigger picture, about brand South Africa and not just your own home brand which is most important. So those who have gone through the trouble and expense of being organically certified, they get it. They're not problem children.

LS: Have you seen improvements in the industrial performance of wine farms (market share, profitability, growth) from investing in environmental measures?

MC: We'd like to think so, a lot of the problem is, so many of these farms don't like talking about it, they don't like to use that as a marketing angle. They do it because they feel they want to do it and it's the right thing to do. So, they don't necessarily use that to get more buyers or more shelf space, which is interesting. They really are doing it because they know it's the right thing to do and they are not using it as a marketing angle. We are trying to encourage them to do so. For example in April we run a campaign through WOSA and wine.co.ca called #Wineforgood. Everyday of that month we run stories on sustainability, be it social sustainability or eco-sustainability and we call the producer to send us the stories, what's happening on your farms, so we can tell the stories throughout April. There is so many stories, but they don't use it, so WOSA does it to push out there. We've done this campaign for the last two years now and it really works well as a focus.

INSTITUTIONAL ENVIRONMENT

LS: Are South African wine farms pressured from import countries to improve their environmental impact?

MC: The main pressure is from external markets. Definitely, not the local markets.

LS: Do regulations and the certification facilitate market access abroad? E.g. helping overcoming uncertainty in market-based transactions?

MC: I think they are a helpful framework. Especially, if you look at the IPW framework, 94% of our farms are IPW certified. The process is easy, it's basic requirements, that you need to adhere to and if you do so you get the certification. It is voluntary, nobody is forced to, 6% aren't certified and they must have their reasons for not doing it.
It's not possible for bulk. It is possible for the wine being produced here in SA. But if it gets exported in bulk, then it can't get the label. It can still be certified but can't get the sticker. Once it has been exported in bulk, we don't know what happens to the wine.

Whether it gets blended or whatever. There is no control from an industry perspective. So we can't allow that.

LS: Is sustainable production promoted/supported by the government? Institutional incentives?

MC: No, not at all. The industry as a whole doesn't get government support. We get 1 million Rand a year from the Department of Trade and Industry, that's it.
Unlike France. If a farmer identifies a block that is not producing decent yields and is old and needs to be uprooted and newly planted which is a 5 year process, then the government works with them to help them carry for the loss of that vineyard over the period of 5 years to enable them to replant and grow the vines to maturity. We don't have any of that. No marketing support from government. For example, an Italian producer gets 50 % if they go and do an international trade fair, 50% covered by their government, we don't have that, no government support.
Everything we do is industry support only.

LS: What are the main challenges for organic wine gaining acceptance in the consumer base?

MC: It's not about gaining legitimacy.
The real challenge from SA perspective for organic farming is multiple

- Climate makes it difficult not to use pesticides
- IPW has identified certain pesticides that can be used, organic growers are doing it have done an amazing job
- Challenge also your neighbors can't spray, so it needs to be a bigger buy-in process
- Additional challenges: Cost of certification
- No SA certification body that is recognized internationally, so we need international certification agencies to come out here once a year
- Annual costs for producer: 60000 and 80000 rand to get that certification
- Given the demand internationally, most producers don't find that it is financially viable given the demand
- Especially, Scandinavian markets, where monopolies like Systembolaget etc, you work on a tender system, don't know if you get in, for the producers the financial risk and costs is not worth going that route of the actual certification
- Important to note, that many producers actually do farm using organic practices, just don't certify it as such, go through the motions and want to do the right thing, but the costs of certification is a major barrier.
- Ceres is not internationally recognized
- The international ones, you get the European ones only certified for Europe, then get a different one for America, it's very costly.

FIRM'S INTERNAL CAPABILITIES

LS: What do farms need to start farming sustainably? (the most important assets)

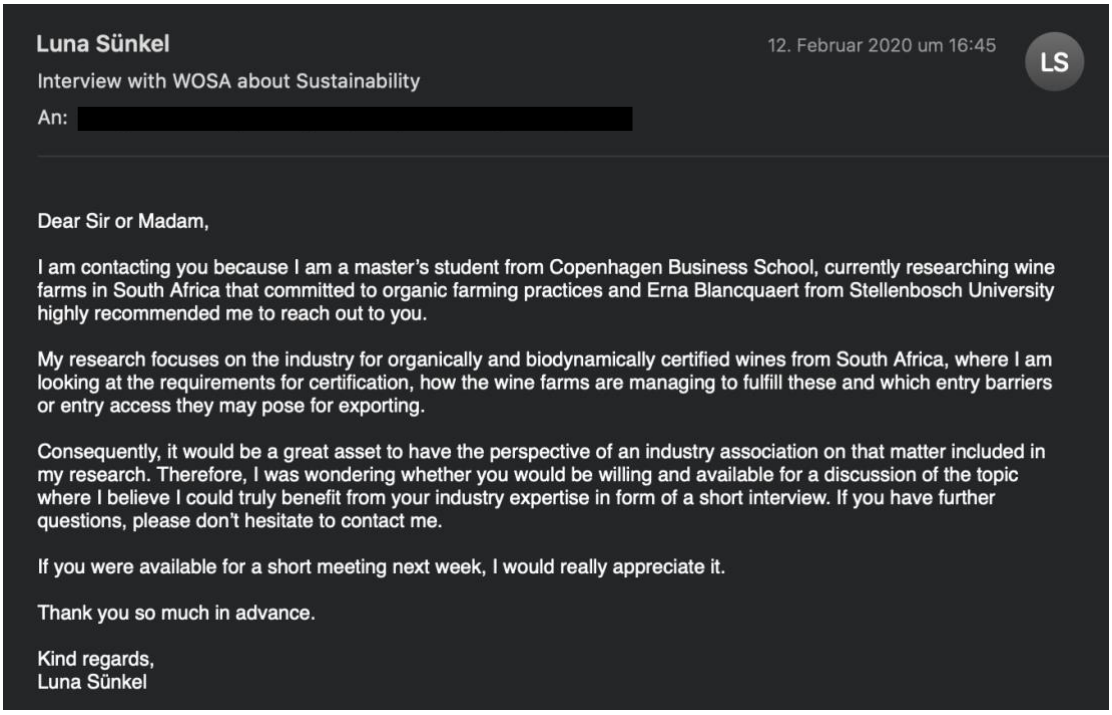
MC: Each farm has its own challenges, each producer does things differently, whether it is climatic challenges, depending on where they are located.

One of the biggest issues what we are dealing with is water, and lack thereof, water is scarce.
Small producers maybe make fantastic wines, it's a kind of one man band, they lack marketing know-how
All have different challenges, we try to assist with the individual challenges of the producers.

LS: So, there is no financial support for the farms when applying for certification?
MC: Nope.

Thank you so much for your time!

Appendix 6. Template Letters for Contacting Respondents



Luna Sünkel 12. Februar 2020 um 16:45 LS

Interview with WOSA about Sustainability

An: [redacted]

Dear Sir or Madam,

I am contacting you because I am a master's student from Copenhagen Business School, currently researching wine farms in South Africa that committed to organic farming practices and Erna Blancquaert from Stellenbosch University highly recommended me to reach out to you.

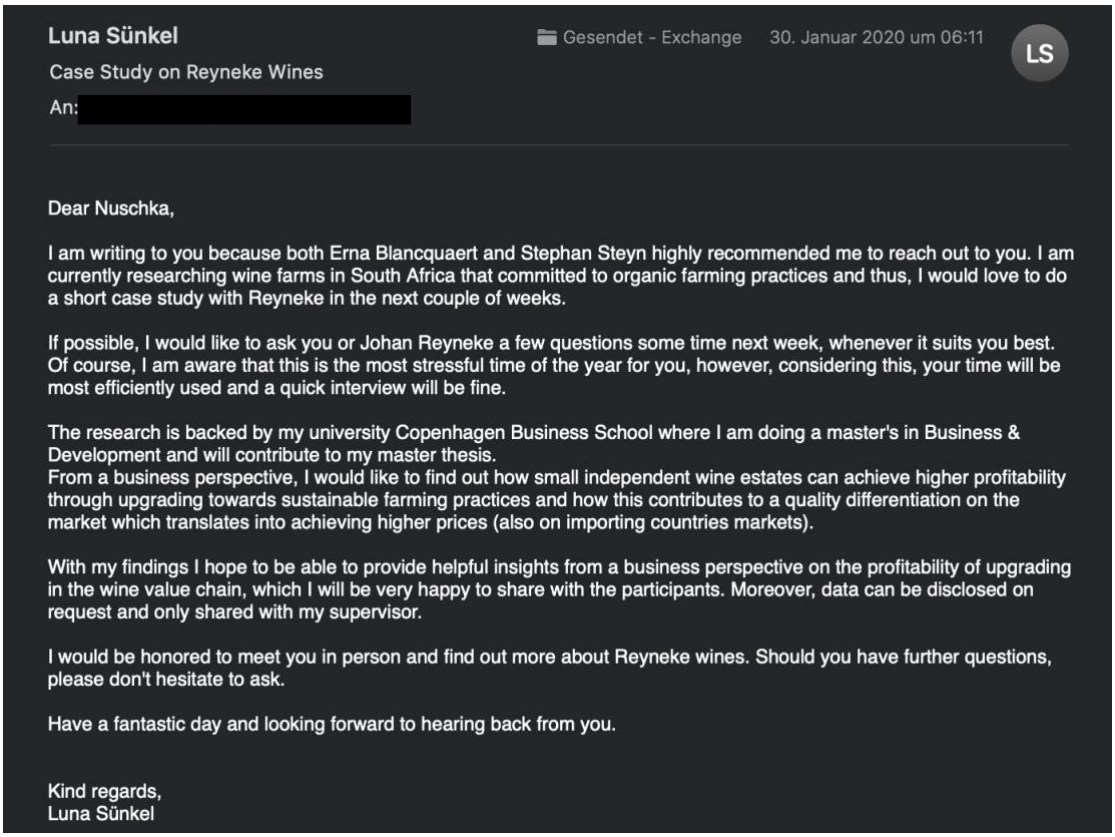
My research focuses on the industry for organically and biodynamically certified wines from South Africa, where I am looking at the requirements for certification, how the wine farms are managing to fulfill these and which entry barriers or entry access they may pose for exporting.

Consequently, it would be a great asset to have the perspective of an industry association on that matter included in my research. Therefore, I was wondering whether you would be willing and available for a discussion of the topic where I believe I could truly benefit from your industry expertise in form of a short interview. If you have further questions, please don't hesitate to contact me.

If you were available for a short meeting next week, I would really appreciate it.

Thank you so much in advance.

Kind regards,
Luna Sünkel



Luna Sünkel Gesendet - Exchange 30. Januar 2020 um 06:11 LS

Case Study on Reyneke Wines

An: [redacted]

Dear Nuschka,

I am writing to you because both Erna Blancquaert and Stephan Steyn highly recommended me to reach out to you. I am currently researching wine farms in South Africa that committed to organic farming practices and thus, I would love to do a short case study with Reyneke in the next couple of weeks.

If possible, I would like to ask you or Johan Reyneke a few questions some time next week, whenever it suits you best. Of course, I am aware that this is the most stressful time of the year for you, however, considering this, your time will be most efficiently used and a quick interview will be fine.

The research is backed by my university Copenhagen Business School where I am doing a master's in Business & Development and will contribute to my master thesis.
From a business perspective, I would like to find out how small independent wine estates can achieve higher profitability through upgrading towards sustainable farming practices and how this contributes to a quality differentiation on the market which translates into achieving higher prices (also on importing countries markets).

With my findings I hope to be able to provide helpful insights from a business perspective on the profitability of upgrading in the wine value chain, which I will be very happy to share with the participants. Moreover, data can be disclosed on request and only shared with my supervisor.

I would be honored to meet you in person and find out more about Reyneke wines. Should you have further questions, please don't hesitate to ask.

Have a fantastic day and looking forward to hearing back from you.

Kind regards,
Luna Sünkel