

The expected financial implications of establishment of a wine brand for a Swartland wine producer

by

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Thesis presented in partial fulfilment of the requirements for the degree of
Master of Science



at

Stellenbosch University

Department of Agricultural Economics, Faculty of AgriSciences

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December 2016

Declaration

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Abstract

The South African wine industry, especially the wine grape producers, are under financial pressure. The small to medium wine grape producers in the Swartland feels the most financial pressure due to the low yielding and lower pay out received per tonne than in other regions. The quality of Swartland wine grapes was found to be just as good and even better than the regions well known for quality. Therefore, the main research problem was to identify the cost implications of establishing a private wine brand for the small to medium wine grape producer in the Swartland. It is believed that wine branding can be the solution for the current financial pressure wine grape producers find themselves in.

The main research method used was the mixed-method. More specifically, this study follows the exploratory design which falls under the main mixed-method. The reason for choosing the exploratory research design is, because the study is dealing with a multiphase problem due to the inter-relatedness of the different phases of wine branding. Data was gathered by means of semi-structured interviews to retrieve qualitative- and quantitative data. The qualitative data was used to understand the characteristics of a typical Swartland wine farmer, while the quantitative data was used to develop a costs implications model.

In the cost implications model, the wine branding process was divided into three phases. The three phases are; farm level, production / cellar and marketing / distribution. The quantitative data from the interviews was used in the model to measure the costs of wine branding in each of the three phases over a five-year period. The model then calculates the total cost of establishing a wine brand, the break-even price at which a bottle of wine needs to be sold and the brand value over a five-year period using the historic cost method.

Wine branding can be the solution to the current financial pressure under which wine producers find themselves. Due to the high cost of branding and the risk involved, especially Swartland producers needs to start focussing on wine production and not see it as a second enterprise to wheat farming. Focus should be placed on vineyard management, good wine making practises and efficient marketing. Starting small and selling at higher prices while learning the tricks of the trade can lead to successful wine branding. From the interviews it was also found that the risk and uncertainty of wine branding is not accepted with confidence by the typical cooperative producer.

Opsomming

Die Suid-Afrikaanse wynbedryf, veral die wyn druif produsente, is onder finansiële druk. Onder dié ervaar die Swartland wyn druif produsente die meeste finansiële druk. Die rede hiervoor is die laer opbrengste en uitbetaling per ton gekenmerk aan die streek. Daar was bevind dat die kwaliteit van wyn duiwe in die Swartland net so goed en selfs beter is as die streke wat bekend is vir hoë kwaliteit duiwe. Daarom is die hoof navorsing probleem om die koste implikasies om 'n privaat wyn handelsnaam te vestig vir 'n klein tot medium wyn produsent in die Swartland te bepaal. Daar word geglo dat wyn handelsname die oplossing vir die huidige finansiële druk waaronder produsente hulle bevind kan wees.

Die hoof navorsing metode wat gebruik was is die gemengde metode. Meer spesifiek, volg hierdie studie die ondersoekende metode wat onder die hoof gemengde metodes val. Die ondersoekende metode was gekies, omdat die studie met 'n meer-fase probleem handel weens die inter-afhanklikheid van die verskillende fases om 'n wyn handelsnaam te vestig. Data was ingesamel met behulp van deels gestruktureerde onderhoude om kwalitatiewe- en kwantitatiewe data te bekom. Die kwalitatiewe data was gebruik om die eienskappe van 'n tipiese Swartland wyn produsent te verstaan. Die kwantitatiewe data was gebruik om 'n koste implikasie model te ontwerp.

In die koste implikasies model is die vestiging van 'n wyn handelsnaam in drie fases verdeel. Die drie fases is as volg; plaasvlak, kelder / produksie en bemarking / verspreiding. Die kwantitatiewe data van die onderhoude was gebruik om die kostes om 'n wyn handelsnaam te vestig in elk van die drie fases oor 'n vyf jaar periode te meet in die model. Die model bereken dan die totale kostes om 'n wyn handelsnaam te vestig, die gelykbreek prys waarteen 'n bottle wyn verkoop moet word, asook die handelsnaam waarde oor 'n vyf jaar periode deur gebruik te maak van die historiesekoste metode.

Wyn handelsname kan die oplossing wees vir die huidige finansiële druk wat produsente ervaar. Weens die hoë kostes verbonde aan handelsnaam vestiging en die risiko betrokke, moet veral Swartland produsente begin fokus op wyn produksie as 'n volwaardige vertakking en nie dit sien as 'n tweede vertakking vir hulle graan produksie nie. Daar moet op wingerdbestuur, goeie wynmaak praktyke en effektiewe bemarking gefokus word. Deur klein te begin en teen hoë pryse te verkoop om stelselmatig die bedryf te leer ken blyk 'n goeie strategie te wees vir suksesvolle handelsnaam vestiging. Alhoewel, dit wil voorkom of die risiko en onsekerheid van handelsnaam vestiging nie gemaklik aanvaar word deur die tipiese kooperatiewe produsent nie.

Acknowledgements

I would like to express my thanks and gratitude to the following persons for their guidance, patience and continued support.

- Dr Willem Hoffmann, my supervisor, for his guidance, assistance and good humour throughout the completion of this study;
- My parents, Dr Niël Hauptfleisch and Melanie Hauptfleisch, for supporting me throughout my studies. Thank you for giving me the opportunity to complete my Master degree;
- My fiancé, Anja Smit, for her love and continued support throughout this study and my work;
- My sister, Esti Hauptfleisch, for the occasional wine and good company;
- All my Interviewees, especially the Swartland producers, for giving me their time and knowledge during the 2016 harvest;
- My heavenly Father for blessing me with the many talents I have.

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Chapter 1: Introduction

1.1 Background

According to Basson (2014), only one third of South African wine farmers realise the minimum Net Farming Income of R20 000 per hectare to farm financially sustainably. Therefore, the trend that farmers, especially in the Swartland, try to produce as much grapes per hectare as they can to compensate for the lower per tonne payment from producer cellars, remains. Most of the farmers in the Swartland still produce the majority of their grapes for producer cellars (Basson, 2014).

It is important to understand that branding and quality go hand in hand. It is not a sustainable solution when lower quality wine is branded and sold at higher prices. In the long term quality and consistency is what will make a wine brand more successful. According to van Rooyen, Stroebel & Esterhuizen (2011), branding is one of the methods used to improve the competitiveness of the South African wine industry.

Just as branding improves competitiveness, there are also factors which still place downward pressure on wine prices. Ponte & Ewert (2007) and Ponte (2007) stated that there are controlling forces in the wine industries all over the world which leads to downward price pressures. This leads to lower payments to grape producers. Most of the controlling forces are applied by the retail sector. Large retailers push down prices of wine brands to be able to stock it more profitably in their shops. An example of this was extracted from a confidential interview carried out in 2014, where a large South African producing wholesaler cancelled a large bulk wine order at the end of the year, this created a surplus of wine in the market. The surplus in the market thus lowered the prices and said producing wholesaler placed a new order for bulk wine at the lower price.

Further external and internal controlling factors influence profitability. The majority of the wine farmers in the Swartland produce between 1 tonne and less than 500 tonnes each year. This falls in the small-to-medium wine producer category (SAWIS, 2015). These farmers struggle to survive because of their smaller production and the high input costs in wine farming. The most logical way of negating this trend is to sell wine at higher prices. An effective way of doing this is through branding. There is however some uncertainty regarding the full implication, and especially cost, of establishing and maintaining a brand. This study will attempt to calculate a cost estimate for the small-to-medium wine farmer to establish his/her own wine brand. Knowledge of this cost estimate will guide producers in selling their own grapes at higher prices and/or keep the wine industry alive by attracting the younger/creative winemakers to the Swartland (SAWIS, 2015).

The Swartland and Worcester wine regions are the two wine regions showing an increase in private wine cellars since 2004. The most planted cultivars are Shiraz, Chenin Blanc and Pinotage in descending order (SAWIS, 2013 & 2015). The Swartland has a number of unique selling points which will enable it to become a wine hub of South Africa (Malan, 2014). The Swartland is a relatively young wine region compared to Stellenbosch or Paarl. Therefore, there are opportunities for producers to work together to promote the region's uniqueness. According to Lewis, Byrom & Grimmer (2015), Bengtsson & Kock (2000), Möller & Rajala (2007) and Morris, Koçak & Özer (2007) there are advantages to successful collaborative marketing actions. Regional wine branding is also a strategy which can fit the Swartland well and will be discussed in Chapter two (Lurati, Zamparini & Illia, 2010).

Research done by Kirkman, Strydom & van Zyl (2013) show the value of tourism in the Stellenbosch wine route and provide good insight into opportunities available in the Swartland to sell the regional characteristics. The uniqueness of a wine region proves to be the most important driver of consumption patterns according to Bruwer & Alant (2004, 2009). Bruwer (2003) focuses more specifically on the South African context. The cost of regional branding is not within the scope of this study. Only the literature about regional branding and wine tourism will be discussed in Chapter two.

Most producers do not know the cost involved in establishing a successful wine brand and they also do not know the value of their brand, therefore the characteristics of a successful small-to-medium brand must first be identified. The cost break-even point of making and selling wine also needs to be identified. A long-term pricing strategy for the wine brand must also be identified.

Lastly, the value of the wine brand needs to be calculated for future marketing strategies and budget planning.

1.2 Problem statement

Wine grape producers in the Swartland are under financial pressure. Only one-third of all the producers in the South African wine industry generate the minimum net farming income of R20 000 per hectare needed to farm sustainably (Basson, 2014). A solution to this problem is branding from an individual producer and cooperative cellar perspective. The cost implications of branding are uncertain. Therefore, the main research question is: What are the cost implications for a small-to-medium wine farmer in establishing a wine brand in the Swartland?

1.3 Goals

Main goal: To determine the cost implications to a small-to-medium wine farmer of establishing a wine brand in the Swartland.

Subgoal 1: Identify the farm-level cost differences between grapes produced for a producer cellar and grapes produced for a private brand.

Subgoal 2: Identify the farm-level cost differences between a premium and super premium wine brand.

Subgoal 3: Identify production/cellar cost differences between a premium and super premium wine brand.

Subgoal 4: Identify marketing and distribution cost differences between a premium and super premium wine brand.

Subgoal 5: Develop a model which can calculate a selling price for a bottle of wine given the above mentioned input costs.

Subgoal 6: Develop a model which can calculate brand value with historic cost.

1.4 Delimitations and definitions

This study will focus on the cost of establishing a private wine brand in the Swartland for a small-to-medium sized farmer. For simplification purposes the study will only focus on establishing premium and super premium wine brands. Historic data over a five-year period will be collected to see what the costs are on farm level, the cellar and marketing in establishing a wine brand. The aim of this study is not to calculate the value of a wine brand; although the historic cost brand valuation method will be discussed, because it forms part of the five-year cost implications. Nor is the aim to create a cost effective farming, wine making or marketing plan. The aim is also not identifying steps to establish a wine brand successfully. The aim of this study will be to create a model to help small-to-medium farmers calculate the cost of establishing a premium or super premium wine brand and also at which price to sell the wine at in order to break even.

List of definitions

Cost implications – The cost of a certain action in the wine branding process.

Small wine farmer – 1 to 100 tonnes.

Medium wine farmer – 100 to 1700 tonnes.

Premium wine brand – For the purpose of this study, in the price range R30 – R80.

Super Premium wine brand – For the purpose of this study, in the price range R80 – R300.

Farm level cost – All the costs involved in producing the grapes.

Production/Cellar cost – All the costs involved from the grapes coming into the cellar to the final product ready for the customer.

Marketing cost – The cost of marketing the wine to restaurants or wholesalers locally and internationally.

Distribution cost – The cost of distributing the final product from the cellar to the customer.

Winescape – Wine landscape or wine lands.

Coopetition – Cooperation and competition.

Terroir - The coming together of the climate, the soil, and the landscape.

Swartland (Map Annexure: A) – It is one of the largest wine regions in the Western Cape with many small-to-medium sized wine brands.

Cooperative cellar – These are cellars owned by its members who are usually wine grape producers. Modern cooperative cellars are registered private companies and managed by its directors. They are called producer cellars.

Producing wholesalers – These are cellars who produce their own grapes and also buy in grapes and wine from others cellars for their brands.

1.5 Proposed methods

This study will largely be based on a case study of a few established small-to-medium wine brands in the Swartland. Financial data of the farm level, production/cellar and marketing will be needed. This data will be obtained by means of personal interviews with a few selected wine brand owners, farmers and viticulturists. Most of the interviewees were selected based on how well-known their wine brand is, while two of the interviewees were selected based on a viticulturist's opinion of their cost effective farming practises. Therefore, this study is not representative of the Swartland as a whole, but only provide a platform for further studies of this sort.

Industry average farm level costs, production costs and marketing costs will also be needed. This can be found in PWC (2014), VinPro (2015) and several International Journals of Wine Marketing. A model which can calculate the costs of establishing a wine brand will be created and therefore contact will be made with two leading wine industry experts from the United States of America who specialise in the marketing of wine and valuation of wine brands.

The research method will be based on personal interviews and correspondence with different international experts on this topic as no research of this sort has been done in South Africa yet.

Interviews will be recorded with either an iPad or GoPro camera, while international correspondence will be via e-mail which will be attached in the Annexure E of this thesis.

Data retrieved from the interviews will be used in a multi-period (five year) model which will give the producer an indication of the costs involved when establishing a small-to-medium sized wine brand in the Swartland per price class. The model will also give an estimated brand value of the wine brand over a five-year period.

1.6 Layout of chapters

Chapter 2: Overview of the wine industry with special focus on the role of branding and the Swartland

In this chapter the Swartland as a wine region will be discussed. Literature regarding regional branding, wine tourism and horizontal networks will also be discussed. The research method used and the model built for this study will be discussed.

Chapter 3: Research applications

In this chapter all the interviews and reasons for interviewing these wine industry leaders and producers are explained. The research method will be applied and the cost implications model will be explained.

Chapter 4: Results and discussions

In this chapter the results from the study will be given mostly in table form and then discussed. At the end of this chapter a short conclusion about the findings will also be made.

Chapter 5: Conclusions, summary and recommendations

In this chapter a detailed conclusion of the findings will be made as well as a summary of the whole study. At the end of the chapter recommendations for further studies will be made.

Chapter 2: Overview of the wine industry with special focus on the role of branding and the Swartland

2.1 Introduction

In Chapter 1 it was stated that the goal of this research was to identify and evaluate the cost implications for a small-to-medium wine farmer in establishing a wine brand in the Swartland. This chapter, firstly, includes an in-depth discussion of the study area (Swartland). This will be broken down into a short history of the area, the size, cultivars planted, terroir, viticulture and winemaking practices. This will be followed by a literature review regarding the relationship between producers and the producer cellars (old cooperatives).

Secondly, an overview of the South African wine industry and its competitiveness is included to identify the opportunities and threats of establishing a wine brand. This will be followed by an explanation of why the Swartland was chosen as the area of study. For this area, three marketing strategies will also be discussed which may suit the Swartland situation well. After that the characteristics of a successful small-to-medium enterprise will be discussed.

Lastly, the cost implication model built for this study will be discussed along with methods of brand valuation. The model was built to create a platform where different inputs in the branding process can be varied to see what effect it has on costs and brand value.

2.2 The Swartland as wine producing area

The Swartland, which is traditionally known as a grain producing area, stretches along the Berg River and Perdeberg to Malmesbury and Riebeeck, all the way to Darling, Yzerfontein, Piketberg, Koringberg and Porterville. The area also hosts 91% of the total bush vine plantings in South Africa. There has been a move away from bush vines due to the pressure for higher yields and mechanisation (Wines of South Africa [WOSA], n.d; Van Schalkwyk, 2014; Map: Annexure A).

The Swartland is a wine district in the coastal wine region. The name “Swartland” came from Jan van Riebeeck, who named it “Het Zwarte Land”, because of the renosterbos (rhinoceros bush) which appeared black, mainly after the winter rain (Malan, 2014: 6).

2.2.1 Size and structure

The Swartland is the fourth largest wine region in South Africa with 34 427 310 vines planted on 13 591 hectares. The majority of the wine farmers in the Swartland produce between 1 and 500 tonnes each year, which falls in the small-to-medium wine producer category. There are two producer cellars

(old cooperative cellars) and 29 private cellars. The Swartland and Worcester wine regions are the only wine regions showing an increase in private wine cellars since 2004 (SAWIS, 2013 & 2015).

2.2.2 Cultivars

The Swartland has traditionally been a source of robust, full-bodied red wines and high quality, fortified wines. Recently, the Swartland made a name for itself with the award winning Pinotage, Shiraz, Cabernet Sauvignon, Chardonnay, Chenin Blanc and Sauvignon Blanc wines. The most planted cultivars are Shiraz, Chenin Blanc and Pinotage in descending order (Malan, 2014).

Table 2.1 below is the SAWIS data for the Swartland. The table shows the total area of wine grapes planted as on 31 December 2014. The data provides a good indication of the most planted varieties in the Swartland (SAWIS, 2015).

1 Table 2.1: Swartland wine cultivars

Cultivar	Swartland (hectares)
Chenin Blanc	45
Colombar	19
Sauvignon Blanc	2
Chardonnay	4
Muscat d'Alexandrie	-
Pinot Gris	-
Muscat de Frontignan	-
Other White	8
Total White	78
Pinotage	30
Cabernet Sauvignon	-
Shiraz	23
Ruby Cabernet	5
Merlot	-
Roobernet	1
Port Variety	2
Pinot Noir	3
Cinsaut	2
Other Red	6
Total Red	71

Source: SAWIS (2015)

2.2.3 Terroir

Before the Swartland terroir can be described the concept of terroir will be explained in more detail. The concept of terroir is applicable to all agricultural produce, although it is mostly used in wine or viticulture. Terroir is important in viticulture, because it relates the sensory attributes found in wines with the environment it was grown in. The terroir in which vines are grown have a large impact on the quality of the wines made from those vines. Terroir includes climate, soil, cultivar and human practises (Van Leeuwen & Seguin, 2006).

Climate can be divided into macroclimate, mesoclimate and microclimate. Macroclimate is the temperature and rainfall of the region in the Western Cape, for example. Mesoclimate is the temperature and rainfall in the wine growing region in the Swartland, for example. Microclimate is the temperature and moisture in the fruit zone or where the grapes ripen. The microclimate can be manipulated by human practises such as canopy management (Van Leeuwen & Seguin, 2006).

Soil plays a vital role in viticulture; it can also be divided into geology, pedology and an agronomic approach. Geology deals with rock types and the structures in the soil. Pedology is where soil types can be mapped into blocks where certain soil types have certain effects on viticulture and, in the end, wine flavours. To understand the role soil plays in viticulture, the agronomic approach needs to be followed: this takes into account which geology and pedology aspects will have the best effect on root development, water uptake and also, the influence on microclimate. The soil type will have a large impact on the cultivar decision (Van Leeuwen & Seguin, 2006).

The four main soil types are Glenrosa, Swartland, Hutton and Oakleaf. All four are found near or on mountain slopes and formed from decomposed shale or granite soils. The vines are therefore mostly planted against the mountain slopes of the Perdeberg, Riebeekberg and Darling Hills. To the North of Malmesbury, clay-rich Oakleaf soils can be found; a dark red coloured soil. This specific soil is considered to be among the best in the Western Cape (Malan, 2014; Winetech, 2008).

The average rainfall in the Swartland is between 400mm and 500mm per year near Malmesbury, while the Perdeberg showed between 700mm and 800mm per year which has an impact on dryland cultivation and the wines produced. The average temperature in the Swartland is around 25 degrees Celcius in Darling (near the West Coast) and around 30 degrees Celsius at Riebeek (Malan, 2014; Euvrard, personal interview, 2016 January 18).

Due to the climate mentioned above, dryland practices can only be followed on soils with good water holding characteristics. Therefore, the eastern slopes of Kasteelberg and Perdeberg are suitable for dryland practices. The microclimate in the Swartland can differ from site to site, sometimes as little as 5km apart and contribute to unique styles in the wine produced (Malan, 2014; Euvrard, personal interview, 2016 January 18).

The topography of the Swartland has a wide spectrum of slopes against mountains which provide unique characteristics in wines which adds to the diversity of the Swartland (Malan, 2014).

2.2.4 Viticulture

Like any other wine region in South Africa needed to make good wine, good soil preparation is required to let the vines grow optimally. Therefore, a soil analysis needs to be conducted to identify the different ameliorants which need to be added. After the application of the ameliorants the soil needs to be cross mix ripped to mix the ameliorants into the soil while loosening it for planting. When the soil is prepared for dryland cultivation, the soil needs to be cross mix ripped at deeper depths for good root penetration for water (Hauptfleisch, personal interview, 2016 January 12; Oberholzer, personal interview, 2016 January 12).

As already mentioned above, the Swartland has the most bush vines in South Africa and this is what makes it unique to many producers. It is believed that bush vines protect the grapes better from the extreme elements and therefore the grapes ripen more gradually. New plant trellising systems are used more and more for better balance and thus the soil potential can be better utilised. At the moment the Swartland consists of approximately 50/50 bush vines and trellised vines. Irrigation is also used more and more, but it is only to support the vines in December during the ripening phase to relieve stress. It is again also a 50/50 combination of dryland and irrigated vines (Malan, 2014; Euvrard, personal interview, 2016 January 18).

The average yield in the Swartland is 9 tonnes per hectare which is very low, compared to the Breede Valley area's 22 tonnes per hectare average, when all the grapes are produced for a producer cellar. Producers cannot farm sustainably at this yield with the rise of input costs. The quality is very good, because the grapes produce concentrated juice in smaller berries (VinPro, 2015; Malan, 2014).

2.2.5 Winemaking

Producer cellars focus on clear-cut, single cultivar wines. Small-to-medium private winemakers focus on blends. These winemakers believe that the Swartland has far too much to offer in terms of variety in terroir to be focussing on one single cultivar. They are also in the process of promoting the Swartland as a region where no acid or yeast are added to the wine during the winemaking process. Therefore, these wines ferment naturally or "wild" as it is called. The existence of natural winemaking in the Swartland is much higher than in any other wine region (Malan, 2014).

Traditionally wine prices from the Swartland are lower compared to regions like Stellenbosch or Paarl. This not due to quality being lower, but rather due to an earlier stage of regional branding. The Swartland wine region does not have the reputation of high quality wine brands as yet. Quality wine branding in the Swartland is relatively young. It started to pick up its pace after the Swartland

Revolution approximately 10 years ago. Winemakers like Eben Sadie and Adi Badenhorst sell some of the best quality wines at the highest prices. They have received several local and international awards for their wines. A particular, high yielding, Chenin Blanc block in the Perdeberg region received the General Smuts Trophy for best Chenin Blanc in South Africa in 2014 (Engelbrecht, personal interview, 2016 March 3).

2.2.6 Why the Swartland as study area?

As mentioned before the Swartland is a relatively new wine region, in terms of first vines planted as well as reputation. The first wine grapes were planted in 1795 in the Swartland, almost a 150 years after the first vines were planted in other regions in South Africa by Jan van Riebeeck in 1652. In terms of reputation, Swartland only came to the South African public's attention after the Swartland Revolution; particularly because of the winemakers' eccentric personalities and down-to-earth wine making styles. Compared to Stellenbosch, Paarl and Robertson, the Swartland still has a long way to go. The Swartland does not have as many private wineries and well-known brands as the previous mentioned regions (Malan, 2014).

Another reason for choosing the Swartland as study area is because it has a lot of potential to become a preferred visiting spot for wine lovers and tourists. The Swartland also has a lot to offer in terms of unique experiences and unique wines not found anywhere else in the world (Euvrard, personal interview, 2016 January 18). The main challenges are to communicate this and therefore three main marketing strategies will be discussed which, this researcher believes, will suit the Swartland perfectly because it has smaller private wine brands, close to each other. The three main marketing strategies will be discussed later in this chapter.

2.3 Producers/producer cellar relationship

Firstly, the eight behaviours or norms for a good relationship will be discussed from the Bruwer et al. (2010) study.

1. Restraint in the use of power

This is where no party will use his/her power against the interest of a partner. In the case of the wine industry, large wineries or wholesalers must not use their power to lower pay-outs to producers.

2. Cooperation

This is where coordination tasks are conducted individually and jointly to achieve a combined goal or objective.

3. Social bonds

It is a relationship formed on an economic exchange which holds two individuals together.

4. Communication and information exchange

This is the readiness to provide all the information which is useful to the partner.

5. Solidarity

“The preservation of the relationship particularly in situations in which one partner is in a predicament” (Bruwer et al., 2010).

6. Flexibility

This is the individual’s readiness to adapt to an existing agreement or to new environmental conditions.

7. Conflict resolution

“The use of personal, friendly and informal mechanisms to resolve conflicts” (Bruwer et al., 2010).

8. Cultural fit

“Understanding of partners’ attitudes and behaviours and appropriate interpretation of actions” (Bruwer et al., 2010).

To understand the relationship and conflicts between producer cellars and producers, the relationship and possible conflict between producer cellars and their buyers should be investigated. The wine price negotiations between producer cellars and their bulk buyers already start in November each year. The agreement after negotiations is not binding; this is because there are still a lot of natural factors which could affect the wine price. Furthermore, although most producer cellars only have a year contract with their bulk buyers, there is a good understanding between the two parties because of years of business (Ponte & Ewert, 2007: 44).

Before the harvest, in January/February, the wine price gets fixed between the two parties; but this still does not bind the bulk buyer to buying the wine if it does not meet their standards. The producer cellar is then obligated to deliver wine of a certain style, quality and volume. The producer cellars usually do not have much negotiation power because they need to sell the wine as quickly as possible to be able to pay their producers. This means that the wine is usually sold at lower prices (Ponte & Ewert, 2007: 44).

Wine made by producer cellars has mostly been sold to wholesalers who then bottle the wine under their own brand. Modern producer cellars are becoming more brand and export driven to increase their income and cancel out the power wholesalers have over them. Wholesalers follow a very direct approach when it comes to buying wine. They send their wine buyers to taste the wine at different

cellars and in some cases, play different cellars off against each other to lower their prices in order to buy the wine with the highest quality and lowest price. Other wholesalers form a relationship with three or four cellars from which they buy wine every year (Blok, 2007; Ponte, 2007).

There are also conflicts between producers and producer cellars found in a study done in Australia and from interviews done in South Africa. According to the Australian study, one of the conflict areas is when producers aim to increase yields, which leads to oversupply in some years. This then lowers the price per tonne that the producers get. The study carried out in South Australia also indicates that the producers realise that the wineries are exploiting this to be able to buy grapes cheaper. This notion indicates that wineries have greater power in the producer/winery relationship (Bruwer et al., 2010).

Another complaint from producers in the Australian study is that there is more drama involved when they produce for large cellars, than when they sell their grapes to smaller cellars. This corresponds with the South African case, where producers are sometimes happier to produce for smaller private cellars than to produce for larger cellars. The smaller cellars communicate what they want more effectively, so that the producers know exactly how to farm the vines to produce a certain grape for a certain price (Bruwer et al., 2010; Euvrard, personal interview, 2016 January 18; Le Roux, personal interview, 2014 June 13).

According to the Australian study the larger wineries have the financial ability to employ various grower liaison staff such as viticulturists, winemakers, etc. This leads to a communication overload, which then leads to a decrease in satisfaction and trust. This is applicable to the South African case as well. Producers do not want interference from the larger wineries' staff because they know that more intensive practises will not increase their income per tonne (Bruwer et al., 2010; Le Roux, personal interview, 2014 June 13).

The existence of producer cellars was not to be self-interested and make as much money as possible for themselves, because it is not a profit driven entity. Producers get paid in three parts throughout the year. Producers receive a first payment after they have delivered the grapes and this usually gets paid from the producer cellar's bank overdraft facility. After the cellar has paid back the bank overdraft, an interim and final payment will follow. Therefore, the cellars need to sell as much wine as fast as possible. The old cooperative cellars paid the interim and final payment from the pooling system, but this started to create problems because larger producers carried the smaller producers. Therefore, the modern cooperative cellars are not registered as cooperatives anymore, but rather as companies which started to move to contract-based buying of grapes from their producers for certain brands. The cellar's viticulturist classifies the producer's vineyards on a scale of one hundred according to different criteria. When a producer receives more than 80% for a certain block of vineyard, a certain premium will be paid for the grapes from that block (Mentani, 2011; Ponte, 2007).

There are certainly many producers who are happy with the relationship between themselves and the producer cellar they deliver to. They receive a good pay-out and the communication between them and the cellar staff is such that everyone benefits. Some of the well-known producer cellars, such as Riebeek Cellar, Boland Cellar, etc. with well-known brands look after their producers very well and they receive above average pay-outs. These cellars provide good security to producers because they know there is a market for their wine and that they will therefore receive a pay-out. These are producer cellars not focussing on bulk wine anymore, but rather branded wine and exports (Malan, personal interview, 2014 June 18).

To summarise then, the main source of conflict seems to come from the producer cellar's buyer. As mentioned above, most of the wholesalers do not work to build a relationship with a certain cellar, but rather play the cellars off against each other to buy the highest quality wine at the lowest price. This then flows over to the producers who receive less money for their grapes and leads to the trend of increasing the yield.

2.4 Overview of the South African wine industry and competitiveness

2.4.1 Overview

In 2013 South Africa was the eighth largest wine producer in the world with a steady increase of around 4% in wine volume from 2010 onwards. In 2015 South Africa was the seventh largest wine producer in the world, with China in the eighth place. Regarding the area under vines, South Africa was ranked in eleventh place in 2013 and fourteenth place in 2015. The total area found under wine grapes has been stagnant at around 100 000 ha since 2003. Chenin Blanc is the most planted cultivar in South Africa. South Africa is also the country with the most planted Chenin Blanc in the world (SAWIS, 2013 & 2015).

The industry consists of 3 314 primary grape producers. These grapes are then crushed by 49 producer cellars (the old co-ops), 485 private wine cellars and 25 producing wholesalers (Distell, DGB, etc.). There are also 109 bulk wine buyers who will buy the wine from the above mentioned role players and then bottle it under their own brand for sale or export it in bulk (SAWIS, 2015).

In 2013, Europe increased the duty free quota from 50 million litres to 110 million litres. Therefore, wine exports, as percentage of total production, increased from 38.3% in 2003 to 57.4% in 2013. Consequently, the South African wine industry is considered to be a highly wine-export orientated country (Conningarth Economists final report [SAWIS], 2015).

South Africa's main wine export countries are: UK (27%), Germany (17%) and the Netherlands (7%). These are currently the major export destinations for South African wines, with export to the African continent (Nigeria and Kenya) rapidly growing. China is also one of the fastest growing export markets for South African wine. Per capita consumption of wine in South Africa is stagnant at 7.5 litres in comparison with 53.9 litres in France, 22.4 litres in Australia, 28.1 litres in Argentina and 8.5 litres in the USA (SAWIS, 2013).

The industry also creates around 300 000 jobs in the fields of agriculture, manufacturing and hospitality. Of this number 55.6% are unskilled, 29.3% semi-skilled and 15% skilled. The labour/capital ratio of 4.64 also shows that capital is applied much more efficiently to create jobs than the national average of 2.94 (Conningarth Economists final report [SAWIS], 2015).

In 2013, wine was the Western Cape's largest non-petroleum export product and contributed to 1.25% of the National GDP. The wine industry's GDP per capital ratio is 0.58, which is higher than the national average of 0.45. This does not measure the profitability of the industry, but it does mean that the industry's capital productivity is somewhat higher than the national average (Conningarth Economists final report [SAWIS], 2015; Koegelenberg, 2015; SAWIS, 2013).

The biggest issue in the industry is that wine grape producers operate at a loss. One third of the producers do not realise the minimum net farm income of R20 000 per hectare to farm sustainably (Basson, 2014). Therefore, different components of the external environment will be discussed below.

2.4.2 Competitiveness

The South African wine industry has experienced a positive trend in competitiveness since the 1990s, with a peak in 2005. Since 2005 there has been a decline in competitiveness due to the following reasons: "world economic slowdown, declining levels of wine consumption, sustained international strengthening in the value of the local currency, global warming/drought conditions and climatic fluctuations, increases in interest rates, lack of infrastructure maintenance and export facilities, lack of skilled labour, and government's inability to provide sufficient regulatory, certification and support services to the needs of the dynamic wine industry" (Van Rooyen et. al, 2011).

- Current competitiveness drivers

VinIntell (2012 & 2013) described South Africa's wine industry current competitive drivers using the acronym PESTEL: Political (P), economic (E), social (S), technological (T), environmental (E) and legal factors (L). Below is a combination of the VinIntell (2012 & 2013) competitiveness drivers and Van Rooyen et al. (2011) drivers.

I. Political

The five factors constraining the wine industry the most in South Africa were identified by the Chamber's Wine Executive Survey (WES) in 2005, in the Van Rooyen et al. (2011) article, and four of the five are politically related: costs of crime, difficulty of starting a new business, lack of trust in the political system and the incompetency of government administration and bureaucracy. South Africa has also had labour issues since the sanction periods, which became more intense until 2012 and 2013 and were accompanied by strikes and vandalism. This led to an increase in minimum wages without any increase in productivity, thus adding to the increase in costs of wine production.

II. Economic

When only the wine industry's economic performance is considered, there is pressure on profitability and the reasons for this can be categorised into two parts. The first reason is due to the stagnant local wine consumption over the long-term. From 1997 to 2013 there was only a 0.7% increase in local packaged wine sales. This may be due to aggressive pricing of other alcoholic beverages such as beer, which makes price-sensitive consumers switch from wine to beer. Overall the South African consumers are considered to be more price orientated (Conningarth Economists final report [SAWIS], 2015).

Secondly, cost escalations above the national inflation rate also put pressure on profitability. Packaging costs increased by 146% from 2008 to 2013, bulk prices increased by 46% in the same period, National Production Price Index increased by 29% in the same period and average wine production costs increased by 52% from 2008 to 2013 compared to the 32% increase in income per ton of grapes produced (Conningarth Economists final report [SAWIS], 2015).

III. Social

Alcohol abuse and fetal alcohol syndrome (FAS) is high in South Africa. Because of this the wine industry is also put under pressure to bring in different laws to help reduce the problem. The origin of the problem of alcohol abuse in South Africa is not because of the legal wine industry, but rather the 150 000 unlicensed liquor outlets and one in five litres of alcohol sold being homemade mixtures (Basson, 2015).

As part of the image building of the brand South Africa there are different organisations in place to help promote responsible use of alcohol like Industry Association for Responsible Alcohol Use (ARA) which focuses on the prevention of FAS. Furthermore, wine producers who want to sell their grapes to cellars exporting wine must obtain accreditation from the Wine Industry Ethical Trade

Initiative (Wieta), who ensures that wine producers comply with local and global standards regarding ethical labour practice (Basson, 2015).

The wine industry also generated R23 579 million in household income, of which R3 994 million is destined for the lower income groups. There is a lot of social pressure on the wine industry, but at the same time there are also good organisations in place to counteract these pressures (Conningarth Economists final report [SAWIS], 2015).

IV. Technological

South Africa is on the world stage when it comes to the latest technology in wine producing. The Institute of Grape and Wine Science (IGWS) is a joint venture between Stellenbosch University and the South African wine industry, established in 2012, to deliver world-class teaching, research and technology development.

The South African wine industry is also becoming more up-to-date with social media marketing and online shopping. The industry is still behind the rest of the world when it comes to social media marketing, because the more traditional marketers are still sceptical about social media as a marketing tool. Online wine shops have also grown over the last few years and can be a very positive tool for wineries to decrease the market power of the trade. The South African consumers, however, are still not fully comfortable using online shopping, but this is increasing (VinIntell, 2013).

V. Physical/ Biological

There has been an increased drive to protect the environment because of the effect climate change has had on terroir and certain regions where certain cultivars were grown for years. Climate change is no longer a debatable topic and is seen as a given and something that needs attention. Grapes are ripening faster, due to longer warm periods and shorter winter months. This will have a definite effect on vineyards practises in future (VinIntell, 2012).

This is not the only issue affecting the wine industry. A few of the industry rootstock suppliers are worried that the top three varieties being purchased are Chenin Blanc, Colombar and Pinotage with rootstocks for higher yields. On the other side there is also a decline in the plantings of quality grape cultivars such as Cabernet Sauvignon and Chardonnay. This is an indication of a trend under producers to increase yields. A Chardonnay shortage is expected in a few years. There is a clear swing towards higher yields in the industry, but with no planning, structure or strategy for the future (Heyns, 2015).

2.5 Discussion of wine branding mechanisms

This section will discuss a few mechanisms that are considered to fit the Swartland characteristics and producers. These mechanisms are also believed to make wine branding a more profitable option for the average Swartland producer.

2.5.1 Horizontal networks (“coopetition”)

There are three main networks, namely: Quasi-integration networks, Supply and demand networks and lastly Technology orientated networks. Quasi-integration networks are primarily horizontal networks with the goal of gaining market power and reach through resources. Supply and demand networks are divided into gaining access to different new vertical networks and solution networks for client services. Technology orientated networks are also divided into research and development networks and standardisation networks. These three networks are used to add value to the product (Möller & Rajala, 2007).

On a global scale, the wine industry comprises many regions which are often marketed according to the unique strengths of their terroir. The number of wine regions and growers continue to grow making it more and more difficult to differentiate a brand according to region or terroir. Therefore, in order to survive, wine brands or companies need to form business relationships or linkages with other businesses in their region. These linkages can assist the region and brands in order to build stronger brand awareness and identity for long-term success (Lewis et al., 2015).

There are three main degrees of coopetition namely: Cooperation dominated relationships, Equal relationships and Competition dominated relationships. Cooperation dominated relationships consist of a horizontal relationship where cooperation is more important than competition. Equal relationships are the ideal, where horizontal relationships consist of both cooperation and competition. Lastly competition dominated relationships is where the horizontal network is dominated by competition (Bengtsson & Kock, 2000).

A study done in Australia found that small-to-medium premium wine brands form horizontal relationships for eight reasons: Commercial motivation, Leveraging event marketing, Enhancing the identity and awareness of a regional wine brand, Lobbying and a collective voice, Social motivation, Strategic motivation, Marketing coordination and integration and lastly, Respect and responsibility. Each of them will be discussed shortly in the next paragraph. (Lewis et al., 2015).

Commercial motivation involves the need for efficiency and the desire to achieve economies of scale. These horizontal networks provide opportunities for producers to improve profits, save money and resources and generate marketing impact that is otherwise unattainable. *Leveraging event marketing* involves small wine producers being motivated to join in on formal horizontal relationships because

they feel isolated in their small business. For these producers these networks offer access to more experienced winemakers which again lead to opportunities to become part of other networks such as events, trade shows and national newspaper advertising. These events then give these small wineries the opportunity to increase their brand awareness and meet sommeliers and distributors (Lewis et al., 2015; Morris et al., 2007).

Horizontal networks help in *enhancing the identity and awareness of a regional wine brand* and is believed to be necessary in order to stand out in an increasingly competitive environment. Horizontal networks help small firms to access different resources and new markets. This will also help raise attention for a region from a wine tourism perspective; this will be discussed later. Horizontal networks also give individual producers or firms more *Lobbying* and a *collective voice*. This is beneficial when certain issues need to be brought under the government's attention (Lewis et al., 2015).

Social motivation for horizontal networks is when small wine owners are provided with a welcome and accessible environment for basic interaction which they do not get in their own business or vertical networks. This gives the owners the opportunity to build relationships and learn from each other which can be useful in times of need. When trust is gained they can start to seize opportunities to become more commercially efficient and economic exchanges take place (Lewis et al., 2015).

Strategic motivation also plays a role in horizontal networks. Smaller firms would prefer a horizontal network with a larger firm to gain more resources, while a larger firm may want a smaller firm in a horizontal network to gain economies of scale over a large competitor. Smaller firms may also find that horizontal networks with larger firms can lead to reduced profits and negative effects to their business and decide to join other smaller firm (Lewis et al., 2015; Morris et al., 2007).

Marketing coordination and integration from horizontal networks help producers to gain access to a nationwide and regional network to increase their individual presence in the industry. *Respect and responsibility* is also a motivation to join horizontal networks, because larger wineries, with more financial power, will feel responsible to join such a movement and promote the region as a whole (Lewis et al., 2015).

These horizontal networks' success is based on trust, commitment and mutual benefit. Trust and commitment between members is believed to be the two main success factors, although mutual benefit is also needed for healthy business and competition (Morris et al., 2007).

2.5.2 Regional branding

Firstly, wine branding in general will be discussed. According to McGechan (2011) wine branding is the obvious next step for good producers. This is a means of growing vertically in the value chain and gaining more profit. Apart from more profit gains, wine branding has one big advantage; it is a communication tool. It is a means of communicating quality, important information, what makes your brand different from other brands, tells the story of the winery and can also attract your niche market. According to Lay (2015), a good wine brand has the power to influence the consumer's buying nature. For a brand to be a tool to influence consumers, it has to have strong brand recognition. To build strong brand recognition a company should have a strong revenue and profit. Therefore, it can be prohibitive for some smaller companies with smaller revenues. Branding is an expensive, but useful business tool (Lay, 2015).

“A regional brand is one whose quality and/or fame can be attributed to its region of origin and which is marketed using the name of the region of origin” (van Ittersum, 2001).

The most well-known regional brand in the world is probably, Bordeaux. When the name “Cotes de Bordeaux” is present on a bottle of wine, consumers can be more assured that they are dealing with a quality wine. The Bordeaux brand is strong enough to draw tourists to France to savour its wine produce, whether they are in the Bordeaux region or not. From a South African perspective, the only region with a true regional brand is Stellenbosch. But even Stellenbosch cannot communicate one style of wine or cultivar which they can be well-known for, such as the Bordeaux region with their Bordeaux blends.

According to Durrieu (2008), there are seven drivers for regional branding, namely:

1. Specialisation - specialising in one style such as the French Chablis region, renowned for its dry white wines.
2. Volume Production - established reputation of “certain critical mass” for shelf space guarantees.
3. Opinion formation - press releases, publications, awards, word of mouth.
4. Quality - consistent and good.
5. Heritage - reputation of a region that takes time to develop.
6. Distinctive - a style of wine that is quickly recognised as belonging to the region, for example, Barossa Shiraz, Clare Valley Riesling or Hunter Semillon,
7. Terroir - climate, prescribed varietal, soil, wine-producer and human factors of the region that make the wine distinctive and typical of that region.

The benefits of regional branding are that it will have a higher impact on consumer responses and potential to expand because a larger brand is more salient. In the case of smaller producers, it is an especially good idea to invest in regional branding because it is a strategic option that adds value to their existing brands. Regional branding also offers another means of differentiation by providing a place where consumers can connect with the winemakers and experience the region first hand. It therefore provides better brand recognition (Durrieu, 2008).

Regional branding can be divided in three ways, namely: Geographical characteristics, Umbrella brand and Brand constellation. *Geographical characteristics* is where unique quality characteristics or traditional views of the region are used in marketing of the region. These quality characteristics need to be maintained by yield control, winemaking and viticultural practises. *Umbrella branding* is linked to the collective reputation and individual reputation in the region. This means that the same name (region name) is used on different products, made by different winemakers from the region. Previous studies show that umbrella branding has an effect on quality perceptions of the products under the umbrella brand. *Brand constellation* includes the following cues used by consumers: colour of the wine, country or region of origin, vineyard, price including discounts, varietal names or combinations, winemaker(s) and style (Durrieu, 2008).

Previous studies have found that regionalism and clustering of brands are found more and more in the world, especially under small-to-medium wine brands, due to pressure to compete on the world stage. Therefore, it is definitely a good strategy to follow in the Swartland, especially if it can be divided into sub-regions like the Perdeberg and Riebeek Kasteel which have different unique characteristics to offer. The Swartland Independent Producers also provides a good platform to build a regional brand on.

The level of effective communication and commitment is part of the problem associated with regional brands. Some producers put a lot of effort into promoting the regional brand while others free-ride on these efforts. Therefore, audit models have been created to measure communication of the regional wine brand and it also determines what wineries actually convey through their formal communications (Lurati et al., 2010).

2.5.3 Wine tourism

Horizontal networks and regional branding will lead to wine tourism. Previous studies show that South Africa has one of the most developed wine tourism industries in the world, but still earns 70% less than the Napa Valley in California. Wine tourism is regarded to be a critical contributor to the success of a winery (Kirkman et al., 2013).

The South African wine industry is one of the few national industries which is concentrated outside the metropolitan areas and therefore plays a vital role in corporate investment, regional development, business growth, employment generation and tourism. Still, there is not sufficient research done on ways to measure cellar-door tourism and the role it plays in that regions or wine route's tourism (Bruwer, 2003).

A wine route plays a vital role in the creation of wine tourism. The concept of a wine route can be described as a bounded space which is vital in helping to define its wine-producing members and the identity that proclaims the unique attributes of their wines and cultural heritage. A wine route is characterised by natural attractions (scenery), physical attractions (winery, estate), vineyards and road markers directing tourists. Both the wine and tourism industries rely on regional branding, therefore the above mentioned two marketing strategies have a vital role in the bigger picture (Bruwer, 2003).

There are four factors helping tourists choose a certain destination, namely: Geographical distance to destination, Travel time needed to cover the geographical distance, Amount of money needed to cover the geographical distance and lastly, the cognitive distance to the destination (how far the tourist thinks he/she needs to travel to the destination, opposed to the real distance. Riebeeck (in the Swartland) is an hour's drive from Cape Town and, from the amount of restaurants in the town, it is definitely a popular tourist destination. Perdeberg and Darling is also a short drive from Cape Town and is therefore a good opportunity for producers to utilise the wine tourism potential (Bruwer, 2003).

The reasons for visits to the Cape Winelands are (Bruwer and Alant, 2009):

- The main reason for visiting is for holiday or leisure (72%), visiting friends (17%) and business (3%).
- The majority of visitors stay overnight (73%).
- The top six activities of the 16 identified activities engaged in by visitors are: scenic drives (65%), shopping (63%), visiting nature attractions (53%), visiting beaches (52%), whale watching (42%) and wine tasting (40%).

Previous studies of socio-demographics of wine tourists show that the wine tourists are mostly female; weighted at 66%. The age group of these tourists are mostly Millennials (18-35 years of age) and Generation X (35 years +). Studies also show that 44% of the visitors visit the destination/winery for the first time, while 56% are repeat visitors. It is possible that some tourists choose a destination impulsively and do not plan it for a few days, therefore they will most likely choose a destination which they enjoyed before again. The studies found that the main reason for tourists to visit a winery is to taste and buy wine. Most of these tourists also bought the winery's wine at an on/off trade venue three months preceding their visit. Apart from tasting and buying wine, the studies also show that tourists attach great value to the winescape or scenery of the wine-route. The winescape leads the visitor to engage in the total experience by tasting the wine from that region and therefore

understanding what effect the terroir has on what he/she tastes; “The impact of the nature-related dimension (i.e. scenery and/or setting) far outweighs all other dimensions of the wine region’s winescape, both for first-time and repeat visitors” (Bruwer et al., n.d; Bruwer & Alant, 2003).

Respondents from a study carried out in the Paarl Wine Route, ranked their reasons (highest to lowest) for visiting a specific cellar door in the following list (Bruwer & Alant, 2003):

- To taste wine.
- To have a nice tasting experience.
- To buy wine.
- To enjoy different wines.
- To find interesting and special wines.
- To experience the atmosphere at the winery.
- To find information of the winery's products.
- To have a relaxing day out.
- To socialise with partner, friends and/or family.
- To learn more about wines in general.
- For the rural setting.
- To eat at the cellar-door restaurant.
- To meet the winemaker.
- To be entertained.
- Go on a winery tour.
- Other reasons for visiting this particular cellar door today.

2.6 Successful small-to-medium enterprise

The entire industry is increasingly focussing on re-orientating themselves to be aligned with the rapid globalisation of the world. Small, medium and large firms are focussing more than ever on marketing goals, branding, distribution channels and production quality in order to address the growing opportunities and challenges of this globalization (Aylward, 2006).

South African studies show that only 1% of micro enterprises will make a successful transition to a small enterprise with 10 or more workers. A key issue in Africa concerning this small number is policy supporting small-to-medium enterprises. Despite the small numbers, these enterprises still play a vital role in the policy goals of employment creation, promotion of economic growth and poverty alleviation (Rogerson, 2000).

Research, done by the World Bank in 1993, shows that there is a direct correlation between the entrepreneur's education and the turnover of his/her small-medium enterprise (SME) in South Africa. The study concluded that entrepreneurs with a matric qualification have twice the turnover of those with only a grade ten qualification. This is not very applicable to the average Swartland producer, because the majority have a matric qualification and a tertiary qualification (Rogerson, 2000).

Previous studies show that the key elements for successful enterprises in sub-Saharan Africa were: relatively stable access to markets, access to capital from outside sources and that these enterprises are run by an entrepreneur with the capacity to innovate and take risk. In the wine industry there is no stability in market access, because the market changes all the time as consumer preferences change, therefore innovation and the ability to take risks is of critical importance in the wine industry. Access to capital from outside sources can be achieved, either from non-government organisations investing in agriculture or from banks, although it will become more difficult to receive capital from banks in 2016 (Rogerson, 2000).

A recent study done in Australia identified the key drivers for successful SMEs and it relies heavily on export success. The key elements are (Aylward, 2006):

- Increasing export intensity to between 50% and 60% over the next three years.
- Creating sustainability in terms of sales and number of markets.
- Trailing non-traditional but growth oriented markets, such as China, India, Thailand, Japan and regions of Scandinavia.
- Creating individual brands based on regionality and higher price points.
- Targeting the growth in off-license distributors.
- Matching brands and style to specific markets.

Studies also show that successful small-medium enterprises realise that cooperating together in a network improves their chances of success. This also adds to one of the previously mentioned marketing strategies for the Swartland, namely: horizontal networks or "coopetition" (Pullen et al., 2008).

2.7 Background to research methodology

The main research method used in this study is called the mixed-method. The mixed-method is where more than one research method is used. More specifically, this study follows the exploratory design which falls under the main mixed-method. The reason for choosing the exploratory research design is because the study is dealing with a multiphase problem. It is a multiphase problem because the

different phases of wine branding are inter-related. The inter-related phases will be discussed in the next section (Leedy & Omrod, 2013).

According to Leedy and Omrod (2013) an exploratory design encompasses two phases. In the first phase the researcher makes use of qualitative methods to get a sense of the characteristics, phenomena and issues related to the study. One of the qualitative methods used in this study was interviewing, which will be discussed later in this section. The insight gained from phase one provides a basis for a more systematic quantitative study in phase two.

The main method of gathering information was by means of semi-structured interviews. Interviews are semi-structured when the researcher asks the standard questions and also a few individually tailored questions for clarification. In this study semi-structured interviews were used to develop more specific questions to gain insight into the cost structure of wine branding at farm level, wine making and marketing and distribution perspectives. Due to the exploratory nature of the study, a simulation model will be developed. The qualitative data gained from the structured questions was used to develop an experimental simulation model, which will be called the cost implications model from now on. The cost implications model will be discussed in the next section (Leedy & Omrod, 2013).

2.7.1 The cost implications model

This model was built with the goal of being a simulation instrument to aid in the process of this research by calculating different cost components more easily in a table format. With further improvements to the model, it can be considered an aiding tool in decision making for the small-to-medium wine grape grower who wants to establish his/her own brand. It can aid in the calculation of total costs involved in establishing a brand, help with calculations of the break-even price at which a bottle wine should be sold and lastly calculate the wine brand's value after five years with the use of the historic cost method.

The three main areas where costs are involved in the brand establishment process were identified as: farm-level costs, production/cellar costs and marketing and distribution costs. Each of those areas was then divided into costs involved in establishing a premium and super-premium brand. A premium wine brand is in the R50 – R150 price bracket and a super-premium wine brand is in the R150-R300 price bracket. Each of these cost areas are presented over a five-year period because it takes roughly five years to establish a wine brand and to catch the target market's attention. The values over the five-year period are forecasted values which were manipulated from the data derived from the

interviews. The reason for the forecasted values is to give a producer an estimate cost of establishing a new successful wine brand.

2.7.1.1 Description of the model, data needed and method of obtaining the data

Farm-level costs

Farm-level costs were, as mentioned above, presented over a five-year period for the premium and super-premium brands to see if there are any significant cost differences between the two kinds of brands. Farm-level costs were also divided between grapes produced for a private wine brand and grapes produced for a producer cellar (old cooperative cellar), to see if there are any differences.

The farm level cost structure and data can be seen in Table 2.2 which was derived from VinPro (2015) for the Swartland region. (The table reads from left to right.)

2 Table 2.2: Farm-level cost structure

	Establishment of new Vineyard (Premium & Super Premium)
Swartland (Malmesbury cost)	Ha new establishment
Farm level	Soil preparation
	Trellis system (3.2m spacing Perold)
Farm size (Planted)	Irrigation (3.2m spacing, 0.75m compensated)
Total tonne	Vines (irrigated)
Tonne / ha	Vines (dry land)
Ha	
	Total irrigated/ha
Direct Cost	Total
Seed	Total dryland/ha
Fertiliser	Total
Organic material	
Pesticide control	% Establishing cost supported by Co-op farming
Herbicide control	% Establishing cost supported by brand farming
Repair and binding material	
	Interest on bank overdraft (establishment cost/ha) (irrigated)
Labour	Interest on bank overdraft (establishment cost/ha) (dry

	land)
Supervision	
Permanent	Entrepreneurial remuneration
Seasonal	
	Total cost / ha without new establishment
Mechanisation	Total cost / ha with new establishment (irrigated)
Fuel	Total cost / ha with new establishment (dry land)
Repair, Parts & Maintenance	
Licences & Insurance	Total cost per year (no establishment)
Transport hired	Total cost per year (irrigated establishment)
	Total cost per year (dryland establishment)
Fixed improvements	
Repair & Maintenance	
Insurance	

The data was obtained by means of personal interviews with different small-to-medium, established wine brands in the Swartland. The data is then compared with the VinPro (2015) data. The interview has an unstructured section as well as a structured section. In the unstructured side, open questions were asked based on the Swartland as a wine region with its challenges and opportunities. In the structured section, a question paper with the cost structure, as seen in Table 2.2, was given to the respondents to fill in over a three-week period. The data obtained from the interviews was then added to the model under premium and super premium brands or co-op farm where it differed from the VinPro (2015) data.

To make the comparison between branded wine grape production and producer cellar wine grape production, the VinPro (2015) Stellenbosch Estate production cost study was used because the majority of the Swartland grapes are sold to producer cellars while the Stellenbosch Estates produce their grapes for their private brands.

Under the establishment costs of the new vineyards section in the model, a wider row spacing of 3.2m was used because this is the practice in the Swartland; where water is scarcer. The assumption was made that at least 3 hectares of new vineyards should be established to reduce the average age of the vineyards on the farm and also to increase the private brand tonnage. The total of 6 hectares will then be divided equally between the co-op farm and also the branded farm. These hectares will then be added automatically to the next year under premium and super premium brand and also under the co-

op farm. An assumption was also made that the producer will pay for the new establishment from his/her bank overdraft and therefore, the interest on the bank overdraft is also one of the farm level costs. The model also adds the interest on the bank overdraft from the previous year to the present year for five years.

Production/Cellar costs

Production and cellar costs were also presented over a five-year period and divided between premium and super-premium brands. The cost structure and data needed can be seen in Table 2.3. The production/cellar cost structure was identified with the help of PWC (2014) and a personal interview with Interviewee 7 (personal interview, 2016 January 20).

3 Table 2.3: Production and cellar costs

	Fixed improvements (total costs)
Swartland cost	Maintenance and repair of cellar building and equipment (total costs)
Production & Cellar cost	
Total tonne	Electricity & Water (total costs)
Average t/ha	
Total ha	Packaging & Bottling
Litres/tonne	Glass bottles (total costs)
Total litre	Cork (total costs)
Number of bottles (750ml)	Screw caps (total costs)
	Boxes (total costs)
Labour costs (total)	Labels (total costs)
Chemicals, cleaning and filtration costs (total)	Bottling (total costs)
Cellar expenses	Total
Yeast, SO ₂ , bacteria, etc. (total costs)	
Wood barrels (total costs)	
Alternate wood (total costs)	

The first section of Table 2.3 (from total tonne to number of bottles) is to calculate the rand per litre, rand per tonne, rand per hectare and rand per bottle separately. This will be used at a later stage in the

model where the break-even selling price of a bottle of wine will be identified. The rest of the total cost inputs were obtained from personal interviews with different small-to-medium wine brand owners in the Swartland. The same unstructured and structured approach was followed as mentioned in the farm level cost section.

This part of the model is linked to the farm-level cost section. Here an assumption can be made of the percentage of the total tonnage (“share of total”) going to the premium and super premium brand separately. The total hectares of the new vineyard establishment in the farm level section will also be divided in the same manner and added to the next year automatically.

Marketing and distribution costs

Marketing and distribution costs were also presented over a five-year period and divided between premium and super-premium brands. The cost structure and data needed can be seen in Table 2.4. Data was obtained through personal interviews as mentioned in the previous sections.

4 Table 2.4: Marketing and distribution costs

Swartland costs
Marketing & Distribution
Marketing costs
International
Travel costs
Product tastings
Wine and dine with buyers
South Africa
Inviting international buyers to farm
Travel costs to restaurants
Restaurant listing fees
Product tastings
Events on the farm
Print media
Distribution
International costs
South Africa costs

This table also represents the total cost of each of the items listed. The total cost will also be converted to rand per litre, rand per tonne and rand per hectare. Respondents were asked to fill in total amount where applicable to them.

In this section of the model, only the total cost of each input was used because small-to-medium producers do not spend more on the marketing of their super premium brands than on the premium brands. They rather budget for a total marketing amount and then promote the estate or farm as a whole. Therefore, this section of the model used the same “share of total” assumption, as mentioned in the production/cellar cost section, to calculate the weighted share of the marketing and distribution cost for the premium and super premium brand separately.

Cost implications

Under this section in the model, each of the previously mentioned cost sections will be taken and summarised into one table over the five-year period for premium and super premium brands. The idea with this section is to summarise the total cost per hectare, per tonne, per litre and per bottle. This data will then be added to another table where the break-even point will be calculated to identify the minimum price at which a bottle of wine must be sold.

This section is also linked to all the previous sections so that any changes in previous sections will reflect in this section.

5 Table 2.5: Cost implications

Swartland costs
Cost implications
Farm level
Per ha
Per tonne
Per litre
Per bottle
Production & Cellar
Per ha
Per tonne
Per litre
Per bottle
Marketing & Distribution

Per ha
Per tonne
Per litre
Per bottle

Break-even price

This section of the model was built on the same layout of the previous section (Cost implications) and therefore also linked to the previous section. This section calculates the sum of the cost per bottle of wine for farm level, production/cellar and marketing and distribution for each year to work out a total price at which a bottle of wine needs to be sold to break-even. As in any business, the lower the wine brand, the lower the cost per bottle will be.

2.7.2 Brand valuation

The recognition of brands on a company's financial statements as an intangible asset only became a focus of attention in the late 1980s. This was due to the wave of brand acquisitions in the late 1980s that exposed the hidden value of highly branded companies. The amount paid for highly branded companies were much higher than the value of that company's tangible assets (Seetharaman, Nadzir & Gunalan, 2001).

In general, there are three main economic functions of brands. Firstly, a brand is seen as a communication platform. A brand tells a story of the firm or producer and also communicates the quality of the product. Secondly, a brand also helps consumers to differentiate by forming perceptions in a market where products keep on increasing. The specific property and qualities of a brand helps the firm to sell their product at a higher price than the competitor. Thirdly, a brand can become the only constant in the relationship between a firm and their consumers (Scholz and Gregory, 2008).

There are also three main components of a successful brand, namely brand awareness, loyalty and perceived quality. Firstly, brand awareness is a very important part in the branding process. Research has shown that consumers will only choose the product which they recognise when two products are presented. Secondly, brand loyalty can be categorised into 5 parts namely; non-customers, price switchers, passively loyal, fence sitters and committed clients. Passively loyal customers will buy a brand just out of the habit of it, while fence sitters will buy the most convenient or best priced brand. A firm will strive to create a committed client base, where clients will buy a brand at any place and time. Thirdly, perceived quality is where a firm can charge a price premium for a brand which has a

product of high quality. Therefore, the quality needs to be good and also communicated through the brand to charge a price premium (Seetharaman, Nadzir & Gunalan, 2001).

The problem comes in when the price premium on a branded product needs to be calculated. There are three main methods of charging a price premium on branded products namely; market method, income method and cost method. The market method looks into the transactions of the brand but information may be difficult to obtain, especially for a new brand. With regards to the income method, there are two methods used to calculate the premium value. The first is the discounted cash flow model and second the excess earnings method. This means that the returns that belong to other assets will be subtracted from the free cash flow and that any balance will be considered the returns from the brand (Seetharaman, Nadzir & Gunalan, 2001).

The last method, as mentioned in the previous paragraph, is the cost method which is also the method that will be used in this study. The reason for using it in this study is that it is considered to be a more conservative approach to valuing a brand and it provides little future orientation. A more conservative approach is needed when valuing a wine brand, because market trends can change more dramatically from year to year (Seetharaman, Nadzir and Gunalan, 2001).

The most used approach, with regards to the cost method, is the historical cost approach, which is also used in this study because it is the most applicable approach for a new brand or one that is five years old. The cost method is also the simplest method and therefore mostly used by accountants. The problem with this approach, and the reason why it is considered to be conservative, is because of “brand burden”. “Brand burden” is when the present value of a brand has grown so much due to popularity that it is much higher than its cost value. This can happen to a brand after five years and then the cost of establishing a similar brand should be analysed. This is known as the re-creating cost analysis (Seetharaman, Nadzir and Gunalan, 2001).

The disadvantage of the historical cost method is that all the costs previously incurred by the brand should be identified and added. It is difficult to identify all the inputs and their costs which have had an effect on the brand value over the years. Some costs may not have been directly attributable to the brand but rather in support of it. Another problem is identifying the point on the time horizon of where to start incurring the costs for a mature brand. After the historical costs have been identified it is also necessary to identify an appropriate discount rate at which the historical values can be discounted to present values (Seetharaman, Nadzir and Gunalan, 2001).

Some of the historical costs involved could be the design, register, and promotion of the trademarks and associated rights. Alternatively, one can address what they might cost to be replaced. According to Haigh and Knowles (2004), the start of every valuation should be from a branded business aspect valuation to get a bigger picture before a specific brand is valued. In the case of small-to-medium

wine brands, the brand is the business and therefore this approach will be used in this study (Haigh & Knowles, 2004).

The difference between the historical cost method and the replacement cost method is that the discount rate used in the historical cost method does not factor risk in, while the replacement cost method does factor risk in. This means that the success factor will also be multiplied in the formula. For the purpose of this study the risk factor will be disregarded because in reality the success factor of a new business or brand is very low; around 10% (Turner, 2000).

2.7.2.1 Brand valuation model explained

The aim of this model is to discount the historic cost over the five-year period to present values. The valuation is for the branded business and not the premium and super premium brands separately. Only the cost of developing the branded business will be calculated, therefore not all the costs will be added. The total cost for the premium and super premium brands were added together under the two of the three main cost sections of the model, namely: Production & Cellar and Marketing & Distribution as seen in Table 2.6. The researcher believes that quality and consistency is a key component in developing the branded business and therefore, production and cellar costs are also added (Seetharaman, Nadzir and Gunalan, 2001).

6 Table 2.6: Brand value

Swartland costs
Branded business value
Farm level
Historic costs
Production & Cellar
Historic costs
Marketing & Distribution
Historic costs

The total added costs for all three sections from year one to five were then discounted to present values. The discount rate that was used is the inflation adjusted repo rate. The formula used to calculate this is as follow: $[(1 + \text{Repo rate}) / (1 + \text{Inflation rate})] - 1$. A repo rate of 10% and an inflation rate of 7% were used. The model would then take the year one total cost for establishing the branded business and place it in the value table under year one. In year two the model takes the year one total and multiplies it with the inflation adjusted repo rate and then adds it to the year two total

cost which will give the year two branded business value. The same applies for the next years until year five. The model takes the previous year and multiplies it with the inflation adjusted repo rate and then adds it to the next year; formula: $[(\text{Year 1} \times (1 + \text{Inflation adjusted repo rate})) + \text{Year 2}]$.

This part of the model is to give the producer an estimate of what it will cost to create a similar brand after years two – five. Furthermore, this value can also be used in future as an asset on the business's balance sheet.

2.8 Conclusions

With the Swartland's unique characteristics, wine branding certainly seems a viable option to address the problem of producers being under financial pressure. With producers being under financial pressure, cost of wine branding may seem to be the largest challenge. Therefore, horizontal networks seem to be a good solution. Producers can work together in an area to divide the cost of branding between each other and then create a unique regional brand which will lead to wine tourism.

Chapter 3: Research application

3.1 Introduction

In Chapter Two the overview of the wine industry was discussed. Special focus was placed on the role of wine branding and the Swartland as wine region. The method of gathering information was also discussed.

This chapter will firstly discuss the time frame of each of the interviews in this study and why these respondents were interviewed with regards to their contribution to the topic. Secondly, the questionnaire will be discussed with regards to the design and use of the data further to the study. Lastly, the cost implications model will also be covered below and it will be explained how it was used to answer the six goals listed at the end of this chapter.

3.2 Interviews (names in Annexure B)

The producers interviewed were all from the Swartland, with the largest concentration in the Perderberg, Malmesbury and Darling area.

This study is an expansion of an honours study done by the author in 2014. Therefore, the first interviews started in 2014. The first interview was on 11 June, 2014 with an Agricultural Economist at VinPro at the time. The reason for interviewing him was to gain insight into the average payout cooperative producers receive and also to record his views on the potential for increased payouts due to branding. He developed a model which can calculate the payout a cooperative producer needs after different inputs and variables to break even.

After Interviewee 1, the second individual was interviewed on 13 June 2014. This interviewee is also trained as an Agricultural Economist and started his career at KWV in 1990 where he worked as agricultural economist and got promoted several times. By the time he left KWV in 2009 he was the divisional manager for Asia and Japan. He also worked as a general manager at Bovelei Winery between 2009 and 2013. In 2013 he started as the commercial director at Linton Park Wines. Interviewee 2 was interviewed for his experience with both cooperative cellars and private cellars. This way good insight was gained into managerial differences as well as conflict points.

The last interview for 2014 was with Interviewee 3 on 18 June 2014. The cooperative cellar he represented has members from the whole of the Swartland, Paarl and Wellington areas. Interviewee 3 was interviewed to gain insight into the conflict aspects that occur inside a cooperative cellar.

Furthermore, insight was also gained in the way a modern cooperative cellar will be managed in the future after the ending of the pooling system. Another reason for choosing this specific cooperative cellar was because their producers receive some of the better payouts in the industry; this is because they are also a more brand driven cellar and export focused.

The first interviews for 2016 took place on 12 January with Interviewees 4 and 5. Interviewee 4 is the managing director of a large soil preparation group, and Interviewee 5 was a soil scientist at VinPro at the time. Interviewee 4 was interviewed to gain insight into the correct soil preparation for the Swartland; because their main business and field of specialisation is soil preparation for new establishments. Interviewee 5 was interviewed because he wrote several guides to soil types in the Swartland and other regions. He also provided good insight into the effect different slopes and soil types could have on the wine. This is discussed under the terroir section in chapter two.

Interviewee 6 was the first small wine brand owner interviewed on 18 January 2016. This wine brand is the smallest brand in the study. Interviewee 6 started to make wine in 2009 and did not make wine every year until around 2013 where he managed to target markets with a steady demand. He focuses on restaurants in South Africa and also exports to the UK in small quantities. The main income of the farm is from contract selling of grapes to larger brands in Stellenbosch and cooperative cellars. The financial data gained from this interview was used as a case study for a small wine brand.

The next case study interview was with Interviewee 7, owner and CEO of one of South Africa's most recognised brands, on 20 January 2016. This brand is the largest and most well-known medium wine brand in this study. They produce 600 tonnes of grapes on their farm between the Darling Hills. They export to most European countries and also started to target the United States. Valuable insight was gained regarding the cost implications between a premium and super premium wine. Interviewee 7 also shared his experience of what is needed to survive in the wine industry as a small-to-medium wine brand. This brand is an example of a wine farm producing all their grapes for their own wine brands.

Interviewee 8, owner of a small wine brand in the Perdeberg, was also interviewed (17 May 2016), to form part of the case study. This brand is a small established wine brand doing well in the UK. Interviewee 8 also managed to get a contract with British Airways to supply their wine. Interviewee 8 is the owner of the brand, but he and his two brothers farm together on different farms in the Swartland. They produce wheat, wine grapes (for cooperative), pears, etc. Therefore, they fall within the typical description of a Swartland wine farmer because wine is not their main focus. Interviewee 8 was therefore interviewed to gain insight into the cost structure of a typical Swartland wine farmer where wine is not the main focus.

A viticulturist (Interviewee 9) from a well-known cooperative cellar was also interviewed on 3 March 2016. A Chenin Blanc block near Perdeberg, which he manages, won the General Smuts Trophy for

best Chenin Blanc in South Africa in 2014. The General Smuts award is one of the most sought after awards for a young wine in South Africa. He helps producers to increase their yields while keeping the vine in balance and therefore produce high quality grapes with high yields. Interviewee 9 was therefore interviewed to gain more insights into the farm-level cost structure and how it can be reduced. Interviewee 9 also identified two producers in the Swartland, who are the most cost effective wine producers per hectare, for further interviews.

The first producer was Interviewee 10 from Perdeberg (4 March 2016). He is one of the few producers who has established new vineyards each year and according to Interviewee 9, one of the producers who is able to maintain a good balance between quantity and quality. Interviewee 10 was interviewed to gain insight into the farm level costs of a cost efficient producer who has the quality and ability to establish a private brand, but does not feel the need to do so.

3.3 Questionnaire

Due to the explorative nature of this study, the challenge was to design a semi-structured questionnaire which could gather as much information as possible in the shortest amount of time because the interviews took place during the harvest period in 2016. Most of the interviews took place while driving around on the respondent's farm. There were two questionnaires: the one was designed for producers with their own private wine brand, and the other questionnaire was designed for producers who produce grapes for a cooperative cellar. The design and application will be discussed below; see Annexure C and D for both questionnaires.

3.3.1 Design and applicability for topic

The first questionnaire, designed for the producers with their own private brand, was made up of two parts. The first part was a semi-structured section, where there were ten fixed questions and a few extra questions which were added as the interview progressed. The first three questions (see Annexure C & D) focussed on the Swartland as wine region. Respondents were asked how they see the Swartland with regards to unique characteristics, opportunities and threats. These answers were partly included in chapter 2 of this study.

Focus was also given to the business aspect of the producers. Therefore, questions 4 and 5 were used to gain more insight into whether wine production was their main income. Questions 6 and 8 were focused more on the marketing side of the business.

The rest of the questions were more direct questions regarding the cost differences between their cooperative grapes and branded grapes with regards to farm level, production and marketing and distribution. The same questions were asked with regards to their premium and super premium brands. Most of the open questions lead to other questions which were not on the questionnaire and therefore resulted in an informal discussion.

Some of the questions that were not included in the questionnaire (Annexure C and D) had the following topics:

- Pricing strategy of a bottle of wine to accommodate unsuspected costs.
- Terroir of the Swartland; most of these were mentioned in Chapter 2.
- History of the wine farm and brand.
- Different branding strategies for different markets; these questions were asked to gain insight into the flexibility of the small-to-medium wine business.
- Methods of gaining access to new markets.
- Should you sell high quantities at low prices or low quantities at high prices?
- What is the value of a brand and a capturing story?

The second part of the questionnaire for producers with their own private brand followed a more structured approach to gain financial data over a five-year period. The questions were also divided between the three main sections of this study, namely: Farm level, Production and Marketing and Distribution. In the Farm level section, the VinPro (2015) cost guide was used to ask specific questions according to the input items involved. In the production section the PWC (2014) report was used and then items were added with the help of Interviewee 7 to gain the costs of each of the input costs. In the Marketing and Distribution section, Interviewee 7 also helped with identifying cost items. This part of the questionnaire was left with the producer for two weeks to be filled in (see Annexure C and D).

The second questionnaire was intended for producers who only deliver their grapes to cooperative cellars. This questionnaire only had a structured section where the farm-level financial data was gathered. The questions were also left with the respondent for two weeks to be filled in. The interviews with these respondents followed no structure and took place by means of an informal discussion. Some of the topics discussed in the informal interview were:

- Terroir of the Swartland.
- Opportunities and threats of being a wine producer in the Swartland.
- Input costs in line with VinPro (2015) cost guide data.
- Security of producing wine grapes for a good cooperative cellar.

- Importance of a wine grape producer to be interested in and involved with the markets where their wine goes.
- Contract based wine farming and the pooling system.
- Reasons for not starting their own wine brand on a small scale.
- Vertical integration in the value chain.

3.3.2 How the questionnaire was used

The insight gained from the first (semi-structured) section of both questionnaires is discussed in the literature section of this study about the Swartland in general. The discussions will also be used in the results section of this study, Chapter 4. The aim of this part of the questionnaire was to gain insight on why certain producers started their own brand and why others are not interested.

The second (structured) part of the questionnaire was used to gain the financial data over a five-year period of established brands in each of the three categories, namely: Farm level, Production and Marketing and Distribution. The aim of this part was to use this financial data in the cost implication model, which will be explained in the next section of this chapter.

The farm-level input cost questions, which was intended for producers who can start their own wine brand (but who are not interested), was used to gain insight into the cost differences at farm level between a cost effective cooperative producer and an estate farmer, keeping the quality the same.

3.4 Cost implication model (how it was used to answer specific questions)

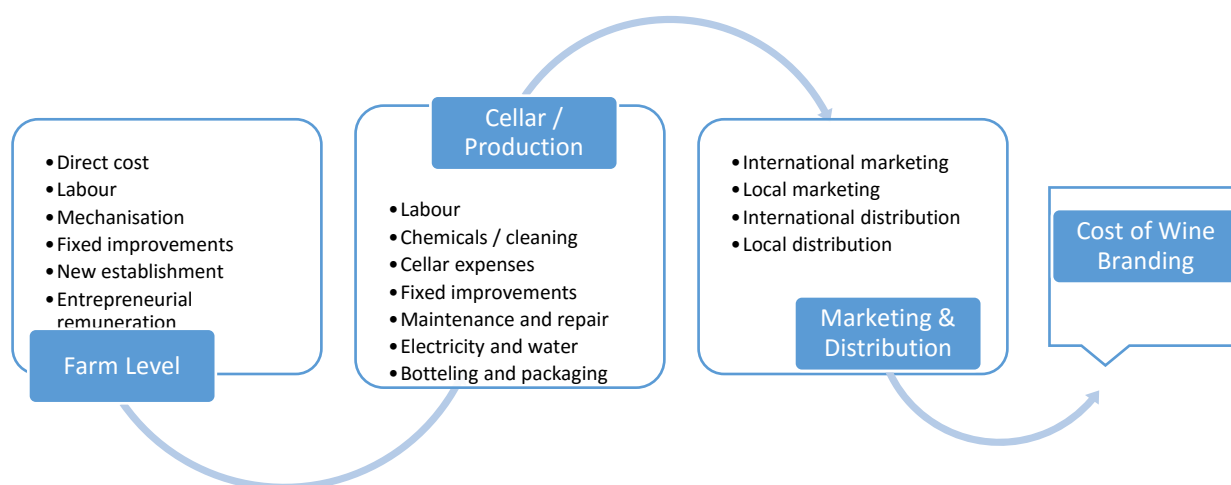


Figure 1 – Cost of wine branding flow diagram

Figure 1 shows the inter-relatedness of the different phases of wine branding. The different components under each phase, as seen in figure 1, were already mentioned in Chapter 2 and will therefore be discussed in more detail.

Farm level

Under the farm-level phase, the first cost component is the direct cost. Under direct cost the following is present: Seed, Fertiliser, Organic material, Pesticide control, Herbicide control, Repair and binding material. Seeds are used to plant cover crops between the vineyard rows to prevent water erosion, weeds, etc.

Fertiliser is applied after harvest to put nutrients back into the soil for a good crop the next season. Organic material is sometimes also bought from cellars in the form of grape skins and then ripped into the soil after harvest. Pesticide control is used by some producers to control different pests in the vineyards like snails, but in the Swartland this is very rarely necessary. Herbicide control is used by the majority of Swartland producers to control weeds during the year. Lastly, repair and binding material are sometimes used to repair trellising systems and therefore also listed as a regular cost item.

Still under the farm level phase is labour cost; one of the large regular expenses. Under labour cost there is permanent labour and also seasonal labour. Permanent labour is usually the more skilled labour and they operate the tractors, grape harvesters, etc., while seasonal labour is only used during harvest time when grapes are still harvested by hand. Mechanisation includes the cost of buying, operating and maintaining the tractors, harvest machines, etc. Fixed improvements include the cost of improving or repairing fixed structures like pump houses, etc. New establishments include the cost of establishing a new vineyard block. Under new establishments the cost of soil preparation, trellis system, irrigation system and the vines are included. The last cost item under the farm level phase is entrepreneurial remuneration, which includes the salary of the producer and his/her managers.

Cellar/Production

The next phase in figure 1 is the cellar/production cost phase and includes the following cost items: Labour, Chemicals/cleaning, Cellar expenses, Fixed improvements, Maintenance and repair, Electricity and water, Bottling and packaging. The labour cost is the total cost of labour including the winemaker's salary. Chemicals and cleaning costs include all the costs of cleaning the cellar, which can be a large cost. Cellar expenses include the winemaking costs, for example, the yeast, bacteria, etc., and also the wood ageing used; whether it is with a barrel or alternate wood. Fixed improvements are the costs involved in expanding cellar capacity. Maintenance and repair involves the cost of maintaining the cellar equipment. Electricity and water are one of the more stable costs in a cellar.

The last cost item under the cellar/production phase is the bottling and packaging cost. This expense, along with the cellar cost, is one of the largest expenses. It includes the cost of glass bottles, corks, screw caps, boxes, labels and bottling of the wine.

Marketing and Distribution

The last phase is the marketing and distribution of the finished product and includes the cost of international and local marketing of the finished product. After the marketing, it also includes the cost of international and local distribution of the finished product. When the costs of all three phases are added together, the cost of branding can be calculated and also what the break-even price of a bottle of wine should be.

The questions which need to be answered with the use of the cost implications model is as follow:

1. Is there a significant difference between the farm level cost of a producer producing for a cooperative cellar and one producing for a premium wine brand?

2. Is there a significant difference between the farm level costs for a premium and super premium brand?
3. Is there a significant difference between the production costs for a premium and super premium brand?
4. Is there a significant difference between the marketing and distribution costs for a premium and super premium brand?
5. What is the break-even price at which a certain bottle of wine needs to be sold at for a small-to-medium wine brand in the Swartland?
6. How can the wine brand value be calculated and used in the business's financial statement?

The cost items mentioned above were used in this model. The cost items were added over the five-year period to firstly calculate the break-even price at which a small-to-medium wine producer in the Swartland should sell his/her wine at. This is an important decision making tool to be able to calculate the break-even selling price for a certain wine farm, taking input costs into consideration. Therefore, it answers the question of what the break-even price should be regarding the specific business's farm-level, production and marketing and distribution cost structure.

The model also uses the financial data mentioned above to calculate the brand value using the historical cost method. The brand value needs to be calculated so that it can be used on the business's financial statements as an intangible asset.

The model was also used to identify, if any, cost differences between cooperative farming and branded farming and also cost differences between a premium and super premium brand at farm level basis. The rest of the model follows the same design, where the model was used to identify the cost differences between premium and super premium brands on the production and marketing and distribution basis.

Lastly, due to the exploratory nature of the study, the model was also used to test different scenarios. The first scenario was to test the effect a change in the exchange rate would have on the cost of branding and selling of the product. The second scenario is to test the effect a change in interest rate would have on the cost structure of wine branding.

3.5 Typical farm

The typical farm theory forms part of the whole farm theory. Firstly, the whole farm theory states that alterations in one component of the farm will have an impact on the farm as a whole. Therefore, studies conducted on the whole farm should be more accurate than studying different components

independently. The whole farm approach also breaks down any knowledge barriers between the researcher and the producer (Hoffmann, 2010; Knott, 2015).

The typical farm forms a basis for comparison in the whole farm approach within a homogenous area. The goal with typical farm theory is to achieve the mode of, rather than the average of, farms in a homogenous area. With applicability to this study, the mode is achieved with respect to farm size, profitability and vineyard practises (Hoffmann, 2010). “A typical farm is defined as a farm representing what a group of farmers do within an essentially homogenous area.” (Knott, 2015). A typical farm model is not derived from a specific set of data or only one producer. The model is composed by accommodating different data from different producers and agricultural specialists in the homogenous area (Knott, 2015).

In this study a typical farm scenario will also be explained and tested in the cost implications model for wine branding. The cost of establishing a private brand for a typical farm in the Swartland will be measured.

3.6 Conclusion

In order to gather the information to answer the question of this research project, which is to determine the financial implications of establishing a new wine brand, certain research methods were followed. Firstly, a sequence of interviews was conducted. The sequence is important to not only learn how the industry functions, but also because the development of the financial model to assess the implications of own brand establishment depend on that sequence of interviews. In the end the data and modelling was incorporated into a typical farm model to determine the wider implications of brand establishment, because it is a multifaceted dimension.

Chapter 4: Results

4.1 Introduction

In the previous chapter the method of gathering data was discussed and also the reason for interviewing the different respondents. In this chapter the data gathered will be presented and discussed.

The first section of Chapter 4 discusses farm-level cost. In this section the data gathered from cooperative-, mixed- and brand-only producers will be presented and discussed. The second section will be presenting the premium and super premium production and cellar costs. Following that is the marketing and distribution section. The second last section covers the cost implications model, where the results for the total cost implications, break-even prices and brand values will be presented and discussed. Lastly, a few different scenarios will be tested with the model. The examples use a 147-hectare farm for cooperative producers and a 15-hectare establishment for branded businesses.

4.2 Farm level costs

In this section of Chapter 4 the farm level cost structure and data will be presented and discussed. Cooperative-, mixed- and brand producers will be discussed separately. The aim is to measure the cost differences, if any, between the three.

4.2.1 Cooperative producer

All of the producers interviewed, except for two, produce grapes for their own wine brand as well as for a cooperative cellar or wine company. One of the two exceptions produces grapes only for a cooperative cellar, while the other only produces grapes for their own brand. Therefore, only the general results from the one producer producing for a cooperative cellar will be discussed as seen in Table 4.1. In Table 4.2, the data from the VinPro (2015) cost guide is presented to compare it with the data from the interviews. Interest on the bank overdraft for establishments was calculated at 10%.

7 Table 4.1: Cooperative producers

Direct Cost (R/ha) 1	2882
Seed	582
Fertiliser	600
Organic Material	0
Pesticide Control	480
Herbicide Control	1200
Repair and binding material	20

Labour (R/ha) 2	4 896
Supervision	816
Permanent	3 400
Seasonal	680
Mechanisation (R/ha) 3	3 983
Fuel	1 800
Repair, Parts & Maintenance	1 020
Licences & Insurance	823
Transport hired	340
Fixed improvements (R/ha) 4	532
Repair & Maintenance	424
Insurance	108
Establishment of new Vineyard (Premium & Super Premium)	3,0
Ha new establishment	3,0
Ameliorants	9 400
Labour	4 400
Soil preparation	15 000
Trellis system (3.2m spacing Perold)	
Irrigation (3.2m spacing, 0.75m compensated)	22 400
Vines (irrigated)	29 475
Vines (dry land)	23 580
Total irrigated/ha (R/ha) 5	80 675
Total (R)	242 025
Total dryland/ha (R/ha) 6	52 380
Total (R)	157 140
% Establishing cost supported by Co-op farming	1,0
% Establishing cost supported by brand farming	
Interest on bank overdraft (establishment cost/ha) (irrigated) (R/ha) 7	8 067,50

Interest on bank overdraft (establishment cost/ha) (dry land) (R/ha) 8	5 238
Entrepreneurial remuneration (R/ha) 9	2 775,50
Total Cost/ha without new establishment (R/ha) (1+2+3+4+9)	15 068,50
Total Cost/ha with new establishment (irrigated) (R/ha) (1+2+3+4+7+9)	23 136
Total Cost/ha with new establishment (dry land) (R/ha) (1+2+3+4+8+9)	20 306,50

8 Table 4.2: VinPro Production Cost Guide

Table 4.2	
Direct Cost (R/ha)	3 884
Seed	154
Fertiliser	1 245
Organic Material	41
Pesticide Control	1 857
Herbicide Control	493
Repair and binding Material	94
Labour (R/ha)	8 604
Supervision	848
Permanent	4 163
Seasonal	3 593
Mechanisation (R/ha)	4 788
Fuel	2 021
Repair, Parts & Maintenance	1 485
Licences & Insurance	350
Transport hired	932
Fixed improvements (R/ha)	532
Repair & Maintenance	424
Insurance	108

Source: VinPro (2015)

The results from Table 4.1 (up to and including Fixed improvements) are substantially lower compared to Table 4.2. In the interviews producers were asked if they produce at the same VinPro (2015) costs or above or below these costs. The larger producers answered that their production costs are less per hectare than the VinPro (2015) costs, while the smaller producers stated that their production costs are the same or slightly higher than the industry costs (Table 4.2). A reason for the difference could be that VinPro (2015) (see Table 4.2) works with an average farm size of 70 ha, while the average farm size of the respondents was 110 ha, thus leading to economies of scale benefits.

Other reasons for the difference between Table 4.1 and 4.2 could be due to the characteristics of a typical wine farm in the Swartland. The typical wine producer in the Swartland also farms with grain. Grain is often the main enterprise and therefore, wine production is often neglected. After the wine harvesting season, producers start to prepare the soil for grain and consequently neglect the time needed for important after-season care that the vines need and, this in turn, affects the next season's quality and yield. Furthermore, the average age of vines in the Swartland increases every year because producers are under financial pressure and therefore do not have the funds to establish vineyards and/or their main focus is on producing grain (SAWIS, 2015). This negative trend in the Swartland could lead to a decrease in the area under vines over the following years.

The producers interviewed for this study are mainly wine grape producers and therefore not typical Swartland wine grape producers explained above. They focus on producing better quality grapes at lower costs. They produce more cost effectively which explains the difference between the VinPro (2015) average in Table 4.2 and the results in Table 4.1. The model used in this study assumes a 3 ha establishment every year and the producers from Table 4.1 can afford to do so, while the average producer from the Swartland (Table 4.2) cannot afford this.

According to Interviewee 9 (personal interview, 2016 March 3) the Swartland proved that it can produce the same quality grapes more cost effectively than most other regions. Interviewee 9 stated that, "With proper vineyard management the producer can produce premium grapes at a fraction of the costs of other regions such as Stellenbosch" (personal interview, 2016 March 3). This statement was supported afterwards in another interview with a leading premium wine producer (Interviewee 10, personal interview, 2016 March 4), who is another example of a producer who produces premium grapes at lower production costs than the industry norm in Table 4.2. The lower cost is achieved without lowering the yield per hectare. It is not necessary to lower yields drastically (Interviewee 9, personal interview, 2016 March 3); an example is the 15 tonne per hectare block of Chenin Blanc which produced the General Smuts young Chenin Blanc in 2014.

This is a welcoming statement for the Swartland wine region. Most of the smaller wine producers in the Swartland cannot make a living producing only 8 tonnes per hectare while receiving an average of

R2 200 per tonne from cooperative cellars. Producers have to average at least 12 tonnes per hectare, or sell their grapes at higher prices on a contract basis, to be able to break even with replacement costs included each year. In the Swartland, increasing yields is difficult, especially within dryland farming. Therefore, focus should be placed on quality and price.

All the respondents were asked why they produce grapes in large quantities for cooperative cellars, while their grapes are of such quality that they could sell it to known brands or establish their own brands. The response was that most modern cooperative cellars in the Swartland, like Boland, Perdeberg and Riebeek Cellar, have started to focus on branding the last few years and use contract based buying. The pooling system is mostly becoming extinct, being replaced with the contract based system where certain blocks of grapes are bought for certain brands. Interviewee 2 (personal interview, 2014 June 13) has experience of the cooperative and private cellar business and stated that there is no room for the pooling system anymore. He said that the pooling system is largely responsible for the low quality/mass production approach some wine producers still have. The contract based approach ensures that the quality producers get better payments for their grapes, as it should be. They also become more involved in the wine making and branding process this way, ensuring better vineyard management and more cost effective production. Interviewee 10 (personal interview, 2016 March 4), added that it takes the extra costs and risk of building a cellar and marketing the wine, away from him. Having a relationship with one cellar gave him extra security so that he could focus on better vineyard management and better grapes.

Interviewee 3 (personal interview, 2014 June 18), stated that the cooperative cellar he represented was one of the first cellars in the wider Swartland region to introduce a contract based approach with their producing members. The aim with this change was to become more brand focused and export driven. According to him, the first few years were difficult; their producers struggled and they received a lot of criticism. Today this cellar is one of the most recognised cooperative brands and they have loyal premium producers such as one of the respondents interviewed for this study.

In summary, the Swartland has the potential to produce high quality grapes at lower production costs compared to other regions, but the drive and focus is not there yet. The future success of the Swartland wine region is dependent on branding and not bulk.

4.2.2 Mixed Producers

Mixed producers are those who produce grapes for cooperative cellars or private cellars, as well as for their own brand. Three of the producers interviewed fall into this category. Therefore, Table 4.3 represents a summary of their average farm level costs.

9 Table 4.3: Mixed producers

	Co-op (R/ha)	Premium & Super Premium (R/ha)
Direct Cost 1	2 882	3 170,20
Seed	582	640,20
Fertiliser	600	660
Organic Material	0,00	0,00
Pesticide Control	480	528
Herbicide Control	1 200	1 320
Repair and Binding Material	20	22
Labour 2	4 896	5 385,60
Supervision	816	897,60
Permanent	3 400	3 740
Seasonal	680	748
Mechanisation 3	3 983	4 381,30
Fuel	1 800	1 980
Repair, Parts & Maintenance	1 020	1 122
Licences & Insurance	823	905,30
Transport hired	340	374
Fixed improvements 4	532	585,20
Repair & Maintenance	424	466,40
Insurance	108	118,80
Establishment of new Vineyard (Premium & Super Premium)	3,0	3,0
Ha new establishment	3,0	3,0
Ameliorants	9 400	9 400
Labour	4 400	4 400
Soil preparation	15 000	15 000
Trellis system (3.2m spacing Perold)		

Irrigation (3.2m spacing, 0.75m compensated)	22 400	22 400
Vines (irrigated)	29 475	29 475
Vines (dry land)	23 580	23 580
Total irrigated/ha 5	80 675	80 675
Total	242 025	242 025
Total dryland/ha 6	52 380	52 380
Total	157 140	115 740
% Establishing cost supported by Co-op farming	1,0	
% Establishing cost supported by brand farming		1,0
Interest on bank overdraft (establishment cost/ha) (irrigated) 7	8 067,50	8 067,50
Interest on bank overdraft (establishment cost/ha) (dry land) 8	5 238	5 238
Entrepreneurial remuneration 9	2 775,50	5 100
Total Cost/ha without new establishment (1+2+3+4+9)	15 068,50	18 622,30
Total Cost/ha with new establishment (irrigated) (1+2+3+4+7+9)	23 136	26 689,80
Total Cost/ha with new establishment (dry land) (1+2+3+4+8+9)	20 306,50	23 860,30

Table 4.3 compares the difference between the production costs of cooperative grapes and premium and super premium grapes. The first column is the same as Table 4.1 which was discussed in the previous sub-section. This section received a mixed response in the interviews, giving the impression that these specific producers did not keep track of the financial differences between their cooperative and premium farm level costs; although they did state that their labour cost would be higher for their premium grapes. This lead to the assumption that there are not major differences in production costs between modern cooperative farming and premium brand farming. Modern cooperative farming refers to the contract based approach.

Interviewee 6 (personal interview, 2016 January 18), like most small Swartland wine brands, follows a hands-on approach when selecting grapes and making wine. The grapes produced for his own brand comes from blocks which he harvests for cooperative cellars. He then harvests the grapes from four or

five vines in different areas in the block. This also differs from year to year, because he goes into each block and tastes the grapes until he finds a flavour he wants in his wines. The only variable then is the time of the winemaker/producer and the labour which is needed to harvest only from those certain areas. Vineyard management is the same throughout the block. Therefore, this will not lead to major cost differences.

The abovementioned Interviewee 6 (personal interview, 2016 January 18), did mention that there are some differences in vineyard management between his cooperative blocks and the blocks he is selling to private brands in Stellenbosch and Paarl. Some of these private brands want him to manage the block in a certain way. For example, more selective pruning by hand and not with machine, reducing the grape bunches a few weeks before harvest and harvesting the grapes by hand and not machine. On the other hand, he stated that his cooperative grapes have higher yields and there is less labour involved. The only difference then is more labour and less mechanisation. This does not reflect in Table 4.3 due to the way these producers allocate their farm level costs. They only have the totals in their financial statements and not allocated separately to co-op and brand. Therefore, the assumption was made to increase all of their total co-op costs by 10% for the branded business.

Interviewee 8 (personal interview, 2016 May 17) and his two brothers follow a larger scale approach. They have contracts with a large cooperative cellar in the region, as well as a large producing wholesaler from Stellenbosch. This way they can plan and manage their vineyards in such a way that they lower their production costs. Their production costs are also lower than the industry norm (Table 4.2). When it comes to their own brand they also follow a more hands-on approach in selecting the grapes. Only certain blocks on their various farms are used and these blocks are pruned and harvested mostly by hand. They also manage the irrigation better to get more concentrated flavours in the berries. This interviewee also did not keep track of cost differences between his cooperative and brand farm level production costs, because the main difference is between labour and mechanisation.

Interviewee 7 (personal interview, 2016 January 20), mainly produces grapes for their premium and super premium brands. He does however sell a small amount of their grapes to other cellars. He stated that there are no production cost differences between their private brand grapes and grapes sold to other cellars.

Table 4.4 represents VinPro (2015) data from the Stellenbosch wine region, comparing cooperative – and estate farm level production costs. The reason for adding the Stellenbosch cooperative farm level costs as well, is to show that Stellenbosch has higher farm level costs overall and that one can't just assume that estate or branded cost in Stellenbosch would be the same in the Swartland and that quality grapes doesn't necessarily need higher farm level costs.

10 Table 4.4: Stellenbosch cooperative and estate farm level costs

	Stellenbosch	
	Co-op (R/ha)	Brand (R/ha)
Direct Cost	4 473	6 346
Seed	41	305
Fertiliser	1 056	928
Organic Material	26	3
Pesticide Control	2 023	3 876
Herbicide Control	1 126	826
Repair and Binding Material	201	408
Labour	14 801	21 002
Supervision	2 062	2 972
Permanent	8 610	11 068
Seasonal	4 129	6 962
Mechanisation	5 040	6 584
Fuel	2 004	2 423
Repair, Parts & Maintenance	2 256	3 575
Licences & Insurance	532	527
Transport hired	248	59
Fixed improvements	1 427	1 450
Repair & Maintenance	1 121	1 075
Insurance	306	375

Source: VinPro (2015)

The data from Table 4.4 suggest that there is a meaningful difference between cooperative- and estate farm-level production costs. This should not necessarily also be the case in the Swartland because of the effect of terroir on vineyard management and also labour costs. The labour in the Swartland is cheaper than in Stellenbosch; in Stellenbosch labourers have more opportunities to earn more and therefore put upward pressure on wages and salaries.

To summarize then, no meaningful evidence was found to support that there are farm-level production cost differences between cooperative farming and brand farming in the Swartland according to the producers interviewed. For the purpose of this model an assumption was made that there is a 10% increase in production costs between cooperative farming and premium brand farming in order to incorporate the possibility of higher labour costs.

4.2.3 Brand only producer (Premium vs. Super Premium)

Under this sub-section data gathered from the interview with Interviewee 7 (personal interview, 2016 January 20), will be discussed. Their grapes are mainly produced for their private brand. Therefore, the aim in this sub-section is to identify differences, if any, between farm-level production costs for premium and super premium brands. The results in Table 4.5 are the same as in Table 4.3 due to this producer being the largest of all the interviewees and therefore having the largest impact on the average in Table 4.3. The results were also kept the same to see if there are a profound difference between premium and super-premium.

Interviewee 7 (personal interview, 2016 January 20), indicated that his farm level production costs are a bit less than the industry norm in Table 4.2. Therefore, the data used in Table 4.3 will be presented again over a period of five years in Table 4.5 below.

11 Table 4.5: Brand only producers

	Year 1	Year 2	Year 3	Year 4	Year 5
Direct Cost (R/ha) 1	3 170	3 234	3 298	3 364	3 432
Seed	640	653	666	679	693
Fertiliser	660	673	687	700	714
Organic Material	0	0	0	0	0
Pesticide Control	528	539	549	560	572
Herbicide Control	1 320	1 346	1 373	1 401	1 429
Repair and binding Material	22	22	23	23	24
Labour (R/ha) 2	5 386	5 493	5 603	5 715	5 830
Supervision	898	916	934	953	972
Permanent	3 740	3 815	3 891	3 969	4 048
Seasonal	748	763	778	794	810
Mechanisation (R/ha) 3	4 381	5 267	5 267	5 267	5 267
Fuel	1 980	2 223	2 223	2 223	2 223
Repair, Parts & Maintenance	1 122	1 634	1 634	1 634	1 634
Licences & Insurance	905	385	385	385	385
Transport hired	374	1 025	1 025	1 025	1 025
Fixed improvements (R/ha) 4	585	585	585	585	585
Repair & Maintenance	466	466	466	466	466

Insurance	119	119	119	119	119
Establishment of new Vineyard (R/ha)	3			3	
Ha new establishment	3			3	
Ameliorants	9 400			9 400	
Labour	4 400			4 400	
Soil preparation	15 000			15 000	
Trellis system (3.2m spacing Perold)		40 000			40 000
Irrigation (3.2m spacing, 0.75m compensated)	22 400			22 400	
Vines (irrigated)	29 475			29 475	
Vines (dry land)	23 580			23 580	
Total irrigated/ha (R/ha) 5	80 675	40 000		80 675	40 000
Total dryland/ha (R/ha) 6	38 580	40 000		38 580	40 000
Interest on bank overdraft (establishment cost/ha) (irrigated) (R/ha) 7	8 068	8 068	8 068	16 000	16 000
Interest on bank overdraft (establishment cost/ha) (dry land) (R/ha) 8	5 238	5 238	5 238	10 400	10 400
Entrepreneurial remuneration (R/ha) 9	5 100	4915	4915	4915	4744
Total Cost/ha without new establishment (R/ha) (1+2+3+4+9)	18 622	15 203	15 368	15 536	15 709
Total Cost/ha with new establishment (irrigated) (R/ha) (1+2+3+4+7+9)	26 690	23 270	23 435	31 536	31 709
Total Cost/ha with new establishment (dry land) (R/ha) (1+2+3+4+5+8+9)	23 860	20 441	20 606	25 936	26 109

Interviewee 7 (personal interview, 2016 January 20), an Agricultural Economist himself, follows a very logical financial management model. He divided the brand into two entities: one being the farm that produces the grapes and the other being the winery processing the grapes and selling the wine. The winery then buys the grapes from the farming entity for a certain brand. This way the farming entity can be run separately from the winery, and the winery does not have to carry the farm level production costs. This model also helps to make sure the wine is sold at the right price for a profitable business. A further discussion on wine pricing will follow later in this chapter.

As mentioned earlier, Interviewee 7 (personal interview, 2016 January 20), did indicate that their farm level production cost is lower than the industry norm (Table 4.2). He said the main reason for this is that all of their vineyards are on dryland (not irrigated) and he believes that being a dryland producer forces you to produce more cost effectively because yields are lower. This producer is one of the best examples demonstrating that cost effective farming does not lead to lower quality. They produce some of the best Sauvignon Blancs in South Africa. This supports the statement made by Interviewee 9 (personal interview, 2016 March 3), that the Swartland can compete amongst the best with quality at a fraction of the cost.

Interviewee 7 (personal interview, 2016 January 20), was asked about their planning strategy for new establishments or vineyard management for specific brands. He answered that they do not plan to plant three to five hectares of vines every second year for a specific brand. They do however plant new vineyards according to wine demand. For example, if the demand for Sauvignon Blanc is high they will plant more Sauvignon Blanc and then they manage the block the best possible way while keeping it cost effective. Only at harvest time they will decide which blocks will go to which brands. Therefore, there are no farm-level production cost differences between their premium and super premium grapes. Farm-level costs remain the same throughout the range, or the difference is so small that it is not necessary to keep a record of it.

4.2.4 Average farm-level model results

12 Table 4.6: Average farm level model

Farm level (R/ha)	Year 1		Year 2		Year 3	
	Co-op	P&SP*	Co-op	P&SP	Co-op	P&SP
Total tonne	1 470	640	1 500	664	1 530	664
Tonne/ha	10	8	10	8	10	8
Ha	147	80	150	83	153	83
Direct Cost	2 882,00	3 170,00	2 939,00	3 233,00	2 998,00	3 298,00
Labour	4 896,00	5 385,60	4 993,90	5 493,30	5 093,80	5 603,20
Mechanisation	3 983,00	4 381,30	4 788,00	5 266,80	4 788,00	5 266,80
Fixed improvements	532,00	585,20	532,00	585,20	532,00	585,20
Establishment of new vineyard	3,0	3,0	3,0		3,0	
Total irrigated/ha	80 675	80 675	120 675		120 675	
Total	242 025	242 025	362 025		362 025	
Total dryland/ha	52 380	52 380	92 380		92 380	
Total	157 140	157 140	277 140		277 140	
Payment (establishment cost/ha) (irrigated)	8 067,50	8 067,50	16 135,00	8 067,50	24 202,50	8 067,50
Payment (establishment cost/ha) (dry)	5 238	5 238	10 476	5 238	15 714	5 238

land)						
Entrepreneurial remuneration	2 775,50	5 100,00	1 127,30	4 915,70	1 120,80	4 915,70
Total Cost/ha without new establishment	15 068,50	18 622,30	14 380,90	19 494,60	14 533,00	19 669,10
Total Cost/ha with new establishment (irrigated)	23 136,00	26 689,80	30 515,90	27 562,10	38 735,50	27 736,60
Total Cost/ha with new establishment (dry land)	20 306,50	23 860,30	24 856,90	24 732,60	30 247,00	24 907,10

*Premium and super premium (P&SP)

Table 4.6 presents the combined forecasted farm level costs for cooperative and brand farming over a three-year period from the model built for this study. The detailed five-year table can be found in Annexure F (Table 4.6 in detail). These are forecasted values, because the aim of this study is to give a producer an estimate cost of establishing a successful wine brand. The respondents were asked to give their farm-level production costs from the year 2010 to 2015. All the data from year one was already presented earlier in this chapter. For the rest of the years an average increase of 2% was added, because it was found from the interviews that the respondent's average costs increased by between 2% and 5% from 2010 to 2015.

It is important to notice that the increase is less than inflation, which averages at 6% per annum. This could be an indication that these producers managed to adjust their vineyard management strategy in such a way that they were able to beat inflation pressure on their profitability. In an industry where rising production and costs without the equal rise in income is the norm, this is a positive sign and evidence that Swartland producers can produce quality grapes at lower costs.

As mentioned earlier in the chapter the model also assumes a 3 ha vineyard establishment every year for cooperative producers and 3 ha every second year for brand producers. The reason for this is to stay in a growing cycle and have a good balance between young vines and old vines. As seen in Table

4.6 (detailed in Annexure F), the trellising system only gets installed and paid for a year after establishment. The assumption is also made that new establishments are done with finance from a bank. Therefore, the repayment for a 3 ha establishment is roughly R40 000 per annum over a five-year period at a 10% interest rate. The model then calculated the yearly repayment and divided it by the total hectares to get a repayment per hectare for a dryland and irrigated establishment.

At the end the model also calculated the total farm level-production costs by adding all the costs in Table 4.6 for every year. These total costs will then be used in the break-even pricing model which will be discussed later in this chapter.

4.3 Production and cellar costs

In this section, Chapter 4, the data gathered from the interviews regarding wine production and cellar costs will be discussed. This is also the section where the main cost difference between premium and super premium wines can be seen, according to Interviewee 7 (personal interview, 2016 January 20). Therefore, the production and cellar costs for premium and super premium wines will be discussed separately in different sub-sections.

Four quantity brackets were identified, namely; the cellar producing less than 10 000 bottles a year, the cellar producing between 10 000 and 50 000 bottles a year, the cellar producing between 50 000 and 100 000 bottles a year and lastly, the cellar producing more than 100 000 bottles a year. The input costs can increase roughly between 1.5 and 2 times between these brackets (Interviewee 7, personal interview, 2016 January 20; Interviewee 6, personal interview, 2016 January 18). For example, NamPak will sell 10 000 glass bottles at a higher price per unit than, for example, 50 000 bottles. Higher production leads to lower overhead costs in the cellar.

4.3.1 Premium production and cellar costs

The cost implications model takes the total tonnage from the farm level model and divide it so that 80 goes to the production of premium wine and 20% goes to the production of super-premium wine. Table 4.7 below firstly present the 80% for the production of premium wines.

13 Table 4.7: Premium production and cellar costs

Production & Cellar cost (Total R)	Year 1	Year 2	Year 3	Year 4	Year 5
% of total tonnage for Premium	80%	80%	80%	80%	80%
Total tonne	96	115	115	115	134
Average t/ha	8,0	8,0	8,0	8,0	8,0
Total ha	12,0	14,4	14,4	14,4	16,8

Litres/tonne	650	650	650	650	650
Total litre	62 400	74 880	74 880	74 880	87 360
Number of bottles (750ml)	83 200	99 840	99 840	99 840	116 480
Labour costs (total)	33 600	43 776	46 080	51 609,60	80 371,20
Chemicals, cleaning and filtration costs (total)	21 120	27 648	30 643,20	36 864	56 448
Fixed improvements (total costs)					
Maintenance and repair of cellar building and equipment (total costs)	28 224	33 408	59 673,60	39 859,20	64 243,20
Electricity & water (total costs)	44 160	56 678,4	60 364,8	62 899,2	79 296
Cellar expenses (% of Total)	60%	60%	60%	60%	60%
Yeast, SO ₂ , bacteria, etc. (total costs)	10 223,62	12 406,36	12 544,38	12 682,4	14 957,15
Wood barrels (total costs)	4 320	5 184	5 184	5 184	6 048
Alternate wood (total costs)	4 320	5 184	5 184	5 184	6 048
Packaging & Bottling (% of Total)	60%	60%	60%	60%	60%
Glass bottles (total costs)	103 680	136 650,20	146 603,50	159 978,20	203 454,70
Cork (total costs)	41 299,20	54 224,64	52 565,76	57 438,72	56 246,40
Screw caps (total costs)					
Boxes (total costs)	21 772,80	27 578,88	29 859,84	49 973,76	54 311,04
Labels (total costs)	31 968	40 020,48	36 806,4	56 609,28	83 099,52
Bottling (total costs)	17 539,20	21 461,76	17 521,92	30 896,64	26 248,32
Total	362 226,80	464 220,80	503 031,40	569 179,00	730 771,60

Table 4.7 presents the total costs of all the inputs during the winemaking process for a premium wine (R30 to R80) over a period of five years. Firstly, the model has a variable input here where the percentage of the total tonnage from the farm-level data going to the premium brand can be chosen. In the Table 4.7, the assumption was made that 80% of the total tonnage goes to the production of a premium brand. When this is chosen the model takes the total tonnage from the farm-level model and calculates 80% thereof. Then the model uses that tonnage to calculate the total litres, with the

assumption that 650 litres comes from one tonne. This litre total will then be used at a later stage to calculate the total cost per litre.

From the interviews it was found that producers do not keep track of their separate productions and cellar costs for premium and super premium wines. They only have the total cost for all the wine made and bottled in the cellar. Therefore, the total costs over the five-year period for each of the inputs were added to a separate sheet in the model. As mentioned before, the model was designed to choose an appropriate quantity bracket according to the total hectares in the farm-level model and then multiply the quantity with the production and cellar input price in that quantity bracket. The example in Table 4.7 used a 15-hectare brand establishment, which will produce a total of more than 100 000 bottles. Therefore, the input cost chosen will be in the 100 000+ quantity bracket. The total input costs are then added to the separate premium and super premium models by using the percentage variable. In Table 4.7, 80% of the total costs were then added to the model.

This was applied to all the inputs except for wood barrels, alternate wood and packaging and bottling. According to Interviewee 7 (personal interview, 2016 January 20), Interviewee 8 (personal interview, 2016 May 17) and Interviewee 6 (personal interview, 2016 January 18), the inputs that can make large differences in production and cellar costs are wood barrels, alternate wood and packaging and bottling. Therefore, another variable was implemented in the model to accommodate this relative to the total costs. The interviewees did not keep separate record of these costs for premium and super premium production. Therefore, the assumption was made that 60% of the total cost of the above-mentioned three input costs was used for the production of the premium wines. For example, when taking the total for glass bottles by adding Table 4.7 and 4.9 (R172 800), then 60% (R103 680) goes to the premium brand and 40% (R69 120) goes to the super-premium brand.

According to the interviewees, they use older wood barrels for their premium wines (R30 to R80) or alternative wood. They also stated that there are big differences between their premium and super premium wine packaging and bottling costs. They mostly use screw caps on thinner glass bottles for their premium wines. The label and boxes also have less tooling involved. Tooling means labels and boxes are not embossed on thicker, textured paper. This can make up a difference of R5 per label.

On the next page, Table 4.8 presents a breakdown of the total premium production and cellar costs per hectare, per tonne, per litre and per bottle over a two-year period. As mentioned earlier, the example falls into the 100 000+ bottles quantity bracket. The detailed Table 4.8 can be found under Annexure F (Table 4.8 detailed). This will be compared with Table 4.10 at the end of this section to evaluate what difference certain inputs can make to the total cost between premium and super premium wines.

14 Table 4.8: Total premium production and cellar costs per unit

	Year 1				Year 2			
	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle
Labour costs (total)	0,54	350	2 800	0,40	0,58	380	3 040	0,44
Chemicals, cleaning and filtration costs (total)	0,34	220	1 760	0,25	0,37	240	1 920	0,28
Fixed improvements (total costs)								
Maintenance and repair of cellar building and equipment (total costs)	0,45	294	2 352	0,34	0,45	290	2 320	0,33
Electricity & Water (total costs)	0,71	460	3 680	0,53	0,76	492	3 936	0,57
Cellar expenses	0,30	196	1 571	0,23	0,30	197	1 581	0,23
Yeast, SO ₂ , bacteria etc. (total costs)	0,16	106	851	0,12	0,17	107	861	0,12
Wood barrels (total costs)	0,07	45	360	0,05	0,07	45	360	0,05

Alternate wood (total costs)	0,07	45,00	360	0,05	0,07	45	360	0,05
Packaging & Bottling	3,47	2 252	18 021	2,60	3,74	2 430	19 440	2,80
Glass bottles (total costs)	1,66	1 080	8 640	1,25	1,82	1 186	9 489	1,37
Cork (total costs)	0,66	430	3 441	0,50	0,72	470	3 765	0,54
Screw caps (total costs)								
Boxes (total costs)	0,35	226	1 814	0,26	0,37	239	1 915	0,28
Labels (total costs)	0,51	333	2 664	0,38	0,53	347	2 779	0,40
Bottling (total costs)	0,28	182	1 461	0,21	0,29	186	1 490	0,21
Total	5,80	3 773	30 185	4,35	6,20	4 029	32 237	4,65

4.3.2 Super premium production and cellar costs

15 Table 4.9: Super premium production and cellar costs

Production & Cellar cost	Year 1	Year 2	Year 3	Year 4	Year 5
% of total tonnage for Super Premium	20%	20%	20%	20%	20%
Total tonne	24	29	29	29	34
Average t/ha	8,0	8,0	8,0	8,0	8,0
Total ha	3,0	3,6	3,6	3,6	4,2
litres/tonne	650	650	650	650	650
Total litre	15 600	18 720	18 720	18 720	21 840
number of bottles (750ml)	20 800	24 960	24 960	24 960	29 120
Labour costs (total)	8 400	10 944	11 520	12 902,40	20 092,80
Chemicals, cleaning and filtration costs (total)	5 280	6 912	7 660,80	9 216	14 112
Fixed improvements (total costs)					
Maintenance and repair of cellar building and equipment (total costs)	7 056	8 352	14 918,40	9 964,80	16 060,80
Electricity & water (total costs)	11 040	14 169,60	15 091,20	15 724,80	19 824
Cellar expenses (% of Total)	40%	40%	40%	40%	40%
Yeast, SO ₂ , bacteria etc. (total costs)	2 555,90	3 101,59	3 136,09	3 170,59	3 739,28
Wood barrels (total costs)	2 880	3 456	3 456	3 456	4 032
Alternate wood (total costs)	2 880	3 456	3 456	3 456	4 032
Packaging & Bottling (% of Total)	40%	40%	40%	40%	40%
Glass bottles (total costs)	69 120	91 100,16	97 735,68	106 652,20	135 636,50
Cork (total costs)					
Screw caps (total costs)	27 532,80	36 149,76	35 043,84	38 292,48	37 497,60
Boxes (total costs)	14 515,20	18 385,92	19 906,56	33 315,84	36 207,36
Labels (total costs)	21 312	26 680,32	24 537,60	37 739,52	55 399,68
Bottling (total costs)	11 692,80	14 307,84	11 681,28	20 597,76	17 498,88
Total	184 264,70	237 015,20	248 143,50	294 488,40	364 132,90

Table 4.9 presents the total costs of all the inputs during the wine making process for a super-premium wine over a period of five years (R80 to R300+). Again, the model has a variable input where the percentage of the total tonnage from the brand farm-level data going to the super premium brand can be chosen. Due to the assumption made in Table 4.7, that 80% of the farm-level tonnage goes to the production of premium wine, the rest of the total (20%) will go to the production of the super-premium wine. Again, the model uses that tonnage to calculate the total litres, with the assumption that 650 litres comes from one tonne. This litre total will then be used at a later stage to calculate the total cost per litre.

The same applies as for Table 4.7, where the model was designed to choose an appropriate quantity bracket according to the total hectares in the farm-level model and then multiply the quantity with the production and cellar input price in that quantity bracket. The same example found in Table 4.7, with a 15-hectare brand establishment, is applicable here. Therefore, the input cost chosen will be in the 100 000+ quantity bracket. The total input costs are then added to the separate premium and super premium models by using the percentage variable.

Due to the knowledge gained from the interviews mentioned in 4.3.1, the variable 20% was then used to calculate the share of total input costs going to the production of the super-premium wines. The model applied this to all the inputs except for wood barrels, alternate wood and packaging and bottling, given the reasons stated in 4.3.1. Another variable percentage was applied to the model with the assumption that 40% of the total costs of the abovementioned three inputs go to the production of super premium wines.

On the next page, Table 4.10 presents the Rand/tonne, Rand/hectare, Rand/litre and Rand/bottle summary. When comparing the Rand/bottle cost from Table 4.8 (premium) with Table 4.10 (super premium), the production and cellar costs per bottle are twice as much for super premium wines than for premium wines. A detailed Table 4.10, spread over a five-year period, can be found in Annexure F.

16 Table 4.10: Total super premium production and cellar cost per unit

	Year 1				Year 2			
	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle
Labour costs (total)	0,54	350	2800	0,40	0,58	380	3040	0,44
Chemicals, cleaning and filtration costs (total)	0,34	220	1760	0,25	0,37	240	1920	0,28
Cellar expenses	0,53	346	2771	0,40	0,53	347	2781	0,40
Yeast, SO ₂ , bacteria, etc. (total costs)	0,16	106	851	0,12	0,17	107	861	0,12
Wood barrels (total costs)	0,18	120	960	0,14	0,18	120	960	0,14
Alternate wood (total costs)	0,18	120	960	0,14	0,18	120	960	0,14
Fixed improvements (total costs)								
Maintenance and repair of cellar building and equipment (total costs)	0,45	294	2352	0,34	0,45	290	2320	0,33

Electricity & water (total costs)	0,71	460	3680	0,53	0,76	492	3936	0,57
Packaging & Bottling	9,24	6007	48057	6,93	9,97	6480	51840	7,48
Glass bottles (total costs)	4,43	2880	23040	3,32	4,87	3163	25305	3,65
Cork (total costs)	1,76	1147	9177	1,32	1,93	1255	10041	1,45
Screw caps (total costs)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Boxes (total costs)	0,93	604	4838	0,70	0,98	638	5107	0,74
Labels (total costs)	1,37	888	7104	1,02	1,43	926	7411	1,07
Bottling (total costs)	0,75	487	3897	0,56	0,76	496	3974	0,57
Total	11,81	7677	61421	8,86	12,66	8229	65837	9,50

4.4 Marketing and distribution

In this section of Chapter 4 the results given by the model from the interviews for marketing and distribution costs will be discussed. Structured data was difficult to gather, given that most of the smaller wineries marketed and distributed their wines locally themselves. It also appeared as if there were no determinable fixed methods of marketing and distributing wine. All three of the respondents followed a different approach.

Interviewee 6 (personal interview, 2016 January 18), marketed and distributed his wines locally to boutique wine shops and restaurants himself. Internationally he relies on wine shops, especially England, to buy and stock his wines. He sells the wines to them and then ships it Free On Board to the buyer.

Interviewee 7 (personal interview, 2016 January 20), followed a more direct approach. He believes that a good relationship is needed with buyers. They also export most of their wines to 8 countries Free On Board. Therefore, they only pay for distribution to the harbour. Their largest marketing expense was travel costs to their buyers for regular visits.

Interviewee 8 (personal interview, 2016 May 17), followed a similar approach to the Interviewee 7, by visiting their international buyers regularly. This wine brand has relationships with different distributors or wine merchants who buy and then distribute their wine internationally. Locally they sell their wines to most of the large retailers; most of their distribution costs are from the farm in Darling to a warehouse in Cape Town where another company then distributes their wines at a fee. This interviewee does not believe in print or television advertisements. They prefer to follow a more engaging approach where they host farmer's markets every month to attract customers to the farm to experience the area.

The data gathered from Interviewee 7 (personal interview, 2016 January 20), provided the most meaningful information and therefore his information was manipulated to get a marketing and distribution cost per bottle. The assumption was made that the total marketing and distribution cost was for 100 000 bottles of wine, thus making the per bottle cost higher to ensure that enough money is budgeted for in the model regarding marketing and distribution.

Table 4.11 represents the estimate values of marketing and distribution per bottle calculated with the abovementioned method. It is important to notice that these costs can differ substantially, depending on the approach followed.

17 Table 4.11: Estimate marketing and distribution costs

R/bottle	Year 1	Year 2	Year 3	Year 4	Year 5
Marketing Costs					
International (Total)	0,87	0,86	1,5	2,5	3,08
Travel costs					
Product tastings					
Wine & dine with buyers					
South Africa (Total)	2,6	2,66	3	7,19	6,55
Inviting international buyers to farm					
Travel costs to restaurants					
Restaurant listing fees					
Product tastings					
Events on the farm					
Print media					
Distribution					
International costs	1,2	1	1,58	1,78	2,22
South Africa costs	8,78	8,87	10,51	11,66	10,71
Total	12,58	12,53	15,09	20,63	19,48

4.5 Cost implications

In this section of Chapter 4, firstly, a summary of the total cost implications for establishing a premium and super premium wine brand will be given, secondly, the break-even selling price of the wines will be given over the five-year period. Thirdly, the estimated brand value will be given and lastly a few scenarios will be implemented in the model to compare the difference it makes to the break-even prices.

4.5.1 Total cost implications

On the next page the total cost implications over the five-year period will be given in Table 4.12 and then discussed shortly. A detailed Table 4.12 over a five-year period can be found in Annexure F.

18 Table 4.12: Total cost implications

	Year 1		Year 2		Year 3	
	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium
Total ha	12	3	14,4	3,6	14,4	3,6
Total tonne	96	24	115	29	115	29
Total litre	62 400	15 600	74 880	18 720	74 880	18 720
Total bottles	83 200	20 800	99 840	24 960	99 840	24 960
Farm level						
Per ha	63 909	53 258	41 171	41 171	41 346	41 346
Per tonne	7 989	6 657	5 146	5 146	5 168	5 168
Per litre	12	12	8	8	8	8
Per bottle	9	9	6	6	6	6
Total	766 908	191 727	592 865	148 216	595 378	148 845
Production & Cellar						
Per ha	30 186	61 422	32 238	65 838	34 933	68 929
Per tonne	3 773	7 678	4 030	8 230	4 367	4 367
Per litre	6	12	6	13	7	13
Per bottle	4	9	5	9	5	10
Total	362 227	184 265	464 221	237 015	503 031	248 143
Marketing & Distribution						
Per ha	87 221	87 221	86 875	86 875	104 624	104 624
Per tonne	10 903	10 903	10 859	10 859	13 078	13 078
Per litre	17	17	17	17	20	20
Per bottle	13	13	13	13	15	15
Total	1 046 656	261 664	1 250 995	312 749	1 506 586	376 646

Total (all three phases)	2 175 791	637 656	2 308 081	697 980	2 604 995	773 634
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The farm level costs in Table 4.12 were calculated by using the total farm level cost for premium and super premium production and then divided between premium and super premium by using the 80% and 20% variable used in the production and cellar costs model (Table 4.7). The same principle was applied to the total marketing and distribution costs to divide the total cost between premium and super premium production.

As seen in Table 4.12, the total cost of establishing a premium and super premium brand would be R2 813 447 for a producer who is able to use 15 hectares of his whole farm for the brand in the first year.

4.5.2 Break-even pricing

This sub section will present the break-even price (in Rand) for a premium and super premium wine per bottle as calculated by the model in Table 4.13.

19 Table 4.13: Break-even pricing

Break-even Price	Year 1		Year 2		Year 3		Year 4		Year 5	
	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium
Farm level										
Per bottle	9,22	9,22	5,94	5,94	5,96	5,96	8,93	8,93	5,98	5,98
Production & Cellar										
Per bottle	4,35	8,86	4,65	9,50	5,04	9,94	5,70	11,80	6,27	12,50
Marketing & Distribution										
Per bottle	12,58	12,58	12,53	12,53	15,09	15,09	20,63	20,63	19,48	19,48
Break-even price	26,15	30,66	23,12	27,96	26,09	30,99	35,26	41,36	31,73	37,96

As mentioned earlier in this chapter, the largest cost difference between premium and super premium wines falls under the production and cellar costs, and this can also be seen in Table 4.13 above. Table 4.13 presents the price at which the wine must be sold per bottle to break even for a 15 ha brand establishment. Small-to-medium producers then need to make sure they add a large enough profit margin to this to make sure they are covered for unforeseen expenses. Interviewee 7 stated, (personal interview, 2016 January 20) that a good pricing strategy to follow is to take the break-even price and

multiply it by two to get the selling price. He added that it is an especially good strategy for smaller wineries or new wineries to start their prices as high as possible because it allows them access to a less competitive market and more manageable growth. Small wineries can easily grow themselves bankrupt when they receive a large demand for their product and then try to supply the demand by making dept. With slower growth a longer term and loyal market can be targeted, rather than fast growth when it is new and trendy.

4.5.3 Brand value

Attempts to gain insight from different international experts was unsuccessful as can be seen in Annexure E. Therefore, the literature from Seetharaman, Nadzir & Gunalan (2001) was interpreted to create the brand valuation model shown in Table 4.14. The model can calculate the estimate brand value after year five, following the historic cost approach and then discounting it with the inflation adjusted repo rate. Only the historic cost of building the brand was used. Therefore, all the farm level costs were excluded.

20 Table 4.14: Brand value

	Year 1	Year 2	Year 3	Year 4	Year 5
Total (cost implications P & SP)*	1 854 812	2 264 980	2 634 407	3 438 291	3 931 192
	Year 1	Year 2	Year 3	Year 4	Year 5
Value	1 854 812	4 171 796	6 923 169	10 555 568	14 782 710
Repo rate	10%				
Inflation	7%				
Inflation adjusted discount rate	0,028037				

*Premium and Super Premium (P & SP)

The results in Table 4.14 are for the same 15-hectare brand establishment used throughout Chapter 4. This model then uses the total costs calculated in the cost implications model for premium and super premium wines and then adds them together in one year, as seen at the top of Table 4.14. The value for year one is then the same as the cost. For year two, the value has been calculated by using the formula: [Year 1 * (1+Inflation adjusted rate)] + Year 2. The rest of the years follow the same pattern until year five.

The total estimated brand value of this 15-hectare establishment then would be R 14 782 710 when the historic cost brand valuation method was followed. The assumptions made here is that inflation remained at 7% over the five years, the repo rate remained at 10% and that the business followed the expansion pattern used in all three the phases in the model over the period. This could be a useful value for the owner, because it most banks want to see that the value of the business does not exceed the expenses. This could be beneficial for later expansions in the business.

4.5.4 Testing different scenarios

This sub-section will test the effect two different scenarios will have on the break-even price model in Table 4.13. The scenarios that will be tested are:

1. Increase in repo rate from 10% to 15% (Table 4.15).
2. Lowering repayment schedule from 60 months to 36 months (Table 4.16).
3. Cost effectiveness of starting very small (Only 1 hectare) (Table 4.17).
4. The cost implications of branding for a typical medium sized (147 hectare) cooperative wine producer in the Swartland. (Table 4.18).

21 Table 4.15: Increase in repo rate

Break-even Price	Year 1		Year 2		Year 3		Year 4		Year 5	
	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium
Farm level										
Per bottle	9,30	9,30	6,01	6,01	6,03	6,03	9,07	9,07	6,10	6,10
Production & Cellar										
Per bottle	4,35	8,86	4,65	9,50	5,04	9,94	5,70	11,80	6,27	12,50
Marketing & Distribution										
Per bottle	12,58	12,58	12,53	12,53	15,09	15,09	20,63	20,63	19,48	19,48
Break-even price	26,23	30,74	23,19	28,03	26,16	31,06	35,40	41,49	31,85	38,08

There is only a slight difference between the 10% repo rate (Table 4.13) and 15% repo rate (Table 4.15), due to the fact that the only loan in the model is under the farm-level costs for the establishment

of a new 3-hectare vineyard. The rest of the expenses are assumed to come from the cash flow of the business.

22 Table 4.16: Lowering repayment schedule

Break-even Price	Year 1			Year 2			Year 3			Year 4			Year 5		
	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium
Farm level															
Per bottle	9,57	9,57	6,23	6,23	6,26	6,26	9,53	9,53	6,50	6,50					
Production & Cellar															
Per bottle	4,35	8,86	4,65	9,50	5,04	9,94	5,70	11,80	6,27	12,50					
Marketing & Distribution															
Per bottle	12,58	12,58	12,53	12,53	15,09	15,09	20,63	20,63	19,48	19,48					
Break-even price	26,50	31,01	23,41	28,26	26,39	31,29	35,86	41,96	32,25	38,48					

23 Table 4.17: Cost effectiveness of starting small

Break-even Price	Year 1			Year 2			Year 3			Year 4			Year 5		
	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium	Premium	Super	Premium
Farm level / Per bottle	110,96	110,96	19,36	19,36	19,39	19,39	32,63	32,63	13,58	13,58					
Production & Cellar / Per bottle	34,83	70,87	20,27	42,07	21,98	44,05	24,88	52,32	27,20	55,24					
Marketing & Distribution / Per bottle	12,58	12,58	12,53	12,53	15,09	15,09	20,63	20,63	19,48	19,48					

Break-even price	158,37	194,41	52,16	73,97	56,46	78,52	78,14	105,58	60,25	88,29
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By keeping the repo rate at 10% and then lowering the repayment period from 60 months to 36 months makes for an increase of almost 50c per bottle. This appears to be a good option for the smaller winery to repay its debt before the next 3-hectare establishment commences.

Table 4.17 indicates the break-even price for a 1-hectare establishment. As can be seen, the break-even price goes up dramatically, especially in the years where a new 3-hectare establishment commenced (Year 1 and Year 4). For these producers it would be viable to sell their wines at the higher prices or to plan their new establishments further apart.

24 Table 4.18: Typical producer

Break-even Price	Year 1		Year 2		Year 3		Year 4		Year 5	
	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium
Farm level										
Per bottle	2,51	2,51	2,37	2,37	2,54	2,54	2,92	2,92	2,66	2,66
Production & Cellar										
Per bottle	4,35	8,86	4,65	9,50	5,04	9,94	5,70	11,80	6,27	12,50
Marketing & Distribution										
Per bottle	12,58	12,58	12,53	12,53	15,09	15,09	20,63	20,63	19,48	19,48
Break-even price	19,45	23,95	19,55	24,40	22,67	27,58	29,25	35,35	28,41	34,64

Regarding the last scenario as laid out in table 4.18, it is important to state that the cooperative producers interviewed for this study already produce premium quality grapes for premium cooperative wine brands. It was found that most of the medium sized cooperative wine producers in the Swartland follow the same premium vineyard management practises on roughly 147 hectares. As mentioned earlier the producers interviewed for this study are not typical Swartland producers. The

data from Table 4.18 is typical in a sense that the whole farms produce goes to a cooperative cellar. This then is in line with the typical farm theory discussed in chapter 3.5 in a way. Therefore, there are very little farm-level cost differences for these typical producers when establishing a private wine brand. They already produce premium grapes for cooperative brands.

The per-unit cost for a 147-hectare cooperative producer to establish a private brand would be the lowest. Firstly, this is an unrealistic comparison, because in practise the risk would be too high to produce the total of 147 hectares for a private brand. Secondly, the total cost of establishing a brand which can accommodate 147 hectare's worth of grapes would cost roughly R15 million compared to R800 000 for a small start of one hectare. Most cooperative producers will not be able to convert their whole farm to a private brand.

4.6 Conclusions

Most of the producers in the Swartland produce grapes for cooperative cellars. Therefore, the aim under the farm-level phase was also to identify cost differences, if any, between the production costs of cooperative producers and premium or super premium producers. The overall finding was that there is no significant difference between the farm-level cost of the cooperative producers and private brand producers in the Swartland that were interviewed.

When it came to the farm-level production cost differences between premium and super premium grapes there was a mixed response from the producers who were interviewed. The smaller producers indicated that their super premium grapes demanded more labour than their premium grapes. What was interesting was that they did not keep record of the costs differences between premium and super premium farm-level costs separately. The larger producers indicated that they do not keep separate track of the costs because the difference is very small.

The main cost difference between premium and super premium wine brands was found at the production and cellar costs phase. The first variable was the quantity of wine made, because the larger cellars pay a lower per unit price on cellar consumables, while the smaller cellars pay a higher per unit price. In the model four quantity brackets were identified, namely: 100 000+ bottles, 50 000 to 100 000 bottles, 10 000 to 50 000 bottles and lastly, less than 10 000 bottles.

The third phase of wine branding, marketing and distribution was the most difficult phase to retrieve meaningful financial data. It differed a lot between the producers interviewed. The smaller producers marketed and distributed their wines themselves, while the larger producers followed different marketing approaches and made use of distributing companies. Therefore, one of the larger producers' marketing budget was used to derive an average per bottle marketing and distribution cost. This added

up to a relatively high marketing and distribution cost of around R12 per bottle. Furthermore, no difference between the marketing and distribution of premium and super premium wines were found.

The results given in Chapter 4 were derived from considerable assumptions and can therefore differ from situation to situation. The cost of establishing a wine brand in the Swartland, given the assumptions, is very high. Therefore, most of the interviewees approached branding with caution by starting very small and building the brand from there. The benefit of starting small is that the wines can be sold in a higher price bracket to make a profit giving rise to a steady growth.

Starting small also has its own risks. Growing small wine brands too fast is also potentially detrimental in that they may grow themselves into bankruptcy in the process. The smallest wine producers, who are also under the most financial pressure, will probably not be able to establish a successful wine brand due to the high cost thereof. The options they have are to engage in horizontal networks with a few small wine producers and start to build a regional brand amongst each other, this way they can divide the costs. Another option is to make sure their grape quality is good enough to sell their grapes to existing strong brands on a contract basis.

Wine branding can be the solution to the current financial pressure under which wine producers find themselves. Due to the high cost of branding and the risk involved, especially Swartland, producers need to start focussing on wine production and not see it as a second enterprise to wheat farming. Focus should be placed on vineyard management, good wine making practises and efficient marketing. Starting small and selling at higher prices while mastering trade skills can lead to successful wine branding.

Chapter 5: Conclusions, Summary and Recommendations

5.1 Conclusion

The profitable production of wine grapes is under pressure and one way farmers implement to negate this is to push production as high as possible. In the wine industry this cause, almost certainly, a decline in quality and subsequently prices. For producers the alternative is to focus on quality grape production, if the market allows it. The most certain way of keeping a measure of control over price is to implement a system of own branding. This also presents some options for producers in the Swartland wine production area. There are, however, cost implications regarding the establishment of an own brand. These costs include production alterations, adaptations to the wine making process as well as marketing. Regarding these changes there are uncertainty regarding the cost implications for the producers. To address this uncertainty this project focused on identifying the technical changes required to improve wine quality to premium and access the cost implications thereof. The main aim of the research project was, to determine the cost implications are for a small-to-medium wine farmer in establishing a wine brand in the Swartland. The question proved valid as interviews indicated that costing and different methods of branding was an uncertain topic for producers.

Wine branding consist of various possible options, all with different cost implications and benefits. Horizontal networks, regional branding and wine tourism are all presented as possibilities to strengthen the development of an own brand for wine.

Over the extent of the project, data was collected and the question was answered within the framework of a model that was built for this study. This model was built with the goal of being a simulation instrument to aid in the process of this research by calculating different cost components more easily in a table format. The three main areas where costs are involved in the brand establishment process were identified as: farm-level costs, production/cellar costs and marketing and distribution costs. The main research method used in this study is called the mixed-method. The reason for choosing the exploratory research design is because the study is dealing with a multiphase problem. In the first phase qualitative methods are employed to determine the characteristics, phenomena and issues related to the study. The insight gained from phase one provides a basis for a more systematic quantitative study in phase two.

For this purpose, a branding cost model was developed to assess the cost implications of the various components of establishing own branding. The model is able use variable quantity inputs to generate the costs for wine branding in total and at farm-level, production and marketing and distribution phases.

The explorative style of the research was suitably sufficient for this study. Each interview led to a new understanding of how wine branding in the Swartland could work and therefore, also prepared the researcher better for the next interview. The semi-structured interviews were also found to be sufficient as the discussion led to new and interesting findings used in the study.

The cost of establishing a wine brand is high and therefore branding does not currently appear to be a viable economic solution for the struggling smaller wine grape producer in the Swartland; although there are examples of small wineries with well-known winemakers making a good living in the Swartland. The Swartland regional brand is getting stronger and there may be a place for smaller wine brands in the near future.

It is possible to establish a small-to-medium wine brand in the Swartland for the larger producer who delivers grapes to cooperative cellars with strong premium brands. The belief is that only a low-yielding vineyard can produce the quality grapes for premium and super premium wines by some wineries and regions. This places unnecessary pressure on farm level-production costs and makes wine farming in the Swartland unprofitable.

Swartland wines have the potential quality and story to find high paying niche markets. Therefore, larger producers who want to establish a wine brand in the Swartland can afford to start small and sell their wines at higher prices, while maintaining a good relationship with their main buyers (cooperative cellars). One of the main strategies to consider for these small wine producers is horizontal networks or “coopetition” and to promote a regional brand, setting an example for the rest of the wine industry. It is important to keep in mind that this conclusion cannot be generalised and is only applicable to the producers interviewed for this study or of similar size and nature.

5.2 Summary

In the previous chapter the data gathered from the research were interpreted with the help of a cost model and the results were then discussed. In this chapter a summary of the findings will firstly be given. Secondly, some concluding comments will be made, followed by recommendations for further studies.

The main purpose of this research was to identify the cost implications for establishing a small-to-medium private wine brand in the Swartland. The Swartland was specifically chosen for its relatively new reputation as a wine region and its down-to-earth, hands-on winemakers. The Swartland Revolution introduced a wave of new small wine brands to the public. Some of these small winemakers form horizontal networks (“coopetition”), where they help each other out during the winemaking process and then compete in the market place indirectly. The Swartland Revolution also

introduced a regional branding strategy to the region, therefore showing the effectiveness of working together to create a regional brand which in turn also leads to an increase in wine tourism.

The reason why this study's goal was to identify the cost implications of specific branding in the Swartland was because of the literature by Aylward (2006). He identified one of the reasons for the success of an industry is having small-to-medium enterprises which create successful individual brands based on "regionality". Therefore, it is believed that the success of the South African wine industry relies on the creation of individual brands based on strong regional brands.

Due to no previous research done on this topic, the study followed an explorative approach. Three main phases in wine branding were identified with the help of several interviews. The three main phases are: Farm level, Production and cellar and lastly, Marketing and distribution. To test the difference in quality of grapes / wine in the three phases, wine branding was divided between premium and super premium wines. A cost implications model was then built to help with the interpretation of the data gathered from the interviews with Swartland producers.

Most of the producers in the Swartland produce grapes for cooperative cellars. Therefore, the aim under the farm-level phase was also to identify cost differences, if any, between the production costs of cooperative producers and premium or super premium producers. The overall finding was that there is no significant difference between the farm-level cost of the cooperative producers and private brand producers in the Swartland that were interviewed. Furthermore, the cooperative producers that were interviewed were chosen because they produced premium grapes. This view was supported by a statement from the viticulturist interviewed (Interviewee 9, personal interview, 2016 March 3), that the Swartland can produce some of the best quality grapes at a fraction of the price than other regions can. VinPro (2015) also identified the Swartland as the region with the lowest production costs.

When it came to the farm-level production cost differences between premium and super premium grapes there was a mixed response from the producers who were interviewed. The smaller producers indicated that their super premium grapes demanded more labour than their premium grapes. However, it must be noted that they did not keep separate records of the cost differences between premium and super premium farm-level costs. The larger producers stated that they do not keep separate track of the costs because the difference is very small. Interviewee 7 (personal interview, 2016 January 20), summed up the reasons why they do not keep separate records was because, "We have tractors and labour. If we pass through a block two times or three times, it doesn't make a difference. There are however vineyard management differences, but it doesn't necessarily make a large cost difference."

The main cost difference between premium and super premium wine brands were found at the production and cellar costs phase. The first variable was the quantity of wine made, because the larger cellars pay a lower per unit price on cellar consumables, while the smaller cellars pay a higher per unit

price. In the model, four quantity brackets were identified, namely: 100 000+ bottles, 50 000 to 100 000 bottles, 10 000 to 50 000 bottles and lastly less than 10 000 bottles. The per unit price difference between these brackets are double each time. The second variable was the cost differences between wood barrels, alternate wood and packaging and bottling used for premium and super premium wines. For example, the glass bottles used for premium wines are cheaper than for super premium wines.

The third phase of wine branding, marketing and distribution was the most difficult phase to retrieve meaningful financial data. It differed substantially between the producers interviewed. The smaller producers marketed and distributed their wines themselves, while the larger producers followed different marketing approaches and made use of distributing companies. Therefore, one of the larger producer's marketing budget was used to derive an average per-bottle marketing and distribution cost. This added up to a relatively high marketing and distribution cost of around R12 per bottle. No further difference between the marketing and distribution of premium and super premium wines were found.

Lastly, the total cost implications were added up with the help of the model and then discussed in detail in Chapter four. The break-even price was also calculated for a 15-hectare brand establishment. The 15-hectare brand establishment's break-even price was then compared with a 1-hectare brand establishment's break-even price. It was found that the quantity bracket did make a big difference on production and cellar costs, as well as farm-level costs when a new 3-hectare establishment is planned for every third year. Therefore, the strategy, mentioned by Interviewee 7 (personal interview, 2016 January 20), to multiply the break-even price per bottle by two to get the selling price appears viable.

5.3 Recommendation

A recommendation for someone interested in extending this study would be to expand the number of producers over a wider area in the Swartland to make the results more generalizable. One of the limitations of this study is that it is not fully representative of the Swartland as a whole due to the concentration of producers interviewed being mostly in the Perdeberg, Malmesbury and Darling areas. The model that was built gives a good basis for further development regarding a more detailed production and cellar cost difference between premium and super premium wines. The model also does not take into account the cost differences between making white and red wines. Lastly, the elementary brand valuation model can also be improved upon to be used as a definite tool for valuing wine brands.

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Annexure A (Maps)





Annexure B (Interviews)

Mr Braham Oberholzer – 12 January 2016

Dr Niel Hauptfleisch – 12 January 2016

Mr Philip La Grange – 4 March 2016

Mr Hugo Basson – 17 May 2016

Mr Herman le Roux – 13 June 2014

Mr Jaco Engelbrecht – 3 March 2016

Mr Nick Pentz – 20 January 2016

Mr Paul Malan – 18 June 2014

Mr Pieter Euvrard – 18 January 2016

Mr Pieter van Niekerk – 11 June 2014

Annexure C (Questionnaire Brands)

Jak Hauptfleisch

Januarie 2016

MSc Agric (Landbou-Ekonomie) SU

Studieleier: Dr Willem Hoffmann

Oop vrae:

1. Waarom het jy besluit om 'n privaat handelsnaam in die Swartland te begin?
2. Dink jy die Swartland as wynstreek bied goeie geleentheid vir iemand soos jy wat 'n privaat handelsnaam gevestig het?
3. Wat is die uitdagings betrokke om 'n privaat handelsnaam in die Swartland te vestig?
Wat is die kenmerkende eienskappe van die Swartland?
4. Is wyndruiwe en wyn jou primêre inkomste?
5. Hoeveel ton van jou druiwe gaan vir jou privaat handelsnaam en hoeveel gaan vir 'n ander kelder?
6. Wie of wat is julle teikengroep?
7. Is daar 'n verskil in boerdery praktyke vir jou privaat handelsnaam se druiwe teenoor die druiwe vir 'n ander kelder?
8. In watter prysklasse val jou handelsname?
9. Is daar 'n verskil in boerdery praktyke tussen jou premium- en super premium handelsname?
10. Is daar 'n verskil in wynmaak praktyke tussen jou premium- en super premium handelsname? Wat is die kostes van kelder bou min of meer?
11. Is daar 'n verskil in bemarking praktyke tussen jou premium- en super premium handelsname? Doen julle self die bemarking of gebruik julle 'n bemarking agentskap?
12. Sou 'n waardebepaling van jou wyn handelsnaam tot waarde wees vir jou?

Jak Hauptfleisch**Januarie 2015**

MSc Agric (Landbou-Ekonomie) SU

Studieleier: Dr Willem Hoffmann

Hierdie vraelys is van toepassing op spesifieke finansiële aspekte van handelsnaam vestiging. Die vraelys word na die onderhoud by die respondent agtergelaat en oor 'n week opgetel. **Alle data sal konfidensieel gehou word, en slegs gebruik word vir verwerking in 'n model.**

Die vrae is van toepassing op die afgelope **vyf jaar**. M.a.w. jaarliks vanaf **2010 tot 2015**. Vul asb. net die bedrag in van toepassing op jou goedkoper (intree) handelsnaam en ook jou duurder handelsnaam. Dit word onderskeidelik **premium en super premium** genoem hieronder.

Produksie (Plaasvlak):

1. Het jy nuwe wingerd gevestig vir die handelsname die afgelope vyf jaar? Ja/Nee
Indien Nee, ignoreer asb 1.1 en vul 1.2 in.

1.1	Premium (R)	Super Premium (R)
Grondvoorbereidingskoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Stokkies (totaal) <i>Dui asb. cultivar aan</i>	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Prieëlstelselkoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Besproeiingstelselkoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Chemiese regstellings / Ameliorante	2010: 2011: 2012: 2013: 2014:	2010: 2011: 2012: 2013: 2014:

	2015:	2015:
Arbeidskoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Meganisasiekoste (aankoop van parsmasjien ens.)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Finansieringskoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Depresiasie (indien beskikbaar)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

1.2	Premium (R)	Super Premium (R)
Arbeidkoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Meganisasiekoste (aankoop van parsmasjien ens.)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Finansieringskoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Besproeiingskoste	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Depresiasie (indien beskikbaar)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

Verwerking (kelder):

Indien gebruik maak van bestaande kelder en die wyn self gemaak word vul asb. 2.1 in, indien nie, vul 2.2 in.

2.1	Premium	Super Premium
Totale liter	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Totale ton	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Arbeidskoste (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	
Chemikalië, skoonmaakmiddels en filtrasie (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	
Kleder uitgawes vir die wynmaak proses. Bv. Gis, ens. (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Verbeterings en herstelwerk (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	
Elektrisiteit & water (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	
Glas bottels (totale R)	2010: 2011:	2010: 2011:

	2012: 2013: 2014: 2015:	2012: 2013: 2014: 2015:
Etiketie (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Kurk/Screw caps (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Karton bokse (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Bottelingskoste (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Depresiasie (indien beskikbaar)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

2.2 Indien wyn deur 'n buite persoon of ander kelder gemaak word:

	Premium	Super Premium
Liter	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Kostes (R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

Bemarking:

3.1 Self bemarking	Premium	Super Premium
Buiteland (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Binneland (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Telefoonkoste (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Adminkoste (totale R)	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Bemarker salaris	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

3.2 Indien Bemarking agentskap gebruik word**Maatskappy naam:**

Kostes: 2010:
2011:
2012:
2013:
2014:
2015:

Logistiek / Verspreiding:

4.1 Doen julle self verspreiding? Ja/Nee

Indien Ja, vul asb. onderstaande tabel in of beweeg aan na 4.2.

4.1	Premium	Super Premium
Binneland kostes	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Buiteland kostes	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

4.2 Gebruik julle 'n verspreiding maatskappy? Ja/Nee

Indien Ja, vul asb. onderstaande tabel in.

4.2	Premium	Super Premium
Binneland kostes	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:
Buiteland kostes	2010: 2011: 2012: 2013: 2014: 2015:	2010: 2011: 2012: 2013: 2014: 2015:

Annexure D (Questionnaire Producers)**Jak Hauptfleisch (MSc Agric)****Producer questionnaire**

Farm size (planted) ha	
Total tonne	
Tonne / ha	
Direct Cost	
Seed (cover crop)	
Fertiliser	
Organic Material	
Pesticide Control	
Herbicide Control	
Repair and binding Material	
Labour	
Supervision	
Permanent	
Seasonal	
Mechanisation	
Fuel	
Repair, Parts & Maintenance	
Licences & Insurance	
Transport hired	
Fixed improvements	
Repair & Maintenance	
Insurance on fixed assets	

March 2016

Annexure E (International correspondence)

Email from Professor Mike Veseth (USA)

Dear Jak

Thanks for writing. This is a very interesting research problem and quite comprehensive. I am sure that feasibility studies like this have been done in other regions, but I have not seen anything published. My guess is that the data is kept private. The situation in the Swartland has some unique elements, but if you can find a study from another region you can no doubt make the correct adjustments.

I have two suggestions, but you have no doubt already done the first thing, which is to talk with Nick Vink at Stellenbosch. He seems to know everyone and everything and I always value his opinion. But since he is right there I imagine you've already consulted with him.

My second suggestion is to contact Tony Correia in California.

<http://www.correiaco.com/about.html>

I am pretty sure that Tony has done the kind of analysis you are interested in for his private clients and that he might either be able to share some of that or else he can send you to the persons/resources you need. Tony has a fantastic understanding of the business and I am sure he has dealt with superpremium wine clients, too.

Hope this help. I hope we can find an excuse to return to RSA at some point and perhaps we can talk in person then.

Cheers

Mike

Email from Tony Correia (USA)

Jak, afraid I am not the fellow to help you with this, I value real property only; land, buildings and vineyards. Brand valuation is a bit of a different discipline, usually done by the Business Valuation specialists. Two of the fellows who do quite a lot of that are:

Joe Orlando JOrlando@frankrimerman.com

Mike Fisher mfisher@globalwinebank.com

Good luck!

Annexure F (Detailed tables)

25 Table 4.6: Average farm-level model (detailed)

Farm level	Year 1		Year 2		Year 3		Year 4		Year 5	
	Co-op	P&SP	Co-op	P&SP	Co-op	P&SP	Co-op	P&SP	Co-op	P&SP
Total tonne	1470,0	640,0	1500,0	664,0	1530,0	664,0	1560,0	664,0	1590,0	688,0
Tonne/ha	10,0	8,0	10,0	8,0	10,0	8,0	10,0	8,0	10,0	8,0
Ha	147,0	80,0	150,0	83,0	153,0	83,0	156,0	83,0	159,0	86,0
Direct Cost	2882,0	3170,2	2939,6	3233,6	2998,4	3298,3	3058,4	3364,2	3119,6	3431,5
Seed	582,0	640,2	593,6	653,0	605,5	666,1	617,6	679,4	630,0	693,0
Fertiliser	600,0	660,0	612,0	673,2	624,2	686,7	636,7	700,4	649,5	714,4
Organic Material	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Pesticide Control	480,0	528,0	489,6	538,6	499,4	549,3	509,4	560,3	519,6	571,5
Herbicide Control	1200,0	1320,0	1224,0	1346,4	1248,5	1373,3	1273,4	1400,8	1298,9	1428,8
Repair and binding Material	20,0	22,0	20,4	22,4	20,8	22,9	21,2	23,3	21,6	23,8
Labour	4896,0	5385,6	4993,9	5493,3	5093,8	5603,2	5195,7	5715,2	5299,6	5829,5

Supervision	816,0	897,6	832,3	915,6	849,0	933,9	865,9	952,5	883,3	971,6
Permanent	3400,0	3740,0	3468,0	3814,8	3537,4	3891,1	3608,1	3968,9	3680,3	4048,3
Seasonal	680,0	748,0	693,6	763,0	707,5	778,2	721,6	793,8	736,1	809,7
Mechanisation	3983,0	4381,3	4788,0	5266,8	4788,0	5266,8	4788,0	5266,8	4788,0	5266,8
Fuel	1800,0	1980,0	2021,0	2223,1	2021,0	2223,1	2021,0	2223,1	2021,0	2223,1
Repair, Parts & Maintenance	1020,0	1122,0	1485,0	1633,5	1485,0	1633,5	1485,0	1633,5	1485,0	1633,5
Licences & Insurance	823,0	905,3	350,0	385,0	350,0	385,0	350,0	385,0	350,0	385,0
Transport hired	340,0	374,0	932,0	1025,2	932,0	1025,2	932,0	1025,2	932,0	1025,2
Fixed improvements	532,0	585,2	532,0	585,2	532,0	585,2	532,0	585,2	532,0	585,2
Repair & Maintenance	424,0	466,4	424,0	466,4	424,0	466,4	424,0	466,4	424,0	466,4
Insurance	108,0	118,8	108,0	118,8	108,0	118,8	108,0	118,8	108,0	118,8
Establishment of new Vineyard	3,0	3,0	3,0		3,0		3,0	3,0	3,0	
Ha new establishment	3,0	3,0	3,0		3,0		3,0	3,0	3,0	

Ameliorants	9400,0	9400,0	9400,0		9400,0		9400,0	9400,0	9400,0	
Labour	4400,0	4400,0	4400,0		4400,0		4400,0	4400,0	4400,0	
Soil preparation	15000,0	15000,0	15000,0		15000,0		15000,0	15000,0	15000,0	
Trellis system (3.2m spacing Perold)			40000,0	40000	40000,0		40000,0		40000,0	40000,0
Irrigation (3.2m spacing, 0.75m compensated)	22400,0	22400,0	22400,0		22400,0		22400,0	22400,0	22400,0	
Vines (irrigated)	29475,0	29475,0	29475,0		29475,0		29475,0	29475,0	29475,0	
Vines (dry land)	23580,0	23580,0	23580,0		23580,0		23580,0	23580,0	23580,0	
Total irrigated/ha	80675	80675	120675		120675		120675	80675	127675	
Total	242025	242025	362025		362025		362025	242025	383025	
Total dryland/ha	52380	52380	92380		92380		92380	52380	99380	
Total	157140	157140	277140		277140		277140	157140	298140	

Payment (establishment cost/ha) (irrigated)	8067,5	8067,5	16135,0	8067,5	24202,5	8067,5	32270,0	16135,0	40337,5	16135,0
Payment (establishment cost/ha) (dry land)	5238,0	5238,0	10476,0	5238,0	15714,0	5238,0	20952,0	10476,0	26190,0	10476,0
Entrepreneurial remuneration	2775,5	5100,0	1127,3	4915,7	1120,8	4915,7	1114,3	4915,7	1080,7	4744,2
Total Cost/ha without new establishment	15068,5	18622,3	14380,9	19494,6	14533,0	19669,1	14688,3	19847,1	14819,9	19857,3
Total Cost/ha with new establishment (irrigated)	23136,0	26689,8	30515,9	27562,1	38735,5	27736,6	46958,3	35982,1	55157,4	35992,3
Total Cost/ha with new establishment (dry land)	20306,5	23860,3	24856,9	24732,6	30247,0	24907,1	35640,3	30323,1	41009,9	30333,3

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26 Table 4.8: Total premium production and cellar costs per unit (detailed)

	Year 1				Year 2				Year 3				Year 4				Year 5			
	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle	R/l	R/t	R/ha	R/bottle
Labour costs (total)	0,54	350,00	2 800,00	0,40	0,58	380,00	3 040,00	0,44	0,62	400,00	3 200,00	0,46	0,69	448,00	3 584,00	0,52	0,92	598,00	4 784,00	0,69
Chemicals, cleaning and filtration costs (total)	0,34	220,00	1 760,00	0,25	0,37	240,00	1 920,00	0,28	0,41	266,00	2 128,00	0,31	0,49	320,00	2 560,00	0,37	0,65	420,00	3 360,00	0,48
Fixed improvements (total costs)	0,45	294,00	2 352,00	0,34	0,45	290,00	2 320,00	0,33	0,80	518,00	4 144,00	0,60	0,53	346,00	2 768,00	0,40	0,74	478,00	3 824,00	0,55

Main- tenance and repair of cellar building and equipment (total costs)																				
Electricity & water (total costs)	0,71	460,00	3 680,00	0,53	0,76	492,00	3 936,00	0,57	0,81	524,00	4 192,00	0,60	0,84	546,00	4 368,00	0,63	0,91	590,00	4 720,00	0,68
Cellar expenses	0,30	196,50	1 571,97	0,23	0,30	197,69	1 581,55	0,23	0,31	198,89	1 591,14	0,23	0,31	200,09	1 600,72	0,23	0,31	201,29	1 610,31	0,23
Yeast, SO ₂ , bacteria, etc. (total costs)	0,16	106,50	851,97	0,12	0,17	107,69	861,55	0,12	0,17	108,89	871,14	0,13	0,17	110,09	880,72	0,13	0,17	111,29	890,31	0,13

Wood barrels (total costs)	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05
Alternate wood (total costs)	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05	0,07	45,00	360,00	0,05
Packaging & Bottling	3,47	2 252,70	18 021,60	2,60	3,74	2 430,00	19 440,00	2,80	3,78	2 459,70	19 677,60	2,84	4,74	3 080,70	24 645,60	3,55	4,85	3 150,00	25 200,00	3,63
Glass bottles (total costs)	1,66	1 080,00	8 640,00	1,25	1,82	1 186,20	9 489,60	1,37	1,96	1 272,60	10 180,80	1,47	2,14	1 388,70	11 109,60	1,60	2,33	1 513,80	12 110,40	1,75
Cork (total costs)	0,66	430,20	3 441,60	0,50	0,72	470,70	3 765,60	0,54	0,70	456,30	3 650,40	0,53	0,77	498,60	3 988,80	0,58	0,64	418,50	3 348,00	0,48
Screw caps (total costs)																				

Boxes (total costs)	0,35	226,80	1 814,40	0,26	0,37	239,40	1 915,20	0,28	0,40	259,20	2 073,60	0,30	0,67	433,80	3 470,40	0,50	0,62	404,10	3 232,80	0,47
Labels (total costs)	0,51	333,00	2 664,00	0,38	0,53	347,40	2 779,20	0,40	0,49	319,50	2 556,00	0,37	0,76	491,40	3 931,20	0,57	0,95	618,30	4 946,40	0,71
Bottling (total costs)	0,28	182,70	1 461,60	0,21	0,29	186,30	1 490,40	0,21	0,23	152,10	1 216,80	0,18	0,41	268,20	2 145,60	0,31	0,30	195,30	1 562,40	0,23
Total	5,80	3 773,20	30 185,57	4,35	6,20	4 029,69	32 237,55	4,65	6,72	4 366,59	34 932,74	5,04	7,60	4 940,79	39 526,32	5,70	8,37	5 437,29	43 498,31	6,27

27 Table 4.10: Super premium production and cellar costs (detailed)

	Year 1				Year 2				Year 3				Year 4				Year 5			
	R/l	R/t	R/ ha	R/ bottle	R/l	R/t	R/ ha	R/ bottle	R/l	R/t	R/ ha	R/ bottle	R/l	R/t	R/ ha	R/ bottle	R/l	R/t	R/ ha	R/ bottle
Labour costs (total)	0,54	350,00	2800,00	0,40	0,58	380,00	3040,00	0,44	0,62	400,00	3200,00	0,46	0,69	448,00	3584,00	0,52	0,92	598,00	4784,00	0,69

Chemicals, cleaning and filtration costs (total)	0,34	220,00	1760,00	0,25	0,37	240,00	1920,00	0,28	0,41	266,00	2128,00	0,31	0,49	320,00	2560,00	0,37	0,65	420,00	3360,00	0,48
Fixed improvements (total costs)																				
Maintenance and repair of cellar building and equipment (total costs)	0,45	294,00	2352,00	0,34	0,45	290,00	2320,00	0,33	0,80	518,00	4144,00	0,60	0,53	346,00	2768,00	0,40	0,74	478,00	3824,00	0,55
Electricity & water (total costs)	0,71	460,00	3680,00	0,53	0,76	492,00	3936,00	0,57	0,81	524,00	4192,00	0,60	0,84	546,00	4368,00	0,63	0,91	590,00	4720,00	0,68

Cellar expenses	0,53	346,50	2771,97	0,40	0,53	347,69	2781,55	0,40	0,54	348,89	2791,14	0,40	0,54	350,09	2800,72	0,40	0,54	351,29	2810,31	0,41
Yeast, SO2, bacteria etc. (total costs)	0,16	106,50	851,97	0,12	0,17	107,69	861,55	0,12	0,17	108,89	871,14	0,13	0,17	110,09	880,72	0,13	0,17	111,29	890,31	0,13
Wood barrels (total costs)	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14
Alternate wood (total costs)	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14	0,18	120,00	960,00	0,14
Packaging & Bottling	9,24	6007,20	48057,60	6,93	9,97	6480,00	51840,00	7,48	10,09	6559,20	52473,60	7,57	12,64	8215,20	65721,60	9,48	12,92	8400,00	67200,00	9,69
Glass bottles (total costs)	4,43	2880,00	23040,00	3,32	4,87	3163,20	25305,60	3,65	5,22	3393,60	27148,80	3,92	5,70	3703,20	29625,60	4,27	6,21	4036,80	32294,40	4,66
Cork (total costs)	1,76	1147,20	9177,60	1,32	1,93	1255,20	10041,60	1,45	1,87	1216,80	9734,40	1,40	2,05	1329,60	10636,80	1,53	1,72	1116,00	8928,00	1,29

Screw caps (total costs)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	
Boxes (total costs)	0,93	604,80	4838,40	0,70	0,98	638,40	5107,20	0,74	1,06	691,20	5529,60	0,80	1,78	1156,80	9254,40	1,33	1,66	1077,60	8620,80	1,24	0,00
Labels (total costs)	1,37	888,00	7104,00	1,02	1,43	926,40	7411,20	1,07	1,31	852,00	6816,00	0,98	2,02	1310,40	10483,20	1,51	2,54	1648,80	13190,40	1,90	0,00
Bottling (total costs)	0,75	487,20	3897,60	0,56	0,76	496,80	3974,40	0,57	0,62	405,60	3244,80	0,47	1,10	715,20	5721,60	0,83	0,80	520,80	4166,40	0,60	0,00
Total	11,81	7677,70	61421,57	8,86	12,66	8229,69	65837,55	9,50	13,26	8616,09	68928,74	9,94	15,73	10225,29	81802,32	11,80	16,67	10837,29	86698,31	12,50	0,00

28 Table 4.12: Total cost implications (detailed)

	Year 1		Year 2		Year 3		Year 4		Year 5	
	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium	Premium	Super Premium
Farm level										
Per ha	63 909	53 258	41 171	41 171	41 346	41 346	61 892	61 892	41 453	41 453
Per tonne	7 989	6 657	5 146	5 146	5 168	5 168	7 736	7 736	5 182	5 182
Per litre	12	12	8	8	8	8	12	12	8	8
Per bottle	9	9	6	6	6	6	9	9	6	6
Total	766 908	191 727	592 865	148 216	595 378	148 845	891 242	222 811	696 417	174 104
Production & Cellar										
Per ha	30 186	61 422	32 238	65 838	34 933	68 929	39 526	81 802	43 498	86 698
Per tonne	3 773	7 678	4 030	8 230	4 367	4 367	4 941	10 225	5 437	10 837
Per litre	6	12	6	13	7	13	8	16	8	17
Per bottle	4	9	5	9	5	10	6	12	6	13
Total	362 227	184 265	464 221	237 015	503 031	248 143	569 179	294 488	730 772	364 133
Marketing & Distribution										
Per ha	87 221	87 221	86 875	86 875	104 624	104 624	143 035	143 035	135 061	135 061
Per tonne	10 903	10 903	10 859	10 859	13 078	13 078	17 879	17 879	16 883	16 883
Per litre	17	17	17	17	20	20	28	28	26	26

Per bottle	13	13	13	13	15	15	21	21	19	19
Total	1 046 656	261 664	1 250 995	312 749	1 506 586	376 646	2 059 699	514 925	2 269 030	567 258
Total (All three phases)	2 175 791	637 656	2 308 081	697 980	2 604 995	773 634	3 520 121	1 032 224	3 696 219	1 105 495