



# AMERICAN ASSOCIATION OF WINE ECONOMISTS

AAWE WORKING PAPER  
No. 161  
*Economics*

## FINANCING WINE BARRELS: THE VINCORP MODEL

Nick Vink, Theo Kleynhans and  
Willem Hoffmann

Jul 2014  
ISSN 2166-9112

[www.wine-economics.org](http://www.wine-economics.org)

# Financing Wine Barrels: the Vincorp Model

Nick Vink\*, Theo Kleynhans and Willem Hoffmann  
Department of Agricultural Economics, University of Stellenbosch, South Africa

## 1. Introduction

The use of oak barrels to improve the quality of wine and to aid in the maturation process has a long history (Garde-Cerdán and Ancín-Azpilicueta, 2006), and has become a core part of the expertise of wine makers globally. Wine barrels are expensive, and constitute a considerable share in the cost of making a fine wine - this is why it is estimated that only 4% of wineries world-wide use them (Anson, 2013). Yet there is not much in the literature on the financing models available to wine makers, or on how they decide on the optimal financing strategy, although some authors do address the issue tangentially (e.g. Carter, 2012; Monday and Wood-Harper, 2010; Blake *et al.*, 1998). This is arguably because there are really only two financial models in use around the world: buy the barrels with own funds, or borrow directly or indirectly from a bank using a conventional loan instrument with collateral. This neglect exists despite the more recent emphasis on value chain financing in the literature (e.g. Miller and Jones, 2010).

Elsewhere in the world wine makers have the option of a) buying barrels with their own funds; b) of borrowing in the form of a collateralised loan or a lease from the traditional banking sector or from a wine industry-specific bank; or c) of taking out a lease in the form of barrel-specific lending. The second of these options represents a conventional financial model. The lease option works much like vehicle finance. The owner of the equipment (in this case wine barrels), also called the lessor, gives a client the opportunity to rent the equipment over a fixed time period against an agreed rental payment. The lessee has the option to return the equipment after the expiry of the agreed term, or to take over ownership in the event that there was a buyout option (Kirkham, 2011). The lessor typically gains a tax advantage in writing down the value of the capital asset. The lessee frees their capital for other uses, especially after the harvest when wine making incurs a host of other costs. In a lease the equipment itself is the collateral for the loan, unlike a regular loan, where additional collateral may be required.

The third option, barrel-specific lending, is found in different variations in France and in South Africa. The purpose of this paper is to describe the origins of the rental model in use in these two countries, and to describe the business model that has been put in place to gain access to the market. The attention then shifts to the identification of those characteristics of the market in wine barrels that make the South African version of the model suited to the needs of the local market. The paper ends with some information on international trade in wine barrels as an indication of market size and some reflections on how to grow the business.

\*Corresponding author ([nv@sun.ac.za](mailto:nv@sun.ac.za))

## 2. Origins

As will be seen below, the French and South African versions of a barrel-specific leasing model differ from each other in quite significant ways. Nevertheless, they share some degree of common heritage, as one of the two progenitors of the French model and currently the President of the company H&A Financing and Services, Richard Hardillier, is described as French-South African (Anson, 2013). Another common feature is that both are expanding globally.

### 2.1 France<sup>1</sup>

The French company H&A Location was established in 2004 by Richard Hardillier and Florent Arrouy, after two years of development of the business plan and the piloting of the first leasing contract. The business model was focussed on the management of barrel inventory on behalf of the client – H&A Location does not put up its own capital to purchase barrels, but refers the buyer to a bank. Offices were opened in Bordeaux, Beaune in the Burgundy region and Limonest in the Rhône region. In 2006 the company opened a subsidiary, H&A Renting, in Madrid, Spain, in 2010 H&A Finance in San Francisco, USA, and H&A Locazione in 2013 in Milan, Italy. By 2006 the company was servicing its 100<sup>th</sup> customer and had a turnover of \$10m and by 2013 the 1000<sup>th</sup> customer and a \$130m turnover, a figure that has now grown to \$155m. It is estimated that the company has a 40% share of the French barrel market, and 50% of the Bordeaux market (Anson 2013), and has 400 000 barrels under management.

### 2.2 South Africa<sup>2</sup>

The South African version of a dedicated business model for barrel financing has a unique provenance. It started in the fruit industry in the early 1990s: a fruit farmer in the Stellenbosch area, JP du Plessis, became concerned about the cost of the bins used to store and transport fresh fruit - a highly seasonal market. At that time GKN Chep South Africa, a company with its origins in Australia, and whose parent company is currently a global leader in pallet and container pooling services across all industries and modes of transport, was renting out these bins. However, he thought he could out-compete them. When he subsequently sold his farm he used the capital to buy bins in order to rent them out to farmers. While the returns were good, he realised that he would not be able to compete with GKN Chep in the long run.

Then, in the mid-1990s, KWV approached Du Plessis. They were planning expansion and wanted to know whether he would consider including the financing of wine barrels as part of his business plan. At that time KWV was still incorporated as a cooperative and had statutory powers over the entire wine industry. Also, at that time barrel aging was a virtually unknown practice in the industry, used only by the large players such as Distell and KWV. Where individual farmers did use barrels, it was invariably under advice and instruction from KWV. The fact that KWV had statutory powers over the industry, therefore, enabled the institution to adopt a bird's-eye view of what they thought would be the total requirement for barrels in the industry.

---

<sup>1</sup> Most of this information is available on the Company website at <http://www.hafinancing.com/en/corporate-mission-statement.php> (Accessed 25 February 2014)

<sup>2</sup> Most of the information in this section was gained from interviews with the principals of Vincorp. The schedule of interviews is provided at the end of the article.

This changed in 1996 when the KWV filed court papers to convert from a cooperative to a company, a move that was opposed by the Minister of Agriculture and Land Affairs (Derek Hanekom) pending further investigation (Vink *et al.*, 2004). The Court instructed the parties to come to an agreement before making a ruling. The Minister then appointed three Committees of Inquiry in early 1997, one of which was charged with recommending whether KWV should keep its statutory powers and what should be done if the status quo was to change. This Committee, chaired by Prof WE Kassier, recommended against allowing a private company to exercise such powers, and this recommendation then became part of the settlement which caused the Minister to withdraw his objection to the transformation. This occurred later in 1997, with new industry legislation and a new institutional framework for industry functions such as the funding of research and the provision of information.

Of course, this was also the time when the South African industry was experiencing a boom in exports (Vink *et al.*, 2004), and a revolution in the production of high quality wines (Ponte and Ewert, 2009). The result was a rapid expansion in the market for new barrels, thus the time was ripe for the establishment of Vincorp, currently a division of Anglo African Finance, a Stellenbosch-based financing company.

### **3. The business model**

#### **3.1 France**

H&A Financing and Services, a French (and now global) \$155m enterprise was established a decade ago in Bordeaux and has expanded into Spain, the USA and Italy, with discussions around expansion into Argentina and Chile. The firm currently has more than 1000 clients and 45 employees. According to their website (<http://www.hafinancing.com>), the business model consists of a three-pronged approach: a) leasing of barrels; b) inventory management on behalf of the wine maker; and c) management of the resale of the barrels. As part of this third activity, buyers of second and third fill barrels can be provided with a guarantee in the event that the barrels were used by one of the premier Chateaux as first fill. These barrels come at a price premium that can vary according to the reputation of the Chateaux in question, and the renter guarantees a buy-back to that Chateau – a business that can survive only as long as there is a demand for the second fill barrels.

Importantly, H&A Financing and Services does not commit its own capital to the purchasing of first fill barrels, but connects the wine farmer to a financier, mostly commercial banks that lend on conventional leasing terms – their biggest financier is BNP Paribas (e.g. Kirkham, 2011).

The French enterprise started with the provision of a service to the wine maker, namely managing the logistics of their barrel inventory, which included the provision of financing in the form of a lease that allows the wine maker to move the barrels from the balance sheet to the operating budget. The three main services that are provided are implemented as follows:

- A leasing solution that consists of a customized contract that evolves with the lifecycle of the barrel inventory and that provides the lessee with depreciation and tax benefits, frees up their cash flow, and reduces their administration costs.
- An online barrel inventory management system that is accessible by smartphone. A unique barrel ID is created along with a customized view of inventory, tracking of work orders and tracing of all historical activity.

- Resale management of barrels in a service that operates globally. One variant of this activity is that the company can guarantee the lessee that particular barrels were used by a particular grower for first fill – the better known the Chateau, the higher the price. As part of this service the company offers advice on the proper maintenance of barrels, traceability, an international sales force with local knowledge, logistical support in sourcing barrels internationally, and recycling at the end of the life of the barrel.

## 2. South Africa

It is obvious why a wine producer would normally prefer to rent wine barrels rather than buy them. However, it is not as obvious why a wine producer would prefer to rent through Vincorp rather than through their bank. The reason why Vincorp handles some 60-65% of the market for new barrels in South Africa is because:

1. Vincorp does not ask for collateral from the borrower. This it can do because of the active market in purchase or rental of second-hand barrels, and its own intimate knowledge of this market.
2. The focus is on new barrels for first fill; hence loans are typically for a year to eighteen months. At the end of the period the barrel is bought by the wine maker for a nominal sum, and then also takes responsibility for the further use or disposal of the barrels.
3. In return, Vincorp has the benefit of being able to draw back on Value Added Tax (VAT) for the full value of the barrels on purchase (the buyer can also claim back on VAT, but only for the rental amount as this is paid). This also serves to emphasise that the ownership of the barrel remains with Vincorp until the full rental has been paid. At the end of the rental agreement a nominal payment is made by the buyer to secure ownership of the barrels.
4. Vincorp sees to all the necessary logistical arrangements involved in finding, purchasing, financing and moving the barrels from source to the client. Few banks know the market well enough to compete with Vincorp in these respects.
5. Vincorp runs its business with very low overhead costs. The logistics involved in getting the barrels to the client are, for example, outsourced, and delivery is on a just-in-time basis, i.e. there are no warehousing costs. The business basically consists of four people.
6. Vincorp does not interfere in the normal business relationship between the wine producer and the agents of the firms that sell barrels in South Africa. Once the wine producer has decided on what barrels they want, they approach Vincorp for financing and get a quote from Vincorp for the quantities, specifications and payment terms that the client wants. Obviously, Vincorp will also advise a client on what is available on the market if requested.

Vincorp's market share consists of the barrels that they finance, as well as the barrels where they provide an import service to farmers who provide their own financing, and for agents who basically use Vincorp as a back office. By Vincorp's calculation, the market for new barrels in South Africa is some 20 – 25 000 barrels a year. Their turnover consists of rentals (R70 million per year) and the provision of the logistical service around the import processes (some R50 million per year).

In 2003 the concept was taken to Australia, principally through a partnership with Boar's Rock Winery, described as a purveyor of "premium bulk wine or contract winemaking and storage services in

Adelaide, Australia”<sup>3</sup> who at that stage had a crush capacity of some 35 000 tons of grapes. The Australian enterprise is called Barrel Finance and Logistics, and it currently finances over 17 000 barrels and is considering expansion into cellar equipment. It expanded into New Zealand in 2009.<sup>4</sup> However, given the current problems in Australia, the business there has not grown substantially and needs attention. Vincorp currently has about 20-25% of the Australian market in new barrels.

### 3.3 A comparison between the business models

Table 1 provides a comparison between the French and South African business models. The two models differ in important respects. Vincorp uses its own capital to finance the purchase of the barrels, resulting in a lot less red tape in accessing funds for the wine maker as opposed to the H&A Location model, where clients are recommended to a commercial bank. H&A Location on the other hand includes a buy-back guarantee, and lends for a far longer period together with the provision of an inventory management system. Yet the two models also have some common features: both allow the renter/lessee of the barrels the freedom to choose which barrels they prefer, i.e. they do not interfere with their relationship with the coopers or agents as the case may be. Both also provide logistical and administrative support to the renter/lessee. The French enterprise is at least 10 times as big as the South African counterpart by most measures.

**Table 1: A comparison between the French and South African barrel leasing models**

	<b>French</b>	<b>South African</b>
Source of finance	Bank	Own capital
Collateral?	Yes – the asset	No
Buy-back clause?	Yes – for a fee	No
Term	Up to 10 years	Typically 12-18 months
Online inventory management	Yes	No
Buyer cooper preferences respected?	Yes	Yes
Logistical support	Yes	Yes
Administrative support	Yes	Yes
Finance second and third fill barrels?	Yes	No
Number of barrels owned (current)	400 000	At most 40 000
Turnover	€155m	ZAR 120m
Employees	45	4

### 4. Characteristics of the South African market

The precise nature of the business model is evidently derived from the special characteristics of the environment within which it is implemented. In the South African case, the most important features of the wine industry and its environment are:

1. The main barriers to entry into the market are the capital required to buy the barrels; the knowledge of the product and the ties with the (French) suppliers; and the ability to provide a service in terms of the processes of getting the barrels to the wine farmer in South Africa.

<sup>3</sup> <http://www.boarsrock.com.au/>

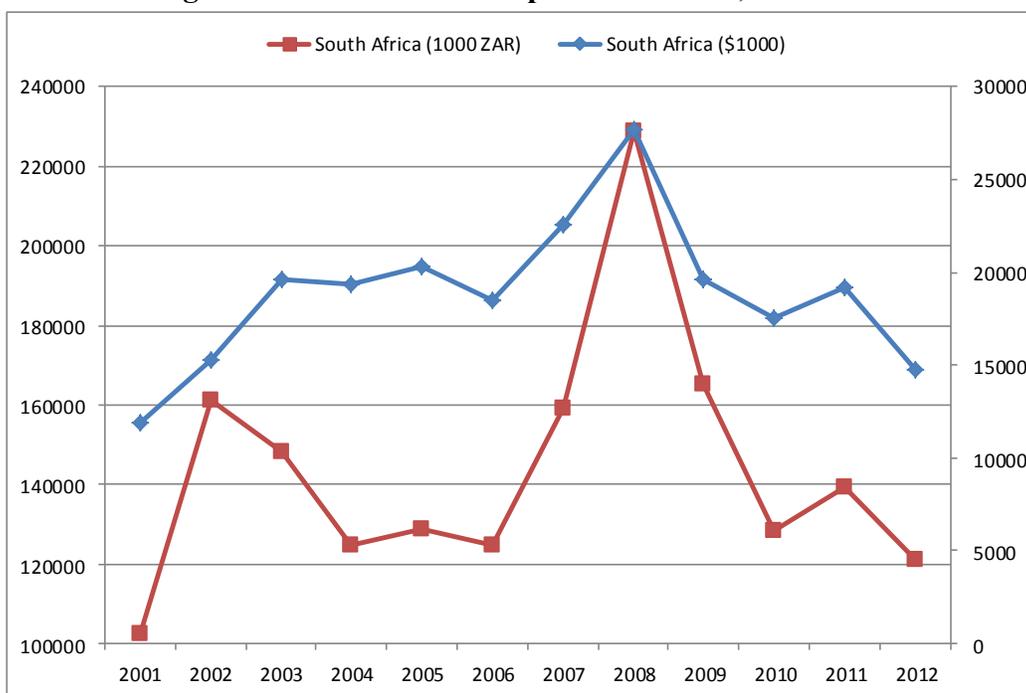
<sup>4</sup> <http://www.bfl.net.au/company-profile.html>

2. The market dominance of oak and particularly French oak, as the wood of choice. There is no particular reason why oak, and particularly French oak, is the wood of choice globally for aging wines other than a form of path dependence. All woods enhance the quality of the wine drinking experience, but the world has come to associate oak wood with the taste of the best premium wines, and so oak wood is the most widely used. For the same reason, French oak is preferred because of the French influence on perceptions about wine quality, although oak from Eastern Europe and from the USA is also used worldwide.
3. The result is that French cooperages dominate the global market for oak for the production of wine barrels. In South Africa, it is estimated that some 90% of the oak that is imported comes from French coopers, with 7½% per cent from other parts of Europe and 2½% from the USA. To complicate matters, French coopers also sell oak from other origins, so the proportion of American oak used in South Africa could actually be as high as 15%. The dominance of the French coopers also means that even a buyer of large volumes such as Vincorp does not really get a discount on prices, but this is still an old-fashioned trade where Letters of Credit are not normally required from large buyers. This represents a large saving on normal financing costs for the importer that qualifies.
4. Although global supply of oak wood for barrels is largely confined to France, the USA and certain Eastern European countries, there is a wide variety of barrels available on the market. A typical price list for September 2013 for one of the better-known coopers has two pages of different sizes (205 and 225 litres plus larger sizes), stave thicknesses (22mm and 27mm), length of seasoning (24 or 26 months), shapes (Bordeaux and Burgundy) as well as further options such as barrels for organic and biodynamic producers, toasting of barrel heads, and the placement of the logo of the winery on the barrel. Knowledge of the product provides the specialist financier with a strong competitive advantage over a more generalised financier such as a bank.
5. There is an active rental and purchase market for second-hand barrels in South Africa (and elsewhere), although the South African market is less liquid than the market in the USA, for example. Nevertheless, Vincorp is prepared to finance without collateral because they retain ownership of the barrel until it is paid up. Most of Vincorp's new clients (some 85%) ask for financing for the barrels for one year only. The typical client requires 30 to 60 barrels, with a third used for white wine and two thirds for red wine. Barrels for white wine are typically landed in January, and those for red in February, with payment starting from 1 May or 1 June, for a period of 12 months, so the payment period is in any case longer than a year. Vincorp is flexible in its repayment terms, and is prepared to lend over three years, but for the producer the issue is that in the second and third year they are paying instalments on the new barrels bought in those years, so the savings of an extended term are not very large. Once the barrels have been paid off they become the property of the buyer. Because the market in South Africa is relatively less liquid, buyers will use these barrels for second and third, etc. fills, even for second labels.
6. Given that buyers have few choices of where to buy, it would be more efficient to transport the wood to the country where the barrels are to be used, and to make the barrels locally. Usually it is cheaper to transport the value-added product, but in this case the barrel is an awkward shape (traditionally to make it easier to handle) and is itself a means of storage. Transporting barrels is akin to putting an empty container into an empty container – it uses up a lot of space, hence transport costs are very high.
7. The South African industry is geographically concentrated, with most of the barrels delivered within a 3 to 4 hour drive from Vincorp's warehouse in Paarl. This is in sharp contrast with Australia, for example, where there is a continent between the Western Australian wine-producing areas and the rest of the industry, which is in any event widely scattered.

## 5. Characteristics of the global market

Figure 1 shows South African imports under the relevant HS code from 2002-2012. These data need to be treated with caution because the HS category in question (HS 441600) is defined as including “Casks, barrels, vats, tubs and other coopers’ products, parts thereof, of wood, incl. staves”. The relevant databases provide tariff data at an even more disaggregated level, as illustrated in Table 2, but trade data to this level do not seem to be available. From this definition it seems as if the appropriate HS category would be 44160030, but even here it is unclear whether these are new barrels, or whether they are intended for use in the wine industry.

**Figure 1: South Africa’s imports of barrels, 2001-2012**



**Note:** US\$ values measured on right axis.

**Source:** US International Trade Commission (<http://usitc.gov/>); South African Reserve Bank ([www.resbank.co.za](http://www.resbank.co.za))

**Table 2: HS codes for barrels**

44160030	Wooden casks, barrels and hogsheads
44160060	Wooden staves and hoops; tight barrelheads of softwood
44160090	Wooden vats, tubs and other coopers' products and parts thereof

Notwithstanding, it is clear from Figure 1 that South Africa’s imports peaked in 2008 in both Rand and Dollar terms and declined thereafter with the strengthening of the Rand and the global recession. Imports are expected to increase with the current weakening of the Rand and an expected increase in packaged wine exports.

It is also interesting to note South Africa's relative position as a buyer of barrels from the EU in the international market. The data are shown in Table 3. The USA is by far the largest buyer of barrels, but its share has declined from over 60% to below 55% since 2001. Argentina and Chile have increased their share of world imports, as has the rest of the world, while the share of Australia, New Zealand and South Africa has declined.

**Table 3: South Africa as a buyer of barrels (%)**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Argentina	1.90	1.88	2.36	3.29	3.07	3.62	3.37	4.47	4.92	4.90	4.26	3.53
Australia	15.66	13.52	13.95	14.75	13.77	12.47	10.22	11.39	11.65	12.31	10.91	12.67
Chile	5.24	5.79	7.24	7.25	7.26	6.27	6.83	7.80	8.69	8.19	7.48	7.17
New Zealand	4.19	3.81	4.79	4.63	5.77	4.13	4.43	4.35	4.68	5.24	3.84	3.97
South Africa	6.33	7.33	8.53	8.18	7.80	5.97	6.39	6.75	6.42	6.30	5.83	4.40
USA	60.77	61.82	55.11	52.71	54.51	59.15	59.65	57.18	52.84	50.34	54.15	54.42
Rest of World	5.92	5.85	8.03	9.18	7.82	8.40	9.11	8.05	10.80	12.72	13.53	13.84
Total	100	100	100	100	100	100	100	100	100	200	100	100

Source: Global Trade Information Services (Brasher). <http://www.gtis.com/english/>

Table 4 provides the structure of tariffs for the importing of barrels into the main new world wine producing countries. In all cases the MFN tariffs are the same as these applied rates. Argentina and the USA levy a small tariff, while Chile has a standard tariff on all its imports. Australia, New Zealand and South Africa levy no tariffs, and there is no evidence of tariff escalation to encourage cooerage within these countries rather than importing ready-made barrels.

**Table 4: Trade barriers in the market for barrels**

HS Code	Product description	Argentina	Australia	Chile	New Zealand	South Africa	USA
44160000	Casks, barrels, vats, tubs and other coopers' products parts thereof, of wood, incl. staves	na	0	na	0	0	na
44160010	Barrels vats, tubs and other articles of cooerage and their parts of wood, including staves: of holm oak, Cork oak and other oaks (quercus spp.)	2%	na	na	na	na	na
44160030	Wooden casks, barrels and hogsheads	na	na	6%	na	na	0%
44160060	Wooden staves and hoops; tight barrelheads of softwood	na	na	6%	na	na	0%
44160090	Wooden vats, tubs and other coopers' products and parts thereof	10%	na	6%	na	na	3.20%

## 6. The potential for expansion

It is clear that the South African market in new barrels presents a unique business opportunity, but because the market is finite, it also places a ceiling on the expansion potential of the firm. There are, however, a number of potential ways in which this business can expand over time. At the same time, competition, domestic or foreign, could effectively shrink the market. These are all possibilities that warrant further investigation.

1. The business started with the rental of fruit bins, and this has been continued through Binfin, also part of Anglo African Finance. The renting out of fruit bins differs from wine barrels in two important respects. First, while seasonal, it is also a cyclical business. Second, because of market concentration (there is only one supplier of plastic crates and four of wooden crates in South Africa) bin sizes are more uniform, so that industry information is less of a market differentiator and barrier to entry. Thus, expansion prospects exist, but are limited.
2. As shown above, the business model can be expanded geographically, as has been done in Australia and New Zealand. A former partner has also started to pilot the model in the USA.
3. While rentals are known in the USA, the available evidence shows that it is largely in the form of traditional bank lending (either directly or 'back-to-back' lending), i.e. with collateral and a lot of red tape, and largely without the additional element of service provision.
4. Vincorp already finances cellar equipment such as forklifts and wine making equipment. However, this calls for caution, especially where the assets being financed do not have a ready second hand market (e.g. custom built tanks in the winery). Again, this presents expansion potential, but is limited to products that have the same characteristics as wine barrels (especially the existence of a second hand market) or alternatively to an additional service to existing clients, in which case a premium is charged.
5. The South African market has grown considerably over the past two decades, largely because the average price at which wine is sold has increased, in turn largely because of the improved quality of wine, as evidenced by the increasing proportion of wine that is made from the noble varieties. This is reflected in Table 5, which shows that less than 12% of the grapes grown in South Africa in 1990 were one of the 'noble' cultivars, and that this has increased to more than 50%, which still leaves scope for further upgrading. This will increase the demand for oak barrels.

**Table 5: The share of noble varieties in the South African crush, 1990 - 2012**

	1990	1995	2000	2010	2011	2012
	Per cent					
Orange River	0.38	0.97	1.91	4.57	7.0	7.0
Little Karoo	1.33	2.21	6.13	20.69	27.51	26.00
Olifants River	1.56	3.43	15.60	36.14	35.60	34.00
Worcester	1.82	5.23	17.35	41.40	46.46	45.00
Robertson	6.34	9.25	22.96	51.36	54.10	55.00
Malmesbury	10.87	16.22	34.26	67.64	63.00	64.00
Paarl	19.63	25.20	41.63	68.19	61.00	60.00
Stellenbosch	30.06	40.21	59.19	83.43	77.00	79.00
Total	11.68	16.45	29.76	54.58	52.00	52.00

**Note:** Noble varieties include Cabernet Sauvignon, Cabernet Franc, Pinotage, Shiraz, Sauvignon Blanc and Chardonnay

**Source:** SAWIT, 2013

## 7. Conclusion

Value chain finance in agriculture consists of “The flows of funds to and among the various links within a value chain” (Miller and Jones, 2010). The models of barrel-specific funding described here are a prime example of value chain financing, and illustrate how different financing models can be adapted to different circumstances. In this article, two such dedicated financing models have been analysed, namely that of H&A Financing and Services in France, and Vincorp in South Africa. In the case of the latter, the way in which the model has been adapted to local circumstances has also been described. In this regard, it would also be interesting to investigate further how the clients (wine makers) respond to this opportunity in the market. More specifically, research on the following aspects would be useful:

1. How do farmers decide what the best financing model is for their purposes?
2. Are there any patterns (demographic, geographic, etc.) to farmers’ decisions in this regard?
3. What features do wine makers like and dislike about the current model (i.e. how can the model be adapted to suit their needs even better)?
4. Is it possible to cost the ancillary services provided to wine farmers?
5. What is the short, medium and long term expansion potential for the model – within agriculture or even in other sectors of the economy?

## References

- Anson, Jane, 2013. The barrel men. *Decanter China*, 3 October 2013. Available at <https://www.decanterchina.com/en/index.html?article=591>. Accessed 25 February 2014
- Blake, John, Oriol Amat and Jack Dowds, 1998. The drive for quality: the impact on accounting in the wine industry. *Journal of Wine Research*, Vol. 9 No 2: 75-85
- Carter, Elizabeth Ann, 2012. *Cooperation, Competition, and Regulation: Constructing Value in French and Italian Wine Markets*. A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Political Science in the Graduate Division of the University of California, Berkeley
- Garde-Cerdán, Teresa and Carmen Ancín-Azpilicueta, 2006. Review of quality factors on wine ageing in oak barrels. *Trends in Food Science & Technology*, Volume 17, Issue 8 Pages 438–447
- Kirkham, Kerry, 2011. Barrel leasing and cash flow: how to address your fast-depreciating oak inventory through finance *Wines & Vines*, September 2011. Available at <http://www.winesandvines.com/template.cfm?section=features&content=91414&ftitle=Barrel%20Leasing%20and%20Cash%20Flow> (Accessed 25 February 2014)
- Miller, Calvin and Linda Jones, 2010. *Agricultural value chain finance: tools and lessons*. Rome, Food and Agriculture Organization of the United Nations

Monday, Ann and Trevor Wood-Harper, 2010. Exploring the supply chain of small and medium-sized South Australian wine producers. Supply Chain Forum, Vol. 11 - N°1: 16-26

Ponte, S. and Ewert, J. (2009), “Which way is ‘up’ in upgrading? Trajectories of change in the value chain for South African wine”, World Development, Vol. 37 No. 10, pp. 1637-50

SAWIT, 2013. South African Wine Industry Statistics No 37. Paarl, South African Wine Industry Information and Systems

Vink, Nick, Gavin Williams and Johann Kirsten, 2004. South Africa. In Anderson, Kym (ed.). The world’s wine markets: globalization at work. London: Edward Elgar: 227-251

### **Interviews at Vincorp**

JP du Plessis, 16 January 2014

Chris Krige, Paul Haumann and Hendrik de Waal, 31 January 2014

Chris Krige, 24 February 2014