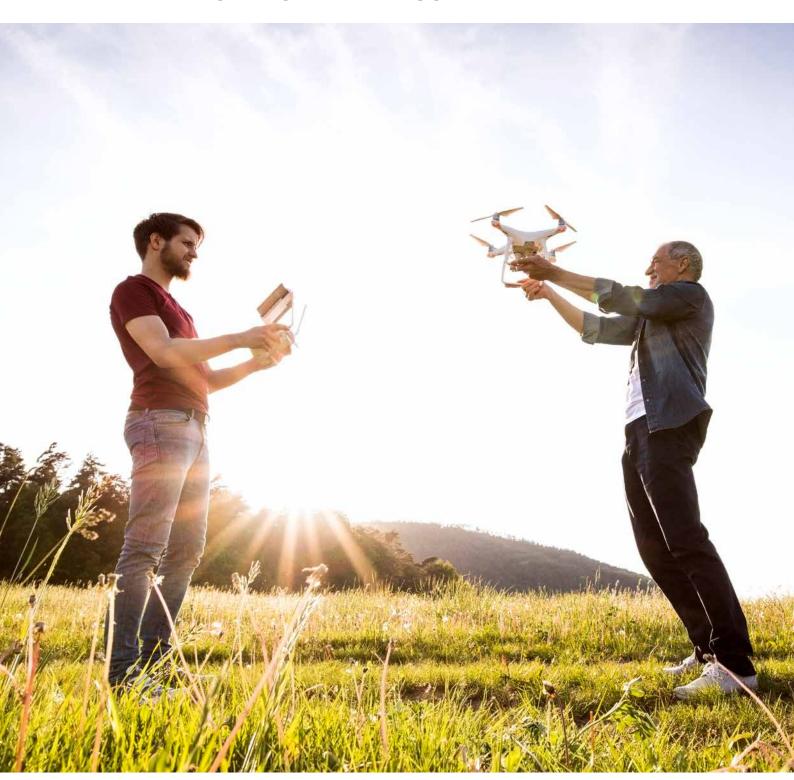
# AGRIFRANCE 2018 RURAL REPORT

DIGITAL TECHNOLOGY IS REVOLUTIONISING THE WORLD'S WINE INDUSTRY





The bank for a changing world



# PREFACE

# DIGITAL TECHNOLOGY IS REVOLUTIONISING THE WORLD'S WINE INDUSTRY

This year, we decided to focus on digital technology in the wine industry for the first part of this report. Although wine is usually associated with land, appellations and tradition, wine professionals and consumers are discovering new digital products and services.

Although for some, digital technology offers fascinating possibilities, for others it is disruptive and challenges existing models. A revolution is underway! In this report, we look at the prospects across the wine industry and provide some examples through interviews.

For over 18 years now, we have been producing a report on the major trends in the rural markets. The second part of this report presents our analysis.

In agriculture, viticulture and forestry, 2017 saw mixed results, depending on the region. Prices observed in the cereals market did not help to rebalance the books. In viticulture, France, Italy and Spain had small harvests. That said, wine prices are trending upwards thanks to higher world demand. Exports are expanding and new opportunities are opening up for French wine producers. In forestry, on the back of the economic recovery, including in the construction sector, timber prices are rising, especially oak. French rural land (above all forests and vineyards), remains a good investment. Despite slowing down, farmland prices continued to pick up slightly in 2017.

Enjoy your read.

Benoît Léchenault Head of Agrifrance



# TECHNOLOGY IS REVOLUTIONISING THE WORLD'S WINE INDUSTRY

Start-ups are revolutionising the wine market by rolling out new innovative products and services. This is a fabulous way of revamping the image of an industry which until recently had capitalised on famous 'terroirs', vintage years and references to the history of wine. From production to distribution, via information and communication, digital tools are transforming the wine industry, impacting professionals and consumers alike.

BNP PARIBAS WEALTH MANAGEMENT



# DRONES, ROBOTS, ALGORITHMS, GLOBAL POSITIONING SYSTEMS AND EMBEDDED MAPS

# PRODUCERS ARE EQUIPPING THEMSELVES WITH NEW TOOLS

The concept of the drone goes back to the First World War. Literally a male bee, the term 'drone' was coined in the 1930s in the United Kingdom. Prototypes of autonomous target aircraft or drones were then developed in major conflict zones (e.g. Second World War, Vietnam, Iraq and Kosovo). In June 2014, the United States authorised, for the first time, the flight of a drone for commercial use, with the flight of an aircraft in Alaska. Since then, the drone market has been booming. At the international level, civil drones for both leisure and professional use represent a colossal market, estimated at \$6 billion (€5.6 billion) in 2017, up 34% y/y.

Nowadays drones are used in many sectors and activities, such as the monitoring of wind turbine blades and solar panels. Although they have conquered the general public, especially in the leisure and sport sector, they are attracting an increasing number of professionals in the wine industry. Explained in an interview with Olivier Maffrand (CEO and Founder of Hawk), drones may be used in many different ways in precision wine-growing, and at a lower cost. For example, the number of unproductive

grapevines on a plot of land can be monitored rapidly. It is also possible to assess the health of a vineyard by analysing the amount of chlorophyll in vine leaves. Moreover, by using sensors installed on drones, the temperature and hygrometry in wine cellars can be measured. Prospects are almost limitless thanks to the digital network and connected objects.

Data are crossed with information relating to the vineyard (soil tests, details of grape varieties, age of plantations). They provide useful information, helping wine-growers to make decisions relating to fertilisation, weeding, protection of vine stocks, and even the harvest when grapes reach optimum maturity.

Another example: to face the labour shortage at vineyards, prototype robots are being developed for the wine industry to assist with monitoring and weeding land. Robots alleviate the workload and optimise the profitability of the business while reducing the environmental impact.

, the straddling robot (photo: Tien Tran,

# Ted, the straddling robot

With this new straddling viticulture robot, Naïo Technologies is seeking to improve the working conditions of wine-growers. This multi-functional robot is in the production stage. Its main task is mechanical intra-row weeding. Moreover, Naïo Technologies plans to add other functionalities to the robot, such as mowing, leaf stripping and trimming. A prototype has been designed, and mass production is scheduled to begin in 2018. This is a true revolution because one robot can work a surface of around 25 hectares in a week or 4-5 hectares in a day.







Our goal is to ensure that the use of drones and the data they gather are as automated as possible, so that our clients can focus on the essentials, in other words using the indicators to run their business.





# **3 QUESTIONS TO**

# OLIVIER MAFFRAND CEO AND FOUNDER OF HAWK

Whether undertaking inspections in inaccessible environments or replacing workers who carry out repetitive tasks, drones have now moved beyond the experimental stage and are being used more and more in agriculture and industry. Drones are able to capture data rapidly and at a lower cost, and can therefore digitalise both processes and assets.

## What do drones bring to the viticulture industry?

Drones are now helping to develop precision wine-growing. As you may know, the three benefits of precision wine-growing are increasing quality and yield, cutting costs, and reducing the need for pesticides. Observation using aerial imagery provides detailed and geolocation knowledge of a wide spectrum of parameters. These parameters (land, soil or vine stock) are analysed during the various phenological stages (budding, flowering, fruit setting, ripening and harvesting).

Drones can manoeuvre easily and can be deployed in all kinds of terrain. They fly at low altitudes and provide excellent image resolution. Because they can be deployed rapidly, they can be used to carry out regular observations and, not least, they provide data at a low cost.



What are your greatest assets?

At Hawk we see ourselves as a 'Drone-As-A-Service' company. We offer on-demand services, meaning that our clients don't need to own drones which rapidly become obsolete and/or require special skills to handle.

Our goal is to ensure that the use of drones and the data they gather are as automated as possible, so that our clients can focus on the essentials, in other words using the indicators to run their business.

With this in mind, we have developed the first-ever platform for carrying out vineyard inspections by means of drones. For example, our service includes selecting the plots to inspect, choosing the type of inspection according to the information sought, and then ordering a drone mission.

For this we work alongside a community of drone operators whom we have carefully hand-picked.

Following the inspection, we analyse the collected data, which are then input into the vineyard estate's own dashboard. This helps to monitor the quality of production, from vineyard to glass, you might say.

In this way a vineyard manager can cross data on topography, weather forecasts (via sensors) and the vines themselves in order to plan cultivation work more efficiently and draw up the plot selection calendar for harvest, for example.

Last but not least, data traceability provided by our platform is an additional guarantee when vineyards are bought and sold.

A prospective buyer can access the full due diligence for an expert's report on - and valuation of - a vineyard. From the range of indicators available we can calculate for each plot the planted surface, the vine density, the full topography of the vineyard (slopes, exposure, curves/ dips in the terrain) plus the age of the vines and the grape variety.

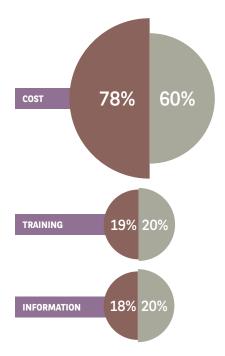
This type of information becomes even more important when an estate has been affected by an unusual weather event, such as the severe frost we experienced in spring 2017.

### What types of service can wine-growers call on?

A drone is a tool that wine-growers can use throughout the crop cycle. First and foremost, drones can identify unproductive vines. According to the French national observatory of wood diseases, around 13% of all vine stock in France is unproductive; that is a substantial loss of productivity considering that the wine industry turns over €16 billion annually! To make a plot of land profitable again while maintaining the density required for each appellation, renewal planning takes place at the beginning of each growing season and at the end of the harvest.

The process of searching out unproductive vines consists in identifying the location and number of dead vines, in order to prepare the companion planting on priority plots. Doing this job on foot is slow and tedious, so drones are ideal for the task.

Another way that drones are extremely useful is in assessing the vitality of vine stock. The purpose of this technique is to identify factors that hamper vine maturity. By using multispectral sensors embedded on the drones to assess chlorophyll levels, we can interpret factors which are likely to affect the condition of vines, for example, hydric stress (too little or too much water) either due to topographical reasons or as a result of exceptional weather conditions. Another factor might be a lack of organic matter in the soil. In this case a solution would be to introduce a differentiated regime of organic fertilising, adjusting the amounts used in each case.



BARRIERS TO INVESTING IN INNOVATION IN THE VITICULTURE INDUSTRY, % OF COMPANIES

- 1-25 staff members
- At least 26 staff members

# CHALLENGES FACING THE VITI-VINICULTURE BUSINESS

Firstly, the wine sector is highly fragmented and the size of vineyards (14.5 ha on average) is dependent on the adoption of new technologies. More than 50% of vineyards employ less than 10 people. In a survey\* on digital technology and new technologies in viticulture conducted among wine-growers in France's Nouvelle Aquitaine region, 80% of vineyards with fewer than 10 staff members affirmed that they had no digital needs! For three-quarters of the respondents, cost is the main obstacle to investing. Finally, the lack of information and training on digital products and services is also hampering investment.

A blockage exists particularly among small wine-growers who consider that it is impossible for them to invest. It thus seems that the solution lies in sharing the tools/machinery or best practice of leading industry players (professional organisations, cooperatives, major private players, etc.). To be adopted, this pooling system must also be promoted and explained through information and training.

\* Insee Cefil 2017 survey

source: Insee Cefil 2017 survey for the viticulture industry in Nouvelle Aquitaine

# INCREASINGLY DEMATERIALISED DATA THE BIG DATA REVOLUTION

As mentioned above, connected objects can generate data: temperature, hygrometry, photosynthesis, etc. These data are increasingly dematerialised. Every day, vineyards produce millions of data to be interpreted. Some of these data are analysed by agricultural players, such as management centres, chambers of agriculture, cooperatives, professional farming organisations and private businesses.

The gains are indisputable: precious time saved and documents that can be stored and accessed any time from a tablet or a smartphone. Questions remain about the use, handling and sale of electronic data. Legislators continue to struggle to define a protective framework.

The next issue of the Official Journal of the European Union will address the new European regulation pertaining to

data protection. This European regulation should enter into force on 25 May 2018. The adoption of this law should help Europe to adapt to new digital realities.

The reform has three main objectives:

- Reinforce people's rights, particularly through the implementation of a right to the portability of personal data. This right will allow people to retrieve and reuse their personal data to serve their own needs.
- Ensure that the organisations (data controllers and processors) handling these data are fully accountable.
- Make the regulation credible thanks to strengthened cooperation between data protection bodies, which will be able to take joint decisions when data processing becomes transnational and sanctions are stepped up.



eProvenance was therefore created to provide a service of monitoring and tracking the quality of wine and other fragile goods during transportation and storage. Our services ensure that fragile goods are kept at the right temperature and humidity levels.



# **3 QUESTIONS TO**

# ERIC E. VOGT CEO and Founder of ePROVENANCE

# How did eProvenance come into being?

eProvenance is a Franco-American company I founded ten years ago. During a wine-tasting event, the owner of a large château in the Bordeaux region shared his concerns about the shipping conditions of his wines. Given that wine is a high-end, valuable, fragile product, with one in three bottles exported, we were fully aware that good shipping conditions play a vital part in preserving the quality of the wine. eProvenance was therefore created to provide a service of monitoring and tracking the quality of wine and other fragile goods during transportation and storage. Our services ensure that fragile goods are kept at the right temperature and humidity levels.

## How do your services work in practice?

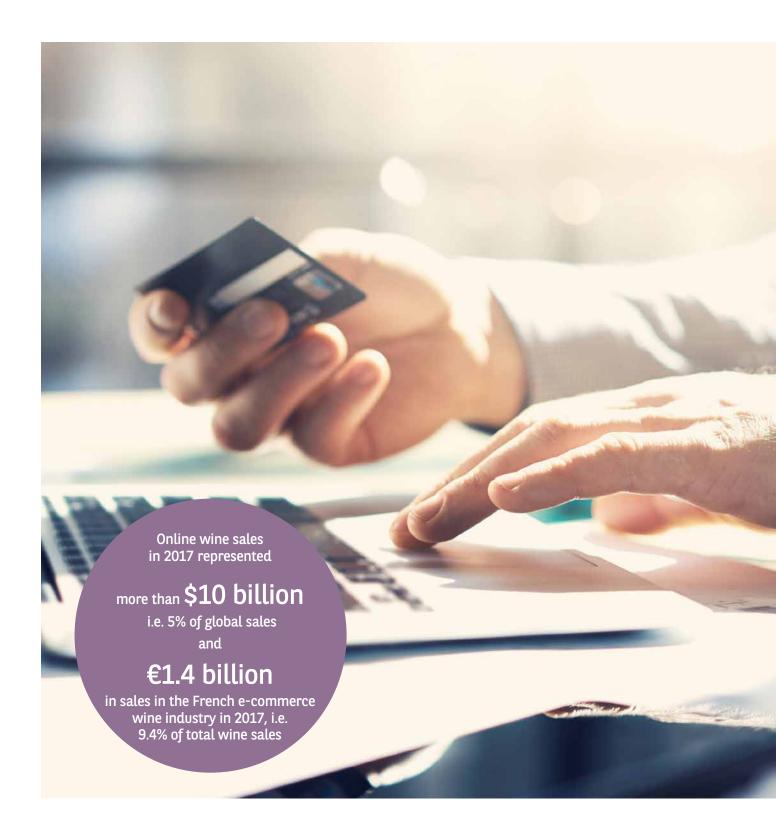
Central to eProvenance services are our proprietary rating algorithms, underpinned by sensors and mobile apps. In agreement with clients and transporters, we place our sensors on cases, pallets and containers in order to record the wine's temperature, humidity and/or geolocation from

the moment the wine leaves the cellars to its arrival at the final destination. By analysing the data we can assess the conditions under which the wine is being transported, scored out of 100 on an eProvenance-developed ranking. The eProvenance system produces data that can be used to insure merchandise and help improve quality along the supply chain.

# You gather a large amount of data; how are wine producers and the industry benefiting?

For the last ten years we've been working with the largest wineries in the Bordeaux, Burgundy and Champagne regions. We've recorded and analysed millions of pieces of data in 65 countries. Recording data is an important step but it's the analysis that really counts. This is our core business. Our tracking solutions enable wine producers to guarantee the quality of their products that helps them to enhance their image.

# A NEW DISTRIBUTION CHANNEL

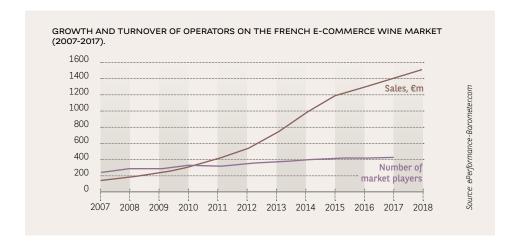


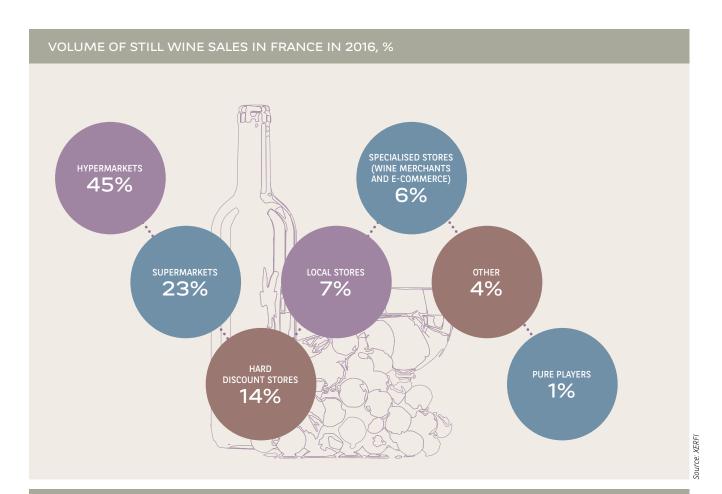


# THE MARKET CONTINUES TO GROW WORLDWIDE, ALBEIT STABILISING IN FRANCE

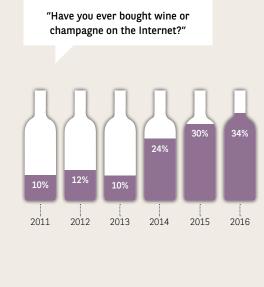
Based on a report published by Kedge Business School in June 2017, global wine sales on the Internet amounted to \$9.8 billion in 2016 and exceeded \$10 billion in 2017 or 5% of the total market. The market in Asia and in the emerging markets should continue to progress thanks to the boom in e-commerce. In France, the e-commerce wine industry is nearly mature and is expected to reach  $\[ \in \]$ 1.4 billion or 9.4% of total wine sales.

Characterised by strong growth (above 30% per year), the French market is currently in a stabilisation phase. With more than 400 websites in France and a global market value increasing tenfold in ten years, the e-commerce wine market has become very competitive. The 2014-15 period was a turning point for online wine sales with growth decelerating significantly due to the arrival of many new entrants (see graph below). There is a concentration of merchants which will need to reach critical mass to secure profitability and business continuity. And there is a high number of websites that have 'disappeared' or closed, particularly of first generation players which have failed to develop their brand, sales and client base sufficiently.





# NEW PURCHASING HABITS OF WINE CONSUMERS IN FRANCE



* Hypermarkets, supermarkets, mini-markets
** Vineyard estates or trade fairs





# OVERVIEW OF **E-COMMERCE PLAYERS**

**Generalist pure players:** This segment is dominated by two companies, Vente-privee.com and Cdiscount.com, which have secured a co-leadership position in less than ten years. Vente-privee.com is specialised in clearance sales of high quality wines. Its positioning was strengthened in 2017 when it acquired Le Petit Ballon, a boxed wine specialist. Together the two French

leaders generate €100 million in sales but still only represent a drop in the ocean of wine sales in France. Other providers, such as Amazon, eBay (only in the United States) and Priceminister have a smaller market presence.

TOD 2 CENEDALIST	L DI IDE DI VAEDO INI 1	THE FRENCH MARKET
TOP 2 GENERALIST	PURE PLATERS III	THE FRENCH MARKET

Company	Year of market entry	2016 sales, €m	Number of bottles sold
Vente-privee.com	2005	60	4.4 million
Cdiscount.com	2007	40	4 million

ource: XERFI

# TOP 6 E-COMMERCE WINE MERCHANTS IN FRANCE

Company	Sales, €m	Number of visits per month
Millesima.fr	28.9 (2016)	92,250
Lavinia.fr	21.5 (2015) including 3.5 from online sales	71,250
Millesimes.com	16.7 (2015) including 5 from online sales	35,000
Vinatis.com	12.5 (2015)	357,000
Chateaunet.com*	9 (2016)	227,500
Wineandco.com	7.6 (2014)	92,500

Specialist pure players comprise large companies (e.g. Millesima, Lavinia) and a host of smaller players which often position themselves on niche markets (one region, foreign wines, organic wines, etc.). These specialised niche websites, which are constantly improving, enrich immensely the choice of wines available for sale online. These sites have seen a strong concentration since 2015. Many 'semi-professional' sites which were set up as a side business with little investment in human and financial resources have shut up shop.



#### OTHER E-COMMERCE WINE MERCHANTS

Merchant	Sales, €m
Idealwine.com	5.1 (2015)
Cavissima.com	1.6 (2015)

rce: XERFI

The e-commerce wine market comprises a large number of specialised companies with an atypical positioning. Idealwine.com, a French site, ranks world no. 2 in wine auctions while Cavissima.com specialises in online wine cellar management.

# TOP 6 WINE DISTRIBUTORS IN FRANCE\*

Wine distributor	Sales, €m	Number of stores in France	
Groupe Castel (including Nicolas)	300 (2016)	500	
Geci-Caravin (including Famille Lurton)	55 (2016)	151	
V and B	77 (2015)	146	
Maison Richard (including Inter Caves)	NA	96	
La Martiniquaise	15.2 (2015)	38	
C10	NA	32	

## Physical wine stores with an online presence

are mostly established players with around ten years in the e-commerce business. Together, they generate more than a million euros from internet sales and have a large bricks-and-mortar network across France (Nicolas, Les Repaires de Bacchus, Inter Caves, etc.). Their business model is simple: adapt their physical market to the Internet. This model has paid off over the past ten years, but attracts only a small proportion of buyers.

This segment also comprises **a host of smaller physical wine merchants** which launched a website to ride the wave of online sales. For these dozens of merchants whose online sales do not usually exceed €100,000, this business provides an additional stream of revenue.

Retailer	Number of walk-in stores in France
Carrefour Group	2,087
Intermarché	1,821
Casino Group	1,347
Système U	1,116
E. Leclerc Group	662
Auchan Group	561
* excluding drive-in stores	

The arrival of newcomers and recent market developments are forcing wine merchants to rethink their business model, for example, by creating wine boxes, holding private sales and/or combining websites and physical stores as part of a cross-channel initiative. Nicolas, a French wine dealer, with a network of 500 walk-in stores, boasts all the assets to become the French leader on this market: advisory, product range, local store network, strong brand, etc.

Large food retailers have missed the boat in terms of remote sales. As such, they are seeking a model to carve out a place for themselves in the e-commerce market. They consider online wine sales as a source of revenue but need to improve their client-centric approach. Independent brands (e.g. E. Leclerc, Système U, Intermarché) are finding it harder than integrated brands (e.g. Auchan, Carrefour) to build an e-commerce activity. Large retailers sell the bulk of their online wine at trade fairs.

However, large food retailers are well equipped to succeed in the online wine market. They have an extensive range of products in their stores, a large amount of client data, deep market knowledge, strong negotiating power and a sizeable network throughout France.

Despite established e-commerce wine merchants, new entrants continue to emerge. The Internet is a fabulous playing field for entrepreneurs and start-ups. Moreover, in recent years entrepreneurs have launched into online wine sales, thus moving towards wine sales 2.0, with new business models and new success factors.





# THE SHAZAM FOR WINE

Created by a Dane based in California, **Vivino**, a wine merchant dubbed 'the Shazam for wine', is aimed at wine lovers and enthusiasts. Vivino allows buyers to choose wine for an occasion, by scanning the label on the bottle with a smartphone. The application then saves wines that the user likes with a view to making some purchase suggestions based on his or her preferences. Vivino's application counts 13 million users in 228 countries. Many apps offer a similar service and the business model is not easy to optimise.

# HOW TO SUCCEED ON THE ONLINE WINE MARKET

## Be consumer-centric

Only truly 'consumer-centric' companies which know how to exploit client data will survive (the consumer is king, deciding what he wants thanks to the tools available). In 2016 Total Wine and More, an American website, generated more than 2 billion dollars in sales. This success is attributable to its walk-in store network and the boom in internet and mobile sales. After developing a client database, this company exploits the data.

# Achieve seamless logistics

The online wine market cannot grow without adapted and competitive logistics solutions or by enhancing the service quality: short delivery times, home/cellar deliveries, smaller delivery slots (30 minutes), etc.



The logistics, preparation and delivery of orders are becoming a key factor of success. Over the past year we have seen this market turn professional. With irreproachable logistics, Amazon is dictating a business model that online wine merchants are endeavouring to duplicate. In Paris the famous brand Lavinia has added the Amazon Prime Now application to its delivery service.

# Optimise cross-channel selling

Nowadays, complementarity between online and physical stores is a real competitive advantage. It's all about being in the right place at the right time to adapt to client preferences. Even though an optimal model is yet to be found, and the aim is not to lose market share at bricks-and-mortar stores while capitalising on growth drivers in e-commerce, the challenge is to offer would-be buyers a smooth customer experience. Another important aspect is having a consistent price strategy: managing to keep physical store prices higher than those offered on a website.





# INTERVIEW WITH

# PIERRE NICOLET CEO AND CO-FOUNDER OF KOL

# Our history

Kol is the story of an epicurean Parisian, who prefers evening parties with friends in apartments to the crowded nightclubs of the French capital. He was rapidly joined by two companions who were just as passionate about oenology. Together they founded Kol to offer Parisians and Londoners a unique service combining discovery, innovation and practicality. So Kol was born. Today it delivers wine and spirits around-the-clock and customers order via a mobile application. It offers attractive prices, home delivery and the discovery of outstanding drinks.

Like the so-called 'foodtech', the service, which is currently available in Paris and London via an iOS application, Android and an e-commerce site, works with a fleet of 100 independent delivery people. They have a fixed and variable remuneration, based on the number of deliveries made. The bottles, stored at room temperature in three Parisian warehouses, are delivered in less than 30 minutes from Tuesday to Sunday.

Partnering directly with a hundred or so producers, Kol is looking for an 'epicurean approach' in a sector that is in need of innovation. The platform thus proposes an original selection ranging from artisanal beer to classified *grands crus*, renewed monthly, and elaborated by oenologists who have been working with the brand since its launch. The start-up works directly with a large number of wineries and allows many independent wine-growers to offer their products directly on the platform.

Feedback has been extremely positive, and Kol enables clients to rejuvenate their image by offering products on a new distribution channel and to bypass supermarkets which often have unfavourable conditions. By reducing the middlemen, the start-up can offer competitive prices that beat those of rivals such as the wine merchant Nicolas.

Following a successful first fundraising of  $\[ \in \]$ 650,000 in December 2016 amongst prestigious 'business angels', Kol finalised the second round, targeting  $\[ \in \]$ 1 million, implying a pre-money valuation of  $\[ \in \]$ 3 million. By 1 January 2018, the young start-up had already raised  $\[ \in \]$ 750,000 and the final closing took place on 28 February. This new fundraising operation should enable Kol to accelerate its development in Paris with more marketing resources with the ambition of becoming the leading player in the 'City of Light'. It should also help recruit talent and provide a better customer experience by rolling out more technology.

### The team

#### Martin Gunther

Marketing & Communication

After graduating from the Ecole Normale Supérieure in Economics, the London School of Economics (LSE) and St Andrews University in Finance, Martin started his career by co-founding KMG Partners, an organisation specialising in hotel consultancy.

#### Pierre Nicolet

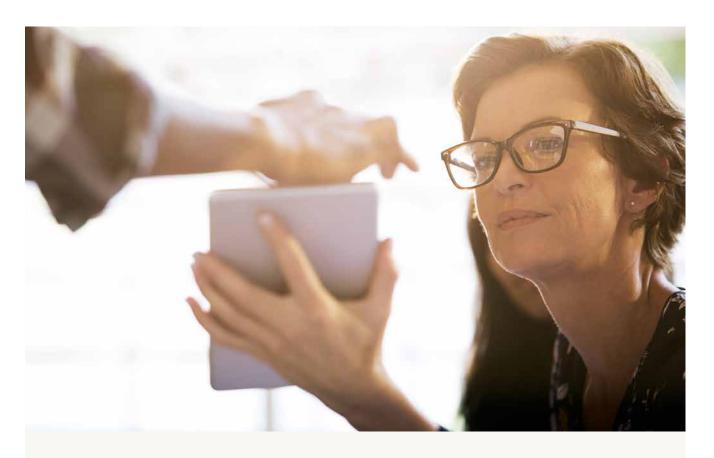
Logistics & Finance

Pierre graduated from St Andrews University with a Master's degree in Finance. He began his career at Goldman Sachs in London in the Private Equity department of Alternative Investments & Manager Selection Group.

#### **Baptiste Guez**

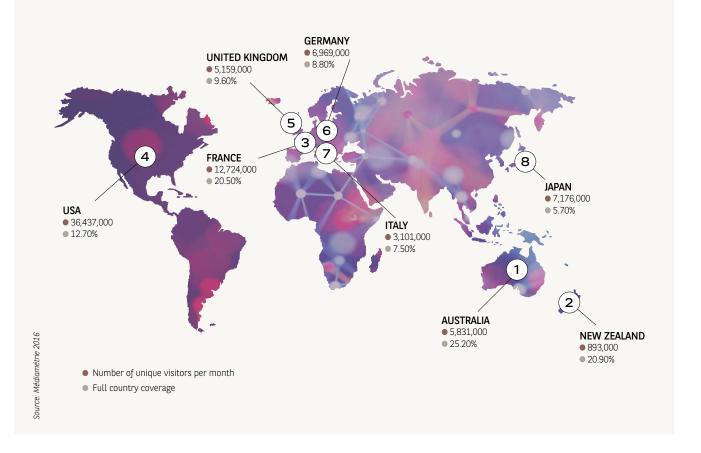
Sales

A former performance improvement consultant at Ernst & Young, Baptiste graduated from Audencia, specialising in Marketing and Management.



# FRANCE RANKS N°3 FOR GLOBAL INTERNET COVERAGE

Obviously online services would not even exist without the huge development of infrastructure and networks. According to a survey by Médiamétrie in 2016, France ranks in third position for global internet coverage.





We aim to create a bridge between wine buyers, producers and the media.



# 3 QUESTIONS TO

# **GUILLAUME DEGLISE**CEO OF VINEXPO

Vinexpo has proved highly successful both in France and abroad. Why do you think it has done so well?

Vinexpo is a pioneer in its field. First held in 1981, the event is still the must-attend meeting place for professionals in the wine and spirits industry. Vinexpo is much more than a trade fair: we aim to create a bridge between wine buyers, producers and the media. Our goal is to guide our clients towards business opportunities and help them access emerging markets. We therefore need to stay active and adapt our offer to meet market demand and client requirements. With this in mind, we launched Vinexpo Explorer in September 2017 and inaugurated Vinexpo New York on 5-6 March 2018. In June 2017 we set up the WOW! (World of Organic Wines) space, which is devoted to organic and biodynamic wines, and this space met with great approval at our 20th Hong Kong event. Last but not least, we've just announced the launch of Vinexpo Paris for January 2020. Our staff make it a point of honour to welcome small and large producers from around the world, to provide them with advice and a high-quality service. This is demanding work and I think this is what really makes the difference and ensures that each and every Vinexpo event is a highlight of the year in the wine and spirits sector.

# So what is the state of the wine market and what innovations have you seen recently?

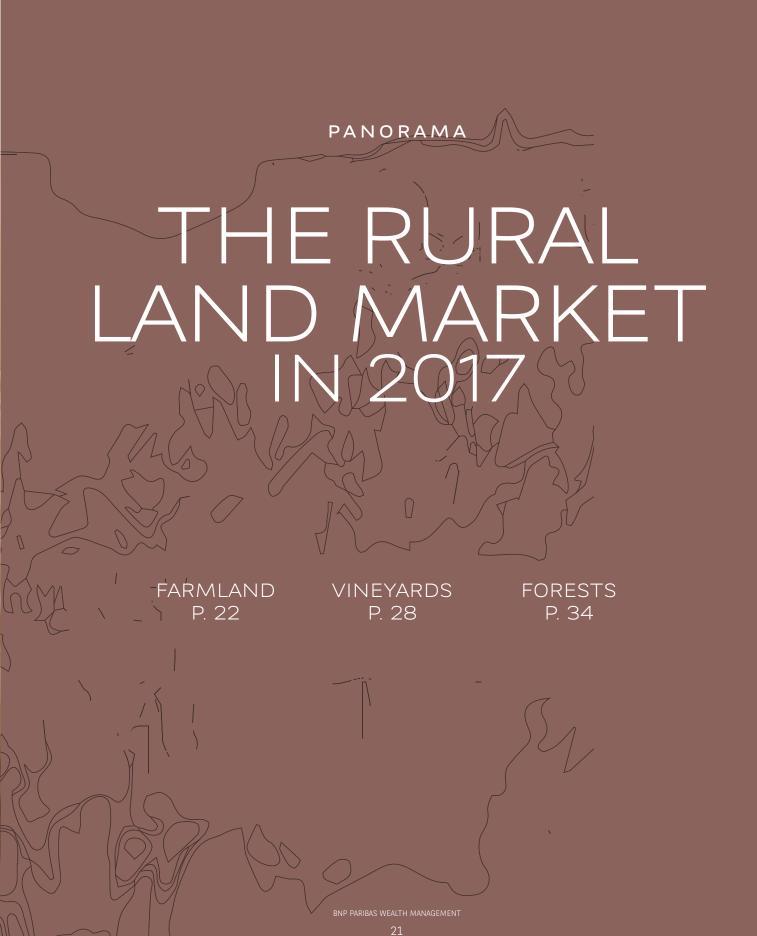
Well, we've seen tremendous growth in exports outside Europe. The wine market has become an international market. One in three wines consumed anywhere in the world has been imported. Prospective studies that we've carried out in conjunction with the UK agency IWSR show that wine consumption today is driven by the United States and China. Canada and Japan are also dynamic markets and there are new opportunities in Africa, Mexico, Vietnam and Thailand. But let's not forget that Europe still accounts for 60% of global wine consumption!

# What do you think of the Internet and e-commerce?

Digital tools provide faster access to information and the distribution side remains one of the important aspects of the wine and spirits industry, so e-commerce is a major area of interest for our clients. In China, the popularity of online shopping means there are some 500 million potential customers there. This is a market development that we're delighted to be part of through a four-year partnership that we've signed with Alibaba. Indeed Alibaba, which organises online events including wine fairs and delivers orders to second- or even third-echelon cities in China, has become a very powerful sales platform for wines and spirits.

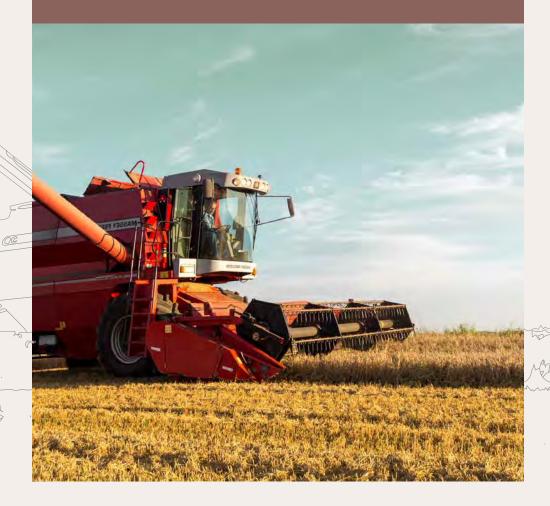
In fact, we invite major e-commerce players to come and share their expertise at our Vinexpo events. Last June in Bordeaux we featured vente-privée.com, wine.com, Alibaba and Cdiscount. Vinexpo New York will provide another opportunity to spotlight this area.





# PANORAMA

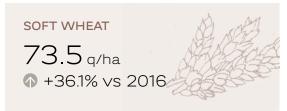




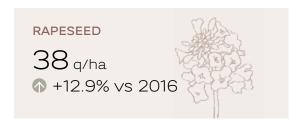
# **AGRICULTURE**

# A BETTER HARVEST IN 2017













SUGAR BEET

899.9 q/ha

+22.8% vs 2016

A surge in wheat and corn yields contributed to the 26% annual increase in grain production. Oilseed production grew by 18% y/y thanks to record yields (especially sunflower seed). The end of quotas led to a marked rise in sugar beet production.

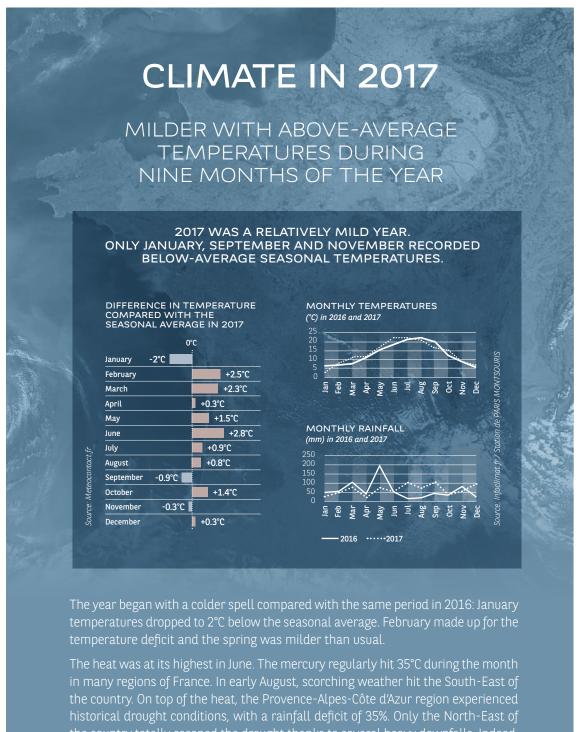
#### **FARMLAND**





In terms of prices, the larger wheat harvest in Canada supported the upward trend in 2017. Russia is on the verge of becoming the world's leading exporter of wheat, with a record volume of 32 million tonnes. In Europe, the wheat market comprises two segments. The first, which consists of French wheat with a low protein content (less than 13%), is suffering from world competition, especially Russian exports. The second segment, comprising wheat varieties with a higher protein content (produced last year in Germany and Poland), saw prices hold up better in 2017. The global supply of corn remained abundant, which dragged on prices.

Rapeseed prices were pushed down by oils, which were largely impacted by rising stocks of palm oils in Malaysia. However, rapeseed prices should pick up again because global demand remains strong. Indeed, world trade has tripled since 2005; by comparison production has grown by only 60%.



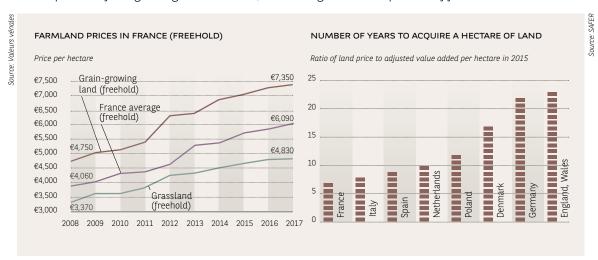
the country totally escaped the drought thanks to several heavy downfalls. Indeed, temperatures returned in December and rain was widespread. Overall, 2017 was

# FARMLAND MARKET

# SLOWDOWN IN PRICE INCREASE

In 2017, farmland in France cost on average €6,090 per hectare, representing a small increase (+0.9%) compared with 2016, and up more than 5% in ten years. Like the previous year, this sharp slowdown must be viewed in the context of declining revenues and prices for agricultural products.

However, market values are increasing and transactions for quality land remain active. Prices in France are still lower than those of its European neighbouring countries. There is little land on the market, accounting for barely 2% of farmland in use. Finally, the 'urbanisation' market appears to be picking up due to pressure from growing urban centres, translating into the acquisition of farmland.







# Grain-growing land prices continue to outstrip grassland

Arable prices are 34% higher than grazing land. A hectare of grain-growing land costs on average  $\[ \in \]$ 7,350 compared with  $\[ \in \]$ 4,830 for a hectare of pasture. Prices barely rose in 2017: +1.1% for grain-growing land compared with +0.6% for grassland.

At the top end of the market, the best grain-growing land fetches in excess of €20,000 per hectare. Such regions include Nord Pas de Calais, Santerre, Champagne Crayeuse and Saint Quentinois, as well as certain regions in the South of France, such as Crau and the Durance Valley.

At the bottom end, the cheapest land costs between €2,500 and €3,000 per hectare, for example in Mayenne, the Jura and Morvan.

# In a low-interest rate environment, farmland remains attractive.

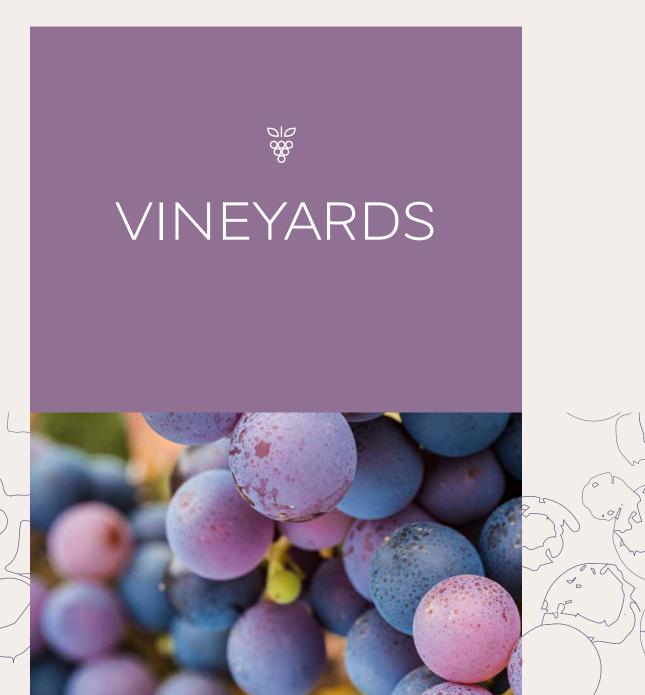
For landowners, the average price of leased land (i.e. with a tenant in situ) in 2017 was €5,040 per hectare, up 1.8% on 2016, and 1% more than freehold land. There was a noticeable increase for grain-growing land (+2%) versus grassland (+1.6%).

Grain-growing land and grassland (leased)	2017 €/ha	2016 €/ha	2016- 2017
France average	5,040	4,950	+1.8%
Leased grain-growing land*	6,180	6,060	+2.0%
Leased grassland*	3,900	3,840	+1.6%

For the first time in ten years, rents fell by 2.6% y/y in 2017. Nevertheless, with an average farm rent of €164 per hectare and per annum, the gross yield on leased farmland was still 3.3% in 2017. In today's context of low interest rates, this is by no means insignificant. The average gross yield varied between grassland (3.7%) and grain-growing land (3%), depending on the region and the type of land.

More than ever before, economic models are moving towards the search for added value, even if this means that land and working capital are increasingly uncorrelated, as in trade and industry. Individual farms represented 58% of total farmland in 2000 but only 38% of the total surface area in 2013. At the same time, the number of operating companies is on the rise. New alternative methods of financing are emerging (crowdfunding, land piggybacking by external investors, etc.). In this context, we observe a surge in the number of non-operating investors, because in the medium term, farmland and vineyards remain an attractive means of diversification.

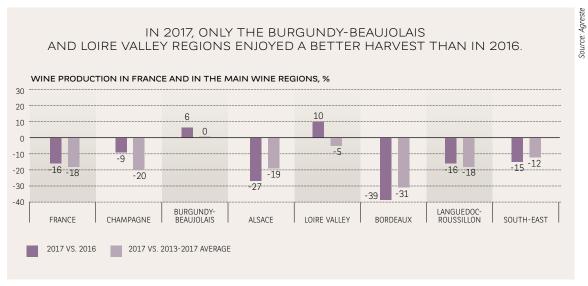




# WINE

# 2017 WAS A GOOD VINTAGE YEAR DESPITE THIN VOLUMES





Last year was the smallest grape harvest in France in ten years, with only 35.6 million hectolitres (Mhl) produced, representing a 16% decline on the previous year. For the first time, the two other major wine-producing countries, Italy and Spain, were impacted at the same time. This unprecedented situation is offering New World countries an opportunity to capture market shares at a time when global consumption is on the rise. To avoid losing customers and markets, French wine producers must manage the thinner volumes as best they can, through successful stock management. More than ever, the question of securing stocks is a key issue. To prevent prices from soaring, producers and merchants alike appear to be willing to sign multi-annual contracts with a commitment to volumes and prices. Accordingly, the Castel Group, France's leading wine distributor, offers contracts guaranteeing prices for protected geographical indication (IGP) Pays d'OC wines.

#### **BURGUNDY AND BEAUJOLAIS REGION**

Despite a severe drought in the Beaujolais region, wine production in the Burgundy-Beaujolais region advanced by 6% y/y, driven by higher production in Burgundy.

#### **CENTRE-LOIRE VALLEY REGION**

Production increased by 10% compared with 2016 which saw a poor harvest. Nevertheless, 2017 production was 5% smaller than the 2012-2016 average. Juice yields on some grape varieties were low.

## CHAMPAGNE REGION

Thunderstorms from late August caused grapes to rot on some vines in the Chardonnay appellation. Therefore a sorting process was necessary during the grape-picking season that consequently weighed on production volumes. In 2017, spring frosts caused less devastation than in 2016. Production decreased by 6% y/y.

#### **BORDEAUX REGION**

2011

2012

The grape harvests took place earlier than usual. The alternation of rainfall and heat favoured large grape

berries. The frost hampered production, which plummeted by 39% y/y (there was a large harvest in 2016). Moreover, production was 31% lower than the five-year average.

#### LANGUEDOC-ROUSSILLON REGION

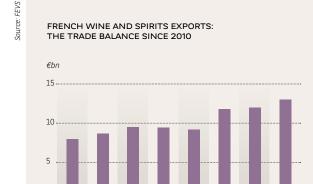
The grape harvests ended early. The hot, dry and windy conditions had a negative effect on berry growth. Severe spring frosts in the Aude and Hérault *départements* also impacted production (-16% y/y). Nevertheless, the quality of grapes was excellent.

# PROVENCE AND CÔTES DU RHÔNE REGION

The grapes were harvested in September, ten or so days early. The drought, scorching heatwave and wind dehydrated the grapes before harvest, and they were mainly small. Juice yields were 15% lower than in 2016.

#### ALSACE REGION

Production nose-dived compared with 2016 (-27%) because the spring frost weighed heavily on production, as in the Jura region.



2013

According to the French Federation of Wine and Spirits Exporters (FEVS), exports of wine and spirits from France rose by 8.5% in 2016 to €12.9 billion in 2017. This is double the amount in 2004! What a fabulous expansion in an industry which employs 300,000 people in France for the export market!

2014

2015

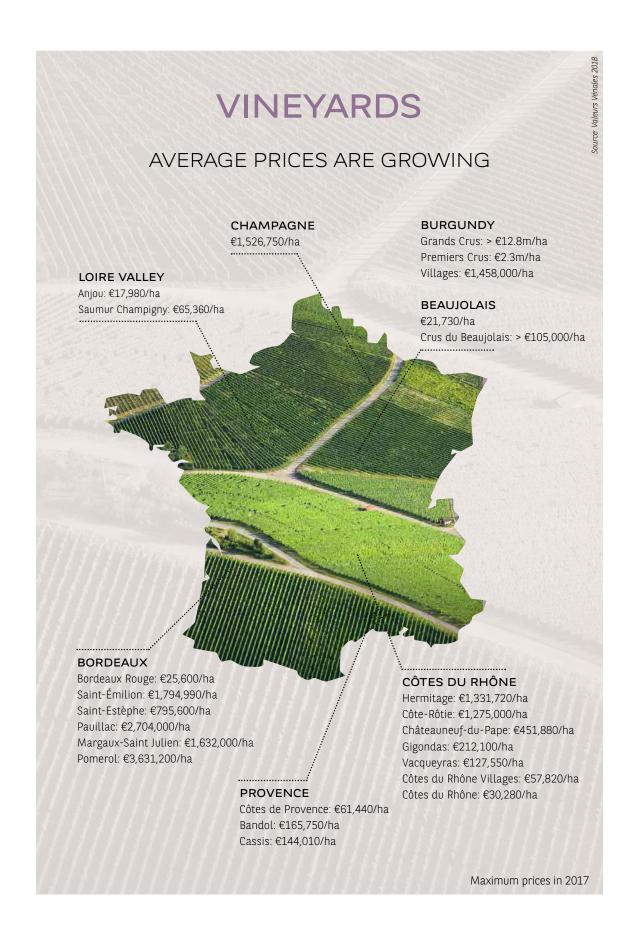
Despite the euro's appreciation and geopolitical uncertainties, wine export sales ( $\in$ 8.66 billion) posted a 9.6% annual increase and spirits exceeded the  $\in$ 4 billion mark for the first time ( $\in$ 4.2 billion), an annual growth of 6.3%. Together, wine and spirits ( $\in$ 11.5 billion), secured

their position as the second-largest surplus industry on France's trade balance, after aeronautics and in front of perfumes and cosmetics.

The good news is that volumes are also on the rise (+5%) and it is estimated that more than 200 million cases of wine and spirits were exported in 2017.

In terms of destinations, more than 80% of growth can be attributed to the strong momentum in countries outside the European market. With imports amounting to  $\in$ 3.08 billion, the United States (+10% y/y), remains the top importer, in front of the United Kingdom ( $\in$ 1.34 billion, +2.7% y/y) and China ( $\in$ 1.17 billion, up a sharp 24.5% y/y).



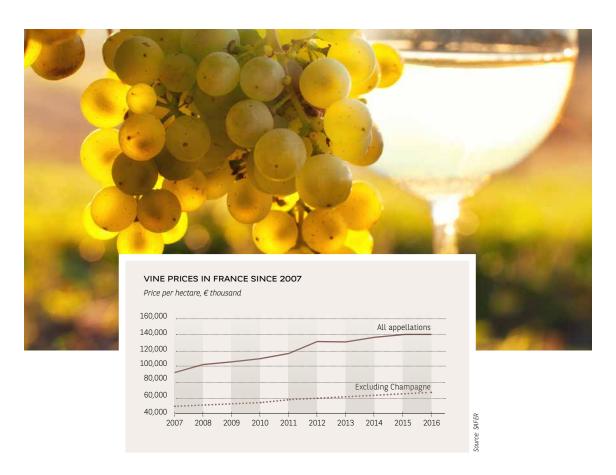


# WINE-GROWING LAND

WITH THE FRENCH WINE SECTOR IN BETTER ECONOMIC SHAPE, THE PRICE OF WINE-GROWING LAND ROSE IN MOST APPELLATIONS IN 2017; ONLY A FEW APPELLATIONS DEPRECIATED.

In numerous regions, even at entry-level (with only a few exceptions), the price for wine-growing land has risen. Over the past ten years or so, we have observed a slight improvement which is largely due to expanding world consumption and a strong momentum in exports.

This trend is chiefly driven by Champagne, but also by other regions such as Bordeaux (largest market by value), Burgundy, Côtes du Rhône and Provence. Over the last ten years, prices for all appellations have progressed by 3.7% per year, and by only 3% on average if excluding Champagne.



As for farmland, nearly one in three hectares is sold with a tenant in situ and transactions represent less than 2% of the total surface area. The average price of wine-growing land is close to €140,000 per hectare, but there are noticeable differences between regions and appellations.

#### **BORDEAUX REGION**

The market for wine-growing land around Bordeaux is extremely buoyant. Around 2% of the region's 115,000 hectares of land (i.e. 2,500) is bought and sold every year. The choice is wide, and available to all types of buyer: from €20,000 per hectare in the Bordeaux appellation to more than €3.6 million per hectare for Pomerol. Prices are rising in prestigious appellations. At €1,794,180/ha, the price for Saint-Émilion shot up by 15% compared with 2016.

Pomerol, which continues to hold the record for the most expensive land in the Bordeaux region, jumped by 9.6% y/y. In Saint-Estèphe, the price per hectare climbed by 8.7% from €732,000 to €795,600. Margaux and Saint Julien are

valued at more than €1.6 million per hectare. Land for Pauillac dipped by 1.7% last year but still fetches €2,704,000 per hectare.

At the bottom end, appellations are gaining less momentum. Prices for Bordeaux and Fronsac picked up, rising by 3.5% y/y and 10.8% y/y, although they plummeted by more than 50% over a 20-year period.

#### CHAMPAGNE REGION

The Champagne market remains very active and is the leader by value. The market is driven by the sale of small surface areas averaging around 15 'ares' (1 are = 100m²). This makes them accessible to a large number of buyers

who are mostly established wine producers. The average price per hectare of vine in the Champagne appellation varies between  $\[ \in \]$ 1.2 million and  $\[ \in \]$ 1.5 million. The price of vines in Champagne has edged up by 3.4% per annum over the last ten years. In the highly-prized Côte des Blancs area, the average price per hectare can vary between  $\[ \in \]$ 2 million.

#### **BURGUNDY REGION**

Wine-growing land in Burgundy is rare on the market and some very emblematic sales drive up the price of *Grands Crus*. In the 'Villages' appellation, a hectare of land costs between  $\[ \in \]$ 0.9 million and  $\[ \in \]$ 1.4 million, whereas *Premier Cru* land fetches between  $\[ \in \]$ 2 million and  $\[ \in \]$ 3.2 million for the top appellations. Meanwhile, prices for very rare

*Grands Crus* are rocketing. This tension on the market is having repercussions across the whole region and Côte d'Or winemakers are keeping an eye out for less expensive land in Saône-et-Loire and Beaujolais.

## CÔTES DU RHÔNE REGION

In the north of the region, the market is overstretched and prices in Côte-Rôtie and Hermitage can easily top  $\[ \in \]$ 1.2 million per hectare. Land in the Hermitage appellation commands as much as  $\[ \in \]$ 1,275,000 (+3.7% y/y) for Côte-Rôtie.

To the south (in the Côtes du Rhône méridional region), the

value of the Côtes du Rhône appellation increased slightly to €20,000 - €30,000 per hectare last year. The Côtes du Rhône Villages appellation also rose to between €35,000 and €55,000 per hectare. Prices for the region's *Cru* land continued to gain momentum. Châteauneuf-du-Pape edged up by 4.3%. At €451,880 per hectare, it remains the region's most expensive appellation.



# LOIRE VALLEY REGION

Demand is essentially local. External investors show little interest in this region which nonetheless boasts many assets. The Anjou appellation lost 2.8% in value last year, with a hectare of land averaging €17,980, compared with

€65,360 for Saumur-Champigny (+1% y/y).

# PROVENCE REGION

Provence rosé is gaining in popularity, including at the international level. Land prices for the Cassis and Bandol appellations continue to enjoy steady growth. By comparison, a hectare of Bandol is now worth €165,750 (+2%) compared with €144,010/ha in Cassis.

In Coteaux d'Aix, wine-growing land prices diminished to €43,670/ha (-3.5% y/y).

Land in Côtes de Provence fetches between €50,000 and €60,000 per hectare. Prices for Côtes de Provence in coastal areas are on the increase with land currently worth between €120,000 and €150,000 per hectare.



# FORESTS



# THE TIMBER MARKET

THE AUTUMN 2017 SALES BEGAN WITH A CONFIRMED PICK-UP IN DEMAND FOR OAK. FOR OTHER HARDWOOD SPECIES, THE SITUATION HARDLY CHANGED.

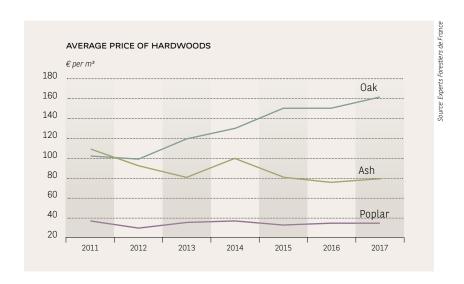


Oak prices continued to rise, with average growth of 12% in 2017 (€151 per m³ on average). Autumn sales repeated past trends. For oak, the 2008 crisis is but a distant memory. After four consecutive years of rising prices, sector professionals are confident in the future and have low stocks. Prices of standing timber exceeded pre-2008 crisis levels. For example, prices for high-quality oak—used for making furniture and barrels—reached between €300 and €500 per m³.

Unit volume	2007	2014	2015	2016	2017	2007 - 2017	2014 - 2017	2016 - 2017
1.5	100	l 95	100	122	140	+40%	+47.4%	+14.75%
2	150	127	145	170	186	+24%	+46.5%	+9.4%
2.5	180	149	180	205	223	+23.9%	+49.7%	+8.8%
3	215	170	210	233	250	+16.3%	+47.1%	+7.3%
3.5	240	187	234	258	275	+14.6%	+47.1%	+6.6%
3.5	240 265	187 200	234 255	258 279	275 295	+14.6%	+47.1%	+6.6%

Source: ONF Burgundy

#### **FORESTS**



In other hardwood species, such as beech and ash, supply was high and demand selective. Because the cost of maritime freight soared, exports to Asia levelled off. High-quality beech traded at €25-50 per m³. The strong momentum of exports to Germany supported the price of ash: €80-100 per m³. Demand for poplar timber was driven by its use in packaging. Poplar timber suitable for peeling traded at €25-40 per m³.

The pulpwood and fuelwood markets were more challenging.



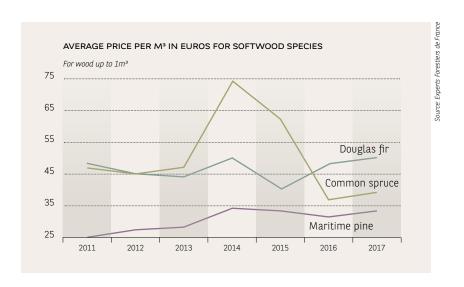
#### **FORESTS**



AFTER DECLINING FOR SEVERAL YEARS, SOFTWOOD MARKETS STARTED TO IMPROVE IN THE SECOND QUARTER OF 2017. VOLUMES COMING ONTO THE MARKET INCREASED BY 20% AND PRICES FOR STANDING TIMBER ROSE.

During the first half of 2017, 750,000m³ of softwoods came onto the market (+20% y/y). In ten years, this is the largest volume brought to the market by forest owners. Excluding Scots pine, whose volumes coming onto the market dipped, the supply of all other softwood species saw an upswing.

The building sector appears to be picking up again, with an upturn in new housing starts: 397,000 (+15.2% y/y). As the supply of unsold wood diminished, prices increased. Spruce (€37-68 per m³) fetched between €2 and €4 more per m³ of standing timber (+3% to 5% y/y). The same was true for Douglas fir (€20-75 per m³) thanks to robust demand. Silver fir traded at €58 per m³ on average. Maritime pine (€20-75 per m³) posted a smaller price increase in 2017, but has still grown steadily since 2011.



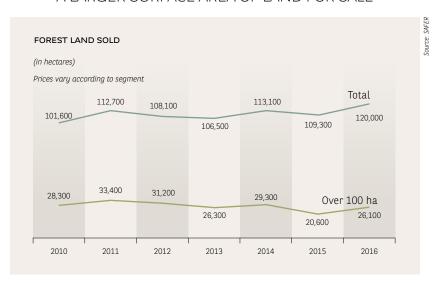
# THE FOREST LAND MARKET

Approximately 120,000 hectares of forest land are bought and sold every year. The market is pretty active, with 17,500 transactions. For forests exceeding 100 hectares, the market is tight, and demand comfortably outstrips supply: only 130 transactions are closed every year.

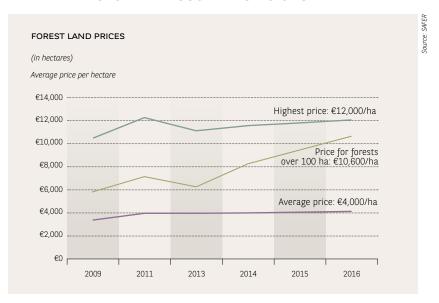
The average price for forest land in France is €4,000 per hectare; this price edged up by more than 2% in 2016 and continued to rise in 2017. However, this average price masks disparities between the size of the forest, the quality of wood and the upside potential. It is worth noting that the presence of buildings pushes up the value of a forest. There is a wide gap between the lowest price per hectare (€670) and the highest (€12,040). The average price of a forest over 50 hectares is €6,400 per hectare; this figure rises to €9,100 per hectare in the French *départements* of Aisne, Ardennes and Marne.



# A LARGER SURFACE AREA OF LAND FOR SALE



## PRICES VARY ACCORDING TO SEGMENT



Although the average price has edged up only slightly, we observe that buyers have been paying a premium for top-quality forests (larger surface areas) for many years.



### SOURCES AND GLOSSARY

## Enquête Insee Cefil 2017

for the wine-making industry in the French region of Nouvelle Aquitaine.

#### **KEDGE**

A leading School of Business and Management based in Marseille, Bordeaux and Paris. It also has a Wine & Spirits Academy.

### ePerformance-Barometer.com

Drawing on the expertise of KEDGE Business School in the areas of e-commerce and management in the wine sector, the e-Performance Barometer produces an independent and original study on the e-commerce wine business. This report analyses consumption habits of 2,300 internet users from nine countries (France, Spain, Italy, Germany, United Kingdom, Australia, USA, Canada and China). Last year's survey was based on a representative sample of 100 internet wine buyers in each country. The resulting ranking was based on feedback from real internet users and prospective clients of the sites under review. The sample, which was essentially made up of men (73%) in high socioprofessional categories (50%) with high annual net revenue (61% of households earn more than €30,000), corresponds to the average profile of internet wine purchasers.

#### **XERFI**

An audio-visual magazine on the world of economy, strategy and business management.

Report: "La distribution de vin" in French (10/07/2017), reference 7DIS35/XF2+

#### Doc'Eco

Group Information Centre/BNP Paribas Group.

#### Vinexpo

Set up in 1981 by the Bordeaux Chamber of Commerce and Industry, this body organises a trade fair which has become the world's leading event for professionals in the wine and spirits industry.

#### **IWSR**

An organisation that provides research and advice to the wine and spirits industry. Over the past 40 years, this organisation has built up the world's largest database on wines and spirits.

### Baromètre SOWINE

An agency specialised in communication and marketing in the wine industry.

#### Médiamétrie

A company which measures the audience of audio-visual media and the Internet.

#### Pure player

The term was originally used to designate a company whose activity was carried out exclusively on the Internet. It also refers to a company which concentrates on one business or in any case on one sector of activity.

Terre-net.fr
Agreste
Meteocontact.fr
Infoclimat.fr / Station de PARIS MONTSOURIS
Valeurs Vénales
SAFER
Experts Forestiers de France
FEVS
ONF Bourgogne

# **AGRIFRANCE**

As part of BNP PARIBAS PROPERTY SNC- the BNP PARIBAS subsidiary dedicated to real estate activities –, AGRIFRANCE is the department specialising in rural property: vineyards, prestigious country estates, farmland and forests. With over 40 years' experience in this domain, AGRIFRANCE works hand-in-hand with its clients in their personal wealth management. Through a network of reputed professionals, AGRIFRANCE is also able to provide complementary services, such as property appraisals and estate management.

Advisory services and transactions in agricultural real estate, vineyards, forests and leisure properties

BNP PARIBAS PROPERTY SNC 33, rue du Quatre Septembre 75002 Paris France

Tel: +33 (0)1 42 98 43 51

Email: serviceclient.bnpproperty@bnpparibas.com

A French general partnership company (SNC) with share capital amounting to €1,200,000. Registered in the Paris Trade and Companies Register under n° 784 194 144 RCS PARIS Holder of professional licence CPI 7501 2016 000 008 797 issued by the Chamber of Commerce and Industry of Paris Île-de-France Guarantee BNP Paribas, 16, Boulevard des Italiens, 75009 Paris, France. E.C. Identification: C.E FR25784194144

A BNP Paribas Group company.

This is a promotional document, provided solely for information purposes, and under no circumstances does it constitute an offer or proposal effected in a State (or jurisdiction) in which such an offer or proposal is not authorised, or an offer or proposal made to persons to whom such an offer, proposal or sale would be illegal.

# **CONNECT WITH US**





@BNPP\_Wealth #Agrifrance





BNP Paribas Wealth Management



wealthmanagement.bnpparibas







The cover was made from transformed potato waste.



