

The French Wine Cluster

Microeconomics of Competitiveness

Professors Michael Porter and Hirotaka Takeuchi

Harvard Business School

Winter 2013

May 10, 2013

Maria Baibakova

Matthew Guilford

Jennifer Lee

Rami Sarafa

Marius Weigand

Table of Contents

Introduction.....	1
Country Performance	2
Sociopolitical Overview.....	2
Economic Growth	3
Monetary and Fiscal Policy	4
Unemployment and Productivity	5
Trade and Exports.....	6
Country Competitiveness Analysis.....	7
Macroeconomic Conditions.....	7
Microeconomic Conditions: Company Operations and Strategy	8
Business Environment: The Diamond	8
Factor Conditions	9
Demand Conditions	9
Related and Supporting Industries.....	9
Context for Strategy and Rivalry.....	10
Country analysis: Conclusion	10
Cluster Performance.....	10
France's Performance In The World Wine Market	10
Trends In The Global Wine Market	11
Key Players in the Global Wine Markets	11
Importance Of The Wine Cluster For France As A Country	12
History Of The French Wine Cluster	12
Cluster Map Of The French Wine Cluster	13
Performance of the French Wine Cluster.....	13
Cluster Competitiveness Analysis	16
Historical Drivers of Cluster Performance	16
Factor Conditions	16
Related and Supporting Industries.....	17
Emergence of Competing Clusters	21
Current French Cluster Conditions and Key Issues.....	23
Overview: A Bifurcation Between the Best and the Rest	23
Factor Conditions	23
Related and Supporting Industries.....	24
Demand Conditions	25
Context for Strategy and Rivalry.....	25
Firms: Internationalize supply as well as demand.....	26

INTRODUCTION

France's post-war reconciliation with Germany has helped form the political, economic and monetary cooperation that was central to the establishment of the European Union. The country's ease of access to major trading partners in Europe, access to a unified currency market and increased clout in international organizations have been principal drivers of growth in the past fifteen years. That being said, France has lost significant competitive edge in principal areas of its economy in recent years. Rising deficits, stubborn unemployment and low productivity are core challenges the country faces.

Although France's relative position remains strong overall, certain industries such as viticulture and agriculture have lost significant competitiveness. When compared to peer "new world" wine-producing countries like Australia and Chile, the country appears to be losing ground in key aspects of context, strategy rivalry (CSR) and capitalizing on factor and demand conditions. Competition has driven innovation in competing wine-producing countries, while growth in domestic disposable income and consumer expenditure has fueled local demand and buyer sophistication. France's competitiveness has also suffered as a result of changes in the global wine market. Historic price pressure as a result of overcapacity is going away as demand is growing stronger than production capacity. At the same time wine is moving from a regional towards a global product as international trade increases, leading to new competitive pressures for wine growers.

France has taken this trend seriously as wine is a key national export for the economy and a key employer for the work force. Overall, performance of the French wine cluster over the past decade is mixed. France wine has a strong position in terms of export values and volumes driven by a higher percentage of exports to non-EU countries. France also has maintained a strong price premium on a per liter basis versus other countries. Despite these positive aspects, the cluster cannot ignore the fact that export growth has not kept pace with other wine-producing countries both in terms of volume and value. France faces particularly strong competition from "New World" producers outside of Europe.

The question then begs, how can the French wine cluster remain competitive? The competing clusters in "new world" geographies like Australia, Chile and the United States have gained global export share by adopting the same strategies that made France so successful historically. IFCs that contributed to France's strong performance are now protecting uncompetitive producers and stifling innovation. Producers have been less able or willing to adapt to a changing marketplace, whether due to lack of scale and expertise or an unwillingness to alter owner and worker lifestyles. Going forward, ensuring that national industry organizations and other IFCs drive improvements in productivity will be critical in helping French firms remain globally competitive.

COUNTRY PERFORMANCE

Sociopolitical Overview

Despite recent focus on France's political transition and conflicted relationship with the European Union, the country is one of the world's leading economies. With a GDP (ppp) of \$2.25 trillion and annual exports of \$570 billion, the country boasts the tenth largest economy globally and continuously vies with the United Kingdom for the second largest in Europe (after Germany). With a population of some 64 million, the country's GDP per capita is \$35,500, in the top half of European peers; France's relatively lower Gini coefficient of 32.7 is a testament to the staunchly socialist policies that have shaped its modern economy¹.

The country is geographically diverse with several major population centers with over one million inhabitants including Paris, Marseille, Lyon and Lille. France is divided into 22 metropolitan regions (and 5 overseas regions) and further subdivided into 96 metropolitan departments. The country's major seaports include Calais, Dunkerque, LeHavre, Marseille, Nantes, Paris, and Rouen². Although the country's capital is only the 20th largest urban area globally, it has the sixth-largest economy in the world in line with cities such as London and Chicago. The city is one of the only areas in France that did not suffer a significant GDP

¹ "France," Central Intelligence Agency World Factbook, 2013, accessed April 2013, available at: <https://www.cia.gov/library/publications/the-world-factbook/geos/fr.html>

² *ibid*

contraction during the recent financial crisis and concentrates 30% of the country's overall wealth (PricewaterhouseCoopers, 2007).

France's Chief of State is President Francois Hollande who was elected on May 15, 2012 by popular vote for a five-year term. The country's parliamentary democracy allows the President to appoint a Prime Minister (currently Jean-Marc Ayrault) who is the acting head of government. France operates a bicameral Parliament consisting of the Senate with 348 seats and the National Assembly with 577 seats. The country's adoption of this hybrid presidential-parliamentary governing system has prevented the instability and ineffectiveness common to its political system in the post war period. The most powerful judicial branch of government, the Constitutional Council, is comprised of three members appointment by the President, three by the National Assembly, and three by the Senate³.

France is a permanent member of the United Nations Security Council, NATO, the G-8 and the G-20. As one of the leader's and original proponents of the European Union, France enjoys economic access and international memberships that have solidified its political-economic clout both regionally and globally⁴.

Economic Growth

In the post-war period, France has pursued a series of economic plans with objectives that have evolved over time. Immediate plans after the devastation of World War II focused on redevelopment of infrastructure, modernization of production facilities and increasing output of goods and services. The country grew rapidly during this period (1950-1960) with average growth of 5.1%. In the 1960'ss and early 70's the plans focused on ramping up monetary stability and achieving a balanced foreign payments resulting in significant currency devaluation but significant expansion of exports and growth. The economic grew at an annual average of 4.8% during the period from 1961 – 1972. Increasingly socialist policies in the 1970's and 80's, however, led to a slowdown in growth of around 2.0% per annum. While private consumption,

³ Central Intelligence Agency

⁴ *ibid*

social security expenditure and employment increased during this period, these policies hampered France's competitiveness and overall productivity. Slowing growth in the late 1990's was eventually offset by the economic boost that accompanied the completion of the Euro monetary union in 1999.⁵ A decade of lower but stable GDP growth at around 2% followed despite major shortcoming in unemployment and productivity.

France's economy went into recession in 2009 later and left earlier than most comparable economies, only enduring four quarters of contraction. France entered recession in the second quarter of 2008, but began recovering relatively sooner than other European counterparts posting a surprising 1.3% expansion in the second quarter of 2009. Between January and March 2011, France's GDP growth had been stronger than expected at 0.9%, one of the best figures in Europe but shrunk between April and June 2011 decreasing by -0.1%.⁶ In 2011, the GDP grew at 1.9%, below Germany at 2.9% but more than the UK. FDI to France rose to US\$40.5bn in 2011 up from US\$33.7bn in 2010, but was below pre-crisis levels of US\$98.3bn in 2007. Political infighting between leftists and conservatives and depressed business sentiment have contributed to flat growth in 2012 and early 2013. Private consumption has come under pressure in recent years due to rising deficits and higher taxes, although real wages and employment are expected to slightly increase on the back of lower inflation.⁷

Monetary and Fiscal Policy

Bond yields in France, largely considered a proxy for the country's cost of capital plunged from an average of 7.8% in 1991-2000 to 4.8% from 2001-2007 (INDS). The country's yield reached an annual low of 3.4% in 2005 pointing to the alleged success of the monetary union in helping the country finance growth and investment. Almost identical bond yields for Germany, Spain and France during this period, however, show the deficiencies in European policymaking as these countries' possessed very different economic and risk profiles.

⁵ "France, Country Overview." The Nations Encyclopedia, 2013, accessed April 2013, available at: <http://www.nationsencyclopedia.com/economies/Europe/France.html>.

⁶ "Official Economic Statistics," France's National Institute of Statistics and Economic Studies, 2012, accessed April 2013, available at: <http://www.insee.fr/en/insee-statistiquepublique/default.asp>

⁷ "France, Country Report," The Economist Intelligence Unit, May 2013, accessed May 2013, available at: http://www.eiu.com/index.asp?layout=ib3country&pubtypeid=1152462500&country_id=1350000135

While briefly spiking to close to 5% in 2007 in the midst of the global financial crisis, aggressive monetary easing from European policymakers has helped drive the cost of capital down again. France's spread over Germany is current around 60bps, which underscores the EU commitment to accommodative monetary policy going forward. France's "Soundness of banks" ranking in the competitive index fell -21 on rising borrowing costs, which in turn have hurt SME's.⁸

Fiscally, France is in a more precarious position as deficit and debt figures highlight significant challenges going forward. France historically maintained a budget deficit of -1% - 2%, but this ballooned in excess of 7% in 2009 on the back of stimulus aimed at reviving the economy. The country's ranking in terms of debt competitiveness fell -60 from 2003-2012 – one of the largest recorded declines. EU law states that member states should not exceed 3%, but this was suspended in the wake of the recession. Social security spending in the country currently accounts roughly 50% of total public expenditure rising in excess of 3% annually since 2010. Public receipts are not equivalent to 51.7% of GDP reflecting the challenge that France now has one of the highest tax burdens in the EU as a result of a leftist administration.⁹

Unemployment and Productivity

Long-term unemployment in France has adversely affected the country's economy and competitiveness. High minimum wage costs (almost double that of the U.S.) and stringent labor regulations have plagued France's economy for decades. Before the mid-1970s, unemployment in France had remained consistently low. However, the number of unemployed people in France rose steadily, reaching almost 13% in the mid 90's, and was associated with a dramatic decline in labor productivity growth (Moss, 1998). Unemployment had risen in France because the economy had failed to create enough new jobs to accommodate growth in the labor force. Pockets of growth in employment, such as part-time work, were largely due to increased participation from women. All of job growth was due to an increase in government employment

⁸ National Institute of Statistics and Economic Studies

⁹ "Deficit Overshoots Target," The Economist Intelligence Unit, April 3, 2013, accessed May 2013, available at: <http://country.eiu.com.ezpprod1.hul.harvard.edu/article.aspx?articleid=30340614&Country=France&topic=Economy>

with net job creation in the private sector negative over the 70's, 80's and early 90's (Moss, 1998).

When compared to the United States, the French produce 23% less than their American counterparts. While on an hourly basis French workers are actually slightly more productive than Americans, they work 15% less, which is principally to blame. There are also more unemployed and underemployed individuals of working age in France. Overall, the social welfare system in France was among the most generous of any in the world (Moss, 1998). Pay and productivity ranking stayed flat over the last decade reflecting an impasse in solving these endemic challenges. That being said, increased cooperation in labor-employer relations has slightly improved in recent years reflecting new willingness to compromise (Porter, 2013).

Trade and Exports

France's trading surplus has slowed significantly in the past decade. With a current account surplus of 2-3% in the late 90's, the economy has posted a consistent deficit since 2005. While a rise in private consumption partly offset this deficit prior the reception, the current account deficit rose to -2% suggesting a broad based decline in export growth despite accommodative economic policies. This partly reflects higher international oil prices, but the deterioration is broad-based, suggesting a loss of competitiveness. The trade deficit is forecast to remain fairly large throughout 2013-17, but the overall current-account deficit should continue to be manageable as a proportion of GDP owing to large surpluses on the services and income accounts. The value of goods exports in 2011 totaled \$590bn, while the import bill reached \$692bn, resulting in a trade deficit of \$102bn. Prevalence of trade barriers ranking fell -17 in the competitiveness index reflecting protectionism by current policymakers (INSEE, 2012).

France's leading industries produce machinery, chemicals, automobiles, metals, aircraft, electronics equipment, textiles, and foods (especially cheeses). Advanced technology industries are also important. Coal, iron ore, bauxite, and other minerals are mined. The country's leading crops are wheat, sugar beets, corn, barley, and potatoes in addition to cattle raising. France is among the foremost producers of wine in the world. The best-known vineyards are in Burgundy, Champagne, the Rhône and Loire valleys, and the Bordeaux region. The centers of the wine

trade are Bordeaux, Reims, Épernay, Dijon, and Cognac (CIA, 2013). Despite this economic diversity, only the aerospace and medical device industries have increased in market share with agriculture and foodstuffs declining by around 3% (Porter, 2013) (Exhibit 1).

In understanding how the country's macro conditions have affected businesses operating in the country, it is necessary to analyze the country's performance in key competitiveness' indicators. Rising borrowing costs, limited private sector involvement and endemic challenges in spurring productivity are the primary drivers of a loss of competitiveness for the country in recent years. The challenges have also shaped the context and challenges faced by a once booming wine cluster.

COUNTRY COMPETITIVENESS ANALYSIS

France's overall competitive position in the world economy is relatively strong, ranking at 20 on the GCI, which shows relatively strong performance in contrast with other wine-producing countries such as Chile (23), Spain (28), and Italy (44). However, it is important to note that "new world" wine-producing countries such as Australia and Chile are catching up or already performing at a better level, with Australia ranking at 13 and Chile gaining 3 positions since 2011 and showing a steady increase since 2001. Chile gaining ground is not surprising: since 2009, the country was heralded by the global community for its "solid macro environment" and "good innovation policies" (Lopez-Claros, 2009-2010), both of which are critical for wine cluster development. France needs to continue investing into vehicles that drive competitiveness in order to retain its leading position as a wine-producing country. This part of the paper explores the successes and woes of France's competitive position from the perspective of macro as well as the business environment.

Macroeconomic Conditions

France's overall macro competitiveness ranking has remained stable over the past ten years at a solid 19th position on the GCI. On the surface, France's basic health and education services, established political institutions, and solid rule are the fundamental reasons for France's status as a developed global economy. However, upon closer inspection, certain trends become alarming,

in particular that of an increase in wastefulness of government spending (-23 in GCI ranking) and limits to freedom of the press (-18 in GCI ranking). As wasteful spending and proposed cuts perpetuate the discourse on Europe's future, France falls into the spotlight as it needs to seriously address government spending amidst low economic growth (Bremer, 2013). Likewise, the 2013 Press Freedom Index of Reporters Without Borders ranks France at a low 38th rank of 179 countries, listing it lower than countries such as Uruguay and Namibia, to name a few. Looking further into France's rule of law rankings, "reliability of police services" and "impact of organized crime" jump out as alarming places where France lost 13 and 15 positions on the GCI respectively. The perception of heightened crime and a less effective police force is highly detrimental to investor confidence France's business environment and needs to be addressed by the French government.

Microeconomic Conditions: Company Operations and Strategy

France's relative microeconomic competitiveness remains in a strong position of 22 on the GCI ranking, certain negative trends jump out. The most wine-cluster-relevant data points – degree of customer orientation, and overall internationalization of firms with control of international distribution in particular – show highly negative drops in rankings. The degree of customer orientation has fallen by 36 positions on the GCI index, which is correlated with degree of buyer sophistication in the business environment analysis (more details on this in Business Environment: Demand Conditions below). Another critical element to the continued prosperity of French wine firms is the degree of internationalization, which is critical for sustainable long-term competitiveness. Although this paper will later look at firm-level international strategy more in-depth, we will note for now the 23-position drop in this ranking, particularly caused by the control of international distribution plummeting from a consistent leading position of 1 or 2 in 2001-2004 to a dismal 38 by 2012. This is a critical element that has the potential to seriously inhibit France's long-term competitive position in wine and cannot be overlooked.

Business Environment: The Diamond

France has an overall strong business environment ranking at 21 on the GCI, though like on most overall indicators, France is showing a steady drop of -9 positions. This is particularly worrying

in comparison to Australia, which finds itself 17th position. The following section taken an in-depth look at France's business environment using the tool of the country diamond (for an abbreviated version, see Exhibit 2).

Factor Conditions

France boasts strong infrastructure overall, including on the logistical, communications, and administrative fronts. Recent changes in legislation in 2008 significantly eased tax and bureaucratic regulation, making doing business, with time to start a business shortened and ease of paying taxes improved (World Bank Group 2013). However, innovation-related metrics are significantly decreasing by 11 in GCI ranking, which is further supported by stagnant patent output per million inhabitants and R&D Expenditure as % of GDP, as well as by a mere 5% growth in number of researchers per million of inhabitants. These metrics give even more cause for concern in contrast with Australia, which is experiencing much larger growth rates in all three innovation parameters and is now also overcoming France in absolute numbers on all three fronts. One final cause for concern is France's significantly decreasing ranking in getting access to credit and venture funding parameters, both of which fell in GCI by 25 and 26 positions respectively. This is probably caused in lack of investor confidence in France overall given its fiscal woes.

Demand Conditions

With low internationalization, in-country demand conditions are particularly critical for the well-being of France's wine industry. However, the some metrics in the "demand" part of the diamond are showing worrying downward trends. France's buyer sophistication plummeted 26 positions on the GCI, which is supported by a negative CAGR in of consumer expenditure from 2007 to 2012 and a tiny growth in disposable income over the same period (EuroMonitor). This trend is particularly worrying given the increasing performance of "new world" wine-producing countries Australia and Chile, both of which are seeing rapid consumer spending and disposable income growth rates as well as increases in buyer sophistication (Chile +24 in GCI, Australia ranking higher than France at 22 vs 30).

Related and Supporting Industries

The RSI ranking lost 12 positions in the last ten years, mainly due to a decrease in local supplier quantity and quality, which is both fundamental to the development of the wine cluster. Here again France went from a leading position of 2 and 4 to 20 and 17 in both categories respectively. What's comforting is that France still ranks higher on both factors than rapidly encroaching Australia and Chile.

Context for Strategy and Rivalry

CSR is perhaps the most important components of the country diamond because it is this context that all businesses in France define themselves in. Because wine is in the agriculture business, the most important metric to consider in the CSR rankings is distortive effects of subsidies on competition. High subsidies generally correlate with a decrease in competition, which is unhealthy for the development of the business environment over the long term. Because France is part of the EU which sets agricultural policies, the subsidy metrics are aggregate for the EU; however, it is known that France is the EU's biggest beneficiary, securing as much as 20% of EU CAP funds. Indeed, the EU's agricultural subsidies, although dropping over the past 15 years, still far exceed those of Australia and Chile. To put the EU into perspective, we decided to likewise include the US, another wine-producing country, into this data sample. Although the US is also renowned for its agricultural subsidies, it is clear that the EU's subsidies are much more significant, which probably has a distortive effect on competition. This fact is supported by a 27-position fall in GCI ranking of intensity of local competition.

Country analysis: Conclusion

After evaluating France's country diamond, we can see that France is in a strong position today, but has significant cause for concern both regarding its domestic situation with lower demand and local competition, as well as with its international position vis-à-vis "new world" wine-producing countries like Australia and Chile.

CLUSTER PERFORMANCE

France's Performance In The World Wine Market

To understand the French Wine Cluster, we first analyze the broader context of the global wine industry and how Europe, with France as one of its leading wine growing countries, participates in these trends. Next we investigate the current and historical importance of the Wine Cluster for France as well as the resulting structure of the industry and its key differences to wine clusters around the globe. In a final step we compare the cluster's performance compared to other markets and investigate potential differences for different segments.

Trends In The Global Wine Market

The global wine markets faced overproduction for a long time: In 1995 global wine growers produced 12% more wine (254 mHL) than was consumed in that year. While some overproduction is needed for spirit distillation (for liquors like Cognac), this high level of overproduction put increasing pressure on wine prices and endangered the survival of many, especially small, wineries. However, this trend is reversing. Consumption grew by 6% from 1995 to 2010 while production only grew by 4%, leading to an overproduction of below 9% in 2010.¹⁰ This trend is expected to continue, driven by strong demand in the US and emerging markets and lower yields in Europe¹¹ (Ruitenbergh 2012); price pressure is likely to fade as a result.

Second, a significant increase in global trade shook up the world of the established players, like France, as wine went from a former regionally focused to a globally competing product in less than two decades. Global trade grew by 83% from 1995 to 2010 and while in 1995 only 55 mHL of wine or 24% of that year's consumption was traded, in 2010 this number was up to 100 mHL or 42%. At the same time trade value grew with 173% twice as strong to a \$30bn market in 2010 and indicates that especially trade in higher quality segments increased.¹²

Key Players in the Global Wine Markets

European is still the dominant player in the global markets for wine, and accounts for two thirds of the global production and over 70% of the global consumption, both by volume and by value.

¹⁰ OIV and FAOStat data, <http://www.oiv.int/oiv/info/enstatoivextracts2>, <http://faostat.fao.org/site/613/default.aspx#ancor>, accessed April 2013

¹¹ Rudy Ruitenbergh, "World Wine Output to Fall to 37-Year Low, Depleting Stocks," Bloomberg, October 30, 2012, accessed April 2013, available at: <http://www.bloomberg.com/news/2012-10-30/world-wine-production-is-estimated-to-fall-6-1-this-year.html>

¹² OIV and FAOStat data, <http://www.oiv.int/oiv/info/enstatoivextracts2>, <http://faostat.fao.org/site/613/default.aspx#ancor>, accessed April 2013

However, emerging wine markets, especially the Americas, mainly USA, Argentina and Chile, and Oceania, mainly Australia and New Zealand, are gaining ground rapidly. This is especially significant in trade: The Americas increased their market share of trade volumes from 9% to 15% from 1995 to 2010 and more than doubled the share of trade value from 5% to 12% at the same time. Oceania increased their market share in volumes by more than 5x and more than tripling their share of trade values from 3% to 10% in the same time period.¹³ This market disruption happens especially at the low end as both, the Americas and Oceania have higher share in trade volumes than in values. However, this is changing rapidly, e.g. Penfolds Grange 2008 just scored the highest score in the American Wine Journal¹⁴ and shares in trade value and volumes moved closer over the last decade. France and the other established producers have to find an answer to this rapidly expanding force in the global wine markets.

Importance Of The Wine Cluster For France As A Country

In 2011, 85,000 independent growers focused in nine main regions make up the French wine growing industry: the Champagne, widely known for high quality sparkling wines, Burgundy and Bordeaux that are world famous for their red wines, the Loire Valley and Alsace with a focus on white wines and Côtes du Rhône, Languedoc/Roussillon as well as the Provence.¹⁵ Together the sector employs over 250,000 agricultural workers, and so provides almost 30% of the agricultural employment in France while only accounting for 3% of the agricultural area. This underlines the importance of the sector for French employment. In addition to that, wine also contributes significantly to the country's exports – it is with 1.7% of total exports the seventh biggest export good, and the largest agricultural exports.¹⁶

History Of The French Wine Cluster

Part of today's role of France in the global wine markets as well as the importance of the wine cluster for the French economy can be explained by the long history of the country in wine

¹³ FAOstat, <http://faostat.fao.org/site/613/default.aspx#ancor>, accessed April 2013

¹⁴ "Gago Welcomes 100-point Ranking for Grange," wine-searcher.com, accessed May 2012, available <http://www.wine-searcher.com/m/2013/03/penfolds-grange-receives-100-point-ranking>

¹⁵ Kevin Zraly's Complete Wine Course 2012, p. 30-31

¹⁶ "FAOstat," Food and Agricultural Organization of the United Nations, available at: http://atlas.media.mit.edu/explore/tree_map/export/fra/all/show/2010/.

growing, wine trading and wine research and development. (See Exhibit 3.) Wine was first cultivated 600 BC when Greek colonists founded Marsallia (today's Marseille). Later, the Romans spread wine production across the country and in the middle age Christian monks kept production of this essential element of their Eucharist alive. Trading wine with the south was common already for the Romans and France also established a stable trade relationship with England – still the biggest importer of French wine today – in 1150 already. In addition, France engaged early in wine R&D when they founded wine research institutes in Bordeaux and Dijon in 1750 and Chaptal developed the first guide on efficient production techniques on Napoleon's initiative already in 1800. More recently, in the 1950s, the AOC (Appellation d'Origine Contrôlée) was introduced to add a quality control seal to French wine (Robinson 2006).

Cluster Map Of The French Wine Cluster

Based on that history France developed several unique institutions. (See Exhibit 4.) While the cluster is supported by numerous regional and country-wide IFCs¹⁷ and research institutions as well as by strong related clusters like specialty food, fine dining or the tourism, we believe that three unique elements account for the main difference in the success of the French wine cluster from its competitors: The négociants, wine brokers that buy wine early-on, age it and take care of marketing and distribution; the AOC system, a state-initiative for quality control later matched by IFCs and the Common Agricultural Policy of the European Union. We discuss details on the historical developments of the intuitions and their impact on the cluster competitive later in the paper.

Performance of the French Wine Cluster

With its long history and culture of wine production, France is and has been a dominant country in the wine industry. As of 2010, it was the leading producer of wine by volume with 4.6 billion liters representing 16.2% of the world's production.¹⁸ France has maintained its leadership position despite declines in both the wine acreage and overall production. These declines are

¹⁷ E.g. the Comité Interprofessionnel du Vin de Champagne (CIVC) - grape growers and champagne houses in Champagne region or the Conseil Interprofessionnel du Vin de Bordeaux (CIVB) - winegrowers, wine merchants and brokers in Bordeaux region

¹⁸ "2010 World Wine Production by Country," Wine Institute, 2012, accessed April 2013, available at: <http://www.wineinstitute.org/resources/worldstatistics/article87>

likely a response to historical global overproduction, government-sponsored grubbing programs of wine acreage and growth of New World wine production.

The majority of wine can be broken down into three categories—VQPRD wines which are higher quality premium wines, non-VQPRD wines which are colloquially considered “table” wines, and sparkling wines.¹⁹ These European classifications differ slightly from France’s own internal system, which was fully introduced in 2012. France’s internal system consists of three categories—AOP which are the highest quality wines and replaced the AOC label, IGP an intermediate level, and Vin de France which represent table wines. The French wine cluster focuses on higher quality wines with roughly 67% of its vineyards producing VQPRD wines and the grubbing programs occurring predominantly in lower quality vineyards. In comparison, Italy—the second largest wine producer—has only approximately 33% of its production dedicated to VQPRD wines (Baldi, 2012).

France is also leading wine export country as the third largest exporter in volume behind Italy and Spain with 14% market share (FAOSTAT, Trade Database).²⁰ Despite its strong position, exports by volume have actually declined 10% from 2000 to 2010, dropping from 15 to 13.5 million hectoliters (HL). In addition, France’s export market share by volume also declined 46% over this period from 25% to 13%. While exports by volume have declined, French wine exports by value have conversely increased by 20% from \$7.0 billion to \$8.4 billion over this same period.

To better understand the decline in export volumes but increases in export values, it helps to analyze wine exports by segment. Over the last decade export volumes declined all categories except sparkling wines. Sparkling wines was the one area where export volume increased by 31% from 1.1 to 1.5 million HL. Continued growth in France’s sparkling wine category likely reflects the power of France’s champagne brand and champagne’s ubiquitous association with sparkling wines, despite champagne sales suffering in large consumer markets like the UK following the recent financial crisis (Baldi, 2012). However, the decline in export volumes was

¹⁹ VQPRD = Vin de Qualité Provenant de Régions Déterminées. It is a European classification which includes French AOC and VQDS wines, Italian DOC and DOCG wines, Spanish DO wines, and German Qualitätswein wines.

²⁰ “Trade: Crops and Livestock Products,” FAOSTAT, accessed March 2013, available at: <http://faostat.fao.org/site/535/default.aspx#ancor>

offset by corresponding export price increases, leading to ultimately larger exports by value.

This trend was particularly true for higher quality VQPRD wine, which saw export volume drop by 23% but price per liter increase by 38%, leading to an overall increase in export value of 7%.

Analyzing exports by destination shows a similar story. The price per liter not only increased for exports to all countries, but that there was also a shift in exports towards non-EU countries.

Historically, EU markets have been the dominant consumer of French wines. While this is still the case in terms of absolute volume (63% of French export volumes went to EU countries in 2011), non-EU markets became a larger importer of French wines by value reaching \$5.1 billion or 52% of export value in 2011. In addition, non-EU markets saw an increase export volumes despite the 18% decline in export volumes to the EU. The non-EU markets also tend to consume higher priced French wine. Thus, the shift in exports to non-EU markets also contributed to the overall increase in price per liter for French wine exports.

Exhibit 5 takes a closer look at the French wine cluster's performance in three important import markets: Germany as the largest importer by volume, UK as the largest importer by value, and China as the fastest growing import market. In Germany, French wines are second most popular with 29% of the market, but French market share is still down from 33% in 2000. Although Germany wine imports by category is unavailable, Germany's price per liter of wine imported is low at \$1.89. This suggests that German wine consumers favor cheaper, probably table wines, which could help explain the decline in French wine imports. However, it's important to note that Germany is one of the few European wine markets where consumption is increasing unlike in France, Italy, and Spain and thus represents an opportunity for wine producing countries. In the UK market, France maintained its dominant position with 35% of the imports and likely benefited from UK customers limiting volume consumption in favor of higher quality wines during the recession (Baldi, 2011). In China, French wines dominate with 45% of total market share. The French wine cluster is particularly strong in higher end "bottled" wine sales with 52% of the market, whereas it is 5th for lower-end "bulk" wine sales with only 6% of the market (Kate Chan Research, 2012).

With the increase in price per liter, the French wine cluster has garnered a significant price premium over wines from other countries. Price increases in the French wine cluster had the second largest compound annual growth rate of 6% from 2000 to 2010 just behind German wines at 7%. Despite increases in price and total exports by value over the last decade, France's export growth lagged behind other wine countries and its market share declined by 11% over this period. (See Exhibit 6.)

Performance of the French wine cluster since 2000 has been mixed. The increase in price per liter and growth in exports by value are all positive indications of a vibrant and competitive cluster. However, the loss in export market share is a real concern and highlights potential competitiveness issues. Furthermore, it raises several key questions about the wine cluster. First, how was the French wine cluster able to establish its leading position? What features of the cluster and characteristics of the cluster diamond have led to the current results of increasing price premium but declining market share? Finally, how much longer can the French wine cluster offset declines in export volumes with increases in price per liter? Explanations to these questions will be addressed in the following section.

CLUSTER COMPETITIVENESS ANALYSIS

Historical Drivers of Cluster Performance

The emergence of France as the world's dominant wine cluster did not happen by chance. Instead, the historically strong performance of the French wine cluster was driven by decisions, strategies and institutions across the four components of the Diamond framework: Factor Conditions, Related and Supporting Industries, Demand Conditions and Context for Strategy and Rivalry. (See Exhibit 7.) Each of these components allowed the cluster to deliver the highest quality wine in the world.

Factor Conditions

France certainly benefited from strong endowments, particularly a mild climate well suited to growing wine and a legacy of grape cultivation dating back to Roman times. These conditions, however, cannot be the whole picture; they were also present in Italy and Spain, locations with

wine clusters that have been far less dominant than France's. One explanation is that the French wine cluster has created strong factor conditions that have allowed it to better capitalize on these endowments.

Arguably the most important of these factor conditions has been a specialized labor force with deep expertise in wine growing. Early on, family ownership of vineyards allowed best practices to be passed down across the centuries, with younger generations serving as apprentices for their elders. As access to formal higher education grew during the nineteenth century, oenology and viticulture programs became important offerings for universities and schools in wine producing regions. The first *Station Agronomique et Œnologique* was founded in Bordeaux in 1880 by Ulysse Gayon, a researcher and former student of Louis Pasteur. 76 years later the *Ecole Supérieure d'Œnologie* was launched to train the first professional oenologists. Within a few years, both groups would become part of the *Institut d'Œnologie* at the *Université Bordeaux II*.²¹ Human capital efforts extended beyond technical training. For example, leaders of the Burgundy wine community were instrumental in creating the region's first business school in 1899. This Burgundy School of Business would continue to evolve, offering a specialized master's degree in wine in 1988 and launching a comprehensive Wine Management Institute in 2009.²²

The technical and managerial talent trained through programs like these would help to make French firms pioneers in production methods that could turn grapes produced by the local *terroir* into wins of exceptional quality.

Related and Supporting Industries

In addition to strong factor conditions, related and supporting industries that evolved alongside France's wine cluster played important roles in its evolution.

Industries like specialty foods and agricultural products, alcoholic spirits and other fermented beverages have inputs or end customers in common with wine, and France has built historically strong clusters in each area. In 2010, the country accounted for 6.1% of the global export share

²¹ "About the Unit of Research and Education (UFR) Oenology," Université Bordeaux Segalen, available at: <http://www.oenologie.u-bordeaux2.fr/index.php/en/introduction>.

²² "The Wine Management Institute," Group ESC Dijon Bourgogne, available at: <http://www.bsbu.eu/highlights/wine-management-institute/>

of specialty foods, 8.1% of specialty agricultural products, and 17.1% of spirits and fermented beverages.²³ For example, a cluster in western France focused on rillettes – a chopped meat product that is often paired with wine – was growing steadily in the latter part of the 20th century, with nearly 2,200 employees in 1998. Likewise, the Compté cheese cluster in eastern France employed more than 1,200 people across 14 firms in the late 1990s. By the same time period, the salted ham cluster in southern France had reached “critical mass,” employing 500 employees in 50 firms.²⁴ France has also traditionally been strong in the industries that supply key inputs for the winemaking process. In terms of 2010 global exports, France accounted for 4.1% of cork, 4.2% of food machinery, 5.9% of farm machinery, 7.5% of metal and glass containers and 12.5% of pesticides.²⁵

By driving economies of scale on the supply side and shaping consumer preferences on the demand side, these related and supporting industries have complemented the development of the wine cluster.

Demand Conditions

As important as strong Factor Conditions and Related and Supporting Industries have been for the development of France’s wine cluster, a high level of local Demand Conditions – both in terms of volume and sophistication – has been an even more important driver.

France has long been a leader in the volume of domestic wine consumption. In 1965 the average French adult drank a remarkable 160 liters of wine per year.²⁶ In 1980, one out of two adults in France was drinking at least a glass of wine every day.²⁷ As of 2012, France ranked among the top four countries in per-capita wine consumption, and the first among states with populations of

²³ Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics. Available at: <http://data.isc.hbs.edu/iccp/>.

²⁴ “Rillettes Cluster Profile,” “Cheese Cluster Profile,” and “Salted Ham Cluster Profile,” Prof. Michael E. Porter, Cluster Profiles, Institute for Strategy and Competitiveness, Harvard Business School, available at: http://data.isc.hbs.edu/cp/getProfile?profile=Clusterprofile_0162.pdf, http://data.isc.hbs.edu/cp/getProfile?profile=Clusterprofile_0126.pdf, and http://data.isc.hbs.edu/cp/getProfile?profile=Clusterprofile_0101.pdf.

²⁵ International Cluster Competitiveness Project.

²⁶ Henry Samuel, “French Wine Consumption Hits Record Low,” The Telegraph, November 30, 2012, available at: <http://www.telegraph.co.uk/foodanddrink/wine/9713390/French-wine-consumption-hits-record-low.html>

²⁷ Hugh Schofield, “Why Are the French Drinking Less Wine?” BBC News, March 25, 2013, available at: <http://www.bbc.co.uk/news/magazine-21929287>

over a million.²⁸ Overall, France accounts for 12.5% of global wine consumption, second only to the United States.²⁹ Even more importantly, the country has some of the most discriminating wine consumers in the world. Beyond simply selecting a wine based on the grape or varietal type, buyers in France have historically been unique in their consideration of factors including region, appellation, identity of the domaine or chateau, and year of production. French consumers have historically been willing to pay premiums for wines from regions or with appellations that are known for having high quality standards. (Euromonitor International, 2012b) Comparatively expensive champagnes, sparkling wines and fortified wines make up 35% of French wine consumption, a relatively large proportion. (Marketline, 2013)

Strong domestic consumption overall has historically allowed the firms that make up France's wine cluster to uncover and quickly respond to emerging consumer needs – something all the more important in an industry where producers are separated from consumers by layers of wholesalers and distributors. Local high-end demand has been particularly important in placing France at the forefront of global tastes and trends.

Context for Strategy and Rivalry

In addition to robust and sophisticated local demand, the development of a wine cluster in France that has been exceptionally good at producing top-margin wines was greatly aided by another factor: a Context for Strategy and Rivalry that had rigorous mechanisms for preserving the quality, brand and pricing power of the country's elite wineries. One source of this has been the strong rivalry inherent in having a large number of firms operating in France's wine cluster: in 2000, there were nearly 224,000 growers in the country.³⁰ At the same time, the cluster has also created policies and institutions intended to help the highest quality wineries rise to the top.

Négociants are wine brokers who buy the freshly produced wine right after the harvest in bulk, age the wine and release it in the domestic or foreign market when they believe the time is ripe.

²⁸ "Per Capita Wine Consumption by Country," Wine Institute, available at: http://www.wineinstitute.org/files/2010_Per_Capita_Wine_Consumption_by_Country.pdf

²⁹ "World Wine Consumption," Wine Institute, available at: http://www.wineinstitute.org/files/2010_World_Wine_Consumption_By_Volume_Rank.pdf

³⁰ OIV and FAOStat data, <http://www.oiv.int/oiv/info/enstatoivextracts2>, <http://faostat.fao.org/site/613/default.aspx#ancor>, accessed April 2013

This way, they perform an important function within the cluster, especially for red-wine focused growing areas like Bordeaux or Burgundy (Bordeaux alone has over 400 négociants): they provide the wineries with cash in the year of the harvest and take over the risk and cost of storage for the aging process of the red wine. This allows growers to reinvest the money early on and focus on improving their production methods. In addition to that function they help smaller wineries get access to global distributors and advertise the local wines more efficiently than the smaller wineries could do themselves. They also provide a quality control early on while setting the price for new wine and provide demand even in bad years to remain their relationship with the growers for access in a good year, this way smoothing out the growers income. Finally they stabilize world market prices as they can decide when and how much wine they are going to release in the markets.

Appellations d'Origine Contrôlée (AOCs or appellations) were introduced around 1950 by the French state as a tool for quality control to market French wine abroad. Today there are more than 300 wine AOCs in France that cover over 46% of the French production. If a winery wants to gain the quality seal of the AOC as a controlled heritage, they have to obey to strict rules on the kind of grape mix, the kind of planting and harvesting methods and the maximum yield. While this ensures a consistent quality in a certain growing area, it also limits creativity in incentives for improvement. In addition to the state-initiated AOC areas, often IFCs developed in which the AOC-associated wineries coordinated, marketing, funding and research efforts.

The Common Agricultural Policy (CAP) is Europe's most important instrument of regulation and regional support, accounting for 44% of the overall budget in 2012 with over EUR 50 bn. With regard to wine, the CAP historically pursues two main strategies to support regional farmers: First they protect the European wine growers from foreign imports through quotas and tariffs. Second they support wine growers directly and even buy overcapacity in years of weak global demand. The CAP recognizes that some of the European producers are too small and their production techniques are globally not competitive. As a result they decided to provide incentives to reduce acreage and production efficiency to improve European production. France is one of the main beneficiaries of these policies.

Emergence of Competing Clusters

Were the world the same as when Pope Clement V moved to Avignon, the factors detailed above may have been sufficient to preserve the dominance of France’s wine cluster. Yet over the past centuries geographic exploration and technical advances have berthed a host of “New World” locations where acceptable quality wine can be grown. Three among them – Australia, Chile and the United States – pose the most significant threats to the vulnerable mid-tier French wines that are less protected by strong brands and IFCs. And ironically, these new competitors are taking many of approaches pioneered in France and simply implementing them even *more* effectively. (See Exhibit 8.)

Factor Conditions

Given an absence of the endowed *terroir* that is present in the best French vineyards, a major focus of New World wine clusters has been on improving factor conditions. To build human capital, these clusters have created oenological training programs modeled on those in Burgundy and Bordeaux. California alone has a range of viticulture programs across all levels at UC Davis, Cal Poly, Fresno State, Santa Rosa Junior College and other institutions.³¹ Further south, the Universidad de Chile offers a master’s degree in “Enología y Vitivinicultura.”³² Professional associations like the Australian Society of Viticulture and Oenology are organizing practitioners to drive operational and technical improvements.³³ Chief among these is the deployment of active irrigation strategies, particularly drip irrigation systems that provide producers with “much more control over when their fruit ripens.”³⁴

Related and Supporting Industries

New World clusters are also making progress on related and supporting industries. For example, Australian (and New Zealand) wine producers pioneered the use of screw cap tops for wine, and

³¹ “Winemaking,” University of California Davis, available at: <http://extension.ucdavis.edu/unit/winemaking/>. “Cal Poly Wine and Viticulture,” California Polytechnic University, available at: <http://wvit.calpoly.edu/>. “Department of Viticulture and Oenology,” Fresno State University, available at: <http://www.fresnostate.edu/catoffice/current/enolhd.html>. “Santa Rosa Junior College – Viticulture,” Santa Rosa Junior College, available at: http://www.santarosa.edu/instruction/instructional_departments/agriculture/viticulture.php/.

³² “Magister en Enología y Vitivinicultura,” Universidad de Chile, available at: <http://www.uchile.cl/postgrados/40649/enologia-y-vitivinicultura>

³³ “Home,” Australian Society of Viticulture and Oenology, available at: <http://www.asvo.com.au/>.

³⁴ “Terroir and Technology: A Survey of Wine,” The Economist, December 16, 1999, available at: <http://www.economist.com/node/268112>

are leading the charge on an International Screwcap Initiative.³⁵ In an attempt to further reduce the cost of wine sold overseas in the midst of currency appreciation, Australian producers are shipping wine in 24,000 liter plastic bags in an unlikely homage to another packaging innovation pioneered in the country: “bag-in-a-box” wines.³⁶ New World clusters are also making headway in connecting with related industries. California’s wine country has become a popular destination for “gastro-tourism” that combines wine, fine dining and other foods like olive oils. Australia and the United States are also home to increasingly sophisticated cheese industries.

Demand Conditions

Additionally, New World producers are well positioned to take advantage of shifts in global demand. Domestic wine consumption in the New World is picking up significantly. Between 2007 and 2010, per capita consumption grew by 4.6% in Chile, 5.1% in the United States and 9.6% in Australia. These producers are far closer to markets with emerging middle classes that are demanding wine, including Brazil (9.1% growth), China (15.8% growth) and India (38.3% growth).³⁷ New World producers are also creating programs to increase the *quality* of demand. International wine competitions in San Francisco and Sydney and wine awards in Chile pit local producers against some of the Old World’s most prominent names. Additionally, ratings publications like Langton’s *Classification of Australian Wines*³⁸ and *Wine Spectator*³⁹ in the United States are educating consumers and increasing expectations with respect to quality.

Context for Strategy and Rivalry

Compared to France, New World producers have created a competitive playing field that has many of the same types of institutions, but arguably more dynamism. All three New World wine locales have created IFCs to coordinate cluster-building efforts: Vinos de Chile, the Wine Australia Corporation, and the Wine Institute in the United States. In addition to advocating for domestic public policies to make their respective clusters more globally competitive, these IFCs

³⁵ “Why Screwcaps?” The International Screwcap Initiative, available at: <http://www.screwcapinitiative.com/normal.asp?navID=24&pageID=24>

³⁶ David Fickling, “Australian Bladders Become New Normal for Wine Exports,” Bloomberg, January 30, 2013, available at: <http://www.bloomberg.com/news/2013-01-30/australian-bladders-become-new-normal-for-wine-exports.html>

³⁷ “Per Capita Wine Consumption by Country,” Wine Institute

³⁸ “Our Classification Explained,” Langton’s, available at: <http://www.langtons.com.au/Wine/ClassificationExplained.aspx>

³⁹ “Wine Ratings,” Wine Spectator, available at: <http://www.winespectator.com/wineratings>

also lead aggressive export promotion and brand building efforts; Chile is represented in five markets, Australia in eight and the United States in 14.⁴⁰ Instead of being protected from foreign competition through protective trade barriers, wine producers in these New World countries are *more* exposed to the rigors of global markets. Import tariffs on wine in Australia and Chile, for example, are less than *one-fifth* of European Union import tariffs.⁴¹

Current French Cluster Conditions and Key Issues

Overview: A Bifurcation Between the Best and the Rest

When these New World competitors come up against a French wine cluster that has been developed over centuries to produce the highest quality, we see confusing results. How is it possible that France's share of the global export market is declining so quickly while the Liv-ex Fine Wine 100 Index – a high-end benchmark where French vintages account for 97% of wines – as increased by 188% in the past decade?⁴² The answer may lay in the differing impacts that changes in the cluster diamond have had on ultra high-end wines and the balance of production.

Factor Conditions

One of the cluster's major Factor Conditions challenges has been aligning the supply of planted vineyards with actual demand. Between 2003 and 2008 France had a significant mismatch between production and demand; among European wine producers it was second only to Italy in overproduction. In response to this challenge, the European Commission launched a community-wide “grubbing up” scheme to pay farmers to remove planted vines. Although the program was virtually irrelevant for top producers, it had a dramatic impact on the mid-tier; the Languedoc-Roussillon region alone had over 63,000 hectares “restructured,” amounting to 21% of local production. Unlike in Spain, Italy, and other countries impacted by the scheme, France saw

⁴⁰ “Offices,” Wines of Chile, available at: <http://www.winesofchile.org/about-wines-of-chile/offices/>. “About Wine Institute,” Wine Institute, available at: <http://www.discovercaliforniawines.com/about-wine-institute/>. “Contact Us,” Wine Australia, available at: <http://www.wineaustralia.com/en/Contact%20Us.aspx>.

⁴¹ World Trade Organization, Tariff Analysis Online, available at: <http://tariffanalysis.wto.org/>

⁴² Analysis based on “Liv-ex Fine Wine 100 Index,” Live-ex Limited, available at: http://www.liv-ex.com/staticPageContent.do?pageKey=Fine_Wine_100

no corresponding increase in yield – a troubling sign for Factor Conditions productivity among mid-tier producers.⁴³

In contrast to mid-tier producers, a main strategy of top tier French firms for addressing local Factor Conditions challenges has been to develop production capabilities abroad. In 2011, Moët Hennessy announced that it was opening a new winery in the Ningxia Hui region of northwest China with the goal of producing and selling high quality sparkling wine under its Chandon label.⁴⁴ Champagne Louis Roederer's experience producing wine in the United States dates back even earlier; the French firm began developing its own vineyards in California in 1982.⁴⁵ In parallel to this internationalization, the French cluster is losing well-established human capital; for example, one prominent winemaker left a second-growth Bordeaux vineyard in favor of role that involved time in New Zealand, Brazil and California.⁴⁶

Related and Supporting Industries

Although not the single most important factor, the decline in relative competitiveness of the cluster's related and supporting industries has likely played some role in accelerating the decline of France's wine cluster. Of the ten key industries that are connected with the wine cluster – from specialty foods to fertilizers – all but one declined precipitously in global export market share between 2000 and 2010.⁴⁷

Digging deeper into the drivers of this performance, it becomes clear that stagnating domestic demand is largely to blame. Between 2007 and 2012, there was a 24.1% decline in consumption of the unpackaged domestic hard cheese that is most often associated with wine. Further, French consumers are less adventurous in the types of cheeses they consume: although more than 300 varieties are available in most supermarkets, the average French shopper will purchase the same

⁴³ "The Reform of the Common Organisation of the Market in Wine: Progress to Date," European Court of Auditors, 2012, available at: <http://eca.europa.eu/portal/pls/portal/docs/1/14988759.PDF>

⁴⁴ Stanley Pignal, "Vine Life for Moët As It Branches Into China," Financial Times, May 21, 2011, available at: <http://www.ft.com/intl/cms/s/0/ec1230fa-7cb3-11e0-994d-00144feabdc0.html#axzz2Sk6Rdzuc>.

⁴⁵ "Building Upon a 200-Year Tradition of Winemaking Excellence," Roederer Estate, available at: <http://www.roedererestate.com/index.php?q=history.php&#amp;>

⁴⁶ Suzanne Mustacich, "Why Would Jean-Guillaume Prats Leave Château Cos-d'Estournel?" Wine Spectator, April 3, 2013, available at: <http://www.winespectator.com/webfeature/show/id/48228>

⁴⁷ International Cluster Competitiveness Project.

one or two types every week. (Euromonitor, 2012a) The poor performance of canned and preserved foods can likewise be attributed to lackluster domestic demand; consumption of preserved meat products declined by 7.8% between 2007 and 2012. (Euromonitor 2013)

Demand Conditions

Arguably the greatest challenge to France's wine cluster can be found in shifts in global demand. French consumption of wine has declined dramatically in recent years; it was down 3.0% between 2007 and 2010, a rate of decline that is, among the world's top producers, second only to economically-ravaged Spain.⁴⁸ Major lifestyle trends in "cocooning, home entertainment and mobility" as well as national laws aimed at reducing drunk driving all point to a decrease in consumption that lasts well beyond the economic crisis. As consumers increasingly seek value, they are shifting demand to "easier" less sophisticated wines. (Euromonitor International, 2012)

As demand in France decreases in volume and sophistication, winemakers at the very top of the cluster's hierarchy are finding that global demand is increasing, less due to the quality of the wine and more due to their products' positioning as luxury items and status symbols. Bordeaux wineries report that Chinese *nouveau riche* are driving a 10% year-over-year increase in sales value of the region's wines on the back of a production increase of only 2%, with similar trends seen in elite Champagnes and Burgundy wines.⁴⁹ However, such a reliance on brand and speculation can have its risks, as evidenced by a recent 19% decline in wine auction revenues due in part to a crackdown on corruption in China.⁵⁰

Context for Strategy and Rivalry

In attempting to respond to these changes in demand, mid-tier wine producers in France's cluster are finding that the Context for Strategy and Rivalry that served them so well for centuries is of little help, and may in fact be tying their hands. For example, although the appellation system established strong regional brand identities, it did so by imposing rigid local requirements on

⁴⁸ "Per Capita Wine Consumption by Country," Wine Institute

⁴⁹ Julia Pittam, "Chinese Connoisseurs Buy Up Bordeaux's Wines," BBC News, February 17, 2013, available at: <http://www.bbc.co.uk/news/business-21292824>.

⁵⁰ Scotty Reyburn and Guy Collins, "Wine Auctions Drop 19%, Chinese Demand Cools for Bordeaux," Bloomberg, December 18, 2012, accessed May 2013, available at: <http://www.bloomberg.com/news/2012-12-18/wine-auctions-drop-19-chinese-demand-cools-for-bordeaux.html>

everything from production methods to labeling, making it more difficult to innovate. Further, by making the *region* the indicator of quality, appellations have made it significantly harder for individual wineries without LVMH-style marketing dynamos to break away from the pack in terms of consumer perceptions. Additionally, as even vineyards with appellations face declining demand, the benefits of the *négociant* system in terms of stabilizing prices, may be outweighed added cost of maintaining these brokers.

The particular approach that France has taken to implementing reforms to the EU Common Agricultural Policy (CAP) for wine may also prove problematic for mid-tier producers. Since changes to CAP in 2008, the Commission has provided nearly €1.3 billion in supports to the French wine cluster. Yet France has chosen to invest €81 million *less* than Italy in the types of export promotion programs that can help smaller producers reach global consumers. Further, although Italy and Spain are increasing their use of Commission funds for industry restructuring efforts, France's embrace of these cluster-level interventions has declined. In lieu of this, France has spent more than Germany, Italy, Portugal and Spain *combined* to invest directly in wine-related enterprises, raising the unpleasant specter of the government dictating firm strategies instead of supporting them.⁵¹

Recommendations

Firms: Internationalize supply as well as demand

One of the key challenges facing France's wine cluster is that shifting global demand is increasing the likelihood that French firms will miss emerging consumer needs. Although the ultra-high-tier producers are likely to have high levels of global demand based on brand reputation alone, understanding new tastes and trends will be critical for mid-tier French wineries seeking to compete with New World firms. Doing this means being physically proximate to customers – in short, internationalizing production to match global demand.

As firms seek to internationalize, they would benefit by leveraging export promotion efforts to gather data on customer preferences in foreign markets. As a complement to global expansion,

⁵¹ "What Is the Current Situation of Europe's Wine Sector?" European Commission, accessed April 2013, available at: <http://ec.europa.eu/agriculture/markets/wine/>

French wineries should also work to foster more sophisticated demand at home. Although some may argue that internationalization risks diluting quality and brand equity, decades of experience from LVMH and other firms at the pinnacle of the wine cluster demonstrates that French firms can seize New World opportunities while preserving the quality of Old World brands.

Government: Focus funding on cluster-level development

A second key challenge is that France's approach to government "support" of its wine cluster risks prescribing – instead of enabling – firm strategies and distorting competition. Interventions that are too hands-on may lead to improper decision-making or even an avoidance of the hard choices that are often required if uncompetitive firms wish to become more innovative.

Accordingly, the government should transition from individual subsidies to cluster-wide efforts.

Such an approach would likely involve reallocating funds towards export promotion and global marketing, as well as support of "field studies" by local firms to understand international best practices. This change is likely to encounter resistance from government bureaucrats weary of losing their influence over firms as well as from a subset of winery owners who are currently using subsidies to prop up unprofitable businesses. However, a more dynamic cluster is ultimately in the interests of workers and communities in wine growing regions.

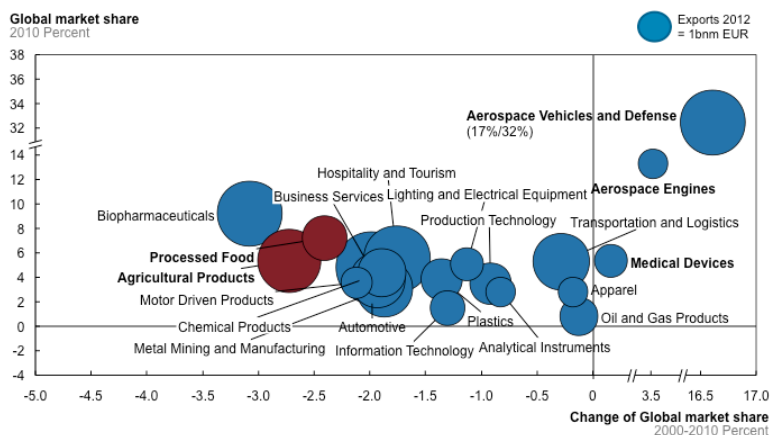
Institutions for Collaboration: Improve the effectiveness of AOCs and négociants

A last major challenge is found in the risk that the system of appellations and *négociants* may actually *inhibit* innovation, productivity improvements, and ultimately profitability. A remedy for this may be found in reinvigorating and repurposing these entities as well-functioning IFCs that can make the entire cluster more competitive.

Such an approach would involve capacity building within existing groups to help them roll out technological and operational innovations to their members, as well as the creation of new IFCs in wine regions lacking them. This would be coupled with efforts by AOCs and *négociants* to increase transparency and easy of access by new market entrants. Although last action is likely to be resisted by those brokers and organizations that benefit from obscuring market information, these groups will be unable to resist the call to openness as global competition intensifies.

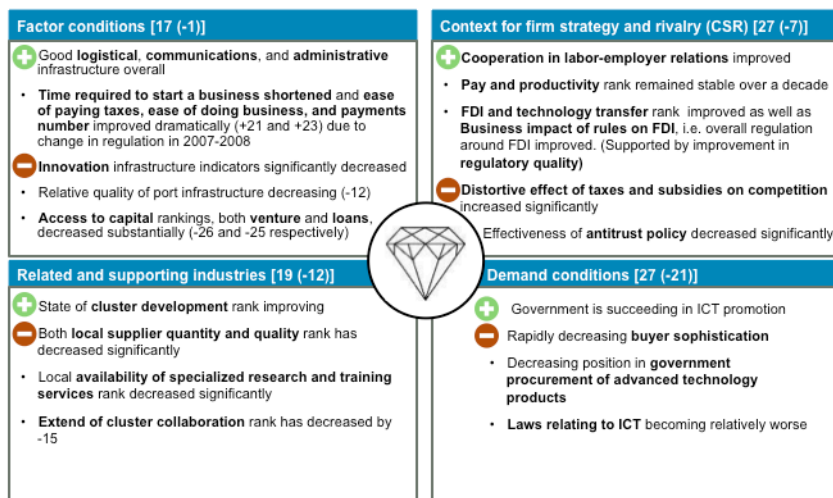
Exhibits

Exhibit 1: Performance of French Clusters



Source: Institute for Strategy and Competitiveness

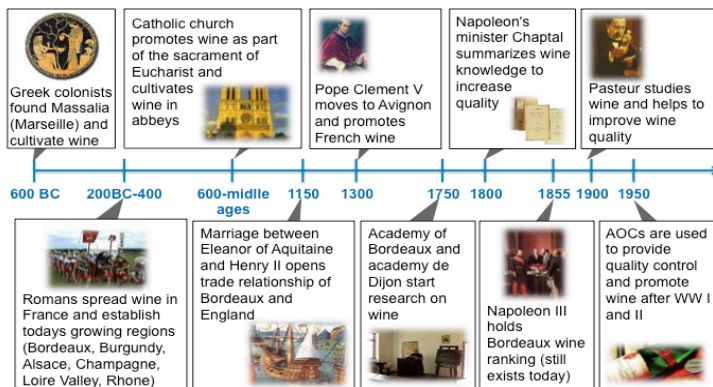
Exhibit 2: French Business Environment Diamond



Rank 2012 [...] Change 2001-12

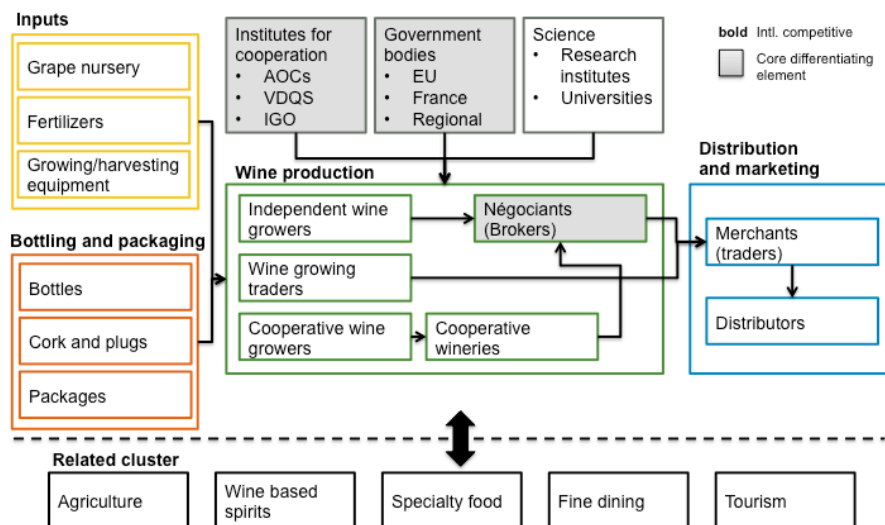
Source: Team analysis based on data from the Institute for Strategy and Competitiveness

Exhibit 3: History of Wine in France



Source: J. Robinson, The Oxford Companion to Wine

Exhibit 4: Map of the French Wine Cluster



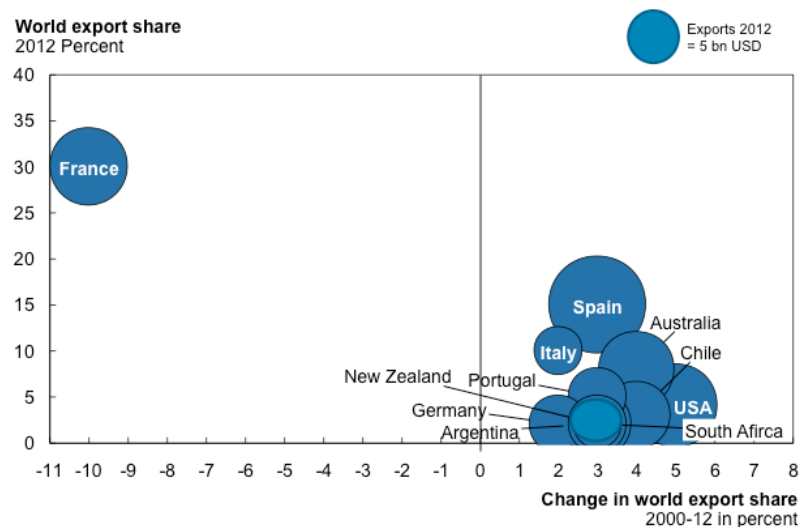
Source: Team analysis

Exhibit 5: Volumes, Values and Prices for Key French Wine Import Markets

Germany	000HL		\$ mil		Value Share (%)			\$ / Liter	UK	000HL		\$ mil		Value Share (%)			\$ / Liter	China	000HL		\$ mil		Value Share (%)		
	2000	2010	2000	2010	2000	2010	2010			2000	2010	2000	2010	2000	2010	2000			2010	2000	2010	2000	2010	2000	2010
Italy	3,613	6,411	545	1,006	33%	36%	1.6	France	2,405	2,173	881	1,511	35%	35%	7.0	Italy	61	213	6	49	10%	5%			
France	2,706	2,428	550	797	33%	29%	3.3	Italy	1,178	2,334	244	646	10%	15%	2.8	France	67	767	19	368	32%	41%			
Spain	1,298	2,183	237	328	14%	12%	1.5	Spain	797	1,033	192	355	8%	8%	3.4	Spain	215	485	14	47	24%	5%			
Austria	261	409	22	82	1%	3%	2.0	Germany	887	637	135	175	5%	4%	2.7	Germany	8	33	2	14	3%	2%			
Portugal	101	201	18	49	1%	2%	2.4	Portugal	158	155	67	86	3%	2%	5.5	USA	37	131	9	37	15%	4%			
Denmark	93	192	18	44	1%	2%	2.3	Australia	1,512	2,412	436	469	17%	11%	1.9	Chile	19	570	3	77	5%	9%			
South Africa	118	707	24	100	1%	4%	1.4	Chile	474	1,172	133	310	5%	7%	2.6	Australia	6	579	2	148	3%	16%			
USA	61	428	18	87	1%	3%	2.0	New Zealand	117	490	50	233	2%	5%	4.8	Argentina	2	32	0	10	1%	1%			
Chile	153	492	31	72	2%	3%	1.5	USA	586	973	173	153	7%	4%	1.6	Other	9	299	4	154	7%	17%			
Australia	106	383	28	59	2%	2%	1.5	South Africa	530	1,042	120	193	5%	4%	1.9										
Other	1,661	876	177	148	11%	5%	1.7	Other	457	440	113	185	4%	4%	4.2										
World	10,171	14,710	1,667	2,772			1.9	World	9,101	12,861	2,544	4,316			3.4	World	423	3,108	58	903					

Source: FAOSTAT, Detailed Trade Flow

Exhibit 6: Performance of the French Wine Cluster



Source: Institute for Strategy and Competitiveness

Exhibit 7: Diamond Analysis of the French Wine Cluster

Factor conditions	Context for firm strategy and rivalry
<p><i>Historical strengths</i></p> <ul style="list-style-type: none"> • Large pool of specialized human capital (e.g. winemakers, commercial managers) • Long-term approach to land cultivation <p><i>Current challenges</i></p> <ul style="list-style-type: none"> • Significant disparities in quality of physical factor conditions across wine growing regions • "Grubbing up" scheme may drive regulation 	<p><i>Historical strengths</i></p> <ul style="list-style-type: none"> • Appellation d'origine contrôlée (AOC) system preserves brand identities and supports IFCs • Négociants system helps maintain price stability <p><i>Current challenges</i></p> <ul style="list-style-type: none"> • AOC and négociants creating barriers to competition <ul style="list-style-type: none"> • Although regulatory reform in process, focus on firm-level intervention is questionable
Related and supporting industries	Demand conditions
<p><i>Historical strengths</i></p> <ul style="list-style-type: none"> • Robust related industries like spirits, food products • Strong network of suppliers of specialized inputs <p><i>Current challenges</i></p> <ul style="list-style-type: none"> • Fertilizers and pesticides losing export share; cork, containers and other inputs also losing share • Spirits, specialty foods, specialty agricultural products remain large but are losing share 	<p><i>Historical strengths</i></p> <ul style="list-style-type: none"> • High per capita domestic consumption relative to peers • Strong domestic demand for high end wines <p><i>Current challenges</i></p> <ul style="list-style-type: none"> • However, French consumption overall is declining • Consumption worldwide and in "New World" markets is increasing

Source: Team analysis

Exhibit 8: Diamond Analysis of Prominent New World Wine Clusters

Factor conditions	Context for firm strategy and rivalry
<ul style="list-style-type: none"> • Advanced viticulture training programs at Universidad de Chile and in California (USA) at UC Davis, Cal State and Cal Poly • Growing professionalization of field through associations like Australian Society of Viticulture and Oenology 	<ul style="list-style-type: none"> • Vinos de Chile, Wine Australia Corporation and Wine Institute (USA) created as IFCs • Strong export-promotion efforts by California, (USA, 14 markets), Australia (8 markets) and Chile (5 markets) <ul style="list-style-type: none"> • Wine import tariffs in Australia and Chile less than 20% of EU tariffs
Related and supporting industries	Demand conditions
<ul style="list-style-type: none"> • International Screwcap Initiative drives packaging innovation in Australia and New Zealand • Wine regions in USA have developed strong wine- and gastro-tourism industries • Growing gourmet cheese industries in Australia and USA 	<ul style="list-style-type: none"> • Per-capita wine consumption growing in Australia, Chile and USA • Global competitions in San Francisco (USA) and Sydney (Australia) and Wines of Chile Awards drive sophisticated demand • Australia has close geographic proximity to growing high-end customer base in China

Source: Team analysis

Bibliography

- Baldi, S. (2011) *GAIN Report: EU-27 Wine Annual*. Washington: USDA Foreign Agricultural Service.
- Baldi, S. (2012). *GAIN Report: EU-27 Wine Annual*. Washington: USDA Foreign Agricultural Service.
- Bremer, C. (2013) “French Government Will Take Few Months to Plan 2014 Spending Cuts: PM,” *Thomson Reuters*.
- Euromonitor International. (2012a). *Cheese in France*.
- Euromonitor International. (2012b). *Wine in France*.
- Euromonitor International. (2013). *Canned/Preserved Food in France*.
- FranceAgriMer. (2011). *Les chiffres de la filière viti-vinicole: Données statistiques 2000/2010 Commerce Exterieur*. Paris: FranceAgriMer.
- Kate Chan Research. (2012). *GAIN Report: Marketing U.S. Wine in China*. Report number: 12805. Shanghai: USDA Foreign Agricultural Service.
- Lopez-Claros, A. and M. Yasmina. (2010). “Chile: Catching Up with the Top Performers.” *The Innovation Capacity Index: Factors, Policies, and Institutions Driving Country Innovation, The Innovation for Development Report 2009–2010*, pp. 40–42.
- MarketLine. (2013). *Wine In France: MarketLine Industry Profile*.
- Moss, D. and Mary S. Connor Malik. (1995). “Unemployment in France: Priority Number One,” Harvard Business School Case 9-795-064.
- Porter, Michael E. (2013). “International Cluster Competitiveness Project, Institute for Strategy and Competitiveness.
- Reporters Without Borders. (2013). *Press Freedom Index*.
- Robinson, J. (2006). *The Oxford Companion to Wine, Third Edition*. Oxford: Oxford University Press.
- PricewaterHouse Coopers. (2007). *United Kingdom Economic Outlook*.
- World Bank Group. (2013). *Doing Business 2013: France Report, 10th Edition*.