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Market entry strategies in the U.S. alcohol distribution: The case of French wine exporters

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Résumé. This study examines the different strategies adopted by wine exporters/traders located in France for penetrating the international alcohol distribution networks in the U.S. market (and to a lesser extent the Canadian market). Grounded in the business-to-business marketing literature, this research conceptualizes a framework incorporating a 'stakeholder' approach. Contrary to most studies focused on the exporter resources and capabilities, our study adopts a deterministic perspective on exports. This single year study uses firm-level data and a sample of more than 32 700 wine containers. Findings suggest that exports from different regions are influenced by factors associated to the buyer side. The organization of the distribution networks and the environment related to sea ports and shipping destinations influence wine shipments. The study provides new insights about the strategic choices of wine exporters/traders and specifies essential factors to consider for the choices of distribution channels in wine exports.

1. Introduction

The U.S. is the largest wine market in volume and value in terms of consumption expenditures. Wine imports complement the supply of the domestic market. The volume of wine imports accounts for approximately 40 percent of wine consumption volumes in the U.S.. French wine imports account for a significant share of all wines imports in 2023 (13.6% in volume and 36.7% in value) [1][2][3]. From the exporter perspective, the U.S. represents a key market for the shipments of still, sparkling, and fortified wines. Since the beginning of the twenty-first century, the U.S. wine imports have increased in growth in volume (+4.5%) and in value terms (+4.6%). The new economic and geopolitical conditions after the pandemics of Covid-19 brought with it new challenges for wine traders, importers, and consumers. In 2023, the share of wine imports declined with an average annual reduction of volumes (-14.6%) and value (-8.6%) [1] [2][3].

The penetration of the distribution channels in the U.S. is therefore a determinant factor of the export performance and success. The U.S. wine distribution system is complex in terms of legal restrictions involving the distribution of alcohol beverages (controlled and non-controlled States). Furthermore, routes-to-the-market are influenced by the '*three-tier system*', where a network of wholesalers, importers, and distributors, operate and control different tiers of the alcohol distribution chain (licensing outlets…). In recent years, the economic concentration of wholesalers and distributors increased the market power in the downstream of the wine chain [4]. Distributors and wholesalers increased their geographic scope and the scale of operations. Economic concentration in marketing channels widened the gap between suppliers (foreign exporters, wine traders…) and wine distributors/wholesalers generating externalities in highly concentrated markets [3]. The largest U.S. wholesaler - Southern Wines & Spirits of America (SWSA) - accounts for more than 30 percent of the overall wine and spirits imports.

In the field of marketing, the relationships in business-to-business (b2b) channels have been investigated by considering market power, informational asymmetries related to geographical and cultural distances, and transaction cost economics (specific investments in relational assets, switching costs related to brand distribution changes…)[5]. Empirical studies in the field of marketing exports present fragmented results across a variety of export dimensions. Such studies are limited to 'management influences', i.e. leaving out the influence of external forces impacting export performance [6].

Previous studies in the field of wine exports identified the need for empirical studies considering the structure of the marketing channels and the environment of the exports [7] [8].

The present study contributes to the literature on wine exports and market entry strategies by considering the structure of alcohol distribution channels and the strategic factors impacting the environment at destination. This study provides a comprehensive understanding of the wine distribution system in a b2b context. Our findings associate exports from the main wine regions in France with the specific contexts in export destinations (state restrictions in alcohol licensing and distribution, state taxes of wine, dwell time in ports, alcohol channels),

The rest of the paper is organized as follows: Section 2 introduces the contingent framework, and Section 3 presents the data and methods. Section 4 presents the empirical findings. Section 6 discusses the findings of the logistics regressions. Section 6 presents the concluding remarks and the limitations of the investigation.

2. Literature review

2.1. The export decision and the choice of foreign markets

Research on key determinants of exports and market-entry strategies has attracted a growing interest in the management literature because of the economic importance of exports and employment creation [9] [10] [11]. Export decisions and foreign market entry strategies depend on multiple factors ranging from international contingencies, country-based (e.g. national culture…) factors, and firm-level factors [10].

Factors related to the access to bargaigning power an access to distribution networks are two key determinants of the competitiveness of French and European wineries [12]. A recent study about the competitiveness of the European wine sector suggests that the size of the supplier (exporter or domestic) (I), the ability to manage relationships with the importer/distributor (II), tthe ability to select importer/distributor/buyers (III), and exclusive sale agreements (IV) are important factors when considering partner bargaigning power and access to distribution channels [12].

There is an abundant literature on the determinants of export decisions, however only a limited number of studies address single industries [13]. The distribution strategy is one of the key success factors to assess firms' performance. The quality of distributor relationships [6] is one of the most common measures adopted to analyze the performance in export markets.

[6][11] examine the current status of the literature on market entry strategies. They argue that the domain is in an urgent need of an unifed theory and that the research may assist in the exploration of important contigency factors that contribute to improving our understanding of entry behaviour.

Foreign entry modes range from direct exports to sole ownership. Entry modes vary in terms of the level of resources or equity commitment to the foreign-owned subsidiary[13]. The mode of operation usually determines the level of control over day-to-day activites related to distribution, marketing, and sales in foreign markets. Behaviorial modes impact the the level of control in reacting to changes in market conditions

For exporting firms, the choice between direct exports and operating through a foreign-owned subsidiary (internalization) in export markets in is not neutral [19]. Previous findings suggest that subsidiaries within the same firm have different powers to influence decision-making at the headquarters level as they have different competences and skills [20] [21]. Foreign-owned subsidiaries facilitate the access to international markets. [22] find that domestic firms introduce fewer product innovations than foreign-owned subsidiaries.

2.2. A conceptual framework

Given the divergent characteristics and roles of wine importers in the U.S., for the purpose of investigating the relationship between French wine exporters/shippers and overseas buyers we introduce a contingency framework [14] [15]. The framework provides a comprehensive understanding of b2b relationships in an inter-organizational context.

We take a positive view for the relationship between the type and region of origin of exporters/shippers and their performance in the U.S. alcohol channels. For the purpose of this study, we implicitly adopted a deterministic perspective on exports/shipments by considering the export performance dependent on the variables related to the organization structure and constraints in the export market.

Our framework is grounded on recent contributions of the stakeholder theory of the firm and competition and cooperation in marketing channels [16][17]. Most commonly, export relationships are based on relationships between firms and foreign partners and to a lesser extent, a limited number of wine exporters directly-own distribution, sales, and marketing subsidiaries in export markets ([8][22][23]). The main advantages of direct exports are lower costs and investments when compared to other distribution systems [23].

The consideration of direct and indirect exports in the literature does not demonstrate significant differences in the outcomes. For example, a recent study compared the benefits of direct and indirect Spanish wine exports. [8] concluded the wine export prices received by the direct exporter was significantly lower than the one received through indirect exporters but both export systems did not generate significant differences in export profits.

Our study adds to the previous literature by integrating the structure of the distribution channels and the environment in the export market [25]. The conceptual contingency framework [14] [21] [23] proposes three main exogenous variables – structure of distribution channels, environmental factors related to ports (location and congestion) and environmental factors in states of shipping destination (alcohol control laws, state taxes on wine, and

licensed alcohol stores). The figure here below summarizes the contingency framework (figure 1).

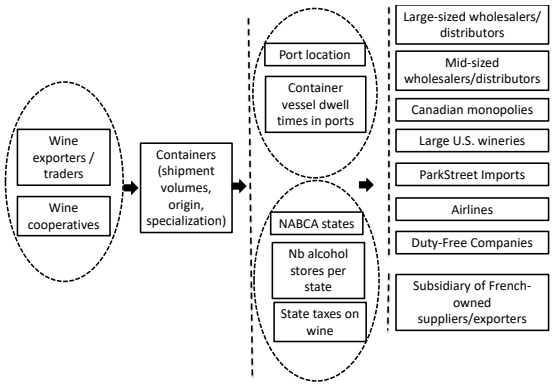

Figure 1. A contingency framework on wine exporters-buyers relationships in the U.S. market.

The contingency framework distinguishes two types of suppliers: wine exporters/traders and wine co-operatives (either first tier- or second-tier co-operatives) (see Figure 1). The buyer-side is represented by large and mid-size wholesalers/distributors located in the U.S. market, Canadian monopolies, large U.S. wineries (Gallo Family Vineyards, The Wine Group, Constellation Brands…), ParkStreet Imports, Airlines, and Duty-Free companies.

Parkstreet Imports is a unique company that operates under a platform system engaged in activities related to imports, distribution, back-office and financial services to wine suppliers. Furthermore, in addition to compliance (U.S. customs, Tax and Trade Bureau, state and federal laws) and logistics, the company provides services for alcohol beverages companies to help them building and managing brands. The company claims working with more than 1 000 alcohol brands.

3. Materials and Methods

3.1. Research context, data sources, and sample selection

Alcohol distribution channels in the U.S. are highly regulated and concentrated [4]. The regulation includes restrictions to licensing in distribution and sales of alcohol at federal and state jurisdictions.

The '*three-tier system*' is an organizational arrangement for the procurement of wines, beer, and distilled spirits in the U.S.. Alcohol suppliers (tier 1) are forced to sell to wholesalers/distributors (tier 2), who sells the wines to a retailer (tier 3), which in turn sell the wines to the consumers. Such arrangement is enforced differently at state level. The system tries to balance alcohol control and access. Some U.S. states established distribution franchise laws to leverage the business relationships of distributors with their partners [26]. In Canada, the different states also adopted a similar strategy balancing control and access through the establishment of various alcohol monopolies (SAQ, LCBO…). In recent years, inter-state shipments of wine are allowed between U.S. states but only under some conditions (it concerns mainly small and medium-size wineries and limited wine volumes).

Generally speaking, the alcohol regulatory states are divided among controlled and open states. Controlled states control the distribution of wine, beer, and spirits. In all control states, states, the states establish the minimum price for wine and other alcohol beverages. Those states are organized under the umbrella of the NABCA – the National Alcohol Beverage Control association. The association includes 17 states that account for approximately 25 percent of the U.S. population. In open states the distribution and sale of wine, beer, and spirits is mainly organized by private entities under a licensing system that complies with regulations in each state. Open states provide greater access to the distribution and sale of alcohol beverages and lower prices.

[27] reported that in the '*three-tier system*' '*distributors maintain a position of power over most wineries*'. Foreign wine suppliers are required to negotiate with state-licensed or franchised-wholesalers. Foreign wineries must build relationships with licensed wholesalers/distributors located in each state. Therefore market power of large wholesalers/distributors and transaction costs are an important barrier to expand shipments and to scale-up export operations. From the wholesaler/distributor perspective the management of inventory levels (ratio inventory/sales) and a geographic diverse portfolio that includes recognized wine brands are a strategic asset. Congestion and dwell-times in wine shipping from foreign markets and changes in excise duties at state level may impact wine inventory levels and the profitability of operations.

This investigation in this paper uses secondary data collected from an international database identifying shipments at firm level (buyers and exporters). Shipments involve transactions between a French exporting company (wine trader, co-operative…) and a U.S. and/or Canadian partner (importer, distributor/wholesaler…).

For the purpose of the empirical study we use a database with firm-level data for the full year of 2023 on wine export shipments. Data on wine shipments was collected at firm- and container-levels.

Data on export shipments was collected for the leading French wine regions: Bordeaux, Burgundy, Occitanie, Provence, Champagne, Loire, and Alsace. The choice of these seven regions is justified by the importance of wine sector in each region.

3.2. The model

We model the French wine shipments from each individual region (Bordeaux, Burgundy, Occitanie, Provence, Champagne, Loire, and Alsace) as a set of binary choices that each wine exporter/shipper makes on whether or not to ship wine to the target countries (U.S. and Canada). This means that we estimate the following model:

$$\textit{Probability of wine shipping} = \alpha + \beta \textit{ shipments to the export market} + \gamma \textit{ control variables} + \varepsilon \quad (1)$$

We follow the literature in the selection the relevant control variables for wine shipments [25].

The controlling variables include wine shipping volumes, specialization (bulk wine), region of shipping origin, port location (arrival), congestion in arrival ports (dwell times), alcohol controlling status at state level (NABCA), state taxes on wine, number of alcohol stores at state level, structure of the distribution channels, the level of integration in wine distribution in the U.S (self-owned subsidiary), real GDP per capita at state levels, and the total population in each state. The detailed list of the variables and the measurements are detailed in the Appendix.

The sample only considers direct shipments from France to the U.S. and Canada markets. Sea shipments are the main channel for wine transportation from France to North America. Wineries and importers make use of different roads to the markets. Shipment costs, logistics (dwell time), and (federal and state) tax considerations are important issues in wine shipping and distribution. Indirect shipments allow multiple transporters or intermediaries to handle the wine containers (consolidation of goods). Indirect shipments such as wine re-exports are a common practice but it is usually associated to delayed deliveries. Further, some shipping operators make use of sea hubs/platforms to consolidate or redistribute containers and optimize distribution across geographies.

Table 1. Summary of the descriptive statistics.

Variable	Obs	Mean	Std. Dev.	Min	Max
Top10 Wholesalers_States	3429	32.397	12.293	1	41
Airlines Shipments	32715	.004	.06	0	1
Duty Free	32715	.001	.025	0	1
Top10 Wholesalers	32717	.119	.324	0	1
TO8 MidSize Distrib	32717	.064	.245	0	1
Top20WineMNE	32717	.009	.094	0	1
USA Monopoly	32717	.001	.03	0	1
ParkStreetImports	32717	.02	.14	0	1
CanadianMonop	32717	.009	.093	0	1
Subsidiary Exporter	32717	.075	.263	0	1
Alsace Exporter	32717	.037	.188	0	1
Occitanie Exporter	32717	.037	.189	0	1
Loire Exporter	32717	.026	.16	0	1
Bordeaux Exporter	32717	.077	.267	0	1
Provence Exporter	32717	.016	.126	0	1
Champagne Exporter	32717	.102	.302	0	1
Burgundy Exporter	32676	.066	.248	0	1
Co ops	32716	.04	.196	0	1
Unemployment Rates_State	32717	4.13	.636	2.1	6
GDP Growth State	32717	2.169	1.336	.7	5.7
Nb AlcoholStores	32717	7.732	.91	4.043	10.496
State Population	32717	15.801	11.309	1.39	38.96
Dwell Time	32715	3.798	.991	0	8
State Taxes Wine	32716	7.169	1.004	4.45	11.5
GDPppp State	32717	11.179	.133	10.469	11.416
NABCA State	32717	.055	.228	0	1
Port Massach	32717	.044	.206	0	1
Port NewYork	32717	.037	.19	0	1
Port Newark	32717	.521	.5	0	1
Port Florida	32717	.065	.247	0	1
Port Texas	32717	.054	.226	0	1
Port California	32717	.147	.354	0	1
Gross Weight	32717	8.797	1.394	0	12.295
Containers	32717	1.044	.317	1	8
Bulk Wine	32717	.004	.059	0	1

For the consideration of the main consignees in the exporting market we identified the following licensed operators: wholesalers, large wineries, alcohol monopolies, duty free, and airlines. Further, we also included in the analysis direct shipments toward French self-owned subsidiaries located in the U.S.

We modeled the determinants of exports for each one of the seven leading French wine regions through seven logistic regressions. The dependent variable is binary. It takes the value of '1'if the wine shipment of each exporting firm 'n' is located in the region 'n'. It takes the value '0', if otherwise. The list of independent variables and measurements are listed in the Appendix. A summary of the descriptive statistics is introduced in the table 1.

4. Empirical findings

The results of the seven logistic regressions show contrasting results for the wine exports established in each major French wine region (Alsace, Occitanie, Provence, Loire, Bordeaux, Champagne, Burgundy) (see results reported on Table 2). We found strong correlation between the number of wineries in the portfolio of the top ten largest wholesalers and its geographic coverage in the U.S. Therefore, in order to avoid multicollinearity effects between independent variables, we only considered a

variable representing the number of states covered by each major wholesaler.

Our findings suggest that exporters located in the different French wine regions undertake differentiated roads to the market. Channel structures and the environment at state level do influence the export outcomes. The predictive power of Alsace and Loire models is lower for the other French regions (low pseudo R2). The first equation reports that wine exports from Alsace are positively related the real GDP power purchase parity in destination states - defined by the location of the port of entry – and inversely related to local state taxes on wine. However, contrary to the other models for the other French regions, a low pseudo R2 in the equation indicates that shipments in the equation have a low predictive power.

Large wholesale consignee partners (geographic coverage, wide wine portfolios…) combined with substantial wine volumes shipped increase the likelihood of shipments from Occitanie. States with large number of alcohol stores also increase the likelihood of shipments from this same region. Further, higher real GDP per capita has a positive influence on the willingness of increasing wine shipments from Occitanie.

Wine shipments from Occitanie increase with an increasing number of alcohol stores in each U.S. state. In addition, higher real GDP per capita has a positive influence on the willingness of shipments from Occitanie. Shipments from Occitanie to the states of California, New York, Newark, Florida, and Texas are less likely to happen with increases in volumes (negative coefficients). Congestion times at arrival ports equally decrease shipments from the region to the U.S. states. A low pseudo R2 in the equation indicates that shipments in the equation have a low predictive power.

Table 2. Results of the logistic regressions: determinants of U.S. exports from shippers/traders located in the main French wine regions.

	Alsace_1	**Occitanie_2**	**Loire_3**	**Bordeaux_4**	**Provence_5**	**Champagne_6**	**Burgundy_7**
	b/t	b/t	b/t	b/t	b/t	b/t	b/t
main							
State_Population	.0369676						-.0558947
	(1.438123)						(-1.093302)
Top10_Wholesaler_States	.0169911	.0701378***	.0091752	.0053949	-.0530972**		
	(1.707419)	(6.929584)	(1.278417)	(.7738737)	(-3.08338)		
Gross_Weight	.0096091	.7520257***	.008844	-.3616721***	.7299737**	-.1949852***	.1514106***
	(.1348535)	(9.156823)	(.1442284)	(-7.265826)	(3.137554)	(-11.30062)	(7.58603)
Nb_AlcoholStores	.0071629	1.370972**	2.502597***	-1.552273*	-1.862392	.5913718***	.5472729*
	(.0435362)	(3.057005)	(4.435928)	(-2.260449)	(-.8172973)	(3.490876)	(1.975229)
Dwell_Time	.0147072	-.2966055***	-.281081**	-.0940068	.9558884	-.1268971***	-.1857571***
	(.0897916)	(-3.441836)	(-2.855816)	(-.515694)	(1.720216)	(-3.619064)	(-3.909155)
State_Taxes_Wine	-.6472805**	.0433861	-.0482064	-.5160198	-1.353402	.4518***	-.2823387***
	(-2.635463)	(.1524575)	(-.097789)	(-1.775397)	(-1.109187)	(5.956964)	(-3.404256)
GDPppp_State	5.020301**	-3.12962*	-8.019902***	1.641807	7.839808	-2.241528***	-1.613471**
	(3.274212)	(-2.31363)	(-3.730513)	(.766522)	(1.038697)	(-5.701852)	(-3.216056)
NABCA_State	-1.750994	-.3906918	1.6018	-1.658784	-.50967	1.189632***	-1.36701***
	(-1.646931)	(-.4704282)	(1.574056)	(-1.527259)	(-.3521002)	(5.072928)	(-5.239978)
Port_California	.311156	-2.792664***	-3.644625***	4.357392**	6.619445	-.8002451*	1.384634
	(.5937485)	(-3.6891)	(-3.340461)	(3.151735)	(1.691205)	(-2.510383)	(1.090337)
Port_NewYork		-2.099772**	-1.318702	3.27293**		-.1597224	-.0058551
		(-3.147813)	(-1.337796)	(2.649017)		(-.5600675)	(-.0138919)
Port_Newark		-2.32252***	-1.097862	2.199258*	1.788008	.4764255**	-.7223289***
		(-4.726186)	(-1.639909)	(2.465057)	(.7203601)	(3.258684)	(-5.253209)
Port_Florida		-8.038975***	-11.50125***	6.057339		-1.553883*	-1.621539*
		(-4.735558)	(-5.329381)	(1.91707)		(-2.318547)	(-2.355954)
Port_Texas		-2.143843***	-2.29772***	2.369132*	5.079454	-.8854923***	-.3883204
		(-4.247089)	(-3.662078)	(2.16471)	(1.628598)	(-3.675984)	(-.407755)
Co_ops				-2.597248*		.3895265***	-2.543641***
				(-2.574605)		(3.485898)	(-6.18026)
Airlines_Shipments						1.861074***	.7030138*
						(7.939099)	(2.353405)
Duty_Free						1.616962**	
						(3.252187)	
Top10_Wholesalers						.2827082***	-.1056217
						(3.841379)	(-1.206384)
TO8_MidSize_Distrib						.4296468***	1.258154***
						(4.490861)	(17.58583)

Large volumes and shipments from wine co-operatives located in the Bordeaux to the U.S. are less likely to happen (negative coefficients). States with large number of alcohol stores increase the likelihood of wine shipments from the Bordeaux region. Furthermore, wine shipments to California, New-York, Newark and Texas are more likely to happen (positive coefficients).

Large wine volumes shipped from the Provence region to large U.S. wholesalers are less likely to happen (negative coefficients). Large wine volumes from the Provence region increase the likelihood of exports from the region to the U.S.

Shipments to large and mid-size wholesale channels as well as shipments to large wine U.S. multinationals increase the likelihood of shipments from Champagne. The likelihood of increasing Champagne wine shipments augments in the specialized airlines and duty-free channels. At the opposite, wine shipments from Champagne decrease when the consignee is ParkStreet Imports.

Positive increase of state taxes on still wine increase the likelihood of expanding the shipments from Champagne. Further, an increase in real GDP per capita at state level decreases the likelihood of exports of wines from Champagne region. These findings are counterintuitive but it can be justified by the counter cyclical arguments. Tax increases may have some substitution effects with consumers and importers moving from still wine to sparkling (more expensive) wines.

Findings suggest that the presence of an increasing number of alcohol stores in the states increases the likelihood of shipments from Champagne to the U.S. Increases in Champagne shipments decrease the likelihood of export to five U.S. ports – California, Newark, New-York, Florida, and Texas. However, champagne wine shipments vary positively when the destination port is located on a NABCA state. Shipments also vary positively when the French exporter is a co-operative or the importer is a subsidiary of a French-owned exporter. Logically, increases in congestion of U.S. ports (dwell times) decreases shipments to such geographies.

Similarly to wine shipments from Champagne region, an increase in real GDP per capita at state level decreases the likelihood of exports of wines from the Burgundy region. When shipping larger volumes it increases the likelihood of exporting wines from Burgundy.

Shipments to mid-size U.S. wholesalers decrease the likelihood of shipping wines from Burgundy. At the opposite, wine shipments from Burgundy increase when the consignee is ParkStreet Imports or a subsidiary of a French-owned exporter. When shipments from the Burgundy region increase, it decreases the likelihood that the exporter be a wine co-operative.

Positive increases of state taxes on still wine decreases the likelihood of expanding shipments from Burgundy region.

An increasing number of alcohol stores in the states increases the likelihood of shipping wines from Burgundy to the U.S. Increases in shipments from Burgundy region augment the likelihood of exports. Furthermore, increases in shipments from the Burgundy region decrease the likelihood of exports to NABCA states and to three particular U.S. ports – Newark, New-York, Florida, and Texas. Logically, the increases of congestion in U.S. ports (dwell times) decreases shipments to such geographies.

5. Discussion

This study examines the strategies adopted by French wine exporters/traders for penetrating the alcohol distribution networks in the U.S.. Previous empirical results have revealed that the structure of marketing channels in foreign markets and environmental issues impact strategies in export markets and firm performances [7][29].

Consistent with previous literature, on channel choice structure, environmental issues, and strategic choice [30][31] our findings suggest that the shipments from the distinctive wine regions are impacted by a diversity of factors and interrelationships

The current findings suggest that the size of the wholesalers/distributors, local state taxes on wine and congestion in the port of entry matter. In line with [31], our investigation also indicates that channel context is also relevant in wine shipments.

The influence of macroeconomic variables is complex. Wine consumption, and indirectly wine exports, are procyclical. Wine shipments from Champagne and Burgundy vary negatively with increases in real GDP per capita at state level. For more expensive wines, shipments decrease during economic downturns.

Table 4 in the appendix summarizes complementary and alternative economic estimates of the effect of state unemployment, state GDP growth, and state real GDP per capita. The effects were measured only at the arrival ports in the U.S.

The three specifications report results that can lead to complex interpretations. A first relevant finding is the significant and negative influence of real GDP growth per state on Bordeaux, Provence,, Champagne, and Burgundy wine shipments. The results show the relevance of the economic downturns on French wine imports. Such results are consistent with previous studies on the influence of macroeconomic factors on the demand for alcohol beverages and drinking [28].

The influence of unemployment rates at state level has divergent results and must be interpreted cautiously. The logistic regressions suggest unemployment rates impacts negatively the wine shipments from Loire region but positively the wines from Provence and Champagne. U.S. Champagne and Provence consumers may not be those categories of the population most impacted by unemployment rates.

Increases in real GDP per capita at state levels impact significantly and positively wine shipments from Alsace, Occitanie, Loire, and Burgundy. Conversely, the effect is negative for French wine shipments from Bordeaux, Provence, and Champagne regions. Negative effects of real GDP per capita are related to the economic downturn.

6. Conclusion

This paper provides a comprehensive analysis of the French wine exports to the U.S. marketing channels. We focused on the analysis of wine shipments from the main exporting regions for a single year. Diverse from most empirical studies on exports that investigate multiple industries [6] and employed aggregate and country-level data, we focused on a single industry and firm-level data.

We tested the influence of distribution channels, U.S. port location and congestion, state taxes, and the macroeconomic factors. The influence of the different factors varies across the French wine export regions. Our findings also suggest a differentiated impact of macroeconomic conditions, particularly of the economic downturn.

The empirical investigations suggest the existence of alternative shipping roads to the U.S. These alternatives depend on not only on the voluntary strategy of French exporters/shippers (i.e. the managerial influence) [6] but also on the organization of the marketing channels at destination and of the factors related to the state environment. Therefore, when considering export decisions, managers need to integrate not only firm-specific factors but also the uniqueness of the distribution channels at destination and factors related to the environment in the target markets.

This investigation includes some limitations. From the theoretical perspective, independent variables are associated with the demand-side. However, previous literature on export markets documents the influence of pull and push factors [31]. In particular, the strategy and characteristics of the exporting firms (supply side) may also influence the performance in export markets. Factors related to previous experience and asymmetric power in export markets are also relevant explanatory variables [31].

The empirical study uses data for a single year and the unit of analysis is the container (instead of the wine bottles or brands). Due to data limitations, price segments in the wine industry and 'generic' strategies (terroir-based firms, cost domination, or mixed strategies) were not included in the empirical study [7]. In addition, we did not include data on the financial performances of the wine exporters or measures related to risk exposure in wine exports [32].

The analysis of the trajectories of firms across multiple years would provide complementary insights on market entry strategies and decision-making across multiple channels export markets.

Potential avenues for research could include the assessment of the financial performances in the export market across multiple channels and the analysis of exporters' margin to risk relationship [32].

7. References

1. International Organisation of Vine and Wine (OIV), Note de Conjoncture Mondiale 2023, Dijon (2024)
2. Silicon Valley Bank (2023), Silicon Valley Bank. State of US Wine Industry 2021; Silicon Valley Bank: Santa Clara, CA, USA, 2022 (2023)
3. Observatorio Español del Mercado del Vino, Principales Importadores Mundiales de Vino – Septiembre 2023, Madrid, (2024)
4. J. Bodington, Mergers & acquistions among wine and spirits distributors. Consolidation and allegation of anticompetitive actions, AAWE American Association of Wine Economists, Working Paper N.° 282 (2024)
5. C. Ellegaard, C.J. Medlin, Finding good relationships – intended and realized relational governance of international fine wine exchanges, J. of World Bus., 53, 6, 794-805 (2018)
6. S. Zou, S. Stan, The determinants of export performance: a review of the literature between 1987 and 1997, Intern. Market. Rev., 15, 5, 333-356 (1998)
7. L. Duval, Performance export des entreprises vitivinicoles françaises. Influence des stratégies et des politiques à l'exportation, Economie Rurale, 362, Novembre-Décembre, 64-89, I-XXIII (2017)
8. M. Fernandez-Olmos, M. Wanglin, F. Pecheux-Livat, Linking Spanish wine farmers to international markets: Is direct export better than indirect export in improving farm performance?, Econ. Analysis and Policy, 81, March, 153-163 (2024)
9. C.M.P. Sousa, F.J. Martinez-Lopez, F. Coelho, The determinants of export performance: A review of the research in the literature between 1998 and 2005, Intern. J. of Manag. Rev., 10, 4, 343-374 (2008)
10. J. Chen, C.P. Sousa, The determinants of export performance: a review of the literature 2006-2014, Int. Marketing Rev., 33, 5, 626-670 (2016)
11. G.D. Markman, P. Gianodis, G.T. Payne, C. Tucci, I. Filatotchev, R. Kotha, E. Gedajlovic, The Who, Where, What, How, and When of Market Entry, J. Manag. Stud., 56, 7, 1241-1259 (2019)
12. Cogea, Study on the competitiveness of European wines, Final Report, Luxembourg: Publications Office of the European Union (2014)
13. S.P. Douglas, C.S. Craig, Evolution of global marketing strategy: scale, scope and synergy,

Columbia J. of World Bus., Fall, 24, 3, 47-59 (1989)

14. C.W. Hofer, Toward a contingency theory of business strategy, Acad. Manag. J., 18, 784–810. (1975)
15. G. Morgan, Images of Organization; Sage Publications Inc.: Thousand Oaks, CA, USA (1986)
16. R. Freeman, Strategic Management: A Stakeholder Approach, Pitman: Boston, MA, USA (1984)
17. R.E. Freeman, S.D. Dmytriyev, R.A. Phillips, Stakeholder Theory and the Resource-Based View of the Firm, J. of Management, 47, 5 (2021)
18. P. Sousa, Export Performance Measurement: An Evaluation of the Empirical Research in Literature, Acad. Market. Sc. 9, 1-22 (2004)
19. C. Karelakis, K. Mattas, G. Chryssochoidis, Greek Wine Firms: Determinants of Export Performance, Agribus., 24, 2, 275-297 (2008)
20. J.M. Birkinshaw, A.J. Morrison, Configurations of strategy and structure in subsidiaries of multinational corporations, J. of Intern. Bus. Studies, 26, 729-754 (1995)
21. P.H. Kristensen, J. Zeitlin, 'The making of a global firm: local pathways to multinational enterprise', in G. Morgan, P.H. Kristensen, R. Whitley(Eds.), The Multinational Firm, Oxford: Oxford University Press, 172-195 (2001)
22. Q.T.K. Nguyen, P. Almodovar, Intra-firm and arm's length export propensity and intensity of MNE foreign subsidiaries, Journal of Business Research, 145, 288-308 (2022)
23. P. Suwannarat, The study of intermediary performance determinants, Multinational Bus. Rev., 24, 123-143 (2016)
24. P.-L. Yeoh, L. Jeong, Contingency relationships between entrepreneurship, export channel structure and environment: a proposed conceptual model of export performance, Eur. J. of Market., 29, 8, 95-115 (1995)
25. M. Santiago, M. Sykuta, Regulation and Contract Distribution in the Distribution of Wine. J. Wine Econ, 11, 216–232 (2016)
26. E.C. Thach, J. Olsen, Building strategic partnerships in wine marketing: Implications for wine distribution. J. Food Prod. Mark. 12, 71–86 (2006)
27. A. Coelho, The Leading Wine Cooperatives in Argentina and Europe: What are the Strategic Choices to Penetrate the Distribution Channels in the United States and Canada, Sustainability, 16 (15), 6376 (2024)
28. C.J. Rum, W.E. Black, Does Drinking Really Decrease in Bad Times?, NBER Working Paper Series, Working Paper N°8511, National Bureau of Economic Research (2001)
29. C. Maurel, Determinants of export performance in French wine SMEs, Int. Journ.Wine Bus. Res., 21, 2, 118-142 (2009).
30. B.M. Wren, Channel Structure and Strategic Choice in Distribution Channels, J. of Manag. Res., 7, 2, 78-86 (2007)
31. G. L. Frazier, Organizing and managing channels of distribution, Journ. Acad. Market. Sc., 27, 2, 226-240 (1999).
32. J.-L. Viviani, Export Implicit Financial Performance : The Case of French Wine Companies, Intern. Food and Agrib. Manag. Rev., 12, 3, 23-48. (2009)

Table 3. Variable definitions.

Variables	Definition
Airlines_Shipments	Value equals to '1' if the customer of the shipment is an airline (distribution). It takes the value of '0' if otherwise. Source: shipments database.
DutyFree_Shipments	Value equals to '1' if the customer of the shipment is a Duty Free company (distribution). It takes the value of '0' if otherwise. Source: shipments database.
Top10_Wholesalers	The top 10 leading wine distributors/wholesalers in the U.S.. Value equals to '1' if the customer of the shipment is a firm among the top 10 wine distributors/wholesalers in the USA. It takes the value of '0' if otherwise. Source: Winebusiness.com.
Top8MidDistrib	The top 8 mid wine distributors/importers in the U.S.. Value equals to "1" if the customer of the shipment is a firm among the top 8 wine distributors/importers in the U.S.. It takes the value of '0' if otherwise. Source: Winebusiness.com
Top20WineMNE	The top 20 leading wine firms in the U.S.. Value equals to '1' if the customer of the shipment is a firm among the top 20 wine leading multinationals. It takes the value of '0' if otherwise. Source: Winebusiness.com
USA_Monopoly	Value equals to '1' if the customer of the shipment is a .State Monopoly (distribution). It takes the value of '0' if otherwise. Source: shipments database.
CanadaMonopoly	Value equals to '1' if the customer of the shipment is a Canadian Monopoly (distribution). It takes the value of '0' if otherwise. Source: shipments database.
ParkStreetImports	Value equals to '1' if the customer of the shipment is ParkStreet Imports (distribution). It takes the value of '0' if otherwise.. Source: shipments database.
Subsidiary_Exporter	Value equals to '1' if the exporter is a subsidiary of a French-owned company. It takes the value of '0' if otherwise. Source: shipments database.
Alsace_Exporter	Value equals to '1' if the exporter is headquartered in the Alsace region. It takes the value of '0' if otherwise. Source: shipments database.
Occitanie_Exporter	Value equals to '1' if the exporter is headquartered in the Occitanie region (South of France). It takes the value of '0' if otherwise. Source: shipments database.
Loire_Exporter	Value equals to '1' if the exporter is headquartered in the Loire region. It takes the value of '0' if otherwise. Source: shipments database.
Bordeaux_Exporter	Value equals to '1' if the exporter is headquartered in the Bordeaux region. It takes the value of '0' if otherwise. Source: shipments database.
Provence_Exporter	Value equals to '1' if the exporter is headquartered in the Provence region. It takes the value of '0' if otherwise. Source: shipments database.
Champagne_Exporter	Value equals to '1' if the exporter is headquartered in the Champagne region. It takes the value of '0' if otherwise. Source: shipments database.
Burgundy_Exporter	Value equals to '1' if the exporter is headquartered in the Burgundy region. It takes the value of '0' if otherwise. Source: shipments database.
Coop_Exporter	Value equals to '1' if the exporter is a co-operative association. It takes the value of '0' if otherwise. Source: shipments database.
Nb_Alcohol_Stores	The total number of wine, beer, and spirits stores in each U.S. state (arrival port) (Log-transformed). Source: US Census.
State_Population	The total population in each U.S. state (arrival port) (Log-transformed). Source: US Census.
Dwell_Time	Average congestion time at the US arrival port in 2023 (number of days). Source: yuken-usa.com
State_Taxes_Wine	Average state taxes on wine in each US arrival port (percentage) in 2023. Source: taxfoundation.org
GDPppp_State	The total population (Log-transformed) in each U.S. state (arrival port). Source: US Census.
GDPppp_Growth_State	Variation in 2023 real GDP growth (percentage) (source: Bea.gov)
Unemployment_Rates_State	Unemployement rates (percentage) (source: Bureau of Labor Statistics, bls.gov)
NABCA_State	Value equals to '1' if the U.S. state of shipment arrival is a NABCA (National Alcohol Beverage Control Associate) state. It takes the value of '0' if otherwise. Source: nabca.org
Port_Masschas	Value equals to '1' if the arrival port is located in the state of Massachusetts. It takes the value of '0' if otherwise. Source: shipments database.
Port_NewYork	Value equals to '1' if the arrival port is located in the state of New-York. It takes the value of '0' if otherwise. Source: shipments database.
Port_Newark	Value equals to '1' if the arrival port is located in the state of Newark. It takes the value of '0' if otherwise. Source: shipments database.
Port_Florida	Value equals to '1' if the arrival port is located in the state of Florida. It takes the value of '0' if otherwise. Source: shipments database.
Port_Texas	Value equals to '1' if the arrival port is located in the state of Texas. It takes the value of '0' if otherwise. Source: shipments database.
Port_California	Value equals to '1' if the arrival port is located in the state of California. It takes the value of '0' if otherwise. Source: shipments database.
Gross_Weight	The total weight (Log-transformed) of wine containers (20-foot) shipped by each French exporter to the U.S. or Canada. Source: shipments database.
Bulk_Wine	Value equals to '1' if the container exported is bulk wine. It takes the value of '0' if otherwise. Source: shipments database.

Table 4. Complementary Estimates on the Effects of Changes in Macroeconomic Conditions on Wine Shipments from the Main French Wine Regions to the U.S. States (Port Arrivals).

Regressor	Alsace_1	Occitanie_2	Loire_3	Bordeaux_4	Provence_5	Champagne_6	Burgundy_7
	b/t	b/t	b/t	b/t	b/t	b/t	b/t
main							
Unemployment_Rates_State	.0514905	.0557417	-.1911892**	-.0031349	.310872***	.2771547***	.0096159
	(.896133)	(.9821767)	(-3.113108)	(-1.130737)	(3.701336)	(7.866726)	(.2268809)
GDP_Growth_State	.0158999	.0269905	-.0495844	-.0043671***	-.1189108**	-.1339673***	-.1249502***
	(.6252494)	(1.092551)	(-1.669479)	(-3.493458)	(-2.740409)	(-7.613406)	(-5.850747)
GDPppp_State	1.668358***	.6730619**	.279275	-.0627145***	-1.00526**	-1.849883***	.528569**
	(6.373162)	(2.631753)	(.9427419)	(-4.99887)	(-3.185365)	(-13.0074)	(2.736862)
_cons	-22.18574***	-11.07527***	-5.836224	.8008826***	6.074253	17.6125***	-8.349272***
	(-7.727395)	(-3.9614)	(-1.797782)	(5.838093)	(1.732062)	(11.25896)	(-3.93499)
N	32717	32717	32717	32717	32717	32717	32676
pseudo R^2	.0054519	.0011033	.001236		.0069876	.0128586	.0043536

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$