

FINANCIAL APPROACH TO EXPORT PERFORMANCE  
IN FRENCH WINE SMES

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## ABSTRACT

**Purpose** – Most of French wine SMEs have been facing a severe crisis since the beginning of the 2000s, weakening their financial health. In the context of intensive international competition of the wine market, the development and the improvement of the export activity and performance seems to be a strategy which would both improve their international position and create new sources of revenue to recover their health. In this research paper, the double purpose is to determine if the financial structure of SMEs is actually a determinant of their export performance and if export performance is a factor of better firm performance and reduced risk.

**Design / Methodology** – This paper will introduce a theoretical framework based on a financial approach to export performance relating export performance determinants, export performance and export performance effects on the firm performance and risk. The empirical study on SMEs in the French wine industry is composed of a confrontation of several statistical analysis and a panel data econometric analysis.

**Findings** – The asset structure, the financing resource structure and cash flows have a theoretical impact on export performance. Then, relationship between the firm profitability and the firm risk reduction and diversification is developed. Some preliminary results suggest a positive relationship between export performance and the firm profitability, negative between accounts receivable and payable and export performance, mixed between export performance and the financing structure and the cash flow position.

**Research implications** – This study will be combined to a previous study on export performance determinants focusing on non-financial antecedents of export performance (Maurel, 2007) to a global view of this construct.

**Originality / Value of the Paper** – This paper brings a new and original approach to export performance; a financial approach, helping to understanding better this concept so far mainly studied by researchers in Marketing and Strategy.

**Keywords** – export performance, financial structure, firm performance, risk, SME, wine Industry.

## Introduction

French wine companies, which are mainly Small and Medium-Sized Enterprises (SMEs) have been, for most of them, facing a crisis which is weakening their financial health. The EEAFFV-2006 [1] brought out a 11 per cent decrease in global turnover for cooperatives and 6 percent for SA [2] between 2002 and 2005. Meanwhile, they have to struggle to be nationally as well as internationally competitive: Nationally because they have to come out of this difficult situation to survive and internationally because they must keep their historical leadership in this wine market where New World Wines represent a real threat.

It is difficult to find a precise definition of export performance. It is defined as “a composite outcome of a firm’s international sales, which includes three dimensions: export sales, export profitability and export growth.” (Shoham, 1998) but I would rather define export performance as the qualitative and quantitative level of export activity. The qualitative export performance refers to how the activity is perceived by the manager or the owner of the company, i.e. success, failure, improvement, decline... The quantitative export performance refers to the level of export intensity, sales and profitability of a company. The evolution of export performance will be observable thanks to the growth rates of these indicators.

In this context, one can observe that the export performance is a pertinent current topic when studying how these SMEs can improve their financial performance as well as their international position. This is the meaning of “financial approach” of export performance. Indeed on the one hand, I noticed in a previous literature review on export performance determinants of SMEs that the financial structure of these SMEs did not appear in the list of determinants (Maurel, 2007) although there is a link between financial constraints and the international development of companies (Greenaway and al, 2007). On the other hand, exporting is a strategic decision aiming at generating additional and alternative revenue for the company.

So, the purpose of this paper is first to see in what ways the financial structure of SMEs can theoretically be a determinant of their export performance and then to investigate the link between export performance and the performance and risk of these companies. This paper is mainly theoretical and aims at understanding the different relationships linking export performance and financial constructs and variables. The first and second part of this paper will explain the theoretical framework of this research. Afterwards will be introduced the empirical study that will be carried out in the next future regarding French wine SMEs. The final part regards preliminary results and limitations of the study.

## **1. Financial antecedents of export performance.**

### **1.1. Relationship between the financial structure and the export performance**

#### **1.1.1. Justification of the existing role of financial antecedents to export performance**

Export performance determinants in SMEs are numerous. My previous literature review and empirical study about this topic (Maurel, 2007) classified them into internal, external and strategy-related determinants. Empirical results showed that a bigger size, a developed and strong relationship with partners, an innovative behaviour and a dynamic and entrepreneurial management are positively and significantly related to a higher export performance (measured by export intensity and export turnover) in French wine companies. A major conclusion drawn from this previous research is that financial antecedents do not appear in the existing literature dealing with the export performance of SMEs.

However, a paper dealing with the competitive advantage and export performance in a Chinese context (Ling-Yee and Ogunmokun, 2001) supports that export financing resources have a positive impact on the competitive advantage and thus on a superior export performance. Based on this observation and this paper, I hypothesize that the financial structure of a SME must have an impact on its export performance as it constitutes a condition under which the company will be able or not to make all the investments necessary to develop internationally and improve its export performance.

#### **1.1.2. Why are French wine firms especially concerned by this problematic?**

The lack of capital, of financial planning and use of financial information and ratios as well as the poor credit and debts conditions of smaller firms constitute obstacles to export development for those companies when compared to bigger ones (Stahrl and Sarkis, 1986). Companies in the French wine industry are mostly SMEs and a lot of them are managed by farmers, they correspond to the characteristics quoted just before and as they have been facing a difficult crisis since the beginning of the 2000s, they experience poor credit situations. This

makes me think that this difficult financial situation will impact their ability to export and develop their export strategy and performance, although exporting constitutes a way to find new incomes to go out of the crisis. It is like a “vicious circle”.

## **1.2. Composition of the financial structure and expected links**

The financial structure of a company can be divided into three categories and refers to the balance sheet structure of the company:

### **1.2.1. The financing structure**

Numerous SMEs have limited financial resources (LeCornu and al, 1996). The main sources of financing are the self-financing (internal resources), the debt and finally financial markets. For most of the French wine companies, anchored in an agricultural tradition, the choice has to be done between the first two possibilities, as the third one is devoted to bigger companies such as the Champagne groups.

The lack of financial resources can constitute a serious obstacle to their international development (Panet-Raymond and Robichaud, 2005, Desrochers and Yu, 1995) as it prevents them from engaging into the necessary investments to improve their export performance. Generally speaking, entrepreneurs prefer resorting first to self-financing, then debt and finally financing thanks to external partners (Calof, 1985) as supported by the Pecking Order Theory (Myers and Majluf, 1984). This can be easily related to their will to keep the control of their firm as much as possible, even if from a rational point of view, it is not necessarily the most optimal and profitable choice as external resources enable the company to have less limited additional resources than equity. Financial debts is a more risky financing resources as the company must have the necessary cash flows to pay interests, bankruptcy risk is then higher here. This general trend is confirmed by a report made by the Crédit Agricole, a French Bank [3]. In the case of the export development which is a strategic decision implying substantial investments impacting the evolution of the company in the medium-to-long run, external financing resources may give the company more possibilities and the risk can be compensated by the higher outcomes expected from this future better export performance.

The indicators of the financing structure regard the repartition between equity and debts in the resources of the company.

*H1: SMEs having a higher part of debt than self-financing in their financial structure have a higher level of export performance.*

### **1.2.2. The asset structure**

The asset structure of a company is divided into two categories: fixed assets and current assets. It represents all what the SME owns. I hypothesize that the composition of these assets will constitute a factor which will influence the export performance through its impact on export related investments.

One can wonder whether having large amounts of stocks or substantial amounts of money owed by customers will decrease the ability of the company to improve its export performance, as it represents costs that it has to bear. Regarding the stocks, the company needs to have enough stocks to face the additional demand induced by the increase in the export activity but it must not have too much amounts of stocks which are costly. As we will see later in the paper the situation is particular in the wine industry.

Martinez (2001) underlined the role played by the intangibles assets (patents, reputation, brands...) in the value creation process implied by the internationalisation, based on the internalisation theory. Intangible assets should play a role on export performance improvement (Braunerhjelm, 1996). The link between R&D activities and capabilities and export performance in SMEs depends on their internationalization level (Lefebvre and al, 1998). Innovation and brand marking must be combined to enhance and maintain the reputation of exporters and thus their export performance (Higgins and Mordhorst, 2008).

*H2 (a): A higher part of intangible assets encourage is positively related to a better export performance.*

Accounts receivable (by customers) will increase and will have to be well managed as they are often paid in 30, 60 and even 90 days after the ordering. The company will have to reduce them as much as possible as they require more liquid assets. So it will be interesting to see whether firms with better export performance have a lower part of accounts receivable in current assets. This would mean that they managed well this accounts receivable, what is a well-known weakness of SMEs (Grablowsky, 1976). This aspect of the financial structure of SMEs is the one I am considering the most cautiously as theoretical justifications in the literature are difficult to find.

*H2 (b): a negative relationship exist between export performance and the amount of accounts receivable from customers.*

### **1.2.3. Cash Flows**

The lack of liquidity when they want to grow is a recurrent feature of SMEs (LeCornu and al, 1996). Having a positive cash flow will enable SMEs to face additional costs and constraints linked to the export activity such as: longer payment period, entry costs...(Desrochers & Yu, 1995). The internationalization is a financially heavy and costly process, especially for SMEs (Philippe, 1995).

To face these costs, the SME needs to have enough available cash flows and a stable cash flow position to cover payable accounts. A healthy financial structure will help covering all the additional costs that can not be avoided when selling abroad (Bernard and Jensen, 1999). By managing well its working capital, the SME manage its liquid assets : the more liquid assets she has, the less working capital she uses to pay for its current liabilities. However cash flow disposals are also necessary to pay interests linked to the investments in the renewal of the production capacity but this regards more companies whose main activity is producing. The cash flow position is measured by the difference between the working capital and the working capital needs. If it is positive it means that the company has enough liquidity to face all its short-term obligations, which will be more important when the company increases and intensifies its export activity.

To understand the liquidity position of the SME, the working capital ratio or current ratio can also be observed, it is composed by current assets / short-term debts (current liabilities) and must be superior to 1.

*H 3: A positive cash flow position leads to better export performance.*

## **2. Impact of export performance on SMEs' global performance and risk.**

Developing export activity is the first way to reach the objectives (EEAFV-2006) in the French wine industry, i.e. to gain profitability and market shares. It confirms the inevitable

role of exports in the development of these companies and the necessity to wonder if export performance actually leads to an increase in performance (Alexandre and Schatt, 2005).

## **2.1. Export performance and firm performance**

### **2.1.1. Justification of the relationship**

A meta analysis of empirical studies about the determinants of financial performance (Capon and al, 1990) indicates that exports, which are part of the 25 most frequently studied explanatory variables show a negative relationship with financial performance at the firm as well as at the business level.

Moreover, the relationship between a better export performance and a better firm performance is not a linear one. Beamish and Lu (2001) show that the relationship between internationalization and firm performance has a “U-shape”, i.e. in a first time the impact of internationalization is negative and then thanks to the experience effect it increases and become favourable.

As a consequence, I choose to consider firm profitability from two different points of view: short-run performance and long-term performance. On the one hand a better export performance may not lead to better short-run profitability because all the benefits of investments made to improve export performance have to be covered, they cost a lot and a better export performance may lead more to a decrease in profitability. The positive effect of these efforts are not visible on the short run.

On the other hand, when following the value creation and profit maximization principles, one can think that making efforts to improve one’s export activity and export performance if no benefits is expected is non-sense from a financial point of view. As the development of export activity can be considered as a strategic decision and investment, the positive effects are expected in the middle to long term. Indeed, when investment costs are well managed thanks to additional outcomes from an extended international activity, the profitability should increase.

The existing literature agrees to say that “*Exporters are better than non-exporters*” (Bernard and Jensen, 1999, p. 1), what supports this hypothesis, even if their empirical results do not clearly show that current exporters systematically experience better future firm performance. Greenaway and al’s (2007) conclusions go in the same direction, showing that exporters have a better financial health than non exporters and that a stronger commitment in export activities improves the financial health of firms, what supports the positive link between export performance and global performance.

Regarding the French wine industry, one paper has already dealt with the relationship between exports and financial performance (Alexandre and Schatt, 2005) which appears to be positive.

*H4 (a): On the short-term (less than one year) a higher export performance leads to a lower firm performance*

*H4 (b): On the long-term, a higher export performance leads to a higher financial performance.*

### **2.1.2. Measures of firm performance in French wine SMEs**

According to the results of the EAAFV-2006 survey, the main indicators of performance used by cooperatives is “la remuneration des apporteurs” (the capital brought by the members of the cooperative in the cooperative) and the net margin for SA. Taking into account those

results and the fact that French SMEs do not all belong to cooperatives, I have chosen the following indicators:

The first one is the remuneration of the members of the cooperative: net profit / paid-in capital (by the member of the cooperative). It represents what yields one euro of capital brought in the cooperative. As the data about this capital is not available in the data set, this indicator will unfortunately not be exploited.

The net margin is measured by the ratio net profit to the global turnover and is an indicator of profitability, indicating what is gained for each euro of turnover.

The return on equity can be calculated as the ratio net profit to the amount of equity and measures the profit generated by one invested euro.

I will add economic (assets) performance indicator to complete the notion of « global performance », measured by the return on assets (net income to total assets) which indicates the relationship between what the company owns and what this assets enables to get.

## **2.2. Export performance and risk diversification**

### **2.2.1. The reason of this risk diversification**

Risk diversification is one of the benefits of exporting (Richardson and Rindal, 1995). Rugman (1976) demonstrated that this risk diversification implied by the international activity and development of companies helps reduce risk. He studied the case of the multinational companies and foreign direct investment but one can think that it is the same for smaller companies diversifying their sources of outcomes, i.e. their targeted countries and customers. More precisely, the relationship between risk diversification and exports in small businesses was studied by Stahrl and Sarkis (1986). If the domestic market is glutted, as in the French wine industry, and if the company does not export, its sales and profits will fall and bankruptcy can occur more easily than for firms that have diversified their sales and sources of outcomes abroad. Bernard and Jensen (1999) found empirical support to this positive relationship between successful exporters and the increased probability of survival.

Here is an example to illustrate the relationship:

If a SME sells its wines only in France and if, as it is currently the case, the domestic market is saturated and experiences a crisis, the SME will see its sales decreasing and its profits as well: increased bankruptcy risk.

If a SME sells its wine in France and in one foreign country, in the same context, even if its domestic sales are decreasing, she still earns outcomes from the foreign country.

The more the SME will increase the number of its customers and targeted countries, the more she will be able to face a decline of one of the markets and compensate this decline thanks to another source of outcomes.

The relationship between international development and risk reduction and diversification finds its theoretical explanation in the portfolio theory (Markowitz, 1959). Like the investor has to build a portfolio which maximises the profitability and minimizes the risk, the exporter will have to select a certain number of target countries and customers in these destinations in order not to depend only on French incomes and diversify its sources of revenue.

*H 5: the more the SMEs exports to different countries (France included), the less high its risk is.*

*H 5bis: the higher the export intensity is, the lower the risk is.*

### **2.2.2. Measures of the risk**

The variance can be one measure of the risk of profits (Rugman, 1976) if one refer to the portfolio theory, i.e. the variance of the rate of return on capital (profits or net income / net value of the company) which will show whether the earnings are stable or volatile. The lower the variance of profits will be, the lower the risk will be.

Another way to measure risk diversification implied by exports is to compare the variance of the rate of return from foreign sources to the rate of return from domestic sources and see if the first one is lower than the second one. Then, the correlation coefficient between both rates of return must be observed and must be significantly different from 1, otherwise it means that these rates are highly correlated (Stahrl and Sarkis, 1986).

## **3. The empirical study: What about French wine SMEs.**

### **3.1. Current situation of French wine companies**

*Exports* – In 2007, French exports of wine recovered and one can observe an increase in the export figures. In 2007, wine exports represented 2 per cents of French total exports and constituted the first category of agro-food exports. Wine exports amounted to 4.16 billion euros, i.e. a 7.5 per cent increase when compared to the same period in 2006 [4]. However this optimistic trend after several years of severe crisis in the French wine industry must be moderated as results differ according to the producing region. The evolution of still wines (+4.1% value and +1.3% volume) is much weaker than the great results of sparkling wines. Burgundy and Provence wines experience higher export results while Languedoc-Roussillon, Beaujolais or even Bergerac still have to face a decline in their exports.

The leader international position of French wines has been weakened by the growth of New World Wines (Australia, USA, South Africa, Chile...). They represent a real threaten for traditional wine countries and has forced them to improve their competitiveness and their export performance in order not to be overtaken by them.

According the the EAAFV-2006 survey, The first destinations of French wines are European countries (Belgium, Germany, United Kingdom). Exports (European Union and rest of the world) represent 14.8 per cent of total sales (volume) for cooperatives and 37.4 per cent for merchants. Cooperatives mostly manage their export activity themselves whereas merchants mostly use indirect exports through an importer.

*Financial Situation* – Details of the financial structure of French wine companies are presented in Remaud and Couderc (2003), Saulpic and Tanguy (2002).

In the French wine industry, the situation seems to be different from the general trend in SMEs and the Pecking Order theory, as the main financing source used by companies is the long-term loan followed by self-financing (EAAFV-2006).

Regarding stocks, one knows that in the wine industry the situation will be different according to the type of company considered. Producers are constrained by their stocks as each year new crops come in and new wine is produced, previous stocks must as much as possible be sold off. On the other hand, a good stock management is important for merchants as selling is their main activity. Results of better exporters will be different according to the main activity of the company.

The EAAFV-2006 survey showed that cooperatives had a positive and increasing cash flow position while SA had a stable negative cash flow position.

### **3.2.Data and Samples**



*Data* – The empirical study will be carried out thanks to data from the “Enquête Entreprises Aval Filière Vin – 2006” Survey (EEAFV-2006) made by SUPAGRO, the Superior School of Agronomy of Montpellier. This survey gathers data related to the financial performance and situation of French wine companies from 1996 to 2005. The total sample is composed of 214 backing companies (cooperatives and “Société Anonymes”), i.e. companies from French wine producing regions, whose activity includes one or several steps in the production of sparkling and non-sparkling wine (bottling, blending and/or vinification). All the surveyed firms have a turnover amounting to over three million euros and have a managerial autonomy. This represents a total turnover of 50 million hectolitres for still wines, 1.7 million hectolitres for sparkling wines and 1.8 millions for effervescent wines.

*Samples* – From the available initial sample, a smaller one has been selected, gathering companies with less than 250 employees (SMEs). This sample is composed of 205 companies but even if they can be considered as SMEs in terms of employees their average global turnover amounts to 9,8 million euros with a maximum of 80 millions.

As French wine exports come more by “négociants” than directly by the wine-maker (Saulpic and Tanguy, 2002), this sample will be analysed in its globality but also by separating it into two sub-samples according to the French “APE-code” used to identify companies according to their main activity. The first sub-sample gathers companies having the following codes : on the one hand 159F (“champagnisation” or champagne-making), 159G (“vinification” or wine-making) et O11G (“viticulture” or wine-growing) and on the other hand the code 513J (“commerce de gros” or wholeselling).

Features 2005	Total sample	Codes APE : 159F, 159G, 011G	Code APE : 513J
Number of companies	205	123	82
Average number of employees	29,1	21,6	<b>36,7</b>
Average turnover	9,8 M EUR	9,2 M EUR	10,6 M EUR
Average export turnover	2,6 M EUR	1,6 M EUR	<b>3,7 M EUR</b>
Average export intensity	29,9 %	24 %	<b>35,9 %</b>

Table 1: Descriptive statistics of the samples

### 3.3. Methodology

*1<sup>st</sup> Step* – Before carrying on panel data analysis, several linear correlation matrix and factorial analysis of variances have been made. Each of these analysis regard respectively the three samples introduced before. Correlation matrix aims at determining if there exists a linear relationship between the export performance year n and the financial structure year n-1. Regarding Anovas, each variable has been divided in quartiles. Post Hoc mean comparison test enables to see if there exists any significant mean differences in export performance according to different levels of financial structure and firm performance.

*2<sup>nd</sup> Step* – The best adapted methodology of the empirical investigation will be a panel econometric analysis as the available data regard several companies observed on a period of time (longitudinal study). Here the analysis unit is the company (the SME) and the period of time considered is from 1996 to 2005.

The choice of this methodology is motivated by the context of the research as the development of the export activity and the improvement is a process which takes time and as its effect on firm performance and risk must be observed in the short as well as in the medium or long term. This will be observable with this methodology. Moreover this type of analysis will take the heterogeneity of the sample into account, and will enable me to observe whether

there exist different levels of export performance regarding the financial structure of SMEs and different levels of firm performance and risk according to different levels of export performance.

The risk of this methodology is linked to the fact that the panel will not be balanced as some observations will be missing.

### 3.4. Variables

#### 3.4.1. Financial structure indicators

Here is a table gathering the financial structure variables that are going to be used in the future empirical study: Altman's Z-Score analysis (Altman, 1968) is composed of five ratios: return on total assets (Earnings Before Interest and Taxes / Total Assets), sales to total assets (Net Sales / Total Assets), Equity to debts (Market Value of Equity / Total Liabilities), Working Capital to Total Assets and retained earnings to total assets.

CATEGORY	DETERMINANT	INDICATOR	Variable decomposition in the data set [5]
<b>FINANCING STRUCTURE</b>	Financial leverage <i>Levier financier</i>	$\lambda = \text{financial debts} / \text{equity}$	Dettes de caractère financier KEUR / Capitaux propres KEUR
	Gearing <i>Ratio d'endettement</i>	liabilities / equity	Dettes KEUR / (Capitaux propres KEUR + dettes KEUR) x 100
	Weight of the debt <i>Poids de l'endettement</i>	interests / global turnover	(Intérêts et charges assimilées KEUR / CA net HT KEUR) x 100
<b>ASSET STRUCTURE</b>	Fixed asset weight <i>Poids de l'actif immobilisé</i>	Fixed assets / total assets	(Actif immobilisé net KEUR / total actif KEUR) x 100
	Stocks weight <i>Poids des stocks</i>	Stocks / current assets	(stocks nets KEUR / total actif KEUR) x 100
	Customer debts weight <i>Poids des créances clients</i>	Customer debt / current assets	(créances clients et comptes rattachés KEUR / total actif KEUR) x 100
<b>Capital working</b>	Capital working Fonds de roulement	(Equity + long and medium-term financial debt) – net fixed assets	
<b>CASH FLOWS</b>	Liquidity ratio <i>Ratio de liquidité générale</i> (liquidité = flux de trésorerie = cash flows = bénéfice net + amortissement)	Current assets / short term debts > 1	actif circulant net KEUR / dettes fournisseurs et comptes rattachés KEUR
	Cash flow position	Working capital – working capital needs	

#### 3.4.2. Export performance indicators

In his literature review, Sousa (2004) gathered about 50 different export performance indicators, classified them into objective (quantitative) vs. subjective (attitudes, perceptions)

indicators. He found that the most frequently used ones were “*export intensity (export-to-total sales ratio), export sales growth, export profitability, export market shares, satisfaction with overall export performance, and perceived export success.*” It is important to measure export performance by different indicators in order to increase the reliability of the results.

The export intensity (VENTEX), i.e. the percentage of export sales in the total sales is the most commonly used indicator. The advantage of this indicator when compared to the export turnover is that it cancels the size effect and facilitates comparison between companies of different sizes. Moreover it represents the export dependance of the company.

However, when analysing the concept export performance, one can see that the notion of performance and profitability is perceptible with difficulty in these indicators which are to my mind more indicators of the level of exports and the scope of the activity. It would be interesting to transpose the notion of performance in the export context, using export profitability or export margin. These indicators are not often considered in existing studies as it is not easy to quantify these ratios. Thus, I will add an indicator measuring the percentage of net profit in the export sales (Shoham, 1998, Rose and Shoham, 2002) in order to highlight the financial dimension of export performance.

### 3.4.3. Firm performance and risk indicators

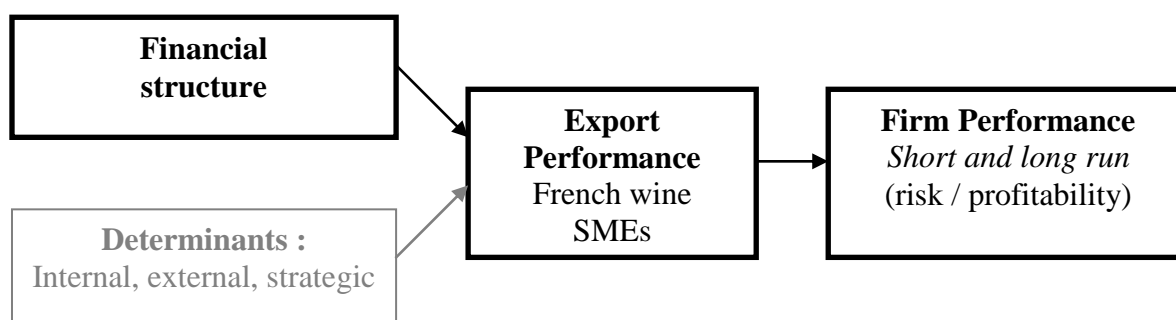
Here is a table gathering the firm performance and risk variables that are going to be used in the future empirical study:

CATEGORY	DETERMINANT	INDICATOR	Variable formation in the data set [5]
<b>FIRM PERFORMANCE</b>	Remuneration of the member of the cooperative	net profit / paid-in capital	Not available
	Financial performance: return on equity	(Net profit / equity)x100	(Bénéfice ou perte KEUR/ Capitaux propres KEUR)x100
	Economic performance : return on assets	(Net operating income / total assets)x100 Total assets : equity+financial debts	(Résultat d’exploitation KEUR/ AE)x100
	Net margin	(Net profit / global turnover)x100	(résultat d’exploitation KEUR/CA net HT KEUR)x100
<b>RISK</b>	Variance of the ROE rate	Variance of the ROE rate	
	Operating risk	Global turnover / fixed assets	CA net HT KEUR/ Actif immobilisé net KEUR
	Risk diversification	*Variance of the rate of return from foreign sources < variance of the rate of return from domestic sources *correlation coefficient the rate of return from foreign sources - rate of return from domestic sources significantly ≠ 1	

## 4. Excepted Results and *a priori* Limitations

## 4.1. Expected Results

### 4.1.1. Theoretical Model:



The aim of this empirical study is to discover whether there exists a financial structure which is more convenient for SMEs willing to develop and improve their export performance. This will be possible thanks to the possible existence of a positive and significant relationship between export performance and a specific financing structure, a specific asset structure, a positive cash flow position and thus a certain level of working capital and working capital needs. By doing so, I will observe which repartition of financial resources (equity and debts) tallies with a higher export performance.

The second major purpose of this study is to confirm the effect of export performance on the firm performance, which is essential especially for SMEs often less solid financially and allocating resources in the export activity and thus dependent on the results of this allocation. It is expected that a higher export performance will lead to a better economic, financial performance as well as a better margin not systematically in the short-term (1 year) because of the weight of the investments, but at least in the 2 to 5 years following the investments.

### 4.1.2. Preliminary results:

Here are the results of the Pearson linear correlations coefficients relating export performance indicators (export intensity 2005 and export turnover 2005) to the financial structure, performance and risk of French wine SMEs in 2004 for the total sample, the sample APE codes producing companies and selling companies.

Total Sample	RE04	RCP04	marge04	rskexp4	levier04	endt04	poiendt04	immo 04	stock 04	client 04	liquid 04	tres04	tresof04	fourn04	cp04
ventex 05			0,156**			-0,117**	0,158**	-0,079*		-0,108**	-0,124**			-0,133**	0,120**
CA export 05				0,185**		0,199**	0,157*	-0,157*							-0,195**

APE prod	RE04	RCP04	marge04	rskexp04	levier04	endt04	poi endt 04	immo 04	stock 04	client 04	liquid04	tres04	tresof04	fourn04	cp04
ventex 05	0,267**	0,275**	0,307**	-0,140*		-0,166**	0,124*		0,244**	-0,241**	-0,127*			-0,127*	0,170**
CA export 05				0,487**	0,231**										

APE selling	RE04	RCP04	marge04	rskexp04	levier04	endt 04	poi endt 04	immo 04	stock 04	client 04	liquid 04	tres04	tresof04	fourn04	cp04
ventex 05			0,145**			-0,188**	0,256**			-0,111*	0,253**			-0,366**	0,186**
CA export 05					0,440**		0,578**		0,252**	-0,202*			-0,231*		

\* : significant at 0,01 (bilateral) / \*\* : significant at 0,05 (bilateral)

One can notice significant positive relationships between export performance and profitability indicators, debt weight and the weight of equity in the total liabilities. Negative relationships regard export performance and accounts receivable and payable. For the other variables, correlation coefficients are mixed according to the type of company and the export performance indicator.

Below are summarized the results of the anovas with Post Hoc analysis. Five groups of variables are analysed: performance, debt, liabilities, assets, cash flows. For each explanatory variable, the average from 1996 to 2005 is calculated and divided into quartiles. Analysis are carried out with respectively two export performance indicators as dependent variables. The dependent variable are respectively the average export intensity and the average export turnover from 1996 to 2005. These variables are also divided into quartiles.

For each Post Hoc test, the table indicates which quartile presents a significantly superior level of export performance when compared to the other quartile. For instance, Q3, Q4 > Q2, Q1 (1) means that Q3 and Q4 of economic profitability have a higher level of average export intensity than lower level of economic profitability: companies with a higher economic profitability are also companies with a higher export performance.

Dependent variable Fixed factors	Total Sample		APE-Producing companies		APE-Selling companies		
	average VENTEX quartiles	Average export turnover	average VENTEX quartiles	Average export turnover	average VENTEX quartiles	Average export turnover	
Performance	nmoyre	Q3, Q4 > Q1, Q2 (1)	Q3, Q4 > Q1, Q2	Q3, Q4 > Q1, Q2 Q4 > Q3	Q4 > Q1, Q2, Q3 Q3 > Q1	Q1, Q3, Q4 > Q2	Q1, Q3, Q4 > Q2
	nmoyrep	Q4 > Q1, Q2, Q3	Q4 > Q1	Q4 > Q1, Q2, Q3 Q2, Q3, Q4 > Q1	Q4 > Q1, Q2, Q3 Q2, Q3, Q4 > Q1	Q4 > Q1, Q2, Q3	Q4 > Q1, Q3
	nmoymarge	Q4 > Q1, Q2, Q3	Q2, Q3, Q4 > Q1 Q4 > Q2	Q3, Q4 > Q1, Q2 Q4 > Q3	Q3, Q4 > Q1, Q2	Q4 > Q1, Q2, Q3 Q2, Q3, Q4 > Q1	Q2, Q4 > Q1, Q3
	nmoyrskexp	Q3, Q4 > Q1, Q2	Q2, Q3, Q4 > Q1	No significant mean difference	Q3, Q4 > Q2 Q3 > Q1	Q3 > Q1, Q2, Q4	Q1, Q2, Q3 > Q4
Debt	nmoylevier	Q1 > Q3, Q4	No significant mean difference	Q2 > Q1	Q2 > Q1, Q4	Q1 > Q2, Q3, Q4	Q4 > Q3.
	nmoyendt	Q1 > Q2	Q1, Q3, Q4 > Q2	Q1 > Q2, Q3, Q4	Q1, Q3 > Q2, Q4	Q1 > Q2, Q4	Q1 > Q2, Q3, Q4
	nmoypoiendt	Q4 > Q1	Q4 > Q1, Q2	Q4 > Q1, Q3	Q2, Q4 > Q1, Q3	Q3, Q4 > Q2	Q3, Q4 > Q2, Q3
Liabilities	nmoyfourn	Q3 > Q1, Q2, Q4	Q2, Q3 > Q1, Q4	Q2 > Q1, Q3, Q4	Q2, Q3 > Q1, Q4	Q1, Q2, Q3 > Q4	Q1, Q2, Q3 > Q4
	nmoureserv	Q1, Q2, Q4 > Q3 Q1 > Q4	Q1, Q2, Q4 > Q3 Q1 > Q2, Q3, Q4	Q1, Q2, Q4 > Q3	Q1, Q3 > Q2, Q4	No significant mean difference	Q1 > Q2, Q3, Q4
	nmoycp	Q4 > Q2, Q3	Q1, Q2, Q4 > Q3	Q4 > Q1, Q2, Q3	Q1, Q4 > Q2, Q3	Q4 > Q1, Q2, Q3	Q4 > Q1, Q3
assets	nmoyimmo	Q2 > Q1, Q3, Q4 Q1, Q2 > Q4	Q2 > Q4	Q2 > Q1, Q3, Q4	Q1 > Q3	Q1, Q2, Q3 > Q4	Q3 > Q1, Q2, Q4
	nmoystock	Q2, Q3 ; Q4 > Q1	Q2, Q3, Q4 > Q1	Q4 > Q1, Q2	Q3, Q4 > Q1, Q2	Q2, Q4 > Q3 Q2 > Q1, Q3	Q2, Q4 > Q1
	nmoyclient	No significant mean difference	Q2 > Q1, Q3, Q4	Q1 > Q2, Q3, Q4	Q1, Q2 > Q3, Q4	Q4 > Q3	Q1, Q2 > Q3, Q4
Cash flow	nmoyliquid	Q2, Q3 > Q1, Q4	Q1, Q2, Q3 > Q4 Q3 > Q1, Q2, Q4	Q3 > Q1, Q2, Q4	Q3 > Q1, Q2, Q4	Q2, Q3, Q4 > Q1	Q3 > Q1, Q2
	nmoytreso	Q1 > Q3	Q1 > Q2, Q3, Q4	Q2 > Q1, Q3, Q4	Q1, Q2 > Q4	Q1 > Q2, Q3 Q1, Q4 > Q3	Q1 > Q2, Q3, Q4
	nmoytresof	Q1, Q2 > Q3, Q4	Q1, Q2 > Q3, 4	Q2 > Q1, Q3, Q4	Q1, Q2, Q3 > Q4	Q1, Q4 > Q2, Q3	Q1, Q2, Q4 > Q3 Q1, Q4 > Q2, Q4

Q1: quartile 1, Q2: Quartile 2, Q3: Quartile 3, Q4: Quartile 4.  
Mean differences significant at 0,05.

Once again, results confirm the positive relationship between export performance and the firm performance, the debt weight. A negative relationship can be observed between export performance and accounts receivable and payable. Mixed results regard financing resources, cash flows, fixed assets and stocks.

#### 4.2. Limitations of the study

The limitation of the study are linked to its large scope. This ambitious work aims at getting a global view of the financial dimension of export performance, its financial antecedents and financial effects. The results may differ from the expected conclusions as one can wonder whether the financial dimension is a cause or an effect of export performance, or both. Indeed, in the French wine industry especially, where the crisis is still present, there exist companies which are in a difficult financial situation and which count on the export development and the improvement of their export performance to improve their global performance.

Variables are numerous and a particular attention will have to be paid to the effects of variables on each other. Export performance certainly depends on the financial structure of

the SME but it also depends on other determinants (internal, external, strategy-related ones) which will certainly have an impact of the financial structure itself. Methodological precautions will have to be taken to manage those relationships in order to concentrate on the effect of the financial structure of the SME.

## **Conclusion**

This paper represents a new and original theoretical analysis of the multidimensionnal concept called export performance, as it adopts a financial point of view, contrary to most of studies related to this topic belonging mostly to the marketing and strategy oriented export literature.

After explaining the theoretical impact of the financial structure of a SME on export performance measured by several quantitative indicators, I focused on the theoretical impact of this export performance on the firm performance and its risk diversification and reduction. Thanks to the last section, the empirical study is introduced, where the theoretical framework about the financial approach to export performance will be soon applied to an industry mainly composed of SMEs operating in an international and competitive market: the French wine industry. Preliminary results provide with encouraging results with regard to the profile of better exporters but a deeper analysis is necessary in order to get clear and relevant conclusions.

The managerial implications of this work regards the orientation and organisation of the export activity of French wine SMEs willing to come out of the crisis by enhancing their exports and meanwhile not to loose the prestigious but weakened position France has been having in the international wine market for a long time.

## **Notes**

[1] EEAFFV-2006 : Enquête Entreprise Aval de la Filière Vin 2006. Survey carried out by Supagro, gathering data about the financial performance of French Wine companies.

[2] SA means Sociétés Anonymes and is the approximate equivalent of Public Limited company. This represent wine merchants, called “négociants” in France.

[3] Crédit Agricole, Horizons Bancaires, « Le financement des PME en France », December 2006, No. 331.

[4] Source : [http://www.vitisphere.com/dossier.php?id\\_dossier=49749](http://www.vitisphere.com/dossier.php?id_dossier=49749) , 22/08/07

[5] In this column, the language used is the French as it explains the name and details of the variables in the data set, which is built in French.

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