

PalArch's Journal of Archaeology of Egypt / Egyptology

MOROCCAN SMES EXPORTERS TO SUB-SAHARAN AFRICA: AN ABSTRACT ON EXPORT RISKS SOURCE

ASSABANE Ibrahim¹, MSSASSI Said², LOUARDY Hanane³

¹National School of Business and Management, Abdelmalek Essaâdi University

²National School of Business and Management, Abdelmalek Essaâdi University

³Faculty of Legal, Economic and Social Sciences of Ain Chock, Hassan II University

Email: ¹assabane2@gmail.com, ²mssassis@yahoo.fr, ³nina.louardy@gmail.com

**ASSABANE Ibrahim¹, MSSASSI Said², LOUARDY Hanane³, Moroccan
Smes Exporters To Sub-Saharan Africa: An Abstract On Export Risks
Source– Palarch's Journal of Archaeology of Egypt/Egyptology 17(6) (2020).
ISSN 1567-214X.**

**Keywords: export risks, SMEs exporters, anticipatory information, the African
market.**

Abstract

The purpose of this study is to identify different types of export risks usually encountered during international engagement. The study is carried out on ten Moroccan SMEs exporters to sub-Saharan Africa. Over the past decades, fifteen studies were conducted and we have identified the most imminent risks affecting SMEs exporters from different sectors. Based on this study, we explored a set of Moroccan companies from different activity sector and gave them a code to identify the risk perceived by said companies. The results allowed us to conceptualise an export risk repository in the African market and to show the sensitivity of the lack of information in several environmental sectors intensifying these resulting risks.

Introduction

International SMEs are often limited to export as the latter is regarded as one of the most important development avenues. . It constitutes the first stage of expansion, being part of a process of gradual learning of the Uppsala model of Johanson and Vahlne (1977), allowing to advance cautiously by acquiring gradual learning to avoid essential risks.

This way fits SMEs capacities and resources by requiring high flexibility, a minimum commitment of resources and limited risk exposure. At the same time, it enables them to acquire gradual learning by moving forward cautiously.

What discourages their initiative and maintenance of export is their limited capacity caused by their lack of information resources on new markets,

especially when acting individually. One of the main unfavourable factors to start, maintain and increase export engagement is the perception of export risk (Zou and Stan, 1998). Besides, the repressive impact of these risks is felt even more in smaller companies.

In the African context, Moroccan SMEs are affected by these challenges. And to deal with the challenge successfully, they should detect the risk they are facing and be ready to seize the opportunities available to the sub-Saharan African market.

Before formulating any strategic action or predicting any difficulty to seize the opportunity arising from a foreign environment, Moroccan SMEs exporters must identify the risks they might face. Therefore, the question is What are the risks facing Moroccan SMEs when exporting to the sub-Saharan African market?

To resolve this issue, it would be better to start with presenting the theoretical framework of risk factors and classify all the risks faced by SMEs exporters to foreign markets over the past two decades to arrive at an exhaustive list allowing us to highlight the most redundant risks when opening up to the international trade.

to adapt to local specifications and to detect exact risks arising from the markets of sub-Saharan Africa, it requires some background work. Therefore, we led a qualitative study based on the analysis of interviews conducted with ten Moroccan SMEs exporting to these markets to identify the risks perceived by the managers of these companies.

1.Risks in exporting SMEs: a literature review

Risk is not a new notion in business. It has been studied and classified since the work of Knight (1921), then taken up by other several authors. Traditionally, the risk is manifested in three concepts:: the risk factor (peril, danger, etc.), criticality and vulnerability

However, in the SMEs exporters situation, it is not a mere question of classic risks, but others as well such as customer dissatisfaction, the legal and regulatory environment, cultural constraints, competition, etc. This development is part of the globalization of trade, through which SMEs are now attached to a new unstable and uncertain environment.

Most research in the field has identified several risks related to companies of international distribution, especially, SMEs. Numerous studies have identified the risk factors linked to the external environment. Other works highlight the risk to be related to the lack of knowledge, information and the possibility for the company to identify the markets to target for export.

As mentioned in previous works, the risks facing SMEs exporters can be traced to their origin (Arteaga-Ortiz and Fernandez-Ortiz, 2008; Maders HP. and Masselin JL., 2009; Figueira-de-Lemos and *al.*, 2011; Rodriguez and *al.*, 2010).

Failure to identify and resolve them could compromise the achievement of expected results through export activities; these obstacles can be seen, according to Labiad N. and Bensaid M. (2017), as many risk factors for exporting SMEs.

1.1. Risks factors in SMEs exporters.

The risk factors of SMEs exporters are to be found in several studies. These risks are cultural, financial, political, regulatory and related to foreign competition.

Socio-cultural risks vary according to their locations. Consequently, the risk is more or less critical depending on the company's origin. These socio-cultural risks emerge because of the difficulty for companies to easily familiarize themselves with the business practices of foreign countries (Khattak and *al.*, 2011).

Cultural and linguistic differences need to be considered separately because the linguistic close relation to certain markets is not always matched by cultural proximity. This gap could be very crucial, especially concerning corporate culture (Arteaga-Ortiz and Fernández-Ortiz, 2008). These differences can lead to a misunderstanding during transactions, leading to a lack of efficiency and compromise of benefits caused by possible misunderstandings (Prime and Usunieb, 1994).

The cultural similarities of markets reduce the percentage of failure and provide more incentive for companies with limited ability to penetrate foreign markets to start trading. Indeed, similarities are easier to manage for companies than dissimilarities (Sousa and *al.*, 2008). Moreover, cultural dissimilarity sometimes makes it difficult to obtain and interpret information on the foreign market (Sousa and *al.*, 2008).

Taking the financial approach, for example, the external factor relating to the exchange rate in foreign markets increase prices and limit the competitive advantage of the exporting company. Companies therefore often come up against new types of risks that generate significant costs that can negatively affect the company's export performance (Dornbusch and *al.*, 1998). It is essentially linked to the changing value or the different equivalences between the invoice date and the effective payment date. This risk arises when invoicing in a currency other than its national currency and when there is an appreciation of the currency compared to the invoicing currency between the invoice date and the payment date. (Prime and Usunieb, 2004 and Hollensen, 2007). The business may therefore suffer monetary losses caused by the fact that the sums of money are converted at an unfavourable exchange rate. Consequently, the currency changing value is a risk constraining the competitive advantage of the exporting company and negatively affecting the performance of the company.

Likewise, the government of the host country may impose laws or restrictions such as currency controls, which could have a significant impact on decisions related to investment, financing or repatriation (Sousa and *al.*, 2008). Government interventions can significantly affect export performance. It is consequently a political risk which, according to Jean-Claude USUNIER (1987, p. 55), "resides both in the actions of the government of a host country, likely to be unfavourable to foreign companies. established in the country or trading with it, and in the environmental factors that generate these actions (riots, a sudden change in the political regime. "Thus, the instability of the legal and political environment of the host countries are among the exogenous risk factors SMEs exporters usually face.

The competitive approach regards fierce competition as a risk facing companies and their export strategies. In a study on Pakistani SMEs, khattak and *al.* (2011) confirm this observation by showing that these companies are faced with stiff competition from other foreign companies with more advantageous prices. . Zou and Stan (1998) and Sousa and *al.* (2008) agree, they find that the lack of

competition is an opportunity and therefore has a positive link with export performance. A market with fewer competitors can be regarded as an opportunity for the company because the market is not yet saturated.

In all information about the international activities of SMEs, it is recognized that international business opportunities remain riskier than those presented in the domestic market given the risk factors faced by SMEs exporters.

As a result, these companies are aware of the uncertainties related to international engagement. The risk is often irreparable and requires great caution; these risks are generally linked to the lack of knowledge on the international market (Labiad N. and Bensaid M., 2017). These are the knowledge specific to foreign markets and the general knowledge that a business must have to be successful in foreign markets (Johanson and Vahlne, 1977),

Lack of knowledge is the source of several difficulties that SMEs exporters face. It is a major obstacle to enter a foreign market (Suarez-Ortega, 2003). It presents difficulties for companies to identify opportunities in foreign markets, to understand foreign business practices (Dusoye and *al.*, (2013) and to identify suitable foreign distributors (Bilkey and Tesar, 1977).

Gathering this knowledge is above all a human process feeding on basic information which is assembled, transformed and synthesized to derive some knowledge useful for action. (Philippe Paquet, 2006). Skills and information are therefore the background knowledge of the foreign market.

SMEs often struggle to find the right information to function well in markets that are often very different from the national market (Julien and *al.* (1998); this information covers everything that is directly or indirectly related to the activity of export, namely, logistics, competition, distribution, regulations, etc.

The lack of information to penetrate foreign markets is one of the limitations of export. (Amesse and Zaccour, 1991; Joyal, 1996). Access to this information is equally important for both new and experienced exporters. To be successful in a foreign market, SMEs must get familiar with all the cultural, legal, social, political and economic aspects of the host country.

To sum up, the risk analysis for international SMEs exporters has allowed us to find risk factors related to environmental sectors. Besides, in all the published work, authors generally subdivide the environment into two major dimensions: the macro-environment and the micro-environment (Bourgeois, 1980). The macro-environment often includes political, economic, socio-cultural and demographic factors, while the microenvironment is generally made up of customers, competitors and suppliers. Given this division and fear of being overwhelmed with risks that are difficult to identify, we categorize the risks arising from our analysis of the market (customers, competitors, suppliers) as "micro-environmental risks". The table above summarizes these analyses.

Table 1: Categorization of risks for international SMEs exporters

Authors	Risk origins	Risk categories
Bilkey and Tesar (1977)	- Non-compliance with standards relating to products, consumption and custom differences	Cultural risk
- Amesse and Zaccour (1991) ; Joyal (1996)	- Lack of information on cultural and social aspects.	

Sousa and <i>al.</i> (2008)	- Cultural dissimilarity limits the possibility to acquire and interpret information on the foreign market.	
Prime and Usunieb (1994)	- Misunderstanding during transactions.	
Khattak and <i>al.</i> (2011)	- Socio-cultural restrictions limiting familiarization with the commercial practices of foreign countries.	
Amesse and Zaccour (1991) ; Joyal (1996) ; Julien and <i>al.</i> (1998)	- Lack of information on legal and political aspects.	Legal-political risk
Amesse and Zaccour (1991) ; Joyal (1996)	- Lack of information on the economic aspects of the host country.	Micro-environmental risks (customers, competitors, suppliers)
Julien and <i>al.</i> (1998)	- Lack of information on logistics, competition and distribution.	
Dusoye and <i>al.</i> (2013)	- Difficulties to identify suitable foreign distributors.	
Johanson and Valhne (1977) ; Suarez-Ortega (2003)	-. Lack of specific knowledge of foreign markets	
Prime and Usunieb (2004) ; Hollensen (2007)	- The uncertainty of equivalence between the invoice date and the actual payment date.	Financial risk

1.2. Classification of risks in SMEs exporters.

When SMEs exporters opened up to trade in foreign markets, some classifications were already established to identify potential sources of risks. The same classifications allowed to identify the different level of risk, namely those related to the overall environment (political, governmental, macroeconomic, social and natural risks), to the sector of activity (market, product, competition, technology) and to the business itself (risks related to operations, liability, research and development, credit, individual behaviour). These classifications make it possible to identify the main dimensions of risk faced by companies operating internationally.

During the last two decades (period 2001-2017), however, more risks have been identified by several empirical works during the internationalisation of some SMEs in different contexts. This time interval retained is due to a period during which said studies focused on contemporary risks in export. The table below illustrates the empirical work selected, the study contexts and the methodologies used.

Table 2: The main empirical studies on the risks in SMEs exporters.

Authors	Context	Unit	Methodology
Laghzaoui and Sliman (2017)	Morocco	Exporters	- 64 SMEs / quantitative approach
Nacera Arrouche (2017)	Algeria	Exporters	- 60 PME / quantitative approach
Josée St-Pierre and al. (2017)	Madagascar	Exporters	- 5 case studies - qualitative approach
Noémie Dominguez (2016)	France	Exporters	-5 case studies / qualitative approach
Maarouf Ramadan and Nadine (2011)	Libanon	Exporters	- 115 E/ses/ quantitative approach
Le and Luong (2009)	Vietnam	Exporters	- 80 E/ses/ quantitative approach
Simin Lin (2009)	China	Exporters	- Les PME de Zhejiang
Runtihinda C. (2008)	Canada	Exporters	- 62 E/ses/ quantitative approach
Ortiz and Ortiz (2008)	Spain	Exporters	-478 E/ses/quantitative approach
Abakouy Mostafa (2006)	Morocco	Exporters	-34 PME/ qualitative approach
Brahim Allali (2006)	Morocco/ Canada	Exporters	-10 PME / qualitative approach
Neupert and al. (2006)	Vietnam/ USA	Exporters	-32 E/ses /qualitative approach
Leonidou (2004)	Not defined	Exporters & non-Exporters	-32 empirical studies carried out between 1960 and 2000 / qualitative approach
Ahmed and al. (2004)	Libanon	Exporters & non-Exporters	- 61companies / Quantitative approach
Bassen, Behan and Gilbert (2001)	Germany	Exporters	-533 SMEs / quantitative approach

Based on these fifteen studies, we have fourteen recent risks, which we ranked according to their rate of recurrence. These risks are grouped into six groups belonging to the different environmental sectors. Macro environmental risks are regulatory, cultural, financial and political risks; while microenvironmental risks are generally related to customers and competition.

nonetheless, risks related to the lack of information involve the two environmental sectors because, according to Abakouy Mostafa (2006), this lack of information resources, risks of all kinds are multiplied in a diverse, open and interdependent environment. This disfunction of information on foreign markets affects other dimensions of the international development of Moroccan SMEs (Laghzaoui S. and Sliman M., 2017). The following table is a summary of the results of the most significant risks identified from previous work which is useful to proceed with an exploration of the Moroccan context.

Table 3: Risks perceived in exporting in the context of SMEs exporters.

Export risk factors	Dimensions of risk factors in SMEs exporters	Bassen, Behan and Gilbert (2001)	Ahmed and al (2004)	Leonidou L. C. (2004)	Neupert and al. (2006)	Brahim Allali (2006)	Abakouy Mostafa (2006)	Ortiz and Ortiz (2008)	Runthinda (2008)	Le and Luong (2009)	Simin Lin (2009)	Maarouf R. and Nadine (2011)	Noémie Dominguez (2016)	Josée St-Pierre and al., (2017)	Nacera Arrouche (2017)	Laghaoui and Sliman (2017)	Frequency
Lack of information	Insufficient Information to locate / analyze Markets						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
	Lack of knowledge of the environment					✓											1
Risk related to competence	Strong competition in foreign markets	✓		✓		✓		✓									4
	Difficulty reaching the prices of competitors abroad			✓					✓		✓						3
Regulatory risk	Customs obstacles to exports		✓	✓				✓		✓							4
	The bureaucratic requirement of the country of origin					✓		✓					✓				3
	Restrictive foreign regulations	✓									✓						2
	Cultural				✓			✓			✓						3

Cultural risk	differences of importing countries															
	Difficulty obtaining adequate representation abroad		✓	✓					✓	✓		✓				5
	The difference in product use by foreign customers			✓				✓				✓				3
	Language difference of importing countries						✓					✓				2
Financial risk	Risk due to exchange rates fluctuation.			✓			✓	✓								3
Political risk	Political risk			✓			✓			✓		✓				4
Client risk	Risk of losing money selling abroad				✓		✓									2

2. Empirical framework

2.1. Methodology

We conducted a qualitative study based on ten Moroccan SMEs exporting to sub-Saharan Africa as an example. Methodologically, we opted for closed coding which is encrypting the data following a closed procedure in which the analysis grid is predefined before the study by focusing on the meanings of the amount obtained and by adopting as "a unit of analysis a portion of a sentence, a whole sentence, or a group of sentences relating to the same theme" (Allard-Poesi and *al.* 2007. p. 503). The purpose of this process is to observe how the categories of themes of our analysis grid were approached by the respondents.

Then, we will proceed to the quantification of the results by calculating the frequency of the themes raised in all the statements, referring to the postulate of (Bardin L., 2013; p. 140) according to which "the importance of a recording unit increases with its frequency of occurrence". About the guidelines of

Osgood (1959), We filter these results, by analysing the relationships between the elements of speech to highlight the appearance of two or more elements in the same segment of speech (index of co-frequency, proximity index, remoteness index).

2.2. Data processing and analysis

A code is assigned to different analysis units to guarantee the anonymity of the actors interviewed. This grid was then completed in the process of handing out and analysing each interview to allow its easy legibility of the categories of themes which are illustrated by the interviews from which they arise and to carry out a horizontal analysis on themes separately. By analysing occurrences, we calculate the frequency of the themes raised in all the speeches. To this end, numbers were associated with all the themes from the ten cases to facilitate the counting. The calculations are done as follows:

- The absolute frequency: the number of times the same category (x) was mentioned by all the interviewees.
- Relative frequency: Number of times category (x) is mentioned by all interviewees / The total number of comments produced by all interviewees.
- Weight: The number of interviews where the category (x) is mentioned at least once / The total number of respondents

Table 4: Results of themes occurrence.

Theme categories	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Cumulative frequency		
											Absolute	Relative	Weight
Risks associated with lack of market information	9	5	8	6	6	7	6	5	4	3	61	44,20%	10/10= 100%
Client risk	4	3	0	2	3	4	4	2	2	1	25	18,12%	9/10= 90%
Competition risk	0	2	2	1	1	2	1	0	0	0	9	6,52%	6/10= 60%
Political risk	3	1	3	1	1	2	2	0	2	1	16	11,59%	9/10= 90%
Regulatory risk	1	2	1	0	2	1	1	1	0	1	10	7,24%	8/10= 80%
Cultural risk	2	3	2	1	0	3	3	2	0	1	17	12,32%	8/10= 80%
Financial risk	0	0	0	0	0	0	0	0	0	0	0	00%	00%

Table 4 is the basis of the summary report of the qualitative study. It studies how each category of themes, appearing in the grid, was approached by all the interviewees. It also makes it possible to identify the most frequent categories on the set of interviews.

Reading this table, we notice that the six categories of risks related to lack of information (to customers, to competition, risks of a political, regulatory and cultural nature) are mentioned by the majority of respondents; while the category related to financial risk, is omitted by respondents. However, the most redundant risks among the interviewees are respectively the risks related to the lack of information which represents 44.20% of the total evocations, followed by the risk related to the clients with 18.12% of the total perceived risks.

Based on these data, we note the absence of a compromise regarding the number of underlying risk factors and the content of each of them among the different interviewees, which could be due to the divergence of the sectors in

question. " the activity and competence of owner-managers in terms of their risk perception capacity.

However, the analysis of co-occurrences, also called contingency analysis, allowed us to refine our analysis by listing the indices of co-frequency, proximity and distance between the different risks perceived in the same segment of speech. As part of this analysis, we seek to determine the history of each risk. The table below highlights the results of the associations or dissociations of the themes with mainly the risk related to the lack of information.

Table 5: Contingency matrix

Theme categories	A	B	C	D	E	F	Number of co-occurrences	Number of respondents
Lack of information (A)		5	6	8	6	7	5	10
Client risk (B)	5						1	3
Competition risk (C)	6						1	4
Political risk (D)	8						1	7
Regulatory risk (E)	6						1	5
Cultural risk (F)	7						1	4

Based on the above matrix, all interviewees highlight five relationships between the theme categories. The two perceived risks, related to customers and competitors by the interviewees are all associated with the category of the theme of lack of information. The same contingency relationship with the lack of information is highlighted, by all of the interviewees, for macro-environmental risks (political, regulatory and cultural risks, risks related to customers and competition).

2.3. Results and discussions

The various results obtained from our qualitative data processing, highlight the risks perceived by Moroccan SMEs exporters to sub-Saharan African markets.

Based on the interviews conducted, we can deduct that for SMEs, the risks on the African market are obvious and that at least five risks are perceived by all the interviewees. These remarks are highlighted by the announcement of a leading owner of P1 who says "there are a lot of risks, (...) but the African market is a bit blatant". These risks, to which are added the lack of experience and availability, cause the failure of a rate of 70% of exporting companies in their international engagement and the abandonment of a good part of them. export activity (Lemaistre and *al.*, 2013). These are risks associated with several environmental sectors, such as the political, regulatory, competitive, cultural and customer credit environment.

But the only risk ignored by the respondents is that of a financial nature since it is manageable through the use of financing techniques developed by financial institutions. This is illustrated by the proposals of (P6) which states that "For financial risk and currency risk, it remains manageable. But, the risk that cannot be managed is that of collection and solvency risk "

The risks recognised by the SMEs in our sample are of different magnitude. According to all interviewees, lack of information stays as the main one. This is owed to the non-accessibility to information sources by companies that already have access to the market. These companies engaged in Africa are reluctant to

provide information, they protect even the information of other SMEs considered as competitors”(P6)

The same situation applies to companies operating in the agricultural sector. They confirm that the absence of government aid for exports in terms of information challenge any access, by resorting to anticipatory information "the chambers of commerce do not have its department dedicated to making the information they need from the foreign market available to SMEs. »(P6).

The perception of these risks leads the interviewees to seek information by targeting the sources of change. This observation is mentioned by PMI1 which states that "through the information that we collect or that we collect directly in the field, we always make our action plan".

All risks are associated with the lack of information on the environmental sectors which are considered to be the source of risks. "The risks that we face in black African markets are difficult to manage if we do not manage to have information about the client, the change in policy or laws and our competitors, etc. "(P4).

This lack of information generates uncertainty in decision-making "we sometimes find ourselves in a deadlock because we are not sure of the success of the operation, this uncertainty blocks us and we feel at risk" (P3). Uncertainty is also a risk situation in which we do not know and we cannot reasonably estimate the probabilities of the course of events, results and consequences (Ménard, 1993).

The notion of uncertainty is linked to the lack of environmental information making it difficult to predict the impact a decision can have on the organization. Obtaining information is one of the main means available to companies to reduce uncertainty (Julien et al., 1998). Obtaining information resources consequently enables the exporter to reduce the risk that deters any decision-making. Uncertainty, therefore, constitutes a restriction for the company because information intervenes in the process of formulating the strategy and its implementation (Aliouat.B, 1996).

Managers adopt an informational tool which consists in monitoring the sources of change to collect anticipatory information that can help them make their environment intelligible, "we seek information and we anticipate, through the information that" we harvest "(P2); this is mentioned by Pateyron E. (1998) who states that information is useful for reducing uncertainty in decision-making, it helps to reduce the ambiguity that surrounds the decision-making process. The reduction of ambiguity resulting from uncertainty is an opportunity to create meaning.

Conclusion

A multitude of risks jeopardises the success of Moroccan SMEs exporters in the markets of sub-Saharan Africa where the strategic skills are not the same as in Morocco.

In this new environment, SMEs exporters will now be faced with macro and micro environmental risks, namely, political, regulatory, cultural risks, risks related to competition and the solvency of customers.

However, the main redundant risk for Moroccan SMEs is related to the lack of information to locate and analyze the markets as a whole: political, regulatory, competitive, cultural and customer creditworthiness levels.

to protect against these risks is not efficient without being able, at first glance, to detect them by developing vigilance in the face of any change, regardless of political, economic, competitive, technological and many others. Therefore, it is useful to set up a monitoring unit for SMEs exporters whose purposes can be summed up in the detection of risks through its teaching mechanism.

Depending on the source of the risk, the detection modes (legal, competitor and customer watch) certainly make it possible to minimize international risks. However, its generalization is not fully reliable, given that SMEs are heterogeneous in terms of resources and skills. This prompts us to talk about various categories of heterogeneous SMEs even with the ultimate faces of their internationalization, global SMEs, professional SMEs, opportunistic SMEs, etc.

bibliography

ABAKHOY Mustapha (2006). « Performance à l'international des PME marocaines ». Dans *L'internationalisation des PME et ses conséquences sur les stratégies entrepreneuriales*. 8^{ème} congrès international francophone en Entrepreneuriat et PME. Haute école de gestion (HEG) Fribourg, Suisse, 25, 26, 27 octobre 2006.

Références

- [1] Ahmed Z., Julian C., Baalbaki I. and Hadidian T.V. (2004). « Exports barriers and firm internationalization: A study of Lebanese entrepreneurs », *Journal of Management and World Business Research*, Vol.1, N°1, pp.11-22.
- [2] Aliouat B. (1996). *Les stratégies de coopération technologiques*. Economica.
- [3] Allali B. (2006). « Vision et turbulence dans les PME qui s'internationalisent », *L'internationalisation des PME et ses conséquences sur les stratégies entrepreneuriales*. 8^{ème} congrès international francophone en Entrepreneuriat et PME. Haute école de gestion (HEG) Fribourg, Suisse, 25, 26, 27 octobre 2006.
- [4] ALLARD-POESI F. et MARECHAL C. (2007). *Construction de l'objet de la recherche*, In Thiétart R A., (Dir.), *Méthodes de recherche en management*, 3^{ème} édition, Dunod.
- [5] Amesse F. et Zaccour G. (1991). « Les différences de perception et d'attitudes entre les gestionnaires de firmes exportatrices et non exportatrices au Québec », *Revue Canadienne des Sciences Administratives*, Vol.8, N°3, pp.148-160.
- [6] ARROUCHE N. (2017). « Export Barriers: An Analysis of the Situation of Algerian Non-Hydrocarbon Companies », *El-Bahith Review*, décembre, pp. 183-195.
- [7] Arteaga-Ortiz J. et Fernández-Ortiz R. (2008). « Des obstacles à l'exportation chez les petites et moyennes entreprises : une proposition intégrative », *Revue internationale P.M.E. : économie et gestion de la petite et moyenne entreprise*, vol. 21, N° 2, pp. 9-42.
- [8] Arteaga-Ortiz Jesús et Fernández-Ortiz Rubén (2008), « Des obstacles à l'exportation chez les petites et moyennes entreprises : une proposition intégrative », *Revue internationale P.M.E. : économie et gestion de la petite et moyenne entreprise*, vol. 21, n° 2, pp. 9-42.
- [9] Bardin L. (2013). *L'analyse de contenu*, éd. Presses Universitaires de France, Paris.
- [10] BASSEN A., BEHNAM et GILBERT (2001). « Internationalisierung des Mittelstands. Ergebnisse einer empirischen Studie zum Internationalisierungsverhalten deutscher mittelständischer Unternehmen », *Zeitschrift für Betriebswirtschaft*, Vol 71, N°4/2001, Wiesbaden.

- [11] Bourgeois L. J. (1980), « Performance and consensus », *Strategic Management*, Volume 1, Issue 3 July/September, pp. 227-248
- [12] Dominguez N. (2016). « Les stratégies tête-de-pont : un outil efficace de gestion des risques et d'accélération du développement international des PME ? », *Revue internationale P.M.E.*, 29(3-4), pp.109-134.
- [13] Dominguez, N. (2016), « Les stratégies tête-de-pont : un outil efficace de gestion des risques et d'accélération du développement international des PME ? », *Revue internationale P.M.E.*, 29(3-4), pp.109-134.
- [14] Dornbusch R., Fischer S. et Kearney C. (1998). *Macroeconomics*, 2nd edition, Australia: McGraw- Hill.
- [15] Dusoye Indra, Mahadeo Jyoti Devi ,Aujayeb-Rogbeer Ashita (2013), « Small firm internationalisation and export barriers; the case of Mauritius », pp. 1-29.
- [16] Figueira-de-Lemos F., Johanson J. and Vahlne J-E. (2011). « Risk management in the internationalization process of the firm: A note on the uppsala model », *Journal of World Business*, 46(2), pp.143-153.
- [17] Hassid O. (2008). *La gestion des risques*, Ed. Dunod, 2^{ème} édition, Paris.
- [18] Hollensen, S. (2007). *Global Marketing: A Decision-oriented Approach*, 4^è ed, Harlow, Pearson Educational Limited.
- [19] Johanson J. and Vahlne J.E. (1977). « The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments », *Journal of International Business studies*, vol. 8, pp. 23-39.
- [20] Joyal, A. (1996). *Des PME et le défi de l'exportation*, Presses Inter Universitaires, Québec.
- [21] Julien, PA., Toulouse, J.M., Ramangalahy, C. et Morin, M. (1998). « Comportements d'information, compétitivité et performance des PME exportatrices », 4^è Congrès international francophone de la PME. Metz, octobre.
- [22] Khattak JK., Arslan M and Umair M. (2011). « SMEs'Export Problems in Pakistan », *E3 Journal of Business Manage Economics*, V 2(5), pp. 192-199.
- [23] Khattak JK., Arslan M. and Umair M. (2011). « SMEs'Export Problems in Pakistan », *E3 Journal of Business Manage Economics*, V 2(5), pp. 192-199.
- [24] Khattak JK., Arslan M. and Umair M. (2011). « SMEs'Export Problems in Pakistan », *E3 Journal of Business Manage Economics*, V 2(5), pp. 192-199.
- [25] Knight F.-H. (1921). *Risk, Uncertainty and Profit*, The University of Chicago Press, Chicago.
- [26] LABIAD N. et BENSAD M. (2017). « Internationalisation des entreprises : L'apprentissage organisationnel dans le modèle Uppsala », Conférence Internationale en Economie-Gestion & Commerce International (EGCI-2017), *International Journal of Economics & Strategic Management of Business Process-ESMB* vol.9 pp.150-162
- [27] Laghzaoui S. et Sliman M. (2017). « Quelles pratiques d'intelligence économique par les PME exportatrices ? », *International Business Research*, Paris, mai, pp.1-22.
- [28] Le Q. et Luong M. (2009). « Barrières et stimuli à l'exportation perçus par les entrepreneurs d'un pays en transition : le cas des PME du Vietnam ». *Dans La vulnérabilité des TPE et des PME dans un environnement mondialisé*. 11^{ème} Journée scientifique du Réseau Entrepreneuriat 2009. Trois-Rivières, Québec, Canada, pp. 27-29, mai.
- [29] Lemaistre M., Chevillard F. et Vauchez E. (2013). Échec et constance à l'exportation. Saisie 2 juillet.
- [30] Leonidou, L. C. (2004). « An analysis of the barriers hindering small business export development », *Journal of Small Business Management*, 42(3), pp. 279-302.
- [31] Maders H-P. et Masselin J-L. (2009). *Piloter les risques d'un projet*, Editions des Organisation, Paris.

- [32] Ménard L. et Howe R. (1993), *Croyances et pratiques en évaluation des apprentissages*, recherche PAREA, Laval, Collège Montmorency.
- [33] Neupert, K., Baughn, C. and Thanh Lam Dao, T. (2006). « SME exporting challenges in transitional and developed economies », *Journal of Small Business and Enterprise Development*, vol.13, N°4, pp. 535-545.
- [34] Osgood, C. E. (1959). « Representational model and relevant research methods », In I. Pool (Ed.), *Trends in content analysis* (pp. 33-38). Urbana, IL: Illinois Press.
- [35] Paquet P. (2006). « De l'information à la connaissance », *Cahier de recherche*, Numéro 2006/1, pp. 1-24.
- [36] Pateyron E. (1998). *La Veille stratégique*, Economica, p.208.
- [37] Prime, N. et Unisieb, IC. (1994). *Marketing International : Développement des marchés et management multiculturel*, Vuibert, 2è éd, Paris.
- [38] Rodriguez V., Barcos L., and Alvarez M.J. (2010). « Managing risk and knowledge in the internationalisation process », *Intangible Capital*, 6(2), pp.202-235.
- [39] Runtihinda C. (2008). « Export barriers and performance of small and medium size enterprises », *Journal of International Business Research*, vol. 7, N°2, pp. 57-63.
- [40] Simin L. (2009). « Les caractéristiques et les contraintes des PME chinoises dans le processus d'internationalisation : cas de la province du Zhejiang », 5ème Colloque de l'IFBAE (Institut Franco-Brésilien d'Administration des Entreprises), France.
- [41] Sousa C.M.P., Martinez-Lopez FJ. and Coelho F. (2008). « The determinants of export performance: A review of the research in the literature between 1998 and 2005 », *International Journal of Management Reviews*, Vol. 10, N°4, pp.343-374.
- [42] Suarez-Ortega S. (2003). « Export Barriers: Insights from small and medium-sized firms », *International Small Business Journal*, 21(4), pp. 403-419.
- [43] USUNIER J-C. (1987). *Environnement international et gestion de l'exportation*, Puf, Paris.
- [44] Zou S. and Stan S. (1998). « The determinants of export performance: a review of the empirical between 1987 and 1997 », *International Marketing Review*, vol. 15, N° 5, pp. 333-356. Alhayani B., H. Ilhan.(2020). "Image transmission over decode and forward based cooperative wireless multimedia sensor networks for Rayleigh fading channels in medical internet of things (MIoT) for remote health-care and health communication monitoring," *Journal of Medical Imaging And Health Informatics*, vol. 10, pp. 160-168.
- [45] Alhayani B.,H.Ilhan. (2020). Efficient cooperative image transmission in one-Way mult-hop sensor network," *International Journal of Electrical Engineering Education*, vol.57, no.2, pp.321-339.
- [46] Alhayani, B. and Abdallah, A.A. (2020), "Manufacturing intelligent Corvus corone module for a secured two way image transmission under WSN", *Engineering Computations*, Vol. 37 No. 9, pp. 1-17. <https://doi.org/10.1108/EC-02-2020-0107>.
- [47] B. Alhayani, H. Ilhan, (2017). "**Hyper spectral image classification using dimensionality reduction techniques**", *International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering*, vol.5, pp.71-74.
- [48] B. Alhayani, Milind Rane. (2014). "face recognition system by image processing" *International journal of electronics and communication engineering & technology (IJCET)*, vol.5, no.5, pp. 80-90.
- [49] B. Al-Hayani, H. Ilhan. (2020)"Visual Sensor Intelligent Module Based Image Transmission in Industrial Manufacturing for Monitoring and Manipulation problems," *Journal of Intelligent Manufacturing*, vol.4,pp.1-14.

- [50] Khalaf, O. I., & Abdulsahib, G. M. (2019). Frequency estimation by the method of minimum mean squared error and P-value distributed in the wireless sensor network . *Journal of Information Science and Engineering* , 35(5), 1099-1112.
- [51] Khalaf, O.I., Abdulsahib, G.M., Kasmaei, H.D., Ogudo, K.A. (2020).A new algorithm on application of blockchain technology in live stream video transmissions and telecommunications. *International Journal of e-Collaboration*,16(1).
- [52] Khalaf, O. I., Abdulsahib, G. M., & Sabbar, B. M. (2020). Optimization of Wireless Sensor Network Coverage using the Bee Algorithm. *J. Inf. Sci. Eng.*, 36(2), 377-386
- [53] Khalaf, O. I., & Sabbar, B. M. (2019). An overview on wireless sensor networks and finding optimal location of nodes. *Periodicals of Engineering and Natural Sciences*, 7(3), 1096-1101