



## Supply Chain Finance Risks Impact on SMEs Performance: The Case of Moroccan Companies

Fadila ELBICHRI

IBN ZOHR UNIVERSITY, National School of Business and Management, Laboratoire MADIALOG, Agadir, Morocco

**ABSTRACT:** Based on extant literature, there is lack of empirical research targeting the influence of supply chain finance risks on companies' performance in general [6] and to our knowledge research on such topic in the context of developing countries is scarce. Consequently, this paper seeks to investigate the impact of supply chain finance risks on Moroccan companies' logistics and economic performance. Semi structured interviews with executives of Moroccan companies would be carried out to examine their awareness of supply chain finance risks and how they address such issues.

Accordingly, the research originality lies in the fact that we contribute to extant literature on supply chain risk management and supply chain finance risk mitigation which would offer new insights to theory. Concerning managerial implications, our prospective results would be helpful to companies in Morocco and elsewhere in order to understand and address the issues related to supply chain finance risks and how the latter impact their organizational and economic performance. Furthermore, by investigating Moroccan companies in the context of a developing country we provide a new perspective since most of the studies on supply chain finance focused on developed and emergent economies.

**KEY WORDS:** Moroccan companies, Supply chain finance, Supply chain risk management, SMEs performance.

### 1. INTRODUCTION

Supply chain risk management has generated an abundant literature about different types of risks that cause disruptions in supply chains [24] [21]. There are multiple classifications of supply chain risks according to the perspective of scholars (internal or external, institutional, environmental, political, and process-based risks, etc). Notwithstanding, most research models focused on mitigating risks related to supply chains, and the specific examination of supply chain finance risks impacts was often overlooked in extant literature. Supply Chain Finance is an innovative form of short-term credit aiming to serve a dyadic relationship in a supply chain (buyer-supplier) by including a third party. The aim is to facilitate the supply chain's functioning [25]. Supply chain finance risks are often related to the risks of bankruptcy of partners in the supply chain such as customers and suppliers [15] [22] [16].

Based on extant literature, there is lack of empirical research targeting the influence of supply chain finance risks on companies' performance in general [6] and to our knowledge research on such topic in the context of developing countries is scarce. Consequently, this paper seeks to investigate the impact of supply chain finance risks on Moroccan companies' logistics and economic performance. Semi structured interviews with executives of Moroccan companies would be addressed to examine their awareness of supply chain finance solutions and risks.

Accordingly, through this research we contribute to extant literature on supply chain finance and supply chain finance risk mitigation. Concerning managerial implications, our prospective results would be helpful to companies in Morocco and elsewhere in order to understand and address the issues related to supply chain finance risks and how the latter impact their performance. Furthermore, by investigating Moroccan companies in the context of a developing country we provide a new perspective since most of the studies on supply chain finance focused on developed and emergent economies.

Further statistical support would be needed to justify wider generalization of its findings as a future research opportunity. Studies might therefore do well to investigate supply chain finance risks in other countries to increase the external validity of the results.

### 2. SUPPLY CHAIN FINANCE: A LITERATURE FRAMEWORK

#### 2.1. Financial flows in Supply Chain

SCF concept evolution cannot be disassociated from supply chain management discipline [13] [3]. SCM is "an interdisciplinary management concept which is based on the idea of holistic optimization of various flows constituting a supply chain" [3]. In extant



SCM literature many types and levels of flows have been identified, however the concept of “Financial Supply Chain” remains ambiguous according to several scholars [3] [16]. Financial supply chain relates to managing the financial flows generated by logistics and finance processes [10] [14]. Furthermore, financial flows management seems to be a recent trend among some researches in SCM [14] [10] and initially Stemmler and Seuring (2003) were the first authors to use extensively the “Supply Chain Finance” concept by analyzing the optimization of financial flows resulting from logistics operations [13].

## 2.2. The concept of supply chain finance

A particular consideration must be assigned to the definition of SCF. As Templar et al (2012) state: “Defining the true nature of SCF in itself appears to be difficult: model, discipline, technique, product or program?” SCF can be considered as the interaction between finance and logistics that emerged recently among scholars [8]. Several definitions are proposed in the literature, notwithstanding researchers conceptualized SCF according to two main orientations. The first category is financial focused, represented by the definition of [3] which considers SCF as “*the set of products and services that a financial institution offers to facilitate the management of the physical and information flows of a supply chain*”. Beyond his definition of SCF, the author distinguished between this latter and the financial supply chain for which the objective is to define the liquidity value of the accounts and working capital of the company through a set of processes and information. In the same vein, [4], consider the SCF “*as an innovative financial solution that bridges the bank and capital-constrained firms in the supply chain, reduces the mismatch risk of supply and demand in the financial flow, and creates value for supply chain with capital constraints*”. Hence, the combination of information flows and material flows offers lenders the opportunity to reduce the financial risk within the supply chain, and then “reduce the credit risk of the financing service” [4].

The second approach to SCF is focused more on the supply chain operations. As an example of that approach, Gross-Ruyken et al., (2011) defined SCF as “*an integrated approach that provides visibility and control overall cash-related processes within a supply chain*”. Another example is [7] who considers the SCF as “*the processes of optimizing the financial structure and the cash-flow within the supply chain*”.

Concerning the relations between partners, literature has highlighted the presence of several actors in the SCF. Accordingly, [9] distinguished between two categories of actors: (i) Macro-institutional and (ii) Micro-institutional. The first category concerns the partners in a supply chain: vendors, manufacturer, logistics services providers, retailers, etc. In addition, investors, either public or private belong to the macro-institutions. The second category is related to the micro-institutional actors encompassing all the departments of the company (purchasing, production, distribution and logistics units).

Based on these contributions, we can say that supply chain finance was conceptualized in literature as an innovative form of short-term credit aiming to improve a buyer-supplier relationship to avoid the resilience of the supply chain [26]. Hence, supply chain finance risks are often associated with the bankruptcy risks of principal partners in the supply chain [22] [16], foreign exchange, cost fluctuation, and conflict of interest between buyers and suppliers.

If at the conceptual level, the link between SCF risks and SMEs performance seems probable, at the empirical level, most of the research models focused on mitigation of risks related to supply chains and the specific examination of supply chain finance risks impacts were often overlooked in extant literature [16].

The performance of a company is based mainly on two aspects. It comprises the operational and financial performance, respectively [11]. The financial elements refer to costs, yield, and ROI [17]. The operational function encompasses elements specific and internal to the company, such as product quality, responsiveness, customer satisfaction, efficiency, and productivity.

Thus, these elements directly affect the competitiveness of the company. We will link these two concepts mainly mentioned through our exploratory study and the results obtained from the interview analysis. Therefore, risks must be managed and limited for each performance element to be beneficial and respected. In other words, the latter can affect the proper functioning of the company in general and the functioning of the Supply Chain [2].

## 234. Research questions

Based on extant literature, there is lack of empirical research targeting the influence of supply chain finance risks on companies’ performance in general [6]. Furthermore, to our knowledge research on such topic in the context of developing countries is scarce. Therefore, literature offers a limited perspective on the adoption of SCF by companies including developed countries. Our purpose



is to find out how SCF risks might influence the SMEs’ performance and what motivates companies to initiate such practices. Our paper is an endeavor to fill literature gaps, namely by targeting:

- (1) **SCF in a developing country;**
- (2) **The risks related to SCF initiatives; and**
- (3) **The impact of SCF risks on SMEs performance.**

Our main research questions can be formulated as following:

*RQ1. How do companies implement SCF in the context of a developing country?*

*RQ2. How can SCF risks impact SMEs performance?*

We considered Morocco as a suitable field research due to its effort to modernize infrastructure and financial sector. Morocco’s geographical position and political stability has attracted many investors recently including European and multinational firms. Moreover, SMEs represent the fundamental economic base of Morocco with a very high percentage (more than 90%). In addition, Morocco contributes to the global economy by being a critical exporter (87% of GDP).

**3. METHODOLOGY**

To answer our research questions, we adopted a qualitative approach based on case study analysis for several reasons. Based on the five steps proposed by Stuart et al. (2002), a summary of the empirical work is provided in Table 1.

**Table 1.** Case study method

Stage 1	Stage 2	Stage 3	Stage 4
<b>Research questions</b>	<b>Instrument development</b>	<b>Data gathering</b>	<b>Data analysis</b>
<b>RQ1. How do companies implement SCF in the context of a developing country?</b> <b>RQ2. How can SCF risks impact SMEs performance?</b>	Case study of Moroccan companies	Semi-structured interviews, company reports, and websites	Crosscase Analysis

The case study analysis comprised the following four steps: (1) case study selection and classification, (2) interview protocol, (3) data collection, and (4) analysis and interpretation.

**3.1. Case study selection**

A sample of 25 companies was selected at first as the output of this phase. As suggested by [5], in order to make the information meaningful, we need to select the respondents based on the knowledge we expect to achieve on the basis of the limited samples collected.

Those companies were then approached by phone and email to confirm their availability to be part of the study.

**3.2. Interview protocol**

The interviews were executed employing a semi-structured approach forming open questions about:

- (1) **General company information,**
- (2) **SCF implementation**
- (3) **SCF risks**
- (4) **SCF risks and SMEs’ performance**

**3.3. Data collection**

Interviews were conducted from May 2022 to August 2022. Most of the respondents were interviewed in face-to-face meetings. We recorded and transcribed the interviews that lasted 50 minutes according to the steps proposed in the literature on semi-structured



interviews. The anonymity of the companies was maintained. The choice of the number of respondents was based on the principle of saturation proposed. Hence, the interviews were stopped when no new information was provided. Too few cases could result in overly subjective results, and too many cases might produce excessively dispersed results [12]. Details of the respondents are presented in Table 2.

**Table 2.** Characteristics of case companies

Company	Year of foundation	Activity	Size*	Interviewee
A	2009	Retailer	SME	CEO
B	2003	Industry	SME	CEO
C	2010	Industry	SME	CEO
D	2004	Hardware	SME	Financial manager
E	2006	Agri-food	SME	CEO
F	1988	Maritime	SME	CFO
G	2009	Agri-food	SME	CEO
H	2005	Fordwarer	SME	CEO
I	2011	Fordwarer	SME	CEO
J	2008	Industry	SME	CEO

\*Company size is estimated by turnover and number of employees

#### 4. PRELIMINARY RESULTS

##### a. *Risks related to Supply Chain*

Risk management is one of the major concerns for Moroccan companies; those affected by these risks suffer from significant financial deterioration. However, managers are required to control effectively to limit or minimize them. All interviewees are aware of the risks in a Supply Chain.

Interviewees A, B, and E distinguished between two categories of risks. The first one is related to suppliers. Therefore, in case of non-compliance with the commitments, suppliers can negatively impact the entire supply chain. The bankruptcy of one of the suppliers can also significantly impact the supply chain. The second risk we can identify is related to customers; therefore, we must know their financial situation, identify creditworthy customers and negotiate payment terms not to degrade the cash flow.

The supplier plays a vital role in the supply chain. However, the bankruptcy of one of the suppliers threatens the company's activity. Furthermore, other risks related to the supply chain have been explicitly mentioned: poor information flow, insufficient storage space within the company, or intense competition in the market.

Nevertheless, there is no longer a commercial relationship between the supplier and the customer; it has become a partnership where the supplier accompanies the company.

##### b. *SCF in the context of Moroccan companies*

Following these interviews, we noticed that this concept seemed new to them, but they are aware of some solutions. Factoring is the most common; this kind of tool is granted according to the company's reputation. Its cost is prohibitive (commissions and interests), but it could relieve the cash flow. Factoring is, above all, to insure against the insured risk. The most considerable risk the company can run is the loss of the customer.

Three of these companies have already practiced factoring. These solutions can be helpful for companies as they relieve their cash, solve the problem of cash and solvency, late payment, nonpayment, have a guarantee of payment, relieve the company's financial situation, and limit the risk of bankruptcy. Other solutions cited during the interviews are deposit, customer insurance, documentary credit for export and import operations, and cash facility.

##### c. *Impact of SCF risks on SMEs performance*

Firm performance is about ensuring customers' satisfaction by delivering the right products and corresponding to their expectations at the right time by consuming fewer resources. Interviewees A and B specify that the two keys to consider when talking about



SMEs' performance are the time required to obtain the product for the customer, the elimination of all forms of waste, and optimizing costs. Therefore, we must keep track of stocks to avoid breaks and the expiry of the goods.

Interviewee C emphasized the importance of the staff in the operation of the chain by giving the example of indifferent employees who do not circulate the information correctly because, nowadays, even the flow of information can cost money to the company. This situation can lead to dissatisfaction, then the loss of the client. In addition, we can also mention the risk of bankruptcy of one of the actors in the chain (suppliers), which will directly affect the company. As a result, production will stop. Therefore, the company will have to look for a new supplier that will make them pay without delay. From another point of view, the delivered goods may not meet the company's or customers' expectations, so logistics performance is characterized by the reliability of supply, deliveries without litigation, and delivery to customers on time.

#### d. Motivations to SCF use

All interviewees tend to use SCF solutions to solve the problem of solvency, late payment, and non-payment and have a guarantee of payment. These products can allow companies to relieve their financial situation and limit the risk of bankruptcy. Therefore, it is an opportunity for companies to sell their products without worrying. However, they aim to use these solutions to avoid the cessation of payments and the deficit or excess of cash.

## 5. CONCLUSION

The purpose of this research is to study the impact of SCF's risks on SMEs' performance, evaluate the use of SCF solutions, and examine the knowledge of Moroccan leaders on these concepts and how they address such issues. Concerning the theoretical part, research on such topics in the context of developing countries, especially Morocco, has been proven to be rare.

In this paper, we accentuate the usefulness of SCF in previous studies. Different solutions have been identified in the literature. The difficulty in choosing the right instrument by managers is still confusing, and this was the objective of our research. Therefore, we will attempt to broaden our research and present a conceptual model that will include the different dimensions of SCF that we can test and possibly validate in future research.

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