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# Abstract

In this paper, we study the small traditional retailers that are located in the neighborhoods of big cities in emerging markets. Although modern retailing has grown in the last two decades in these markets, the number of small retailers is still increasing and serving a substantial part of the daily demand for many basic products, such as bread, milk, and cooking oil. We conduct an empirical study to understand the business environment of these small traditional retailers in emerging markets by collecting data from 333 small retailers, spread over 8 large cities in Morocco. We analyze the data and describe their business environment with a focus on the informal credits they offer to their customers. We find that smaller small retailers that are funded from personal savings and managed by the owner himself offer relatively the most credits. Our study also provides interesting insights about these small retailers that will help FMCG manufacturers that are (planning to be) active in Morocco and other emerging markets. We also discuss a number opportunities to improve the efficiency of the supply chains that serve them.

Keywords: small retailers, big cities, emerging markets, empirical study, Morocco, supply chain management

## 1. Introduction

According to the World Bank development indicators of 2012, about 80% of the world's population lives in developing countries and it is expected to grow in the coming years. Moreover, as the GDP of the developing countries continues to increase, companies are trying to develop new activities in these developing countries. However, assumptions and concepts that have served companies well in developed countries can often not be implemented in developing economies (White and Absher, 2007). Well-documented failures (for example that of PepsiCo in Venezuela and Apple in Ukraine) demonstrate that managers must build localized knowledge to perform well in these markets (Harvey and Novicevic, 2000).

One of the key challenges in developing countries is getting the goods to the final customers, the 'last-mile' problem (Nakata and Sivakumar, 1997). This problem is fundamentally different from developed countries. A main reason is the different composition of the retail sector that includes many small traditional stores, which complicate the goods distribution to the final customer (Blanco and Fransoo, 2013). Retailers form the most downstream stage in most consumer goods supply chains and they trigger the order and transportation decisions upstream in the supply chain. Therefore, the behavior of the small retailers, such as the ordering behavior, is very relevant to study and likely to determine the performance of many consumer goods supply chains as a whole.

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In the last two decades, some modern retail formats have been introduced in urban concentrations in Morocco. The first modern retailer (hypermarket) started in 1990 in Rabat and their number increased to 47 in 2011 (Amine and Lazzaoui, 2011). With a total population of about 32 million citizens in Morocco, it means that there is one modern retailer per 680,000 citizens. The limited transportation facilities and the limited purchasing power has halted or slowed down the development of modern retailers in Morocco and other developing countries (Samiee, 1993), as most customers continue purchase their daily products from the small traditional retailers.

As a result, the small traditional retailers are the dominating retail format in Morocco, like in most emerging markets (Blanco and Fransoo, 2013). Blanco and Fransoo (2013) estimate that there are about 50 million of these small traditional stores – nanostores – serving billions of customers in emerging markets. Hence, in order to reach the final customer, it is crucial to understand how the small retailers operate, which is the objective of this paper.

Traditional retail in Morocco takes mainly two forms: *souks* and the small retailers. Souks are weekly open-air markets that mostly take place in the rural areas where fresh fruits, vegetables, and animals are traded. Out of the 1151 souks in Morocco, 954 are located in rural areas and only 197 in urban areas (Kabbassi, 2007). This means that in urban areas, customers typically rely on small retailers for buying the basic products. In Morocco, there are in total about 110,000 small retailers, on average one small retailer per 291 citizens (Elgarah *et al.*, 2006; Kabbassi, 2007).

The small traditional retailers typically serve a few hundreds residents in the neighborhood where they are located. They are an important resource visited by many residents on a daily or even more frequently basis to satisfy their needs for basic products such as bread, milk, sugar, cooking oil, soap, juice, soda drinks, biscuits, etc. The small retailers retain their market share, approximately 75% in Morocco (Euromonitor, 2011), mainly due to their proximity, the limited cash and purchasing power of customers, and lack of good transportation facilities to the modern retailers (Samiee, 1993; Lenartowicz and Balasubramanian, 2009). In addition, the small traditional retailers have the ability to offer informal credits to well-known customers, which is a main reason for their popularity.

A literature review reveals that the business environment of the small retailers in developing countries has not been well studied. Despite earlier calls for more research in the area (Goldman, 1981; Samiee, 1993), sufficient empirical research is still lacking (Lenartowicz and Balasubramanian, 2009), especially from a logistics and supply chain perspective. Sim (2000) highlighted the poor performance of small retailers, but to our knowledge, no empirical study has been conducted to understand their business environment, partly because obtaining data from small retailers is a difficult and complicated task.

This paper is organized as follows. In section 2, we conduct a literature study on small retailers in developing countries. Then, in section 3, we describe our research question and methodology in more detail. In section 4, we discuss the results of our empirical study. In section 5, we draw some conclusions and discuss some insights of how to improve the supply chain efficiency.

# 2. Literature review

Several studies have focused on the analysis of the evolution of the retailing business in developing countries (e.g., Goldman, 1981; Kaynak and Cavusgil, 1982; Samiee, 1993). These papers mainly study the changes in the retailing business due to the rise and growth of the modern retail in developing countries in general or specifically in one country (e.g., Ozcan, 2000; Lo *et al.*, 2001; Lenartowicz and Balasubramanian, 2009).

Lo *et al.* (2001) discuss the development of modern retail in China and argue that their presence will create pressure on the small traditional retailers, as the latter are much less efficient. A similar study has been conducted in Brazil (Lenartowicz and Balasubramanian, 2009). These studies conclude that differences in operational capabilities of small stores in developing countries affect their ability and willingness to be influenced by the sales force.

Other studies have shown that the rise of modern retail in developing countries hardly affect the small traditional retailers. Ozcan (2000) studies the case in Turkey and finds that although the number of large modern retailers increased, the number of small retailers in Turkey is also increasing. The development of the modern retail in Turkey has been also studied by Tokatli and Boyaci (1998).

D'Andrea *et al.* (2006) study the main reasons why small traditional retailers in Latin America remain successful even after the rise of many modern retail stores. They find that although most customers individually have a weak buying power, the customers in total have a substantial buying power as a group. Amine and Lazzaoui (2011) find that modern retail has mainly been welcomed by the middle and upper class in Morocco, but much less by the lower income class.

All these studies focus mainly on the rise and growth of modern retail in developing countries and some of them discuss its impact on the small traditional retailer. Although modern retailers showed a substantial increase in developing countries, most of the customers keep visiting the small retailer (Kaynak and Cavusgil, 1982; Amine and Lazzaoui, 2011). They visit the small retailers for their proximity, to benefit from the informal credits, and depending on the financial resources, the type of product, and the emergency of needs (Goldman, 1982).

Hence, even with the rise of the modern retail, small traditional retailers remain and even grow, as they fulfill beyond their economic function other functions as well. Large segment of the population in developing countries, mostly the low and lower middle class, remain attached to the small retailer in their neighborhood, who tends to have a personalized and strong relation with their customers (Sim, 2000) and does not necessarily search for expanding his circle of customers (Kaynak and Cavusgil, 1982; Amine and Lazzaoui, 2011). The daily or even more regular visits are an important part of the daily routine of the residents in the neighborhood, which brings them in regular contact with the retailer. It is a medium for social interaction for the neighborhood (Sim, 2000). They fulfill an economic *and* a social hub in the neighborhood. They are visited for social interaction, discoveries of the newest updates of the neighborhood, and self-expression (Filser, 2001). Hence, the small retailer meets the expectations and socio-cultural demands that the modern retail does not (Lenartowicz and Balasubramanian, 2001).

Moreover, the credit facilities that the small retailers offer strengthen the competitive advantage over the modern retailers, especially for households with low or irregular income (Amine and Lazzaoui, 2011). Therefore, small retailers 'fit to the needs of poor customers very well' (D'Andrea et al., 2006).

Samiee (1993) reviews the literature on small retailers in developing countries, based on which some research propositions are developed to guide future research in the field. The study concludes that the literature is lacking an empirical study towards small retailers in developing countries, mainly due to the lack of secondary data and the difficulty of collecting accurate primary data from developing countries.

Studies that followed focused mainly on the strategic or marketing side of small retailers in developing countries (e.g., Spillan and Ziemnowicz, 2003; Kabbassi, 2007; Elgarah *et al.*, 2009; Amine and Lazzaoui, 2011). Spillan and Ziemnowicz (2003) conduct a study in Guatemala to assess the strategic decision making attitude of retail owners and managers. They find that the strategic decision making is present, but informal. Amine and Lazzaoui (2011) study the effects of the modern retail in Morocco on the evolution of the local buyers' shopping behavior. This study shows for example how some local customers use the modern retail as 'a scene of symbolic exhibition for their social status'.

Despite this substantial interest in the evolution of the retail business in developing countries, empirical studies of small retailers in developing countries is lacking, despite their importance for FMCG manufacturers to be successful in emerging markets. The objective of this paper is to fill this gap and conduct an empirical study to better understand the business environment of the small retailers, which is the first of its kind. Based on a survey, interviews, and direct observations, we collect data from small traditional retailers from 8 large cities in Morocco.

# 3. Research objectives and Methodology

We collected data from 333 small retailers located in 8 large cities in Morocco. Retailers were randomly selected across different neighborhoods with different levels of welfare. The data was collected by trained researchers visiting small retailers and filling surveys during the interview. No attempt was made to request transactional data, as it has been documented that the small retailers operate in an environment with no or poor information structure and no decision support system. The data collection took place from January 2012 till October 2012. See Figure 1 for the number of collected surveys from the 8 different cities. Several measures were taken to maximize the inter-rater reliability such as cross-training and field pilot surveys.

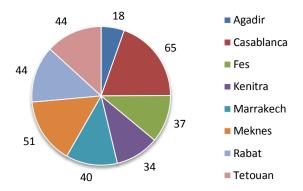


Figure 1. The number of filled surveys from 8 different cities.

The survey was designed around three topics:

1. <u>Characteristics of the business</u>

We asked question about the number of years the business is in operation, the number of owners, who runs the small retailer, the gender of the owner, the previous job, the number of operating hours per day, the number of employees, their average age, whether the real estate has been bought, inherited, or rented, the level of schooling, and whether they think that a school degree is important to run the business.

2. Financial indicators

We asked questions about the average monthly sales, the percentage of sales immediately paid in cash, the average credit period, which customer get a credit, the initial investment, the source of funding, and the selling price of a selected number of products.

3. Distribution

For a selected number of products, we asked who the supplier is, whether the manufacturer supplies directly or via a third party, how the order quantity is determined, the order frequency, how the order is sent to the supplier, how the delivery takes place, the lead time, and the payment method.

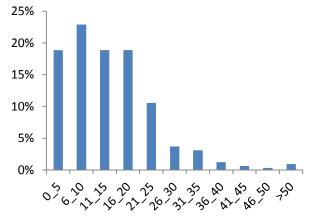
In the sections 4.1 till 4.3, we present some descriptive statistics of the data that we obtained related to the three topics mentioned above. In section 4.4., we present a regression analysis on two important financial variables: the credits offered to customers and the initial investment. The credits offered to customers are crucial to the operations of the small retailers which need to be better understood. The initial investment gives an insight of the capital structure of small retailers, which also affect their long-term financial viability.

### 4. Results and discussion

#### 4.1. Characteristics of the business

The physical configuration of the small traditional retailers is rather standard and easily recognizable in Morocco and other emerging markets. The size of the business is very limited, on average about 25  $m^2$ , which severely constraints the storage capacity and limits the product assortment. Moreover, almost all the small retailers in Morocco have a counter behind which the owner or manager stands as he serves his customers.

The number of years that the retailers have been operating varies between half a year and 80 years, on average 14.5 years, see figure 2 for the distribution. About 52% of the small retailers that we studied were run by the owner, 20% by a family member, and 28% by a manager, who has been hired to manage the business. Out of those managers, 65% are paid by a share of the sales or profit, while 35% has a fixed salary. The total number of people working within the small retail varies between 1 and 8, on average 2.1 employees, see figure 3 for the distribution. The age of the store manager varies between 14 years and 71 years, with an average of 30 years. All the owners, employees, and managers in the small retailing business are males, which is remarkable, as it does not reflect the female participation in the Moroccan labor market (26% as reported by the World Bank).



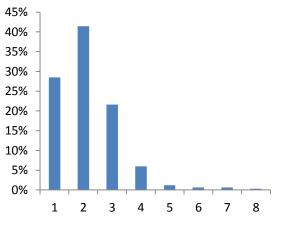
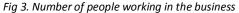


Fig 2. Number of years the business exists



The total number of operating hours per day varies between 6 and 24 hours, 13.5 hours on average. The distribution is shown in figure 4. We noticed that some of the employees may even live in the shop, as their families may live far from the work place. The educational level of the owner, manager, and employees is low. Only 29% of the interviewed people has at least a primary school degree. Out of those that have a degree, only 10% has a university degree. Hence, the vast majority has not obtained an educational degree at all. We also asked whether they think that an educational degree would be important to them and whether it would improve their way of doing business. The results are shown in Table 1. Out of those that have an educational degree, 84% think that a degree is important, while only 50% of those who do not have a degree think similarly. A  $\chi^2$  test shows that the difference is significant with p = 0.000. We also found that the sales of small retailers run by educated people (17950 MAD =  $\xi$  1,632) is significantly higher than the sales of uneducated people (12530 MAD =  $\xi$  1,140) with p = 0.007. The sales are also significantly higher for small retailers that think that an educational degree is important to run their business with p = 0.002.

		Importance of educational degree		
		Yes	No	
Educational degree	Yes	82	16	98
Euucacional degree	No	115	114	229
		197	130	327

Table 1. The number of interviewees that have an educational degree and that think that such a degree is important for their business.

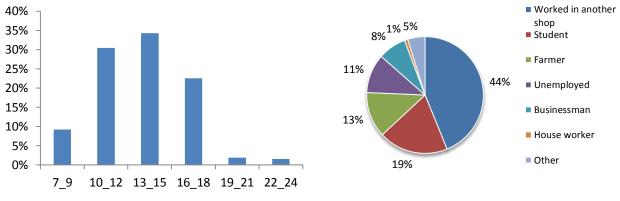


Fig 4. Number of operating hours per day

Fig 5. The previous occupation of the retailers

Figure 5 shows the previous occupation of the retailers, where a majority has been entrepreneurial. The buildings in which the small retailers are located are owned, rented, inherited, or the 'key has been bought', see figure 6 for the distribution. 'Buying the key' is a well-known practice in Morocco. It means that a fixed amount is paid to the owner of the real estate when the 'the key is bought'. Then, a small amount is paid monthly, which is usually less than the regular rent. The buyer of 'the key' has the right to rent the shop to another person, but never for less than the amount that he pays the owner of the real estate. We can see that only 7% of the retailers operate under this model and that close to half of the small retailers are owner operated.

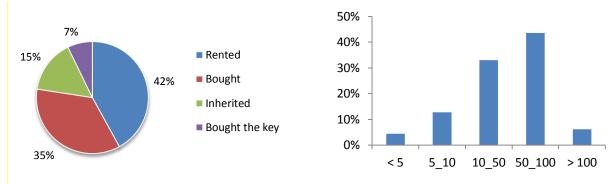
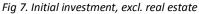


Fig 6. Status of the real estate



We also found that the sales of the different subgroups (rented, bought, inherited, and bought the key) is significantly different with p = 0.04. The group of small retailers that rent their shop generates the highest sales (on average 16,742 MAD per month =  $\notin$  1,522) compared to those that own it (12,575 MAD =  $\notin$  1,143), probably because there is more pressure to be able to pay the rent. Those that inherited the business generate the least sales (on average 9,261 MAD =  $\notin$  842).

## 4.2. Financial indicators

We asked what the initial investment was to set up the business, which includes investment in equipment and inventory and all other initial investments, except the real estate. See figure 7 for the results. Since the investments were done at different periods in time, the present value of the average investment is about 60,000 MAD (about € 5,450). We will see later that this is slightly more than four months of sales, which makes the initial investment relatively low. Figure 8 shows that the sources of the investment are: personal savings (70%) and loans or gifts from family members and friends (28%), loans from banks (2%). We did not find a significant correlation between the source of investment and the monthly sales.

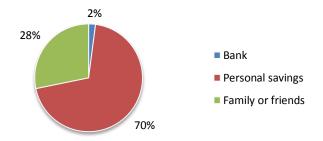


Fig 8. Sources of funding the initial investment

Most of the small retailers do not keep track of their sales records and sometimes they even often do not know their sales exactly. However, we were able to derive the sales based on the alms that they give to poor people, which is supposed to be 2.5% of their income (according to the Islam). The average monthly sales appear to be about 14,000 MAD (about  $\leq$  1,300) and the distribution of the sales is presented in figure 9. Retailers also indicated that 74% of the sales are paid in cash (see figure 10 for the distribution).

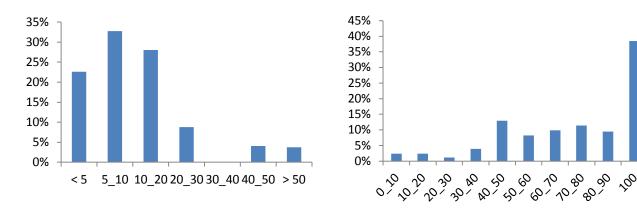


Fig 9. The average montly sales (in 1,000 MAD)

Fig 10. Percentage of the sales paid in cash

Maximum selling prices for some fast moving consumer goods in Morocco have been set by the government. More precisely, the government subsidizes via the national compensation fund *'la caisse de compensation'* most of the important fast moving consumer goods, such as bread, milk, gas, flour, and sugar. This fund was created by the Moroccan government in 1941 to stabilize the prices of these basic products and hence, to increase the purchasing power of customers. The total budget of this fund reached 60 billion MAD (about  $\in$  5.5 billion) in 2011, about 35% of the government spending. Similar programs of food and petrol subsidies are widespread in many other developing countries. Due to this price stabilization program, one hardly finds any price differences for these products at different retailers. However, modern retailers offer sometimes price promotions for these products, which decrease the prices temporarily. For the nonsubsidized products, the survey showed that prices at the small retailer are often higher than at the modern retailers. For some products we see the following (average) prices: shampoo (12.75 vs. 13.00 MAD), coffee (18.50 vs. 18.80 MAD), and cooking oil (79.70 vs. 82.80 MAD). The price difference at small retailers for the set of products that we selected is on average 2.5%. One MAD is equivalent to about  $\in$  0.09.

Although the average prices at the small retailer are higher than at the modern retailer, many customers still prefer visiting the small retailer for its proximity, but definitely also for the *consumer credits* that the small retailers offer. The percentage of sales that is paid immediately in cash is on average 74%. The distribution is shown in figure 10. These credits are offered without charging any interest and it is mainly done to increase the sales from customers that have low purchasing power and that have limited cash on-hand.

We asked the small retailer owner which customers get the credits. The credits are not provided to 'poor' people as one may expect, but only to known residents of the neighborhood, preferably those with a steady regular income. The duration of the credit is mostly one month and it is fully based on trust. We have seen that the retailers keep track of the credits in a small notebook, but without having any formal agreement with the customers. The personal contact between the residents and the small retailer and the interpersonal knowledge is crucial for offering credits.

The small retailers also indicate that if a customer delays the payment too much (typically longer than two months), then likely no future credits will be offered anymore to that customer. Moreover, the retailers mostly bound the credit to about 2000 MAD (about € 180) per customer. Still, most of the retailers indicate that a small percentage of the credits are never paid back, without keeping track of the lost amounts. Some of the small retailers estimate the loss, which is about 5% of the credits offered.

### 4.3. Distribution

To describe the relationship between small traditional retailers and their suppliers, we relied on unstructured interviews. The interviews included a discussion with the retail owner describing the ordering and inventory management process of milk, bread, water, and other fast moving goods carried in the retail store. The research team then reviewed these interviews and patterns were extracted that described the relevant business processes. They are summarized in this section.

All ordering decisions are made solely by the owner or manager of the small retailer, without any consultation, calculation, and without keeping track of the historical sales quantities. We observed that the order decisions are made by 'intuition' and in a very informal way. When asking how the decisions are determined, often unstructured reasoning follows, and hardly anyone mentions 'forecasting' in the answer. Most keep the *perception* of last weeks' sales in mind when deciding on the order quantity and the *cash position*.

The order decision is made when the salesperson visits the small retailer. We noticed that an out-of-stock situation is hardly a reason to order. The small retailers wait for the next 'order moment', i.e. till the next visit of a salesperson. Some small retailers indicated that in case of an out-of-stock, customers will likely chose a substitute product, so an out-of-stock situation does not harm their business much. All orders are made face-to-face. None of the small retailer indicated to order by phone, e-mail, or another method. Hence, their order behavior is passive.

The exact format of order fulfillment differs per product. For the fastest moving products such as milk, bread, and drinking water, a salesperson of the supplier or distributor visits the small retailer with inventory in a small truck. The truck is filled with products and visits the small retailers one by one, without having collected any prior order information. This process is referred to as van-sales or on-board sales strategy (Blanco and Fransoo, 2013). If the small retailer decides to order, the order is placed on the spot, and the delivery follows after the payment in cash within a few minutes. The bread is supplied two to three times per day and the water supply frequency depends on the season (daily in the summer and twice a week in the winter). Since the supplier of milk takes back all leftovers from the previous supply for free, the small retailer's owner is limited in his decision making. For some other products, the pre-salesperson of the supplier or the distributor visits the small retailer on average once a week to once in two weeks to collect the order and the delivery and the payment in cash take place the next day. Hence, the lead time is one day. This process is referred to as the pre-sales strategy.

For both strategies, the cash position of the small retailer is constraining the operations. In the van-sales strategy, the available cash is constraining directly the order quantity, as the suppliers do not accept any delayed payment. It is important to note that the suppliers generally do not offer credits to the small retailers like the small retailers do towards their customers. In the pre-sales strategy, the delivery of the order takes place one day after the order placement. However, if the small retailer does not have enough cash to pay the order at the moment of delivery, the delivery does not take place and gets cancelled or postponed. From the small retailers' perspective, it is hard to predict the amount of available cash for the next day when the order is placed, mainly due to the credits offered to the customers and due to visits of other suppliers earlier that collect all available cash.

Hence, the cash position of the small retailers and the credits that the small retailers offer are an important factor in the viability of their business. We will explore the financial dimensions in the next section in more detail.

The very small retailers (typically < 10 m<sup>2</sup>) are not visited by most suppliers or distributors. They get some of their products (mainly the non-perishable products) supplied by wholesalers. The wholesalers are an intermediary stage in the supply chain, since it is not economically attractive for suppliers to visit all of these very small retailers, approximately 110,000 in Morocco and 37,000 in Casablanca, who order very small quantities. These wholesalers are typically concentrated in one area in the big cities (e.g. *Derb Omar* in Casablanca) and their storage facilities are mostly housed inside big garages where goods are very efficiently stored. Dependent on the relationship between the small retailer and the wholesaler, the wholesaler may supply the retailer or arrange self-pickups by the retailers. These deliveries are done with a motorcycle with an open container, as the supply quantities per retailer are often small or the small retailer is located in a region where a truck may not enter.

#### 4.4. Regression analysis

In this section, we present the results of a regression analysis to better understand two financial variables collected during the survey: the credit offered to customers and the initial investment. As mentioned earlier, these are related to the financial viability of the retailer.

We find that the percentage of sales paid in cash is significantly positively correlated (with  $\alpha$ =0.05) with the average monthly sales and the number of workers at the small retailer, and significantly negatively correlated (with  $\alpha$ =0.05) with the average age of the employees at the small retailer and the number of years that the small retailers is in operation. We build a regression model with the percentage of sales immediately paid in cash as dependent variable (= 1 – percentage of sales that are offered as credit). The regression model is built by applying the backward elimination method, which means that all the variables are initially considered as potential independent variables. Then, variables are deleted one at a time until reaching the point where the remaining variables all make significant partial contributions to predicting the percentage paid in cash. The final regression model is as follows.

$$\hat{S} = \beta_0 + \beta_1 P + \beta_2 M + \beta_3 F + \beta_4 O$$
$$R_{adi}^2 = 0.322$$

- *S* Sales paid immediately in cash as percentage of the total sales
- *P* Fraction of personal savings of the total initial investment
- M Average monthly sales
- *F* Dummy variable with value of 1 if the small retailer is run by a family member and 0 otherwise
- *O* Dummy variable with value of 1 if the small retailer is run by the owner and 0 otherwise

Model		idardized ficients	Standardized coefficients	t	Sig.	Collinearity statistics
	В	Std. Error	Beta			VIF
(Constant)	102.12	8.09		12.617	0.000	
0	-16.03	5.33	-0.335	-3.009	0.003	2.138
F	-12.26	6.16	-0.220	-1.990	0.048	2.119
М	0.16	0.10	0.124	1.602	0.064	1.034
P	-0.15	0.07	-0.163	-2.132	0.035	1.017

Table 2. Multiple regression results using the sales paid in cash as independent variable.

The regression model shows the four variables that explain and predict the credits offered to the customers. We see that the coefficient of determination is 0.322. However, that does not change the interpretation of the significant variables; especially since the overall model significance is 0.002. It is remarkable that the higher the monthly sales, the higher the percentage of sales paid immediately in cash, i.e., the lower the credits offered. This can be probably explained by the fact that the small retailers that generate more sales are probably located in neighborhoods where residents are richer and employed or where there is more transient foot traffic; hence customers are less known to the small retail owner compared to more traditional neighborhoods.

In section 4.2, we discussed that the credits are mainly offered to *known* residents in the neighborhood. The regression analysis also shows that the small retailers that are funded from personal savings offer more credits, especially those that are run by the owner himself or a family member. When the small retailer is managed by an employee, he may not have the authority to offer credits and he may also not to be able to judge who is allowed to get a credit since credits are tracked informally.

Another financial variable in the study is the initial investment required to set up the operation, where a large variation was observed. The regression model was built following the same approach as the previous one. The final model is as follows.

$$\hat{I} = \beta_0 + \beta_1 W + \beta_2 H + \beta_3 D + \beta_4 R + \beta_5 B R_{adi}^2 = 0.555$$

- *I* (Discounted) initial investment
- *W* Number of people working in the shop
- *H* Number of hours that the small retailer is open per day
- *D* Dummy variable with value of 1 if the small retailer owner has an educational degree and 0 otherwise
- *R* Dummy variable with value of 1 if the small retailer has been rented and 0 otherwise
- *B* Dummy variable with value of 1 if the small retailer has been bought and 0 otherwise

Model		dardized icients	Standardized coefficients	t	Sig.	Collinearity statistics
	В	Std. Error	Beta			VIF
(Constant)	-28,773	13,174		-2.184	0.030	
W	17,673	2,701	0.378	6.544	0.000	1.147
Н	1,629	881	0.104	1.850	0.066	1.096
D	20,963	5,608	0.212	3.738	0.000	1.108
В	20,758	6,919	0.218	3.000	0.003	1.818
R	18,659	6,650	0.201	2.806	0.005	1.760

Table 3. Multiple regression results using the initial investment as independent variable.

The regression model shows the variables that explain and predict the starting initial investment for the small retailer. We see that the coefficient of determination of this model is 0.555 and the overall model significance is 0.000. It is intuitive that the size and level of activity of the small retailer (expressed by the number of people working in the shop and the opening times) impact the invested amount to set up the small retailer. However, it is remarkable that an educational degree of the small retail owner is significantly correlated with the initial investment. This can be probably explained by the fact that if a small retailer owner is educated, he is more ambitious and targeting higher sales and profit. This holds especially for small retailers who bought the shops where they are located. This information allows FMCG companies to potentially assess risk of payment in case they decide to extend credit to the small retailers.

# 5. Conclusions

In this paper, we study the small traditional retailers in Morocco that are the dominating retail format in many large cities in emerging markets and that play a crucial role in fulfilling the daily customer's demand for products such as bread, milk, water, soap etc. An empirical analysis of the small traditional retailers in developing countries is remarkably absent in the literature, while they are crucial for many FMCG manufacturers that want to be successful in emerging markets.

We conducted our study by surveying 333 small traditional retailers in 8 large cities in Morocco to better understand their business environment. The results show that the small retailers are owned and run by a single person or a family with low capital and often no educational degree and who relies on the support of his family, both in terms of funding and manpower. We also find that the entry barrier to open a new small retail shop is low. The initial investment (excluding the real estate) is on average slightly more than four months of sales. Most small retailers fund their investment from personal savings or they get loans or gifts from family members and friends. Our analysis shows that besides the size of the small retailer, the educational degree of the owner significantly determines the initial investment.

Although the small retailers do not offer products at lower price than the modern retailers, the small retailers are very popular and they serve a large part of the customer's daily demand for products such as bread, water, milk, soap etc. Due to the limited purchasing power of many customers, they frequently visit the small retailer for buying small quantities. The modern retailers who are often located far away cannot fulfill this function, especially that the transportation facilities are limited. Moreover, the small retailers also offer informal credits to the known customers in the neighborhood. Our analysis finds that smaller small retailers offer relatively more credits, especially by small retailers that are funded with personal savings.

Based on our analysis, we may make a distinction between two types of small retailers. The first type of small retailers is owned by older people with no educational degree, that start their business with little fund and who often own their business. They also mostly run their business by themselves. They generate less sales and they offer more credits to their customers. The main reason for opening for owning and running the business is likely to socialize and to remain active at an older age. The second type is small retailers that are owned and managed by younger people that have an educational degree and that are more ambitious. We find that they generate significantly more sales and offer less credits to their customers. They are mainly active in wealthier neighborhoods.

In contrast to the modern retail, decisions are made solely by the small retailer owner without any (formal) decision support. In addition, decisions are made passively, i.e., they wait until a salesperson shows up even if there is an out of stock situation. We find that order decisions are mainly driven by the perception of last period's sales. We discussed the main distribution modes. The small retailers can get either supplied directly from the supplier or arrange a self-pick-up from the wholesaler. Suppliers distribute their good by applying the van-sales or the presales strategy. In all cases the cash position of the small retailer is very important, because if there is no cash available, the supply does not take place, as suppliers require immediate payment when delivering. We noticed that in the pre-sales situation, deliveries get cancelled due to the limited cash position of the small retailer and in the van-sales situation; the cash position limits the order quantity directly. The limited cash availability leads to inefficiencies in the distribution, as the demand for transportation is the result of the orders from the retailers. This needs to be better studied in future studies. Trips made by the trucks and motorcycles that do not result in an actual delivery need to be limited.

The small traditional retailers are often the most downstream stage within many consumer goods supply chains. Their ordering behavior which is rather arbitrary and limited by their cash position affects the performance of the whole supply chain as well. Hence, improving the operational decision making of the large number of small retailers will not only impact the performance of the small retailers themselves but also of many consumer goods supply chains. We are aware that care is needed to generalize our results for all emerging markets, especially since the data collection was done in Morocco. We think that the results and insights are at least generalizable for the Maghreb region, but a replication of this study is needed to test whether the results hold for other regions as well. Finally, a more in-depth study of consumer buying behaviors, including retailer selection and product substitution, will help expand the study to include neighborhoods served by these retailers.

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