

The expansion of Moroccan banks in Africa: The motives and the impact on Performance

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Abstract

Moroccan banks have witnessed rapid growth since the early 2000s in the African continent, particularly in French-speaking countries where they have established themselves as important institutions in the financial sector. The purpose of this paper is to study, on the one hand, the motives for Moroccan banks' expansion in Africa, and on the other hand, the impact of this expansion on their performance.

To respond to research questions, a three-step process was followed. First, we propose and operationalize an explanatory model. Second, we collect secondary data to conduct a longitudinal analysis over the study period. Third, we mobilize a multiple linear regression to test the hypotheses.

Three conclusions emerge from the study. First, the absence of growth opportunities on the national market and the possession of a specific advantage positively impacts the development of Moroccan banks in Africa. Second, the development of domestic customers in Africa has a positive impact on the development of Moroccan banks on the continent. Third, the internationalisation of Moroccan banks does not have a significant impact on the performance of banks (Profitability and risk).

Admittedly, this study has limitations. The first is the non-use of retrospective interviews. The second is related to the accounting and financial data period. We have retained 11 years instead of the 18 years originally planned. The third is the absence of data related, on the one hand, to the evolution of the number and geographical distribution of bank branches at the level of each country and, on the other hand, to the trademark (Brand) used at the level of each country.

Keywords: Strategy; Internationalisation; Performance; Bank; Africa.

Classification JEL: F23, G21, M16

Paper type: Empirical Research

1. Introduction

Over the past two decades, Morocco has placed the African continent at the heart of its strategic choices. Indeed, it has significantly increased the number of its diplomatic representations on the continent and has given more importance to south-south cooperation.

On the economic level, Morocco's African orientation has taken on a new dimension by being part of a medium and long-term vision. Indeed, the country has developed an economic strategy that encourages its large companies to develop their activities in Africa. Moroccan companies' expansion in Africa has gone through three main stages¹:

- The first is characterized by the implication of large governmental companies in infrastructure development projects (Infrastructure projects, telecommunications, transportation, electrification, etc.);
- The second is characterized by the implication of the large private companies, particularly large companies operating in the service sectors (Banking, insurance, consulting, etc.). During this phase, economic diplomacy played an active role in supporting business initiatives;
- The third, distinguished by the implementation of a real road map which is part of a medium- and long-term vision oriented towards the achievement of further regional integration;

In terms of Foreign Direct Investment (FDI), Morocco has recorded strong growth in its investments in Africa over the last decade. Indeed, the country is among the first African investors in the West African Economic and Monetary Union (UEMOA) and the Central African Economic and Monetary Community (CEMAC). In our opinion, this trend should accelerate in the long term, given Morocco's accession to the African Union (AU) and its request for membership in the Economic Community of West African States (ECOWAS).

In this context, Moroccan banks have not escaped African expansion. Indeed, since the early 2000s, Moroccan banks have experienced rapid growth on the African continent, particularly in French-speaking countries, where they have established themselves as major players in the financial sector. At the end of 2018, they were present in 27 African countries (BAM, 2019, p. 19). During the period from 2000 to 2018, the three banking groups; AttijariWafa Bank (AWB), Banque Centrale Populaire (BCP), and BMCE Bank Of Africa (BOA) have significantly increased their coverage in the African continent from no presence to 13 countries, from 3 to 13 countries and from 1 to 19 countries respectively (Nemroui et al., 2019b).

Along with the development of Moroccan banks, the banking system in Africa has undergone remarkable changes. One of the major changes has been the evolution of the ownership structure following the liberalization and privatization process undertaken by several African countries. This change reduced the market share of state banks in favor of new entrants. These entrants are made up of three groups :

- Banks from developed countries. Their presence in Africa dates back to the colonial period. Indeed, during this period each colonial power encouraged its banks to set up in its colonies to ensure the financing of new infrastructure, international trade operations, and settlers. Following independence and benefiting from the privileges resulting from the colonial period, European banks continued to dominate the African banking sector with a concentration of British banks in English-speaking countries, French banks in French-speaking countries, and Portuguese banks. in Portuguese-speaking countries;
- Banks from developing countries (Outside Africa). These are banks from China, India, Bahrain, or Pakistan. Compared to banks from developed countries, their presence in Africa is a recent phenomenon (Beck et al., 2014, p. 36) ;

¹ DEPF, Relations Maroc-Afrique: L'ambition d'une « nouvelle frontières », 2015, p. 2-3

- Banks from African countries (Pan-African Banks). The main characteristic of these banks is that their headquarters are located in an African country. The expansion of these banks only started in the 1990s with an acceleration in mid-2000.

All these facts highlight the importance of studying the development of Pan-African banks, in general, and Moroccan banks in particular. Indeed, faced with this rapid growth on the continent and the absence of academic publications on the subject², this study will investigate the following research questions:

RQ1 Why did the three Moroccan banking groups undertake an expansion strategy on the continent since the 2000s (Determinants)?

RQ2 What is the result of this international expansion on their performance (The impact)?

To answer these two questions, we will design and operationalize an explanatory model to test it with empirical reality. This article is organized as follows. In the first section, we will present the literature review. The second the methodology. The third is the data analysis and the results. In the fourth, the discussion and at the end, we will leave room for a conclusion.

2. Literature review

This section is dedicated to the literature review. First, the literature dedicated to the motives for internationalisation is exposed. Second, the literature discussing the internationalisation-performance relationship is presented. Finally, the research hypotheses summary and the conceptual model are exposed.

2.1. Motives for international expansion

To the first question, why do banks expand beyond national borders (Determinants)? The international management academic community mentions five reasons:

- First, to find new financial resources (Engwall & Wallenstal, 1988; Hellman, 1994; Mutinelli, 2001; Tschoegl, 2002a). In this posture, banks set up in international financial centers to access the financial resources necessary to finance the needs of their customers;
- Second, to follow national customers (Blandon, 2001; José Alvarez-Gil et al., 2003; Kumar Boojihawon & Acholonu, 2013; Mutinelli, 2001; Qian & Delios, 2008). In this situation described as defensive, banks are expanding internationally, in order, to meet the needs of their domestic customers (companies) who are expanding beyond domestic borders and, to prevent them from going to other banks, competitors, capable of serving them better;
- Third, to look for new growth opportunities (Fung et al., 2002; José Alvarez-Gil et al., 2003; Prada et al., 2009; Tschoegl, 2002a). In this case, expansion abroad is justified when the opportunities to grow on the national territory are difficult (oligopoly and/or a saturated market) or impossible (antitrust legislation or following a modification of the legislation). Indeed, in this situation, banks will turn to foreign markets to look for new sources of growth;
- Fourth, to respond to the international expansion of competing banks in the domestic market (Ekman et al., 2014; Engwall & Wallenstal, 1988; Guillén & Tschoegl, 1999; Tschoegl, 2002a). This reaction qualified, in the literature, as an oligopolistic reaction or follow the leader is a strategic move of the bank to face the decisions taken or anticipated by its competitors on the national market. Indeed, to reduce the risk, banks in a situation of oligopoly will decide to develop outside the national market in order to avoid, on the one hand, destructive competition at the national level, and on the other hand, that a competitor invests alone abroad and develops a competitive advantage allowing it to sustainably

² To the best of our knowledge, this is the first study that examines the motives behind Moroccan bank's international expansion in Africa and the relationship between internationalisation – performance.

outpace its main national competitors;

- Fifth, to look for assets (Fung et al., 2002; Guillén & Tschoegl, 1999; Kumar Boojihawon & Acholonu, 2013; Prada et al., 2009). Thus, in the face of competition and the opening of markets, becoming a regional or multinational bank becomes a necessity and not an option. According to this explanation, the acquisition of assets in new territories makes it possible to achieve the strategic objectives of banks that want to become multinational banks. Indeed, the increase in size, the acquisition of new experiences and new knowledge allow the improvement of the competitive advantage and therefore make the banks able to compete with other multinational banks.

Before presenting the answers given by the academic community to the second research question, two important points should be made clear:

- The motives for internationalisation are not mutually exclusive and the start of a bank's international expansion process can be explained by several motives (Determinants) at the same time. (Cardone-Riportella et al., 2003) note that Spanish banks are simultaneously pursuing their national customers, leading banks, and looking for new markets ;
- The first move to start an international expansion process requires that the bank concerned have a specific advantage. Indeed, this remark which is consistent with the contributions of the specific advantage theory (Hymer, 1976; Kindleberger, 1969) has been verified by several authors (Blandon, 2001; Fung et al., 2002; Prada et al., 2009; Tschoegl, 2002b; Ursacki & Vertinsky, 1992).

According to the previous literature review, the authors propose the following hypotheses:

- H.I :** The absence of growth opportunities in the domestic market and the ownership of a specific advantage would positively impact expansion in Africa.
- H.II :** The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa.

2.2. Internationalisation-Performance relationship

Addressing the second question, which pertains to the consequences of international expansion on banks' performance (the impact), the literature review discerns two divergent viewpoints. On one side, proponents argue that internationalisation exerts a positive influence on performance. This stance finds validation through two corroborating elements:

- Geographical expansion allows banks to improve their efficiency. Indeed, it provides flexibility and makes it possible to achieve a level of activity with fewer resources (Acharya et al., 2006; Boyd & Prescott, 1986; Carlson, 2004; Diamond, 1984; Lepetit et al., 2008; Morgan & Samolyk, 2003; Pelletier, 2018; Rime, 2005) ;
- Geographical expansion allows banks to reduce risk. According to portfolio theory, geographic diversification improves risk-return trade-off if the return on new assets is not correlated with the return on assets already held by the bank (Acharya et al., 2006; Akhigbe & Whyte, 2003; Calomiris, 2000; Deng & Elyasiani, 2008; Goetz et al., 2016; Sissy et al., 2017) ;

Conversely, opponents argue that internationalisation exerts an adverse effect on performance. This perspective is supported by two underlying elements:

- The agency theory suggests that, contrary to the interests of shareholders, a bank's geographical expansion can be motivated by the personal advantages that managers can generate by managing large institutions (Amihud & Lev, 1981; Denis et al., 1997; Jensen, 1993; Servaes, 1996; Vander Vennet, 1996) ;
- The geographical and cultural distance between the head office and its subsidiaries limits the ability of the headquarters to control its subsidiaries. Indeed, the decrease in the level of control deteriorates the quality of the bank assets and the overall risk of the bank (Berger &

DeYoung, 2001; Deng & Elyasiani, 2005).

According to the literature review, the authors propose the following hypotheses:

H.III : Expansion in Africa would positively impact bank's performance.

H. IV : Expansion in Africa would negatively impact bank's risk.

(Nemrouri et al., 2019a) study offers a detailed literature review regarding the motives for bank's internationalisation and the relationship Internationalisation-Performance. Table 1 and Figure 1 summarize the study research hypotheses and the proposed conceptual model.

Table 1 – Hypotheses summary formulated according to the literature review

Research questions	Hypotheses	
	Retail bank	Wholesale bank
Why the three banks started an expansion in Africa? (Determinants)	(H.I) The absence of growth opportunities in the domestic market and the ownership of a specific advantage would positively impact expansion in Africa.	(H.II) The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa.
What is the result of the expansion in Africa on the performance? (Impact)	(H.III) Expansion in Africa would positively impact bank's performance. (H.IV) Expansion in Africa would negatively impact bank's risk.	

Source: Authors

Figure 1 – Proposed conceptual (Theoretical) model

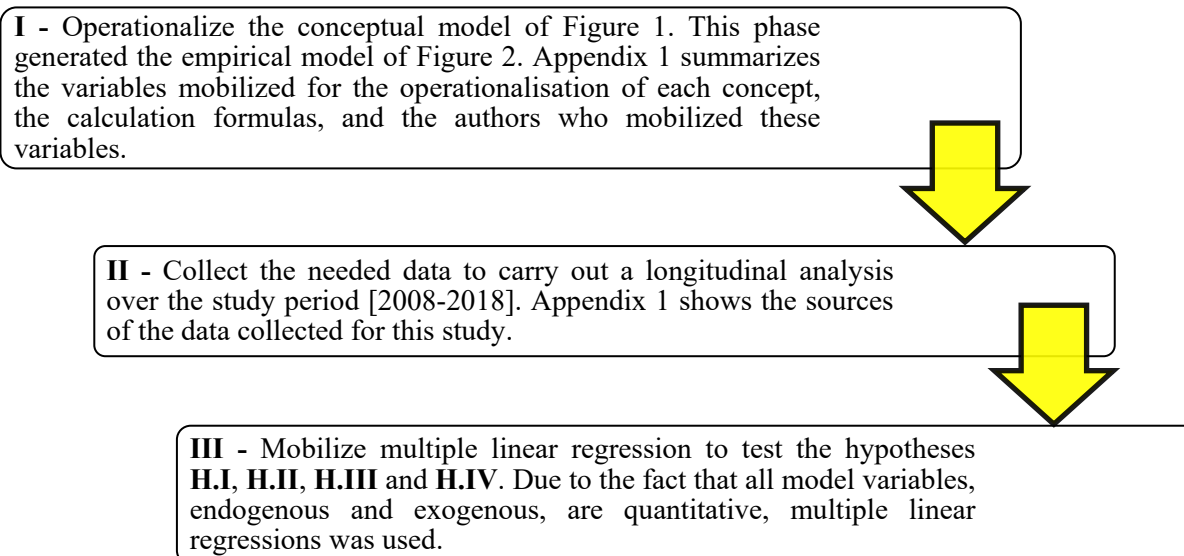


Source: Authors.

3. Research methodology

A three-step process was followed to confront the conceptual model to the empirical reality and respond to the research questions. Diagram 1 summarizes each step of the process.

Diagram 1 – Research methodology



Source: Authors

3.1. Cases and research data

The research comprises the three Moroccan banks expanding in Africa (Three cases). Three reasons justify this choice. First, to respond to a major criticism formulated against case studies and relating to the possibility of generalizing the results of a single case (Bhattacharjee, 2012, p. 93; Yin, 2018, p. 20). Second, to allow the study of the entire population subject to the research and to carry out inter-case comparisons. Indeed, during the exploratory study, we found that only three Moroccan banks are expanding in Africa. Third, to be able to analytically generalize the results of the study, taking into account certain conditions, to other African banks (Schwandt, 2007, p. 28; Thietart et al., 2014, p. 224; Yin, 2018, p. 21).

The longitudinal study spans a period of approximately two decades, from 2001 to 2018³. Two reasons justify this period :

- First, the desire to identify and analyze almost all of the investments made by Moroccan banks in Africa since the beginning of the century and until the last period before the Covid crisis⁴ ;
- Second, the need to study the environment of the Moroccan banking sector during the period (2000-2005). Indeed, it was during this period (in 2004) that the largest merger operation in the Moroccan banking sector took place between the two banks BCM and Wafa Bank and gave birth to the first Moroccan banking group AWB. Also, it was starting in 2005 that we noticed the implementation of a sustainable strategy expansion in Africa by the two banks BOA and AWB. We believe that the study of this period will shed more light on the question ; Why the expansion in Africa ?

At the level of each of the three cases, we collect and analyze data, both quantitative and qualitative (Yin, 2018, p. 17), to explain the behavior of the three banks.

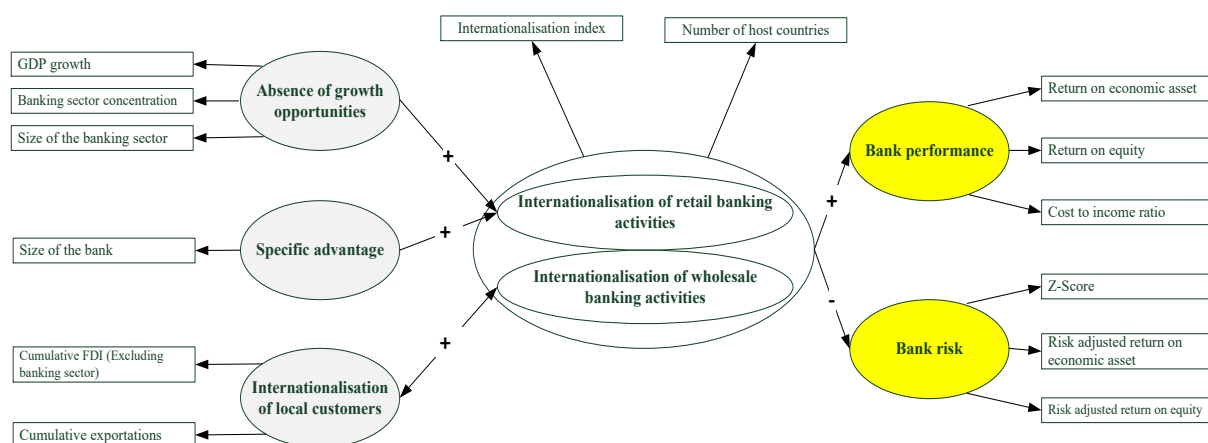
³ Regarding the Bank's financial data, we used the consolidated accounts published under IFRS instead of local accounting standards to conduct this research. This choice is motivated by the desire to be able to compare the results with those of other African banks in future research. However, it led to a decrease in the data collection period, 2008-2018 (11 years) instead of what was planned initially, 2001-2018 (18 years). Indeed, the publication of consolidated accounts in IFRS standards by Moroccan banks became mandatory starting in 2008.

⁴ Since it was published after the Covid crisis (End 2019/Beginning 2020), 2019 bank's financial data were excluded from the study.

3.2. Research model

Figure 2 shows the research model. Appendix 1 summarizes the variables mobilized for the operationalization of each concept, the calculation formulas, and the authors who mobilized these variables in previous studies

Figure 2 – Proposed empirical model



Source: Authors.

3.3. Data analysis

To conduct the analysis, we use multiple linear regression. The use of multiple linear regression is methodically justified for the analysis of the proposed model since all its variables, endogenous and exogenous, are quantitative. However, in practice, most variables have an unknown probability distribution. For this reason, we will use asymptotic laws to approximate the true law. Also, when it is a small sample size, as in the case of the current study, there is a risk of having a poor-quality approximation and consequently, the tests based on it will be biased (Flachaire, 2000, pp. 183–194). The Bootstrap method makes it possible to deal with this problem and the approximation obtained from the true law of statistics is generally more precise than the asymptotic law.

As part of this analysis, the general bootstrap methodology in the context of multiple linear regression models was carried out, with SPSS software.

It should be mentioned that given the absence of a public database, a manual extraction of the data from several documents was carried out. Appendix 1 shows the sources of the data we collected for this study

4. Data analysis and results

4.1. Key factors for the internationalisation of Moroccan banks

To analyze the determinants of banks' internationalisation, we use the multiple linear regression, based on the bootstrap method, applied to the data collected.

The objective is to explain, first, the Internationalisation index and second the Number of countries of establishment by the variables that describe:

- On the one hand, growth opportunities in the domestic market, namely ; GDP growth, Size of the domestic banking sector, and Concentration of the domestic banking sector ;
- On the other hand, the internationalisation of the domestic customers of the banks, namely ; Cumulative FDI (excluding the banking and insurance sector) and Cumulative exports.

To be able to verify if a factor is relevant, that is to say, that it explains the endogenous variable in a regression model (whose coefficient is different from zero), we must first, fix the acceptable risk of error. Generally this risk of error (Alpha : α) takes the following most common values : 0.01, 0.05, or 0.10. Indeed, a coefficient is statistically different from 0 if its probability is less than 0.01 or 0.05. Also, a probability of less than 0.10 will be accepted as part of this analysis. Moreover, given the observation that only the three largest Moroccan banks are active in Africa (Nemroui et al., 2019b), we have concluded, without carrying out statistical analyses, that the possession of a specific advantage is a necessary condition to start an expansion strategy beyond national borders by Moroccan banks.

Table 2 summarizes the explanatory power of the growth opportunities in the domestic market and the internationalisation of the domestic customer of banks on the bank's internationalisation.

Table 2 – Multiple linear regression summary

N°		Banks	Internationalisation	
			Internationalisation Index	Number of countries of establishment
I	Growth opportunities in the domestic market (GDP growth, Size of the domestic banking sector, and Concentration of domestic banking sector)	AWB	82.5%	82.4%
		BCP	52.1%	71.4%
		BOA	62.8%	73.5%
II	Internationalisation of domestic customers	AWB	84.3%	81.3%
		BCP	73.5%	93.8%
		BOA	70.5%	91.9%

Source : Authors

4.2. Internationalisation-performance relation

To analyze the impact of the internationalisation of each bank on its performance, we use the multiple linear regression, based on the bootstrap method, applied to the data collected for each bank. In a regression model, the exogenous variable explains the endogenous variable if its coefficient is different from zero, meaning, its probability is less than 0.05. Also, a probability of less than 0.10 will be accepted as part of the analysis.

First, we seek to explain the evolution of the indicators which measure the profitability of each bank (Return of the economic asset, return of the equity, and Cost to income ratio) by the variables which measure the evolution of the internationalisation process of each bank, namely; the Internationalisation index and the Number of countries of establishment.

Table 3 summarizes the explanatory power of internationalisation on the profitability of banks.

Table 3 – Multiple linear regression summary

N°		Banks	Profitability		
			Return of the economic asset	Return of the equity	Cost to income ratio
III	Internationalisation of the bank	AWB	5.4%	42.7%	10.7%
		BCP ⁵	89.3%	82.3%	61.6%
		BOA	41.9%	15.4%	74.2%

Source : Authors

Second, we seek to explain the evolution of the indicators which measure the bank's risk (Z. Score, Return on economic assets adjusted to risk, Return on equity adjusted to risk) by the variables which measure the evolution of the internationalisation process of each bank, namely ; the Internationalisation Index and the Number of countries of establishment.

Table 4 summarizes the explanatory power of internationalisation on the risk of banks.

⁵ Strong explanatory power. But in the opposite direction (Negative impact).

Table 4 – Multiple linear regression summary

N°		Banks	Risk		
			Z. Score	Return on economic assets adjusted to risk	Return on equity adjusted to risk
IV	Internationalisation of the bank	AWB	76.8%	6.9%	39.8%
		BCP	25.7%	73.6%	77.8%
		BOA	61.3%	63.7%	18.8%

Source : Authors

5. Discussion

5.1. Conclusion of the proposed empirical model

Table 5 and Appendix 2 summarize the conclusions generated from the statistical analysis of collected data.

Table 5 - Hypotheses testing results

N°	Hypotheses	Hypotheses testing for the three banks		
		AWB	BCP	BOA
I	The absence of growth opportunities in the domestic market and the ownership of a specific advantage would positively impact expansion in Africa.	Valid	Not valid	Valid
II	The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa.	Valid	Valid	Valid
III	Expansion in Africa would positively impact bank's performance.	Not valid	Not valid	Not valid
IV	Expansion in Africa would negatively impact bank's risk.	Not valid	Not valid	Not valid

Source : Authors

As stated earlier, the paper's objective is to understand Moroccan banks' expansion in Africa. For this purpose, we tried to answer two research questions ; Why did the three Moroccan banking groups undertake an expansion strategy in Africa since the early 2000s (Determinants) ? What is the result of this international expansion on their performance (The impact on profitability and risk) ?

5.2. The absence of growth opportunities in the domestic market and the ownership of a specific advantage would positively impact expansion in Africa

The exploratory study has shown that only the three largest Moroccan banks (in terms of Total assets, Net banking income, and Number of staff) are deploying an expansion strategy in Africa (Nemrouri et al., 2019b). This observation confirms that the implementation of an internationalisation strategy requires the possession of a specific advantage. In addition, we found that the variables measuring the growth opportunities in the domestic market have a strong explanatory power on the internationalisation of the three banks. We found a strong and positive relationship between the size of the banking sector and the internationalisation index in two cases (AWB, BOA), and a strong and positive relationship between the size of the banking sector and the number of countries of establishment in the three cases (AWB, BCP, BOA).

These results allow us to accept the first hypothesis and confirm it. First, the decrease or absence of growth opportunities in the national market pushes Moroccan banks to expand in Africa. Second, the expansion in the African market requires banks to possess a specific advantage to compete with domestic banks in the host countries.

The study results are in line with the Hymer-Kindelberger theory (specific advantage theory). It stipulates that investments abroad are justified when the opportunities to grow in the domestic market are difficult (Oligopoly) or impossible (Antitrust legislation). Then, it states that to

overcome the barriers to entering each foreign market, the company must possess some firm-specific advantages. Also, the results are in line with the empirical studies of several researchers (Fung et al., 2002; José Alvarez-Gil et al., 2003; Marois, 1997; Prada et al., 2009; Tschoegl, 2002a).

5.3. The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa.

Data analysis reveals that the variables measuring the internationalisation of domestic customers have a strong explanatory power on the internationalisation of the three banks. In the three cases (AWB, BCP, BOA), we found a positive and strong relationship between, on the one hand, the accumulation of FDI (excluding the banking and insurance sector) and the number of countries of establishment and, on the other hand, between the cumulative exports and the number of countries of establishment. Also, in the case of AWB, we found a positive and strong relationship between, the accumulation of FDI and the internationalisation index and, in the case of BCP, a positive and strong relationship between the cumulative exports and the internationalisation index.

These results allow us to accept the second hypothesis since the analysis shows that the development of local companies in Africa drives the development of banks. According to the literature, local banks are expanding abroad to meet the needs of local companies which are expanding abroad and preventing them from going to other multinational banks capable of providing a better-quality service. These banks' behaviour is described as defensive.

The study results are in line with the empirical studies of several researchers (Blandon, 2001; José Alvarez-Gil et al., 2003; Kumar Boojihawon & Acholonu, 2013; Mutinelli, 2001; Qian & Delios, 2008). Moreover, the observation that the three Moroccan banks are developing in Africa to find new sources of growth and, at the same time, to follow national customers is not surprising. Indeed, these motives are not mutually exclusive and the triggering of a bank's international expansion can be explained by several motives at the same time. (Cardone-Riportella et al., 2003) reveal that Spanish banks pursue, simultaneously, their national customers, banks that are leaders in the domestic market, and search for new markets.

Also, it should be noted that the literature mentions internationalisation to find new financial resources (Engwall & Wallenstal, 1988; Hellman, 1994; Mutinelli, 2001; Tschoegl, 2002a). In this situation, banks are setting up in international financial centers to access the financial resources necessary to finance the needs of their customers. However, the African continent has only two financial centers (Casablanca Finance City and Mauritius) (Z/Yen & CDI, 2020, pp. 4–5) and only the BCP set up a subsidiary in Mauritius in 2018. According to this fact, we believe that internationalisation to find new financial resources does not explain, at this stage, the geographical expansion of Moroccan banks.

5.4. The expansion of Moroccan banks in Africa does not have a significant impact on performance (profitability) and risk

The analysis of internationalisation (measured by the Internationalisation index and the Number of countries of establishment) and profitability (measured by the Return on economic assets, the Return on equity, and the Cost to income ratio) relation, data shows that internationalisation has a strong explanatory power over profitability in one case (BCP). However, when looking for strong relationships between variables, we found only a strong, but negative, relationship between the internationalisation index and the cost to income ratio in one case (BOA). These results allow us to reject the third hypothesis.

Regarding the analysis of internationalisation (measured by the Internationalisation index and the Number of countries of establishment) and risk (measured by Z-score, Risk adjusted return on economic asset, Risk adjusted return on equity) relation, data shows that internationalisation

has a strong explanatory power over risk in one case (BCP). However, when looking for strong relationships between variables, we found only a strong, relationship between the number of countries of establishment and risk adjusted return on equity (BCP). These results allow us to reject the fourth hypothesis.

These conclusions are not surprising given the fact that the literature does not offer a decisive answer to the Internationalization-Performance relationship. On the one hand, a group claims a positive relationship on performance. On the other side, a second group claims a negative relationship. (Slager, 2005) studies the Internationalization-Performance relationship of 44 banks (8 countries) and concludes that this relationship approaches a J-curve. This means that at the beginning of the process, the costs of internationalization prevail on expected profits until banks gain experience and learn how to manage them. This scenario implies that banks experience a period of performance degradation before, knowledge acquired by international experience, leads to superior performance. However, the author makes two important findings. First, the period of performance degradation is considerable. Second, banks must significantly increase their international exposure before reaching the inflection point.

In line with the study results, (Sissy et al., 2017) conclude that cross-border banking does not have a direct significant effect on banks' risk and profitability. In absolute terms, banks that establish themselves outside the borders do not derive any significant advantage through the reduction of risk and the increase in profitability. However, they can derive a significant diversification benefit if they cross borders and diversify their sources of income (interest-generated income and non-interest-generated income) simultaneously.

Before moving on to the conclusion, we would like to alert of the need to contextualize the results of the current study regarding the stage of geographical expansion of Moroccan banks on the African continent. Indeed, taking into account all data (quantitative and qualitative) that we were able to collect and analyze, we believe that Moroccan banks are at the beginning of the third phase of the model proposed by (Fujita & Ishigaki, 1986). During this phase, the bank gradually becomes involved in transactions and operations that do not involve the bank's entities established in the country of origin, as a source or user of funds.

6. Conclusion

With ongoing globalisation and the continuous growth and significance of emerging economies, there is a pressing need for Morocco to rise from its state of marginality to play a more prominent role in the global economy. Moroccan firms and their international growth is central to this process, but so far we know very little of their ability to internationalise, their internationalisation behavior, The challenges they face, the kinds of policy support they need, and what this means for their international competitiveness.

This study has taken a small step in that direction to shed light on some of the questions underpinning the internationalisation process of Moroccan banks, and it has provided some important insights regarding the motives for their internationalisation and the relation Internationalisation-Performance. Indeed, one of the unique aspects of this research is that it has focused on the internationalisation of Moroccan banks in Africa.

As stated previously, the objective of this study is to answer two research questions. Firstly, why did the three Moroccan banking groups undertake an expansion strategy on the continent since the 2000s (Determinants) ? Secondly, what is the result of this international expansion on their performance (The impact) ?

To these questions, the study provides the following answers. First, Moroccan banks are expanding in Africa for two reasons ; to find new growth opportunities and to follow their domestic customer expanding in Africa. These results are in line with the academic literature. Meanwhile, we need to point out that the academic literature provides five motives for

international expansion. The remaining three motives weren't covered in the study. Second, the internationalisation of Moroccan banks does not have a significant positive impact on each bank's performance ((Profitability and risk). This finding corroborates the literature review, which discerns two divergent viewpoints. On one side, proponents argue that internationalisation exerts a positive influence on performance. On the other side, opponents argue that internationalisation exerts an adverse effect on performance. We believe that Slager's conclusion is close to the reality of Moroccan banks. (Slager, 2005) studies the Internationalisation-performance relationship of 44 banks (8 countries) and concludes that this relationship approaches a J-curve. This means that at the beginning of the process, the costs of internationalisation prevail on expected profits until banks gain experience and learn how to manage them. This scenario implies that banks experience a period of performance degradation, before knowledge acquired by international experience leads to superior performance.

Admittedly, there are several limitations in our study. First, a case study including the three Moroccan banks expanding in Africa is inadequate to make any form of generalisations for the other Moroccan firms or African firms and banks. Nonetheless, this study is only an early effort to understand the internationalisation process of firms from Africa and Morocco particularly. Second, the non-use of retrospective interviews. These interviews could have generated new informations and a better understanding of the internationalisation motives of Moroccan banks. Third, related to the accounting and financial data on which we have worked. We have retained 11 years instead of the 18 years originally planned. This update is due to our commitment to work on consolidated financial documents published in IFRS⁶ standards, instead of national accounting standards, to be able to compare our results with those of other Pan-African banks in future studies. Fourth, the absence of data related, on the one hand, to the evolution of the number and geographical distribution of banks' branches at the level of each country and, on the other hand, to trademark (Brand) used at the level of each country. This information could have shed more light on the activities⁷ that Moroccan banks develop in priority in each country (Retail banking or Wholesale banking).

Anyhow, the conclusions of this study should be interpreted taking into account the limitation in the availability of the data and the fact that the study has been limited to the African market. Given the limits and the gray areas that this study has been able to reveal, we believe that the following areas require investigation in future studies. First, conduct studies regarding the behavior of Moroccan banks in each new territory of establishment and the determinants of the profitability of the bank's subsidiaries. This work will shed light on the link between the overall bank performance and the performance of its subsidiaries. Second, carry out retrospective interviews to enrich the results of the current study based exclusively on secondary data. Third, investigate the success and profitability of the different international processes (e.g. choice of countries of establishment, choice of entry modes), which would in turn provide more useful managerial contributions. Finally, carry out comparative studies between the expansion strategies adopted by Moroccan banks and those adopted by other Pan-African banks and in particular, the South-African banks, whose expansion process is the most mature. This last call for comparative studies of the processes characterising the internationalisation and growth of African banks will allow the generalisation of the finding to African banks, and contrast, any noteworthy differences, if at all with banks in other emerging or developed contexts, whilst challenging the relevance, the application, and the extension of internationalisation theories in consideration to Africa.

⁶ The publication of consolidated financial documents in IFRS standards by Moroccan banks started to be mandatory by 2008.

⁷ Retail banking (dedicated to individuals, professionals, and small and medium-sized enterprises) or corporate and investment banking (dedicated to large companies and in particular multinational and pan-African companies, institutional investors, and governments).

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APPENDIX

Appendix 1 - List of research variables

Concepts	Variables	Symbols	Formulas	References	Sources of data
Variables related to the banks					
Specific advantage	-Size of bank	TAI_BQ	Total assets	Ball & Tschoegl (1982), Ursacki & Vertinsky (1992), Blandon (2001), Focarelli & Pozzolo (2001), Focarelli & Pozzolo (2005), Deng & Elyasiani (2008), Qian & Delios (2008), Goetz & al (2016).	Bank Al-Maghrib reports (Central bank) ;
Internationalisation	-Internationalisation index	BQ_TNI	$\frac{[(\text{Assets abroad} / \text{Total assets}) + (\text{Net foreign income} / \text{Total net income}) + (\text{Operating expenses abroad} / \text{Total operating expenses})]}{3}$	(Slager (2005), Van Tulder & al (Van Tulder et al., 2001, p. 47) (2001).) ⁸	Annual reports (AWB, BCP, BOA) Management reports (AWB, BCP, BOA) Information notes (AWB, BCP, BOA)
	-Geographic diversification	NB_PAY	Number of host countries	Liang & al (2013), Boubacar (2016).	
Bank performance	-Return on economic asset	ROA	Net income / Total assets	Sanchez-Peinado (2003), Focarelli & Pozzolo (2001), Morgan & Samolyk (2003), Focarelli & Pozzolo (2005), Qian & Delios (2008), Liang & al (2013), Boubacar (2016), Goetz & al (2016).	Annual reports (AWB, BCP, BOA) Management reports (AWB, BCP, BOA) Information notes (AWB, BCP, BOA)
	-Return on equity	ROE	Net income / Equity	Focarelli & Pozzolo (2001), Morgan & Samolyk (2003), Focarelli & Pozzolo (2005), Liang & al (2013), Boubacar (2016), Pelletier (2018), Slager (2005).	
	-Cost to income ratio	CR	Overheads / Net banking income	Focarelli & Pozzolo (2001), Focarelli & Pozzolo (2005), Liang & al (2013), Sissy & al (2017), Pelletier (2018).	
Bank risk	-Z-score	Z_SCO	$(\text{ROA} + (\text{Equity} / \text{Total assets})) / \text{Standard deviation (ROA)}$	Sissy & al (2017), Goetz & al (2016).	Annual reports (AWB, BCP, BOA) Management reports (AWB, BCP, BOA) Information notes (AWB, BCP, BOA)
	-Risk adjusted return on economic asset	RAROA	ROA / Standard deviation (ROA)	Sissy & al (2017).	
	-Risk adjusted return on equity	RAROE	ROE / Standard deviation (ROE)	Sissy & al (2017), Slager (2005).	

⁸ To be specific. Authors used the ratio : $[(\text{Assets abroad} / \text{Total assets}) + (\text{Net foreign income} / \text{Total net income}) + (\text{Staff abroad} / \text{Total staff})] / 3$.

Variables related to the environment					
Growth opportunities (Market attractiveness)	-GDP growth	TX_PIB	$(GDP_n - GDP_{n-1}) / GDP_{n-1}$	Qian & Delios (2008), Focarelli & Pozzolo ⁹ (2005), Caves (1996).	World Bank (Database available online)
	-Size of the banking sector	TAI_SB	Total domestic credit provided by financial sector / GDP	Focarelli & Pozzolo ¹⁰ (2005), Focarelli & Pozzolo ¹¹ (2001).	World Bank (Database available online)
	-Banking sector concentration	PTA_BQ	Total assets of the top five Moroccan banks / Total assets of the banking sector in Morocco	-	Bank Al Maghrib reports (Central bank) ;
International development of local customers	-Cumulative FDI (Excluding banking sector)	CUM_IDE ES	$\sum IDE ES_{2001 \rightarrow 2018}$	Engwall & Wallenstal (1988), Hellman (1994), José-Alvarez-Gil & al (2003), Ursacki & Vertinsky (1992).	Exchange office reports (Database available online)
	-Cumulative exportations	CUM_EXP ES	$\sum EXP ES_{200X1 \rightarrow 2018}$	Engwall & Wallenstal (1988), Hellman (1994), José-Alvarez-Gil & al (2003), Ursacki & Vertinsky (1992).	

Source: Authors

⁹ To be specific. Authors used « Expected GDP growth » ;

¹⁰ To be specific. Authors used the ratio « Total credit to the economy/GDP ».

¹¹ To be specific. Authors used the ratio « Total credit to the economy/GDP ».

Appendix 2 - Statistical analysis of collected data

- **Hypothesis I : The absence of growth opportunities in domestic market and the ownership of a specific advantage would positively impact expansion in Africa.**

Tableau 1 - Hypothesis I tests for AWB

Hypothesis I	Hypothesis test	Important of relationship	Direction of relation
The absence of growth opportunities in domestic market and the ownership of a specific advantage would positively impact expansion in Africa : Accepted			
GDP growth has a positive impact on the internationalisation index	Rejected	-	-
Banking sector size has a positive impact on the internationalisation index	Accepted	Strong	Positive
The concentration of total assets has a positive impacts the internationalisation index	Rejected	-	-
GDP growth has a positive impact on the number of host countries	Rejected	-	-
Banking sector size has a positive impact on the number of host countries	Accepted	Strong	Positive
Concentration of total assets has a positive impact on the number of host countries	Rejected	-	-

Source: Authors

Tableau 2 - Hypothesis I tests for BCP

Hypothesis I	Hypothesis test	Important of relationship	Direction of relation
The absence of growth opportunities in domestic market and the ownership of a specific advantage would positively impact expansion in Africa : Rejected			
GDP growth has a positive impact on the internationalisation index	Rejected	-	-
Banking sector size has a positive impact on the internationalisation index	Rejected	-	-
The concentration of total assets has a positive impacts the internationalisation index	Rejected	-	-
GDP growth has a positive impact on the number of host countries	Rejected	-	-
Banking sector size has a positive impact on the number of host countries	Accepted	Strong	Positive
Concentration of total assets has a positive impact on the number of host countries	Rejected	-	-

Source: Authors

Tableau 3 - Hypothesis I tests for BOA

Hypothesis I	Hypothesis test	Important of relationship	Direction of relation
The absence of growth opportunities in domestic market and the ownership of a specific advantage would positively impact expansion in Africa : <u>Accepted</u>			
GDP growth has a positive impact on the internationalisation index	Rejected	-	-
Banking sector size has a positive impact on the internationalisation index	Accepted	Strong	Positive
The concentration of total assets has a positive impacts the internationalisation	Rejected	-	-
GDP growth has a positive impact on the number of host countries	Rejected	-	-
Banking sector size has a positive impact on the number of host countries	Accepted	Strong	Positive
Concentration of total assets has a positive impact on the number of host countries	Rejected	-	-

Source: Authors

These results, to which we must add our observation that only the three largest Moroccan banks are active in Africa, allow us to validate the hypothesis H I.

- **Hypothesis II : The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa.**

Tableau 4 - Hypothesis II tests for AWB

Hypothesis II	Hypothesis test	Important of relationship	Direction of relation
The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa : <u>Accepted</u>			
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the internationalisation index	Accepted	Strong	Positive
Cumulative exports has a positive impacts on the internationalisation index	Rejected	-	-
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the number of host countries	Accepted	Strong	Positive
Cumulative exports has a positive impacts on the number of host countries	Accepted	Strong	Positive

Source: Authors

Tableau 5 - Hypothesis II tests for BCP

Hypothesis II	Hypothesis test	Important of relationship	Direction of relation
The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa : <u>Accepted</u>			
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the internationalisation index	Rejected	-	-
Cumulative exports has a positive impacts on the internationalisation index	Accepted	Strong	Positive
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the number of host countries	Accepted	Strong	Positive
Cumulative exports has a positive impacts on the number of host countries	Accepted	Strong	Positive

Source: Authors

Tableau 6 - Hypothesis II tests for BOA

Hypothesis II	Hypothesis test	Important of relationship	Direction of relation
The development of local customers in Africa would positively impact the expansion of Moroccan banks in Africa : <u>Accepted</u>			
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the internationalisation index	Rejected	-	-
Cumulative exports has a positive impacts on the internationalisation index	Rejected	-	-
Cumulative FDI (Excluding banking & insurance sector) has a positive impact on the number of host countries	Accepted	Strong	Positive
Cumulative exports has a positive impacts on the number of host countries	Accepted	Strong	Positive

Source: Authors

These results allow us to validate the hypothesis H II.

- Hypothesis III : Expansion in Africal would positively impact banks performance.

Tableau 7 - Hypothesis III tests for AWB

Hypothesis III	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africal would positively impact banks performance : <u>Rejected</u>			
The internationalisation index has a positive impact on the Return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Return on equity	Rejected	-	-
The internationalisation index has a negative impact on the Cost to income ratio	Rejected	-	-
The number of host countries has a positive impact on the Return on economic asset	Rejected	-	-
The number of host countries has a positive impact on the Return on equity	Rejected	-	-
The number of host countries has a negative impact on the Cost to income ratio	Rejected	-	-

Source: Authors

Tableau 8 - Hypothesis III tests for BCP

Hypothesis III	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africal would positively impact banks performance : <u>Rejected</u>			
The internationalisation index has a positive impact on the Return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Return on equity	Rejected	-	-
The internationalisation index has a negative impact on the Cost to income ratio	Rejected	-	-
The number of host countries has a positive impact on the Return on economic asset	Rejected	-	-
The number of host countries has a positive impact on the Return on equity	Rejected	-	-
The number of host countries has a negative impact on the Cost to income ratio	Rejected	-	-

Source: Authors

Tableau 9 - Hypothesis III tests for BOA

Hypothesis III	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africal would positively impact banks performance : <u>Rejected</u>			
The internationalisation index has a positive impact on the Return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Return on equity	Rejected	-	-
The internationalisation index has a negative impact on the Cost to income ratio	Rejected	Strong	Negative
The number of host countries has a positive impact on the Return on economic asset	Rejected	-	-
The number of host countries has a positive impact on the Return on equity	Rejected	-	-
The number of host countries has a negative impact on the Cost to income ratio	Rejected	-	-

Source: Authors

These results allow us to invalidate the hypothesis H III.

- **Hypothesis IV: Expansion in Africa would negatively impact banks risk.**

Tableau 10 - Hypothesis IV tests for AWB

Hypothesis IV	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africa would negatively impact banks risk : <u>Rejected</u>			
The internationalisation index has a positive impact on the Z. Score	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on equity	Rejected	-	-
The number of host countries has a positive impact on the Z. Score	Rejected	-	-
The number of host countries has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The number of host countries has a positive impact on Risk-adjusted return on equity	Rejected	-	-

Source: Authors

Tableau 11 - Hypothesis IV tests for BCP

Hypothesis IV	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africa would negatively impact banks risk : <u>Rejected</u>			
The internationalisation index has a positive impact on the Z. Score	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on equity	Rejected	-	-
The number of host countries has a positive impact on the Z. Score	Rejected	-	-
The number of host countries has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The number of host countries has a positive impact on Risk-adjusted return on equity	Rejected	-	-

Source: Authors

Tableau 12 - Hypothesis IV tests for BOA

Hypothesis IV	Hypothesis test	Important of relationship	Direction of relation
Expansion in Africa would negatively impact banks risk : <u>Rejected</u>			
The internationalisation index has a positive impact on the Z. Score	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The internationalisation index has a positive impact on the Risk-adjusted return on equity	Rejected	-	-
The number of host countries has a positive impact on the Z. Score	Rejected	-	-
The number of host countries has a positive impact on the Risk-adjusted return on economic asset	Rejected	-	-
The number of host countries has a positive impact on Risk-adjusted return on equity	Rejected	-	-

Source: Authors

These results allow us to invalidate the hypothesis H IV