

Financial innovation of Small and Medium Enterprises in Morocco in the area of energy optimization: state of the art

Naima Boutbirt¹, Mohamed Adaskou¹

¹Faculty of Law, Economics and Social Sciences, ibn zohr university, Agadir, Morocco.

Abstract. The Moroccan entrepreneurial ecosystem is composed mainly of small and medium-sized enterprises (SMEs). These SMEs are currently undergoing profound changes after the financial and health crises, characterized by upheavals and uncertainty. This global context has prompted SMEs to be more and more competitive in order to cope with high degrees of turbulence and unpredictability. This requires the adoption of financial innovations and the inclusion of new modes of financing, in order to overcome the constraints of limited access to resources and the problems of undercapitalization that are related to information asymmetry and insufficient guarantees. These enterprises are using financial innovation can help SMEs understand the financing mechanisms available and encourage them to invest in energy efficiency projects. The objective of this work is to draw up an inventory of different techniques of financial innovation put in favor of Moroccan SMEs and adapting financial innovation in Moroccan SMEs can play an important role in optimizing energy consumption. To this end, the entrepreneurial orientation of SME owner-managers aims at adopting innovative financing means, such as Private Equity, Crowdfunding, Business Angeles, Venture Capital and Digital Finance to facilitate their sustainable development.

Keywords: Energy optimization, Financial innovation, Competitiveness, Constraints, Moroccan SMEs.

1 INTRODUCTION

According to figures from the High Commission for Planning (HCP 2019), small and medium-sized firms (SMEs) account for 95% of the national economic fabric, making them the development arm of our nation.

One of the biggest barriers to the growth of these small firms is the hunt for financial resources. Self-financing, followed by bank loans as an external source of funding, serves as the primary financial source for SMEs to meet their investment needs in theory.

Furthermore, SMEs are the recipients of 30% of all loans made according to statistics provided by Bank Al Maghreb (BAM 2020). Despite their preference for bank loans, these businesses are compelled to use other cutting-edge financing strategies in order to reduce the counterparty risk associated with bank financing.

This is why we are interested in researching financial innovation in SMEs in Morocco. Information asymmetry and the risk it creates are what define an innovative endeavor in a SME's. Since profitability affects capitalization in innovative SMEs, these businesses, despite the high risk and uncertainty of their activities, aim to reduce risk and increase profitability by utilizing cutting-edge financing methods like private equity, crowdfunding, business angels, venture capital, and digital finance, or fintech.

The current study examines financial innovation in the context of Moroccan SMEs, by first reviewing the literature on the idea of financial innovation, and we examining the many forms of financial innovation that we may find in Moroccan SMEs. Then we present briefly the impact of energy optimization on SMEs in Morocco. We will address the benefits of financial innovation for local SMEs, then discuss the possible challenges encountered.

2 LITERATURE REVIEW ON FINANCIAL INNOVATION

In general, the term "innovation" refers to a company's commitment to research and development in order to satisfy worldwide standards for competitiveness and crisis survival.

Particularly, financial innovation is an innovation that can be used in the finance industry. This idea relates to the development of new financial solutions intended to close the capital market's gap and facilitate a more effective funds flow from lenders to borrowers. This essentially refers to the development and growth of financial services [1].

For John K. Galbraith, he defined innovation financing as follows:

"As to new financial instruments, experience establishes a firm rule [...] that financial operations do not lend themselves to innovation. What is recurrently so described and celebrated is, without exception, a small variation on an established design, one that owes its distinctive character to the aforementioned brevity of the financial memory. The world of finance hails the invention of the wheel over and over again, often in a slightly more unstable version. All financial innovation involves, in one form or another, the creation of debt secured in greater or lesser adequacy by real assets [...] All crises have involved debt that, in one fashion or another, has become dangerously out of scale in relation to the underlying means of payment." [2].

According to [3], financial innovation is "any act of creating or popularizing new financial instruments, technologies, institutions and markets".

Indeed, financial innovations emerged in the late 1990s and peaked between 2004 and 2012. [4] . These financing innovations are presented as interesting solutions and vital for the survival of SME's [5.6].

3 TYPES OF FINANCIAL INNOVATIONS IN SMES

SMEs are constantly looking for adequate financial instruments to manage their risks and strengthen their liquidity. Thus, with the advent of banks that share profits and losses, these companies have a new access to financial sources instead of conventional financing (IPEMED ,2018).

This new type of financial innovation combines a number of financing types that we'll present next:

3.1 Business Angels are recent in Morocco; they are represented by individuals who invest a part of their wealth in innovative companies or start-up businesses with high growth potential. In 2008, the first Moroccan network of business angels called Atlas Business Angels was created, which gathers about thirty individual investors who bring their capital, their experience, their competence and their relationship to innovative companies and business. The business angels intervene in the financing offer of start-ups and SMEs. The Caisse Centrale de Gestion has set up the Innov Invest fund, which enables SMEs to overcome difficulties in the initial phase [7]. The business angels step in to help start-ups and SMEs with their finance requests. The Innov Invest fund was established by the "Caisse Centrale de Gestion" to help SMEs get over initial hurdles.

3.2 Private Equity is an investment in equity or quasi-equity in the capital of an unlisted company for a given period of time [8]. It is the Moroccan Association of Investors in Capital (AMIC), set up in 2000, which brings together Moroccan investors in capital. Private equity, allows SMEs to have financial support at all stages of its existence. Thus, the share allocated to private equity has increased by more than 42% and reached 1350 million MAD in 2020 (AMIC, 2020).

3.3 Evolution : venture capital started to emerge in Morocco. A financing tool that involves acquiring short-term minority holdings in the capital of very young, high-growth businesses, which enhances the prerequisites needed for access to bank loans. With venture capital, business owners can take advantage of these investors' wise counsel, knowledge, and ability to shape decisions.

It has gone through three phases:

- The first start-up activity of "Venture Capital" in Morocco begins between 1990-2000 is characterized by the creation of the company Moussahama in association with five banks (BP, BNDE, CDM, BMCE and Bank Al Amal).
- The second phase, between 2000-2005, saw the start of venture capital by the creation of funds with committed capital.
- The construction phase from 2006 to 2009, it was distinguished by the increase of management funds and investment volumes granted to companies.

There are 37 associated private equity funds, which belonged to 19 management businesses, according to statistics from the Moroccan Association of Capital Investments (AMIC) from 2014; these funds meet the needs of financing and bolstering the equity of SMEs.

The preferred method for funding innovation is venture capital, which comes in two forms:

- Seed capital (seed stage): for the financing of a project in the research phase of the product definition.
- Early-stage venture capital: dedicated to product development expenses for its first marketing.

In Morocco, the most important venture capital financing mechanisms are the "Fonds Communs de Placement à Risque" (FCPR) and the "Société de Capital-Risque" (SCR). Currently, this type of financing is aimed at SME startups in the new technologies sector with a fund of 172 million dirhams (AMIC, 2020).

3.4 Participative financing

Participative financing, known as crowdfunding, or alternative/collaborative financing, is part of the social and solidarity economy. This type of financing represents an alternative to traditional financial sources.

It appeared in a global context characterized by financial crises that have disrupted the financial market and led to a number of challenges, particularly for SMEs willing to have access to bank financing.

As a result, Islamic or participatory finance is of interest to the global financial system. The term "participatory" describes both the ability to share losses and the pro-rata distribution of earnings.

A set of rules that permit banking activities free from usury is known as participatory finance [9]. The fundamental idea behind crowdfunding is that businesses can raise money from a large public.

Crowdfunding is a phenomenon that blends the ideas of crowdsourcing and microfinance [10].

Using the thoughts and resources of the general public to develop corporate operations is known as crowdsourcing.

On the other hand, microfinance refers to the capability of offering a range of financial products to those in needs who cannot do so through formal channel.

It has proven to be a primary means of financing the creation of innovative small businesses that are too young to access venture capital and too immaterial to be financed by banks.

Participatory finance was initiated in 2007 in the United States, in 2009 in Europe and in 2017 in Morocco, by the Circular No. 1/W/2017, relating to the products marketed by participatory banks and the modalities of their presentation to customers. Afterwards, in 2019, Bank Al-Maghrib has put in place another circular n° 1/W/2019 which sets the conditions for the Central Guarantee Fund (CDG) to carry out participatory operations.

Participative banking is based on the principles of Islamic legal law for the regularization of its operations. The publication of a number of circulars by Bank Al-Maghrib in 2017 detailed some aspects of this new activity, as well as the products offered. On this aspect, it should be recalled that Morocco is one of the few countries that have not opted for a separate legal text to govern participatory banks, insofar as they have, rather, a dedicated chapter at the level of the new banking law No. 103.12 title III BO_6340. At the same time, the products offered by the participative banks must, from now on, be validated by a unique committee under the authority of the Superior Council of Ulemas. The choice of a single committee to verify the conformity of products should avoid

that each bank has its own Chariâa-Board, which could have generated a high risk of divergence between operators on the market and confusion for the consumer.

Indeed, this mode of financing makes it possible to collect small amounts from a large public. There are three modes of crowdfunding: loan with or without interest, donation with or without reward and capital investment.

There is a basic principle that governs participatory finance practices, including profit and loss sharing (3P). This is the crucial element that distinguishes participatory banks from conventional banks. Thus, the risk-sharing rate replaces the conventional interest rate [11].

In Morocco, the recent establishment of a legal framework represented by the law n°15-18 of the BO n°7014 of 2021 which governs collaborative financing activities serves to strengthen financial inclusion by mobilizing new financial sources for the benefit of very small (VS), small and medium-sized enterprises (SMEs) and directing savings towards new financing opportunities. Moreover, these banks allow to offer to Moroccan SMEs financial products adapted to their specific needs.

Indeed, this regulation establishes a financing framework that involves the general public in the collection of funds through collaborative financing companies (CFCs). It should be noted that the text of the banking law n°103.12 title III BO_6340 defines the system of approval by the administration of those companies and of supervision of the activities of participative financing.

Therefore, Bank Al Maghreb ensures the supervision of lending and donation activities, while the Moroccan Capital Market Authority (AMMC) manages capital investment activities.

Participatory banks in Morocco are allowed to market the following five products:

- **Murabaha:** The participative bank buys the property to resell it later to the client with a profit margin that is agreed in advance between the two parties;
- **Musharaka:** This product is for investors and entrepreneurs, so that they can become partners in the capital of a project;
- **Ijara Mountahia Bi Tamlik:** This is a type of leasing that consists in renting a house for use. The customer can in this case choose the option to buy at the end of the lease contract;
- **Moudaraba:** The participative bank finances a project in its entirety, but its management is entrusted to the entrepreneur. It is a partnership contract where profits are shared between the two parties;

Participative banks, with its diversified products, offer SMEs suitable financial sources for every situation experienced throughout their life cycle.

These companies represent a segment of the potential market for participatory finance institutions. Therefore, these institutions offer financing to SMEs, observing the following three conditions:

- the investment project: through its characteristics, its goals and the process of its realization;
- the profitability of the project: through the expected profit and the summaries of the financial analysis carried out;
- the level of risk to be assumed: by all the different parties involved in the project.

Of course, participatory banks offer flexible and credible sources of financing for SMEs. The latter are looking for other financial means that ensure the satisfaction of their particular liquidity needs.

3.5 Fintech

The term fintech encompasses finance and technology. It is digital innovation applied to financial services. In fact, this new technique combines digital finance and digital technologies. It manifests itself through the use of financial services (money transfer, credit, insurance, savings) by various digital means via the internet, namely: computers, tablets and cell phones. All businesses that use cutting-edge techniques to revamp the financial industry, are considered part of the financial technology industry. Generally, these companies are startups that have capabilities in the field of information and communication technology and seek to capture the market share of large companies with little innovation.

This new mode of financing emerged after the 2008 financial crisis to facilitate access to banking services for underserved individuals and companies at the lowest cost. Moreover, this digital transformation allows SMEs to use online payment methods other than cash. This possibility of financing opens new perspectives for SMEs in search of capital such as access to digital platforms. In this respect, these advances in financial technology have issues on the financial inclusion of SMEs, since FinTech allows to accelerate the transmission of financial assets,

strengthen the liquidity of these companies, reduce their transaction costs. Consequently, SMEs will be able to finance themselves through ICOs (Initial Coin Offering) via the issuance of digital assets.

In Morocco, the Moroccan Capital Market Authority (AMMC) recently launched its FinTech portal, which aims to support innovation in the financial industry. This digital platform is set up by the AMMC as part of its strategic plan 2021-2023, which aims to support project developers and foster the development of new technologies in the Moroccan capital market. As part of its visionary strategy, Bank Al-Maghrib has a series of initiatives, as a catalyst for innovation and a major actor in the fintech ecosystem; through notably the "One Stop Shop Fintech's", which represents a single point of contact with the regulator, providing legal and regulatory support regulatory support for Fintech's wishing to enter the market.

Of the 19 Fintech's received in 2021, 42% are Moroccan Fintech's founded by Moroccans and based in Morocco, and 58% are Fintech's wishing to offer mobile payment solutions. In addition, 23% of the Fintech's receiving support and advice indicated that they wished to obtain a payment institution license. (see Figure.1).

In the same vein, Bank Al-Maghrib is working to co-create a fintech ecosystem, by channeling efforts and creating synergies between the various initiatives proposed by the different financial actors, in particular with the public/private sector and financial sector regulators.

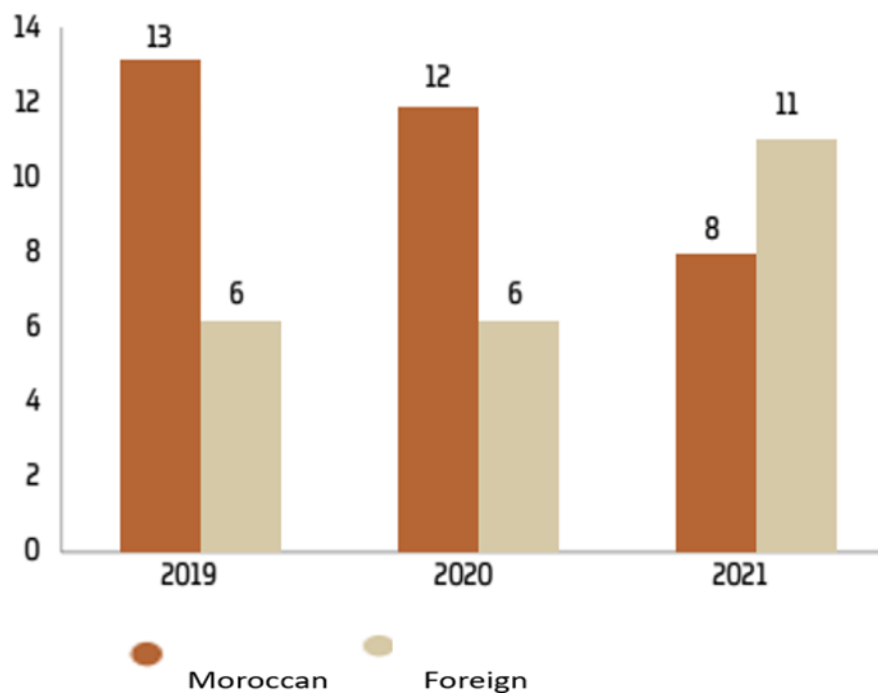


Fig.1. Fintech receipts

Source: Bank al Maghreb's Annual Report on Payment Instruments 2021

3.6 Bootstrap financing, also called bootstrapping, which allows the development of startups without recourse to external financing. According to [12]. This technique is accessible to all SMEs. It includes the combination of economic and social practices through methods that consist in hiring family members in peak periods, acquiring second-hand equipment, financing equipment through leasing contracts instead of purchase. These bootstrapping techniques are used in various countries around the world, but in Morocco this form of financing does not currently exist.

3.7 Green finance, or sustainable finance, is a financial innovation that will support green economy investments for Moroccan SMEs activities such as energy efficiency and sustainable resources management.

Also, the concept of “green finance” refers to all financial products supporting environmentally friendly projects and creating positive externalities which have a positive impact social and economic.

In the last years, this topic has also gained public attention as many protests claim for more respectful policies with regard to environmental and social capital shifting towards a greener and more equal economy. In fact, the activities of companies can have harmful impacts on the environment through the emission of polluting products or the exploitation of natural resources such as energy, so the change concerns all of us, but we are well aware that adopting environmentally friendly tools and habits is not easy, especially in economically and socially vulnerable contexts. And it is mainly in these contexts that it is necessary to intervene with more efficient and less costly solutions.

In view of the seriousness of climate change and the environmental risks likely to hamper future investment, the promotion of innovative financing in the energy sector is an essential element in achieving sustainable development goals. To enable resources to flow into low-carbon sectors, the Moroccan government should stimulate green financing as well as green investment. In the transition to a low-carbon economy, financial institutions must be able to identify environmental risks and ensure financial stability by integrating climate change risks into their risk management strategies and governance structures, disclosing sufficient information on environmental performance and progress made by governments and companies to help minimize financial risks. The market and politics are two key players that can work together to promote green finance; the market can play an important role in determining resource allocation priorities that support the transition to a low-carbon economy. At the same time, policies can encourage the use of green financial instruments such as green bonds, green banks and carbon pricing to finance climate change adaptation projects with a view to achieving sustainability outcomes and returns for investors [13].

The Minister of Finance and Bank Al-Maghrib and the Moroccan financial market authority (AMMC) encouraged to promote the mobilization of green resources. They have agreed a national strategy for financial inclusion that aims to promote the access, use and quality of adapted financial services for both companies and individuals, and thereby support financial sector sustainable finance policies. These initiatives meant that the Sustainable Banking Network ranked Morocco at the “emerging” stage in terms of advancing sustainable finance in its February 2018 Global Progress Report, there is still a long way to go and significant efforts are still required to ensure that the financial sector roadmap is implemented so that environmental and social risk monitoring is put in place by financial institutions.

4 ENERGY OPTIMIZATION A CASE OF SMES IN MOROCCO

The main mission of the National Agency for the Promotion of Small and Medium-sized Enterprises, Maroc PME, is to promote the competitiveness and growth of small and medium-sized enterprises (SMEs) by providing support and backing for investment, strengthening the entrepreneurial ecosystem and implementing partnerships with the public and/or private sector. "TATWIR - GREEN GROWTH" is part of the 2021-2023 Industrial Recovery Plan, which aims to position the Morocco as a carbon-free and circular industrial base. For TATWIR and GREEN GROWTH:

- Integrated offer to support the decarbonization of industrial SMEs
- Support for the development of decarbonized processes/products.
- Support for the emergence of new green industrial sectors.

The energy dependency rate of 88% in 2020, including decentralized and biomass sources, would improve as early as scenario I, given the trend already in place towards greater use of renewable energies. The same applies to specific dependence on petroleum products. This shows that the strategic choices made in 2009, in particular the development of renewable energies, would continue to have an impact over the long term. Scenarios II and III would further accentuate the trend, the former by reducing consumption of petroleum products and the latter by pushing ahead with demand for renewable energies. This would bring the respective indicators by 2050 to 49% and 17% for the energy dependency ratio, and 34% and 17% for the oil dependency ratio. (see figure.2).

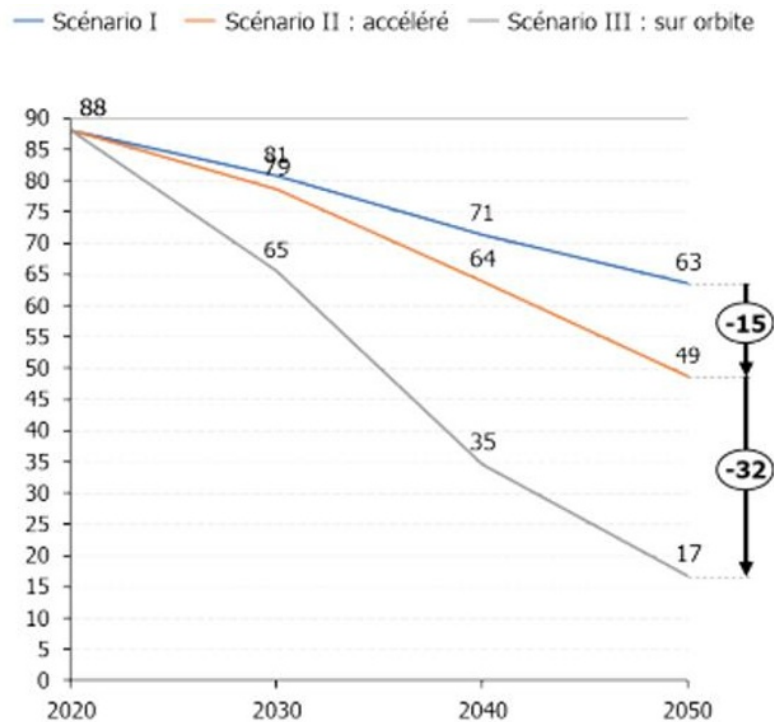


Fig.2. Energy dependency rate %.

Source: The Economic, Social and Environmental Council report (CESE 2020)

The industrial sector accounts for over 21% of final energy consumption. Energy efficiency in this sector is therefore one of the main levers for controlling costs, making companies more competitive and meeting economic and environmental objectives. Energy accounts for a significant proportion of production costs, particularly in certain industrial sectors such as cement, mining and food processing.

Energy efficiency is therefore one of the best ways for a company to increase its profits and become more competitive. Energy audits and the implementation of an energy management system within the company are the main tools needed to achieve cost reduction objectives. Financial incentives, including technical support and a financial contribution to investments, are currently available from several national banks. It is therefore in the interest of manufacturers to invest in these actions.

The major energy sources used in Morocco are oil and electricity. Fuel oil or other petroleum products are by far the most significant energy source, representing 68% of overall use in 2017, while electricity is the second most important source, 3% biofuels and waste as well as 2% of natural gas. The total final consumption by source TFCs in the industry reached 3.8 Mtoe in 2017, up from the peak reached during 2011- 2013, [14]. The use of oil decreased from 2013 onwards as subsidies for fossil fuels were abolished and subsequently increased again in 2017 (see figure 3.).

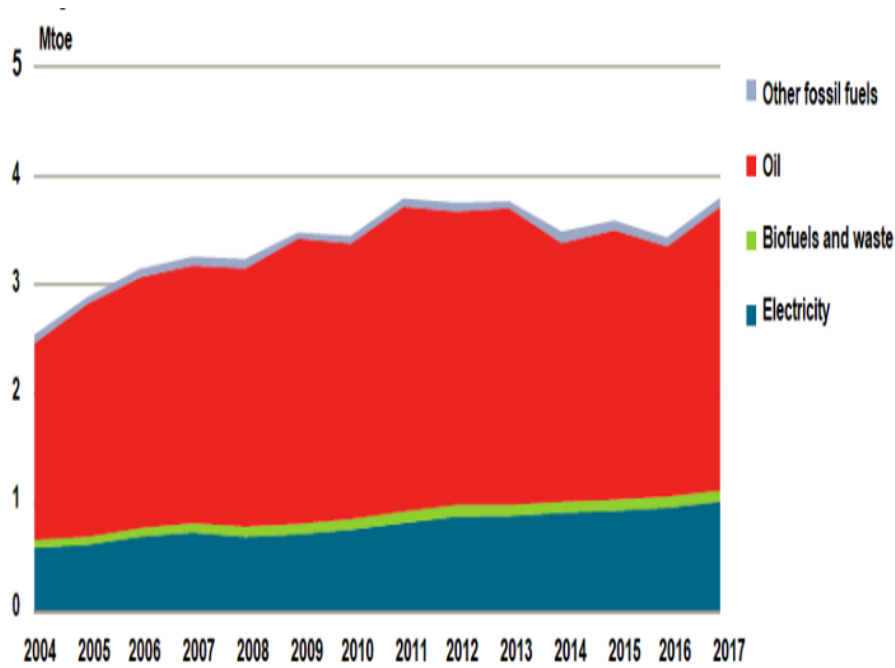


Fig.3. Total final consumption by source at the industrial sector in Morocco

Source: IEA (2019 forthcoming), World Energy Balances 2019 preliminary edition, www.iea.org/statistics/

Eco energy savings are actions taken to limit energy consumption or to avoid losses on the energy produced. For a company, consuming less energy means becoming more competitive. Yet few companies are aware of the level of energy losses they incur on a daily basis, often due to a lack of management or simply a lack of precaution in energy-saving measures. [15], [16], [17], [18]

At present, SMEs are tending to focus on proactive environmental management systems, on conserving natural resources and on implementing techniques to reduce energy use, waste production, raw material consumption, etc. There are several reasons why companies are keen to implement such an approach. Firstly, by implementing a new green economy policy, companies can reduce their energy costs. Indeed, by promoting cleaner energy or eliminating waste, the company can reduce its costs and be more profitable. [19],[20],[21].

With its 2021-2023 recovery plan, Morocco is resolutely moving towards a green economy. To meet market demands and competitive constraints, particularly in view of the imminent introduction of a carbon tax at European borders, Morocco aims to develop an innovative, low-carbon and competitive national industry. To achieve this, Moroccan companies of all sizes and in all sectors will have to rethink their production and consumption patterns by investing in the green economy, synonymous with resilience, modernization and sustainable growth. Whether in renewable energies, energy efficiency or resource efficiency, many companies can testify today to the positive impact of such investments on their profitability, product quality, compliance with regulatory requirements, or brand image. In order to facilitate access to information and stimulate the green ecosystem, the Solar Cluster, in partnership with AMEE, has drawn up this guide, which provides access to financing and support offers that meet the needs of companies wishing to improve their competitiveness by investing in the green economy, on the one hand, and entrepreneurs and suppliers of green technologies and services aiming to accelerate the industrialization or market launch of their solutions, on the other. As these mechanisms evolve or new offers are introduced, this guide will be updated as part of a digital platform.

The overall objective of the project is to improve the energy efficiency of Moroccan small and medium-sized enterprises (SMEs) and significantly reduce GHG emissions by removing regulatory, financing and information barriers to energy efficiency and conservation activities and investments. The specific objectives of the project are:

- Reducing GHG emissions by optimizing energy consumption and contributing to global environmental benefits;

- Promote the development of energy efficiency techniques in the industrial sector by demonstrating the financial benefits of energy savings and strengthening the incentive framework for EE;
- Reducing the country's dependence on fossil energy sources;
- Reducing energy costs and increasing the competitiveness of Moroccan companies.

we discuss the benefits and barriers of financial innovation for small and medium-sized enterprises

5 BENEFITS AND BARRIERS TO SME FINANCIAL INNOVATION IN AREA OF OPTIMIZATION ENERGY

SMEs financial innovation has several benefits and barriers.

5.1 Benefits

- Improves the competitiveness of Moroccan SMEs that are developing in a globalized economic environment;
- Renews the management of SMEs' portfolio of products and services in order to keep up with the fluctuations of the financial markets at the global level;
- Facilitate the accessibility of Moroccan SMEs to additional financing,
- Strengthen the performance of these enterprises;
- Establish research and development practices in SMEs to meet these strategic challenges.

5.2 Limitations

Despite the evolution of financial innovation in favor of SMEs, it has limitations that can be divided into three categories:

- The uncertainty and information asymmetries that characterize these SMEs makes it more difficult for them to access financing. [22].
- Innovative SMEs suffer from a shrinkage of equity capital, this problem of financing innovation seems to be linked to informational constraints that constitute an obstacle to accessing the necessary financial resources;
- Another difficulty to be taken into account, in the context of the recourse of SMEs to financing, is the component of their assets, since the latter is essentially made up of intangible assets, which represents an obstacle to granting them external financial resources;
- The lack of a regulatory framework that is a powerful driver for the creation of innovative financial instruments for SMEs;
- The ambiguity allocated to the interest rate measure for innovative financing means for SMEs;
- The financial risks that result from the lack of experience of small investors in investment operations;
- Cyber Security risks;
- Risks related to the existence of data confidentiality.

Indeed, the risk associated with SME financial innovation is difficult to predict or measure given the degree of uncertainty involved.

6 CONCLUSION

Financial innovation ultimately gives small and medium-sized businesses (SMEs) a wide choice of financing options to choose from, in order to satisfy their needs for financial resources and determine the optimum capital structure for maximizing their value. In addition, the adaptation of financial innovation for this type of business helps to increase its performance and growth [23].

The innovation of the financing means of SMEs is also enhanced by the development of the digital era. Indeed, the world is in perpetual change which has led to new forms of financing such as crowdfunding, participatory financing, socio-financing and finance technology. This includes new methods of financing such as mobile money, digitalization, financial inclusion to facilitate access of SMEs to financial services, and also the innovation watch that consists of managing changes to ensure the sustainability of innovative companies facing the requirements of diversifying their activities.

The innovation of the financial sources of SMEs is an effective solution to the issues of informational asymmetry, credit rationing, risk aversion, from which this type of enterprise suffers.

Ultimately, adapting financial innovation in Moroccan SMEs can play an important role in optimizing energy consumption. This can happen in several ways:

1. Access to financing for energy efficiency projects: Financial innovation can facilitate SMEs' access to specific financing for projects aimed at improving energy efficiency. This can include green loans or low-interest financing mechanisms to support investments in energy-saving technologies and equipment. By providing affordable financial resources, financial innovation enables SMEs to make energy improvements that they might otherwise be unable to finance.

2. Energy performance-based financial instruments: Financial innovation can promote the use of energy performance-based financial instruments. For example, energy performance contracting (EPC) enables SMEs to benefit from external investment in energy efficiency projects, where energy service providers are remunerated according to the energy savings achieved. This approach eases the initial financial burden on SMEs and encourages them to implement cost-effective energy efficiency measures.

3. Partnerships with specialized players: Financial innovation can facilitate partnerships between SMEs and players specialized in energy services. These partnerships can give SMEs access to the expertise and technological solutions of energy service providers, who can help them identify energy-saving opportunities and implement energy efficiency measures. Innovative financing models can be used to support these partnerships, offering SMEs both financial and technological advantages.

4. Awareness-raising and training: Financial innovation can also support awareness-raising and training for SMEs on the benefits of energy efficiency. Financial training programs specific to energy issues can help SMEs understand the financing mechanisms available and encourage them to invest in energy efficiency projects. By strengthening SMEs' financial knowledge in this area, financial innovation helps to overcome financial barriers and stimulate the adoption of energy optimization measures. By combining financial innovation with concrete energy efficiency measures, Moroccan SMEs can achieve significant energy savings, reduce their operating costs, improve their competitiveness and contribute to the transition to a more sustainable economy.

This research is limited to the theoretical aspect and it is within this framework that our study will open other future research path to an empirical study. This study on a sample of Moroccan SMEs using innovative financial means will bring more results that are relevant on the role of these tools in the development and performance of these entities.

References

1. Silber, William L. "The process of financial innovation." *The American Economic Review* 73.2 89-95. (1983).
2. Galbraith, John Kenneth. "A Short History of Financial Euphoria. Financial Genius is Before the Fall." *Whittle Direct Book* (1990).
3. Tufano, P. Financial innovation. *Handbook of the Economics of Finance*, 1, 307-335. (2003).
4. Lerner, J., Seru, A., Short, N., & Sun, Y. *Financial innovation in the 21st century: Evidence from us patents* (No. w28980). National Bureau of Economic (2021).
5. Viennot, L., Chauvet, F., Colin, P., & Rebmann, G.. Designing strategies and tools for teacher training: The role of critical details, examples in optics. *Science Education*, 89(1), 13-27 (2005).

6. Mathieu, J. E., Tannenbaum, S. I., Donsbach, J. S., & Alliger, G. M A review and integration of team composition models: Moving toward a dynamic and temporal framework. *Journal of management*, 40(1), 130-160. (2014).
7. Zemitta, A « Instruments de financement de l'innovation », Les Rencontres PACEIM, Marseille. (2014),
8. Douhane, A. et Rocchi, J-M. « technique d'ingénierie financière ; pratique et méthode des montages financiers », Ed. SEFI, Paris 1997, p.12.n° : 496. (1997).
9. Muhammad, F., Butt, S., & Mansori, S. Innovation capability: The role of Islamic work ethics. *Journal of Asian Business Strategy*, 5(7), 125-131. (2015).
10. Harrison, K. Federalism and climate policy innovation: A critical reassessment. *Canadian Public Policy*, 39 (Supplement 2), S95-S108 (2013).
11. Tan, K. S., Chong, S. C., Lin, B., & Eze, U. C. Internet-based ICT adoption: evidence from Malaysian SMEs. *Industrial Management & Data Systems* (2009).
12. Smith, D. Financial bootstrapping and social capital: How technology-based start-ups fund innovation. *International Journal of Entrepreneurship and Innovation Management*, 10(2), 199-209. (2009).
13. Ainou, F.Z., Ali, M. & Sadiq, M. Green energy security assessment in Morocco: green finance as a step toward sustainable energy transition. *Environ Sci Pollut Res* 30, 61411–61429 (2023).
14. Azeroual, M., EL makrini, A., EL moussaoui, H., & EL markhi, H. Renewable Energy Potential and Available Capacity for Wind and Solar Power in Morocco towards 2030. *Journal of Engineering Science and Technology Review*, 11(1), 189–198. (2018)
15. Daoudi, M., Mou, A. A. S., Idrissi, A., Ihoume, I., Arbaoui, N., & Benchrifa, M. New approach to prioritize wind farm sites by data envelopment analysis method: A case study. *Ocean Engineering*, 271, 113820. (2023).
16. Campitelli, A., Aryoug, O., Ouazzani, N., Bockreis, A., & Schebek, L Assessing the performance of a waste management system towards a circular economy in the Global South: The case of Marrakech (Morocco). *Waste Management*, 166, 259-269. (2023).
17. Bensouda, M., & Benali, M. The Role of Institutional Pressure and Dynamic Capabilities in Promoting Energy Efficiency Practices: Evidence from the Moroccan Manufacturing Sector. *International Journal of Energy Economics and Policy*, 13(1), 352. (2023)
18. Bensouda, M., & Benali, M. From “Fairly Good” to “Optimal” Energy Efficiency Practices within the Moroccan Manufacturing Sector: Are Financial Resources Sufficient? *International Journal of Energy Economics and Policy*, 13(3), 478. (2023).
19. Petrova, M. M., & Akhmedyarov, Y. A. Foreign experience in supporting innovation. (2019).
20. Ramazanov, S. Development, management and forecasting in a green innovative economy, based on the integral dynamics model in the conditions of ‘Industry–4.0’. *ACCESS Journal: Access to science-business-innovation in digital economy*, 1(1), 9-29. (2020).
21. Odinokova, T., & Akhmedyarov, Y. Development of innovation activity research model and its implementation. *Access to science, business, innovation in digital economy*, 29-42. (2022).
22. Ayed, W. H. B., & Zouari, S. G. Capital structure and financing of SMEs: the Tunisian case. *International Journal of Economics and Finance*, 6(5), 96-111 (2014).
23. Becheikh, N. The impact of knowledge acquisition and absorptive capacity on technological innovations in developing countries: Evidence from Egyptian small and medium-sized enterprises. *Journal of African Business*, 14(3), 127-140 (2013).