

Determinants of Growth in Algeria Small and Medium Enterprises -An Empirical Study -

Mohammed GOUDJIL 1,*

¹ Laboratory rehabilitation of the developing economies for the challenges and implications of globalization, Faculty of Economics, Business and Management Sciences, University of Ouargla (Algeria), (med.goudjil@mail.com)

Received: 26/05/2024 ; **Revised:** 26/05/2024 ; **Accepted:** 22/06/2024

Summary: This research endeavors to investigate the factors that influence the growth of small and medium-sized enterprises (SMEs) in the cities of Ouargla and Hassi Messaoud by examining the relationship between these determinants and SME growth. The study employed a descriptive methodology and gathered data through a questionnaire administered to a sample of 38 SMEs across various sectors. The collected data was subjected to analysis using SPSS software.

The primary findings suggest that the growth of the SMEs under investigation is influenced by the entrepreneur's qualities, management style, enterprise characteristics, and the environment to varying degrees, with the entrepreneur's qualities exerting the most significant impact on growth. Furthermore, the study revealed that the activity sector and the entrepreneur's gender affect SME growth, while other personal and general factors do not have a significant bearing on the growth of the studied SMEs.

Keywords: Growth, growth determinants, individual determinants, enterprise characteristics, commercial activity characteristics, small and medium enterprises.

Jel Classification Codes: M13: M19

I-Introduction:

The significance of small and medium-sized enterprises (SMEs) is intrinsically linked to the crucial role they play in achieving economic growth and social equilibrium within societies. However, the realization of these objectives is contingent upon their ability to sustain and grow amidst a myriad of economic, environmental, and legal changes that primarily cater to large enterprises.

The economic and technological transformations that the world is currently witnessing have led to heightened competition between countries, relying on various technological or traditional means and seeking to gain the largest market share and establish a good reputation for enterprises. The latter find themselves compelled to keep pace with this development to ensure their survival and growth.

In Algeria, development policies over the past two decades have focused on supporting the creation of SMEs as one of the strategies to achieve economic and social growth through various specialized support bodies in this field (ANADE, CNAC, ANJEM, etc.). However, a pertinent issue that arises is the extent to which the established enterprises can continue and grow.

^{*} Mohammed GOUDJIL med.goudjil@gmail.com

1. Main Problematic

Through the aforementioned context, this research examines the following central question: What are the determinants of growth for small and medium enterprises in the municipalities of Ouargla and Hassi Messaoud? This overarching issue can be further divided into the following subquestions:

- a. Is there a relationship between the entrepreneur's qualities, the enterprise's characteristics, management style, and the growth of SMEs?
 - b. What is the factor that exerts the most influence on the growth of SMEs in the studied sample?
- c. Are there discernible differences in SME growth that can be attributed to the entrepreneur's demographic qualities and the enterprise's characteristics?

2. Study Hypotheses

To address this problem, the study relied on a set of hypotheses:

- a. There exists a relationship between the entrepreneur's qualities, the enterprise's characteristics, management style, and SME growth.
- b. The factor that most significantly influences SME growth is the qualities of the entrepreneur or manager of the enterprise.
- c. There are differences in SME growth that can be attributed to the entrepreneur's demographic qualities and the enterprise's characteristics.

3. Study Objectives

This study aimed to illuminate the most significant factors contributing to the continuity and growth of SMEs in order to guide decision-makers towards investing in these factors to achieve development goals through SMEs.

4. Study Methodology

The study employed a descriptive approach, delineating a set of factors affecting SME growth, followed by describing and interpreting the field study results for the questionnaire distributed to the studied sample, thereby answering the research hypotheses.

5. Previous Studies

This study drew upon a set of previous studies that addressed the topic either fully, partially, or focused on one of the dependent variable elements, which can be summarized as follows:

- a. Evangelia and Bassima (2002) study: Titled "The determining factors for the growth of microenterprises in Canada." This was a report submitted to the Industrial Small Business Policy Branch in Canada. The study aimed to ascertain how government policies in Canada can support the large number of SMEs to achieve the required goal of creating jobs. The study was conducted on a sample of 1,337 enterprises, asking them a set of questions through direct interviews. The study reached several findings, most notably that the manager's educational level, the entrepreneur's qualities, the level of innovation, and the economic environment are the most important determinants of growth for the studied SMEs.
- b. Jean-Christophe (2004) study: "How to model the determinants of survival and growth of young enterprises?" This was a research paper submitted to the Research Center for the Study and Monitoring of Living Conditions in Paris. The study specifically aimed to analyze the determinants of growth for start-ups over five years by exploiting data from the SINE (Information System on New Enterprises) survey, which contains data for 147,057 enterprises during the studied period from 1994 to 1999. The study reached several findings, including:



- There is a negative link between performance and enterprise size.
- The entrepreneur's personal qualities have less impact on enterprise growth compared to the impact of enterprise characteristics.
- The strategic choices established by the managers modify the growth paths.
- c. Endi and Christea (2016) study: "Growth Determinants of Small Medium Enterprises (SMEs)." This was an article in the Universal Journal of Management, which aimed to empirically test the impact of the three growth determinants: personal factors, factors related to the enterprise, and factors related to the environment. The study was conducted on a sample of 52 managers/enterprise owners in Milan, Italy, which was taken through targeted samples, using path analysis as an analysis technique. The study concluded that:
- Personal factors (professional experience, motivation) and the enterprise's ability to adapt to the environment have a significant impact on growth, as the manager's ability to produce competitive products and product diversity determines SME growth.
- Factors related to the enterprise have an indirect impact on growth for these enterprises.
- d. Josée St-Pierre et al. (2016) study: "The growth factors of manufacturing SMEs in local or international markets." This was a study submitted to the Canadian Research Program, which aimed to highlight the factors directly influencing the growth rates recorded by SMEs, which mainly occurs in the local or international market, through the strategic objectives of these enterprises, based on a database of more than 380 industrial SMEs in Quebec, from which more than 850 general and financial variables were taken directly from the enterprises. A questionnaire was also distributed to a sample of 289 enterprises, so the study sample consisted of 289 growing SMEs with an average age of 25 years, employing about 65 workers, with a turnover of about \$8.84 million, and experiencing a turnover growth estimated at 21.38% over the past five years. This study reached several findings, most notably that the characteristics and skills of the ownermanager and the availability of resources and incentives are among the most important factors influencing SME growth.

II. The Concept of Growth in Small and Medium Enterprises and its Measurement **Indicators**

1. The Concept of Growth in Small and Medium Enterprises

According to some authors, "growth is considered the essence of entrepreneurship," and commitment to it is what primarily distinguishes the owner of an SME (Evangelia and Bassima, 2002).

While early economists focused on the entrepreneur's role in achieving economic development through their individual traits and ability to bear failure (Knight, 1921), or their ability to innovate and seize opportunities as indicated by Schumpeter (1939), this explains the theories' focus on the importance of the entrepreneur's role in SME growth.

The enterprise life cycle model contributed to providing a comprehensive explanation of enterprise growth, as it is always increasing at a different pace from one stage to another. We find that the enterprise grows gradually (unstable growth) in the first stage, which is the launch stage, until it reaches the second stage, the growth stage, where the growth rate increases (rapid and positive growth), until it reaches the maturity stage where the enterprise is at the peak of its activity, witnessing slow and positive growth. Then, the enterprise finds itself facing two situations:

- Rebirth by improving performance, developing products, or searching for new markets.
- The enterprise's growth gradually declines, leading to a loss of competitiveness, fading, and disappearing.

2. Growth Measurement Indicators

Growth measurement indicators in an enterprise are divided into economic indicators related to economic activity and financial indicators related to the financial aspect of the enterprise. These indicators help small business owners track and measure their progress towards specific goals. Some common indicators include the following (Slávik, 2023):

- a. Revenue Growth Rate: This key performance indicator demonstrates how well sales are progressing by comparing revenues from different periods (FCB, 2018).
- b. Gross Profit Margin: This ratio evaluates the company's financial situation by measuring profitability (FCB, 2018).
- c. Cash Flow: Monitoring cash flow helps assess the money coming in and out of the business, highlighting potential shortcomings (FCB, 2018).
- d. Return on Capital Employed (ROCE): This key performance indicator assesses the company's efficiency and profitability in using its total capital investments (FCB, 2018).
- e. Net Profit: Also known as net income, it represents the profit retained after accounting for all expenses and costs (Michael Park, 2024).
- f. Customer Key Performance Indicators: Measures such as customer satisfaction and retention are crucial for assessing success and loyalty (Rova, 2024).
- g. Operational Key Performance Indicators: Efficiency and productivity indicators help evaluate the company's operational soundness (Rova, 2024).

By tracking these indicators, small business owners can gain valuable insights into their business performance, make informed decisions, and drive growth and success.

2. Determinants of Growth in Small and Medium Enterprises

The determinants of SME growth include various factors that influence their development and success. These determinants encompass:

Individual factors, organizational factors, owner's education level, owner's marketing skills, customer complaints, company size, leverage ratio, revenue growth, GDP growth, national governance quality, profitability delay, and national governance quality (Sarwoko and Frisdiantara, 2016; Slávik, 2023; Mateev and Anastasov, 2010). SMEs play a pivotal role in economic development by creating job opportunities, contributing to the economy, and promoting private ownership and business skills.

Comprehending and monitoring these determinants is crucial for assessing and enhancing the performance and efficiency of SMEs, ultimately contributing to their growth and sustainability in the business landscape.

I.1.First Subtitle

Enter here the content of the text of the first subtitle in the same format (font, size, interlines spacing). Enter here the content of the text of the first subtitle in the same format (font, size, interlines spacing). Enter here the content of the text of the first subtitle in the same format (font, size, interlines spacing). Enter here the content of the text of the first subtitle in the same format (font, size, interlines spacing)¹.



II– Methods and Materials:

1. Study Procedures

This section presents the study population and sample, the method and tools for data collection, and the stages of designing the questionnaire.

a. Study Population and Sample

The study included a sample of SMEs operating in Ouargla and Hassi Messaoud from various sectors out of the total population of SMEs in Algeria. Fifty questionnaires were distributed to the targeted SMEs, which were randomly selected. After the sorting and filtering process (removing incomplete or inconsistent questionnaires), 38 questionnaires were obtained, representing the final study sample, at a rate of 76% (see Table 1).

b. Data Collection Tools

This study primarily relied on collecting data through a questionnaire consisting of 34 questions aimed at obtaining the necessary data to test the study hypotheses and identify the factor that most influences SME growth. The questionnaire's paragraphs were constructed based on the theoretical aspect and the results of previous studies. Subsequently, the validity of the questionnaire was ensured through:

- Content Validity: To ensure face validity, the questionnaire was presented to a group of academics from the University of Ouargla and then to a group of young entrepreneurs to ensure the clarity of the statements and their alignment with the intended purpose.
- Measuring Questionnaire Reliability: To determine the reliability of the questionnaire and its paragraphs, Cronbach's alpha was employed, which takes values between 0 and 1. The closer the value is to one (1), the more reliable the paragraphs are, and conversely, the closer the value is to zero (0), the less reliable they are.

Table 4 demonstrates that the value of Cronbach's alpha coefficient reached 0.78, which is a good and acceptable value indicating the reliability of the tool as it exceeds 60%. This suggests that if the same questionnaire is distributed to the same sample under the same previous conditions, 78% of the sample will provide the same answers. Furthermore, the validity coefficient (the validity of the questionnaire is the square root of reliability) for all the paragraphs and axes of the questionnaire, which reached 0.88, confirms the reliability of the scale used, and thus, this tool can be adopted in the study.

c. Statistical Tools and Software

After collecting the distributed questionnaires, the data was summarized and unloaded into Excel and then into SPSS. To answer the raised issues, reliance was placed on arithmetic means, standard deviation, Pearson correlation coefficient, T-test, and ANOVA to study the differences between means.

III- Results and discussion:

The most important findings will be presented along with their analysis and discussion to test the study hypotheses.

1. Presenting the Personal and Demographic Data of the Entrepreneurs and Enterprises in the Studied Sample

a. Personal Data of Entrepreneurs: This includes gender, age, educational level, and the respondent's position in the enterprise.

Table 5 illustrates that the predominant proportion of the sample individuals are males at 95% compared to 3% females out of the total respondents, indicating that most of the entrepreneurs of the sample enterprises are males.

Table 5 also reveals that for the age groups, the predominant proportion of the respondents' ages ranged between 30 and 40 years old at 47.4%, followed by 28.9% for entrepreneurs aged between 20 and 30 years old. The lowest age group was for individuals over 40 years old at 23.7%.

Regarding the educational level, it is observed that 45% of the surveyed entrepreneurs possess a university or postgraduate level, reflecting the high educational attainment of the studied sample, suggesting their familiarity with modern technological applications and management methods. This is followed by 31% for entrepreneurs with less than a secondary level, while the lowest percentage was for individuals with a secondary level at 24%.

Concerning the respondent's position in the enterprise, 97% of the respondents hold the position of "manager-owner" of the enterprise, which is the predominant position compared to 3% who represent the position of owner only.

In summary, it is evident that most of the sample entrepreneurs are males, manager-owners, with a high educational level, and aged between 30 and 40 years old, implying their management experience is acceptable. This allows for the conduct of the study on the selected sample.

b. Data Related to the Enterprises Under Study: This includes activity sector, number of employees, and age of the enterprise.

Table 6 illustrates that the lowest percentage of sample enterprises were healthcare services enterprises, represented by medical analysis laboratories, followed by food industry enterprises (restaurants and bakeries) at 10%, and private education enterprises at a similar percentage of 11%. The largest percentage of sample enterprises were craft industry enterprises at 37%, while other sectors, including construction contracting, tourism and travel enterprises, and commercial enterprises, accounted for a total of 39%.

Table 6 also reveals that the majority of enterprises were micro-sized, employing 1 to 9 workers, constituting 65.8% of the sample. Small enterprises, employing 10 to 49 workers, comprised 21.1% of the sample, while a small number of medium enterprises, employing 50 to 250 workers, represented 13.2% of the sample.

Furthermore, Table 6 indicates that 31.6% of the sample enterprises have been in the market for more than 10 years, representing the category with professional experience and knowledge of the market compared to the other two categories, each of which formed 34.2% equally. The first category consists of enterprises that have been in the market between 5 and 10 years, signifying that they have surpassed the launch stage and reached the growth stage. The second category comprises new enterprises that have been in the market for less than 5 years.

In summary, it is observed that the majority of the sample enterprises were micro enterprises, predominantly contractors or craft industries, existing in the market for 10 years or less, suggesting that they can be considered to be in a growth stage.

2. Analyzing the Level and Determinants of Growth for the Studied Small and Medium Enterprises :

a. Studying the Growth Level of the Sample Enterprises:

Growth can be measured through several indicators: increase in turnover, introduction of production means and technology, increase in production volume, employment, increase in market share, number of markets, and expansion (see Table 7).



Table 7 reveals that half of the sample enterprises (50%) have a stable turnover, which explains the lack of progress and growth for these enterprises during the study period of five years. Conversely, 4.7% of these enterprises achieve an increase in their turnover, allowing for the application of the study and the identification of the reasons for growth in these enterprises.

Table 7 also illustrates that 36.8% of the studied enterprises introduced new production means and technology during the past five years, while 60.5% of the enterprises did not introduce new production means and technology to their enterprises. A very small percentage of these enterprises (2.6%) disposed of some production means and technology. This reflects that there is internal growth for enterprises that have introduced new production means and technology.

Furthermore, Table 7 indicates that half of the sample enterprises are witnessing an increase in the production of goods/services, while 47.7% of the enterprises have maintained the same production volume over five years. Conversely, 2.6% of the enterprises have experienced a decreasing production volume for five years. Therefore, half of the enterprises can be considered to be experiencing internal growth.

Regarding employment, it is observed that it is increasing in 34.2% of the studied enterprises, which can be attributed to their internal growth. In contrast, 52.6% maintained the same number of employees during the study period, while 13.2% laid off a number of employees during this period.

Table 7 also reveals that the market share is increasing for a significant proportion of sample enterprises, representing 50% of the total studied enterprises. Conversely, 42.1% had a stable market share during the study period, and a small percentage of 7.9% experienced a decreasing market share.

Concerning the number of markets for the sample enterprises, Table 7 indicates that 50% of the enterprises maintained their markets, while 44.7% are considering or have recently entered new markets. In contrast, 5.3% of the enterprises withdrew from some markets or reduced their market size.

It is evident from the aforementioned data that 57.9% of the studied enterprises have not undertaken any expansion operation for at least five years. Conversely, 39.5% of the enterprises have expanded either internally or externally, while 2.6% of the enterprises have regressed.

Through the indicators employed to measure growth in this study, it was observed that these indicators are stable for the majority of enterprises. Consequently, it can be concluded that these enterprises are not considering growth as a strategic objective.

b. Analyzing and Interpreting the Characteristics of the Studied Entrepreneurs:

Table 8, which presents the average responses regarding the possession of entrepreneurial characteristics and competencies among the sample entrepreneurs, indicates that the general average for the dimension of motivation for growth reached (2.87) with a standard deviation of (0.35). This represents a good average, demonstrating the entrepreneurs' motivation for growth and their determination to achieve it for their enterprises. Item 3 obtained the highest arithmetic mean (2.97) and a standard deviation of (0.162), while the desire for independence and living in a certain way does not constitute a motivation for growth for most entrepreneurs, as item 5 ranked 3rd with an average of (2.76) and a standard deviation of (0.54). Regarding the factor of eliminating unemployment, it appears that it does not serve as a motivation for growth for enterprise owners, as item 6 came in last place with an average of (2.63) and a standard deviation of (0.63). These findings are consistent with the results of the study by Evangelia and Bassima (2002).

Table 8 reveals that the entrepreneurs' management ability appears to be high, as the general average for this dimension reached (2.36) with a standard deviation of (0.75). This may be

attributed to their significant interaction with business owners, as item 12 ranked first with an average of (2.66) and a standard deviation of (0.70).

Consequently, it can be concluded that the entrepreneurs possess a strong motivation and desire for growth, as well as the ability to manage their enterprises effectively.

c. Analyzing and Interpreting the Management Style Characteristics of the Studied Enterprises

Table 9, which presents the average responses of entrepreneurs regarding management style characteristics, reveals the following:

The entrepreneur's or enterprise's financial capacity allows them to employ and train a new worker or manager and equip them to be able to delegate daily tasks to them or to serve as a manager in their place, as the arithmetic mean for the first item reached (2.53) with a standard deviation of (0.68).

The studied sample enterprises place a strong emphasis on innovation, as the innovation item ranked first with an average of (2.79) and a standard deviation of (0.57).

It appears that the sample enterprises do not heavily rely on e-commerce, as the average for the items in this part reached (2.14) with a standard deviation of 0.86, which is a weak average that deviates towards the "disagree" response.

Table 9 also indicates that most of the sample enterprises operate only locally, and entrepreneurs rely on their own capital or borrowing from friends and family to finance their enterprises.

From the aforementioned analysis, the following conclusions can be drawn:

The sample enterprises possess certain management style characteristics that directly influence their growth. These characteristics include a focus on innovation, operating solely in local markets, and self-financing without relying on bank loans or government subsidies. According to the findings of previous studies, these factors should propel the sample enterprises towards growth. Evangella and Bassima have noted that growth is assured for enterprises that sell in local markets, and entrepreneurs who rely on their own capital and profits to finance their enterprises witness high growth in their enterprises.

d. Analyzing and Interpreting the Enterprise and Environment Characteristics of the Sample Enterprises

Table 10 reveals that the enterprise's environment offers favorable opportunities for conducting business, as this statement obtained the highest arithmetic mean of (2.84) with a standard deviation of (0.43). This finding explains the high level of competition in the activity of these enterprises, as they are situated in urban areas that encourage business. The respondents also indicate that they have efficient and qualified workers, and that the contribution of their activities to the economy is considered a secondary contribution. Consequently, the general average of the respondents' answers to this axis reached (2.68), which is a good average suggesting that the enterprises and their environment possess the characteristics that affect and stimulate growth, with a standard deviation of (0.63).

In conclusion, it can be stated that the determinants related to the entrepreneur, the enterprise, and the environment were present in the sample enterprises. However, regarding the management style characteristics, it was observed that the enterprises possess some characteristics to a small extent, and thus the absence of certain characteristics affected the general average of this axis. This may indicate the importance of the availability of these missing characteristics, which include the adoption of e-commerce technology and the reliance on bank loans and government subsidies for financing (see Table 11).



3. Testing the Study Hypotheses:

To address the study hypotheses, we relied on calculating the correlation coefficients between the previously mentioned growth determinants (entrepreneur characteristics, activity characteristics, and enterprise environment) on the one hand, and the growth level experienced by the studied sample enterprises on the other hand. Subsequently, we calculated the differences in the growth of the studied enterprises according to the individual characteristics of the entrepreneurs and the characteristics of the studied enterprises, and the following results were obtained:

a. First Hypothesis: There is a relationship between the entrepreneur's qualities, the enterprise's characteristics, management style, and the growth of small and medium enterprises.

Through the correlation matrix between the variables (see Table 12 and Figure 1), it is evident that there is a moderate positive relationship between the growth determinants, represented by the entrepreneur's qualities, the enterprise's characteristics and environment, and the characteristics of the commercial activity, and growth, with the strength of the relationship reaching 0.64 at a significance level less than or equal to 0.01.

From the aforementioned analysis, it is possible to conclude the validity of the first hypothesis, which posits that there is a relationship between these determinants and the growth of the studied small and medium enterprises.

b. Second Hypothesis: The factor that most influences the growth of small and medium enterprises is the characteristics of the entrepreneur or manager in the enterprise.

Table 12 illustrates, after calculating Pearson's r correlation coefficient between the studied growth determinants in the sample, that there is a positive relationship between the entrepreneur's possession of entrepreneurial competencies and enterprise growth, with the strength of Pearson's r correlation reaching 0.57 at a statistical significance level of 0.00. This indicates that the more entrepreneurs possess the studied entrepreneurial competencies, which are motivation for growth and management ability, the more the enterprise grows.

Furthermore, there is a positive relationship between management style characteristics and growth, with the strength of this relationship reaching 0.40 (a statistically significant correlation at the level of 0.011), suggesting that management style has a positive and stimulating effect on enterprise growth by 40%. The characteristics of the external environment also have a positive impact on enterprise growth, with the strength of the correlation reaching 0.42 (a statistically significant correlation at the level of 0.008).

Based on these findings, the validity of the second hypothesis can be proven, which states that growth in small and medium enterprises is primarily affected by the characteristics of the owner entrepreneur or manager of the enterprise, followed by the enterprise's environment, and finally by the nature of the commercial activity.

c. Third Hypothesis: There are differences in the growth of small and medium enterprises attributable to the demographic characteristics of the entrepreneur and the enterprise.

To address this hypothesis, we conducted a t-test for gender and a one-way ANOVA for the remaining characteristics to test their effects on the dependent variable (growth). We divided this hypothesis into sub-hypotheses as follows:

1. First Sub-hypothesis: There are differences in SME growth attributable to the entrepreneur's demographic characteristics.

H0: There are no differences in growth at a statistical significance level (0.05) attributable to the entrepreneur's demographic characteristics.

H1: There are differences in growth at a statistical significance level (0.05) attributable to the entrepreneur's demographic characteristics.

\- Measuring the difference in growth according to gender:

We find that there are differences in growth according to the entrepreneur's gender at a 95% confidence level with statistical significance (0.04) (see Table 13).

\- Measuring the difference in growth according to the entrepreneur's age:

There are no differences in growth due to the entrepreneur's age, as the test significance value reached (0.3), which is greater than the hypothesis's statistical significance level (see Table 14).

\- Difference in growth according to educational level:

We note that there are no differences in growth due to educational level, as the test significance value reached (0.22), which exceeds the statistical significance level (see Table 15).

\- Difference in growth according to the respondent's position:

We also observe that there are no differences in growth according to the respondent's position, whether they are a manager-owner or solely an owner, as the test significance value was greater than the statistical significance level (see Table 13).

Therefore, we can conclude that the entrepreneur's gender affects the growth of small and medium enterprises, while age, educational level, and their position in the enterprise, whether a manager-owner or solely an owner, do not have a significant impact on growth.

2. Second Sub-hypothesis: There are differences in SME growth attributable to the enterprise's age.

H0: There are no differences in SME growth attributable to the enterprise's age.

H1: There are differences in SME growth attributable to the enterprise's age.

From Table 17, we observe that the test significance level was greater than the hypothesis's statistical significance level, and therefore we accept the null hypothesis, indicating that there are no differences in SME growth attributable to the enterprise's age.

3. Third Sub-hypothesis: There are differences in SME growth attributable to the activity sector.

H0: There are no differences in SME growth attributable to the activity sector.

H1: There are differences in SME growth attributable to the activity sector.

From Table 18, we note that the test significance value is less than the hypothesis's significance level, leading us to reject the null hypothesis and accept the alternative hypothesis, signifying that there are differences in SME growth due to the activity sector.

4. Résultats:

Through the statistical analysis outputs of the hypotheses, the following conclusions can be reached for the study sample:

\- There is a direct relationship between the entrepreneur's qualities, management style characteristics, as well as the enterprise's characteristics and environment characteristics on the one hand, and SME growth on the other hand, albeit to varying degrees.



- \- The factor that most significantly influences SME growth is the entrepreneur's qualities in terms of their motivation for growth and ability to manage the enterprise. This is governed by the extent of the entrepreneur's experience in the sector and management.
- \- The manager's gender affects SME growth, while age and educational level do not have a significant impact on growth.
- \- The activity sector affects SME growth, particularly sectors characterized by vitality, such as the electronic industry sector, the craft and construction industries sector, and others, or if the sector plays a fundamental role in the economy, as the products of some activity sectors are in high demand.
- \- Intense competition in the sector should propel the enterprise towards growth because the entrepreneur who possesses a desire for growth consistently seeks renewal and innovation and has a motivation to gain the largest market share to ensure survival and continuity.
- \- The ability to manage has a significant role in enterprise growth, but this ability is considered acquired by most entrepreneurs as it stems from extensive experience in the field and interaction with business owners, as well as engagement with management and marketing centers.
- \- Innovation and the adoption of e-commerce contribute significantly to SME growth in particular, as they facilitate entry into the largest number of markets and foster the loyalty of the largest number of customers.
- \- The commercial orientation of the sample enterprises focuses on the local market, indicating that they do not prioritize growth and external expansion.

IV-Conclusion:

Through this study, we endeavored to address the issue of SME growth in Algeria due to its significance in achieving economic and social development. The study focused on analyzing the extent of the impact of the entrepreneur's qualities, management style, and the enterprise's and environment's characteristics on SME growth. Subsequently, we attempted to answer this problem by establishing a set of hypotheses and testing them using a variety of statistical tools and software.

The field study concluded that there is a direct relationship between the entrepreneur's qualities, management style characteristics, as well as the enterprise's characteristics and environment characteristics on the one hand, and SME growth on the other hand. However, the impact of these determinants on growth varies. The entrepreneur's qualities have a more substantial effect on growth compared to other determinants, as the entrepreneur's desire for growth and ability to manage the enterprise had a clear impact on growth, indicating that the strategic vision and desire of the enterprise owner make a significant difference in growth. Management style characteristics also had an impact on the growth of the studied enterprises. Regarding the activity sector, certain activities witness high growth, which compels the enterprise to keep pace with it and move towards growth.

The study also revealed that the entrepreneur's gender has an impact on enterprise growth, while the remaining demographic characteristics, such as age and educational level, do not affect growth. Thus, we have concurred with some of the results of previous studies and differed in others due to the differences in the studied environment as well as the study tool.

Based on these results, we propose the following:

- \- Emphasizing entrepreneurial competencies as one of the most important criteria for supporting and accompanying projects for supporting bodies.
- \- Focusing on developing the management capabilities and skills of entrepreneurs and gaining experience through interaction with business owners, incubators, and support and marketing centers.
- \- Directing investment towards promising sectors while considering the local specifics of each region.
- \- Working on improving the business climate, which remains the foundation for the transition to a real market economy based on small and medium enterprises and start-ups.

- Appendices:

Table 1: Distributed and Retrieved Questionnaires

Tuble 1. Distributed and Retrieved Questionnantes				
Statement	Number	Percentage		
Number of distributed questionnaires	50	100%		
Number of retrieved questionnaires	42	84%		
Number of invalid questionnaires	4	8%		
Number of valid questionnaires for analysis	38	76%		

The Source: Prepared by the researcher based on the survey distribution results.

Table 2: Three-Point Likert Scale

Statements	Agree	Neutral	Disagree
Weights	3	2	1

The Source: Waleed Al-Fara, 2010, "The Youth's World Seminar for Islamic", Data analyzed using SPSS software, p. 7.

Table 3: Averages of Three-Point Likert Scale

Weighted Average	1_1.66	1.67_2.33	2.34_03
General Trend	First Level	Second Level	Third Level
Answers	Disagree	Neutral	Agree
	Contradictory	Fixed/Wavering	Increasing

The Source: Waleed Al-Fara, 2010, "The Youth's World Seminar for Islamic", Data analyzed using SPSS software, p. 7.

Table 4: Cronbach's Alpha for Questionnaire Stability

Number of Items	Cronbach's Alpha	



34	789,

The Source: SPSS outputs.

Table 5: Personal and Functional Characteristics of the Study Sample

Variables	Frequency	Percentage
	Gender	
Male	36	94.70%
Female	2	5.30%
Age		
20 - 30	11	28.90%
30 - 40	18	47.40%
40+	9	23.70%
Educational Level		
Less than Secondary	12	31.60%
Secondary	9	23.70%
University/Graduate Studies	17	44.70%
Position of the Entrepreneur		
Owner/Manager	38	97.40%
Owner only	1	2.60%

The Source: Prepared by the researcher based on SPSS outputs.

Table 6: Characteristics of the Studied Enterprises

Variables	Frequency	Percentage
Sector of Activity		
Food Industry	4	10.50%
Health Services	12	31.60%
Education	4	10.50%
Handicrafts Industry	14	36.80%
Other	15	39.50%
Number of Employees		

01-Sept	25	65.80%
Oct-49	8	21.10%
50- 250	5	13.20%
Age of the Enterprise		
Less than 5 years	13	34.20%
5 - 10 years	13	34.20%
More than 10 years	12	31.60%

Source: Prepared by the researcher based on SPSS outputs.

Table 7: Growth Indicators

Variables		Frequency	Percentage
Growth in the Number of Businesses	Decreasing	2	5.30%
_	Stable	19	50%
	Increasing	17	44.70%
Growth in the use of technological	Decreasing	1	2.6 %
means	Stable	23	60.5 %
	Increasing	14	36.8 %
Growth in production volume	Decreasing	1	2.6 %
_	Stable	18	47.4 %
	Increasing	19	50 %
Employment growth	Decreasing	5	13.2 %
_	Stable	20	52.6 %
	Increasing	13	34.2 %
Market share growth	Decreasing	3	7.9 %
_	Stable	16	42.1 %
_	Increasing	19	50 %
Growth in the number of markets	Decreasing	2	5.3%
-	Stable	19	50 %
_	Increasing	17	44.7%
Expansion	Decreasing	1	2,6%
-	Stable	22	57.9%
-	Increasing	15	39.5%



The Source: Prepared by the researcher based on the outputs of SPSS and Excel

Table 8: Average Responses about Entrepreneurial Competencies

Table 8: Average Responses about Entrepreneurial Competencies					
Statement	Arithmetic Mean	Standard Deviation	Order	Result	
I have the ability to manage effectively	2.95	0.3242	1	Agree	
I can control emergency situations	2.95	0.3242	2	Agree	
I am ready to face any danger that may threaten the advancement of my institution	2.97	0.1621	1	Agree	
I have strong internal control and self confidence	2.97	0.1621	2	Agree	
I have a desire to achieve a certain way of life	2.76	0.5423	3	Agree	
I am concerned with employing new workers and helping to eliminate unemployment in my environment	2.63	0.6334	4	Agree	

The Source: Prepared by the researcher based on SPSS and Excel outputs.

Table 9: Average Responses about Commercial Activity Characteristics

Statement	Arithmetic Mean	Standard Deviation	Order	Result
I have the financial ability to employ and delegate daily tasks to the institution's manager	2.53	0.682	1	Agree
Iam always keen on development and renewal in products and services of the institution	2.79	0.571	2	Agree
The institution uses media and communication technology at a high level	2.37	0.783	3	Agree
The institution owns an electronic website	2.03	0.914	4	Neutral
The institution promotes and markets its products and services via its electronic website and social media	2.03	0.914	5	Neutral

Source: Prepared by the researcher based on SPSS and Excel outputs.

Table 10: Average Responses about Characteristics of the Institution and its Environment

Statement	Arithmetic Mean	Standard Deviation	Order	Result
The institution witnesses high competition in the sector	2.68	0.733	1	Agree

The institution has competent and qualified workers	2.74	0.602	2	Agree
The sector of the institution plays a secondary role in the economy	2.47	0.724	3	Agree
The institution is located in an urban area	2.68	0.703	4	Agree
The institution's environment provides good opportunities for activity	2.84	0.431	5	Agree

Source: Prepared by the researcher based on SPSS and Excel outputs.

Table 11: Ranking of Averages Related to Growth-Related Characteristics of Entrepreneurs

Characteristics	Average
Entrepreneur Characteristics	2.61
Commercial Activity Characteristics	2.27
Institution and Environment Characteristics	2.68

Source: Prepared by the researcher.

Table 12: Correlation Between Study Variables

	Variables	Entrepreneur Qualities	Commercial Activity Characteristics	Institution and Environment Characteristics	Total Determinants
Growth	Pearson's r	0.578	0.409	0.426	0.643
Indicators	Sig	0	0.011	0.008	0
	N	38	38	38	38

Source: Prepared by the researcher based on SPSS outputs.

Table 13: T-Test for Growth Differences in the Institution According to Gender

Gender	N	Mean	Std. Deviation	Std. Error Mean
1(Male)	36	2.3929	0.40316	0.06719
2 (Female)	2	2	0	0

Source: SPSS outputs.

Table 14: ANOVA Test for Growth Differences in the Institution According to Age

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	0.379	2	0.19	1.184	0.318
Within Groups	5.602	35	0.16		
Total	5.981	37			

Source: SPSS outputs.

Table 15: ANOVA Test for Growth Differences in the Institution According to Educational Level



Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	0.488	2	0.244	1.556	0.225
Within Groups	5.493	35	0.157		
Total	5.981	37			

Source: SPSS outputs.

Table 16: ANOVA Test for Growth Differences in the Institution According to Number of Employees

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.414	2	0.707	5.142	0.011
Within Groups	4.567	35	0.131		
Total	5.981	37			

Source: SPSS outputs.

Table 17: ANOVA Test for Growth Differences in the Institution According to the Age of the Institution

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	0.374	2	0.187	1.149	0.328
Within Groups	5.607	35	0.16		
Total	5.981	37			

Source: SPSS outputs.

Table 18: Test for Growth Differences in the Institution According to activity

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	1.610	4	.403	3.039	.031
Within Groups	4.371	33	.132		
Total	5.981	37			

Source: SPSS outputs.

Referrals and references:

- 1. Diogo, Key Performance Indicators (KPIs) for Small Businesses, Published on 13 January 2024, https://rauva.com/blog/kpis-for-small-businesses, (30.04.2024).
- 2. Evangelia Papadaki et Bassima Chami (2002), **Les facteurs déterminants de la croissance des microntreprises au Canada**, direction général de la politique de la ptite entreprise industrie Canada, https://www.ic.gc.ca/eic/site/061.nsf/vwapj/facteurs determinants de la croissance.pdf/\$FILE/facteurs determinants de la croissance.pdf
- 3. FCB, Performance Indicators for Measuring Small Business Success, *Last updated: Jun. 27, 2018*, https://fbc.ca/blog/performance-indicators-measuring-small-business-success/, (30,04,2023).
- 4. François –Louis Billon, Freins à la croissance des PME à potentiel de développement, Regards sur les PME, N°17, p19.
- 5. Jean-Christophe TOURLAI(2004), **Comment modéliser les déterminants de la survie et de la croissance des jeunes entreprises ?**, cahier de recherche N° 197, Centre de Recherche pour l'Etude et l'Observation des Conditions de Vie, paris.
- 6. Josée St-pière et autres (2016), Les facteurs de croissance des PME manufacteurières sur les marchés locaux ou internationaux, université de Québec à trois rivières, département des sciences de la gestion, www.researchgate.net.
- 7. Mateev, M. and Y. Anastasov (2010). "Determinants of small and medium sized fast growing enterprises in central and eastern Europe: a panel data analysis." <u>Financial theory and practice</u> **34**(3): 269-295.
- 8. Michael Park, 4 Small Business KPIs: Grow Your Business With These Key Metrics, Feb 14, 2024, https://www.geeklymedia.com/blog/4-key-metrics-that-every-small-business-should-start-tracking-today, (30.04.2024).
- 9. Sarwoko, E. and C. Frisdiantara (2016). "Growth determinants of small medium enterprises (SMEs)." <u>Universal Journal of Management</u> **4**(1): 36-41.
- 10. Slávik, Š. (2023). "Determinants of the growth of Small and Medium Enterprises." technológií do inovácie metodiky odbornej praxe v pregraduálnej príprave študentov sociálnej práce a projektu VEGA č. 1/0535/23 Integrácia ukrajinských migrantov a posúdenie náročnej životnej situácie spojenej s krízou vyvolanou vojnovým konfliktom optikou sociálnej práce.: 39.