

The Contribution of SMEs to the Algerian Economy: Analysis of Added Value by Sectors and Legal Categories

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© 2025 جامعة العلوم والتكنولوجيا، المركز الرئيس عدن، اليمن. يمكن إعادة استخدام المادة المنشورة حسب رخصة مؤسسة المشاع الإبداعي شريطة الاستشهاد بالمؤلف والمجلة.

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The Contribution of SMEs to the Algerian Economy: Analysis of Added Value by Sectors and Legal Categories

Abstract:

This study explores the crucial role of small and medium-sized enterprises (SMEs) in Algeria's economic development from 2012 to 2022, focusing on growth trends, sectoral contributions, and policy effectiveness. Using both qualitative and quantitative methodologies, the research evaluates SME performance in agriculture and public works sectors, relying on official data. It also examines the impact of government policies, SME classification systems, and regional and sectoral imbalances.

Findings indicate that the number of SMEs nearly doubled over the past decade, demonstrating significant sectoral growth. However, persistent regional disparities and the dominance of micro-enterprises pose major challenges to inclusive development. While Algeria's SME classification aligns with international standards, it does not fully address structural imbalances across regions and sectors.

The study provides comparative insights with global trends and recommends targeted reforms to foster balanced development by supporting underrepresented regions, enhancing financial mechanisms, and promoting strategic investments. It underscores the importance of economic diversification and regional equilibrium to ensure sustainable growth and resilience against external shocks. These insights offer valuable guidance for policymakers seeking to harness the full potential of SMEs as key drivers of economic transformation in Algeria.

Keywords: *Small and Medium Enterprises; Algerian Economy; Added Value; Key Economic Sectors; Public Sector; Family-Owned Private Sector.*

JEL Classification Codes: *L26, O14, O12, P42, H11, E23.*

مساهمة المؤسسات الصغيرة والمتوسطة في الاقتصاد الجزائري: تحليل القيمة المضافة حسب القطاعات والفئات القانونية

خلوفي سفيان^{(1)*}

الملخص:

تستكشف هذه الدراسة الدور الحيوي للمؤسسات الصغيرة والمتوسطة (SMEs) في التنمية الاقتصادية بالجزائر خلال الفترة 2012-2022، مع التركيز على اتجاهات النمو والمساهمات القطاعية وفعالية الأطر السياسية. تعتمد الدراسة على منهجيات كمية ونوعية لتحليل أداء المؤسسات في قطاعي الزراعة والأشغال العامة، مستندة إلى بيانات رسمية. كما تتناول تأثير السياسات الحكومية ونظام تصنيف المؤسسات واختلالات التوازن الإقليمي والقطاعي.

أظهرت النتائج تضاعف عدد المؤسسات الصغيرة والمتوسطة تقريباً خلال العقد الأخير، مما يعكس نمواً ملحوظاً في القطاع. ومع ذلك، لا تزال التفاوتات الإقليمية وهيمنة المؤسسات متناهية الصغر تحديات رئيسية أمام التنمية الشاملة. رغم توافق نظام التصنيف مع المعايير الدولية، إلا أنه لا يعالج بالكامل الاختلالات القطاعية والجغرافية.

تقدم الدراسة رؤى مقارنة مع الاتجاهات العالمية وتوصي بإصلاحات تهدف إلى تحقيق تنمية أكثر توازناً، من خلال دعم المناطق الأقل تمثيلاً، وتعزيز الآليات المالية، وتشجيع الاستثمارات الاستراتيجية. كما تؤكد على أهمية تنويع الأنشطة الاقتصادية وتعزيز التوازن الإقليمي لضمان نمو اقتصادي مستدام ومرن في مواجهة التحديات الخارجية. تشكل هذه الرؤى إطاراً قيماً لصناع القرار لاستغلال الإمكانيات الكاملة للمؤسسات الصغيرة والمتوسطة كمحفز رئيسي للتحول الاقتصادي في الجزائر.

الكلمات المفتاحية: مؤسسات صغيرة ومتوسطة؛ اقتصاد جزائري؛ قيمة مضافة؛ قطاعات اقتصادية رئيسية؛ قطاع عام؛ قطاع خاص عائلي.

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Introduction

Small and Medium Enterprises (SMEs) are universally acknowledged as pivotal to fostering sustainable economic growth and social stability, serving as the backbone of economies through their substantial contributions to GDP, employment, and innovation. In developing nations like Algeria, SMEs are instrumental in diversifying economic activities, reducing reliance on volatile sectors such as oil and gas, and promoting local development. This role is especially crucial as Algeria strives for economic diversification and value creation across various sectors. Similarly, in Europe, SMEs comprise over 99% of businesses, forming the cornerstone of the EU economy with a notable 9.5% increase in value-added production over five years despite anticipated inflation-driven declines in 2024 (**Katsinis, Lagüera-González, Di Bella, Odenthal, Hell, & Lozar, 2024, p. 1**). In Ghana, SMEs demonstrate their economic significance by contributing approximately 70% to the GDP (**Amoah, Belas, Dziwornu, & Khan, 2022, p. 63**), underscoring their centrality to national and regional development.

Algeria's economy faces structural challenges that necessitate reforms and a focus on sectors that promote sustainable growth. SMEs emerge as a vital component in this process due to their ability to generate added value, enhance productivity, and integrate local supply chains. The distinct duality of the Algerian economy—comprising a strong public sector and an evolving private sector—makes SMEs a critical bridge for achieving economic balance and addressing unemployment, especially among the youth. However, the legal and operational environment in which SMEs operate significantly affects their ability to contribute effectively.

The period from 2017 to 2021 marks a transformative phase in Algeria's economic history, shaped by fluctuating oil prices, global economic disruptions, and evolving national policies aimed at fostering economic diversification. During this period, SMEs faced challenges such as limited access to finance, bureaucratic hurdles, and competition from large enterprises. Simultaneously, these years also presented opportunities for SMEs to expand into untapped markets, particularly in key economic activities like manufacturing, agriculture, construction, and services. Analyzing the added value generated by SMEs during this period offers crucial insights into their resilience and potential for future growth.

A noteworthy aspect of SME dynamics in Algeria is their classification by legal status, primarily divided into public sector SMEs and private family-owned enterprises. Public sector SMEs often benefit from government support but may face efficiency challenges, while private SMEs, particularly family-owned businesses, demonstrate agility and adaptability but often operate in less formalized environments. Exploring the contributions of these two legal categories provides a nuanced understanding of how SMEs drive value creation across different sectors.

Given the significant role of SMEs in shaping the Algerian economy, this study aims to investigate their contribution to added value across key sectors and legal categories. By examining trends from 2017 to 2021, the research seeks to identify the strengths and limitations of SMEs, propose strategies to enhance their performance, and provide recommendations for policymakers. With this foundation, the study seeks to answer the following main question:

What is the contribution of SMEs to creating added value in the Algerian economy, considering different legal sectors and key economic activities?

To simplify this question, the following sub-questions were asked:

- What is the contribution of SMEs within the public sector?
- How do family-owned private SMEs contribute to key economic activities?
- What trends can be observed in the evolution of added value by sector from 2017 to 2021?
- What strategies can enhance the performance of SMEs in generating added value?

Study hypotheses

To offer preliminary responses, the following tentative hypotheses were formulated:

H1: SMEs significantly contribute to the added value of the Algerian economy, particularly in key economic sectors.

H2: Public sector SMEs outperform family-owned private SMEs in generating added value.

H3: The evolution of added value by sector exhibits uneven growth during the period 2017–2021.

Significance of the Study

This study holds both scientific and practical importance. Scientifically, it offers a comprehensive analysis of the role of SMEs in generating added value within the Algerian economy, filling a gap in the existing literature. By examining the period from 2017 to 2021, it provides valuable insights into the evolution of SMEs' contributions during a crucial period of economic transition in Algeria. The research also deepens understanding of the differences between public and family-owned private SMEs, offering a detailed perspective on their respective impacts on economic development.

Practically, the study provides actionable insights for policymakers, enabling them to develop more effective strategies and policies to enhance the performance of SMEs. It can guide resource allocation and improve institutional support, helping both public and private sector stakeholders foster sustainable SME growth. Additionally, by identifying key challenges and opportunities, the study offers practical recommendations for business owners and entrepreneurs to align their

activities with national development goals, contributing to job creation and long-term economic stability.

Objectives of the study

The study aims to:

- Analyze the contribution of SMEs to the added value of the Algerian economy.
- Examine differences in performance between public and private (family-owned) SMEs.
- Identify key sectors where SMEs have the highest impact on economic growth.
- Assess trends in added value creation across sectors between 2017 and 2021.
- Propose strategies to enhance SME performance and integration into economic activities.
- Highlight policy recommendations for improving SME sustainability and economic impact.

Study methodology

This study employs a mixed-method approach, integrating both qualitative and quantitative analyses to examine the contribution of SMEs to Algeria's economic development between 2017 and 2021. Data collection relied heavily on national statistical reports and bulletins from government agencies, supplemented by sector-specific surveys and academic research. Statistical tools were employed to analyze trends and growth rates, providing insights into the sectoral and regional dynamics of SMEs.

Key data sources included reports from Algeria's Ministry of Industry and Pharmaceutical Production and regional development offices. Comparative case studies from other emerging economies were also examined to contextualize findings and identify best practices. The research focused on assessing SMEs' added value across legal categories and sectors, primarily in agriculture and public works, using detailed statistical analyses.

However, the study encountered limitations, including incomplete data records in some sectors and inconsistencies in reporting standards over time. Challenges also arose due to limited data availability for rural regions and external shocks like the COVID-19 pandemic, which affected market dynamics. Despite these challenges, the study offers valuable recommendations for enhancing SME growth and resilience in Algeria.

Previous studies

1. "The evaluation of small and medium enterprises role in the economic development of Azerbaijan." (*Ahmadov & Jabrrayil, 2019*)

This study aimed to highlight the critical role of SMEs in national economic development and their contribution to sustainable and inclusive growth. It concluded that SMEs are essential for:

- Promoting economic growth and fostering entrepreneurship.
- Generating employment opportunities, thereby reducing social risks and improving living standards.
- Driving innovation, enhancing productivity, and fostering linkages between small and large enterprises.
- Strengthening export potential and cultivating a modern entrepreneurial culture.
- Contributing to equitable income distribution and overall economic prosperity.

The study emphasized that the growth and development of the SME sector are vital for achieving higher standards of living and economic resilience. It recommended that SMEs should focus on strategic planning, adaptability, and innovation to align with national development goals, ensuring their long-term success and contribution to sustainable economic growth.

2. "The Role of Small and Medium Scale Enterprises in Local Economic Development (LED)" (*Ayandibu & Jennifer, 2017*)

This study aimed to clarify the importance of SMEs in local economic development and their role in achieving sustainable growth. It concluded that SMEs contribute to local development by:

- Promoting entrepreneurship.
- Creating employment opportunities, thus reducing social risks such as crime rates.
- Enhancing productivity, ensuring economic flexibility, and fostering connections between small and large businesses.
- Ensuring equitable income distribution and adding value to the economy.

The study recommended that SMEs should develop strategic business plans that predict societal demands, have operational frameworks, and demonstrate feasibility and sustainability to ensure long-term success and genuine local development.

3. "The role of SMEs and entrepreneurship on economic growth in emerging economies within the post-crisis era: An analysis from Turkey." (*Karadağ, 2016*)

This study aimed to investigate the performance of SMEs and their vital role in socio-economic development, particularly in the aftermath of the global economic crisis. It concluded that SMEs are critical for:

- Driving economic growth and fostering entrepreneurship.
- Creating employment opportunities, thereby supporting social stability and improving living standards.
- Contributing to value-added production and enhancing their role in economic resilience.
- Supporting innovation and strengthening the integration of small enterprises within larger economic systems.
- Highlighting the unique contributions of SMEs to GDP growth and national economic sustainability.

The study emphasized that the development of the SME sector is closely tied to overall economic recovery and growth. It recommended that SMEs adopt strategic approaches to innovation, adaptability, and capacity-building to enhance their contributions to employment, entrepreneurship, and sustainable economic development, particularly in post-crisis scenarios.

4. *"The Role of SMEs in Sustainable Regional Development and Local Business Integration: The Case of Lublin Region (Poland)" (Anna, Matylda, Francisco, & Nelson, 2015)*

This study analyzed the role of SMEs in regional development, focusing on the Lublin region in Poland. Using surveys targeting manufacturing and construction enterprises, the research gathered responses from 314 SMEs out of over 34,000 firms. The study found:

- The economic dimension was the primary focus of SMEs, followed by environmental and social dimensions.
- SMEs demonstrated proactive attitudes toward local development.
- Local business integration was significant, with 54.9% of purchases and 62.5% of sales occurring within the region, indicating high levels of local trade integration.

The results highlighted the positive contribution of SMEs to sustainable regional development and emphasized the importance of local economic ties.

Previous studies, such as Ahmadov and Jabrrayil (2019) and Ayandibu and Jennifer (2017), emphasized the universal importance of SMEs in promoting economic growth, entrepreneurship, and social stability. While these studies provide a global and localized understanding of SMEs' roles, they lack specific analyses of legal sectors or longitudinal trends in economic contributions. For instance, Ahmadov

and Jabrrayil focused on Azerbaijan's national economy, highlighting export growth and income distribution, while Ayandibu and Jennifer examined local economic development through employment generation and social impact. In contrast, the current study incorporates both public and private legal sectors and explores trends specific to Algeria's economic structure.

Karadağ (2016) and Anna et al. (2015) also offer valuable insights into SME contributions, with a focus on post-crisis recovery and regional integration, respectively. However, they emphasize economic resilience and local trade networks rather than sector-specific value-added contributions. Unlike Karadağ's focus on emerging economies broadly, the current research narrows its lens to Algeria, exploring its SME ecosystem within the public and family-owned private sectors. Similarly, while Anna et al. highlight the significance of local trade integration, this study extends beyond regional trade to assess the broader impact of SMEs on national economic development. These distinctions underscore the novelty of the present study in addressing Algeria's specific economic and legal dynamics.

The study addresses a specific gap in the SME literature by focusing on their contribution to the Algerian economy through added value generation, considering legal classifications (public and family-owned private sectors) and key economic activities. While prior research has extensively documented the general role of SMEs in fostering economic growth, employment creation, and innovation, little attention has been given to how these contributions manifest in Algeria's unique dual-sector economy. Moreover, the study examines sectoral trends in added value generation over a defined period (2017–2021), offering a longitudinal perspective often overlooked in regional and global studies. By exploring actionable strategies to enhance SME performance, the research provides both theoretical and practical contributions tailored to Algeria's socio-economic context.

Definition of Small and Medium Enterprises in Algerian Law

According to the definition provided by the Algerian legislator in Law No. 17-02 dated 11 Rabi' al-Thani 1438 AH, corresponding to January 10, 2017, which includes the directive law for the promotion of small and medium enterprises (SMEs), Article 5 defines SMEs, regardless of their legal nature, as: "A production or service enterprise that:

- Employs between one (1) and two hundred and fifty (250) individuals.
- Has an annual turnover not exceeding 4 billion Algerian dinars, or a total annual balance sheet not exceeding 1 billion Algerian dinars.
- Meets the independence criterion (an enterprise whose capital is not owned by 25% or more by another enterprise or group of enterprises that do not qualify as SMEs) (JOURNAL OFFICIEL DE LA REPUBLIQUE ALGERIENNE, 2017, pp. 4-5) "

From this definition, it can be concluded that the classification of SMEs in Algeria relies on three main criteria: the number of employees, the annual turnover, and the annual balance sheet. The table below illustrates the classification criteria for SMEs in Algeria:

Table 1. Classification Criteria for SMEs in Algeria

Unit : Algerian dinar

Category	Number of Employees	Annual Turnover	Annual Balance Sheet
Microenterprise	Less than 10	Less than 40 million	Less than 20 million
Small Enterprise	Less than 50	Less than 400 million	Less than 200 million
Medium Enterprise	Less than 250	Less than 04billion	Less than 01billion

Source : (JOURNAL OFFICIEL DE LA REPUBLIQUE ALGERIENNE, 2017, pp. 4-5)

In Algerian law, SMEs are defined by Law No. 17-02, dated January 10, 2017, which outlines the criteria for categorizing these businesses based on their size and scope. According to Article 5, SMEs are production or service enterprises that employ between 1 and 250 individuals, with an annual turnover not exceeding 4 billion Algerian dinars or a total annual balance sheet not exceeding 1 billion Algerian dinars. Additionally, SMEs must meet an independence criterion, where no other enterprise or group holds more than 25% of their capital.

This classification highlights three core factors: the number of employees, annual turnover, and the annual balance sheet. The definition establishes clear thresholds for micro, small, and medium-sized enterprises, which is essential for targeted policies and support. It also reinforces the role of independence in ensuring that these businesses remain agile and contribute to a diversified economy. Understanding these criteria is vital for any analysis of the SME sector in Algeria, as it impacts everything from economic planning to access to financial support and development programs.

The Evolution of the Number of Small and Medium Enterprises in Algeria Between 2012 and 2022

The following table illustrates the development in the number of Small and Medium Enterprises (SMEs) in Algeria during the period from 2012 to 2022. Notably, approximately 659.309 SMEs were recorded in 2011:

Table 2. Evolution of the Number of Small and Medium Enterprises in Algeria Between 2012 and 2022

Unit: Enterprise

Year	Number of Enterprises	Change in Value	Percentage Change
2012	711.832	52.523	7,97%

2013	777.816	65.984	9,27%
2014	852.053	74.237	9,54%
2015	934.569	82.516	9,68%
2016	1.022.621	88.052	9,42%
2017	1.074.503	51.882	5,07%
2018	1.141.863	67.360	6,27%
2019	1.193.339	51.476	4,5%
2020	1.231.073	37.734	3,16%
2021	1.286.365	55.292	4,49%
2022	1.359.803	73.438	5,71%

Source: Prepared by the researchers based on: (Ministry of Industry and Pharmaceutical Production, 2024) and:

- Ministry of Industry, Small and Medium Enterprises, and Investment Promotion, Statistical Information Bulletin of SMEs, No. 22, April 2013, p. 09.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 24, April 2014, p. 08.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 26, April 2015, p. 07.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 30, May 2017, p. 08.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 32, May 2018, p. 08.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 33, November 2018, p. 07.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 39, November 2021, p. 06.

- Ministry of Industry and Mines, Statistical Information Bulletin of SMEs, No. 42, April 2022, p. 05.

The evolution of small and medium enterprises (SMEs) in Algeria between 2012 and 2022 demonstrates their pivotal role in the country's economic development. From 2012 to 2016, the SME sector experienced steady growth, with annual increases ranging from 7.97% to 9.68%, reflecting the success of government policies promoting entrepreneurship and SME financing. However, the growth rate declined to 5.07% in 2017 and further stabilized at 6.27% in 2018 due to economic challenges, particularly Algeria's dependency on oil revenues. The period from 2019 to 2021 was marked by moderate growth, with a significant slowdown in 2020 (3.16%) due to the COVID-19 pandemic, followed by a gradual recovery in 2021 (4.49%). By 2022, the growth rate improved to 5.71%, signaling the positive

impact of government reforms and investment incentives, particularly in less-developed regions.

Structurally, the SME sector in Algeria is dominated by microenterprises, which account for 98% of the total and exhibit high adaptability to economic and technological shifts. Sectoral disparities remain prominent, with the majority of SMEs concentrated in services and construction, while only 8.53% operate in industrial activities (Ministry of Industry and Mines, 2022, p. 4). Additionally, regional imbalances persist, as SME density is higher in the North compared to the High Plateaus and Southern regions. Addressing these structural challenges through industrial diversification, regional development initiatives, and enhanced support mechanisms will be essential for sustaining SME growth and strengthening their contribution to Algeria's economic resilience.

According to the spatial distribution outlined in the National Territory Planning Scheme (SNAT), SMEs are predominantly concentrated in the northern region and, to a lesser extent, in the High Plateaus. The northern region is home to 945,153 SMEs, accounting for nearly 69.51% of the total SMEs in the country, followed by the High Plateaus region with 300,745 SMEs, representing 22.12%. The southern and Great South regions host 113,905 SMEs, representing 8.38% of the total (Appendix 2).

Evolution of Value Added by Legal Status and by Main Sectors of Activity (2017-2021)

The evolution of value-added by legal status and primary sectors of activity from 2017 to 2021 provides critical insights into the structural and economic dynamics of various industries. This analysis encompasses key sectors such as agriculture, buildings and public works, transport and communication, services provided to businesses, hotels and restaurants, agri-food industries, leather and footwear, and trade and distribution. By examining the trends and contributions across these sectors, it becomes possible to identify the driving forces behind economic growth, the impact of policy and market shifts, and the resilience or vulnerabilities of different industries during the study period. The assessment also sheds light on the interplay between sectoral performance and legal frameworks, offering a comprehensive perspective on their collective influence on economic value creation:

• **Agriculture** : The analysis will focus on the value added by the agricultural sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This evaluation aims to highlight the contributions of SMEs in agriculture to the national economy during the period from 2017 to 2021:

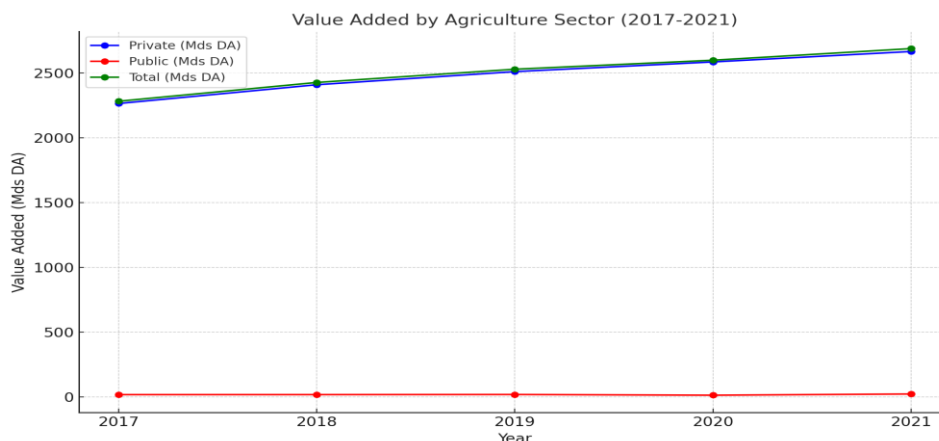


Figure 1. Value Added by the Agricultural Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021

Source: compiled by the author based on survey data

The chart above (Figure 1) illustrates the evolution of the value added by the agricultural sector in Algeria from 2017 to 2021, broken down by legal status (private vs. public entities). It shows that the private sector consistently contributes the overwhelming majority of the total value added, with public sector contributions being minimal in comparison. Over the years, the value added by both private and public sectors has steadily increased, with a slight decrease in public sector contributions in 2020, followed by a rise in 2021. The total value added by the agricultural sector also shows a consistent upward trend, reflecting the overall growth in the sector.

• **Buildings and Public Works:** The analysis will focus on the value added by the buildings and public works sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This evaluation aims to highlight the contributions of SMEs in this sector to the national economy during the period from 2017 to 2021:

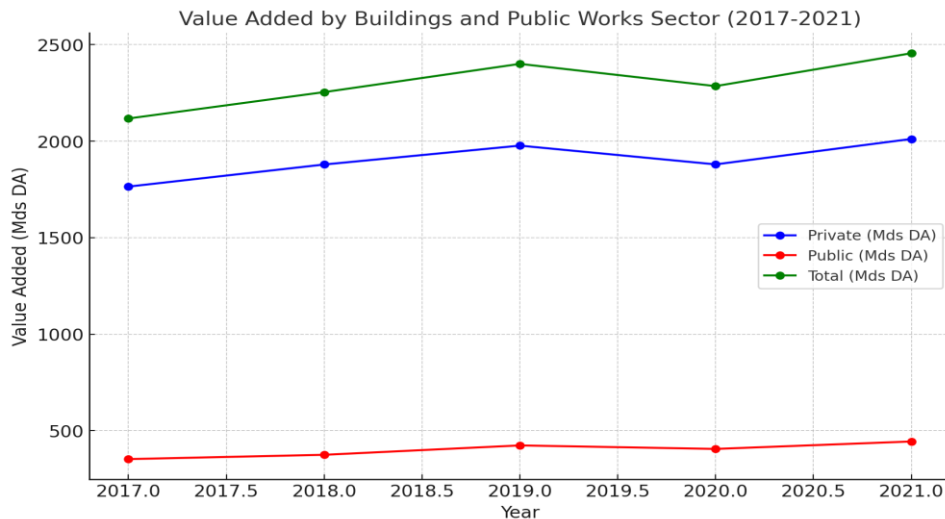


Figure 2 .Value Added by the Buildings and Public Works Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021

Source: compiled by the author based on survey data

The graph above illustrates the value added by the Buildings and Public Works sector in Algeria from 2017 to 2021, categorized by the legal status of the small and medium enterprises (SMEs) in this sector. The blue line represents the private sector, the red line represents the public sector, and the green line indicates the total value added in the sector.

As seen in the chart, the value added by the private sector steadily increases each year, with a slight dip in 2020, likely due to the effects of the global pandemic. The public sector's contribution remains smaller but also shows an increasing trend, especially in 2021. The total value added in the sector reflects the combined contributions of both the private and public sectors, following a similar upward trend, with the private sector consistently contributing the larger portion. The growth in the total value added demonstrates a gradual expansion of the sector over these years.

This analysis highlights the important role of SMEs, particularly in the private sector, in contributing to the national economy through their involvement in buildings and public works activities.

•Transport and Communication: The analysis will examine the value added by the transport and communication sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This study aims to shed light on the role of SMEs in driving economic activity within this sector during the period from 2017 to 2021:

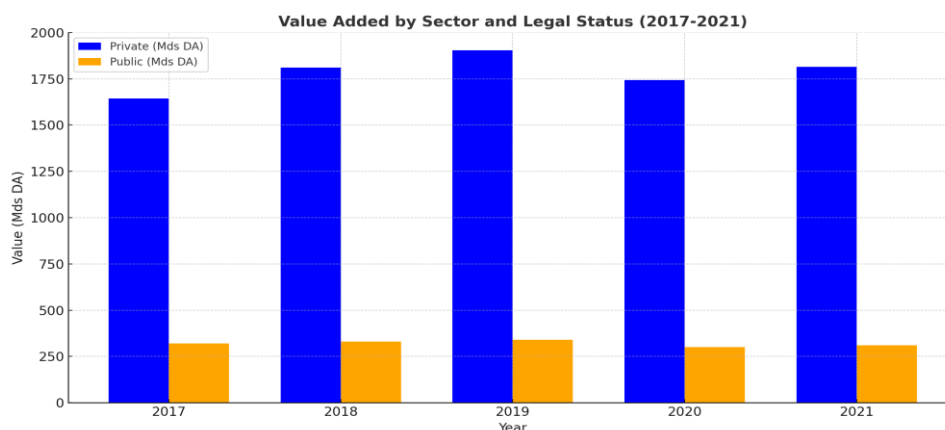


Figure 3. Value Added by the Transport and Communication Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021

Source: compiled by the author based on survey data

The chart illustrates the value added by the transport and communication sector in Algeria, segmented by the legal status of enterprises (private and public) from 2017 to 2021. It reveals a consistent dominance of private enterprises in contributing to the sector's total value added, with their share exceeding 83% annually. The private sector's contribution shows an overall upward trend, peaking at 1,905.26 billion DA in 2019, followed by a slight dip in 2020, likely due to global economic disruptions such as the COVID-19 pandemic. The public sector, though significantly smaller, maintains a steady contribution, ranging from 300.33 to 339.61 billion DA, with its percentage share gradually declining over the observed period.

The analysis highlights the growing reliance on private enterprises as key drivers of economic activity in this sector, reflecting their critical role in fostering efficiency and innovation. The decreasing public sector share, both in absolute and relative terms, suggests a potential shift in policy focus toward encouraging private investment and reducing state involvement. This trend underscores the importance of small and medium enterprises (SMEs) in enhancing the sector's performance and contributing to Algeria's broader economic diversification efforts.

• **Services provided to businesses:** The analysis will explore the value added by services provided to businesses, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. The focus is on understanding the economic contributions of SMEs in this sector from 2017 to 2021:



Figure 4. Value Added by the Services Provided to Businesses Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021

Source: compiled by the author based on survey data

The chart shows the value added by services provided to businesses in Algeria, segmented by the legal status of enterprises (private and public) from 2017 to 2021. Private enterprises consistently contribute the majority of the sector's value added, with their share exceeding 65% throughout the period. Their contribution grows steadily, increasing from 162.37 billion DA in 2017 to 212.85 billion DA in 2021, reflecting the expanding role of private sector services in supporting business activities. Meanwhile, the public sector maintains a relatively stable contribution, with values ranging from 85.54 to 108.06 billion DA, though its share as a percentage of the total decreases slightly over the years.

This analysis underscores the increasing economic significance of private enterprises in the business services sector, which aligns with broader trends of privatization and SME development in Algeria. The public sector's declining relative share suggests a gradual shift toward market-oriented service provision, emphasizing efficiency and adaptability. The growing contributions from private enterprises highlight their pivotal role in driving innovation and economic growth within the sector, making them key players in Algeria's efforts to diversify its economy.

• **Hotels and restaurants:** The analysis will investigate the value added by the hotels and restaurants sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This study seeks to assess the sector's contributions to the economy through SME activity during the period from 2017 to 2021:

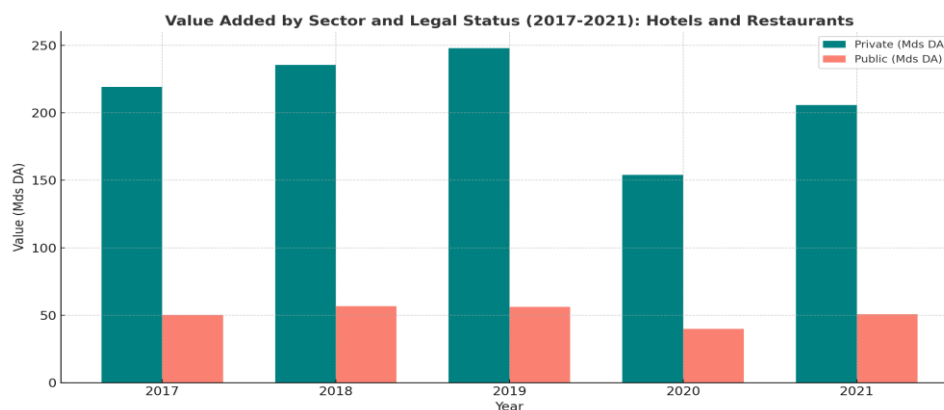


Figure 5. Value Added by the Hotels and Restaurants Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021
Source: compiled by the author based on survey data

The chart illustrates the value added by the hotels and restaurants sector in Algeria from 2017 to 2021, segmented by the legal status of enterprises (private and public). Private enterprises consistently dominate the sector, contributing over 79% of the total value added annually. Their value peaked at 248.01 billion DA in 2019 but experienced a notable decline in 2020 to 154.00 billion DA, likely due to the economic and operational disruptions caused by the COVID-19 pandemic. Public sector contributions remained stable, fluctuating between 39.77 and 56.76 billion DA, with a slightly increasing percentage share during periods of private sector contraction.

This analysis highlights the pivotal role of private enterprises in driving growth within the hotels and restaurants sector, emphasizing their adaptability and importance to the economy. The decline in 2020 underscores the vulnerability of SMEs to external shocks, particularly in service-oriented industries. However, the partial recovery in 2021 suggests resilience and potential for rebound, reflecting the sector's capacity to adapt and sustain its economic contributions despite challenges.

• **Agri-Food Industries:** The analysis will assess the value added by the agri-food industries, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. The objective is to evaluate the role of SMEs in this sector's economic performance during the period from 2017 to 2021:

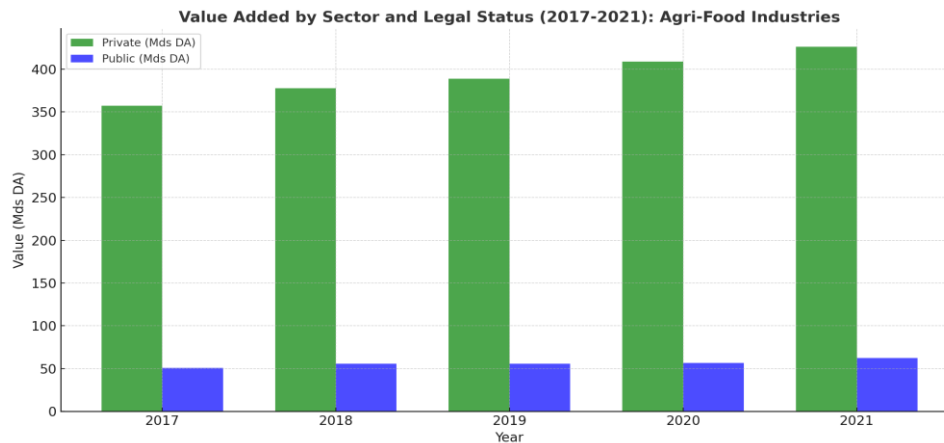


Figure 6. Value Added by the Agri-Food Industries Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021.

Source: compiled by the author based on survey data

The agri-food industries sector in Algeria demonstrates a dominant contribution from the private sector, which consistently accounts for over 87% of the total value added during the 2017-2021 period. This highlights the significant role of small and medium enterprises (SMEs) in driving economic growth and innovation in this sector. The private sector's steady growth in value added, rising from 357.17 Mds DA in 2017 to 426.41 Mds DA in 2021, underscores its resilience and capacity to adapt to market demands and challenges.

The public sector, while playing a smaller role, shows a slight upward trend in value added, increasing from 50.94 Mds DA in 2017 to 62.54 Mds DA in 2021. Although its share remains below 13%, this growth reflects ongoing government efforts to support and invest in the agri-food industries. The overall increase in total value added, from 408.11 Mds DA in 2017 to 488.95 Mds DA in 2021, signifies the sector's importance to Algeria's economy and its potential for further development through enhanced collaboration between public initiatives and private enterprise.

• Leather and footwear industry

The analysis will focus on the value added by the leather and footwear industry, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This evaluation aims to highlight the contributions of SMEs to this sector and the overall economy during the period from 2017 to 2021:

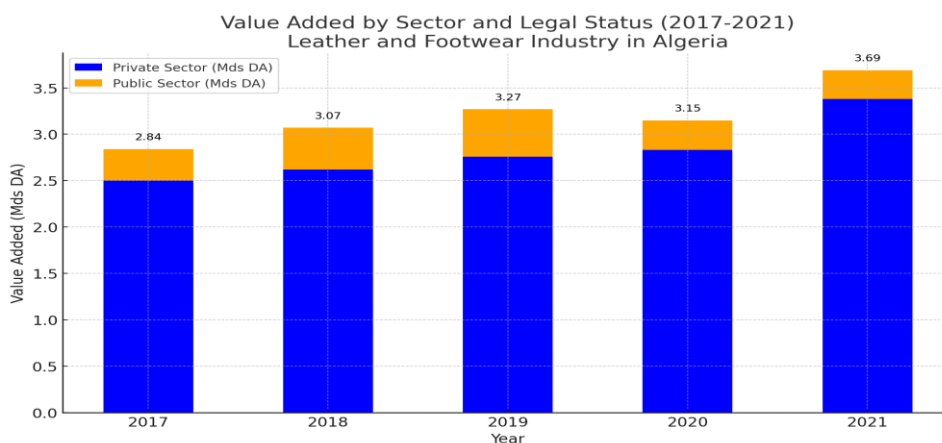


Figure 7. Value Added by the Leather and Footwear Industry in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021
 Source: compiled by the author based on survey data

The data reveals a clear trend in the leather and footwear industry in Algeria between 2017 and 2021, highlighting the growing dominance of the private sector. The value added by the private sector increased steadily from 2.50 Mds DA in 2017 to 3.38 Mds DA in 2021, reflecting a growth of approximately 35% over the period. This suggests that private SMEs are becoming more competitive and playing an increasingly vital role in driving the industry's economic performance. As a result, the private sector's share of the total value added rose consistently, reaching 91.62% by 2021.

On the other hand, the public sector's contribution to the industry has been declining. The value added by the public sector fluctuated over the years but decreased from 0.51 Mds DA in 2019 to 0.31 Mds DA in 2021, with its share dropping from 11.97% in 2017 to 8.38% in 2021. This decline in public sector involvement, especially in 2020, can be partially attributed to the economic challenges posed by the COVID-19 pandemic. Overall, the data highlights the increasing significance of private SMEs in the leather and footwear industry, with the public sector's role diminishing over time.

• Trade and distribution

The analysis will examine the value added by the trade and distribution sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria. This study aims to underscore the economic significance of SMEs in this sector during the period from 2017 to 2021:

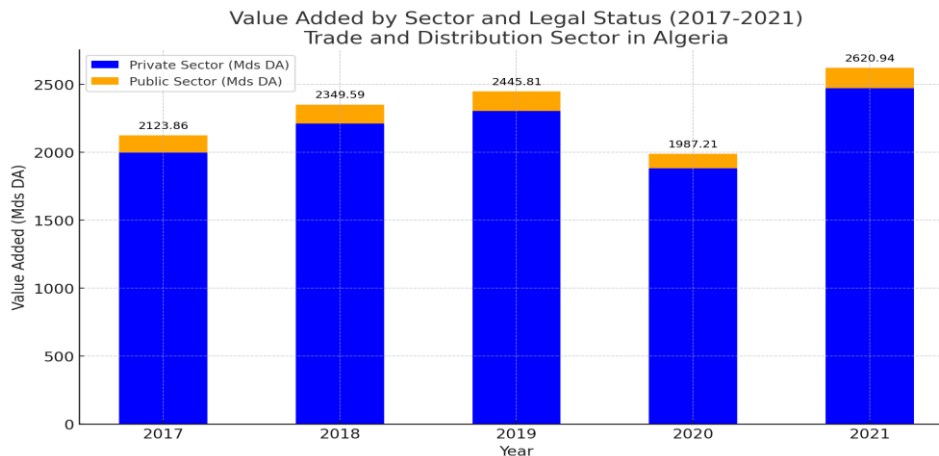


Figure 7. Value Added by the Trade and Distribution Sector in Algeria, Categorized by the Legal Status of Small and Medium Enterprises (SMEs) from 2017 to 2021.

Source: compiled by the author based on survey data

The analysis of the value added by the trade and distribution sector, categorized by the legal status of small and medium enterprises (SMEs) in Algeria from 2017 to 2021, reveals that the private sector consistently dominates the sector's contribution. The private sector's share ranged from 93.96% in 2017 to 94.71% in 2020 and slightly decreased to 94.23% in 2021. This indicates that small and medium private enterprises are the main drivers of value in this sector, underlining their significant economic role. Meanwhile, the public sector's contribution remained marginal, fluctuating between 5.93% in 2018 and 5.77% in 2021, which highlights the limited yet consistent role of state-owned entities in this domain.

The overall value added by the sector exhibited a steady increase from 2,123.86 billion DA in 2017 to 2,620.94 billion DA in 2021, reflecting a general growth trend. However, 2020 saw a noticeable decline in total value added (to 1,987.21 billion DA), likely due to the economic disruptions caused by the COVID-19 pandemic. This was followed by a strong recovery in 2021, with both the private and public sectors contributing to the rebound. These results suggest that, despite temporary setbacks, the trade and distribution sector in Algeria has demonstrated resilience, with the private sector continuing to play a dominant role in its recovery and growth.

Bas du formulaire

Testing the study hypotheses

Based on the data provided in the tables and the context given, let's evaluate the hypotheses:

H1. "SMEs significantly contribute to the added value of the Algerian economy, particularly in key economic sectors."

The classification of SMEs in Algerian law is based on three key parameters: the number of employees, annual turnover, and balance sheet totals. This framework

provides clear criteria for policymakers to identify SMEs, ensuring consistency with international definitions set by organizations such as the OECD and the EU. These international definitions commonly consider enterprises with fewer than 250 employees and an annual turnover not exceeding €50 million as SMEs (Karmowska & Mirosława, 2015, p. 50). However, the Algerian classification adjusts these thresholds, particularly turnover, to reflect the country's economic realities, which differ significantly from those of developed economies. This adaptation underscores the need for policies tailored to Algeria's developmental stage while maintaining alignment with global standards.

Between 2012 and 2022, Algeria experienced significant growth in the number of SMEs, rising from 711,832 to 1,359,803. This substantial increase suggests that the SME classification effectively supports government policies aimed at promoting SME development. The clear and measurable criteria appear to have facilitated targeted interventions, financial incentives, and institutional support, contributing to this growth. However, while the classification provides a robust foundation for policy formulation, challenges such as regional disparities and sectoral imbalances indicate areas where further improvements could be made to ensure equitable development across different regions and industries.

The hypothesis is partially valid. The classification framework is indeed comprehensive and functional, offering clarity and enabling effective support for economic policy and SME promotion. However, its effectiveness could be further enhanced by addressing regional and sectoral disparities, which remain critical obstacles to balanced economic development. Focusing on these disparities would improve the inclusivity and overall impact of SME-related policies.

H2. "Public sector SMEs outperform family-owned private SMEs in generating added value."

Between 2012 and 2022, the SME sector in Algeria experienced remarkable growth, with the total number of SMEs nearly doubling. Annual growth rates during this period ranged from 4.5% to 9.7%, demonstrating consistent expansion. This sustained growth reflects the impact of favorable government policies, including financial incentives, regulatory support, and efforts to create a business-friendly environment. Even during challenging periods, such as 2020, when the COVID-19 pandemic caused economic disruptions, the sector showed resilience, with only a temporary slowdown in growth.

Despite the impressive overall growth, structural and regional imbalances persist. The SME sector remains dominated by microenterprises, which account for approximately 98% of the total. This dominance suggests a need to diversify the SME landscape by fostering the growth of small and medium-sized enterprises. Additionally, regional disparities are evident, with a significant concentration of SMEs in Northern Algeria, leaving other regions underrepresented. Addressing these

imbalances is essential for achieving more inclusive and sustainable growth across the country.

The hypothesis is largely valid. The sustained growth of the SME sector from 2012 to 2022 can be attributed to favorable policies and the sector's economic resilience. However, structural imbalances—such as the dominance of microenterprises—and regional disparities highlight areas where improvements are needed to ensure balanced and equitable growth. Furthermore, external shocks, like the pandemic, underscore the importance of building long-term resilience in the sector to mitigate vulnerabilities during economic downturns.

H3. "The evolution of added value by sector exhibits uneven growth during the period 2017–2021. "

The agricultural sector in Algeria demonstrates the overwhelming dominance of SMEs, particularly private enterprises, which have contributed more than 99% of the sector's value added annually. This consistent contribution is evidenced by sustained growth in value-added figures, rising from 2,264.33 billion DA in 2017 to 2,665.84 billion DA in 2021. Such performance underscores the pivotal role of SMEs in ensuring food security, driving rural development, and contributing to the national economy.

In the public works sector, SMEs also play a critical role, consistently contributing over 80% of the value added. This sector, however, has experienced some fluctuations, including a notable decline in 2020 due to the economic impact of the COVID-19 pandemic. Despite these challenges, the resilience of SMEs has enabled the sector to recover and remain a vital driver of infrastructure development and economic stability.

The hypothesis is valid and supported by quantitative evidence. The significant and growing contributions of SMEs in agriculture and public works underscore their essential role in Algeria's economic development. These contributions highlight the resilience of SMEs, particularly during economic crises, and their ability to sustain economic stability. However, further efforts to mitigate sectoral fluctuations and enhance the capacity of SMEs in underperforming regions could strengthen their overall impact on national development.

The evaluation of the three hypotheses highlights the critical role of SMEs in Algeria's economic framework while identifying areas for improvement. Hypothesis 1 is deemed partially valid, as the classification system provides a robust framework aligned with international standards, yet regional and sectoral imbalances remain significant challenges. Hypothesis 2 is largely valid, reflecting sustained SME growth between 2012 and 2022, albeit with periodic slowdowns and structural imbalances that require attention. Hypothesis 3 is fully valid, demonstrating the vital role of SMEs in value addition across key sectors, particularly agriculture and public works, and their resilience during economic crises. These findings emphasize the need for

targeted reforms to address existing disparities and enhance SMEs' contributions to Algeria's economic diversification and sustained growth.

While Algeria's SME sector has seen impressive growth over the past decade, this expansion remains concentrated in Northern regions, leaving other areas underrepresented. Addressing this imbalance calls for region-specific strategies, such as incentivizing SME establishment in less developed regions through tax breaks, grants, and tailored support programs. Expanding access to infrastructure and financial services in rural areas would further enable SMEs to thrive and contribute more effectively to local economies.

Policy reforms promoting sectoral diversification are also crucial. Encouraging SMEs to venture into high-value industries, including technology and renewable energy, would reduce dependency on micro-enterprises and foster a more resilient economic landscape. Training initiatives to build local capacities and improve innovation in underrepresented regions can also yield substantial long-term benefits by creating skilled labor markets aligned with evolving sectoral demands.

Implementing these interventions not only strengthens the SME landscape across Algeria but also mitigates vulnerabilities caused by external shocks such as the COVID-19 pandemic. Adaptive mechanisms supporting SMEs during crises would enhance their resilience and ensure sustained contributions to national growth. Ultimately, reducing regional disparities through well-structured policy measures contributes to a more inclusive and balanced economic framework, unlocking the full potential of SMEs for Algeria's sustainable development.

CONCLUSION

The role of small and medium-sized enterprises (SMEs) in driving economic development has garnered significant attention globally, particularly in emerging economies where these enterprises serve as the backbone of industrial and service sectors. In Algeria, the SME sector has been central to various economic reform strategies aimed at fostering diversification, reducing dependency on hydrocarbon revenues, and creating employment opportunities. However, despite the critical role SMEs play in Algeria's economic framework, questions persist regarding the effectiveness of policy measures in supporting their growth and ensuring their equitable distribution across regions and sectors.

The complexity of Algeria's economic landscape poses unique challenges for SME development. Structural disparities, such as the concentration of SMEs in Northern Algeria and the dominance of micro-enterprises within the sector, highlight the uneven distribution of economic opportunities. Additionally, while policies and classifications align broadly with international standards, their practical application in addressing regional imbalances and fostering sectoral innovation remains under scrutiny. These disparities raise important questions about the extent to which

existing frameworks adequately support the growth and resilience of SMEs in the face of external shocks and internal inefficiencies.

Against this backdrop, this study examines the multifaceted role of SMEs in Algeria's economy, focusing on their growth trends, sectoral contributions, and alignment with policy objectives. By analyzing the interplay between economic policies, SME performance, and the broader challenges of diversification and resilience, the study seeks to answer whether the current strategies are sufficient to harness the full potential of SMEs in driving sustainable development. The findings and recommendations aim to provide a foundation for refining SME policies and addressing the structural gaps that hinder their contribution to Algeria's economic transformation:

1. Results

Based on the analysis of the provided data and the discussions on the impact of various economic development programs on Algeria's economic indicators, the study reveals several key findings:

- The SME classification framework in Algerian law is comprehensive and aligns with international standards but requires refinement to address regional and sectoral disparities.
- The SME sector exhibited sustained growth from 2012 to 2022, nearly doubling in number, despite temporary slowdowns caused by external shocks, such as the COVID-19 pandemic.
- Regional imbalances persist, with SMEs heavily concentrated in Northern Algeria, while the dominance of microenterprises limits sectoral diversification.
- SMEs play a critical role in value addition across key sectors like agriculture and public works, contributing over 99% and 80% of the value added, respectively, in these sectors.
- Economic resilience during crises, such as the pandemic, highlights the importance of SMEs in stabilizing Algeria's economy.
- Development programs have effectively supported SME growth but lack targeted mechanisms to address structural weaknesses.
- Fluctuations in certain sectors, such as public works, underscore the need for adaptive policies to counter sector-specific challenges.

2. Study recommendations

Based on the analysis of the presented data and the insights gained from the impact of various development plans on Algeria's economic indicators, here are some recommendations for supporting and enhancing these indicators through future development plans:

- Expanding access to tailored financial products for SMEs, including microcredit schemes and investment funds, particularly in rural areas, is highly feasible through partnerships with banks and microfinance institutions. This measure has a significant impact by addressing critical financial barriers faced by SMEs in underserved regions.

- Developing incentives and targeted programs to promote SME growth in underrepresented regions can be implemented within existing governmental frameworks. The potential impact is high, fostering regional equity and supporting economic growth in less developed areas.

- Providing training programs for SME owners and employees through collaboration with educational institutions and industry experts is both cost-effective and scalable. Enhancing skills and fostering innovation significantly improve productivity and competitiveness.

- Continuously refining SME policies to align with global best practices while considering local economic dynamics is feasible and ensures long-term adaptability and sustainability. This approach contributes to improved operational efficiency and market alignment.

- Investing in infrastructure in less developed regions supports the operational needs of SMEs and enables their integration into supply chains. While resource-intensive and requiring long-term planning, the impact on regional economic development is substantial.

- Encouraging SMEs to diversify into high-value industries and emerging sectors requires targeted incentives and market development efforts. This diversification strengthens economic resilience and reduces dependency on micro-enterprises, offering long-term benefits.

- Establishing adaptive mechanisms to support SMEs during external shocks is essential for maintaining economic contributions during crises. Although moderate in feasibility, this measure builds resilience against disruptions such as pandemics or global economic downturns.

- Implementing a robust system for monitoring SME-related programs and policies is feasible with modern data analytics tools. This approach ensures continual improvement, informed decision-making, and greater program effectiveness over time.

By addressing these key areas, Algeria can strengthen its SME sector as a driver of economic diversification, resilience, and sustainable growth.

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Appendices

Appendix 1: Value Added by Sector and Legal Status of SMEs in Algeria (2017-2021)

U : Mds DA

Secteurs juridiques	2017		2018		2019		2020		2021	
	VA	%	VA	%	VA	%	VA	%	VA	%
Agriculture										
Privé	2 264,33	99,23	2 409,25	99,27	2510,49	99,27	2585,36	99,49	2665,84	99,16
Public	17,50	0,77	17,65	0,73	18,56	0,73	13,14	0,51	22,48	0,84
Total	2 281,83	100,00	2 426,90	100,00	2529,05	100,00	2598,50	100,00	2688,32	100,00
Bâtiments et Travaux Publics										
Privé	1 764,57	83,34	1 879,01	83,36	1976,79	82,35	1879,65	82,26	2011,36	81,92
Public	352,82	16,66	375,08	16,64	423,60	17,65	405,43	17,74	444,01	18,08
Total	2 117,39	100,00	2 254,09	100,00	2400,39	100,00	2285,08	100,00	2455,37	100,00
Transport et communication										
Privé	1 644,54	83,67	1 810,60	84,61	1905,26	84,87	1743,72	85,31	1815,02	85,38
Public	320,94	16,33	329,28	15,39	339,61	15,13	300,33	14,69	310,72	14,62
Total	1 965,48	100,00	2 139,88	100,00	2244,87	100,00	2044,05	100,00	2125,75	100,00
Services fournis aux entreprises										
Privé	162,37	65,50	171,51	65,12	184,93	65,76	192,29	65,74	212,85	66,33
Public	85,54	34,50	91,86	34,88	96,31	34,24	100,19	34,26	108,06	33,67
Total	247,91	100,00	263,37	100,00	281,24	100,00	292,48	100,00	320,91	100,00
Hôtellerie et restauration										
Privé	219,13	81,35	235,39	80,57	248,01	81,54	154,00	79,48	205,80	80,20
Public	50,25	18,65	56,76	19,43	56,16	18,46	39,77	20,52	50,80	19,80
Total	269,38	100,00	292,15	100,00	304,17	100,00	193,77	100,00	256,60	100,00
Industries Agro-Alimentaires										
Privé	357,17	87,52	377,94	87,20	389,02	87,48	408,91	87,83	426,41	87,21
Public	50,94	12,48	55,46	12,80	55,68	12,52	56,67	12,17	62,54	12,79
Total	408,11	100,00	433,40	100,00	444,70	100,00	465,58	100,00	488,95	100,00
Industrie des Cuirs et chaussures										
Privé	2,50	88,03	2,62	85,33	2,76	84,40	2,83	89,84	3,38	91,62
Public	0,34	11,97	0,45	14,67	0,51	15,60	0,32	10,16	0,31	8,38
Total	2,84	100,00	3,07	100,00	3,27	100,00	3,15	100,00	3,69	100,00
Commerce et distribution										
Privé	1 995,50	93,96	2 210,20	94,07	2301,77	94,11	1882,18	94,71	2469,73	94,23
Public	128,36	6,04	139,39	5,93	144,04	5,89	105,03	5,29	151,21	5,77
Total	2 123,86	100,00	2 349,59	100,00	2445,81	100,00	1987,21	100,00	2620,94	100,00

Source: (Ministry of Industry and Mines, 2022, p. 36)

Appendix 2: Regional Distribution and Concentration Rate of SMEs in Algeria (2022)

Région	Nbre de PME 2022 ⁸	Taux de concentration (%)
Nord	945 153	69,51
Hauts-Plateaux	300 745	22,12
Sud	113 905	8,38
Total Général	1 359 803	100

Source: (Ministry of Industry and Mines, 2022, p. 11)