THE ADMINISTRATION OF SMES IN ECUADOR: GROWTH ANALYSIS AND INDICATORS

Ximena Patricia Granizo Espinoza
Escuela Superior Politécnica de Chimborazo-ESPOCH,
xgranizo@espoch.edu.ec

Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the variables SMEs and Growth Indicators. The purpose of the bibliometric analysis proposed in this document was to know the main characteristics of the volume of publications registered in the Scopus database during the period 201 7-2022, achieving the identification of 124 publications. The information provided by this platform was organized through graphs and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics have been described, the position of different authors towards the proposed theme is referenced through a qualitative analysis. Among the main findings made through this research, it is found that China and Russia, with 11 publications with the highest scientific production were the countries registered in the name of authors affiliated with institutions of thesenations. The Area of Knowledge that made the greatest contribution to the construction of bibliographic material referring to the study of the administration of SMEs, as well as the growth indicators was Business, Administration and Accounting with 60 published documents, and the Type of Publication most used during the period indicated above was the Articles with 78% of the total scientific production.

Keywords: SME Management, Growth Analysis, Growth Indicators, SMEs.

1. Introduction

In Ecuador, the management of small and medium-sized enterprises (SMEs) plays a fundamental role in the economic and social landscape of the country. These companies represent a significant part of the business fabric, generating employment, promoting innovation and contributing to economic growth. To ensure their success and sustainability, it is crucial that SME owners and managers conduct a thorough analysis of growth and use relevant indicatorsto assess their performance. In terms of growth, Ecuador has witnessed a notable

increase in the number of SMEs in recent years. This is partly due to the policies and programs implemented by the government to encourage the creation and expansion of these companies. Support in areas such as financing, training and market access has provided opportunities for the emergence and development of new SMEs in various sectors.

However, growth alone is not enough to ensure business success. It is necessary to have adequate tools and metrics to evaluate the performance and efficiency of an SME. Through key management indicators, owners and managers can obtain accurate information about differentaspects of their business. First, sales are a key indicator for evaluating the performance of an SME. Analyzing sales trends, identifying changes in demand, and making data-driven decisions allows you to adjust marketing, pricing, and distribution strategies to maximize revenue.

Profitability also plays a crucial role in the management of SMEs. Calculating indicators such as gross and net profit margin, return on investment (ROI), and break-even point helps determine operational efficiency and the ability to generate profits. This allows owners and managers to identify areas where improvements and adjustments can be made to increase profitability. In addition, it is essential to assess the liquidity of an SME. Maintaining adequate cash flow and monitoring indicators such as working capital, cash conversion cycle, and the ratio of current assets to current liabilities helps ensure the ability to meet short-term financial obligations and maintain continuity of operations. Productivity is also a critical aspect in the management of SMEs. Measuring indicators such as production per employee, material use efficiency, and asset utilization helps identify opportunities for process improvement and optimization, which can lead to increased performance and operational efficiency.

Finally, analyzing the growth of the market and the company's share of that market allows informed strategic decisions to be made. Assessing market share, sales growth compared to the total market and level of customer satisfaction provides a comprehensive view of the company's position and helps identifygrowth opportunities. the successful management of SMEs in Ecuador requires a rigorous analysis of growth and the use of relevant indicators. These indicators provide key information for informed decision making, driving efficiency and improving business performance in a competitive business environment. For this reason, this article seeks to describe the main characteristics of the compendium of publications indexed in the Scopus database related to thevariables SMEs and Growth Indicators, as well. As the description of the position of certainauthors affiliated to institutions, during the period between 2017 and 2022

2. Objective general

Analyze from a bibliometric and bibliographic perspective, the elaboration of works on the variables SMEs and Growth Indicators published in high impact journals indexed in Scopus database during the period 201 7-2022.

3. Methodology

This article is carried out through a mixed orientation research that combines the quantitative and qualitative method.

On the one hand, a quantitative analysis of the information selected in Scopus is carried out under a bibliometric approach of the scientific production corresponding to the study of SMEs and Growth Indicators

On the other hand, examples of some research works published in the area of study indicated above are analyzed from a qualitative perspective, starting from a bibliographic approach that allows describing the position of different authors against the proposed topic. It is important to note that the entire search was performed through Scopus, managing to establish the parameters referenced in Figure 1.

3.1. Methodological design

Figure 1. Methodological design



Source: Authors.

3.1.1 Phase 1: Data collection

Data collection was executed from the Search tool on the Scopus website, where 124 publications were obtained from the choice of the following filters:

TITLE-ABS-KEY (smes, AND growth AND indicators) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017))

Journal of Namibian Studies, 33 S2(2023): 3240–3252 ISSN: 2197-5523 (online)

- Published documents whose study variables are related to the study of SMEs and growth indicators.
- Limited to years 201 7-2022.
- Without distinction of country of origin.
- Without distinction of area of knowledge.
- Regardless of type of publication.

3.1.2 Phase 2: Construction of analysis material

The information collected in Scopus during the previous phase is organized and subsequently classified by graphs, figures and tables as follows:

- Co-occurrence of words.
- Year of publication.
- Country of origin of the publication.
- Area of knowledge.
- Type of publication.

3.1.3 Phase 3: Drafting of conclusions and outcome document

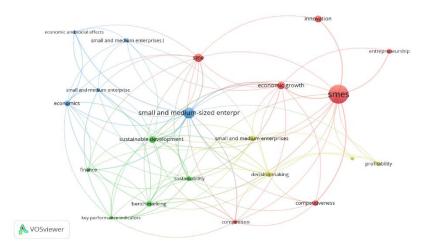
In this phase, we proceed with the analysis of the results previously yielded resulting in the determination of conclusions and, consequently, the obtaining of the final document.

4. Results

4.1 Co-occurrence of words

Figure 2 shows the co-occurrence of keywords found in the publications identified in the Scopus database.

Figure 2. Co-occurrence of words



Source: Own elaboration (2023); based on data exported from Scopus.

Small and Medium Enterprises was the most frequently used keyword among the studies identified through the execution of Phase 1 of the Methodological Design proposed for thedevelopment of this article. Sustainable Development is also among the most frequently used variables, associated with variables such as Innovation, SMEs, Economic Growth. From the above, it is important to note that SMEs tend to be large generators of employment in many economies. They are often the main source of employment for many people, especially in developing countries. Their active participation in the economy contributes to reducing the unemployment rate and improving working conditions. In addition, small and medium-sized enterprises account for a significant share of Gross Domestic Product (GDP) in many countries. Its contribution to total economic activity should not be overlooked, as it demonstrates its importance in the developmentand growth of the economy. In terms of growth indicators, it is important to measure and highlight the performance of SMEs to assess their contribution and detect opportunities for improvement. Some common indicators include sales growth, increased profitability, customer portfolio expansion, investment in research and development, and improved productivity.

4.2 Distribution of scientific production by year of publication

Figure 3 shows how scientific production is distributed according to the year of publication.

Distribución de la producción científica por año de publicación 35 30 25 20 15 10 5 0 2017 2018 2019 2020 2021 2022

Figure 3. Distribution of scientific production by year of publication.

Source: Own elaboration (2023); based on data exported from Scopus

Among the main characteristics evidenced by the distribution of scientific production by year of publication, a level of number of publications registered in Scopus is notorious in the 2020s, reaching a total of 30 documents published in journals indexed on this platform.

This can be explained by articles such as the one entitled "The effect of the informal sector on sustainable development: evidence from developing countries" (Sultana, 2022) This study aims to explore the impact of the informal sector on the sustainability of development. To this end, a large panel dataset from 50 developing countries covering the period 2010-2019 has been used, while the informal sector is assessed in terms of working poverty. Selecting indicators from three dimensions of sustainability, i.e. economy, society and environment, this study has constructed three indices and combines them to build a symptomatic composite index of sustainability. Both short- and longterm panel data models have been applied to empirically investigate the impact of informal economic activities on development sustainability. Economic growth, national spending and economic freedom of countries are used as control variables in the models and the estimated results are robust in empirical research. The results of the study imply that the informal sector plays a detrimental role in the sustainable development of developing countries, while economic growth and economic freedom contribute positively. Therefore, the prescribed strategy is to reduce the informality of business and other economic activities that limit the scope of economies and to understand the domain through which interventions can be made to move to a more formal economy. The integration of informal enterprises and SMEs in the formal sector and the creation of awareness at the corporate level on Corporate Social Responsibility can also be suggested to find a path towards sustainable development in addition to higher economic growth and better economic opportunities for developing countries.

4.3 Distribution of scientific production by country of origin

Figure 4 shows how scientific production is distributed according to the nationality of the authors.

Figure 4. Distribution of scientific production by country of origin.



Source: Own elaboration (2023); based on data provided by Scopus.

Within the distribution of scientific production by country of origin, registrations from institutionswere taken into account, establishing China, as the country of that community, with the highest number of publications indexed in Scopus during the period 2017-2022, with a total of 11 publications in total. In second place, India with 9 scientific papers, and Czech Republic ranking third presenting to the scientific community, with a total of 7 papers among which is the article entitled "Impact of the COVID-19 pandemic on the business environment in Slovakia " (Svabova, 2022) In this article, we present the results of the impact analysis of the COVID-19 pandemic with emphasis mainly on the SME segment, focusing on the tourism, hotel and gastronomic industry (generally as one of the most affected by the pandemic). We also looked at the impact of the pandemic on the automotive industry because it is the most important manufacturing industry in Slovakia. Regardless of which industries in the national economy they operate in, SMEs are supposed to be a driving force for structural changes, increased employment and economic growth. SMEs in Slovakia represent approx. 99% of all active enterprises and participate significantly in the success of the national economy. They are also an important factor in cooperation with large companies; in the case of Slovakia, it is worth mentioning the automotive industry (it is an important part of the secondary sector). The analysis and assessment of the impacts of the COVID-19 pandemic is carried out as a temporal and comparative analysis of selected economic and industrial indicators relevant for the assessment of the impact of the pandemic on the Slovak business environment. It is a general study of development; The impact of the pandemic is mostly expressed through ratio indicators.

4.4 Distribution of scientific production by area of knowledge

Figure 6 shows the distribution of the elaboration of scientific publications from the area of knowledge through which the different research methodologies are implemented.

Distribución de la producción científica por área de conocimiento Business, Management and Accounting Social Sciences Engineering **Decision Sciences** Mathematics Physics and Astronomy Agricultural and Biological Sciences Psychology **1** Medicine **1** 1 Biochemistry, Genetics and Molecular.. 10 20 70 0 30 40 50 60

Figure 6. Distribution of scientific production by area of knowledge.

Source: Own elaboration (2023); based on data provided by Scopus.

Business, Administration and Accounting was the area of knowledge with the highest number of publications registered in Scopus with a total of 60 documents that have based their methodologiesCovid-19, research and scientific dissemination In second place, Economics, Econometrics and Finance with 54 articles and Social Sciences in third place with 35. The above can be explained thanks to the contribution and study of different branches, the article with the greatest impact was recordedby the area of Business, Administration and Accounting entitled "Does investment contribute to the competitiveness of nautical tourism in the Atlantic Area? " (Santos, 2022) This article aims to find outdoor experiences after the confinement by COVID-19 has renewed the popularity of nautical tourism in this area and in the world. Despite the negative effects of the economic crisis on tourism, evidence suggests that some tourist destinations in the Atlantic area are resilient. Thus, while some branches of the blue economy face considerable challenges in increasing competitiveness, others offer opportunities for economic growth and employment. In this context, investment is necessary to lay the foundations for the sustainable development of nautical tourism. However, regarding the role of investment in productivity and competitiveness in the context of crisis, there is no consensus among academics. Thus, we investigated whether the investment contributed to the competitiveness of nautical tourism in the Atlantic Area in 2016-2020. We collected ORBIS data for 29 nautical tourism companies and performed a quantitative and qualitative narrative analysis of competitiveness indicators, allowing comparisons before and during the crisis. The results highlight the multiplicity of ways in which the crisis affects nautical tourism companies. The research fills a gap in the literature by investigating the dynamic capabilities of nautical tourism SMEs in periods of recession, with a special focus on restructuring and competitiveness strategies. Some recommendations are outlined to promote resource efficiency and stimulate the competitiveness of companies to allow the regional development of nautical tourism in the territory of the Atlantic area.

4.5 Type of publication

In the following graph, you will observe the distribution of the bibliographic finding according to the type of publication made by each of the authors found in Scopus.

TIPO DE PUBLICACIÓN

Article Conference Paper Book Chapter Review Conference Review

15%

78%

Figure 7. Type of publication.

Source: Own elaboration (2023); based on data provided by Scopus.

The type of publication most frequently used by the researchersreferenced in the body of this document was the Journal Article with 78% of the total production identified for analysis, followed by Session Paperwith 15%. Chapter of the Book are part of this classification, representing 4% of the research paperspublished during the period 2017-2022 in journals indexed in Scopus. In the latter category, the one entitled "Innovations in small enterprises: do public

procurement contracts and intellectual property rights matter? " (Odei, 2022) This paper aims to examine whether public procurement contracts, market orientations, public subsidies, intellectual property rights and other characteristics of enterprises shape the innovation outcomes of small enterprises in the Czech Republic. Results based on a cross-sectional sample of 4193 small enterprises from the 2014 Community Innovation Survey demonstrate that European utility models positively influence primary and secondary forms of innovation, but not overall innovations. Our findings also show that overseas procurement contracts are important for the major and minor forms of innovation of small firms, but not for general innovations. Our results further demonstrate that export, collaborations with universities and other public research organizations, and external research and development positively influence major and secondary forms of innovation, but not overall innovations. Results on average treatment effects confirm that company collaborations with universities and public research organizations have the highest additionality effects in major and minor forms of innovations. Finally, we found evidence that firm size and group membership positively impact overall small business innovations. We conclude with practical implications for policymakers and business managers in Visegrad economies on measures that could be taken to develop and improve new and existing policy initiatives to increase the effect of major and minor innovation outcomes.

5. Conclusions

Through the bibliometric analysis carried out in the present research work, it was established that China was the country with the largest number of records published for the variables SMEs and Growth Indicators with a total of 11 publications in the Scopus database. In the same way, it was established that the application of theories framed in the area of Business, Administration and Accounting, were the most frequently used in the measurement of the impact generated by the implementation of small and medium-sized enterprises (SMEs). They play a fundamental role in the global economy. They generate employment, promote innovation and contribute to the economic development of countries. Monitoring growth indicators is crucial to assess the health and success of SMEs. In conclusion, growth indicators are key tools for measuring and evaluating the performance and growth potential of these companies. By monitoring these indicators, entrepreneurs and decision-makers can gain a clear view of the financial situation, profitability and operational efficiency of small and mediumsized enterprises. Some of the common growth indicators include sales growth, profit margin, labor productivity, liquidity, and profitability. These indicators allow you to identify areas for improvement, set realistic targets and make informed decisions to drivesustainable growth. In addition, the comparative analysis of growth indicators between companies in the same sector or between different periods of time can provide valuable information on the evolution and competitiveness of companies. Importantly, SME growth refers not only to increased revenues or profits, but also to capacity building, market expansion, job creation and adoption of innovative technologies and practices. Sustainable growth involves balancing economic growth with social and environmental considerations.

Bibliography

- Odei, S. A. (2022). Innovations in small businesses: do public procurement contracts and intellectual property rights matter? Czech Republic.
- Santos, E. C. (2022). Does investment contribute to the competitiveness of nautical tourism in the Atlantic Area? Portugal.
- Sultana, N. R. (2022). The effect of the informal sector on sustainable development: evidence from developing countries. Australia.
- Svabova, L. K. (2022). Impact of the COVID-19 pandemic on the business environment in Slovakia. Slovakia.
- Abu Salma, A. J., Prasolov, V., Glazkova, I., & Rogulin, R. (2021). The impact of business processes on the efficiency of small and medium-sized enterprises. Montenegrin Journal of Economics, 17(3), 131-143. doi:10.14254/1800-5845/2021.17-3.11
- Adesanya, O., Moses, C., & Worlu, R. (2021). Linking women entrepreneurs' quality standard orientation to customer satisfaction in non-oil export trade. International Journal of Entrepreneurship, 25(Special Issue 1) Retrieved from www.scopus.com
- Akinyede, I. J. (2019). Pragmatic evaluation of owner and manager influence toward effective management of small-medium construction company in south africa. Paper presented at the International Conference on Sustainable Infrastructure 2019: Leading Resilient Communities through the 21st Century Proceedings of the International Conference on Sustainable Infrastructure 2019, 301-308. doi:10.1061/9780784482650.031 Retrieved from www.scopus.com
- Al-Eitan, G. N., Al-Own, B., & Bani-Khalid, T. (2022). Financial inclusion indicators affect profitability of jordanian commercial banks: Panel data analysis. Economies, 10(2) doi:10.3390/economies10020038
- Alshiqi, S., & Bekteshi, X. (2020). Conceptual paper on external determinants and relationship with export performance of SMES. International Journal of Entrepreneurship, 24(1) Retrieved from www.scopus.com
- Arcese, G., Valeri, M., Poponi, S., & Elmo, G. C. (2021). Innovative drivers for family business models in tourism. Journal of Family Business Management, 11(4), 402-422. doi:10.1108/JFBM-05-2020-0043
- Arifah, I. D. C., Safitri, A., Fazlurrahman, H., Chen, G. K., Masrom, A. N., & Kharisma, F. (2022). Smart economy implementation in supporting SMEs growth: Case study in indonesia and malaysia smart cities. Paper presented at the 2022 5th International Seminar on Research of Information Technology and Intelligent Systems, ISRITI 2022, 787-792. doi:10.1109/ISRITI56927.2022.10053000 Retrieved from www.scopus.com

- Ashifa, K. M. (2020). Sustanability of small and medium manufacturing engineering enterprises in india. Journal of Advanced Research in Dynamical and Control Systems, 12(7 Special Issue), 992-998. doi:10.5373/JARDCS/V12SP7/20202194
- Bagodi, V., Thimmappa Venkatesh, S., & Sinha, D. (2020). A study of performance measures and quality management system in small and medium enterprises in india. Benchmarking, 28(4), 1356-1389. doi:10.1108/BIJ-08-2020-0444
- Banai, Á., Lang, P., Nagy, G., & Stancsics, M. (2020). Waste of money or growth opportunity: The causal effect of EU subsidies on hungarian SMEs. Economic Systems, 44(1) doi:10.1016/j.ecosys.2020.100742
- Bautista, A., León, A., Rojas, J., & Raymundo, C. (2020). Strategic planning model to increase the profitability of an HR outsourcing SME through digital transformation doi:10.1007/978-3-030-25629-6_134 Retrieved from www.scopus.com
- Beknazarov, B., Niyazbekova, R., Amirseitov, U., Kokenova, A., Daurbayeva, M., & Aitkazina, M. (2020). Development of entrepreneurship and forms of self-employment in the innovative sectors of the economy. Entrepreneurship and Sustainability Issues, 8(2), 209-228. doi:10.9770/jesi.2020.8.2(13)
- Belas, J., Gavurova, B., Kubalek, J., & Kubak, M. (2020). Discrepancies in perception and evaluation of macroenvironment sectoral analysis. Journal of Business Economics and Management, 21(4), 1072-1092. doi:10.3846/jbem.2020.12274
- Berkova, I., Adamova, M., & Nyvltova, K. (2017). Realtionships between fiancial and learning and growth perspectives in BSC. Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, 65(6), 1841-1850. doi:10.11118/actaun201765061841
- Bianchini, S., & Pellegrino, G. (2019). Innovation persistence and employment dynamics. Research Policy, 48(5), 1171-1186. doi:10.1016/j.respol.2018.12.008
- Binh, D. T. T., Loan, B. T. T., & Anh, V. T. K. (2020). The application of the logistic model in analyzing the risk of bankruptcy of small and medium enterprises (SMES): A case study. Academy of Accounting and Financial Studies Journal, 24(3) Retrieved from www.scopus.com
- Biryukov, E., Elina, O., Lyandau, Y., & Mrochkovskiy, N. (2021). Russian SMEs in achieving sustainable development goals. Paper presented at the E3S Web of Conferences, , 258 doi:10.1051/e3sconf/202125806021 Retrieved from www.scopus.com
- Boccaletti, S., Rossi, E., & Rossolini, M. (2022). How can SMEs signal their quality and growth orientation to the market? an analysis of the cost of italian corporate mini-bonds. Journal of International Financial Management and Accounting, 33(2), 219-251. doi:10.1111/jifm.12157
- Bondarenko, T. G., Tsertseil, J. S., Prodanova, N. A., & Polyanin, A. E. (2022). THE DEVELOPMENT OF SMES IN THE CONTEXT OF GLOBALIZATION: TOOLS AND METHODS OF SUPPORT. [O DESENVOLVIMENTO DAS PMES NO CONTEXTO DA GLOBALIZAÇÃO: FERRAMENTAS E MÉTODOS DE APOIO] Relacoes Internacionais no Mundo Atual, 4(37), 960-978. doi:10.21902/Revrima.v4i37.6098

- Boshmaf, H., & O'Keeffe, C. (2022). Promoting gender equality in jordan: A gender review of the national entrepreneurship and SME growth strategy 2015-2017. Dirasat: Human and Social Sciences, 49(5), 61-72. doi:10.35516/hum.v49i5.3114
- Broccardo, L., & Rossi, M. (2020). The management control system of italian SMEs: A survey in the wine sector. International Journal of Entrepreneurship and Small Business, 40(4), 425-438. doi:10.1504/IJESB.2020.109007
- Brodny, J., & Tutak, M. (2022). Digitalization of small and medium-sized enterprises and economic growth: Evidence for the EU-27 countries. Journal of Open Innovation: Technology, Market, and Complexity, 8(2) doi:10.3390/joitmc8020067
- Cao, S., & Leung, D. (2020). Credit constraints and productivity of SMEs: Evidence from canada. Economic Modelling, 88, 163-180. doi:10.1016/j.econmod.2019.09.018
- Casado-Belmonte, M. P., Marín-Carrillo, G. M., Terán-Yépez, E., & Capobianco-Uriarte, M. M. (2020). What is going on with the research into the internationalization of small and medium-sized enterprises (SMEs)? an intellectual structure analysis into the state-of-the-art (1990-2018). Publications, 8(1) doi:10.3390/publications8010011
- Ceylan, I. E. (2021). The impact of firm-specific and macroeconomic factors on financial distress risk: A case study from turkey. Universal Journal of Accounting and Finance, 9(3), 506-517. doi:10.13189/ujaf.2021.090325
- Chang, Y., & Kock, W. M. (2021). Credit guarantee scheme and startup businesses: Financial pipelines and successful startups in south east asia. Investment in startups and small business financing (pp. 265-302) doi:10.1142/9789811235825_0009 Retrieved from www.scopus.com