Acta Universitatis Danubius
ŒCONOMICA

Effects of Government Intervention on SMMEs: A Review of Empirical Evidence

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Abstract: Over the past two decades, governments around the globe have been providing financial and non-financial resources to support small, micro and medium-sized enterprises (SMMEs) through grants and subsidies. But do these public investments help SMMEs to improve their performance and growth in terms of job creation, productivity, sales and their ability to survive? The analysis, which focused on government subsidies and grant programmes, provides an answer to this question through a review of evidence on the effects of public intervention over the period 2010 to 2022. Results indicate that government intervention programmes have had an overall favourable impact on business employment creation, sales/turnover and productivity, while there are conflicting results for business labour productivity and business survival. Despite the divergent empirical results across programmes, it is imperative that government intervention programmes address inclusiveness in the design and implementation phase of grants and subsidies programmes in order to link programme objectives with the intended outcome.

Keywords: effects; SMMEs; government intervention; programme; subsidies

JEL Classification: O12; H81; P43

1. Introduction

Over the past two decades, public investment intervention and support for small, micro and medium enterprises (SMMEs) have increased globally. This is in recognition of the role played by SMMEs in terms of economic development and contribution to the GDP. For example, the global contribution of SMMEs represents

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about 90% of global businesses and more than 50% of employment worldwide (World Bank, 2022). Moreover, in emerging economies, the total GDP contribution of SMMEs was about 40%. However, some of the SMMEs that are in operation today depend on personal savings, as well as finances provided by family and friends (International Finance Corporation [IFC]), 2018). This type of finance is sometimes not enough to increase productivity, increase sales, generate employment and create sustainability for such businesses. Moreover, capital market imperfections in developing countries contribute to financial institutions' reluctance to lend to SMMEs because they are seemingly risky, given their nature or mode of operation (IFC, 2018).

The rate of SMMEs' failure and the market imperfection that exist are still very high across the globe (Ferreira, Strydom & Nieuwenhuizen, 2010; Liu, Xu & Wang, 2021); this has remained a subject of discussion among academics, policymakers and business executives. The economic reasons for government's policy programmes for SMMEs are to promote entrepreneurship development and sustainability and to prevent market failure resulting from asymmetric information, high transaction costs, uncertainty and externalities (Liu, Xu & Wang, 2021). Government support is intended to assist enterprises that are denied access to credit by traditional financial institutions (Zucoloto, Nogueira & De Souza Pereira, 2019). The government's SMME intervention policies cover a variety of activities, such as business development, asset acquisition, training and advisory services, as well as direct financial support provided through financial instruments such as capital grants, soft loans and credit guarantees and subsidies (Akçiğit, Seven, Yarba & Yılmaz, 2021; Lalinsky, & Pal, 2021). Additionally, the intervention is meant to assist SMMEs using other forms of direct assistance, such as tax benefits, grants, trade assistance and subsidies (Xiang, Zhao & Zhang, 2021).

On the other hand, government intervention encourages individual enterprises or entrepreneurs to expand their economic activities and be more engaged in productive ventures. However, the performance and delivery of the intervention programmes in the development of SMMEs are varied and inconsistent among policymakers, researchers, consultants and academics (Aluko, 2022), based on statutory obligations and policy frameworks. The aim of the framework is to create an enabling environment for how SMMEs can be developed, as well as strategies to achieve their potential objective. It is also intended to facilitate income-earning opportunities, employment generation, creation of economic wealth and provide greater equalisation of income among entrepreneurs and self-employed individuals. In this respect, the goal of the framework is to reduce the level of poverty and income inequality among the vulnerable and the disadvantaged. It allows SMMEs to access non-financial and financial services through intermediaries (financial institutions) or government-designated service providers.

Recent developments associated with the COVID-19 pandemic have negatively affected the financing gap for SMME development across the globe. This challenge has reduced both domestic and international revenue mobilisation and redistribution of resources to the key areas of economic development. As a result, the global economy is recovering and slowly expanding, and it is hoped that things will return to normal soon. In addition, the COVID-19 financing gap has significantly increased the number of SMMEs that have been liquidated in unfamiliar ways, which has put millions of people out of work and landed them in extreme poverty (Demmou, & Franco, 2021). This gap has undone any progress that the South African government and international development financial institutions have made in relation to the 2030 Agenda and the Sustainable Development Goals (SDGs) over the past few years. Despite the government's intervening in the SMME sector, evidence of such intervention in terms of employment, survival, profitability, etc tends to be scanty, controversial and unproven. Therefore, an investigation into such effects is necessary.

In this study, the researchers aimed to analyse and investigate empirically the effects of government intervention programmes on SMMEs' growth and performance, as well as what can be done to enhance the effectiveness and efficiency of government intervention programmes in terms of their contribution to level of income and productivity, survival, employment creation and policy recommendations. The rationale for this study was the government's response to the growth and development of SMMEs in terms of various initiatives to support their growth and survival, thus contributing to the gross domestic product (GDP) at various government levels, reducing poverty and generating employment.

The researchers drew on several current studies and previously reviewed and published works (Kersten, Harms, Liket, & Maas, 2017; Testa, Szkuta, & Cunningham, 2019; Dvoulet'y, Srhoj, & Pantea, 2020; Aluko, 2022), which provide an overview of evaluation techniques and illustrations of prior evaluations. It is important to emphasise that such initiatives have been in progress for some time and remain so up to the present moment. Also, this study contributes to the current discussion on the effectiveness of government support policies and programmes for SMMEs' growth and development by offering a thorough analysis of counterfactual evaluations of intervention support for SMMEs. There are two reasons for focusing on SMMEs. Firstly, SMMEs often experience severe financial constraints, so they are more likely to benefit from government assistance policies, especially in the COVID-19 and post-COVID-19 era. Secondly, it is imperative to assess the effectiveness of government's major intervention measures to support SMMEs.

It is hoped that the findings of this study will contribute to improvements in the design and delivery methods of the intervention programmes and indicate to policymakers' alternatives for supporting SMMEs development. The study will also add to the literature on programme effects evaluation research by exploring differences and pointing out if there are any similarities in government intervention programmes. The remainder of the paper is structured as follows: The underpinning perception of SMMEs' government intervention performance is discussed in section 2; the methodology and research approach are outlined in section 3; section 4 presents a review of the findings and a summary of the key findings; and the policy implications are presented in section 5. In the conclusion, section 6, recommendations are made for scholars and further research areas.

2. Government Intervention in the Private Sector: Theoretical Underpinning

According to Nuţă (2011), public support and economic policy promote private economic participation through a comprehensive and stringent protectionist policy for SMME development. Thus, the state – in the context of financing its intervention through fiscal policy or taxes – creates the redistribution of resources in justified circumstances or, most often, diverts them from public consumption to capital goods (Arshed, Carter, & Mason, 2014; Cigu, Petrişor, Nuță, Nuță, & Bostan, 2020). The initiatives and policies around government intervention for SMMEs in both developed and developing economies are based on the belief and understanding that SMMEs experience difficulties in accessing capital – either to expand their business or to start a new one (Aluko, 2022). Government intervention in SMMEs is a valuable way to obtain the required capital that small enterprises need because of the crucial role they play in creating employment, alleviating poverty and generating income for survival, among other things (Mazanai, & Fatoki, 2011; Aluko, & Booyse, 2022). Also, government intervention promotes the idea that beneficiary firms will contribute to the state in proportion to their ability to pay tax and in proportion to the revenue generated under state support (Arshed, Carter, & Mason, 2014; Nuţă, 2011).

Furthermore, financial support is more homogeneous across and increases the working capital of the affiliated and beneficiary firms (Aluko, & Booyse, 2022). In addition to the scientifically driven debate and the evidence-informed approach through the policy-making processes, a variety of factors, such as the stage of the institutional environment, the political cycle and the goals of politicians, also have a significant impact on the formation of public policies and the combination of tools in this regard (Arshed, et al., 2014; Edoho, 2016; Debus, Tosun, & Maxeiner, 2017).

It is no surprise that the formation of public policy today closely reflects the achievement of rationally determined political and strategic objectives, such as raising national competitiveness and innovativeness to increase the welfare and living standards of citizens (Martín-García, & Santor, 2021). The failure or success of a particular policy in achieving its goal ultimately depends solely on the policy's design of selection criteria, targeting and intensity of support, rather than on the original purposes that led to the establishment of a particular state policy programme (Zucoloto, et al., 2019). Furthermore, SMMEs in emerging economies may need a distinct approach to policy because of their lack of capital and resource capabilities. For instance, in developed nations, collaborations between SMMEs and major enterprises can provide many financial and non-financial benefits in terms of sustainability and growth, operational impact, and employee performance (Ridwan Maksum, Yayuk Sri Rahayu, & Kusumawardhani, 2020).

3. Perception of Government Intervention Performance in Terms of SMMEs

The literature suggests that government intervention programmes are important in the development of SMMEs. For example, the intervention is created as a stimulus package that includes specific measures for SMMEs through assistance with grants, subsidies, taxation, trade, credit, training and procurement. Although grants are less cost-efficient than financial tools, they are more effective (Aluko, 2022; Srhoj, Škrinjarić, & Radas, 2021; Nyikos, Béres, & Laposa, 2020; Banai, Lang, Nagy, & Stancsics, 2017; Radas, Anić, Tafro, & Wagner, 2015). Studies on the design and implementation of the government's intervention programme for supporting SMMEs reveal that only a small number of them boost SMMEs' productivity and add jobs as part of the government's support initiative, thus helping to improve sales, productivity and employment overall (Aluko, 2022; Akçiğit, et al., 2021; Brachert, Dettmann, & Titze, 2018).

Based on the empirical evidence and observations of some scholars, practitioners and academic researchers, government support programmes save jobs and sustain economic activity during the first year of access; they also provide for the additional liquidity needs of enterprises and reduce default probability in the short term (Akçiğit, et al., 2021; Lalinsky, & Pal, 2021). Most government interventions achieved their goal because they targeted firms that were in operation for a year or more and operated within the framework of the firm size, location and sector, which are criteria for the firm to access any intervention programmes. This type of government intervention programme takes the form of either a subsidy, grant or guarantee programme. Most programmes in developed economies are designed to target existing enterprises that are formal, comprising at least 20 employees, having a recorded threshold of annual turnover, and operating in the sectors of manufacturing, services, construction or mining (Nyikos, Béres & Laposa, 2020; Arshed, Carter & Mason, 2014; Maffioli, et al., 2017; Bernini, & Pellegrini, 2011). Also, the policy-targeted programme focuses on women-owned firms and micro and small enterprises (Srhoj, et al., 2021) that involve the acquisition of assets, tools and machinery, marketing activities and business development projects (Kimando, Sakwa & Njogu, 2012).

In developing countries, most intervention programmes are established to improve a firm's growth and employment. Others support women's enterprises, thus reducing income inequality in less privileged and undeveloped areas and focusing on firms in the manufacturing sector (Kimando, et al., 2012). The targeted firms in similar circumstances lack access to local and export markets and face market competition and poor market penetration. As a result, their productivity is low, they cannot create new jobs and their survival is uncertain in the medium term. For example, in sub-Saharan Africa, government intervention programmes target enterprises that are small – both new and existing ones – with or without a credit history, a recorded number of employees and low turnover, but that might meet the requirements to make a risk-sharing contribution (Aluko, 2022; Kimando, et al., 2012). Some programmes focus on the acquisition of tools and machinery and business development, while a few target cooperative and women-owned entities in the manufacturing, services and construction sectors (Aluko, & Booyse, 2022). It is important to note that the objectives of the government interventions are economic growth, employment creation, improved productivity and turnover, as well as firm survival. In essence, new firms find it difficult to create jobs because they lack the experience to do so. This has resulted in some intervention programmes' sharing the risk in cost-sharing arrangements, whereby a firm is required to commit certain percentages of the allocated funds before it can benefit from a government subsidy or grant.

Empirical research results show that the state's intervention support programme is not often approved. Additional factors that led to the programme's poor performance were a lack of procedural criteria and an excessively long turnaround time between the approval and conversion phases (Aluko, 2022). This suggests that the programme policy is partially or completely ignored, which contributes to insufficient funding for the programme and inefficient distribution of funds to the intended beneficiary. Additionally, the targeted group is given less priority than qualifying beneficiaries, thereby distorting the programme's access options (Aluko, 2022). However, most government grant programmes in Indonesia, for instance, have focused on financial support and large companies' partnerships with SMMEs. Examples include Credit Investment Scheme (KIK), Credit for Permanent Working Capital (KMKP), Credit for Small Enterprises Scheme (KUK), and Village Credit Scheme (KUPEDES). Despite the grant programmes and policies' being intended to address numerous issues faced by SMMEs, most of the programmes have been insufficient in enhancing the capacity and productivity of the SMMEs (Ridwan Maksum, et al., 2020). Possibly, insufficient research was conducted; alternatively, the research findings were unavailable in the public domain. In table 1 below, the researchers have highlighted, in alphabetical order, relevant articles that analyse the effects of government intervention on SMMEs' growth, employment creation and survival.

Table 1. Summary of Literature Review Evidence of the Effects of SMME Government Intervention

S/N	Author(s)	Year	Country	Title	Method	Findings and conclusion
1	Akçiğit, U., Seven, Ü., Yarba, İ., & Yılmaz, F.	2021	Turkey	Firm-level impact of credit guarantees: Evidence from Turkish credit guarantee fund	Quantitative	The CGF had a positive impact on the performance of targeted firms in terms of employment and sales, and reduced credit default probability and debt burden by 60%. Complementing the CGF with government policies while aiming to improve productivity is critical to ensure growth and success.
2	Aluko, T.O., & Booyse, N.	2022	South Africa	Effects of a state subsidy programme in the small business sector: The case of the emerging market	Mixed method	The government grant programme positively influences only beneficiary firms operating in the services sector in terms of their performance. More awareness of the programme is needed across all sectors of the economy to increase inclusiveness.
3	Aluko, T.O. & Kibuuka, P.	2018	South Africa	Effectiveness of the Co-operative Grant Incentive Scheme (CIS) on beneficiary firms' job creation	Mixed method	The impact of the programme on employment is too insignificant to conclude that it is effective. The programme design and access mechanism should be

				capacity in South Africa		reviewed for effective implementation.
4	Aluko, T.O.	2022	South Africa	Efficiency and competitiveness of a South Africa grant support programme for small, medium, and micro-sized enterprises	Quantitative	There was no significant impact on firms' performances and competitiveness. Better-tailored programmes should be designed to meet SMME needs, with a focus on those that require state support.
5	Arshed, N., Carter, S., & Mason, C.	2014	Italy	The ineffectiveness of entrepreneurship policy: Is policy formulation to blame?	Mixed method	Positive enterprise policy formulation and policy effectiveness should be encouraged.
6	Bai, Y., Song, S., Jiao, J., & Yang, R.	2019	China	The impacts of government R&D subsidies on green innovation: Evidence from Chinese energy-intensive firms	Quantitative	The R&D subsidies increase the green innovation of energy-intensive firms, specifically their performance, which improves by 107.3%.
7	Banai, Á., Lang, P., Nagy, G., & Stancsics, M.	2017	Hungary	Impact evaluation of EU subsidies for economic development on the Hungarian SME sector	Quantitative	The subsidies development programme has significant positive effects on employment, sales/revenue, gross value and operational profit of the beneficiary firms. This was noted in all sectors.
8	Bernini, C., & Pellegrini, G.	2011	Italy	How are growth and productivity in private firms	Quantitative	There is higher growth in output, employment and fixed assets in

				affected by public subsidy? Evidence from a regional policy		subsidised firms, but less increase in total factor productivity than in unsubsidised firms.
9	Brachert, M., Dettmann, E., & Titze, M.	2018	Germany	Public investment subsidies and firm performance – evidence from Germany	Quantitative	There are positive effects on firm employment and turnover but only in the medium-term. The effect of GRW-funding on labour productivity remained insignificant throughout the period of analysis.
10	Bradshaw, T.	2002	USA	The contribution of small business loan guarantees to economic development	Qualitative	These contributed to an increase in firm employment.
11	Caselli, S., Corbetta, G., Rossolini, M., & Vecchi, V.	2019	Italy	Public credit guarantee schemes and SMEs' profitability: Evidence from Italy	Quantitative	Owing to the schemes, there was an increase in profitability in firms operating in the manufacturing sector during an economic meltdown. More customised programmes are necessary to achieve higher value for money in entrepreneurial policies.
12	Chandler, V.	2012	Canada	The economic impact of the Canada Small Business Financing Program	Quantitative	The program created additional employment through the participating firms and improved the salary scale of firm employees.

13	Debus, M., Tosun, J., & Maxeiner, M.	2017	Germany	Support for policies on entrepreneurship and self-employment among parties and coalition governments	Qualitative	Policy analysis paper: More market-liberal policies are recommended.
14	Demmou, L., & Franco, G.	2021	EU	From hibernation to reallocation: Loan guarantees and their implications for post-COVID-19 productivity	Mixed method	There was increased productivity in participating firms.
15	Dvouletý, O., Blažková, I., & Potluka, O.	2021	Czechoslovakia	Estimating the effects of public subsidies on the performance of supported enterprises across firm sizes	Quantitative	Positive effects on sales, return on investment, assets and productivity were recorded. There were only minor positive effects of subsidies for larger enterprises.
16	Dvouletý, O., Srhoj, S., & Pantea, S.	2020	EU	Public SME grants and firm performance in European Union: A systematic review of empirical evidence	Qualitative	The grants had a positive effect on firm survival, employment, assets, sales/turnover and labour productivity.
17	Edoho, F. M.	2016	Nigeria	Entrepreneurship paradigm in the new millennium: A critique of public policy on entrepreneurship	Qualitative	Targeted entrepreneurship policy should promote incentives for opportunity-oriented entrepreneurs, which would have greater benefits for the economy and society.

18	Ferreira, E., Strydom, J., & Nieuwenhuizen, C. 2010.	2010	South Africa	The process of business assistance to small and medium enterprises in South Africa	Qualitative	The authors found that government support programmes need to be flexible for effective and efficient implementation in targeted enterprises.
19	Hansen, T.J., & Kalambokidis, L.	2010	USA	How are businesses responding to Minnesota's Tax-Free Zone Program?	Quantitative	The programme had no significant effects on job creation and firm growth.
20	Kersten, R., Harms, J., Liket, K., & Maas, K.	2017	Global	Small firms, large impact? A systematic review of the SME finance literature	Mixed method	The study noted positive effects on capital investment, firm performance and employment. However, there was no significant effect on profitability and wages.
21	Kimando, L.N., Sakwa, M., & Njogu, M.G.W.	2012	Kenya	Impact of business development services on enterprises in rural Kenya: A case study of micro and small enterprises in Muranga Town	Qualitative	There was a positive effect on the business development strategy of the participating firms, such as training in management skills, financial planning and financial management.
22	Koski, H., & Pajarinen, M.	2013	Finland	The role of business subsidies in job creation of start-ups, gazelles and incumbents	Quantitative	The programme boosted employment in start-up and incumbent enterprises.
23	Lalinsky, T., & Pál, R.	2022	Slovakia	Distribution of COVID-19 government support and its consequences for firm	Quantitative	The study highlighted that the programme saves jobs and sustains economy activity.

				liquidity and solvency.		
24	Liu, Y., Xu, H., & Wang, X.	2021	China	Government subsidy, asymmetric information and green innovation	Qualitative	Subsidies promote firms' green innovation.
25	Lopez-Acevedo, G., & Tan, H.	2010	Latin America and Caribbean	Impact evaluation of SME programs in Latin America and Caribbean	Qualitative	There was no specific effect on firms' performance, employment and productivity.
26	Maffioli, A., De Negri, J.A., Rodriguez, C.M., & Vazquez-Bare, G.	2017	Brazil	Public credit programs and firm performance in Brazil	Qualitative	There was a significant positive impact on firms' employment, growth and export.
27	Mago, S., & Toro, B.	2013	South Africa	South African government's support to small, medium micro-enterprise (SMMEs): The case of King William's Town area	Qualitative	There was no positive impact on participant firms because of low awareness of the subsidy programme.
28	Martín-García, R., & Morán Santor, J.	2021	Spain	Public guarantees: A countercyclical instrument for SME growth. Evidence from the Spanish region of Madrid	Quantitative	The programme increased firms' turnover and investment significantly.

29	Mazanai, M., & Fatoki, O.	2011	South Africa	The effectiveness of business development services providers (BDS) in improving access to debt finance by start-up SMEs in South Africa	Qualitative	There was improved debt financing of firms.
30	Nyikos, G., Béres, A., & Laposa, T.	2020	Hungary	Micro-economic effects of public funds on enterprises in Hungary	Quantitative	There was a positive influence on beneficiary firms'?> sales level and employment.
31	Pellegrini, G., & Muccigrosso, T.	2017	Italy	Do subsidized new firms survive longer? Evidence from a counterfactual approach	Quantitative	The study showed that subsidised programmes assist start-up firms to record low default risk on debts and other liabilities.
32	Radas, S., Anić, I.D., Tafro, A., & Wagner, V.	2015	EU	The effects of public support schemes on small and medium enterprises	Quantitative	The scheme strengthens the R&D orientation of the SMEs.
33	Ridwan Maksum, I., Yayuk Sri Rahayu, A., & Kusumawardhani, D.	2020	Indonesia	A social enterprise approach to empowering micro, small and medium enterprises (SMEs) in Indonesia	Qualitative	The study demonstrated significant alternative leverage on firm productivity.
34	Rogerson, C.M. .	2010	South Africa	The impact of the South African government's	Qualitative	The evidence of the programme's effectiveness was inconclusive.

				SMME programmes: A ten-year review		
35	Rungani, E.C., & Potgieter, M.	2018	South Africa	The impact of financial support on the success of small, medium and micro enterprises in the Eastern Cape province	Quantitative	There was a positive effect on performance in those firms that accessed the financial support programme.
36	Srhoj, S., Škrinjarić, B., & Radas, S.	2021	Croatia	Bidding against the odds? The impact evaluation of grants for young micro and small firms during the recession	Mixed method	The results show that grants had a positive impact on firm survival after the recession, as well as on obtaining long-term bank loans during the recession. However, no empirical support was found for the grants' impact on growth in turnover, employment and labour productivity.
37	Testa, G., Szkuta, K., & Cunningham, P.N. .	2019	EU	Improving access to finance for young innovative enterprises with growth potential: Evidence of the impact of R&D grant schemes on firms' outputs	Quantitative	There was an overall positive impact on firms' employment contribution, total sales level, innovation and R&D.
38	Wang, S., Ahmad, F., Li, Y., Abid,	2022	China	The impact of industrial subsidies and enterprise innovation on enterprise	Quantitative	The subsidies programme had a positive effect on firms, especially the smaller firms.

	N., Chandio, A.A., & Rehman, A.			performance: Evidence from listed Chinese manufacturing companies		
39	Xia, X., & Gan, L.	2020	China	SME financing with new credit guarantee contracts over the business cycle.	Quantitative	The scheme reduces debt overhang and problems with assistance in asset substitution.
40	Xiang, D., Zhao, T., & Zhang, N.	2021	China	Does public subsidy promote sustainable innovation? The case of Chinese high-tech SMEs	Quantitative	Government support significantly and positively affects both the innovation input and output of participating firms.
41	Yu, J., Peng, F., Shi, X., & Yang, L.	2022	China	Impact of credit guarantee on firm performance: Evidence from China's SME.	Quantitative	The credit guarantee improves firms' performance.
42	Zoellner, M., Fritsch, M., & Wyrwich, M.	2018	Germany	An evaluation of German active labour market policies: A review of the empirical evidence	Mixed method	The policies assist self-employment enterprises.
43	Zúñiga-Vicente, J.A., Alonso-Borrego, C., Forcadell, F.J., & Galán, J.I.	2014	Global	Assessing the effect of public subsidies on firm R&D investment: A survey	Qualitative	The evidence was inconclusive.

Source: Compiled by the authors.

4. Methodology and Approach

Regarding the eligibility requirements, the study was concerned only with publications that focused on the terms “effectiveness of grant support for SMME,” “government intervention programme for SMME,” and “subsidies programme for small business”, and these were used as the starting point for the literature search. The researchers consulted published papers and other secondary sources. They also considered only open-access, peer-reviewed literature written in English.

5. Search Strategy and Selection Criteria

When using Scopus and other publication databases, it is possible to provide article titles, keywords or abstracts as search criteria. According to this search strategy, keywords such as those appearing in the title of each manuscript, were used to establish the latter’s initial relevance. If the content of the title suggested that it would explain the technique of the literature review process, then the entire reference was requested, which included the author details, year, title and abstract of the publication, for additional analysis.

From the initial pool of papers that were accessed, studies that did not concentrate on the state grant or subsidy programmes and did not have a rigorous methodology were generally eliminated. Thereafter, the most relevant papers were selected for review. At the end of the process, the articles that were selected were considered relevant to the study and empirical in nature, while policy analysis articles were sorted according to their focus.

Regarding the year of publication, the review covered the period 2010 to 2022 (see figure 1) and, initially, 189 articles were downloaded and sorted, first according to the year of publication, then according to developed and emerging economies. Countries that fell into the “developed” category included Europe, North America and Australia (see figure 1). Emerging economies were divided into three continents, namely Asia, South America and Africa. These studies were conducted primarily in Hungary, Spain, Italy, the United Kingdom, Finland, Germany, Turkey, Slovakia, Czechoslovakia and Croatia in the EU. In the USA, Canada and South America region, there was Brazil, while in the emerging economy, there was South Africa, Sir Lanka and Kenya. The remaining studies originated in Asia, China and Indonesia.

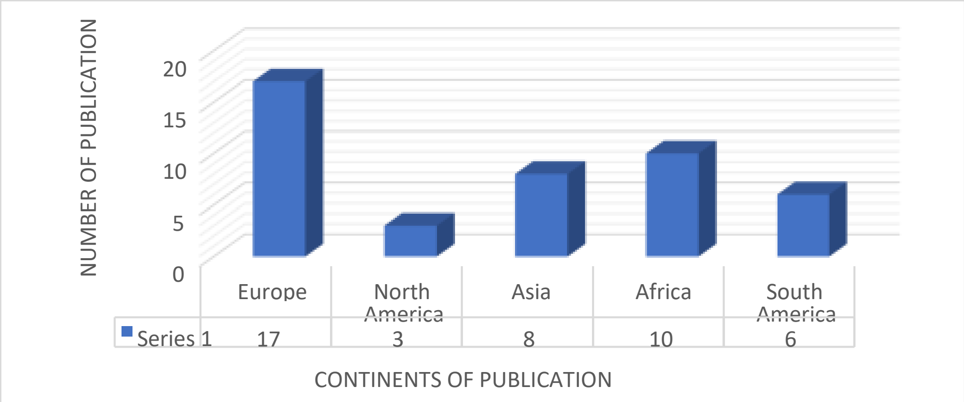

Figure 1. Number of Articles Reviewed Per Continent

Figure 1 presents the continents where the studies that were reviewed and utilised in this analysis were conducted. The research methodologies applied in the empirical studies analysed include 27 quantitative studies, 19 qualitative studies and 7 mixed method studies. The review contains only comprehensive, firm-level evaluations that successfully address the endogeneity of firms' support and give plausible causal effects to enhance the comparability of the results and concentrate on the most trustworthy data.

6. Review of Findings

The findings from the literature review are presented in this section and are categorised according to three key outcome variables, namely employment creation; sales/turnover; and productivity and firm survival. Grants and subsidies are the main subjects of the analysis because they influence the general proportion of the impact factor output of programme evaluation (Criscuolo, et al., 2019). As a result, it is simpler to compare the results than it would be with other incentives, such as tax incentives.

7. Effects on Employment

Employment, in this context, represents the (change in) hours worked, wages paid and number of employees within the supported firms. In developed economies, such as Canada (Chandler, 2012), and in most EU countries, such as Turkey (Akcigit, et al., 2021), Hungary (Banai, et al., 2017; Nyikos, et al., 2020), Italy (Bernini & Pellegrini, 2011), Germany (Brachert, et al., 2018), Finland (Koski & Pajarinen, 2013), Slovakia (Lalinsky, & Pal, 2022), findings show that the grant and subsidy programmes improve employment and save a significant number of jobs in the sectors of manufacturing, services, construction and mining, but only in the medium term. The number of jobs created during the early years of the programme's operation was significant, accompanied by growth in salaries, wages and employment. Moreover, business subsidy programmes boost employment in start-ups and incumbent enterprises (Koski, & Pajarinen, 2013). The positive effects of grant and subsidy programmes on employment creation and sustainability are that most programmes in developed economies focus on firms that prove to be an employable entity or that have existing employees. Other programmes focus on firms that operate in the manufacturing and services sectors only. The multiplier effect of some of these programmes can be explained by the fact that increasing employment was one of the primary goals, while most programmes also assist self-employment enterprises in Germany (Zoellner, et al., 2018).

In developing economies such as South Africa (Aluko, & Kibuuka, 2018; Mago, & Toro, 2013), Nigeria (Edoho, 2016), Kenya (Kimando, et al., 2012), Latin America and the Caribbean (López-Acevedo, & Tan, 2011), the review of government support programmes shows their ineffectiveness and insignificant contribution to the number of employment possibilities as a result of related issues and challenges encountered during the implementation of the programmes. While some studies reported that the effects on employment were transient when compared with credit incentive schemes, others found that employment contribution effects were permanent, although not persuasive. In South Africa, for instance, a cost-sharing and cooperative grant programme for employment is considered too insignificant to conclude that it is effective. This is because the programme awareness is low among the targeted firms and the bureaucratic process is cumbersome. This finding is in line with the results of prior studies (Mago, & Toro, 2013; Kimando, et al.; Mazanai, & Fatoki, 2011; Ferreira, Strydom, & Nieuwenhuizen, 2010). Other authors, however, find mixed or insignificant results for the variable (Brachert, et al., 2018; Srhoj, et al., 2021). Furthermore, the majority of studies focus less on the rural areas of the nations surveyed. As a result, there is a wealth difference between the demographic areas where participating SMMEs are located, making it difficult to prevent rent-seeking cultural implementation activities within the programmes.

8. Impact on Firms' Sales/Turnover

Using firm-level data, the findings of Srhoj, et al. (2021) in Croatia demonstrate that grants were effective and that businesses with access to the funding scheme significantly improved their sales performance; as a result, the participating firms were able to reduce the likelihood of credit default and debt burden by 60%. Nyikos, et al. (2020); and Banai, et al. (2017) in Hungary, as well as Bernini and Pellegrini (2011) in Italy, found the effects on sales, profit and added value to be favourable. Also, there are significant effects when comparisons are made with enterprises that did not use any grant or subsidy programmes in Spain (Martín-García, & Santor, 2021). Subsidies granted to SMMEs through financial instruments in Czechoslovakia benefit the participating firms more because of their higher direct link to increased production and turnover, whereas there are only minor positive effects of subsidies for larger enterprises (Dvouletý, et al., 2021). An example of this is the function of business subsidies in Hungary, which stimulated the economic activity of both new and established businesses (Koski, & Pajarinen, 2013).

In Brazil, a public credit programme offered under the auspices of the National Development Bank (BNDES), supported SMMEs to acquire equipment and machinery. This contributed an average of 5% to SMMEs' sales in the year of operation (Zucoloto, et al., 2019) and considerably boosted economic growth. In China, studies reveal that access to subsidies and guarantees increases SMMEs' probability of survival and has a spillover effect on beneficiary firms. Moreover, government subsidies promote firms' performance through innovation, and they are also crucial in boosting the success of big businesses (Wang, Ahmad, Li, Abid, Chandio, & Rehman, 2022; Yu, Peng, Shi, & Yang, 2022; Xiang, et al., 2021; Xia, & Gan, 2020; Bai, Song, Jiao, & Yang, 2019). A study by Demmou and Franco (2021) on the productivity impact of government support/funds in the OECD countries found that 30% of the inefficiency in the market-selected SMMEs was shielded from productivity distress. This positive development was linked to the size of funds received by the beneficiary firms. In essence, it was observed that the funds help to bridge the gaps in liquidity, firms' productivity and the risk of financial difficulties. This shows that productive businesses often receive support, and they tend to grow more quickly than less productive businesses.

9. Impact on Firms' Productivity and Survival

Pellegrini and Muccigrosso (2017) examined a state programme in Italy that targets manufacturing firms in the regions where economic activity is low and they found beneficial effects on the long-term survival of start-ups at all ages of the firms. Moreover, the findings showed that firms that acquired fixed assets recorded higher growth but less increase in total productivity compared with unsubsidised firms. These findings corroborate Dvouletý, et al. (2021) in Czechoslovakia where the authors noted the positive effects of subsidies on firms' assets and productivity, although there were only minor positive effects for larger enterprises. In Indonesia, Ridwan et al. (2020) showed that government intervention programmes provide significant alternative leverage on firm productivity for the beneficiary firms, while Xia and Gan (2020) in China assert that subsidy programmes assist firms in reducing their debt burden and serve as asset substitutions in the short term. In Kenya, for instance, firms that benefited from government programmes increased their productivity because the programme focused on business development strategy, training in management skills, financial planning and financial management. This was not the case in Latin America and the Caribbean, where López-Acevedo & Tan (2011) found no noticeable effect of SMME programmes on productivity.

In the EU, Dvouletý, et al. (2021) noted largely positive results in terms of company survival, assets acquisition and labour productivity, although there were some conflicting results. Using firm-level data, Srhoj, et al. (2021) in Croatia found that grants were effective in helping businesses to survive the recession and in securing bank loans. However, existing firms that do not operate in the manufacturing or mining sectors, or lack a credit history, found it difficult to survive, despite their access to government intervention programmes. The latter study does, however, highlight critical disparities in the period of analysis (looking at short-term and long-term results), as well as variability in the impacts relating to a firm's location, size of the industry, age and support intensity. The results of Srhoj, et al. (2021) show a positive effect on a firm's survival, but no significant effects on general firm performance. The conclusion, therefore, was that the grant programme was most effective for newly established businesses. Moreover, such a programme mitigates a firm's losses significantly. While small businesses are more likely to go bankrupt, the larger firms that receive support have more leeway to increase their liability and liquidity (Lalinsky, & Pal, 2022). At country level, however, business performance differs because of unique programme targets, objectives, implementation standards and country contexts, since each country's programmes adhere to the regulations governing the creation of such funding programmes.

The results of the review show that most of the grant and subsidy programmes under consideration have a beneficial effect on the employment, sales/turnover and acquisition of fixed assets, as well as boosting firms' survival (Bai, et al., 2019; Maffioli, et al., 2017). This is a favourable effect, although the ultimate purpose of these programmes in developed countries is to boost the firm's efficiency and effectiveness, whereas in developing countries, the main purpose is a reallocation of more resources for further efficient use by the government (Martín-García, & Santor, 2021); hence, this encourages rent-seeking activities within the programme or in similar programmes. Nevertheless, this has shown success in reducing lending restrictions for new and existing SMMEs in developing nations (Aluko, 2022; Rungani & Potgieter, 2018).

10. Policy implications

The establishment of publicly sponsored programmes is a component of strategic economic inclusion and economic transformation in the framework of government assistance programmes for SMMEs in developed and emerging economies. It is a matter of resource redistribution and economic sustainability to strengthen and build the domestic economy through government assistance programmes for SMMEs (Martín-García, & Santor, 2021). This supports decentralisation and deregulation's crucial goal of fostering domestic economic development.

The best programme designed by the government and development financial institutions need to be better understood based on their strength and weaknesses. This knowledge can be used to enhance current initiatives, discontinue those that have proven unproductive, and scale up successful initiatives to boost SMME performance, economic activity and employment creation effectively (Cigu, et al., 2020). Furthermore, even though grants and subsidies had a significant effect on all the beneficiary firms in studies reviewed, which shows that government support programmes constitute a greater boost for the domestic economic agenda, this information may help to shape public policy for targeted SMMEs.

Subsidies should be given to the initially less productive SMMEs in the less-developed areas through an economic policy based on their respective contributions. Policymakers, the government and SMMEs could use this technique as a springboard to assess the contributions of grant-financing programmes and ascertain whether their stated objectives have been met (Debus, et al., 2017). For example, in a developing country, government intervention programmes that focus on business development and training of SMME owners could have a long-lasting effect on targeted firms to create more employment and increase their productivity for economic growth.

Moreover, the implementation of the SMMEs' programme policy should be rooted in a country's culture and localised, even though financial support is crucial. This will allow for greater integration between the social mission and programme objectives. The public and commercial sectors should also foster an environment that supports wise financial management, thus increasing economic performance (Nuţă, 2011). Since start-up SMMEs lack a credit history or record that would allow them to be approved for credit by a traditional financial institution, the recommendations call for raising awareness of a programme in developing countries so that more firms can participate in the grant or subsidy programmes (Mago, & Toro, 2013). There should also be more emphasis on industries that could generate more employment through similar programmes, as well as on those firms that could contribute to the country's GDP (Aluko, & Booyse, 2022). Most importantly, issues such as programme monitoring and evaluation should be part of the programme design mechanism. In addition, women-owned entities should be prioritised when such programmes are being considered by the policymakers. The knock-on effect of these processes will contribute to firms' growth and performance and the overall outcome of the objectives of the programme.

By evaluating strategic coordination and alignment among policymakers, researchers, academics and government agencies, this research/paper will add to the ongoing discussion on the outcomes of grant and subsidy programmes. In addition, a collective evaluation of grant and subsidy programmes is necessary in the hope that it will result in an improvement in the current circumstances experienced by the programmes' target firms.

11. Conclusion and Recommendations

The effects of grant and subsidy programmes have been found to depend on the type of financing method employed, as well as the traits of the intended beneficiaries. The findings of the literature review/analysis show that grant and subsidy programmes significantly boosted the number of employees, productivity, sales/turnover and, in certain circumstances, operating profit of the recipients and firms' survival. However, none of the subsidies had a major impact on labour productivity. Therefore, both in developed and developing economies, the findings support the idea that enterprises used the grants mostly to increase capacity rather than efficiency. However, in developed countries, where grants and subsidies target existing and operational enterprises – irrespective of the industry – the latter were observed to show some level of effectiveness in their performance after accessing an intervention programme. Conversely, in developing countries, the programmes focus on new and existing enterprises that are assumed to be at a disadvantage in accessing credit from traditional financial institutions. The researchers therefore concluded that to ensure growth and long-term success in the execution of comparable grant programmes, the grant must complement other government policies, while striving to increase productivity.

Studying the effects of state SMME policies has become an important subject of research. Thus far, the results have varied between positive, negative and insignificant, thereby providing policymakers and scholars with helpful and relevant recommendations for future policy revisions. By means of this study, the researchers have helped policymakers, researchers and SMMEs to develop mutual trust and shared values that promote societal and cultural adaptation and implementation of the government intervention programmes to prevent rent-seeking activities in similar programmes.

There should be a better way to assess the effects of government intervention programmes by applying a multidimensional assessment instrument, even if the development of additional successful economic programmes is necessary to support future socioeconomic objectives. The literature review contributes to the formation of public–private partnerships and the creation of sound frameworks that can be introduced into programme procedures and practice. The effects of government's financial support programmes was the primary area of interest in this study; therefore, said no conclusions can be made about how the programmes are being implemented for SMMEs and researchers outside the context of this study. In view of this limitation, the research could be expanded to include a more comprehensive approach at grassroots level. The researchers used a literature review/analysis, which opens the way for several new areas of research in the future. For instance, future studies might consider if grant and subsidy programmes are addressing the following: (1) Is there a real need or issue within a community? Is the programme aligned with the values and priorities of the target firm? (2) Is the programme using resources effectively and efficiently to achieve its goals? Are there opportunities to streamline or optimise the programme to improve its efficiency? (3) Is the programme accessible and fair to all participants in the target firm? Are there any unintended consequences or negative impacts on certain groups of firms? (4) Is the programme sustainable over the long term? Are there plans in place to ensure the continued success and impact of the programme?

Overall, the efficacy of government support programmes can be improved by clearly defining the goals and objectives of the programmes, using data and evidence to inform programme design and implementation, and regularly evaluating and adjusting the programme – as needed – to ensure it is meeting the needs of the target firm.

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