

FINANCIAL BOOTSTRAPPING AS A SUSTAINABLE LIVELIHOOD ALTERNATIVE FOR AGRICULTURAL CO-OPERATIVES IN AN EMERGING ECONOMY

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Abstract

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There is a scarcity of scholarly literature relating to financial bootstrapping in emerging economies, especially the use by co-operatives in general and agricultural co-operatives in particular. As such, the financial bootstrapping methods used by agricultural co-operatives in South Africa, an emerging economy, remain unknown (Rwekaza, 2021; Zantsi, 2021). The aim of this study is to determine the financial bootstrapping methods used by agricultural co-operatives. This study was undergirded by pragmatism, which allowed and guided the adoption of mixed-methods research. The qualitative aspect was given more priority or weight in answering the research questions, making it a *quan* → *QUAL* design. The study consisted of 52 agricultural co-operatives located in KwaZulu-Natal, South Africa. It was found that agricultural co-operatives practised some of the bootstrapping methods, especially those related to owner-related financing. However, there is little or no evidence of bootstrapping practices related to sharing resources and minimising capital invested in stock and accounts receivable. The co-operatives stifled their growth as they employed counter-bootstrapping activities caused mainly by their unsubstantiated beliefs. This research furnishes rural co-operatives with operational capital-enhancing guidelines that promote success.

Keywords: Agricultural Co-Operatives, Counter-Bootstrapping Activities, Developing Economy, Financial Bootstrapping, Growth, Sustainability

Authors' individual contribution: Conceptualization — B.K.Z.; Methodology — B.K.Z., M.S., and E.M.; Investigation — B.K.Z.; Writing — Original Draft — B.K.Z.; Writing — Review & Editing — C.J.N., M.S., E.M., and N.F.; Formal Analysis — B.K.Z., C.J.N., and E.M.; Supervision — C.J.N., M.S., E.M., and N.F.

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1. INTRODUCTION

South Africa faces a crisis of unemployment, poverty, and inequality. According to Naidoo (2022) and the Department of Statistics South Africa (2022), the jobless rate in South Africa in the second quarter

of June 2022 was 33.9%. Several studies have linked unemployment to food insecurity (David & Grobler, 2020; Chakona & Shackleton, 2019), and economists have indicated that these two concepts (unemployment and food insecurity) are a cause for concern to the government as it must cater for such

households through social safety net interventions. Given the persistently prominent levels of unemployment, poverty, and inequality in South Africa, especially in rural areas, co-operatives could come in handy to address the problem. From their conceptualization, co-operatives were a way to harness resources and efforts to deal with economic and social stress (Pitman, 2018; Fairbairn, 2004) by providing employment and sustainable income for individuals and communities (Skydan et al., 2021; Anania & Bee, 2018). Co-operatives play a critical role as they provide essential services to their members and communities, including eliminating food insecurity. They help members and communities become more self-sufficient and weather tough economic times (Skydan et al., 2021; Steinerowski & Steinerowska-Streb, 2012).

Emerging agricultural co-operatives in South Africa and developing countries do not survive and most collapse in their infant stages (Rwekaza, 2021; Zantsi, 2021; Yobe et al., 2020; Anania & Bee, 2018). An 88% failure rate has been recorded in South Africa (Mushonga et al., 2019; Small Business Development, 2018). It is frequently cited in the literature that co-operatives and small and new businesses face ruinous challenges that are related to a lack of funding for expansion, a lack of profitability, and a failure to manage business risks (Khumalo, 2014; Okem & Lawrence, 2013). Kanyane and Ilorah (2015) reiterated that challenges faced over the years by black and small-scale farmer co-operatives are historical and are taking place due to a lack of support from the government. Zantsi (2021) and Yobe et al. (2020) concurred that co-operatives have been unsuccessful mainly due to a lack of finance because most of these co-operatives have no collateral to access finance. Many agricultural co-operatives in South Africa are financially inefficient, cannot allocate profits and dividends to members, and contribute to the members' poor livelihoods. This is because their farms are undercapitalized and lack intensive production. Despite the support from the government and enabling legislation, co-operatives have been unsuccessful. Could the failures of these co-operatives be because of a lack of financial innovation? There is abundant literature on financial bootstrapping that suggests that if co-operatives adopt this financial management model, they are likely to survive for longer periods and be successful (Mittal & Raman, 2021; Muo et al., 2020; Fatoki, 2014; Winborg & Landström, 2001; Van Auken & Neely, 1996; Bhide, 1992). Notwithstanding the abundance of literature, this paper argues that there is limited research focusing on the financial bootstrapping practices used by agricultural co-operatives in South Africa.

This study sought to determine the use of financial bootstrapping by agricultural co-operatives in an emerging economy to avert the impact of failing to access external funding by rural co-operatives. This study also highlights the importance of financial bootstrapping for their sustainability and growth. Studies have been conducted on agricultural co-operatives and have looked at traditional methods of financing. This study examines financial bootstrapping methods that contribute to the success of agricultural co-operatives.

Following the introduction of this study, the structure of this paper is organised as follows. Section 2 provides a literature review, highlighting the background of financial bootstrapping, discussing various bootstrapping methods, and examining their impact on small business sustainability. Section 3 describes the research methods employed in this study, detailing the mixed-methods approach and the rationale behind prioritising qualitative data. Section 4 presents the results of the study, showcasing the findings from the 52 agricultural co-operatives surveyed. Section 5 discusses the key results, analysing the implications of the findings and how they relate to the existing literature on financial bootstrapping. Finally, Section 6 concludes the study by providing operational guidelines aimed at helping rural co-operatives succeed and enhance their working capital, ultimately contributing to the socio-economic development of rural communities in an emerging economy.

2. LITERATURE REVIEW

2.1. Background to financial bootstrapping

The concept of financial bootstrapping is as old as the advent of formal and informal small businesses. Extant literature exalts Bhide (1992) as the first to coin how small businesses finance their operations as "financial bootstrapping". After that, many scholars have investigated this concept across various sectors and in different countries. The wide variety of research undertaken on the realities, faces, challenges, and successes of bootstrapping has pinpointed the diversities and possibilities, leading to an understanding of its formulations that play a key role in the understanding of the phenomenon. Bhide (1992), in his seminal article on the art of bootstrap finance, led to the conclusion that the art of start-ups in the co-operative's journey forward was one of the most important elements leading to co-operative success.

Freear et al. (1995), in their pioneering article on organisations and other sources that bankroll and open the path for software founders, described a wide variety of highly creative ways of acquiring the use of resources without borrowing money or raising equity financing from what they described as "traditional sources". Winborg and Landström's (2001) research on financial bootstrapping in small businesses examined a number of types of bootstrappers: private owner-financed bootstrappers, subsidy-oriented bootstrappers, delaying bootstrappers, relationship-oriented bootstrappers, minimising bootstrappers, non-bootstrappers, and private owner-financed bootstrappers. Ebben and Johnson's (2006) empirical research results pinpointed the fact that there have been a wide variety of different types of bootstrapping that have been utilised at different periods in a small firm's life and that the methods utilised coincide to some extent with organisational theory predictions (p. 853). Vanacker et al. (2011), in their article on the impact of financial bootstrapping strategies on value added in new ventures, described bootstrapping as strategies that minimise the need for finance through securing resources at little or no cost through the utilisation of resources without

using bank finance or outside equity finance. Grichnik et al. (2014), in their research dealing with a condition beyond environmental scarcity and the role of human and social capital as driving forces of bootstrapping activities, described the strategy as an alternative resource management approach that is characterised as an initiative instrumental in avoiding market-based resource transactions. Rita (2019), in her article on financial bootstrapping as an external financing dependency alternative for small and medium-sized enterprises, advised entrepreneurs that to overcome the constraints of resource constraints, a bootstrapping strategy is needed to fulfil external finance through creative or unconventional funding strategies. The exploratory study of Alvarado and Mora-Esquivel (2020) on financial bootstrapping among Costa Rican small businesses described the process as a set of potentially creative practices available to entrepreneurs that help reduce operating costs and improve cash flow management. Al Issa's (2021) research on the impact of improvisation and financial bootstrapping strategies on business performance described the strategy as potentially a very important and "key dynamic capability" that allows entrepreneurs to substantially increase the value of their resources. This can be achieved through a process of extension and integration of these strategies together. One of the strategies was the improvement of cash flow by curbing expenses or the necessity to pay while raising money internally.

It can be understood that the key definitions of financial bootstrapping are rooted in Bhidé's definition. Freear et al. (1995) expanded the definition by adding the creativity of small business owners (over and above the modest use of personal funds) in avoiding reliance on traditional financiers to harness funds for business operations. In line with Freear et al.'s (1995) definition, several scholars, such as Tomory (2014), Winborg (2009), Ebben and Johnson (2006), Lahm and Little (2005), and Winborg and Landström (2001), defined bootstrapping as highly creative ways of acquiring the use of resources without borrowing money or raising equity financing from traditional sources. More recently, scholars on small business operations, for example, Al Issa (2021) and Alvarado and Mora-Esquivel (2020) highlighted creativity and astute cash flow management as the key aspects of financial bootstrapping. Cash flow management strategies are critical as they seek to ensure that inflows always exceed or at least equal outflows. At the core of cash flow management, strategies to speed up the cash conversion cycle are seen as financial bootstrapping methods (Samosir, 2018; Tsagem et al., 2017; Ebben & Johnson, 2011).

In the first decade of the coining of the concept, and in line with Bhidé's (1992) commentary, studies focused on determining if small businesses employ bootstrapping to finance their operations. For example, Van Auken and Neely (1996) examined the use of bootstrapping by small firms in America and found that their bootstrapping practices significantly differed according to ownership type and nature or sector. Sole proprietors were found to be more bootstrappers compared to other forms of ownership. Also, firms from remote and small towns relied more on

bootstrapping to fund their businesses, and construction and manufacturing firms were the least bootstrapping. In another study, Winborg and Landström (2001) found that firms transition from one mode of bootstrapping to another as they grow older.

In the second decade of literature on bootstrapping, Winborg and Landström (2001) explored and introduced bootstrapping methods and groups, which became the yardstick of bootstrapping research. In their study, the authors conducted a qualitative study where they identified thirty-two bootstrapping methods, clustered into six groups (as discussed below). These methods were included in a data collection instrument that was completed by a sample of 900 small business owners. An exploratory factor analysis (EFA) was performed, and no firm was found to have used subsidy-oriented bootstrapping methods, thus retaining five of the six groups that have been used by numerous scholars studying financial bootstrapping. These findings were also confirmed in Carter and Van Auken's (2005) study conducted in Iowa, in the United States of America.

2.2. Financial bootstrapping methods

Winborg and Landström (2001) identified 32 bootstrapping methods based on the interviews and the study by Freear et al. (1995), and through factor analysis, they identified six groups (clusters) of financial bootstrapping that the Swedish small businesses used. Winborg and Landström's (2001) results for the six bootstrapping groups were confirmed in successive studies, albeit variedly. For example, Alvarado and Mora-Esquivel (2020) found three bootstrapping groups from Costa Rican small businesses. However, it is noted that the authors combined separate minimization of capital invested in stock and minimization of accounts receivable. Fatoki (2014) and Carter and Van Auken (2005) found five groups, without the subsidy financial bootstrapping group. Nchabeleng et al. (2018), Zwane and Nyide (2016), and Neely and Van Auken (2009) found all six groups identified by Winborg and Landström (2001).

Furthermore, Winborg and Landström (2001) found that the six financial bootstrapping groups showed differences in their orientation towards resource acquisition. They found that some were 1) an internal mode of resource acquisition, 2) a social mode of resource acquisition, and 3) a quasi-market mode of resource acquisition. The internal mode of resource acquisition includes those methods that are found inside the business, for example, delaying payment bootstrappers, minimising bootstrappers, and owner-financed bootstrappers (Tomory, 2014). The social mode of resource acquisition refers to relationship-oriented bootstrappers. Leveraging personal relations to get resources at no or reduced financial costs (Jayawarna et al., 2015) The quasi-market mode is represented by bootstrappers who seek resources from the government, public entities, and market players (Block et al., 2022). The six financial bootstrapping groups are discussed below. Table A.1 in the Appendix provides a snap view of how different studies have adopted Winborg and Landström's (2001) 32 financial bootstrapping

methods (1-32) and also provides some additional methods (33-39) as substitutes for Winborg and Landström's methods due to the studies' contextual differences. For example, subsidy items in Winborg and Landström (2001), such as "Obtain a subsidy from the County Labour Board" and "Obtain a subsidy from the Swedish National Board for Industry and Technical Development", are only specific to the Swedish context.

2.3. Financial bootstrapping methods and small business sustainability

Fatoki investigated the financial bootstrapping methods used by immigrant entrepreneurs in South Africa (Fatoki, 2013) and by new micro-enterprises in the retail sector in South Africa (Fatoki, 2014). In Fatoki's (2013) study, the findings were similar to those of Winborg and Landström (2001), while Fatoki (2014) and Zwane and Nyide (2017) only found four (owners' resources, management of accounts receivable, sharing resources, and delaying payments) of the five bootstrapping groups found by Winborg and Landström (2001). Mabonga (2020) tested the effect of the five bootstrapping groups found by Winborg and Landström (2001) on business sustainability, and all five bootstrapping groups were found to have a significant positive effect on the financial sustainability of small and medium enterprises. The findings suggest that the financial bootstrapping methods under these groups can be used by small businesses to avert the liabilities of smallness and newness (Morris, 2020; Malmström & Wincent, 2018). Since Van Auken and Neely's (1996) study about the effect of the firm's characteristics on bootstrapping, several scholars have also expressed interest in understanding the effect of the owner's or manager's characteristics, such as age, education, and gender, on the use of bootstrapping methods. For example, Neely and Van Auken (2009) studied the effect of owners' characteristics on bootstrapping. The authors found that more educated owners showed an affinity for self-funding (owner-related financing methods) than less educated owners. Also, Neely and Van Auken (2009) found that younger owners tend to use customer-related methods more than older business owners. Male business owners used more self-funding methods than female owners.

Nchabeleng et al. (2018) studied the influence of gender, age, and education on business owners in Limpopo, South Africa. Their findings were consistent with those of Neely and Van Auken (2009) in that males were found to be using more owner financing and joint utilisation bootstrapping compared to female owners. Females were found to have a greater affinity toward minimising investments than males. In summary, their findings indicated that there is a relationship between the owner's characteristics, bootstrapping methods, and mode employed. Vanacker et al. (2011) and Ebben and Johnson (2006) looked at the impact of a firm's bootstrapping strategies on value-added (sales income less materials and services purchased) through a longitudinal study. The authors found that firms change bootstrapping methods over time. Firms dropped using some bootstrapping methods as they progressed and picked others. For example,

the authors explain that firms could not carry on with buying secondhand as it compromised their quality and reputation. In addition to the owner's and firm's characteristics, Grichnik et al. (2014) included the effect environmental factors wield on the bootstrapping practices of nascent firms. Grichnik et al. (2014) found that perceived environmental hostility or lack of access to external financial capital positively influenced the adoption of bootstrapping.

3. RESEARCH METHODOLOGY

This study was undergirded by pragmatism, which allowed and guided the adoption of mixed-methods research (Morgan, 2014; Makrakis & Kostoulas-Makrakis, 2016; Walsh, 2012). Mixed methods allowed the researchers to gain a deeper understanding of the phenomenon under investigation and address the research aim. As suggested by Leedy and Ormrod (2015) and Cameron (2015), mixed-methods research is needed to comprehensively address a large number of research problems and practically capture the living (social) contexts of the research subjects.

3.1. Research approach and design

The choice of the design was informed by the researchers' desire to provide an in-depth, expanded, and complete understanding of the manifestation (or lack thereof) of the bootstrapping concept amongst co-operatives in South Africa. This study adopted a sequential explanatory design. This approach is described by Wipulanusat et al. (2020) and Subedi (2016) as the collection and analysis of quantitative and qualitative data in two continuous and consecutive phases within the parameters of one study. Through quantitative data analysis, the researcher gained a general (descriptive) picture of the research problem, and through qualitative data analysis results, the researchers were able to proffer an in-depth and elaborate explanation of the quantitative results of the subject under investigation (Wipulanusat et al., 2020; Subedi, 2016; Creswell et al., 2011).

The qualitative aspect was given more priority or weight in answering the research questions, making it a *quan* → *QUAL* design (Creswell et al., 2011; Johnson & Onwuegbuzie, 2004), and integration was done at the interpretation stage. For this study, the population of interest was agricultural co-operatives in uMshwathi Local Municipality. uMshwathi is a farming area, and most of its inhabitants earn a living through subsistence farming. For the local municipality to assist them in their farming activities, the farmers had to form or join a co-operative. The co-operatives were registered, and a co-operative's register was kept by the Local Economic Development (LED) unit of the municipality.

3.1.1. Phase 1 of the study: Quantitative research

This study employed a structured questionnaire to collect quantitative data as part of the first phase of the mixed-methods research approach. Fifty-eight questionnaires were distributed to the co-operative

chairpersons, and 52 were returned, translating to a 90% response rate. This response rate exceeds the 50%-70% rates deemed acceptable in the literature (Nulty, 2008).

3.1.2. Phase 2 of the study: Qualitative research

This second phase of mixed-methods research was solely to expand on the results obtained in the first (quantitative) phase. Qualitative research was enlisted to provide a deep and nuanced understanding of why agricultural co-operatives leverage (or do not leverage) financial bootstrapping in their projects. It was also employed to underscore the key reasons for not utilising the financial bootstrapping methods of agricultural co-operatives. Data was collected from 13 co-operatives by way of semi-structured interviews. Using Atlas.ti 22, the qualitative data from the interviews were thematized into manageable bits to extrapolate the insights emerging therefrom and concerning the research questions. Thereafter, results from the two phases of the mixed methods were integrated and interpreted as presented below.

3.2. Alternative methods of conducting the study

This study could utilise a convergent parallel design to gather qualitative and quantitative data simultaneously to comprehend the financial bootstrapping techniques employed by agricultural co-operatives. To gain a comprehensive understanding of the specific bootstrapping practices and their underlying reasons, the qualitative component of the study would involve conducting semi-structured interviews with key stakeholders, organising focus group discussions, and analysing financial records. Simultaneously, the quantitative aspect would entail distributing structured questionnaires to a broader sample of agricultural co-operatives to collect data on the prevalence and various types of bootstrapping methods utilised. Following the collection of data, the qualitative and quantitative data sets will be analysed separately. Thematic analysis will be employed for the qualitative data, while descriptive statistical techniques will be used for the quantitative data. The results from both analyses would subsequently be juxtaposed and amalgamated to yield a comprehensive comprehension of the bootstrapping methods employed. This study could utilise a convergent parallel design to gather qualitative and quantitative data simultaneously to comprehend the financial bootstrapping techniques employed by agricultural co-operatives. To gain a comprehensive understanding of the specific bootstrapping practices and their underlying reasons, the qualitative component of the study would involve conducting semi-structured interviews with key stakeholders, organising focus group discussions, and analysing financial records. Simultaneously, the quantitative aspect would entail distributing structured questionnaires to a broader

sample of agricultural co-operatives to collect data on the prevalence and various types of bootstrapping methods utilised. Following the collection of data, the qualitative and quantitative data sets will be analysed separately. Thematic analysis will be employed for the qualitative data, while descriptive statistical techniques will be used for the quantitative data. The results from both analyses would subsequently be juxtaposed and amalgamated to yield a comprehensive comprehension of the bootstrapping methods employed.

3.3. Ethical considerations

It is also important that data be collected ethically. In this case, approved ethical clearance was obtained from the Faculty Research Ethics Committee of a public university. Moreover, permission to collect data from the co-operatives was sought and granted by the LED unit of the uMshwathi Local Municipality.

4. RESULTS

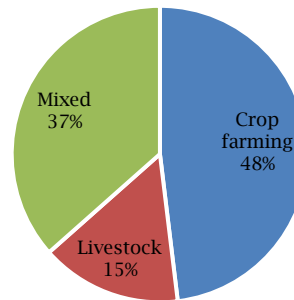
The participants were asked about their highest educational qualifications. Table 1 presents the data.

Table 1. Co-operative leaders' level of education

Level of education	Frequency	Valid percent
Primary education	7	13.5
Secondary education	41	78.8
Tertiary education	4	7.7
Total	52	100.0

Note: n = 52.

Figure 1. Co-operatives' agricultural activities



Note: n = 52.

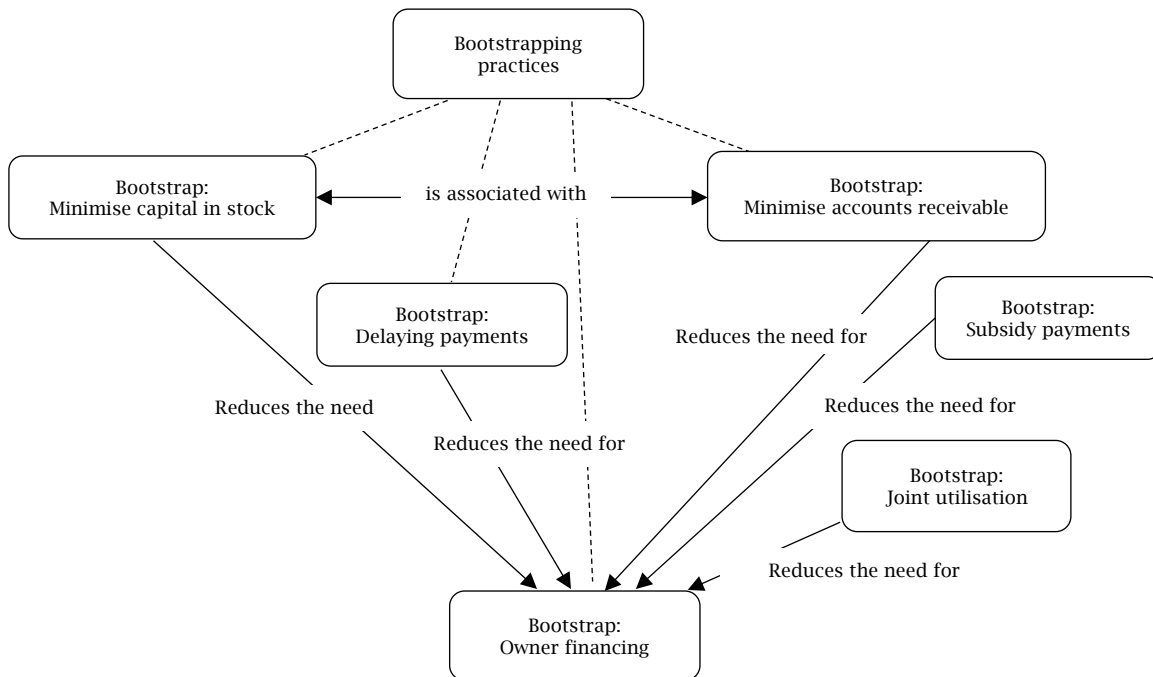
To address this study's research objective, quotations were coded, and they represented the financial bootstrapping methods identified from the data. From the analysis, 19 methods were identified, which are divided into six categories or clusters, as depicted in Table 2. From the results, it is apparent that all the co-operatives relied primarily on the owner-financing type of bootstrapping.

The bootstrapping groups elicited from the interviews in pursuit of this study's objective are depicted in the following network diagram in Figure 2.

Table 2. Financial bootstrapping methods adopted by agricultural co-operatives

Category	Financial bootstrapping methods
Bootstrap: Owner financing (BOF)	<ul style="list-style-type: none"> • Collect membership and annual subscription fees; • Cross-subsidization of farming activities by income from non-farming activities; • Employ relatives and/or friends at non-market rates; • Use family land and home for business purposes; • Withhold member's salary/profits for shorter/longer periods; • Obtain loans from members, relatives, and/or friends; • Hire or use large equipment/vehicles/trailers from members, relatives, and/or friends at non-market rates.
Bootstrap: Minimise accounts receivable (BMAR)	<ul style="list-style-type: none"> • Offer customers discounts if paying cash and buying large quantities; • Offer credit facilities to select few customers; • Collect (debt) money as soon as possible, e.g., payday.
Bootstrap: Delaying payments (BDP)	<ul style="list-style-type: none"> • Buy used equipment from auctions/second-hand shops; • Hire large equipment/vehicles/trailers instead of buying; • Hire personnel on a seasonal/temporary basis.
Bootstrap: Subsidy finance (BSF)	<ul style="list-style-type: none"> • Obtained free training for members, seeds, fertiliser, manure, and extension officers from the government; • Obtained free training for members from non-governmental organisations (NGOs).
Bootstrap: Minimise capital held in stock (BMCS)	<ul style="list-style-type: none"> • Sell on credit to avert losses (perishables).
Bootstrap: Joint utilisation (BJU)	<ul style="list-style-type: none"> • Lease out part of their land to others; • Share animals and certain inputs with others — mating/breeding purposes; • Use communal infrastructure (dips).

Figure 2. Bootstrapping themes emerging from the data



Source: Authors' elaboration.

Figure 2 indicates that the co-operatives in their collective do practise all six bootstrapping groups in the literature (Al Issa, 2021; Alvarado & Mora-Esquivel, 2020; Ebben, 2009; Winborg & Landström, 2001). These are owner financing, delaying payments, minimization of capital held in stock, subsidy-oriented finance, joint utilisation, and minimization of accounts receivable.

5. DISCUSSION

It is evident from the results that the co-operatives use 19 bootstrapping methods, although some were practised unknowingly or unintentionally. These methods differ in form and content but lead to similar results, that is, increased or improved productivity, liquidity, cash flows, and profitability.

The results indicate that the co-operatives practised owner-related financing to a greater extent. They withhold profits earned or members' salaries, operate from members' homes, take loans from friends and family members, collect membership fees, and rent equipment at below-market rates. Several previous studies also highlight an affinity for such bootstrapping methods, which they deem efficient and effective means of financing small businesses, especially at an introductory phase. At this phase, small businesses suffer from liabilities of smallness and newness (Vakulenko, 2021; Morris, 2020; Malmström & Wincent, 2018; Waleczek et al., 2018).

The co-operatives also delayed payments, as indicated in Table 2. At a closer look, the co-operatives only applied three of the "delaying

payments” methods identified in the literature. All co-operatives employed temporary workers, leased only large equipment, and only a few bought used equipment. Literature encourages small businesses to hire all types of equipment and, where they buy, to buy used equipment to reduce costs associated with maintenance and repairs and save on capital outlay (Artz & Naeve, 2016; Başarık & Yildirim, 2015).

On joint utilisation, the co-operatives also practised only three out of four methods identified by Winborg and Landström (2001). However, it is the lack of widespread use of joint utilisation methods across the co-operatives that is the highlight of the findings. On the positive side of bootstrapping, they all shared communal dips. A few shared animals for breeding and input and leased out their land. Notably, a few co-operatives only employed one method of minimising capital held in stock by selling produce on credit. On the minimisation of accounts receivable, a few co-operatives offered credit to select customers, provided cash and bulk discounts, and collected outstanding balances as soon as possible. This partly explains why most of the co-operatives had cash flow problems. As for subsidy financing, the co-operatives did not initiate any funding received for training and inputs.

From such financing practices, save for owner-related financing methods, it is evident that the co-operative sparingly employs bootstrap financing. Such findings are expected not only in the developing world but throughout the globe, as supported by the literature. For example, Al Issa (2021) in Libya, Alvarado and Mora-Esquivel (2020) in Costa Rica, and Rita (2019) in Indonesia all found that small businesses sparingly and, in some instances, unintentionally employed different bootstrap financing methods.

6. CONCLUSION

This study addresses critical funding challenges faced by rural agricultural co-operatives, aiming to reverse their failures and enhance agricultural

productivity. By providing practical guidelines for rural co-operatives to succeed and bolster their working capital, the research has significant implications for socio-economic development in South Africa and beyond. The success of agricultural co-operatives can contribute to alleviating poverty and hunger, especially among rural households, youth, and women, by enabling their economic participation. Additionally, thriving co-operatives can help mitigate rural-urban migration, thereby reducing the strain on cities and townships and contributing to job creation and inequality reduction.

The study emphasises the need for South African researchers and entrepreneurship scholars to extensively explore alternative financing sources for small business operations, with a particular focus on financial bootstrapping in rural and agricultural co-operatives. It recommends that the uMshwathi Local Municipality establish an incubation hub and agro-processing centres within the LED unit. These hubs would be instrumental in formalising co-operatives, providing training on farming techniques and business strategies, and assisting with grant and subsidy proposal writing.

It is important to acknowledge the limitations of the research. Firstly, there is a paucity of scholarly literature on financial bootstrapping in South Africa, particularly regarding its use by co-operatives, including agricultural co-operatives. This gap limits the ability to compare and contrast findings with existing studies. Secondly, the study focuses on agricultural co-operatives in the uMshwathi Local Municipality, which may limit the generalisability of the findings to other regions or types of co-operatives. Additionally, the scope of the investigation is limited and does not encompass co-operatives across all ethnic groups in South Africa, potentially affecting the comprehensiveness of the insights gained. Lastly, there is a need for impact studies to evaluate the effectiveness of the training interventions recommended. Such studies would provide valuable feedback on the practical outcomes of the proposed initiatives.

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APPENDIX

Table A.1. Financial bootstrapping methods (Part 1)

<i>Winborg and Landström's (2001) methods</i>	<i>Carter and Van Auken (2005)</i>	<i>Neely and Van Auken (2009)</i>	<i>Fatoki (2014)</i>	<i>Zwane and Nyide (2016)</i>	<i>Nchabeleng and Fatoki (2018)</i>	<i>Alvarado and Mora-Esquivel (2020)</i>	<i>Mabonga (2020)</i>	<i>Al Issa (2021)</i>
1. Withholding the manager's salary for shorter/longer periods.								X
2. Use of managers' private credit cards for business expenses.							X	
3. Obtain capital via manager's assignments in other businesses.						X	X	X
4. Obtain loans from relatives/friends.								
5. Employ relatives and/or friends at a non-market salary.								X
6. Run the business completely in the home.						X		X
7. Use interest on overdue payments from customers.								
8. Use routines to speed up invoicing.								
9. Offer the same conditions to all customers.			X				X	X
10. Offer customers discounts if paying cash.								
11. Cease business relations with customers frequently paying late.								X
12. Deliberately choose customers who pay quickly.								X
13. Obtain payment in advance from customers.						X	X	
14. Share equipment with other businesses.						X		
15. Share employees with other businesses.							X	
16. Share premises with others.								
17. Borrow equipment from other businesses for shorter periods.								
18. Deliberately delay payment to supplier/s.								
19. Lease equipment instead of buying.								
20. Deliberately delayed payment of value-added tax.		X		X		X	X	X
21. Buy used equipment instead of new.						X		
22. Hire temporary personnel instead of employing permanent ones.						X		
23. Seek out the best conditions possible with supplier/s.						X		X
24. Use routines to minimise capital invested in stock.								X

Table A.1. Financial bootstrapping methods (Part 2)

<i>Winborg and Landström's (2001) methods</i>	<i>Carter and Van Auken (2005)</i>	<i>Neely and Van Auken (2009)</i>	<i>Fatoki (2014)</i>	<i>Zwane and Nyide (2016)</i>	<i>Nchabeleng and Fatoki (2018)</i>	<i>Alvarado and Mora-Esquivel (2020)</i>	<i>Mabonga (2020)</i>	<i>Al Issa (2021)</i>
25. Co-ordinate purchases with other businesses.								X
26. Buy on consignment from supplier/s.						X	X	X
27. Practice barter instead of buying/selling goods.							X	
28. Obtain a subsidy from the County Labour Board.	X	X	X	X		X	X	X
29. Obtain a subsidy from the Swedish National Board for Industry and Technical Development.	X	X	X	X	X	X	X	X
30. Obtain a subsidy from the County Administrative Board.	X	X	X	X	X	X	X	X
31. Obtain a subsidy from the Foundation Innovations Centrum.	X	X	X	X	X	X	X	X
32. Raise capital from a factoring business.				X			X	X
33. Deliberately delay payment to employees.	X		X			X	X	X
34. Has obtained some kind of subsidy	X				X	X	X	X
35. Have the client pay product development costs.	X		X	X	X	X	X	X
36. Obtain government grants.	X		X	X	X	X	X	X
37. Obtain foundation grants.	X		X	X	X	X	X	X
38. Obtain corporate grants.	X		X	X	X	X	X	X
39. Receive free consulting.	X	X	X	X	X	X	X	X