

Financing Models and Startup Sustainability in Emerging African Economies: A Systematic Literature Review

Peter Kasaija., Dr. Jackson Oyaro Ong'eta

University of Eastern Africa, Baraton

DOI: <https://doi.org/10.47772/IJRISS.2026.100800335>

Received: 19 August 2026; Accepted: 24 August 2026; Published: 04 September 2026

ABSTRACT

Background: Access to sustainable financing remains one of the most critical impediments to startup survival and growth across emerging African economies. Despite the strategic importance of startups to employment creation, innovation, and structural economic transformation across the continent, the scholarly literature remains fragmented regarding which financing models most effectively support long-term startup sustainability. The annual financing gap for micro, small, and medium enterprises in Sub-Saharan Africa is estimated to exceed USD 630 billion, and traditional bank lending has proven largely inaccessible to early-stage ventures owing to collateral requirements, information asymmetries, and underdeveloped credit infrastructure.

Objective: This systematic literature review (SLR) synthesizes empirical and theoretical evidence on four distinct financing models: (Hybrid Financing Models (pairing Debt and equity, Venture Capital and banking (VC/B) and equity crowdfunding (ECF) to evaluate their relative effectiveness in supporting startup survival, profitability, innovation, scalability, and long-term sustainability in African and comparable emerging-market contexts. The review further explores the conditions under which each model is most appropriate and identifies gaps warranting further primary research

Method: Following the PRISMA 2020 guidelines, a structured search was conducted across eight major academic databases: Scopus, Web of Science, Springer, Taylor & Francis, ScienceDirect, Emerald, Wiley Online Library, and Google Scholar. Studies published between 2017 and 2026 were screened using a pre-defined PICOS-based inclusion and exclusion framework. A total of 35 peer-reviewed studies were retained for thematic synthesis following title, abstract, and full text screening.

Results: No single financing model emerged as universally superior. Effectiveness is strongly moderated by startup lifecycle stage, institutional environment, and founder human capital. Venture capital demonstrates the strongest performance impact on profitability, innovation, and scalability, but is systemically distorted by homophily bias that disadvantages African-led startups. Bank financing provides the most stable platform for survival and sustainability in the consolidation phase but structurally excludes early-stage ventures. Hybrid models particularly DFI private co-investment structures and equity-for-guarantee instruments offer the most adaptable architecture for bridging financing gaps across startup lifecycle stages. Equity crowdfunding remains constrained by limited digital infrastructure, low investor sophistication, and the absence of enabling regulatory frameworks across most African markets.

Conclusion: The evidence supports a sequenced, lifecycle-sensitive financing approach: hybrid instruments in the early stage, transitioning to VC-backed configurations in the growth phase, and consolidating through bank financing at maturity. Realizing this pathway requires coordinated policy action to strengthen institutional quality and guarantee mechanisms, investor commitment to reducing bias and expanding co-investment mandates, and ecosystem-level integration of financial literacy support. The review's central contribution is diagnostic as much as prescriptive: the field agrees on cause information asymmetry but is largely silent on combination, unable to explain how African entrepreneurs actually choose, combine and transition between financing models over a venture's lifetime. Future research should prioritize longitudinal African cohort

studies, sector-specific comparative analyses, and investigation of the behavioural determinants of financing model choice.

Keywords: Startup financing; entrepreneurial finance; funding models; financing constraints; startup sustainability; Sub-Saharan Africa

INTRODUCTION

Startups occupy a central role in Africa's economic transformation. Across the continent, entrepreneurial ventures in Fintech, agriculture, healthcare, transportation, manufacturing and renewable energy among others are generating employment, driving innovation, and broadening the productive base of economies long constrained by structural limitations. (Ayyagari, Beck & Demirguc-Kunt, 2007; World Bank, 2020). However, the growth and survival of startups across Africa remains precarious despite their strategic importance. Empirical evidence consistently points access to appropriate financing as a principal constraint (Quartey et al., 2017; Fowowe, 2017; Beck, Demirguc-Kunt & Singer, 2013). The scale of this challenge is immense. The International Finance Corporation (IFC, 2024) estimates that the annual funding shortfall for micro, small, and medium enterprises (MSMEs) in Sub-Saharan Africa exceed USD 630 billion annually.

Traditionally, the conventional method for financing business capital has been through the bank traditional lending. But traditional bank financing has been largely out of reach for early stage businesses. Stringent collateral requirements, HIGH interest rates, wide spread information asymmetry and an under developed credit infrastructure have all been barrier to access to capital.

The African continent has witnessed a major boom in entrepreneurial activity over the last decade, with a number of startups and the amount of investments into startup ecosystem growing considerably. However, traditional debt financing from commercial banks has largely been inaccessible for early-stage startups, due to stringent collateral requirements, high interest rates, information asymmetry, and weak credit infrastructure (Ayyagari et al., 2007; Beck et al., 2008).

In response to this funding gap, alternative financing models such as venture capital, hybrid debt-equity instruments, and equity crowdfunding have received increasing attention as potential pathways to close this funding gap (Abor & Quartey, 2010; Runde et al, 2021; Igwe et al., 2024) hence the importance attached to studies on this subject. However, one important question remains inadequately answered in the academic literature: which financing models best support the sustainability of startup in emerging-economy contexts in African? Existing studies tend to examine single funding instruments in isolation, or employ broader geographically frameworks that mask the Africa-specific dynamics, or lack the methodological rigor needed to draw comparative conclusions (Hoque, 2024; Rao et al., 2023; Lerner, 2009; Tykvova, 2018).

In response to this funding gap, alternative financing models such as venture capital, hybrid debt-equity instruments, and equity crowdfunding have received increasing attention as potential pathways to close this funding gap (Abor & Quartey, 2010; Runde et al, 2021; Igwe et al., 2024) hence the importance attached to studies on this subject. However, one important question remains inadequately answered in the academic literature: which financing models best support startup sustainability in emerging African economies? Existing studies tend to examine single funding instruments in isolation, or employ broader geographically frameworks that mask the Africa-specific dynamics, or lack the methodological rigor needed to draw comparative conclusions (Hoque, 2024; Rao et al., 2023; Lerner, 2009; Tykvova, 2018).. The result is a fragmented body of evidence that offers little practical or policy guidance.

This systematic literature review (SLR) aims to address this gap by synthesizing evidence on four distinct financing models:(1) hybrid financing (pairing debt and equity instruments), (2) venture capital (VC), (3) bank financing, and (4) equity crowdfunding (ECF) and this review evaluates the empirical evidence on how each model affects startup survival, profitability, innovation, scalability, and long-term sustainability in African and comparable emerging-market contexts to give a synthesized, comparative account with is missing in the current literature.

Rationale and Motivation

The motivation for the review is threefold. First, from a theoretical perspective, the extant literature on entrepreneurial finance has been mostly developed in the context of advanced economies, rendering the direct applicability of dominant frameworks such as the pecking order theory (Myers & Majluf, 1984), agency theory (Jensen & Meckling, 1976), and information asymmetry models (Stiglitz & Weiss, 1981) to African startup ecosystems a contested empirical question.

Second, from a policy standpoint, development finance institutions, national governments, and multilateral entities are increasingly requiring evidence-based guidance on the best financing instruments for startups in their particular contexts. Third, from a practical perspective, the financing environment in which startup Africa founders operate is fundamentally different from that in Silicon Valley or Europe, and consolidating what the evidence says about effective financing models has direct utility for entrepreneurs, incubators, and accelerators operating on the continent.

This review is further motivated by the transformative shifts in the African startup financing landscape over the past decade including the rapid growth of mobile financial services, the rise of pan-African venture capital funds, the proliferation of development finance institutions, and the uptake of equity crowdfunding platforms which necessitate a current, comprehensive synthesis of the evidence base.

Scope and Boundaries

This review is geographically limited to the emerging economies of Sub-Saharan Africa, with addition coverage of North African contexts where evidence is available. The review covers peer-reviewed empirical and theoretical literature published between 2017 and 2026, a period marked by significant growth in the African startup ecosystem and corresponding increase in scholarly attention paid to the topic. The review focuses specifically on startups which is defined as newly established, innovation-oriented enterprises less than ten years old as distinct from established small and medium enterprises (SMEs), development organizations, or informal micro-enterprises.

Definition of Key Terms and concepts

- 1 **Startup:** A newly established, innovation-oriented enterprise less than ten years old. It is explicitly distinguished in the review's scope from established small and medium enterprises (SMEs), development organizations, and informal micro-enterprises.
- 2 **Startup Sustainability:** A startup's capacity to survive, remain profitable, innovate, scale its operations, and continue functioning over the long term, rather than merely to obtain initial funding.
- 3 **Financing Model:** A structured mechanism or instrument through which a startup obtains capital to fund its establishment, operations, and growth. The review examines four such models: hybrid financing, venture capital, bank financing, and equity crowdfunding.

Theoretical Underpinnings of Startup Financing

The four financing models examined in this review are theoretically grounded in complementary frameworks. The pecking order theory (Myers, 1984, as cited in Wardiman et al., 2024) holds that firms prefer internal funding over debt, and debt over equity, due to the costs of information asymmetries a prediction particularly relevant to African startups where information opacity is high.

Drawing from the Agency Theory and Information Asymmetry Jensen and Meckling (1976) and Stiglitz and Weiss (1981) highlight the role of information asymmetry between borrowers and lenders as a fundamental source of financing constraints for small firms. In the African context, the lack of credit registries, weak

auditing standards, and limited financial disclosure exacerbate information asymmetry problems, making debt financing particularly challenging for early stage startups.

The trade-off theory further recognizes that firms balance the tax advantages of debt against the cost of financial distress risks, implying that optimal capital structures are context-dependent and vary with the firm's lifecycle (Ribeiro & Serrasqueiro, 2025). Signaling theory underpins both VC and ECF dynamics: investors in high-uncertainty environments use observable signals including human capital credentials, social networks, equity retention, and prior funding as proxies for venture quality (Mazzocchi & Lucarelli, 2023). In the African context, institutional theory and homophily (prejudice where Investors may unconsciously favour entrepreneurs who look, think, or have backgrounds similar to their own) add critical explanatory layers: Kabengele and Hahn (2025) demonstrate that institutional voids intensify investor preference for familiar founders, generating systematic financial discrimination that structural financing frameworks alone cannot account for.

Drawing on Levine (2005) and Beck and Levine (2004), the Financial Systems Theory stresses the role of composition of the overall financial system structure bank-based versus market-based in shaping the availability and effectiveness of different financing instruments. Most African financial systems are predominantly bank-based and characterized by shallow capital markets, this implies that equity-based and market-driven financing models face structural impediments to scale, and that development finance institutions and hybrid models may play a compensatory intermediation role.

Research Question and Objectives

Primary Research Question

Which financing model or combination of models most effectively supports the sustainability, survival, and growth of startups in emerging African economies?

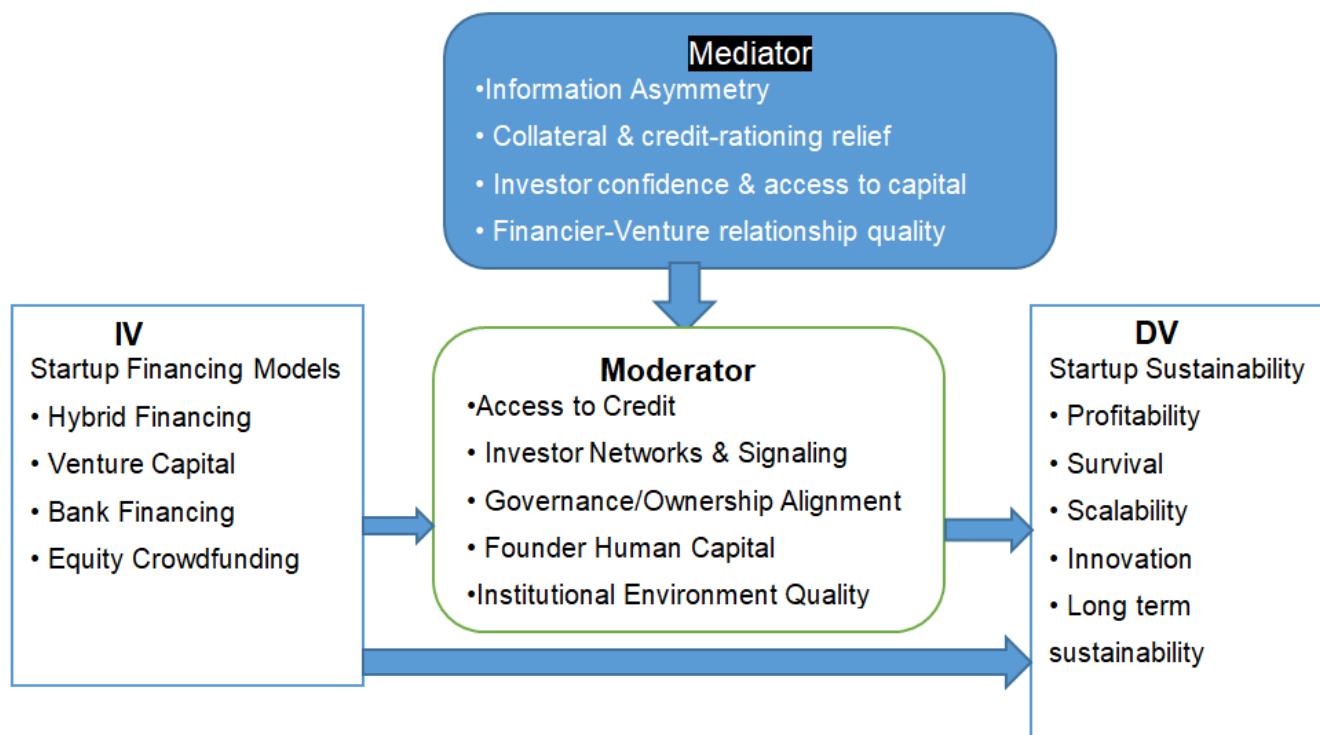
Secondary Research Questions

- **SRQ1:** What are the dominant financing models available to startups in emerging African economies as reported in the peer-reviewed literature?
- **SRQ2:** What empirical evidence exists on the relationship between financing model type and startup survival, profitability, and growth outcomes in African contexts?
- **SRQ3:** What combinations or hybrid financing approaches (if any) are reported to be effective in supporting startup sustainability in Africa?
- **SRQ4:** What gaps in the current literature require further primary research?

Review Objectives

1. To systematically identify, screen, and appraise peer-reviewed studies examining financing models for startups in African emerging economies.
2. To synthesize evidence on the effectiveness of each financing model in relation to startup sustainability outcomes.
3. To map the existing literature and identify gaps warranting further empirical investigation.
4. To derive practical and policy implications for entrepreneurs, investors and development finance institutions seeking to design access financing pathways that support the long-term sustainability of African Startups

Figure 1. Conceptual framework



Source: Author's own construction, based on thematic patterns identified in this review

METHODOLOGY

This paper is structured according to the principles of the systematic literature review, which attempts to explore a body of scholarly literature to synthesize its content, generate insights and critically reflect the current state of the literature in the field of start financing models. This review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021), which provide the most current and comprehensive framework for the transparent reporting of systematic literature reviews. The PRISMA 2020 statement updates earlier iterations to better accommodate non-interventional reviews, such as reviews of observational studies and qualitative syntheses, which are directly applicable to the present study's focus on financing models and entrepreneurial outcomes.

The review retained 35 peer-reviewed journal articles published between 2017 and 2026. The studies were identified through searches of eight academic databases: Web of Science, Scopus, SpringerLink, Taylor & Francis Online, ScienceDirect, Emerald Insight, Wiley Online Library, and Google Scholar. The review is a thematic systematic literature review rather than a journal-restricted review examining the diversity of startup financing research and evaluating it in terms of publication trends (productivity, region), theoretical setup (theory building, application, elaboration, testing), methodological design (research design, data collection and analysis techniques), and themes (evolution, network). The paper concludes by suggesting directions for future startup financing research.

Identification of Relevant Literature

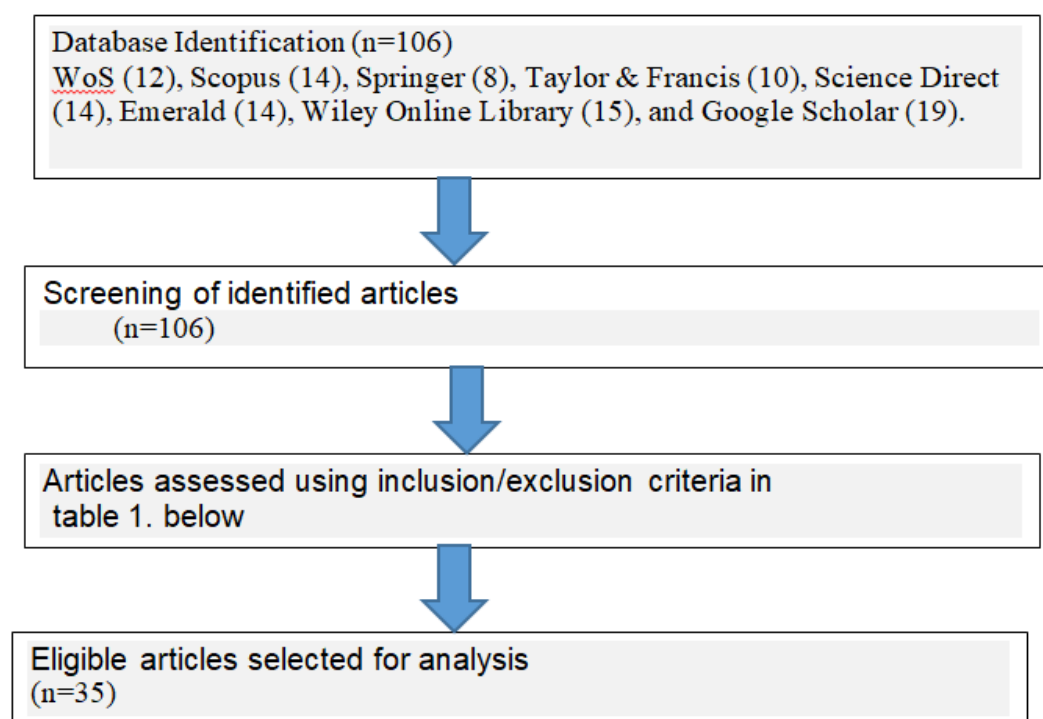
As emphasized by Kraus et al. (2022), a high-quality review article must have a clear established methodology, systematically select and analyze articles, and periodically cover the field to capture the latest developments. In line with this principle and to ensure the inclusion of most recent findings, a comprehensive database search was conducted across multiple reputable repository databases including Web of Science (WoS), Emerald, Science Direct, Springer, and Elsevier SCOPUS. Details are provided in **Figure 2**. These databases were systematically explored to achieve broad and thorough coverage of research landscape. The research focused on a wide range of combinations to reflect the diverse aspects of startups financing

recognizing that startups require adequate capital to establish, grow, and sustain their operations. Given the expanding array of financing options available to modern businesses, the search terms also reflected the critical importance of funding source selection in determining business success, growth trajectories, and long-term sustainability within the entrepreneurship literature.

Following PRISMA 2020 principles, the review used a structured search and selection process designed to identify peer-reviewed evidence on startup financing and sustainability. Searches were conducted in eight sources: Web of Science, Scopus, SpringerLink, Taylor & Francis Online, ScienceDirect, Emerald Insight, Wiley Online Library, and Google Scholar. The search covered publications from 2017 through 2026.

The keywords in the databases research used included Startup financing; entrepreneurial finance; funding models; financing constraints; startup sustainability; Sub-Saharan Africa; startup survival; startup growth; SME sustainability.

Figure 2. Selection process and Breakdown of Articles



Source: Authors own work inspired by Derdabi, A., & Dvouletý, O. (2025)

Across the eight databases, 106 records were identified in the search set reported in the manuscript: Web of Science (12), Scopus (14), SpringerLink (8), Taylor & Francis Online (10), ScienceDirect (14), Emerald Insight (14), Wiley Online Library (15), and Google Scholar (19). The records were consolidated, duplicates were removed using reference-management software, and the resulting records were screened against the predefined eligibility criteria. Thirty-five peer-reviewed journal articles met the stated eligibility requirements and were retained for the final thematic synthesis details provided in figure 2. These databases were systematically explored to achieve broad and thorough coverage of research landscape. To refine the selection, the titles and abstracts of all identified articles were carefully reviewed and assessed for further screening against predefined inclusion and exclusion criteria to assess their relevance, quality, and alignment to the study objectives.

Data retrieved from different database were merged and duplicates were removed and publication lists were merged and organized with Zotero reference software and finally imported the dataset into VOSViewer for the bibliometric analysis. After the screening and assessing eligibility, 35 articles met all selection criteria and were retained for the final review. This process ensured a rigorous and transparent selection of literature while capturing the most relevant studies available across the selected databases.

Search Keyword Combination Strategy

Individual keywords were not searched in isolation. Consistent with PRISMA 2020 guidance on search strategy, the keywords were organized into four conceptual blocks

Individual keywords were not searched in isolation. Consistent with PRISMA 2020 guidance on search strategies, the keywords above were organized into four conceptual blocks (i) the financing phenomenon, (ii) the specific financing model, (iii) the geographic scope, and (iv) the outcome of interest combined using Boolean operators (AND/OR) and phrase quotation so that the search string could be run across database. The master search string applied consistently across databases, took the following form: (*Startup financing OR entrepreneurial finance OR funding models OR financing constraints OR access to finance) AND (startup sustainability OR Sub-Saharan Africa, startup growth OR SME sustainability)

Table 1. Breakdown of Article Papers According to Journal Source

Journal Title	No of Articles sampled	% of Journal contribution	Database
Venture Capital	6	17%	Taylor & Francis, Scopus, WoS
Journal of Small Business Management	4	11%	Wiley Online Library, Scopus
Small Business Economics	5	14%	Springer Link, Scopus
Journal of Management	2	6%	SAGE, WoS, Scopus
Technovation	2	6%	Elsevier, Scopus
Financial Innovation	2	6%	Springer Link
Journal of Business & Finance Librarianship	2	6%	Taylor & Francis
Review of Development Finance	2	6%	ScienceDirect
Future Business Journal	1	3%	Springer
Management Research Review	1	3%	Emerald
European Journal of Innovation Management	3	9%	Emerald
Cogent Economics & Finance	1	3%	Taylor & Francis
Academy of Entrepreneurship Journal	1	3%	Scopus
Research in Globalization	1	3%	ScienceDirect
Journal of Risk and Financial Management	2	6%	Scopus, WoS
Total	35	100%	

Source: Author own work

Eligibility criteria

Eligibility criteria were specified to minimize selection bias and ensure consistency in study inclusion. Studies were evaluated for inclusion or exclusion based on the PICOS framework (Population, Intervention/Exposure, Comparator, Outcome, Study design) as adapted for this review.

Inclusion Criteria

- Studies explicitly examining financing models, funding instruments, or capital access mechanisms for startups or early-stage enterprises (less than 10 years old).
- Studies conducted in Sub-Saharan African countries or other emerging economies in Africa.
- Studies published as peer-reviewed journal articles between 2017 and 2026. Conference proceedings, book chapters, academic theses, editorials, opinion pieces, and other non-journal publications were excluded from the final 35-study synthesis
- Studies published in peer-reviewed journals, conference proceedings with peer review, or academic theses between 2017 and 2026.
- Studies written in English or with an available English-language abstract.
- Studies addressing at least one of the following financing models: hybrid financing, self-financing/bootstrapping, venture capital, equity financing, or debt financing, bank financing, and (4) equity crowdfunding (ECF)
- Studies providing evidence qualitative, quantitative, or mixed-methods on outcomes related to startup survival, sustainability, growth, profitability, or access to capital.
- Studies focusing specifically on startups and entrepreneurial firms, as distinct from established large corporations or informal micro-enterprises without growth orientation.

Exclusion Criteria

- Studies focused exclusively on developed economies (e.g. the United States, European Union, or Japan) with no comparative African component.
- Studies examining financing for non-startup entities only (e.g. established large firms, government agencies, NGOs, or cooperatives without entrepreneurial intent).
- Studies published prior to 2017, given the rapid and transformative changes in African startup financing ecosystems since that period.
- Unpublished grey literature, opinion pieces, editorials, news articles, or non-academic reports, unless produced by a major multilateral institution (e.g. World Bank, IFC, African Development Bank) with rigorous methodology.
- Studies in languages other than English for which no English translation or abstract is available.
- Studies examining financing for rural smallholder agriculture or subsistence farming only, which are outside the definitional scope of innovation-oriented startups.
- Duplicate publications reporting the same dataset or study without adding new evidence.
- Studies that address financing broadly without disaggregating results by financing model type, making model-level synthesis impossible.

Table 2. Admission and exclusion criteria for the analysis of the literature

Inclusion Criteria		Exclusion criteria	
Timeframe	From 2017 to 2026		Papers published before
Type of Publication	Peer- reviewed Journal articles	Non- Journal Publications	Conference papers, book chapters theses, editorials and other non-journal items
Language	Only English	Non-English Language	Exclusion of non-English Articles
Relevance	Explicitly discussing startup funding sources,	Non-Relevance	Papers not focused startup funding sources, models or addressing unrelated topics
Database coverage	Scopus, WOS, Emerald, Goggle scholar, Science Direct, Elsevier	Duplicate publications	
Content focus	Focus on the examining various startup financing models and in line with research questions.	Quality Assessment	Papers failing to meet relevance and rigor based on the initial screening and abstract
Search Key words	startup sustainability; venture capital; equity crowdfunding; hybrid financing; bank financing; debt financing; Sub-Saharan Africa; emerging economies; startup survival; startup growth; SME sustainability; financial inclusion; systematic literature review; PRISMA		

Source: Author own work

Grouping of Studies for Synthesis

Included studies were grouped into thematic synthesis clusters corresponding to each of the four financing model categories under review. Where a single study addressed more than one financing models, it was coded for and included in multiple synthesis groups. Studies were further grouped by type of outcome (survival/sustainability, profitability, growth, access to capital) to facilitate comparison across financing models. In addition to this model-based grouping, studies were re-coded a second time against seven cross-cutting analytical themes (Section 4.4) that cut across financing-model boundaries, allowing the review to identify convergence, disagreement, and evidentiary gaps that a purely model-by-model synthesis would not surface.

Table 3. Characteristics and Evidence Provenance of Included Studies

Study source	Context	Sample / unit	Method	Financing model	Outcomes	Evidence provenance
Fowowe (2017)	African countries	Firm-level evidence; exact sample not reported in manuscript	Empirical quantitative	Access to finance / debt	Firm performance	Direct African evidence
Quartey et al. (2017)	ECOWAS / Africa	SMEs; exact sample not reported in	Empirical	SME financing / debt	Growth / financing	Direct African evidence

		manuscript			constraints	
Kabengele & Hahn (2025)	Africa	335 African fintech startups	Mixed methods / qualitative comparative analysis	Venture capital	Funding access / funding amount	Direct African evidence
Kato (2024)	Sub-Saharan Africa	Not reported in submitted manuscript	Review / conceptual	Sustainable venture capital	Resilience / sustainability	Direct Africa-focused review
Tuffa et al. (2025)	Ethiopia, Kenya, Uganda	Tech startups; exact sample not reported in manuscript	Comparative analysis	Innovation financing mechanisms	Innovation / financing effectiveness	Direct African evidence
Ismaila (2023)	Africa	Not reported in submitted manuscript	Literature review	Crowdfunding	Crowdfunding potential / access	Direct Africa-focused review
Idi & Germinah (2022)	Africa	Not reported in submitted manuscript	Literature review	Venture capital	Entrepreneurship development	Direct Africa-focused review
Wardiman et al. (2024)	Emerging-market / international SME evidence as used in manuscript	Not reported in submitted manuscript	Systematic literature review	Debt / bank financing	Survival, growth, investment	Comparable emerging-market/international evidence
Ribeiro & Serrasqueiro (2026)	International / emerging-market literature	62 peer-reviewed articles	Systematic literature review	Debt / hybrid instruments	Access, growth, financing effectiveness	Comparable/international evidence
Mazzocchi & Lucarelli (2023)	International	32 peer-reviewed articles	Systematic literature review	Equity crowdfunding	Campaign success / post-offering outcomes	Comparable/international evidence
Junge et al. (2022)	Denmark	20 entrepreneurs	Qualitative interviews	Crowdfunding	Financing motives / validation	Non-African comparator
Hoque (2024)	International	Approximately 78 studies	Empirical review	Crowdfunding	Innovation / financing	Comparable/international evidence
Rao et al. (2023)	International	280 SME-financing papers	Systematic literature review / bibliometric	SME financing incl. crowdfunding/ bootstrapping	Research trends / financing	Comparable/international evidence
Svetek (2022)	International	Not reported in submitted manuscript	Review	Early-stage equity financing	Signaling financing access	Comparable/international evidence

Taglialatella & Mina (2024)	International	New firms; exact sample not reported in manuscript	Empirical	Debt/equity / capital structure	Innovation / financing	Comparable/international evidence
Winton & Yerramilli (2008)	International	Not reported in submitted manuscript	Empirical	Banks vs. venture capital	Financing choice / performance	Background/comparator; outside review period

Source: Author's compilation (2026)

Information Sources and Search Strategy

A comprehensive and reproducible search strategy was developed in consultation with the relevant scholarly literature and refined through iterative piloting. Searches were conducted in the following databases:

Table 4. Results of Initial Keyword Search and Search Procedure

Journal Source	Year	No. of papers published
Venture Capital	2017	4
Review of Development Finance	2017	2
Journal of Business & Finance Librarianship	2017	2
Future Business Journal	2024	1
Small Business Economics	2021	5
Journal of Small Business Management	2021	3
Academy of Entrepreneurship Journal	2021	1
Venture Capital	2022	2
Technovation	2022	2
Journal of Small Business Management	2023	1
Management Research Review	2023	1
Journal of Management	2024	2
European Journal of Innovation Management	2024	3
Cogent Economics & Finance	2024	1
Journal of Risk and Financial Management	2025	2
Financial Innovation	2025	2
Research in Globalization	2026	1
Total		35

Source: Author own work

Table 5. Articles with Most Citations (Top 10)

No.	Author and year	Theme	Citations
1	Davila et al. (2003)	Venture capital financing and startup growth	3000+
2	Winton & Yerramilli (2008)	Banks versus venture capital	1500+
3	Drover et al. (2017)	Entrepreneurial equity financing	1200+
4	Mollick-related crowdfunding studies	Crowdfunding and entrepreneurship	1000+
5	Cole & Sokolyk (2018)	Debt financing and startup survival	700+
6	Bellavitis et al. (2017)	Entrepreneurial funding innovations	600+
7	Cumming et al. (2021)	Equity crowdfunding	500+
8	Rao et al. (2023)	SME financing review	300+
9	Klein et al. (2019)	Digital startup financing	250+
10	Svetek (2022)	Signaling in equity financing	150+

Source: Author's compilation (2026)

Characteristics of Included Studies

The included studies span multiple methodological approaches and geographic contexts within Africa. Table 5 presents a summary of the key characteristics of included studies. The majority of studies are empirical quantitative studies (survey-based and archival followed by conceptual studies and qualitative case studies.

Table 6. Methodological Design of Startup Financing Sources/Model

Methodological design of financing research	No. of papers	Percentage
Empirical	7	20%
Conceptual	5	14%
Review	4	11%
Modeling and simulation	2	6%
Qualitative	4	11%
Quantitative	7	20%
Theoretical	3	9%
Mixed	3	9%
Total	35	100

Source: Author's compilation (2026)

Financing Models: Thematic Synthesis

The following sub-sections present a thematic synthesis of evidence for each of the four identified financing models. Each model is examined in terms of its conceptual definition, theoretical grounding, documented accessibility for African startups, and evidence on its relationship with startup sustainability outcomes.

Hybrid Financing Model (Pairing Debt and Equity)

Conceptual Scope

Hybrid financing refers to instruments and strategies that combine elements of debt and equity to address the specific constraints of entrepreneurial ventures. Ribeiro and Serrasqueiro (2025) identify several such mechanisms documented in their systematic literature review of 62 peer-reviewed articles: venture debt, equity-for-guarantee swaps, and bank-tax cooperation models. These instruments are designed to overcome the most persistent barriers facing startups namely, limited collateral, uncertain cash flows, and information asymmetry by drawing on the complementary strengths of both debt and equity structures.

Thus, hybrid techniques have the potential to achieve a better alignment of the interests of both the firms and investors (Megersa, 2020). For instance, Tagliatalata and Mina (2024) argue that hybrid financing mechanisms provide more flexibility to innovative firms and mitigate the effects of information asymmetries that often constrain access to traditional lending.

Evidence on Startup Outcomes

Ribeiro and Serrasqueiro (2025) provide evidence that hybrid financing is a strategically viable option for multiple startup outcome dimensions. Firms that combine VC credibility with formal debt access credit markets that they would otherwise not have access to. Cumming and Johan (2017) find that VC-backed firms signal sufficient credibility to lenders, so that bank loan access are facilitated. Wang et al. (2015) describe equity-for-guarantee swaps as mechanisms enabling entrepreneurs to increase leverage without having to provide a lot of collateral which is an important benefit in African markets where collateral assets are often unavailable or held informally. Venture debt offers repayment structures that are aligned with high-growth startup cash-flow cycles and can be transferrable to African scale-ups navigating uncertain revenue streams (Veena Iyer, 2020).

Another piece of complementary evidence comes from Wardiman et al. (2024) in their view of SME financing. They find that VC financing with staged investment contracts and non-financial value-added services, yields significant increases in total sales productivity and return on investment. The combination of VC discipline with debt's ownership-preservation features a core feature of hybrid models thus addresses both growth imperatives and the governance concerns of founder-led African startups. Financial literacy emerges as a cross-cutting moderator in hybrid financing effectiveness: Ribeiro and Serrasqueiro (2025) argue that financially literate entrepreneurs are better positioned to negotiate hybrid instruments, manage leveraged structures, and strategically respond to economic shocks rather than with panic-driven closures.

African Context and Limitations

Hybrid instruments are particularly relevant in the African context, because they can fill institutional voids that individually defeat either pure debt or pure equity strategies. Microfinance combined with P2P lending elements, and co-investment structures between development finance institutions (DFIs) and local VC firms, represent hybrid models already operating on the continent. However, Ribeiro and Serrasqueiro (2025) argue that hybrid instruments are not well suited to cooperative or collectively owned ventures a governance structure common in community-based African enterprises. The psychological costs of hybrid debt also remain understudied, with high debt-related stress recorded as a constraint on the quality of entrepreneurial decision-making.

Venture Capital (VC)

Conceptual Scope

Venture capital (VC) is an equity-based funding method where investors supply capital, expertise, and networks to high-growth startups in return for ownership stakes. In the African context, Kabengele and Hahn (2025) emphasize that VC operates within an ecosystem marked by significant institutional voids and dominated by non-African investors a structural condition that shapes which startups receive funding and on what terms. Wardiman et al. (2024) further document VC's unique value proposition beyond capital: the staged investment model, coupled with human resources support, management expertise, and market intelligence, creates a competitive advantage for funded firms that extends well beyond financial infusion.

In this review, a point of contention is whether the limited access African startups to VC is a function of investor bias of rational decision making under conditions of information asymmetry. Kabengele and Hahn (2025) view this difference as evidence of homophily bias. The same evidence is consistent with statistical discrimination, where investors use observable proxies when venture quality is difficult to verify. This distinction is important because the two explanations imply different policy responses, namely reducing prejudice versus reducing information asymmetry. We conclude that barriers to VC access are more likely to result from a combination of structural bias and information-driven caution, rather than either explanation alone.

Evidence on Startup Outcomes in Africa

The most direct empirical evidence on VC funding dynamics in African context comes from the mixed methods study by Kabengele and Hahn (2025) on 335 African fintech startup

Their qualitative comparative analysis reveals that, in the early stages of Africa's VC market (before 2018), all configurations that were sufficient for high funding amounts were dominated by non-African founding teams. With Africa's VC ecosystem maturity into the later-stage period (up to 2022), configurations that facilitated high funding for African-led startups emerged, though under more stringent conditions: African founders needed international networks (having studied or worked abroad), operation in large markets, and syndicates combining local and international VC firms.

Venture capitalists are more likely to invest in later-stage firms with proven scalability, thus filling the gap left by debt financing for high-risk ventures (Yung, 2009). Unlike debt, VC is oriented toward long-term returns and more willing to tolerate short-term volatility in exchange for substantial upside potential. Firms with venture capital finance tend to have very risky and positively skewed return distributions, with a high probability of poor or even negative returns and a small probability of extremely high returns (Golder & Barua, 2025); Dekker et al., 2026).

Wardiman et al. (2024) support the growth impact of VC from non-African evidence, by showing that VC-backed firms consistently outperform non-backed counterparts in sales growth, job creation, and return on investment both before and after receiving funding. This implies that the quality of VC selection processes, when freed from hemophilic bias, identifies genuinely higher-performing ventures. The corollary for African startups is that persistent access barriers deprive the ecosystem of significant value creation potential.

Limitations and Sustainability Concerns

The biggest downside of VC financing for African startups, especially those with family or community ownership structures, is the potential for governance conflicts. Wardiman et al. (2024) note that VC financing can increase agency costs, create conflicts between investors and founders, and misalign incentive structures in family-owned businesses a category that encompasses a large proportion of African SMEs. Kabengele and Hahn (2025) note that while Social and Environmental Value Orientation (SEVO), is useful, as a fundraising signal to attract impact-oriented DFI investors, it may not be sustainable for long-term commercial viability if it overweight development mandates at the expense of operational scalability

Banking Financing

Conceptual Scope

Bank financing remains the dominant external debt instrument for SMEs globally, including in Africa. Banks are one of the sources of financing startups in African emerging markets, they provide loans that entrepreneurs can use to start and grow their businesses. Unlike Venture capital, banks do not take any ownership (equity) in the business nor participate in management decisions but rather only expects repayment interest and principal on the advanced loan. Grounded in agency theory where debt covenants align managerial behaviour with lender interests and trade-off theory, bank loans provide structured, predictable capital with clear repayment schedules. Wardiman et al. (2024) identify bank loans as offering more competitive interest rates than most non-bank alternatives, reducing borrowing costs for established SMEs and enabling investment in internal funding capacity.

Evidence on Startup Outcomes

The strongest evidence for bank financing and startup survival is during crisis periods. Wardiman et al. (2024) found that bank loans remained a critical determinant of investment for private SMEs during the 2008–2009 financial crisis, providing a stable financing channel when other sources contracted. For growth outcomes, Ribeiro and Serrasqueiro (2025) explain that bank financing enables firms to scale operations, invest in innovation, and enter new markets while retaining ownership control which is a combination that favorable to VC in terms of governance for growth outcome.

Deloof and Vanacker (2018, as cited in Ribeiro & Serrasqueiro, 2025) provide evidence that mature firms able to negotiate favourable terms of debt and use the bank to finance acquisitions and infrastructure development. This suggests a graduation dynamic in which bank financing becomes more effective with the survival of startups in their early years.

The relationship between bank financing and sustainability is particularly well-documented. D'Apolito et al. (2024, as cited in Wardiman et al., 2024) find a strong positive correlation between the availability of bank credit for SMEs and firm sustainability performance, and sustained bank relationships lower default risk and raise net interest margins suggesting mutual benefit reinforcement over time.

African Context and Constraints

Ribeiro and Serrasqueiro (2025) find that institutional quality is the single most important contextual determinant of bank financing effectiveness: low creditor protection, underdeveloped legal systems, and limited banking competition increase borrowing costs and constrain credit to new ventures in African markets.

This challenge is exacerbated by the rural-urban disparities, as rural African entrepreneurs face lower bank density, less competitive credit markets, and higher perceived lending risk often forcing reliance on expensive informal lending networks. While government guarantee programs can partially reduce these barriers, as demonstrated by Godke Veiga and McCahery (2019, as cited in Ribeiro & Serrasqueiro, 2025), their impact is limited by targeting inefficiencies and administrative capacity gaps. Structural barriers such as bureaucracy, strict collateral requirements, and insufficient loan size put early-stage African startups with no collateral at a significant disadvantage (Wardiman et al. 2024).

Equity Crowdfunding (ECF)

Conceptual Scope

Crowdfunding is a new way of raising money. Entrepreneurs present their business ideas on online platforms to a large global audience and ask people to contribute small amounts of money to support their project. Equity crowdfunding enables ventures to raise capital from a large number of investors via internet-based platforms, typically in exchange for equity shares. CF is a type of alternative financing and, in most cases, a last resort for entrepreneurs who have exhausted their internal funds and encounter difficulties in obtaining bank funding or

institutional equity, since it is part of the pecking order (Walthoff-Borm et al., 2018; Mazzocchi & Lucarelli, 2023; Ribeiro & Serrasqueiro, 2025). Mazzocchi and Lucarelli's (2023) conduct a systematic review of 32 peer-reviewed articles and find signaling theory as the dominant theoretical lens for understanding ECF outcomes: entrepreneurs need to convey both hard information (financial metrics, firm characteristics) and soft information (human capital, social capital, digital presence) to overcome information asymmetries with unsophisticated crowd-investors.

A key point of disagreement in the reviewed literature concerns whether crowdfunding is fundamentally a financing instrument of last resort or deliberate strategy for venture validation?.

Although this question appears straightforward, the empirical evidence does not support a single, consistent conclusion. Specifically, the literature disagrees on whether entrepreneurs turn to crowdfunding only after conventional financing options have been exhausted or whether they intentionally select it despite having access to alternative sources of finance. These competing views represent two distinct perspectives that run throughout the literature.

The first view is grounded in the pecking-order view of entrepreneurial finance which underpins much of ECF literature in this study. Ribeiro and Serrasqueiro (2025) and Mazzocchi and Lucarelli (2023) although approaching the issue from different empirical contexts, both studies rely on this theoretical perspective. According to the pecking-order framework, crowdfunding occupies the lowest position in the financing hierarchy, following internal funds, bank debt, and venture capital. The evidentiary base for this view is firm-level and outcome-based: it infers motive from what ventures did, which capital they raised, in what sequence and not what founders said about why they raised it.

The second view adopts an entrepreneur-level approach which is advanced by Junge et al. (2022) challenges the pecking-order view. Showing that most entrepreneurs choose crowdfunding to validate their businesses, test market demand, rather than the fact that alternative financing instruments have been exhausted. The apparent disagreement arises from differences in methodological approaches rather than from fundamentally conflicting empirical findings. However, this review argues that their explanatory relevance depends on the research question being addressed.

Evidence on Campaign Success and Startup Outcomes

There is evidence from Mazzocchi and Lucarelli (2023) that a rich constellation of signals that predict ECF campaign success, several of which have direct implications for startup sustainability outcomes. The founder's retention of equity as a measure of personal commitment has been shown as possibly the single most important determinant of campaign success, with higher equity retention indicating a belief in the venture's future value. Team size and composition, particularly the presence of diverse, educated, and experienced founders, consistently predicts higher funding amounts and investor numbers. Social capital, operationalized as LinkedIn connections and social media engagement, significantly increases funding probability by reducing information asymmetries in the digital environment that ECF platforms occupy.

Critically, Mazzocchi and Lucarelli (2023) distinguish between campaign success and post offering startup success a distinction that has far reaching implications for sustainability assessments. Only a few fraction of reviewed studies examine post-funding venture performance, revealing a systematic gap in ECF research: the signals that attract crowd-investors are not necessarily aligned with the operational capabilities that support ventures through growth phases. Further, underscoring this concern, Ribeiro and Serrasqueiro (2025) suggest that equity crowdfunding is better suited to serve as market validation tool and a fallback for financially constrained firms rather than an engine of a primary growth.

African Context

The reviewed sources provide limited direct evidence on ECF effectiveness in African markets. In their study of Africa's fintech ecosystem, Kabengele and Hahn's (2025) study of Africa's fintech ecosystem do not specifically address ECF, but rather institutional VC. The general evidence from Mazzocchi and Lucarelli

(2023) suggests that the infrastructure requirements for effective ECF sophisticated digital platforms, investor financial literacy, regulatory frameworks such as the US JOBS Act, and reliable information disclosure environments are largely missing in most African markets. Wardiman et al. (2024) record the growth of financial inclusion through fintech-based lending and P2P platforms expansions in emerging markets including Indonesia, with some transferable lessons for Africa, but the equity-based model of ECF faces higher barriers than its debt-based P2P counterpart given lower investor risk tolerance and weaker regulatory protection for crowd investors on the continent.

Information Asymmetry and Institutional Voids: The Master Mechanism

The theoretical root is given by Stiglitz and Weiss (1981), Jensen and Meckling (1976). Ribeiro and Serrasqueiro (2025) operationalize it for bank lending as the reason African institutions raise collateral requirements and ration credit. Mazzocchini and Lucarelli (2023) operationalize it for equity crowdfunding as the “hard” and “soft” signals entrepreneurs must provide to unsophisticated crowd-investors; and Kabengele and Hahn (2025) operationalize it for venture capital as the institutional voids that push investors toward familiar, network-proximate founders. Al-Khazaleh et al. (2026) extend information asymmetry and Institutional Voids in a direction the other 34 studies do not: they conceptualize access to finance and financial inclusion as structurally related constraints, and locate FinTech innovation as a still-unproven candidate for narrowing the information gap at the base of the market rather than just at the venture-capital or crowdfunding tier. This is the one theme on which the reviewed corpus shows near-total agreement on cause, even where it disagrees sharply on remedy a distinction developed further in Section 4.5.

Signaling and Investor Behaviour in Equity-Based Finance

Kabengele and Hahn (2025) and Mazzocchini and Lucarelli (2023) both consider signaling as the mechanism that allocates equity capital, but they differ in their conclusions as to what the mechanism rewards. In Mazzocchini and Lucarelli's studies, equity retention, founder education, and social-media presence are interpreted as efficient, if imperfect, proxies of venture quality the crowd, in other words, is assumed to be signaling-literate. In Kabengele and Hahn's qualitative comparative analysis of 335 African fintech startups, the “signal” that most reliably predicts high VC funding before 2018 is simply a non-African founding team, and even after 2022 the signal that substitutes for it is international education or an international co-investment syndicate proxies that correlate with proximity to the investor's own network rather than with venture quality as such. Taken together, these two accounts of signaling not only describe two different financing instruments; they reveal an unresolved question this review flags do not settle: is African founders' persistent under representation in high-funding VC primarily attribute to taste-based discrimination, manifested through homophile as conceptualized by Kabengele and Hahn, or does it reflect statistical discrimination, whereby investors rationally rely on observable proxies for difficult-to-verify venture quality in environments characterized by high information asymmetry?

Lifecycle-Stage Sequencing of Financing Choice

A more noticeable but recurring aspect is that financing needs and financing behaviour are not static; they move with the venture. Wardiman et al. (2024) and Ribeiro and Serrasqueiro (2025) both describe a “graduation dynamic” in which bank financing becomes more, not less, useful as a startup survives its early years and builds a credit history; Kabengele and Hahn (2025) argue that an analogous maturation dynamic on the equity side, in which the configurations that predict African-founder access to VC change between the pre-2018 and post-2018 sub-periods of their own sample. Junge et al. (2022), although developed outside this review's African focus, provide the most granular test of this theme available in the wider literature: interviewing 20 Danish entrepreneurs, they find that motives shift systematically with lifecycle stage — early-stage ventures crowdfund primarily for validation and awareness, and it is only in growth or expansion stages that capital-raising becomes the dominant motive. None of the 35 studies we examined tests whether this same motive-shift pattern holds for African entrepreneurs, which is itself worth naming as a gap rather than an assumption.

Crowdfunding as “Alternative” Finance

Hoque (2024), drawing on around 78 international studies, presents crowdfunding as a channel bridging financing gaps left by banks and VC with an optimistic tone, while flagging that its effect on innovation is “contingent on innovation type, stage, and institutional setting” rather than universal. Rao et al. (2023) conceptualize this optimism with a longer bibliometric arc: for 280 SME-financing papers published 1986–2020, research volume rises sharply after 2016, driven almost exclusively by crowdfunding, bootstrapping, and social-capital issues. This confirms that Hoque review is the leading edge of the field's own attention, not a settled consensus. Junge et al. (2022) directly challenge this optimism : interviewing entrepreneurs rather than reading campaign outcomes, they find that only one of 20 cases regarded crowdfunding as a true last resort, and one fully funded campaign was privately judged a failure because it missed its awareness goal direct evidence that funding success and entrepreneur success are not the same variable, a distinction Mazzocchi and Lucarelli (2023) independently confirm when they show that the signals predicting campaign success rarely predict post-offering venture performance. Al-Khazaleh et al. (2026) takes a different direction again, framing crowdfunding and other FinTech-enabled instruments primarily as financial-inclusion tools whose promise is regulatory and infrastructural rather than purely behavioral.

Hybrid and Combination Financing:

Despite the practical and theoretical significance of the reviewed peer-reviewed studies, none examines how combinations of financing models influence startup sustainability. Instead, the studies analyze each financing model in isolation, without investigating the potential complementarities or synergistic effects of integrating multiple financing mechanisms

Ribeiro and Serrasqueiro (2025), in their review of 62 studies, provide the most comprehensive conceptual framework by identifying financing instruments such as venture debt, equity-for-guarantee arrangements, and bank–tax cooperation as mechanisms for expanding startups' access to finance. Wardiman et al. (2024) and Kabengele and Hahn (2025) each suggest hybridity (staged VC contracts that unlock later bank credit; DFI local VC co-investment syndicates), but in both cases the hybrid element is inferred from cross-sectional description rather than from a study designed to test it. Not of the 35 reviewed studies report firm-level data on African startups or simultaneously combine two or more of the four financing models and tracks a survival, profitability, or growth outcome against that combination.

Geographic and Institutional Specificity:

A review focusing on African startup financing require careful scrutiny regarding the extent to which it is actually derived from African contexts. A critical assessment reveals that the empirical foundation is limited. Only Kabengele and Hahn (2025), provide direct firm country-level empirical evidence from Africa. The reference base. This review's own reference list therefore mirrors a known structural bias in the field it is reviewing rather than escaping it, and it is more honest to name this than to let the confident tone of the “African Context” headings in Section 4.3 imply an evidentiary base that is not, in fact, uniformly present.

Points of Convergence

Information asymmetry is the master variable. Every model-specific ultimately traces its central constraint back to information asymmetry, even though each operationalizes it differently, collateral rationing for banks, signaling gaps for VC and ECF, and access-to-finance framing for Al-Khazaleh et al. (2026).

Information asymmetry emerges as the overarching explanatory variable across the reviewed literature. Although each financing model conceptualizes this constraint differently, they ultimately trace their central financing challenges to information asymmetry.

In bank financing, it manifests as collateral-based credit rationing; in venture capital (VC) and equity crowdfunding (ECF), it is reflected in signaling deficiencies that hinder investors' ability to assess venture quality; while Al-Khazaleh et al. (2026) frame the issue more broadly as constraints on access to finance arising from imperfect information. Despite these differences in operationalization, information asymmetry

constitutes the common theoretical mechanism underpinning the financing barriers identified across all four financing models.

There was no single financing model that emerged as universally superior in promoting startup sustainability. Rather, the effectiveness of each financing model is contingent upon factors such as, lifecycle stage, institutional quality, and founder human capital. This represents the central conclusion of the review and it is also supported by the model-specific evidence in Section 4.3:

For instance, Wardiman et al. (2024) demonstrate the relative stability of bank financing during periods of financial crisis. Kabengele and Hahn (2025) highlight the increasing importance of VC in Africa's post-2018 entrepreneurial ecosystem, and Junge et al. (2022) emphasize the validation and signaling functions of equity crowdfunding (ECF). Collectively, these findings suggest that the relative effectiveness of a financing model is context-dependent with no single financing instrument consistently outperforming another across all institution and entrepreneurial conditions.

Financing needs and behaviour evolve with firm age. Wardiman et al. (2024), Ribeiro and Serrasqueiro (2025), Kabengele and Hahn (2025), and Junge et al. (2022) converge, on a common conclusion: as ventures mature, both their financing requirements and their ability to credibly signal quality to external financiers change in predictable ways. Consequently, the suitability and effectiveness of financing instruments are dynamic rather than static, varying according to the firm's stage of development.

Does the Stabilizing Role of Bank Financing Extend to African Banking Systems?

The question also arises as to whether the evidence on the stabilizing role of bank financing can be generalized to the African banking systems. Indeed, the evidence from developed economies where the banking system systems had enough lending capacity to support or quickly resume credit supply after the 2008-2009 global financial crisis shows that banking financing improves stability of startups (Wardiman et al., 2024; D'Apolito et al., 2024). On the other hand, Ribeiro and Serrasqueiro (2025) find that numerous African banking systems are structurally shallow, collateral-constrained, and with limited credit availability even in normal economic conditions.

While these findings are not necessarily contradictory, they do pose an important question regarding the transferability of evidence across institutional contexts. In particular, without further empirical verifications, evidence of the stabilizing role of bank financing in well-capitalized banking systems should not be assumed to extend to banking systems where credit constraints are pervasive prior to the emergency of a crisis.

Knowledge and the Research Gaps in the Startup Financing Literature

Fragmented Financing Research

The main limitation identified by this Systematic Literature Review (SLR) is not a shortage of research on startup finance, but the fragmented nature of the existing evidence. Although a substantial body of literature has examined financing models such as bank financing, venture capital, crowdfunding, and hybrid financing, however, these streams of research have largely developed independently. Consequently, the reviewed studies focused mainly on financing models as separate phenomena, providing valuable insights into the characteristics and outcomes of each model in isolation but with little understanding of how entrepreneurs select, combine, and transition between different financing sources across the venture lifecycle.

Specifically, the literature remains unable to explain whether startups progress sequentially from personal and informal finance to bank lending and venture capital, whether combining financing sources produces better outcomes compared to relying on a single financing model, and whether financing effectiveness depends on the venture's stage of development (whether a startup is new, growing, or already established). The reviewed studies do not answer all these important questions to support startup sustainability.

This fragmentation is particularly evident in the African context, where empirical evidence remains limited. Among the studies reviewed, only a small number collect firm-level data directly from African startups, with

Kabengele and Hahn (2025) providing the strongest evidence through their analysis of 335 startups. However, a single empirical study cannot adequately represent the diversity of entrepreneurial finance across emerging African economies.

Neglection of Informal and Indigenous Financing Mechanisms

Furthermore, the literature largely overlooks informal and indigenous financing mechanisms such as family finance, rotating savings groups, community lending arrangements, and diaspora investment which continue to play an important role in many African entrepreneurial ecosystems. Similarly, studies of crowdfunding consistently identify signals that increase campaign success, but does not establish if successful fundraising leads to long-term venture sustainability, survival, or growth.

The Entrepreneur's Perspective and Decision-Making Rationale

The reviewed literature, with one notable exception, infers financing motives from observed outcomes rather than examining startup founder's own account of the decision making process. Equally important, few studies investigate why African startups prefer one financing option over another. The literature thus, describe the sources of financing that startups obtain, but only provides limited insight into the decision-making processes that leads to those financing decision. Only Junge et al. (2022) in this review directly interviews entrepreneurs about why they chose a particular instrument, his findings suggest that founder-stated motives, such as validation-seeking or awareness-building, diverge systematically from what funding outcomes alone would imply, meaning that the absence of this voice may be distorting, rather than merely narrowing, the field's causal claims. The literature, in short, describes what financing startups obtain, but provides only limited insight into the decision-making processes that produce those outcomes.

Lack of Empirical Evidence on Financing Policies and Regulatory Interventions

While some studies examine investor behavior such Kabengele and Hahn (2025) and Mazzocchi and Lucarelli (2023) on crowd-investor signalling, and Wardiman et al. (2024) and Ribeiro and Serrasqueiro (2025) on SME financing choices, limited research evaluates the actual effects of financing policies and regulatory interventions. Evidence remains scarce on whether initiatives such as credit-guarantee schemes, crowdfunding regulations, or government support programs produce measurable improvements in startup financing outcomes.

Inconsistent Measurement of Financing Effectiveness and Venture Outcomes

Across the reviewed studies, financing effectiveness is operationalized inconsistently: survival (Wardiman et al., 2024), revenue or productivity growth (Ribeiro & Serrasqueiro, 2025), funding amount raised (Kabengele & Hahn, 2025), and campaign-level activity (Mazzocchi & Lucarelli, 2023) are each treated as the relevant outcome in different sub-bodies of literature, with little cross-referencing between them. The studies apply different measures of financing success, including survival, growth, funding amounts, and campaign performance. This inconsistency makes comparisons across financing models difficult because studies may be measuring the different dimensions of venture success. A more integrated outcome framework is required to enable meaningful evaluation of financing effectiveness. This inconsistency makes comparisons across financing models difficult because studies may be measuring different dimensions of venture success. A more integrated outcome framework is required to enable meaningful evaluation of financing effectiveness.

Limited direct Firm-Level Evidence from African Startup Ecosystems

Very few of the studies reviewed collect firm level data directly from African startups. The strongest evidence comes from Kabengele and Hahn (2025) based on the analysis of 335 startups. The empirical study limitation, cannot adequately represent the institutional and economic diversity of entrepreneurial finance across emerging African economies. More firm-level research across diverse African economies is required to establish context-specific explanations of startup financing behavior.

Table 7: Comparative Performance Matrix of Financing Models

Evidence strength scale used in the table matrix below:

***** = Very Strong Evidence / **** = Strong / *** = Moderate/ ** = Weak / * = Very Limited. Ratings are not citation counts. They reflect the convergence, methodological confidence, and contextual relevance of the evidence supporting each outcome. Direct African evidence is given greater contextual weight than evidence transferred from comparable emerging-market settings.

Outcome Dimension	Hybrid (Debt + Equity)	Venture Capital	Bank Financing	Equity Crowdfunding
Survival	**** Resilient via hybrid instruments; VC-backed debt buffers	**** Reduces liquidation; supports strategic exits	*** Stable but high collateral risk; crisis-era critical lifeline	*** Last-resort buffer; validates model but volatile
Profitability	**** Tax shields + equity upside; moderate leverage discipline	***** VC-backed firms outperform pre- and post-funding	*** Competitive rates; high interest burden for risky SMEs	** Campaign success ≠ post-offering profitability
innovation	**** Hybrid models fit R&D-intensive firms; bridges info asymmetry	***** Mentorship, networks, management expertise beyond capital	** Intangible-asset firms face credit rationing; R&D constrained	**** Crowd validates market; early customer involvement
Scalability	**** Equity-for-guarantee swaps enable leverage without heavy collateral	***** High-funding configurations in Africa	*** Policy-backed loans support export scaling; bureaucracy limits speed	*** Campaign overfunding signals scalable models; platform-dependent
Sustainability	**** Financial literacy + aligned maturities = sustainable debt management	*** Impact-oriented investors (DFIs) drive ESG-aligned growth	**** Bank-SME relationships strengthen with CSR; lower default risk	*** Sustainability signals attract crowd but not professionals
Africa context fit	**** Venture debt + microfinance bridge institutional voids	*** Disadvantages African founders; maturing ecosystem	*** Rural-urban gaps; institutional quality critical; informal networks fill gaps	** Limited platform infrastructure; low investor sophistication

Source: author's compilation (2026)

Key Comparative Findings

Across the reviewed evidence, venture capital shows comparatively strong documented associations with profitability, innovation, and scalability; however, much of this performance evidence comes from international or comparable-market studies rather than direct firm-level African evidence. The African evidence reviewed, particularly Kabengele and Hahn (2025), indicates that access to high levels of VC funding is shaped by founder networks, market scale, and local–international investor syndication. Accordingly, the review does not interpret the international performance evidence as proof that VC is universally superior for African startups; rather, it indicates potential benefits conditional on access and institutional context.

Bank financing offers the most stable platform for survival and sustainability outcomes, particularly for firms that have survived their early years and built credit histories. Wardiman et al. (2024) confirm that bank loans remain the preferred and most critical instrument during financial crises, suggesting that bank-startup relationship quality is a foundational element of ecosystem resilience. However, the collateral dependency and bureaucratic complexity of bank financing systematically exclude early-stage African startups, limiting its role to the consolidation phase of the startup lifecycle rather than the formation and growth phases.

Hybrid models emerge as the most theoretically compelling solution for bridging the gap between early-stage funding needs and the limitations of pure debt or pure equity strategies. By combining the ownership-preservation advantages of debt with the growth-enabling qualities of equity, hybrid instruments can be tailored to the specific institutional contexts of African markets. Ribeiro and Serrasqueiro (2025) find that government-backed guarantees, when combined with private lending, create hybrid credit structures that have successfully expanded access to finance in Brazil, Indonesia, and Canada with clear lessons for African policymakers. The emerging infrastructure of DFI co-investments with local African VC firms, documented by Kabengele and Hahn (2025), represents precisely this kind of hybrid logic operationalized at the ecosystem level.

ECF presents the weakest performance profile for African startups in the current evidence base, not because of inherent model limitations but because of the infrastructure, regulatory, and investor sophistication prerequisites that ECF requires to function effectively. The signals pointed out by Mazzocchi and Lucarelli (2023) as predictive of ECF success sophisticated LinkedIn networks, business education, professional investor participation, platform prescreening assume a digital and financial ecosystem that most African markets have not yet developed. ECF's promise as a democratizing financing tool thus remains largely unrealized on the continent within the reviewed period.

Thematic Synthesis of Financing Models

Table 6 provides a structured thematic synthesis of the four financing models, integrating theoretical mechanisms, key outcome evidence, Africa-specific findings, and critical limitations drawn exclusively from the reviewed sources.

Table 8: Thematic Synthesis of the Financing Models

Financing Model	Core Theoretical Mechanism	Key Evidence on Startup Outcomes	Africa-Specific Findings	Critical Limitations
Hybrid Financing (Debt + Equity)	Pecking order theory + trade-off theory; equity-for-guarantee swaps and bank-tax cooperation reduce collateral requirements; venture debt	Firms combining debt with VC credibility gain formal credit access; hybrid structures enable R&D-intensive ventures to access capital without sacrificing control; moderate leverage	Venture debt growing in emerging markets (India/Africa parallel); microfinance + P2P hybrid models reduce exclusion; institutional voids navigated through debt-equity	High complexity; financial literacy gap among African entrepreneurs; instruments poorly designed for cooperatives or collective ventures

	bridges financing gaps for scale-ups	imposes financial discipline	combinations in DFI co-investments	
Venture Capital	Signaling theory; homophily in investor decision making; institutional void mitigation through local-international VC syndicates; SEVO as fundraising signal	VC-backed firms outperform non-VC firms pre and postfunding; increases total sales productivity, job creation, and ROI; staged investment contracts provide non-financial value (mentorship, networks, market access)	Non-African founders historically favoured (homophily bias); African founders require international networks (studied/worked in Global North); later-stage ecosystem maturation expanding local founder access; DFIs shifting mandates toward local capacity-building	Deliberate discrimination not confirmed but systemic bias documented; limited local VC capital pools; small market sizes constrain scalability; governance conflicts in family businesses
Bank Financing	Agency theory (debt covenants align owner-manager interests); trade-off theory (tax shields vs. financial distress); information asymmetry reduced through sustained bank-SME relationships	Bank loans remain critical lifeline during financial crises; reduce borrowing costs for established SMEs; policy-backed loans support export growth; bank-SME sustainability relationships lower default risk and raise net interest margins	Rural-urban financing disparities pronounced; weak creditor protection and underdeveloped legal systems discourage lending to new firms; informal lending networks fill gaps at high cost; government guarantee programs partially offset institutional voids	High collateral requirements exclude early-stage firms; high interest rates for risky SMEs; complex bureaucracy; loan amounts often insufficient for growth-stage capital needs
Equity Crowd-Funding (ECF)	Signaling theory (hard + soft information signals); information cascade and herding behaviour; principal-agent theory; pecking order (ECF as last resort or fallback option)	ECF success driven by human capital signals (education, experience), social capital (LinkedIn networks), team diversity, and entrepreneur commitment (equity retention); campaign quality signals including pitch video, readability, and professional investor presence positively influence outcomes	Very limited Africa-specific ECF evidence in reviewed studies; general emerging-market parallel: ECF used by financially constrained firms unable to access traditional credit; digital infrastructure gaps limit platform penetration in African markets; investor sophistication low	Post-offering performance weak; last-resort positioning signals distress; herding and information manipulation risks; platform infrastructure under-developed in Africa; ECF success does not guarantee venture sustainability

Source: Author's compilation (2026)

Which Financing Model or Combination Best Supports African Startup Sustainability

The evidence synthesized across the reviewed sources converges on a conditional answer: no single financing model is universally optimal for startup sustainability in emerging African economies. Rather, the

effectiveness of each model is contingent on three dimensions :the stage of the startup lifecycle, the quality of the institutional environment, and the human capital profile of founders.

For early-stage startups with limited credit histories and intangible assets, the evidence points toward hybrid models combining government-backed guarantees with private debt as the most accessible and survival-enhancing option, supplemented by impact-oriented VC where available. Kabengele and Hahn (2025) demonstrate that the single necessary condition for high VC funding in Africa is the presence of international investors suggesting that the DFI-local VC co-investment syndicate structure, itself a hybrid model, currently represents the most viable pathway to substantial early-stage equity financing for African startups.

For growth-stage startups with demonstrable revenue and market traction, venture capital with strong local VC co-investment emerges as the superior model for scaling, innovation, and profitability outcomes. The maturing ecosystem dynamics documented by Kabengele and Hahn (2025) suggest that African founders who combine international network credentials with SEVO and local market expertise are increasingly able to access these configurations. The convergence of maturation dynamics and DFI mandate evolution toward local capacity-building represents a structural shift that, if sustained, will expand this pathway to a broader range of African founders.

Bank financing is most effective as a sustainability and consolidation instrument for startups that have survived their early years, built bankable credit relationships, and developed sufficient cash-flow predictability to service debt. Ribeiro and Serrasqueiro (2025) emphasise that financial literacy is a critical moderator of bank financing effectiveness: entrepreneurs who can produce credible financial projections, negotiate loan terms, and manage leverage prudently extract disproportionate value from bank credit channels. This implies that financial literacy programs embedded in incubators and accelerators a recommendation made by both Ribeiro and Serrasqueiro (2025) and Wardiman et al. (2024) are a precondition for bank financing to fulfil its potential as a startup sustainability instrument.

ECF currently offers the weakest contribution to startup sustainability in African markets, given structural barriers to effective platform operation. However, as a market validation and investor readiness tool for fintech-adjacent startups in Africa's most developed ecosystems (Lagos, Nairobi, Cairo), ECF may increasingly complement rather than substitute for institutional financing, particularly as mobile money infrastructure and regulatory frameworks evolve. Mazzocchi and Lucarelli's (2023) finding that accelerator participation prior to ECF campaigns increases funding success suggests a complementarity pathway: incubator-supported startups using ECF as a validation stage before accessing institutional VC or bank credit.

Implications for Practice, Policy, and Future Research

For policymakers and development finance institutions, the review findings suggest that financing policy for African startups should move beyond single-instrument approaches toward integrated, lifecycle-sensitive financing ecosystems that sequence and combine multiple instruments as startups move through growth stages. The design of hybrid blended finance instruments that de-risk private co-investment in early-stage African startups represents the most promising policy intervention supported by the current evidence base.

For startup founders and ecosystem builders, the findings highlight the importance of building institutional relationships with multiple financing sources from an early stage, and of managing the transition from bootstrapping to external financing with deliberate strategic intent. The evidence on equity aversion among African founders suggests a need for investor education and trust-building programmes that reframe equity investment as partnership rather than loss of control.

For future research, this review identifies the following priority directions: (1) longitudinal cohort studies tracking the relationship between financing model choice and startup survival outcomes over five to ten year horizons in African markets; (2) comparative studies explicitly designed to assess financing model effectiveness across different African institutional environments; (3) experimental or quasi-experimental evaluation of blended finance programme impacts; and (4) qualitative studies exploring the behavioural and cultural determinants of financing model choice among African startup founders. These priorities correspond

directly to the gaps identified in Section 4.9: priority (1) responds to G6/G7, priority (2) responds to G4, priority (3) responds to G1, and priority (4) responds to G3.

CONCLUSION

This literature review synthesizes evidence from the reviewed studies to evaluate the effectiveness of hybrid financing, venture capital, bank financing, and equity crowdfunding in supporting startup sustainability, survival, and growth in emerging African economies. The evidence confirms that all four models make distinct contributions to startup outcomes, but their effectiveness is profoundly shaped by institutional context, founder characteristics, and ecosystem maturity. Venture capital offers the strongest performance potential but is distorted by homophile and access barriers; bank financing provides stability but excludes early-stage ventures; hybrid models offer the most adaptable architecture for bridging financing gaps across the startup lifecycle; and ECF remains underdeveloped as an African financing solution despite theoretical promise. Reading this evidence thematically rather than only model by model, further shows that the field's deepest agreement is on causal information asymmetry and its sharpest silence is on combination: how African entrepreneurs actually sequence and blend these four instruments over a venture's lifetime remains, on the evidence reviewed here, an open empirical question rather than a settled one.

The evidence supports a conditional, lifecycle-sensitive financing pathway rather than a universally optimal financing sequence. Hybrid and guarantee-supported instruments appear particularly relevant where early-stage collateral and information constraints are severe; VC may become more relevant during growth when ventures demonstrate traction and can access appropriate investor networks; and bank financing may become more feasible at later stages when cash flows and credit histories are more predictable. This pathway is a synthesis of the reviewed evidence and should not be interpreted as a directly tested causal sequence, because none of the 35 reviewed studies evaluates the full financing sequence longitudinally in African startups.

The most empirically supported answer to the research question is that a sequenced combination of hybrid instruments in the early stage, transitioning to VC-backed debt in the growth stage, and consolidating through bank financing in the maturity stage offers the greatest support for startup sustainability in African emerging economies. Realizing this combination requires coordinated action by policymakers (strengthening institutional quality and guarantee programs), investors (mitigating homophilic biases and expanding DFI co-investment mandates), and ecosystem builders (embedding financial literacy in startup support infrastructure). Future research should extend this analysis to sector-specific and country-specific African contexts, track post-offering ECF performance, and investigate the psychological dimensions of debt management for African entrepreneurs navigating these complex financing landscape

Future Research Direction

Moving forward, this paper has identified several research gaps and several ways future research can go about filling in these gaps, as follows:

(1) The field of startup financing has not paid much research attention to studies that explore how startups combine, sequence, or transition between multiple financing models. Future research is strongly encouraged to go beyond examining individual financing model in isolation and instead adopt longitudinal or panel research design capable of tracking African startups across multiple financing stages. Such studies should establish whether ventures progress sequentially from personal or informal finance to bank lending, venture capital, or other financing sources; whether combining financing instruments results in better venture outcomes than relying on a single source; and whether financing effectiveness varies systematically across different stages of the startup lifecycle. Designs of this kind would allow the field to move from describing what each financing model does in isolation to explaining how African entrepreneurs actually navigate financing decisions as their ventures mature.

(2) Informal and indigenous financing mechanism have received comparatively little research attention in the startup financing literature. Future research should explore family finance, rotating savings and credit associations (ROSCAs), community lending arrangements and diaspora investment as alternative financing

mechanisms, but also how they complement or substitute formal financing models. Similarly, research on equity crowdfunding should not only examine campaign-level success measures but also consider whether successfully funded ventures achieve sustained growth, long-term survival and business sustainability.

(3) Future studies should directly involve African startup founder's or Management to understand why they choose some financing instruments over the alternatives available, extending the qualitative approach pioneered by Junge et al. (2022) but adapted to the African entrepreneurial context. This research would help to show if financing motivations stated by startup founder's or Management differ from those suggested by funding outcomes and would provide decision-making insights that outcome-based studies cannot inherently provide.

(4) Development of a common outcome-measurement framework of startup success. Future research needs to move beyond fragmented and financing-model-specific success measures, and develop and validate an integrated outcome-measurement framework that reflects the multidimensional character of financing effectiveness, including venture survival, revenue and productivity growth, capital acquisition, and campaign-level performance. Such efforts would facilitate more coherent comparison across financing streams, refine the conceptual understanding of what constitutes financing success, and avoid treating distinct outcomes as interchangeable under the broad and often inconsistent label of "success."

REFERENCES

1. Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39, 218–228.
2. Adesanya, A., & Ifere, S. (2025). Entrepreneurship financing: A shift to crowdfunding as enabler of startup and business sustainability. *UNILAG Journal of Business*, 11(1), 1–11.
3. Ahmad, N. S. M., & Atniesha, R. A. A. (2018). The pecking order theory (POT) and start-up financing of small and medium enterprises (SMEs): Insight into available literature in the Libyan context. *Financial Markets, Institutions and Risks*, 2(4), 5–12. [https://doi.org/10.21272/fmir.2\(4\).5-12.2018](https://doi.org/10.21272/fmir.2(4).5-12.2018)
4. Al-Khazaleh, S., Badwan, N., Al-Smadi, R., Aldallai, B., Darwazeh, R., & Abdallah-ou-Moussa, S. (2026). Access to finance, financial constraints and financial inclusion: a literature review and future directions for FinTech innovations. *Research in Globalization*, 100331.
5. Arrieta-Paredes, M. P., van Klyton, A., Scott, J. M., Danowski, J., Duque, K., & Byombi Kamasa, V. (2026). Entrepreneurial finance, news media narratives, and productive entrepreneurship in Rwanda's entrepreneurial ecosystem: an entrepreneurial resourcefulness perspective. *International Journal of Entrepreneurial Behavior & Research*, 1–24.
6. Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe. *Small Business Economics*, 29(4), 415–434.
7. Babich, V., Marinesi, S., & Tsoukalas, G. (2021). Does crowdfunding benefit entrepreneurs and venture capital investors? *Manufacturing & Service Operations Management*, 23(2), 508–524.
8. Beck, T., Demirguc-Kunt, A., & Singer, D. (2013). Is small beautiful? Financial structure, size, and access to finance. *World Development*, 52, 19–33.
9. Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel evidence. *Journal of Banking and Finance*, 28(3), 423–442.
10. Bellavitis, C., Filatotchev, I., Kamuriwo, D. S., & Vanacker, T. (2017). Entrepreneurial finance: new frontiers of research and practice: Editorial for the special issue Embracing entrepreneurial funding innovations. *Venture Capital*, 19(1–2), 1–16.
11. Berger, M., & Gottschalk, S. (2021). Financing and advising early stage startups: the effect of angel investor subsidies. *ZEW-Centre for European Economic Research Discussion Paper* (21-069).
12. Bonini, S., & Capizzi, V. (2019). The role of venture capital in the emerging entrepreneurial finance ecosystem: future threats and opportunities. *Venture Capital*, 21(2–3), 137–175.
13. Brixiova, Z., Kangoye, T., & Yogo, T. U. (2020). Access to finance among small and medium-sized enterprises and job creation in Africa. *Structural Change and Economic Dynamics*, 55, 177–189.
14. Burżacka, M. (2017). Building an optimal capital structure of start ups. *Gospodarka w praktyce i teorii*, 48(3).

15. Camilleri, M. A., & Bresciani, S. (2024). Crowdfunding small businesses and startups: a systematic review, an appraisal of theoretical insights and future research directions. *European Journal of Innovation Management*, 27(7), 2183–2209.
16. Celestin, M., & Vanitha, N. (2018). How to fund your startup: Innovative approaches for aspiring entrepreneurs. *International Journal of Advanced Trends in Engineering and Technology (IJATET)*, 3(2), 43–49.
17. Cole, R. A., & Sokolyk, T. (2018). Debt financing, survival, and growth of start-up firms. *Journal of Corporate Finance*, 50, 609–625.
18. Colombo, G. D. C., Gomes, M. D. C., Eça, J. P. A., & Valle, M. R. D. (2023). Analysis of the capital structure of startups in light of the tradeoff and pecking order theories. *REGEPE Entrepreneurship and Small Business Journal*, 12(3), e2338.
19. Correia, S., Sousa, M., & Brandão, E. (2024). What do we know about the choices of entrepreneurs before the equity crowdfunding campaign? *Small Business Economics*, 63(4), 1471–1501.
20. Cumming, D., Meoli, M., & Vismara, S. (2021). Does equity crowdfunding democratize entrepreneurial finance? *Small Business Economics*, 56(2), 533–552.
21. Davila, A., Foster, G., & Gupta, M. (2003). Venture capital financing and the growth of startup firms. *Journal of Business Venturing*, 18(6), 689–708.
22. Dekker, D., Galeano-Duque, V., & Christopoulos, D. (2026). Effects of venture debt on early- and late-stage funding of tech startups in tech ecosystems. *International Review of Economics & Finance*, 108, 105196.
23. Derdabi, A., & Dvouletý, O. (2025). Funding sustainable entrepreneurship: a hybrid systematic literature review and bibliometric analysis. *Nankai Business Review International*, 16(2), 359–380.
24. Drover, W., Busenitz, L., Matusik, S., Townsend, D., Anglin, A., & Dushnitsky, G. (2017). A review and road map of entrepreneurial equity financing research: Venture capital, corporate venture capital, angel investment, crowdfunding, and accelerators. *Journal of Management*, 43(6), 1820–1853.
25. Eldridge, D., Nisar, T. M., & Torchia, M. (2021). What impact does equity crowdfunding have on SME innovation and growth? An empirical study. *Small Business Economics*, 56(1), 105–120.
26. Ermawati, Y. (2024). Entrepreneurial finance strategies for startup success. *Advances in Economics & Financial Studies*, 2(2), 67–75.
27. Esho, E., & Verhoef, G. (2018). The funding gap and the financing of small and medium businesses: An integrated literature review and an agenda.
28. Fowowe, B. (2017). Access to finance and firm performance: Evidence from African countries. *Review of Development Finance*, 7(1), 6–17.
29. Fred-Sawo, C. I., & Onuoha, B. C. Startup financing models and their effectiveness: A comparative study of crowdfunding and traditional loans in early-stage enterprises.
30. Golder, U., & Barua, S. (2025). The dynamic linkage between fintech venture capital funding, bank credit flows, and equity market movement: evidence from a global perspective. *Financial Innovation*, 11(1), 120.
31. Hoque, M. M. (2024). Crowdfunding for innovation: a comprehensive empirical review. *Future Business Journal*, 10(1), 102.
32. Idi, K. I. A., & Germinah, C. T. E. (2022). Venture capital financing as a driver for entrepreneurship development in Africa: A literature review and future research agenda. *IJEBD (International Journal of Entrepreneurship and Business Development)*, 5(6), 1183–1198.
33. Igwe, P. A., Emeordi, R., & Nkanta, I. (2024). Entrepreneurial financing of small and medium enterprises. *Reference Module in Social Sciences*.
34. Ismaila, B. (2023). The state of crowdfunding in Africa and its potential impact: a literature review. *International Journal of Research in Business & Social Science*, 12(5).
35. Junge, L. B., Laursen, I. C., & Nielsen, K. R. (2022). Choosing crowdfunding: why do entrepreneurs choose to engage in crowdfunding? *Technovation*, 111, 102385.
36. Kabengele, C., & Hahn, R. (2025). Venture capital funding in Africa: a mixed-methods study of evolving ecosystems and financial discrimination. *Journal of International Business Studies*, 56(6), 777–794.
37. Kato, A. (2021). A literature review of venture capital financing and growth of SMEs in emerging economies and an agenda for future research. *Academy of Entrepreneurship Journal*, 27(1), 1–17.

38. Kato, A. I. (2024). Building resilience and sustainability in small businesses enterprises through sustainable venture capital investment in sub-Saharan Africa. *Cogent Economics & Finance*, 12(1), 2399760.
39. Klein, M., Neitzert, F., Hartmann-Wendels, T., & Kraus, S. (2019). Start-up financing in the digital age: A systematic review and comparison of new forms of financing. *The Journal of Entrepreneurial Finance (JEF)*, 21(2), 46–98.
40. Krishna, K., & Bhasin, S. (2025). Financing green startups in developing markets: A systematic review of structural and perceptual gaps. *International Journal of Financial Management and Economics*, 8(2), 88–94.
41. Kukurba, M. (2018). Crowdfunding as a form of funding for businesses in the culturally-changing global economy: a literature review. *Journal of Intercultural Management*.
42. Lerner, J. (2009). *Boulevard of broken dreams: Why public efforts to boost entrepreneurship and venture capital have failed — and what to do about it*. Princeton University Press.
43. Lödar-Miculeac, R., Ulrich, K., Hernández, J., & Eastwood, N. (2026). Attracting business angels to finance entrepreneurial ventures: successful ways for startups to raise funds. *International Entrepreneurship and Management Journal*, 22(2), 82. \
44. Marpaung, N., Eriza, F., Manurung, R. P., Fauzan, A. L., & Sitorus, G. M. (2026). Hybrid funding innovation based on debt and equity collaboration for MSME funding in North Sumatera. *Journal of Management Analytical and Solution (JoMAS)*, 6(1), 6–16.
45. Mazzocchi, F. J., & Lucarelli, C. (2023). Success or failure in equity crowdfunding? A systematic literature review and research perspectives. *Management Research Review*, 46(6), 790–831.
46. Megersa, K. (2020). Improving SMEs' access to finance through capital markets and innovative financing instruments: some evidence from developing countries.
47. Mitra, D. (2012). The role of crowdfunding in entrepreneurial finance. *Delhi Business Review*, 13(2), 67.
48. Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
49. Quartey, P., Turkson, E., Abor, J., & Iddrisu, A. (2017). Financing the growth of SMEs in Africa: What are the constraints to SME financing within ECOWAS? *Review of Development Finance*, 7(1), 18–28.
50. Rao, P., Kumar, S., Chavan, M., & Lim, W. M. (2023). A systematic literature review on SME financing: Trends and future directions. *Journal of Small Business Management*, 61(3), 1247–1277.
51. Ribeiro, C., & Serrasqueiro, Z. (2026). Debt financing in entrepreneurship: a systematic literature review. *Journal of Small Business and Enterprise Development*, 1–20.
52. Romero Alvarez, Y. P., Salas-Navarro, K., Martínez, L. B., & Zamora-Musa, R. (2026). Financing innovation in SMEs: a systematic review of financing channels. *International Journal of Innovation Science*, 18(2), 524–563.
53. Sanga, B., & Aziakpono, M. (2023). FinTech and SMEs financing: A systematic literature review and bibliometric analysis. *Digital Business*, 3(2), 100067.
54. Sukachova, S., Vytrykhovskiy, Y., Korneev, V., Gaponiuk, M., & Borodenko, T. (2025). Innovative startup financing models: Venture capital and crowdfunding. *International Journal of Economics and Financial Issues*, 15(4), 427–433.
55. Svetek, M. (2022). Signaling in the context of early-stage equity financing: review and directions. *Venture Capital*, 24(1), 71–104.
56. Tagliatala, J., & Mina, A. (2024). Innovation, asymmetric information and the capital structure of new firms. *Economics of Innovation and New Technology*, 33(7), 955–978.
57. TSUSHI, N., & Yoshiaki, N. O. S. E. (2025). The "shelf life" of patent signals: Empirical research on startup financing in Japan. *Finance Research Open*, 100063.
58. Tuffa, W. A., Hunegnaw, F. B., & Habtewold, T. M. (2025). Comparative analysis of innovation financing mechanisms for tech startups: Evidence from Ethiopia, Kenya, and Uganda. *Journal of Risk and Financial Management*, 19(1), 1.
59. Tykvova, T. (2018). Venture capital and private equity financing: An overview of recent literature and an agenda for future research. *Journal of Business Economics*, 88(3–4), 325–362.
60. Virgen, M. (2026). Financing sources for venture capital: How startups secure financing. Available at SSRN 6530098.

-
61. Wardiman, J., Wardi, Y., Marwan, M., & Nofriansyah, N. (2024). Exploring debt financing option for SME's: A systematic literature review. *Journal of Management: Small and Medium Enterprises (SMEs)*, 17(3), 1321–1337.
 62. Winton, A., & Yerramilli, V. (2008). Entrepreneurial finance: Banks versus venture capital. *Journal of Financial Economics*, 88(1), 51–79.
 63. Wright, F. (2017). How do entrepreneurs obtain financing? An evaluation of available options and how they fit into the current entrepreneurial ecosystem. *Journal of Business & Finance Librarianship*, 22(3–4), 190–200.