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[Government finance, loans, and guarantees for small and medium enterprises \(SMEs\) \(2000–2021\): A systematic review](#)

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[ABSTRACT](#)

Governments across jurisdictional boundaries leverage financial incentives as a policy strategy to support and develop the business of small and medium enterprises (SMEs). This study is a systematic review of the literature on direct governmental finance to SMEs through loans, guarantees, and credit lines between 2000–2021. Among the 89 studies identified for inclusion, four themes emerged: provision of government loans, other government finance provision, external reasons for government finance provision, and the purpose and outcomes of government financing. The key managerial and finance findings in this study are that a greater awareness among SMEs is needed for accessing existing financial incentives from the government. Likewise, regarding government policy, this study highlights a need to clarify the purpose of loan provision to SMEs.

Finally, despite calls by researchers for more qualitative assessments of SMEs and targeted government loan provision, there remains a lack of evidence to characterize this interrelationship in practice.

KEYWORDS: Government financing government guaranteed loans small business loans small business finance government venture capital

Introduction

Throughout history, governments around the world have lauded small businesses as the engine room of their respective economies, attempting to draw favorable implications from the correlation between government-supported small business finance and economic growth. However, the relationship between government-backed debt for small and medium enterprise (SMEs) and economic growth indicators is perhaps more complex than popular media may suggest. Globally, governments have turned to financial and non-financial incentives for SMEs as a strategic economic policy. This policy has involved some degree of government intervention in credit markets, direct government grants and loans, and government guarantees on loans (Craig et al., Citation2011; Rubin & Ben-Aharon, Citation2021). These schemes have sought to strengthen the viability of SMEs in local and international markets and offer an important source of funding for small businesses not yet capable of obtaining private loans or bank loans, nor having access to venture capital firms.

In recent history, governments have progressively increased the volume of government finance available to SMEs. The British Business Bank (Citation2019), for example, provided £3.2 billion GBP in loans to SMEs from 2009 to 2019; the US Small Business Administration (Citation2019) held \$6.2 billion USD in government finance loans to SMEs at the end of the 2019 calendar year. Likewise, almost \$19 billion CD was provisioned across 169,104 loans during 1999–2018 through the Canadian Small Business Finance Program (ISED Citizen Services Centre, Citation2019). Collectively, these programs contribute a significant source of funding to their respective SME financial capital markets. Therefore, it is critical to evaluate these programs for their efficacy in enabling SMEs and economic growth (Rao et al., Citation2021).

The coronavirus disease 2019 (COVID-19) pandemic led to rapid growth in the perceived and actual role of governments in the provision of financial support to SMEs through one-time grants and loans for an economic downturn. In Australia (ATO, Citation2021), these provisions came in the form of regular cash payments from the federal government to businesses for employee wages during COVID-19 lockdowns and periods of reduced economic activity. Meanwhile, in the United Kingdom and United States, similar initiatives—such as the Coronavirus Business Interruption Loan Scheme (CBILS), Bounce Back Loans Scheme ((BBLs) Browning, Citation2022) and COVID-19 Economic Injury Disaster Loan (EIDL), and Small Business Administration (SBA) Debt Relief program (USA Gov, Citation2021)—were responsible for keeping many small businesses in viable operation during sustained periods of turbulence. These policies supported a rapid emergency response to the effect of the pandemic on small business, drawing on often disparate research. This study both considers changes made during 2020–2021 in response to the COVID-19 pandemic and focuses greater attention on the literature between 2000–2019 regarding broader implications of government financing of SMEs through loans.

While we recognize some significant and seminal scholarly works in government finance of SMEs, to our knowledge this study is the first systematic review on the topic. The importance of this work is in enabling a clear foundation for research on post-pandemic government SME finance and to support consolidation and clarification of the current knowledge on this topic. This study will support a clear and informed position on how governments manage their interactions with credit, loans, and guarantees for SMEs. While some studies focus solely on jurisdictional analysis (e.g., Baker et al., Citation2020; Kumar & Rao, Citation2015; Rao et al., Citation2021), this study examines the global perspective. The value and importance of this study is its presentation of summative knowledge on how governments use finance to influence the profitability and success of SMEs as part of their government strategy (e.g.,

Lim et al., Citation2022). To this end, this study seeks to address the following research question:

RQ:

How does the published literature articulate current knowledge of government finance in the form of guarantees and loans to small and medium enterprises?

This study focuses on how governments provide credit, loans, guarantees, and financing to SMEs and the role they seek to have in sustainability and growth of domestic SMEs. Notably, the study focus is not on government grants and non-financial supports to SMEs. This study organizes the literature to consider government credit, loans, guarantees, and financing during the COVID-19 pandemic. While governments provide considerable other support—both financial and non-financial—to SMEs, the focus of this study relates to the provision of debt finance with a form of repayment attached, such as loans or credits. It also considers government venture capital and participative loan arrangements, given these are funds are at least partially tied to equity or profits. The study excludes grants, one-time finance payments without repayment or equity ties, tax rebates and incentives, and soft supports. These supports are important components of government financing policy; however, they were excluded to enable sufficient depth in this manuscript regarding direct and tied government financing arrangements.

The purpose of this study is to systematically review the extant literature relating to how governments provide direct financial support to micro, small, and medium enterprises. The aim of the study is to better understand how governments support smaller business organizations to establish themselves through the provision of temporary funding, loan schemes, and loan guarantees. The significance of this research is to support a more holistic understanding of how different levels and jurisdictions of government approach the provision of finance to SMEs.

Theoretical framework

Studies on SMEs often adopt perspectives of life-cycle foundations (Rao et al., Citation2021), given that many studies assume a relationship exists between the types of finance provisions needed and the stage of life in which the SME is situated. While this perspective is valuable, the current study diverges from this point of view. Instead of examining life cycle, this study applies agency theory. Agency theory is one method of explaining how principal parties provide agentic power to a third party (the “agent”) to achieve the goals of the principal (Eisenhardt, Citation1989). In this regard governments, as principals, use provision and deployment of financial resources to provide agency to SMEs that employ constituents of that government to achieve broader economic growth. In this regard, studies on matters such as private–public partnerships would be excluded on the basis that the government is no longer a principal, but rather a partner in the relationship.

Method

This study uses a systematic review method to address the research question, guided by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) Statement (Moher et al., Citation2009), a structured search strategy, and thematic analysis (Braun & Clarke, Citation2006) to identify and define emergent themes. Systematic reviews are an important method for summarizing extant research on SMEs (Kraus et al., Citation2021).

Search strategy

The search strategy for this study includes two phases. First, a database-driven search using EBSCOhost, Web of Science, Scopus, PsycInfo and PubMed were used (based on Iwelunmor et al., Citation2020). This search was limited to academic journals, English language articles, and publication dates between 1 January 2000 and 31 December 2022. The search phrase was:

Title (small business OR SME OR small-medium enterprise OR small medium

enterprise OR small firm OR small company OR start-up) AND abstract (government) AND abstract. (financ* OR lending OR credit OR borrowing OR guarantee OR loan)

The second phase included a manual Google Scholar search to identify any missing articles (within the the first 10 search result pages), and a snowball search of reference lists for articles in the final sample. Articles identified in these stages were added at the screening stage (Table 1).

Table 1. Search results.

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Selection procedure and quality assessment

The PRISMA Statement (Figure 1: Moher et al., Citation2009) highlights the progression of 1,238 manuscripts identified for potential inclusion, with 282 duplicates identified. The PRISMA search strategy is commonly used in finance and small business research (e.g., Mago & Modiba, Citation2022; Malki et al., Citation2020; Saddiq & Bakar, Citation2019). Through a double screening of title and abstracts (n=636 excluded), and a double full-text review (n=231 excluded), a total of 867 articles were excluded. In cases of conflict, a third reviewer was used to generate consensus.

Figure 1. PRISMA statement.

Figure 1. PRISMA statement.

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Manuscripts were excluded in full-text reviews for several key reasons. As seen in the PRISMA (Figure 1), the primary exclusions in screening were because the studies were not explicitly related to how governments finance SMEs; for example, in some studies, the word "government" was used in the abstract, but the study itself only referred to private bank loans with implications for government policy, or the framing was not explicitly directed toward SMEs. More specifically, 81 papers had references to government finance but did not refer to specific government finance instruments. For example, Le Trinh (Citation2019) discussed government finance policy generally, but did not identify specific financial instruments that made up this measurement. While interesting generally, the focus of this study was related to how specific government financing mechanisms were used and for what purpose. In addition, 39 manuscripts were related to government support generally, rather than on government finance. For example, Chundakkaden et al. (Citation2022, p. 5) measured government support in response to this research question: "Has this establishment received any national or local government support in response to the COVID-19 crisis?" Some studies focused mainly on commercial bank financing (n=14) or had recommendations related to government finance policy without it being a component of their study (n=10), and some studies were of considerable low quality (n=24). Low-quality studies included those with no information about sample, analysis methods, or tests conducted without any material justification or assumption disclosure. The latter were excluded because the authors could not identify a full-text (n=32) or the articles were not peer-reviewed, which was missed in the screening (n=31). The final sample for the current study was 89 manuscripts.

Thematic analysis

With the final sample (n=89), thematic analysis was used to identify and code themes (Braun & Clarke, Citation2006). The method aimed to complete six steps: data familiarization, data coding, theme searching, thematic review, defining each theme, and naming themes. This approach resulted in 266 manuscript references to 13 sub-themes. The 13 sub-themes were grouped into four higher level themes: provision of government loans, other government finance provision, external reasons for government finance provision, and the purpose and outcomes of government financing (see Table 2). In this coding, the first block of manuscripts were coded inductively (those published up until 31 December 2021), with manuscripts published in 2022 being coded deductively using the codes established in the first thematic analysis, as well as a rechecking of the initial dataset against the established themes for any missing links.

Table 2. Themes, subthemes, and definitions.

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Results

Each article referenced in the current study had at least one form of direct government finance, and some referred to multiple forms (Table 3). This approach highlights that traditional loans and loan guarantees dominate most published literature in the 21st century, in contrast to less conventional financing arrangements through state banks (Beck et al., Citation2011), relationship lending, venture capital, participation loans, microcredit, and credit. Importantly, while the full sample provided useful commentary on government financing of SMEs, some articles provided equivalent or similar arguments. When this redundancy occurred, the current study opted for a representative reference to ensure readability of findings.

Table 3. Types of government finance by references.

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Provision of loans
Government loans

Traditional government loans, unsurprisingly, made up the second largest theme (n=37, 25.96% of references), after government loan guarantees. The empirical studies that discussed government loans to SMEs had mixed findings. A key study within the sample identified that across 11 Organisation for Economic Co-operation and Development countries no significant relationship existed between direct government loans and economic growth or employment improvement (Seo, Citation2019), confirmed in Tambunan (Citation2008a, Citation2008b). Yet, some research does highlight government loan success. In Xiao and Richie (Citation2009), government loans seemed to be overrepresented in their SMEs in the start-up period, but diminished over time in their representation against alternative funding sources. Australian provision of loan support was seen to support and incubate start-up enterprises (Hefferan & Fern, Citation2010); likewise, Pakistani and Romanian SME loans supported long-term competitive performance (Alkahtani et al., Citation2019).

In contrast, Afful-Dadzie and Afful-Dadzie (Citation2005) highlighted that government loans were argued as only effective for SMEs when other government and private support mechanisms were deployed. Across multiple studies, a similar argument was made, with the use of soft supports, including market research and product development, argued as a key parallel to government finance (Hynes, Citation2010; Kuzilwa, Citation2015). In Kuwait, a considerable number of businesses subsequently failed after receipt of government financial support (Al-Ahmad, Citation2012). Some studies spoke to the challenges of government financing, with Kutsuna (Citation2020) highlighting the lack of timeliness and heavy "red-tape" (meaning excessive bureaucracy) attached to government finance screening that results in some businesses not being able to seek financing from government sources. In Poland and Belgium, financing programs were argued to require greater focus to align them with the SMEs needing support, creating distinct liquidity gaps (Bozkaya & Van Pottelsberghe De La Potterie, Citation2008; Klonowski, Citation2008). Interestingly, there was a clear divide in efficacy studies of loan provision in specific jurisdictions, pointing to a need to better understand the vision and alignment of the loan provision with the outcomes of SMEs.

Government-owned banks and state-owned corporation loans

Government-owned banks represented a small portion of the loan provision sample (n=10, 9.61%). In context of the studies included, most spoke to the interventionist nature of the government-owned bank in times of economic difficulty. For example, Beck et al. (Citation2011) compares loan strategies between 91 banks across 45 countries, including government-owned banks, domestic private banks, and foreign-owned banks. Their study found that government-owned banks were less likely to see "soft information" as significant, preferred to decentralize loan approvals for small business, and were more likely to seek

collateral for medium businesses rather than relationship lending. Government-owned banks also tended to loan to larger firms with lower interest rates, and to “lend for political motives” (p. 43). This commentary is consistent in different jurisdictions (e.g., Oloare et al., Citation2020), with a similar comparative Taiwanese study articulating that while foreign banks reduced credit lines in recession, domestic private did not reduce available credit, and public banks increased credit lines (Shen et al., Citation2016). In Britain, the same case was made for a government-owned bank as having the role to support the provision of finance (including loans) when structural market failure limited SME access to capital or when cyclical issues in the SME financial markets emerged (van der Schans, Citation2015; Xiao & Richie, Citation2009). For Nigeria, there seemed to be a reliance in-part on private contributions to state-owned banks to support their expansion, as opposed to purely government-funded support (Kessey, Citation2014). Thus, whereas government-owned banks occupied a similar landscape to foreign and domestic private banks, their role as a policy lever drove them to different loan practices.

Loan defaults

Many studies discussed how government loans and other finance was provided and their broad purpose; however, only a few discussed or measured loan defaults (n =5, 1.88%). For each of these studies, correlation was found between initial capital of SMEs and the rates of SME loan defaults, especially for cases in which a government premium was offered (Cowling & Mitchell, Citation2020). The intended operational costs of the SME is another measure that indicated the level of risk for the lender to assess the borrower’s ability to repay the loan (van der Schans, Citation2001); for example, in the food and beverage sector, where there are many high-cost factors, lenders are likely to default their loans (Riding & Haines, Citation2020). Interestingly, arguments were made that provision of loan guarantees by government tended to decrease the rate of default (Hackney, Citation2023). As an outcome of this review, more work is required regarding both the effects of and responses to government financing defaults.

Government assessment of loans

While many articles discussed briefly how SMEs were assessed for finance, few were dedicated to the results of the assessments (n=4, 1.50%). These studies were, however, diverse in their presentation. First, Kim and Yasuda (Citation2018) examine the assessments used for transactional government guaranteed loans. They highlight that higher quality of accounting information (particularly accrual and cashflow) was related to usage of guaranteed government loans. In situations of lower-quality accounting information, the interest rate for relationship lending was higher. Second, creditworthiness of Turkish SMEs that received government support was examined given these businesses typically did not qualify for traditional bank loans and credit (Caner & Karan, Citation2012). These considerations were company and product information, goals, market structure, and planning documents, including marketing, production, organizational, and financial materials.

Afful-Dadzie and Afful-Dadzie (Citation2005) highlighted that government venture capital financing was often critiqued for investing in early-stage innovation based on policy rather than merit-based assessments. Their theoretical model suggests a greater use of qualitative datasets to make decisions on finance provision. In the Taiwanese sample, SME applications for credit were more successful if the creditor perceived a social (e.g., job prospects) and economic benefit (e.g., exports) over business profitability (Kuo et al., Citation2011). Interestingly, across the small sample was a consistent commentary regarding the lack of “arm’s length” government assessments, and the need to focus more heavily on qualitative models in situations in which traditional bank and venture capital investment or loans would not be provided.

Non-loan government lending

Government loan guarantees

Government loan guarantees were the most represented type of government finance within the sample (n=37, 35.56%). Because this finance type was a considerable

theme, this study considers each manuscript in more depth in Table 4. As can be observed from an analysis presented in Table 4, several key findings consistently arise regarding government guarantees. When plotting the impact of the number of government guarantees extended to SMEs on economic growth metrics, arriving at a significant positive correlation was by overwhelming consensus. However, causation was consistently a much harder metric to demonstrate; when an attempt was made to control for other contributing factors to economic growth metrics, many scholars struggled to preserve a significant positive correlation between number of government guarantees issued to SMEs and the economic growth of that region (Jia, Citation2013; Nigrini & Schoombee, Citation2002). It is also observed throughout the empirical studies in this area that effective matching of government guarantee programs to a particular area of capital constraint acted as a prerequisite to any significant correlation between number of program participants and economic growth metrics. Finally, in the few research cases based on a setting in which SMEs did not have access to organized government-backed debt, a tangibly lower level of SME-driven economic growth was observed because of the associated magnification of capital constraints.

Table 4. Studies on traditional forms of government guarantees to SMEs.

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Relationship lending, venture capital, and participation loans

There was representation of other forms of government financing within the sample, including relationship lending, venture capital, and participative loans (n=15, 5.64%). Relationship loans were characterized by Kim and Yasuda (Citation2022) as those that use more subjective assessments, with potentially lower-coded accrual quality, versus transactional loans based on quantitative assessment. Interestingly Beck et al. (Citation2010) articulated that SME loans do not need to be based on relationship lending because lending technology and organizational structures are not strongly related to extent, type, and pricing of SME loans. Government venture capital typically has different motives than private equity firms and may place higher value on social good over a financial and capital-based return on investment. In congruence with relationship loans, Afful-Dadzie and Afful-Dadzie (Citation2005) argue for the importance of qualitative factors for decision-making to avoid political interference and make more well-rounded decisions. Baldock and Mason (Citation2014) describe the role of government venture capital as needing to be complementary rather than in competition with private equity markets. In a novel model in the sample, Martí and Quas (Citation2018) described Spanish participative loans, whereby governments provide SME loans that include traditional repayment terms and also a contribution based on profit, similar to equity. An alternative view proposed highlighted that Korean venture capital emergence was in part based on government loan guarantees (Binh et al., Citation2020), similar to Radas and Bozic (Citation2009). In addition, as government venture capital opportunities grew, Berger and Hottenrott (Citation2021) found that the business reliance on government subsidies decrease, linking different sources of the capital market to underlying guarantees. Each study within this theme tended to provide implicit critique of traditional government loans versus alternative structures that will better support a government being able to recuperate loan principal and make better decisions outside of conventional quantitative analysis of businesses.

Microcredit and credit provisions

Government-driven microcredit programs had a low representation in the sample (n=15, 5.64%) as a mechanism to support a series of egalitarian and start-up initiatives. In Garcia-Tabuenca et al. (Citation2009), the Instituto de Crédito Oficial (the Spanish government's institute for long-term credit) was discussed as a generally accepted program to support economic development of SMEs. Yet their review found no meaningful differences in the effect of credit on regional and metropolitan economic development, similar to the findings of Garcia-Tabuenca et al. (Citation2009). For Chan (Citation2005), start-up business microcredits were policy levers to support poverty alleviation in Malaysia. The microcredits were mainly used for "petty trading and agricultural activities" (p. 4); however, the long-term efficacy of the program was not commented on.

Broader utilization of microcredit programs were also considered by Skoufias et al. (Citation2013). Indeed, when government microcredit supply was increased, the use of informal credit sources was not compromised, and increased supply produced better individual business performance (Owen et al., Citation2022; Parida & Pradhan, Citation2022). In considering how governments change credit provisions, it was identified that when governments lead consolidation of regional banks, SME credit availability decreases (Hou et al., Citation2004). However, one study argued that government credit supports were not solving credit liquidity gaps in the market (Klonowski, Citation2012). Although government microcredit programs were a small proportion of the sample, it appears these were leveraged to support start-up entrepreneurs and leveling of the playing field in contexts such as sex, regionality, and poverty.

Reasons for government finance

Perceived accessibility and awareness of finance

Entrepreneurs and SME owners, in the study sample (n=10, 3.76%), expressed resistance and challenges in the accessing and awareness of loans (e.g., Pickernell et al., Citation2013). For example, Indonesian rural businesses, while rating the effectiveness of support received, still had considerably low perceived access to government financial support, rating it at 2.3 of a maximum score of 5 (Sato, Citation2013). In addition, in a sample of 74 SMEs, the tangibility of a business idea, the business age, growth rate, profitability, location, and size had significant relationships to access to finance (Denbelo, Citation2020). Cowling (Citation2017) provided supporting evidence on firm size, age, and as well as collateral capacity and contract terms as significant variables for consideration, together with the perception of barriers to access in developing nations (Malita & Mwewa, Citation2021). In a study of immigrant entrepreneurs, barriers included lack of knowledge about available resources, technical challenges, perceived trust of institutions, and language issues (Lee & Black, Citation2017). While few studies reported on managerial capability, Bamata and Phiri (Citation2022) did comment that management skills and financial awareness aided access to finance. With a more political lens, Li and Shi (Citation2022) found that SMEs that donate to charities tended to be able to better access government credit arrangements. Despite general calls for more qualitative assessments for loans, there seemed to be a lack of advice on these more qualitative elements as a response to some of the barriers.

COVID-19 pandemic and the global financial crisis

The theme of macro-level global economics responses emerged as a possible explanation for changes in government finance. The two most prominent macroeconomic events in recent history were the COVID-19 pandemic and the global financial crisis (GFC) (n=12, 4.51%). The government finance response for each event has been unique, however, with a greater and more swift and significant direct offering of SME financing during the pandemic. For example, in Quarter 1 and Quarter 2 of 2020, 92.1% of SME finance was provided or backed by government, compared with a typical rate less than 5% (e.g., Calabrese et al., Citation2022), which was a story consistent across many jurisdictions (e.g., Romania: Catană et al., Citation2020; Spain: Corredera-Catalan et al., Citation2012). During the GFC in Japan, the emergency credit guarantee scheme increased credit availability (Yamori & McMillan, Citation2015), with average profitability identified as worse for SMEs that received loans versus those that did not. Interestingly, by 2010, the profitability differences had "vanished" (Ono & Uesugi, Citation2014, p. 2). In the United States, the use of SME loan guarantees were argued to be more appropriate for the specific market failure that emerged (Craig et al., Citation2018), or accelerate growth (Brown & Lee, Citation2008). Yet, perhaps an alarming and unsurprising comment, those organizations already in debt were more likely to access government loans during the pandemic (Brulhart et al., Citation2020). While these studies pointed to individual responses, it was evident that the strategies deployed were often rapid and without appropriate time to design government finance solutions that best suited the market failures that emerged.

Market failure, Hurricane Katrina, and recession

In discussing major disruptions to the market beyond the COVID-19 pandemic and

the GFC, market failures, Hurricane Katrina, and recessions were key reasons for change in government finance options (n=8, 3.01%). One study found that electoral importance (e.g., swing electorates) effected the availability of loans, and argue this issue as a market failure (Duchin & Hackney, Citation2015). Another highlighted that declines in employment rates may serve as an important signal to leverage government finance interventions (Armstrong et al., Citation2014), despite that not all government finance interventions were considered appropriate (Waniak-Michalak & Michalak, Citation2019) or led to employment outcome improvement. In periods of recession, however, the tendency for private banks to reduce credit supply can be a direct enabler of extending the recession's effects on the SME market (Zhou et al., Citation2022). This effect—considered a market failure—can lead government banks to respond by increasing their availability of finance (Shen et al., Citation2016). Hurricane Katrina was also the subject of some studies, arguing that income, insurance access, and SME owner sex influenced government loan progression (Hiramatsu & Marshall, Citation2018; Josephson & Marshall, Citation2016). Arguably, in some contexts market failures necessitated an increase in supply, or a change in credit and loan strategies from government; however, governments tended to have more time to act on market failures than in the pandemic and GFC contexts previously articulated.

Perceived outcomes of government finance

Start-ups, entrepreneurial emergence, and technology

Among the studies, 22 articles (8.27%) discussed targeted financing designed to support new businesses, emerging entrepreneurs, and technology growth (e.g., Olaore et al., Citation2007). The central theme that united each was a focus on enabling innovation (e.g., Yusoff et al., Citation2013). For example, in a study of 103 Belgian technology SMEs (Bozkaya & Van Pottelsberghe De La Potterie, Citation2008), the role of government financing was identified as more crucial at early-stage capital raising, when the business case had not yet been market-tested, whereas venture capital and angel investors held a greater role in later stages of financing. Chan (Citation2005) also identified that government-financed start-up loans were cost-efficient for achieving rural Malaysian government long-term objectives. When the cost of start-ups loans are low (around RM 500 or ~118 USD), it allows wide-reaching purchasing of equipment or livestock capacity. Despite recognition in the literature on the importance of finance, microentrepreneurs seem to have difficulty seeking and obtaining government financial support (Sato, Citation2000; Skoufias et al., Citation2013). Interestingly, studies that discussed entrepreneurship as an outcome of government finance, tended to exist together with government venture capital (e.g., Berger & Hottenrott, Citation2021; Huergo & Lopez, Citation2022; Hussain et al., Citation2006). Whereas these studies had high-level commentary regarding the aspiration of governments to foster innovation, approaches tended to be broad in scope rather than concentrated to specific activities, innovations, or initiatives despite the fact that like-minded entrepreneurs often cluster.

Targeted economic development

Some manuscripts spoke to more targeted economic development initiatives (n=13, 4.89%). For example, Chan (Citation2005) discussed the aspiration to irradiate poverty through rural micro-loans. In contrast, Hefferan and Fern (Citation2010) highlighted the significance of leveraging government financing capacity to support expansion of the Australian knowledge economy through identifying high-growth start-ups. In addition, Boşcor (Citation2016) highlighted the role of financing in enabling export capacity. The relationship between small business loans and regional growth is significant (Lee, Citation2018), suggesting that such investment can support targeted economic growth. Governments also seem to have a greater interest in funding younger firms that access government financing more easily, as noted in one study (Raco & De Souza, Citation2018). Grimm and Paffhausen (Citation2021) also highlighted challenges in government finance initiatives in enabling job growth in SMEs. Despite the growing discussion on the role of government finance to support targeted economic growth, this role was often not an explicit comment in many of the studies, with a greater need to carefully consider the underlying purpose of such programs and

make this explicit and evidence-based.

Bridging the sex gaps

Some manuscripts spoke to the pursuit of government finance to support bridging the sex gap (n=5, 1.88%). Chan (Citation2005) discussed that empowering women in rural areas through government finance can be difficult because women were less likely to view banks, including state banks, as a source of capital. This issue was particularly prevalent in underserved communities where low access to collateral and a lack of financial history, was more common in women. Likewise, Skoufias et al. (Citation2013) found a similar challenge in which men were more likely to seek credit opportunities than women. This finding was reinforced in the Hurricane Katrina context, where sex was a significant factor in access to government financing (Josephson & Marshall, Citation2016). Fernandez (Citation2011) explained that whereas there were strong sex differences in commercial ventures, these were less prevalent in social enterprises. This finding suggests that the opportunity for more targeted support for women may be more accessible in social enterprise financing. Despite differences in these studies, there was a dearth of accessible research on how government finance was used to support sex gaps in SME ownership and growth.

Discussion

The present study identified that, while the literature in government financing of SMEs is growing, it tended to lack clear focus, to be isolated, and to have an over-reliance on quantitative accounting information. The balance of this discussion will be dedicated to exploring these key findings to identify how governments can better enable the efficacy of their SME loan and finance provisions.

Clearer government vision for financing

A consistent underlying narrative that emerged during most assessments was a lack of clearly designed strategic vision for government finance. Some studies cited poorly constructed or politically influenced finance initiatives (Afful-Dadzie & Afful-Dadzie, Citation2005; Beck et al., Citation2011) and others the needs for rapid responses (e.g., COVID-19 or the GFC: Catană et al., Citation2020; Corredera-Catalan et al., Citation2012). Outside of these factors, broad themes appeared, such as support start-ups or economic development, without a clear link between the government finance type, the specific area of interest, and the specific SME capital constraints targeted. To illustrate, several studies targeted balancing sex differences in SME ownership using government finance. However, women tend to apply for government financing with less frequency than men (Fernandez, Citation2011; Skoufias et al., Citation2013), so a public release of government finance can have the reverse effect of intention without additional measures or soft supports attached. Additionally, start-up financing programs were typically untargeted to industries, despite that limitation, innovators tend to cluster (e.g., Silicon Valley), and leveraging place-based strengths of a region to incentivize particular types of start-ups would likely support higher rates of innovation, and a reciprocal effect beyond the life of the program, meaning existing SMEs will go on to support others into their industry to build and sustain regional competitive advantage.

Stronger packaging and soft supports attached to financing

As highlighted earlier, the use of government financing was often provided in isolation of other possible initiatives. Whereas some studies that characterized government loans as SME packages by a different name may not have been included in the final study sample, it was clear from the extant literature that a lack of synergy exists between direct financing and soft supports that can enable the SMEs to have a higher rate of success or increase their capacity to deploy their new funding effectively (Bachas et al., Citation2021). Bachas et al. (Citation2021) identify a need for clearer parameters on loan guarantee provisions to banks, and that a 1% point increase in loan principal would increase per loan volume by \$19,000. Additionally, Caner and Karan (Citation2012) argued for considering company and product information, goals, market structure, and planning documents (marketing, production, organizational,

and financial) in assessment of loans.

The areas in which individual SMEs are deficient at the point of assessment could represent points for discretionary mentoring and education support to support correction rather than as a point of rejection. Governments could also seek to work with tertiary and post-secondary education institutions to establish programs with paired financing support for region-specific growth needs and capital constraints. For example, government financing for a fixed volume of SMEs that also need marketing support could include financing tied to participation and completion of a bespoke marketing course for that cohort. Each economic region will have specific needs, and designing programs to meet these needs may support a more well-rounded and effective use of government financial resources.

Expansion of qualitative finance assessments

Most manuscripts in the study sample had superficial discussions of how loans and financing were assessed, yet a small number of studies addressed this issue in depth (Afful-Dadzie & Afful-Dadzie, Citation2005; Caner & Karan, Citation2012; Kim & Yasuda, Citation2018). These studies highlighted the prominence of quantitative accounting information (e.g., cashflow, accrual information, balance sheets, and profit and loss) as key in most decision-making for funding provision. However, presentation of these data may be incongruent with the targeting of the financing policy. Many small businesses are not a sufficient size to have internal accountants developing quality records of their accounting information (Dyt & Halabi, Citation2007), and those businesses whose growth is exponential likely have consistently out-of-date information. In these contexts, the businesses may be seen unfavorably on quantitative metrics or serve as a significant inhibitor to seeking funding (i.e., the need to redevelop all accounting documents before submitting applications). The result of conflict can create strong resistance to applying for financing (Lee & Black, Citation2017), despite the fact that these businesses may have the greatest potential to achieve government goals of scaling businesses, economic development, and economic empowerment.

In environments where firm financial performance and SME growth is the target, existing literature discusses organizational behavior and culture antecedents to enhancing profits. For example, specific leadership styles (Gardner et al., Citation2011), high-performance organizational culture (Den Hartog & Verborg, Citation2004), corporate ethics (Chun et al., Citation2013), supply chain strength and lead-times (Christensen et al., Citation2007), corporate governance (Nasrallah & El Khoury, Citation2022), and employee turnover (Hancock et al., Citation2013) all predict financial performance among other variables. Although some of these characteristics can be converted easily into quantitative measures (e.g., employee turnover rates), they were typically not included in the accounting information-dense assessments. Likewise, those that were not easily quantifiable (corporate ethics, governance, and leadership: Crawford & Kelder, Citation2019) were rarely discussed in the literature. There is an incredible opportunity for government finance to model best practices in supporting SMEs that have demonstrable unconventional potential, rather than expect SMEs that are typically ineligible for traditional finance to navigate the same hurdles in government finance settings.

Conclusions

Practical implications

For government policy developers and government finance administrators, this study has significant implications. It is evident that confusion exists regarding the purpose of establishing loan provisions and the specific financial capital deficit they are targeting. First, it is important to develop an understanding of which capital deficit area is to be targeted, and building bespoke initiatives that will support a response will in turn support greater efficacy in policy initiative. It was clear that there were mixed effects on economic growth and limited understandings of environmental (Incekara, Citation2022), social, and governance outcomes. Likewise, an overreliance on traditional forms of accounting information are unlikely to support SMEs that

have promise and potential without the sufficient track record to achieve traditional private finance—a key aim identified in government finance initiatives. In addition, opportunities exist to consider soft measures such as corporate ethics, governance capacity, leadership styles of owner-managers (Crawford et al., Citation2020, and organizational culture, among other factors, to support a more holistic assessment of relationship loans. Also, in one study (Marti & Quas, Citation2018), participative loans were used to support faster recouperation of loan principals. This method may support higher velocity of cashflow for loan provision and repayment, and, although potentially reducing the effect of individual loans, this approach could support a larger volume of loans being provided, with highly successful businesses repaying loans much faster.

Future research

This study was strengthened by its rigorous and transparent PRISMA method, together with multiple researchers at each stage of screening to minimize the potential for unintended exclusion. The study was limited by its timeframe and the size of the final dataset. Inclusion of 60 manuscripts in the study created important and high-level themes; however, the scope did not permit presentation of the entirety of the in-depth analysis conducted on each theme by the research team. Smaller systematic reviews that examine a single theme in this research may support that further analysis. Likewise, there was a lack of research on other macro-challenges of contemporary government financing (e.g., Brexit, climate change, Greek financial crisis) that may be worthy of future study. This study is the culmination of 60 theoretical and empirical works produced between 2000–2021, and it provides a critical baseline understanding of how governments leverage direct financing to support or grow SMEs in both targeted and broad ways.

The study results suggest several areas for further research. First, it would be useful to further examine subgroups of loan types and industry groupings to support more rigorous estimates of their benefits and costs. Likewise, it would be useful to examine studies that report on planned duration of loans (e.g., short- and long-term loans), although many studies in this sample did not report on loan duration. Further, it was beyond the study scope to seek the information that would allow for estimation of the returns to the government against their specific vision for that initiative (e.g., more start-ups, equality, or employment); indeed, there appeared to be insufficient data for such a meta-analysis. This information would support a clear understanding of when government finance is useful—and likewise when it is not—and would be particularly helpful when considering longitudinal efficacy data. Most small businesses do not become profitable for several years after formation, and it is possible that many current studies lack long-term datasets.

The data primarily emphasized quantitative measures in isolation as a method for understanding business success and for provision of financial assessments. There may be incredible opportunities to better understand the role of qualitative assessments, and other less-conventional organizational behavior assessments (e.g., firm leadership development, wellbeing measures, social impact, community reputation). For example, access to significant finance may support soft measure development (e.g., owner-manager leadership capacity), and subsequent firm financial performance as a result (e.g., Gardner et al., Citation2011). These measures may serve to develop an understanding of the more holistic effects of government financing, as well as to provide evidence for more targeted financial measures to support SME business success and economic development. Additionally, there is value in considering future reviews that explore how different jurisdictions globally provide and disburse loans, loan repayment systems, and differences and similarities in demands of loans. This study was limited in its scope by understanding global practice.

Conclusion

Governments have historically, and increasingly in contemporary market failure environments, leveraged their financial capacity to provide small finances to support the growth of SMEs. This study was a systematic review of a final sample

of 60 manuscripts conducted to explore the research question:

RQ:

How does the published literature articulate current knowledge of government finance in the form of guarantees and loans to small and medium enterprise?

Through the PRISMA method (Moher et al., Citation2009) and thematic analysis (Braun & Clarke, Citation2006), this study sought to support a more comprehensive understanding of current government finance, government guarantees, and government loan provisions to SMEs. The study identified four high level themes, and 13 sub-themes: provision of loans (government loans, state-bank loans, loan defaults, and government assessment of loans), non-loan lending (government loan guarantees, relationship lending, venture capital, and participative loans, microcredit and credit provisions), reasons for finance (perceived accessibility and awareness, COVID-19 pandemic and the global financial crisis, and market failure and recession), and the purpose and outcome of financing (start-ups, entrepreneurial emergence, and technological advancement, targeted economic development, and bridging gender gaps).

The results identified a growing volume of literature on the topic, yet these studies were dominated by conventional forms of government loans and government loan guarantees (24.06% of all thematic references). Less conventional measures (e.g., state-bank loans, government venture capital, participation loans, microcredit, and credit provisions), although identified as successful in some studies, were discussed less frequently. Also discovered were considerably mixed results in jurisdictional-based provisions of finance and their relative outcomes, particularly with relation to the provision of government loans and the relationship between guarantees and capital constraints.

The aims of government finance were typically to support innovation (e.g., start-ups and entrepreneurial emergence), targeted economic development (e.g., regional and rural development), and support social justice (e.g., sex gaps). Yet, the studies rarely were clear on the government finance policy aim, or vision, and likewise rarely assessed the degree to which the study actually achieved that stated aim. Government financial provisions need to take a more targeted approach and follow through with careful assessment and revision of their achievement of those targets. A few in the studies in sample addressed political influence in the provision of loans (e.g., in marginal electorates) and suggested that the short government election cycles could reduce the potential appetite for assessment of strategies from previous governments; however, this area remains an important question for future research on the efficacy of government finance for SMEs.

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References

- *Adhikary, B., Kutsuna, K., & Stephannie, S. (2021). Does the government credit guarantee promote micro, small, and medium enterprises? Evidence from Indonesia. *Journal of Small Business & Entrepreneurship*, 33(open in a new window)(3(open in a new window)), 323-348. <https://doi.org/10.1080/08276331.2019.1666338>
(Open in a new window)Google Scholar
- *Afful-Dadzie, E., & Afful-Dadzie, A. (2005). A decision making model for selecting start-up businesses in a government venture capital scheme. *Management Decision*, 54(open in a new window)(3(open in a new window)), 714-734. <https://doi.org/10.1108/MD-06-2015-0226>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar
- *Agnese, P., Rizzo, M., & Vento, G. (2021). Smes finance and bankruptcies: The role of credit guarantee schemes in the UK. *Journal of Applied Finance & Banking*, 8(3), 42370. <https://iris.uniroma1.it/handle/11573/1066063>(open in a new window)
(Open in a new window)Google Scholar
- *Al-Ahmad, F. (2012). Suggested financing methods and tools for Kuwait fund for

development promotion of small and medium businesses. *Al-Andalus Journal for Humanities & Social Sciences*, (30(open in a new window)), 11749.
<https://doi.org/10.12816/0009169>
 (Open in a new window)Google Scholar

*Alkahtani, A., Nordin, N., & Khan, R. (2019). Does government support enhance the relation between networking structure and sustainable competitive performance among SMEs? *Journal of Innovation and Entrepreneurship*, 9(open in a new window)(1(open in a new window)), n.p(open in a new window).
<https://doi.org/10.1186/s13731-020-00127-3>
 (Open in a new window)Google Scholar

*Armstrong, C., Craig, B., Jackson, W. E., III, & Thomson, J. B. (2014). The moderating influence of financial market development on the relationship between loan guarantees for SMEs and local market employment rates. *Journal of Small Business Management*, 52(open in a new window)(1(open in a new window)), 126-140.
<https://doi.org/10.1111/jsbm.12036>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

ATO (Australian Tax Office). (2021). Government grants, payments and stimulus during COVID-19. Australian Government. Retrieved April 10, 2022, from [https://www.ato.gov.au/General/COVID-19/Government-grants,-payments-and-stimulus-during-COVID-19/\(open in a new window\)](https://www.ato.gov.au/General/COVID-19/Government-grants,-payments-and-stimulus-during-COVID-19/(open%20in%20a%20new%20window))
 (Open in a new window)Google Scholar

Bachas, N., Kim, O. S., & Yannelis, C. (2021). Loan guarantees and credit supply. *Journal of Financial Economics*, 139(open in a new window)(3(open in a new window)), 872-894. <https://doi.org/10.1016/j.jfineco.2020.08.008>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Baker, H. K., Kumar, S., & Rao, P. (2020). Financing preferences and practices of Indian SMEs. *Global Finance Journal*, 43(open in a new window), 100388.
<https://doi.org/10.1016/j.gfj.2017.10.003>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Baldock, R., & Mason, C. (2014). Establishing a New UK finance escalator for innovative SMEs: The roles of the enterprise capital funds and angel co-investment fund. *Venture Capital*, 17(open in a new window)(44593(open in a new window)), 59-86. <https://doi.org/10.1080/13691066.2015.1021025>
 (Open in a new window)Google Scholar

*Bamata, N., & Phiri, M. (2022). Optimizing access to external finance by small and medium-sized enterprise start-ups: Towards the development of a conceptual framework. *Journal of Governance & Regulation*, 11(open in a new window)(1(open in a new window)), 125-140. <https://doi.org/10.22495/jgrv11i1art12>
 (Open in a new window)Google Scholar

*Beck, T., Demirgüç-Kunt, A., & Peria, M. S. M. (2011). Bank financing for SMEs: Evidence across countries and bank ownership types. *Journal of Financial Services Research*, 39(open in a new window), 35-54.
<https://doi.org/10.1007/s10693-010-0085-4>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Beck, T., Klapper, L. F., & Mendoza, J. C. (2010). The typology of partial credit guarantee funds around the world. *Journal of Financial Stability*, 6(1), 10-25.
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Berger, M., & Hottenrott, H. (2021). Start-up subsidies and the sources of venture capital. *Journal of Business Venturing Insights*, 16(open in a new window). <https://doi.org/10.1016/j.jbvi.2021.e00272>
 (Open in a new window)Google Scholar

*Biancalani, F., Czarnitzki, D., & Riccaboni, M. (2009). The Italian start up act: A microeconomic program evaluation. *Small Business Economics*, 58(open in a new window)(3(open in a new window)), 1699-1720.
<https://doi.org/10.1007/s11187-021-00468-7>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Binh, K., Jhang, H., Park, D., & Ryu, D. (2020). Capital markets for small- and medium-sized enterprises and startups in Korea. *The Journal of Asian Finance, Economics & Business*, 7(open in a new window)(12(open in a new window)), 195-210. <https://doi.org/10.13106/jafeb.2020.vol7.no12.195>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Boşcor, D. (2016). Barriers faced by Romanian SMEs in exporting. *Bulletin of the Transilvania University of Brasov Series V: Economic Sciences*, 10(1), 203-

208. https://webbut.unitbv.ro/index.php/Series_V/article/view/2939(open in a new window)
 (Open in a new window)Google Scholar

*Bozkaya, A., & Van Pottelsberghe De La Potterie, B. (2008). Who funds technology-based small firms? Evidence from Belgium. *Economics of Innovation & New Technology*, 17(open in a new window)(1-2(open in a new window)), 97-122. <https://doi.org/10.1080/10438590701279466>
 (Open in a new window)Google Scholar

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(open in a new window)(2(open in a new window)), 77-101. <https://doi.org/10.1191/1478088706qp0630a>
 (Open in a new window)Google Scholar

British Business Bank. (2019). The enterprise finance guarantee. Report: British Business Bank. Retrieved April 15, 2022.
 (Open in a new window)Google Scholar

Browning, S. (2022, April 10). Coronavirus: Business loans schemes. House of Commons Library. <https://researchbriefings.files.parliament.uk/documents/CBP-8906/CBP-8906.pdf>(open in a new window)
 (Open in a new window)Google Scholar

*Brown, R., & Lee, N. (2008). Strapped for cash? Funding for UK high growth SMEs since the global financial crisis. *Journal of Business Research*, 99(open in a new window), 37-45. <https://doi.org/10.1016/j.jbusres.2019.02.001>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Brulhart, M., Lalive, R., Lehmann, T., & Siegenthaler, M. (2020). COVID-19 financial support to small businesses in Switzerland: Evaluation and Outlook. *Swiss Journal of Economics and Statistics*, 156(open in a new window), 1-13. <https://doi.org/10.1186/s41937-020-00060-y>
 (Open in a new window)Google Scholar

*Calabrese, R., Cowling, M., & Liu, W. (2022). Understanding the Dynamics of UK COVID-19 SME financing. *British Journal of Management*, 33(open in a new window)(2(open in a new window)), 657-677. <https://doi.org/10.1111/1467-8551.12576>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Caner, S., & Karan, M. B. (2012). Screening creditworthiness of SME's: The case of small business assistance in Turkey. *Multinational Finance Journal*, 16(1/2), 1-20.
 (Open in a new window)Google Scholar

*Catană, Ș. T., Toma, S. G., Grădinaru, C. Ă., & Nicoleta, Z. L. (2020). How were banks involved in supporting Romanian SMEs during the COVID-19 pandemic? *Annals of the "Constantin Brancuș" University of Targu Jiu, Economy Series*, 5, 15-19. https://www.utgjui.ro/revista/ec/pdf/2020-05/02_Catana.pdf(open in a new window)
 (Open in a new window)Google Scholar

*Chait, D. (2015). Small Business financing and the post-2008 credit paradigm: The U.S. Small Business Administration and key factors to support traditional credit markets. *Entrepreneurial Business Law Journal*, 6(2), 411-456. https://heinonline.org/HOL/Page?collection=journals&handle=hein.journals/eblwj6&id=414&men_tab=srchresults(open in a new window)
 (Open in a new window)Google Scholar

*Chan, S. H. (2005). An exploratory study of using micro-credit to encourage the setting up of small businesses in the rural sector of Malaysia. *Asian Business & Management*, 4, 455-479.
 (Open in a new window)Google Scholar

Christensen, W., Germain, R., Birou, L., & Croom, S. (2007). Variance vs average: Supply chain lead-time as a predictor of financial performance. *Supply Chain Management: An International Journal*, 12(open in a new window)(5(open in a new window)), 349-357. <https://doi.org/10.1108/13598540710776926>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Chundakkadan, R., Natarajan, R. R., & Sasidharan, S. (2022). Small firms amidst COVID-19: Financial constraints and role of government support. *Economic Notes*, 51(3), e12206.
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Chun, J., Shin, Y., Choi, J., & Kim, M. (2013). How does corporate ethics contribute to firm financial performance? The mediating role of collective

organizational commitment and organizational citizenship behavior. *Journal of Management*, 39(open in a new window)(4(open in a new window)), 853-877.
<https://doi.org/10.1177/0149206311419662>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Corredera-Catalan, F., diPietro, F., & Trujillo-Ponce, A. (2012). Post-COVID-19 SME financing constraints and the credit guarantee scheme solution in Spain. *Journal of Banking Regulation*, 22(open in a new window)(3(open in a new window)), 250-260. <https://doi.org/10.1057/s41261-021-00143-7>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Cowling, M. (2017). The forgotten cost of borrowing on public small Business lending schemes: Evidence from the fee structure of UK enterprise finance guarantee lending. *International Review of Entrepreneurship*, 19(open in a new window)(3(open in a new window)), 355-372.
<https://doi.org/10.1023/A:1024408932156>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Cowling, M., Matthews, C., & Weixi, L. (2021). The role of loan Commitment terms in credit Allocation on the UK small firms loan guarantee scheme. *International Review of Entrepreneurship*, 15(1), 15-28.
 (Open in a new window)Google Scholar

*Cowling, M., & Mitchell, P. (2020). Is the small firms loan guarantee scheme hazardous for banks or helpful to small business? *Small Business Economics*, 21(1), 63-71.
<https://link.springer.com/content/pdf/10.1023/A:1024408932156.pdf>(open in a new window)
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Cowling, M., & Siepel, J. (2010). Public intervention in UK small firm credit markets: Value-for-money or waste of scarce resources? *Technovation*, 33(open in a new window)(44812(open in a new window)), 265-275.
<https://doi.org/10.1016/j.technovation.2012.11.002>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Craig, B., Jackson, W., & Thomson, J. (2011). Small firm finance, credit Rationing, and the impact of SBA-Guaranteed lending on local economic growth. *Journal of Small Business Management*, 45(open in a new window)(1(open in a new window)), 116-132. <https://doi.org/10.1111/j.1540-627X.2007.00202.x>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Craig, B., Jackson, W., III, & Thomson, J. (2018). Public policy in support of small Business: The American experience. *Entrepreneurial Business Law Journal*, 6(2), 457-467.
https://heinonline.org/HOL/Page?handle=hein.journals/eblwj6&div=20&g_sent=1&casa_token=&collection=journals(open in a new window)
 (Open in a new window)Google Scholar

Crawford, J., Dawkins, S., Martin, A., & Lewis, G. (2020). Putting the leader back into authentic leadership: Reconceptualising and rethinking leaders. *Australian Journal of Management*, 45(open in a new window)(1(open in a new window)), 114-133. <https://doi.org/10.1177/0312896219836460>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Crawford, J., & Kelder, J. A. (2019). Do we measure leadership effectively? Articulating and evaluating scale development psychometrics for best practice. *The Leadership Quarterly*, 30(open in a new window)(1(open in a new window)), 133-144. <https://doi.org/10.1016/j.leaqua.2018.07.001>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Denbelo, T. G. (2020). Determinants of small and medium scale enterprise (SMEs) access to finance in Guji zone. *Srusti Management Review*, 13(1), 63-77.
[http://srustimanagementreview.ac.in/paperfile/2060955954_Determinants%20of%20Small%20and%20Medium%20Scale%20Enterprise%20\(SMEs\)%20Access.pdf](http://srustimanagementreview.ac.in/paperfile/2060955954_Determinants%20of%20Small%20and%20Medium%20Scale%20Enterprise%20(SMEs)%20Access.pdf)(open in a new window)
 (Open in a new window)Google Scholar

Den Hartog, D., & Verbarg, R. (2004). High performance work systems, organisational culture and firm effectiveness. *Human Resource Management Journal*, 14(open in a new window)(1(open in a new window)), 55-78.
<https://doi.org/10.1111/j.1748-8583.2004.tb00112.x>
 (Open in a new window)Google Scholar

*Duchin, R., & Hackney, J. (2015). Buying the vote? The Economics of electoral politics and small-Business loans. *Journal of Financial & Quantitative Analysis*,

56(open in a new window)(7(open in a new window)), 2439–2473.
<https://doi.org/10.1017/S002210902100048X>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Dyt, R., & Halabi, A. (2007). Empirical evidence examining the accounting information systems and accounting reports of small and micro business in Australia. *Small Enterprise Research*, 15(open in a new window)(2(open in a new window)), 1–9. <https://doi.org/10.5172/ser.15.2.1>
 (Open in a new window)Google Scholar
 Eisenhardt, K. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(open in a new window)(1(open in a new window)), 57–74.
<https://doi.org/10.2307/258191>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Fernandez, V. (2011). The role of trust and social commitment in start-up financing. *International Review of Financial Analysis*, 75(open in a new window), 101722. <https://doi.org/10.1016/j.irfa.2021.101722>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *García-Tabuenca, A., Crespo-Espert, J., & Cuadrado-Roura, J. (2009). Public financing and Entrepreneurship: Behaviour and regional heterogeneity of SMEs. *Investigaciones Regionales*, 15, 89–109.
<https://www.redalyc.org/pdf/289/28911701005.pdf>(open in a new window)
 (Open in a new window)Google Scholar
 Gardner, W., Coglisier, C., Davis, K., & Dickens, M. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22(open in a new window)(6(open in a new window)), 1120–1145.
<https://doi.org/10.1016/j.leaqua.2011.09.007>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Grimm, M., & Paffhausen, A. (2021). Do interventions targeted at micro-entrepreneurs and small and medium-sized firms create jobs? A systematic review of the evidence for low and middle income countries. *Labour Economics*, 32(open in a new window), 67–85. <https://doi.org/10.1016/j.labeco.2015.01.003>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Hackney, J. (2023). Small Business lending in financial Crises: The role of government-guaranteed loans. *Review of Finance*, 27(1), 247–287.
<https://doi.org/10.1093/rof/rfac002>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Hancock, J., Allen, D., Bosco, F., McDaniel, K., & Pierce, C. (2013). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management*, 39(open in a new window)(3(open in a new window)), 573–603.
<https://doi.org/10.1177/0149206311424943>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Hefferan, M., & Fern, A. (2010). Questioning the value of government support for start-up, knowledge-intensive companies: Emerging evidence and future options. *Australasian Journal of Regional Studies*, 24(1), 78–95.
<https://search.informit.org/doi/abs/10.3316/informit.590285287495238>(open in a new window)
 (Open in a new window)Google Scholar
 *Hiramatsu, T., & Marshall, M. (2018). The long-term impact of disaster loans: The case of small businesses after Hurricane Katrina. *Sustainability*, 10(open in a new window)(7(open in a new window)), 2364. <https://doi.org/10.3390/su10072364>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Hou, X., He, W., & Ke, K. (2004). Regional bank consolidation and SMEs' credit availability: Evidence from China. *Complexity*, 2021, 44652.
<https://doi.org/10.1155/2021/8509991>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Huergo, E., & Lopez, A. (2022). Growth effects of economic conditions at Birth: The role of public funding for technology-based start-ups. *Economics of Innovation & New Technology*, 31(open in a new window)(6(open in a new window)), 511–538. <https://doi.org/10.1080/10438599.2020.1837525>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Hussain, J., Millman, C., Matlay, H., & Matlay, H. (2006). SME financing in the UK and in China: A comparative perspective. *Journal of Small Business and Enterprise Development*, 13(open in a new window)(4(open in a new window)), 584–599. <https://doi.org/10.1108/14626000610705769>
 (Open in a new window)Google Scholar

*Hynes, B. (2010). International small business growth: A process perspective. *The Irish Journal of Management*, 29(2), 87-106.
(Open in a new window)Google Scholar

*Incekara, M. (2022). The impact of external financial factors on the eco-innovation practices of small and medium-sized businesses. *Ege Academic Review*, 22(open in a new window)(2(open in a new window)), 183-194.
<https://doi.org/10.21121/eab.992423>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

ISED Citizen Services Centre. (2019). Canada Small Business Financing Program: Evaluation Report. Government of Canada. Retrieved April 10, 2022, from [https://www.ic.gc.ca/eic/site/ae-ve.nsf/vwapj/03903-AEB_Evaluation_CSBFP_Final-eng.pdf/\\$file/03903-AEB_Evaluation_CSBFP_Final-eng.pdf](https://www.ic.gc.ca/eic/site/ae-ve.nsf/vwapj/03903-AEB_Evaluation_CSBFP_Final-eng.pdf/$file/03903-AEB_Evaluation_CSBFP_Final-eng.pdf)(open in a new window)
(Open in a new window)Google Scholar

Iwelunmor, J., Nwaozuru, U., Obiezu-Umeh, C., Ehiri, J., Curley, J., Ezechi, O., Airhihenbuwa, C., & Ssewamala, F. (2020). Is it time to RE-AIM? A systematic review of economic empowerment as HIV prevention intervention for adolescent girls and young women in sub-Saharan Africa using the RE-AIM framework. *Implementation Science Communications*, 1(open in a new window)(1(open in a new window)), 1-33. <https://doi.org/10.1186/s43058-020-00042-4>
(Open in a new window)PubMed(Open in a new window)Google Scholar

*Jia, G. (2013). Small Business loan guarantees as insurance against aggregate risks. *B.E. Journal of Macroeconomics*, 13(open in a new window)(1(open in a new window)), 455-479. <https://doi.org/10.1515/bejm-2012-0110>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Jia, Y. (2015). Small Business loan guarantees as insurance against aggregate risks. *Journal of Macroeconomics*, 13(open in a new window)(1(open in a new window)), 455-479. <https://doi.org/10.1515/bejm-2012-0110>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Josephson, A., & Marshall, M. (2016). The demand for post-katrina disaster aid: SBA disaster loans and small businesses in Mississippi. *Journal of Contingencies & Crisis Management*, 24(open in a new window)(4(open in a new window)), 264-274. <https://doi.org/10.1111/1468-5973.12122>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Kessey, K. (2014). Micro credit and promotion of small and medium enterprises in informal sector of Ghana: Lessons from experience. *Asian Economic and Financial Review*, 4(6), 768-780.
(Open in a new window)Google Scholar

*Kim, H., & Yasuda, Y. (2018). Business risk disclosure and firm risk: Evidence from Japan. *Research in International Business and Finance*, 45, 413-426.
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Kim, H., & Yasuda, Y. (2022). Accounting information quality and guaranteed loans: Evidence from Japanese SMEs. *Small Business Economics*, 53(open in a new window)(4(open in a new window)), 1033-1050. <https://doi.org/10.1007/s11187-018-0106-5>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Klonowski, D. (2008). The effectiveness of government-sponsored programmes in supporting the SME sector in Poland. *Post-Communist Economies*, 22(open in a new window)(2(open in a new window)), 229-245. <https://doi.org/10.1080/14631371003740738>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Klonowski, D. (2012). Liquidity gaps in financing the SME sector in an emerging market: Evidence from Poland. *International Journal of Emerging Markets*, 7(open in a new window)(3(open in a new window)), 335-355. <https://doi.org/10.1108/17468801211237072>
(Open in a new window)Google Scholar

Kraus, S., Mahto, R. V., & Walsh, S. T. (2021). The importance of literature reviews in small business and entrepreneurship research. *Journal of Small Business Management*, 61(open in a new window)(3(open in a new window)), 1095-1106. Advanced online publication. <https://doi.org/10.1080/00472778.2021.1955128>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Kumar, S., & Rao, P. (2015). A conceptual framework for identifying financing preferences of SMEs. *Small Enterprise Research*, 22(open in a new window)(1(open in a new window)), 99-112. <https://doi.org/10.1080/13215906.2015.1036504>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Kuo, C., Chen, C., & Sung, C. (2011). Evaluating guarantee Fees for loans to small and medium-Sized enterprises. *Small Business Economics*, 37(open in a new window)(2(open in a new window)), 205–218. <https://doi.org/10.1007/s11187-009-9236-0>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Kutsuna, K. (2020). The relationship between private and public financing for small businesses. *Japanese Economy*, 30(open in a new window)(2(open in a new window)), 3. <https://doi.org/10.2753/JES1097-203X30023>
(Open in a new window)Google Scholar

*Kuzilwa, J. (2015). The role of credit for small Business success. *Journal of Entrepreneurship*, 14(open in a new window)(2(open in a new window)), 131–161. <https://doi.org/10.1177/097135570501400204>
(Open in a new window)Google Scholar

*Lee, Y. (2018). Government guaranteed small business loans and regional growth. *Journal of Business Venturing*, 33(open in a new window)(1(open in a new window)), 70–83. <https://doi.org/10.1016/j.jbusvent.2017.11.001>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Lee, W., & Black, S. L. (2017). Small business development: Immigrants' access to loan capital. *Journal of Small Business & Entrepreneurship*, 29(open in a new window)(3(open in a new window)), 193–209. <https://doi.org/10.1080/08276331.2017.1297106>
(Open in a new window)Google Scholar

*Le Trinh, T. (2019). Factors affecting startup performance of small and medium-sized enterprises in Danang city. *Entrepreneurial Business and Economics Review*, 7(3), 187–203.
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Liang, L., Chih, S.-H., & Sie, S.-H. (2021). Are small- and medium-sized enterprise lending and credit guarantees conducive to bank Efficiency? *International Review of Accounting, Banking and Finance*, 13(3), 53–66. <http://www.irabf.org/upload/journal/prog/Are%20Small-%20and%20Medium-sized%20Enterprise%20Lending%20and%20Credit%20Guarantees%20Conducive%20to%20Bank%20Efficiency%20.pdf>(open in a new window)
(Open in a new window)Google Scholar

Lim, W., Kumar, S., & Ali, F. (2022). Advancing knowledge through literature reviews: 'what', 'why', and 'how to contribute'. *The Service Industries Journal*, 42(open in a new window)(7–8(open in a new window)), 481–513. <https://doi.org/10.1080/02642069.2022.2047941>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Li, W., & Shi, L. (2022). Donation, political connection and credit access: The case of Chinese small and medium enterprises. *Finance Research Letters*, 46(open in a new window). <https://doi.org/10.1016/j.frl.2021.102269>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Luo, P., Song, D., & Chen, B. (2020). Investment and financing for SMEs with bank-tax interaction and public-private partnerships. *International Review of Economics & Finance*, 65(open in a new window), 163–172. <https://doi.org/10.1016/j.iref.2019.10.007>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Mago, S., & Modiba, F. (2022). Does informal finance matter for micro and small businesses in Africa? *Small Business International Review*, 6(open in a new window)(1(open in a new window)), e415. <https://doi.org/10.26784/sbir.v6i1.415>
(Open in a new window)Google Scholar

*Malita, B., & Mwewa, B. (2021). Determining the challenges for small and medium enterprises (SMEs) in accessing financial resources in a rural district of Zambia using multivariate analysis. *CLEAR International Journal of Research in Commerce and Management*, 6(open in a new window)(12(open in a new window)), n.p(open in a new window). https://doi.org/10.1007/978-3-030-36632-2_9
(Open in a new window)Google Scholar

Malki, B., Uman, T., & Pittino, D. (2020). The entrepreneurial financing of the immigrant entrepreneurs: A literature review. *Small Business Economics*, 58(open in a new window)(3(open in a new window)), 1337–1365. <https://doi.org/10.1007/s11187-020-00444-7>
(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Martí, J., & Quas, A. (2018). A beacon in the night: Government certification of SMEs towards banks. *Small Business Economics*, 50(open in a new window)(2(open

in a new window)), 397-413. <https://doi.org/10.1007/s11187-016-9828-4>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Martí, J., & Quas, A. (2018). A beacon in the night: Government certification of SMEs towards banks. *Small Business Economics*, 50, 397-413.
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Moher, D., Liberati, A., Tetzlaff, J., Altman, D., & Group, P. R. I. S. M. A. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine*, 151(open in a new window)(4(open in a new window)), 264-269. <https://doi.org/10.7326/0003-4819-151-4-200908180-00135>
 (Open in a new window)PubMed (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Nancu, D. (2021). The impact of the increase in market interest rates on the credit risk of guarantees issued under the SME invest program., *Ovidius University Annals. Series Economic Sciences*, 21(2), 1084-1087. <https://stec.univ-ovidius.ro/html/anale/R0/2021-2/Section%205/21.pdf>(open in a new window)
 (Open in a new window)Google Scholar
 Nasrallah, N., & El Khoury, R. (2022). Is corporate governance a good predictor of SMEs financial performance? Evidence from developing countries (the case of Lebanon). *Journal of Sustainable Finance & Investment*, 12(open in a new window)(1(open in a new window)), 13-43. <https://doi.org/10.1080/20430795.2021.1874213>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Nigrini, M., & Schoombee, A. (2002). Credit guarantee schemes as an instrument to promote access to finance for small and medium enterprises: An analysis of Khula enterprise finance ltd's individual credit guarantee scheme. *Development Southern Africa*, 19(open in a new window)(5(open in a new window)), 735-750. <https://doi.org/10.1080/03768835022000019356>
 (Open in a new window)Google Scholar
 *Nitani, M., & Riding, A. (2000). Risk factors and the Canada small Business financing program. *Journal of Small Business & Entrepreneurship*, 27(open in a new window)(3(open in a new window)), 251-274. <https://doi.org/10.1080/08276331.2015.1088301>
 (Open in a new window)Google Scholar
 *Nitescu, D. (2018). A new beginning for SMEs development? Theoretical and Applied Economics, 22(3), 39-52. https://www.ebsco.ectap.ro/Theoretical_&_Applied_Economics_2015_Autumn.pdf#page=39(open in a new window)
 (Open in a new window)Google Scholar
 *Olaore, G., Adejare, B., & Udofia, E. (2007). The gains and pains of small and medium-scale enterprises (SMEs): The way forward for entrepreneurship development in Nigeria. *Rajagiri Management Journal*, 15(open in a new window)(1(open in a new window)), 53-68. <https://doi.org/10.1108/RAMJ-09-2020-0056>
 (Open in a new window)Google Scholar
 *Olaore, G. O., Adejare, B. O., & Udofia, E. E. (2020). Prospects and challenges of entrepreneurship internationalization on the competitiveness of SMEs. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(3), 303-315.
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 Ono, A., & Uesugi, I. (2014). SME financing in Japan during the global financial crisis: Evidence from firm surveys (No. 6). Institute of Economic Research, Hitotsubashi University
 (Open in a new window)Google Scholar
 *Owen, R., Botelho, T., Hussain, J., & Anwar, O. (2022). Solving the SME finance puzzle: An examination of demand and supply failure in the UK. *Venture Capital*, 25(open in a new window)(1(open in a new window)), 1-33. <https://doi.org/10.1080/13691066.2022.2135468>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Parida, P., & Pradhan, K. (2022). Explaining the demand for credit by micro, small, and medium enterprises in India. *Journal of Public Affairs*, 22(open in a new window)(2(open in a new window)), 44774. <https://doi.org/10.1002/pa.2486>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar
 *Pickernell, D., Senyard, J., Jones, P., Packham, G., Ramsey, E., & Henry, C. (2013). New and Young firms: Entrepreneurship policy and the role of government - evidence from the federation of small businesses survey. *Journal of Small*

Business and Enterprise Development, 20(open in a new window)(2(open in a new window)), 358–382. <https://doi.org/10.1108/14626001311326770>
 (Open in a new window)Google Scholar

Raco, M., De Souza, T. (2018). Urban development, small Business communities and the entrepreneurialisation of English local government. *Town Planning Review*, 89(open in a new window)(2(open in a new window)), 145–165. <https://doi.org/10.3828/tpv.2018.9>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Radas, S., & Bozic, L. (2009). The antecedents of SME innovativeness in an emerging transition Economy. *Technovation*, 29(open in a new window)(44748(open in a new window)), 438–450. <https://doi.org/10.1016/j.technovation.2008.12.002>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Rao, P., Kumar, S., Chavan, M., & Lim, W. (2021). A systematic literature review on SME financing: Trends and future directions. *Journal of Small Business Management*, 61(open in a new window)(3(open in a new window)), 1247–1277. <https://doi.org/10.1080/00472778.2021.1955123>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Riding, A., & Haines, G., Jr. (2020). Loan guarantees: Costs of default and benefits to small firms. *Journal of Business Venturing*, 16(open in a new window)(6(open in a new window)), 595. [https://doi.org/10.1016/S0883-9026\(00\)00050-1](https://doi.org/10.1016/S0883-9026(00)00050-1)
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Riding, A., Madill, J., & Haines, G. (2019). Incrementality of SME loan guarantees. *Small Business Economics*, 29(open in a new window)(44593(open in a new window)), 47–61. <https://doi.org/10.1007/s11187-005-4411-4>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Rubin, T., & Ben-Aharon, N. (2021). Additionality of government guaranteed loans for SMEs in Israel. *Journal of Economics & Finance*, 45(open in a new window)(3(open in a new window)), 504–528. <https://doi.org/10.1007/s12197-021-09538-8>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

Saddiq, S., & Bakar, A. (2019). Impact of economic and financial crimes on economic growth in emerging and developing countries: A systematic review. *Journal of Financial Crime*, 26(open in a new window)(3(open in a new window)), 910–920. <https://doi.org/10.1108/JFC-10-2018-0112>
 (Open in a new window)Google Scholar

Sato, Y. (2000). Linkage formation by small firms: The case of a rural cluster in Indonesia. *Bulletin of Indonesian Economic Studies*, 36(open in a new window)(1), 137–166. <https://doi.org/10.1080/00074910012331337813>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Sato, Y. (2013). Linkage formation by small firms: The case of a rural cluster in Indonesia. *Bulletin of Indonesian Economic Studies*, 36(open in a new window)(1(open in a new window)), 137–166. <https://doi.org/10.1080/00074910012331337813>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Seo, J. (2019). A study of effective financial support for SMEs to improve economic and employment conditions: Evidence from OECD countries. *Managerial and Decision Economics*, 38(open in a new window)(3(open in a new window)), 432–442. <https://doi.org/10.1002/mde.2838>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Shen, C., Chu, H., & Wang, Y. (2016). Who furls the umbrella on rainy days? The role of bank ownership type and bank size in SME lending. *Emerging Markets Finance & Trade*, 48(open in a new window)(sup2(open in a new window)), 184–199. <https://doi.org/10.2753/REE1540-496X48S211>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Skoufias, E., Leite, P., & Narita, R. (2013). Expanding microfinance in Brazil: Credit utilisation and performance of small firms. *The Journal of Development Studies*, 49(open in a new window)(9(open in a new window)), 1256–1269. <https://doi.org/10.1080/00220388.2013.790961>
 (Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Tambunan, T. (2008a). SME development in Indonesia: Do economic growth and government support matter? https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1218922(open in a new window)
 (Open in a new window)Google Scholar

*Tambunan, T. (2008b). SME development, economic growth, and government intervention in a developing country: The Indonesian story. *Journal of*

International Entrepreneurship, 6(open in a new window)(4(open in a new window)), 147–167. <https://doi.org/10.1007/s10843-008-0025-7>

(Open in a new window)Google Scholar

USA Gov. (2021). COVID-19 small Business loans and assistance. United States of America Government. Retrieved April 10, 2022, from [https://www.usa.gov/covid-small-business-loans?](https://www.usa.gov/covid-small-business-loans?msclkid=ea6460d3bc9311ecae9f7e703b039de7&fbclid=IwAR1I0EdtjzURLDdatje5HwDR67RT5aSTumFWWh13-s_WV0g_JBQrH0sSoBqg)

[msclkid=ea6460d3bc9311ecae9f7e703b039de7&fbclid=IwAR1I0EdtjzURLDdatje5HwDR67RT5aSTumFWWh13-s_WV0g_JBQrH0sSoBqg](https://www.usa.gov/covid-small-business-loans?msclkid=ea6460d3bc9311ecae9f7e703b039de7&fbclid=IwAR1I0EdtjzURLDdatje5HwDR67RT5aSTumFWWh13-s_WV0g_JBQrH0sSoBqg)(open in a new window)

(Open in a new window)Google Scholar

US Small Business Administration. (2019). 2019 weekly lending reports (Version 2019-12-27). <https://www.sba.gov/document/report-2019-weekly-lending-reports>(open in a new window)

(Open in a new window)Google Scholar

*van der Schans, D. (2001). The British Business bank's role in facilitating economic growth by addressing imperfections in SME finance markets. *Venture Capital*, 17(open in a new window)(44593(open in a new window)), 45839.

<https://doi.org/10.1080/13691066.2015.1021026>

(Open in a new window)Google Scholar

*van der Schans, D. (2015). The British Business Bank's role in facilitating economic growth by addressing imperfections in SME finance markets. *Venture Capital*, 17(1-2), 7–25.

(Open in a new window)Google Scholar

*Waniak-Michalak, H., & Michalak, J. (2019). Consequences of public financial aid for organizations providing guarantees for SMEs. *Business and Economic Horizons*, 15(3), 474–489. <https://www.ceeol.com/search/article-detail?id=889582>(open in a new window)

(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Watkins, B. (2016). On government programs that increase small firms' access to capital. *Journal of Small Business Management*, 45(open in a new window)(1(open in a new window)), 133–136. <https://doi.org/10.1111/j.1540-627X.2007.00203.x>

(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Wilcox, J., & Yasuda, Y. (2020). Government guarantees of loans to small businesses: Effects on banks' risk-taking and non-guaranteed lending. *Journal of Financial Intermediation*, 37(open in a new window), 45–57.

<https://doi.org/10.1016/j.jfi.2018.05.003>

(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Xiao, L., & Ritchie, B. (2009). Access to finance for high-tech SMEs: Regional differences in China. *Environment & Planning C: Government & Policy*, 27(open in a new window)(2(open in a new window)), 246–262. <https://doi.org/10.1068/c0817b>

(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Yamori, N., & McMillan, D. (2015). Japanese SMEs and the credit guarantee system after the global financial crisis. *Cogent Economics & Finance*, 3(open in a new window)(1(open in a new window)), n.p(open in a new window).

<https://doi.org/10.1080/23322039.2014.1002600>

(Open in a new window)Google Scholar

*Yusoff, M., Zainol, F., Ismail, M., Kasuma, J., & Darma, D. (2013). Usage of public financial support Services, entrepreneurial orientation and SME performance: The case of Malaysia. *Financial Internet Quarterly 'E-Finance'*, 17(open in a new window)(4(open in a new window)), 46357.

<https://doi.org/10.2478/fiqf-2021-0024>.

(Open in a new window)Web of Science ®(Open in a new window)Google Scholar

*Zhou, S., Chimucheka, T., Ayandibu, A. O., & Masuku, M. (2022). Government interventions to ameliorate COVID-19 recession: The case of small, micro, and medium firm's survival in South Africa. *Journal of International Commerce, Economics and Policy*, 14(open in a new window)(1(open in a new window)), 1–21.

<https://doi.org/10.1142/S1793993323500059>

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Abstract

Education is a significant contributor to human capital. Financial assistance for education through institutional loan serves as the key element for human development, and loan repayment without default makes the education loan product self-sustainable. The systematic review aims to study the various articles related to education loan repayment (ELR) using bibliometric analysis approach and R studio software with the help of biblioshiny package. The study analyses 812 articles published in the Scopus database between 1990 and 2022. The review identifies most relevant authors, most cited articles, publication trends, keywords and themes, and trending topics. The review finds that research in the domain of ELR is at an increasing trend with a growth rate of 7.2% and, in the year 2022, the highest number of scientific publications, that is, 72 articles, was published. The review exhibits that existing research in the field has mainly focused on themes such as repayment burden, financial literacy, financial education, student debt, income, mental health, and loan defaults. The study concludes that highly cited work in educational loan repayment is in the field of medicine, highlighting salary as the key factor for educational loan repayment, and loan repayment is incentivized by the federal government to serve the designated underserved areas through service option loan repayment programs. Methods on designing and marketing new approaches to loan repayment can be researched in future with relation to human resource recruitment and retention by the employers.

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Introduction

Education loans (ELs) are an important source of financing for higher education. However, the increasing number of students' relying on educational loans has emphasized the challenges associated with loan repayment. The concept of promoting ELs in India was first introduced in 2001 by the Indian Banks Association (IBA), which also designed the educational loan scheme. There are 864 universities, 40,026 schools, and 11,669 independent higher education institutions in India. 77.8 percentage of India's colleges are privately run, and majority are non-assisted colleges. In Indian higher education, the gross

enrolment ratio (GER) is 25.2 percentage for 2016–2017, while globally, it ranges from 8 percentage in Africa to 75 percentage in Europe and North America (Nerkar and Dhongde 2018). Overall enrolment in Indian higher education is 1.9 crore boys and 1.6 crore girls as of 2018. The overall portfolio of ELs is about Rs. 80,000 crore, consisting mainly of scheduled commercial banks (contributing Rs. 73,000 crore), cooperative banks (Rs. 2000 crore), and non-banking financial corporations (Rs. 5000 crore) as mentioned by Nerkar and Dhongde (2018).

ELs sanctioned in India have declined by 25% over the past 5 years from 2015 to 2019 because default ratios have increased in education loan repayment (ELR). As on March 31, 2019, the sanctioned number of loans for education decreased from 3.34 to 2.5 lakh (Chitra 2019). The reason for the decline in ELs sanctioned is due to the increasing non-performing assets in the education loan (EL) portfolio of financial institutions. However, it may be noted that the total loan amount disbursed has increased by 34 per cent amounting to Rs. 22,550 crore in the fiscal year 2019 from Rs. 16,800 crore in the financial year 2015 (Chitra 2019), which indicates that banks are keen on funding high ticket education loans. Student loan borrowing is at its highest ever as of August 2022, with more than 45 million borrowers collectively owing \$1.75 trillion student loan debt including private and federal loans in the USA, and the average borrowing per student is around \$28,950. Federal student loan repayments have been paused, it is in forbearance from March 2020 owing to the COVID-19 Pandemic, and the repayment reprieve was set to expire in May 2022 (Hahn 2023).

The motive to review the study on factors affecting ELR is based on the value parameters for literature reviews written by Lim et al. (2022a) that highlights necessity, importance, relevance, urgency, and contribution of literature reviews. This review gives insights to future researchers to identify gaps, avoid duplicative efforts in ELR by identifying the current state and progress in ELR. This study explains the benefits to new and established scholars with an updated understanding of the field of study, and the emerging fields in ELR, and its relevance to the journals scope. There are limited reviews on ELR, and past studies have limitations since they do not address the issues caused by covid-19 pandemic.

Mukherjee et al. (2022) mentioned theoretical contributions from science mapping and practical contributions from performance analysis for bibliometric analysis. In this study, theoretical contributions are presented by clarifying nomological networks to ELR factors, mapping social patterns to understand the social process supporting knowledge development in the field, and by tracking the declining, growing, and emerging topics. It also recognizes crucial knowledge gaps for future directions. Practical contributions of this study include reporting research productivity and impact in ELR, ascertaining reach for coverage claims, identifying social dominance or hidden biases, detecting anomalies for further examination, and evaluating relative performance. The aim of the paper is to systematically review the various articles related to ELR and the factors affecting repayment.

Literature review

Studies have found that ELs are widely available and offered by various financial institutions such as banks, non-banking financial companies, and educational institutions (Rani 2016). The factors affecting ELRs include interest rate, type of loan—mortgage-based or income contingent, loan amount, repayment period, and financial conditions of the borrower (Ganapathy et al. 2019). Moreover, the attitude of the borrower was found to influence ELR (Bhandary et al. 2023; Ismail et al. 2011). Several studies have identified the major challenges faced by borrowers in repaying their ELs. These challenges include high interest rates (Miller et al. 2019), low repayment capacities (Ganapathy et al. 2019), low levels of awareness (Ganapathy et al. 2019), lack of job opportunities (Dutta and Dey 2019), and the lack of effective loan management systems (Rani 2016). Borrowers with limited financial resources are often unable to repay their loans due to high interest rates, which can make it difficult for them to manage their finances (Chaudhary and Kaur 2018). In addition, lack of job opportunities makes it difficult for borrowers to repay

their loans as they may not have a steady income (Dutta and Dey 2019).

EL programs vary across different countries in the world in terms of organizational structure, underlying objective, initial funding sources, loan application procedures, student coverage, and the collection methods (Ziderman 2004). Government-subsidized EL schemes are available in 70 countries across the world (Shen and Ziderman 2009). Prior research has suggested many factors in the background of educational loans, concerning non-repayment by borrowers. Such considerations include history of borrowers, amount of loan borrowed, instability of employment and wages, form of repayment, academic experience, institutional characteristics, income, and education of parents (Lochner et al. 2013). The same study mentioned financial instability as the biggest barrier to loan repayment. Rani (2016) suggested that scholarships, fees, grants, and ELs need to be re-evaluated in the context of increasing costs to design better schemes for higher education.

This study has implications for bank marketing for recouping the money spent on EL. Prospective authors can examine consumer behaviour towards banks and financial service providers as per the gap analysed by Kumar et al. (2022b), and ways forward on personal financial management is encouraged given the impact of covid-19 pandemic on consumer finances. In the study by Baker et al. (2023), financial fragility is negatively associated with financial well-being, and loan repayment has implications on financial well-being of young adults. In the study by Tavares et al. (2023), individuals presented greater levels of financial literacy perception compared to actual knowledge of financial literacy. She et al. (2023) mentioned the lack of research articles in interventions to improve young adults' financial well-being and found limited consensus on a conclusive measure for young adults' financial well-being. Contributions of this study have implications on young adults' financial well-being, safeguarding the financial well-being of young adults' in areas such as financial fragility and financial literacy. The systematic review aims to evaluate and synthesize the existing research on EL programs in various countries around the world, with a focus on the current state of ELR, challenges faced by borrowers, and measures taken to overcome these challenges. Hence, we frame the following research questions.

RQ1:

What is the publication trend in ELR research?

RQ2:

Which are the most influential articles contributing to ELR research?

RQ3:

Who are the top prolific authors in ELR research?

RQ4:

What are the major themes and topics studied in ELR research?

RQ5:

What is the future scope of research in ELR research?

Methods

This systematic review uses bibliometric analysis using biblioshiny package in R Language to understand the trends in publication and to uncover the future research directions. Biblioshiny is a data visualization tool developed in R language by Aria and Cuccurullo (2017) to perform bibliometric analysis. The study follows the method of evidence informed management knowledge for systematic review (Tranfield et al. 2003). Eligibility and screening evaluation observed PICO (Participants, Interventions, Comparisons and Outcomes), and PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analysis) guidelines. The data collection stage encompassed selecting the database, extracting literature with inclusion- exclusion criteria, exporting the extracted data to biblioshiny, and filtering the articles. The data search was conducted on the Scopus database because of its large coverage as compared to web of science (Mongeon and Paul-Hus 2016).

The fundamental elements of literature reviews as independent studies are adopted from the guidelines prepared by Kraus et al. (2022) for systematic literature reviews. The interrogative approach of “what” “why” “when” “where” “who” and “how” prescribed by Paul et al. (2021) in Scientific Procedures and Rationales for Systematic Literature Reviews (SPAR-4-SLR) is used as a tool guide in this study. The bibliometric data were analysed using the three stage sensemaking approach of scanning the data, sensing the data and substantiating the findings developed by Lim and Kumar (2023).

The search string combinations and Boolean operators used are TITLE-ABSTRACT-KEYWORD ("education*" OR "student*" AND "loan*" OR "debt*" AND "payment*" OR "repayment*" OR "instalment*") AND PUBLICATION YEAR>1989 AND PUBLICATION YEAR<2023 AND (LIMIT-TO (PUBLICATION STAGE, "final")) AND (LIMIT-TO (DOCUMENT TYPE, "article") OR LIMIT-TO (DOCUMENT TYPE, "book chapter") OR LIMIT-TO (DOCUMENT TYPE, "review") OR LIMIT-TO (DOCUMENT TYPE, "conference paper") OR LIMIT-TO (DOCUMENT TYPE, "book")) AND (LIMIT-TO (LANGUAGE, "english")). Finally, 812 articles were extracted from Scopus in csv format and exported to biblioshiny for analysis. Articles, book chapters, reviews, conference papers, and books were included after excluding editorial letters, notes, and short surveys from the data in biblioshiny as shown in Fig. 1. The inclusion exclusion criteria followed the PRISMA protocol introduced by Moher et al. (2009) and 38 records were included for the bibliometric study.

Fig. 1

figure 1

Review process for ELR research based on the PRISMA protocol

Full size image

Results

The study applied bibliometric analysis to provide an overview of the research in the field of ELR. Bibliometric analysis toolbox by Donthu et al. (2021) prescribes performance analysis and science mapping for bibliometric result analysis. Performance analysis techniques used in this study are descriptive analysis and citation analysis. The science mapping method included in our study is keyword co-occurrence analysis. The study results have been discussed in the below sections.

Annual scientific production

Figure 2 illustrates the research and publication trend from 1990 to 2022. The figure depicts rapid growth in the publication since 2009 and the compounded annual growth rate is 7.2%. From 1990 to 2006, there was a slow-paced growth in the research field. After 2009, there was a surge in publications demonstrating the growing interest among research scholars. The total number of publications (n) from 1990 to 2022 yielded 812 documents; 93.58% were published between 2009 and 2022. The year 2022 has the highest number of publications (n=72). The statistics of annual scientific production show that ELR has emerged as a significant research theme.

Fig. 2

figure 2

Annual scientific production

Full size image

Most relevant authors and authors' impact

Figure 3 shows the most relevant authors. Chapman has published the highest number of documents (15 articles). The second highest work in ELR is done by Pathman, with 13 articles. Table 1 displays the top 20 most relevant authors, author impact, and total citations received. Ley has been cited more than 300 times. Chapman has the highest h-index of 9.

Fig. 3

figure 3

Most relevant authors

Full size image

Table 1 Author impact

Full size table

Citation analysis

The top 10 globally cited documents are given in Table 2. The article by Ley and Rosenberg (2005) found that physician scientists play a crucial role in medical research and were declining in number with increased indebtedness of medical graduates due to rising tuition fees. The study highlights ELR as an obstacle to pursue medical research careers. Rosenblatt et al. (2006) found that the major barrier in physician recruitment to community health centres was low salaries and recruitment was heavily dependent on NHSC scholarships and state loan repayment programs. Loan repayment for community service in the designated shortage areas was used as an incentive to entice physicians to work in the underserved areas (Pathman et al. 2004). Medical residents reported symptoms of stress, depression, increased cynicism, and decreased humanism owing to their association with increased EL debt and sought for legislative relief from early loan repayment (Collier et al. 2002). State ELR programs for health workers return of service in underserved areas with minimum service requirements were found to alleviate health worker shortage in underserved areas (Barnighausen and Bloom 2009). Skillman et al. (2010) suggested loan repayment programs to be provided for increased participation in oral healthcare in rural America.

Table 2 Global most cited documents (most influential articles)

Full size table

Education debt below \$10,000 was found to support college completion and above \$10,000 was found to reduce the likelihood of college completion (Dwyer et al. 2012) which indicates that amount of loan is a significant factor affecting ELR. In the study by Brown et al. (2016), it was found that mathematics and financial education among students improves loan repayment behaviour. Walsemann et al. (2015) studied the mental health of indebted young adults with student loan borrowings and found that the presence of student loans was associated with poor psychological functioning having possible spill over effects like occupational trajectories affecting loan repayment at a later stage. O'Neill et al. (2005) found that participation in credit counselling programs improves health and financial behaviours.

Word cloud analysis

Figure 4 displays the word cloud analysis, keywords such as higher education, student debt, financial literacy, financial education, human capital, financial aid, loan forgiveness, indebtedness, student loan default, and repayment burdens. Researchers can use these words to find the most relevant articles in ELR.

Fig. 4

figure 4

Word cloud

Full size image

Co-occurrence network

The co-occurrence network shows the major themes related to student loans. In total, the co-occurrence analysis of keywords revealed six knowledge clusters. The explanation for each cluster is based on sensemaking. Sensemaking is a process of arranging keywords in clusters to convey a coherent narrative (Lim et al 2022b; Kumar et al 2022a). The six knowledge clusters are identified under.

Cluster 1::

Repayment burdens following higher education financing through student loans

The co-occurrence of keywords in cluster one investigates "repayment burdens" and "loan defaults" in "student loans" following "higher education financing". The "policy" support and "financial aid" are also grouped together since they contribute towards "human capital".

Cluster 2::

Loan repayment in pursuit of higher education

The "indebtedness" towards "student debt" and "loan repayment" in pursuit of "higher education" is grouped in cluster two.

Cluster 3::

Financial literacy through financial education

The third cluster examines "financial literacy" through "financial education" and its relation to "student loan debt".

Cluster 4::

National health service corps healthcare support programs in service repayment options

The fourth cluster investigates "national health service corps" incentives, aid to "medical education" and "workforce" to contribute towards "rural health" and "primary care".

Cluster 5::

Student debts and income

The sixth cluster examines the relation between "students" and various "debt" of students including "consumer credit" and the different sources of "income" while studying the course.

Cluster 6::

Student financial aid for educational finance

The sixth cluster examines the various "student financial aid" available to "finance education".

The links between various clusters are highlighted to show the different areas of study and the interlink between them in Fig. 5.

Fig. 5

figure 5

Co-occurrence network

Full size image

Thematic map

Co-word analysis of author keywords identifies trending topics in the field. The thematic map was analysed using the technique mentioned by Cobo et al. (2011). The trending topics in student loans are identified based on the central-density diagram. Figure 6 shows the four quadrants as per the clusters of keywords based on centrality and density along the X- and Y-axis that are discussed below.

Fig. 6

figure 6

Thematic map (co-word analysis)

Full size image

Motor theme: The themes of the first quadrant are well-advanced with high centrality and density. There are few motor themes such as "national health service corps", "workforce", "loan repayment", "education debt" and "career".

Niche themes: Second quadrant themes are with high density and low centrality. They are well-developed and specialized themes but are minimal compared to the overall field. "Mental health" and "housing affordability" are the noted themes in this quadrant.

Peripheral themes: The third quadrant consists declining themes with low density and low centrality. This quadrant includes declining themes such as "financial

inclusion", "student financial aid" and "educational finance".

Basic themes: These themes under the fourth quadrant have high centrality and low density. They include "student loan", "higher education" and "student debt".

Discussions and implications

Key implications are discussed based on the identified cluster of themes and the trending topics.

Student financial aid for educational finance

Scholarships and loan repayment programs by the federal government were mentioned as a prominent factor among medical professionals affecting the ELR program (Ley and Rosenberg 2005; Rosenblatt et al. 2006). Citation analysis in educational loan repayment in the field of medicine highlighted "salary" as the key factor for ELR, and repayment had to be incentivized by the federal government to serve in the designated underserved areas by service option loan repayment programs (Barnighausen and Bloom 2009; Collier et al. 2002; Ley and Rosenberg 2005; Pathman et al. 2004; Rosenblatt et al. 2006; Skillman et al. 2010). Several states offered financial incentives and ELR programs for healthcare education (Pathman et al. 2013).

National health service corps healthcare support programs in service repayment options

National Health Service Corps (NHSC) offers student loan repayment programs for physician assistants and nurse practitioners in exchange for 2 years of service with an option to renew the contract after 2 years (Pathman et al. 2014). The loan repayment programs (LRP) of the National Health Service Corps (NHSC) have provided critical recruitment and retention incentives (Pathman et al. 2022), and the NHSC LRP experience by clinicians in all domains was generally positive (Pathman et al. 2019).

Financial literacy through financial education

Brown et al. (2016) found that financial and mathematical education improves repayment behaviour of students. It can be inferred that financial education is a factor affecting ELR. Bhatia and Singh (2023) reported that acquiring financial knowledge and developing positive financial attitude and adopting healthy financial behaviour are important to attain financial well-being. Anand and Mishra (2022) constructed a nonlinear model using vector machine classifier that classifies potential customers into good and bad class, based on their positive and negative savings behaviour, and concluded that behavioural characteristics along with income level and financial literacy can be used to understand financial distress among millennials. Steep instalment plans which have higher initial repayments as compared to flat instalment plans increase the borrowers focus on making repayments as per the study by Dezső et al. (2022) which implies instalment plan as a factor affecting ELR.

Repayment burdens following higher education financing through student loans

Mental health of young adults was affected by student loan borrowing having possible spillover effects that affect loan repayment (Walsemann et al. 2015). Income contingent loan reforms were suggested by Chapman (2006) as a much-needed reform in higher education financing. He studied the various income contingent loan repayment schemes in Yale, Sweden, Australia, Sweden, New Zealand and The Republic of South Korea and found that income contingent scheme is a factor that positively supports ELR as compared to mortgage-based loan repayment programs. Borrowing is considered less risky and reduces the impact of loan aversion by participants in the income contingent loan repayment method when compared to mortgage style repayments (Boatman et al. 2022). Income contingent repayment methods reduce the financial hardships of borrowers as compared to mortgage-based repayment systems (Barr et al. 2019; Cai et al. 2019; Chapman and Dearden 2017). Simulated EL scheme models for Brazil (Dearden and Nascimento 2019) and Ireland (Chapman and Doris 2019) favoured income contingent schemes as compared to mortgage-based schemes by reducing the repayment burden on borrowers.

Loan repayment in pursuit of higher education

Perception of service quality in banks improves by enhancing customer satisfaction and customer engagement (Ananda et al. 2022), which implies that EL borrowers' engagement with bankers, and increase in borrowers' satisfaction level with EL service providers improves borrowers' perception of banks service quality. The study by Zwier (2021) suggests practitioners to add insurance-based marketing in their products marketing mix to create value added products. On similar lines, insurance-based marketing can be applied to add value in marketing ELs. Educational courses contribute significantly in providing financial resources to the universities as compared to conferences, seminars, consultancy and scientific research (AL-Ghaswyneh 2020). The study suggests universities to give more attention to educational courses in their university plans and policies to increase the financial resources implying universities to market ELs along with other stakeholders to increase the universities financial resources.

Student debts and income

In the article by Dwyer et al. (2012), the quantum of loan was a significant factor affecting ELR. The article mentioned the threshold loan amount in the USA as \$10,000, above which, loan repayment was likely to be defaulted by non-completion of the course. Banks should strengthen their human capital efficiency and structure capital efficiency should be taken into consideration to strengthen their competitive advantage and gain higher market share (Van Nguyen and Lu 2023). In the same study, it was found that intellectual capital fosters the competitive nature of banks and ensures growth and development of banks. EL schemes for developing human capital with service repayment options by banks have to be designed and marketed for students with high intellectual capabilities willing to serve the banks in order to strengthen the banking industry. EL products can be tailor made with partial or full repayment waivers and used as a recruitment tool by banks for students identified with proven intellectual capabilities and commitment to serve the banking sector for a certain duration.

Contributions of our study also have implications on young adults' financial well-being and safeguarding the financial well-being of young adults' including areas such as financial fragility and financial literacy.

Ways forward

The contribution of NHSC towards healthcare in underserved areas can be studied further to quantify the healthcare development of underserved areas. The threshold amount of the loan, above which, the repayment is likely to be defaulted, can be studied in developed, developing and under developed countries. Mental health of young adults with student loan borrowing can be researched further in different fields of study other than medicine. Cost-benefit analysis on borrowers who availed mortgage-based repayment, with borrowers who availed income contingent repayment can be researched. Safeguarding the financial well-being of young adults can be studied to explore the relationship of financial literacy and financial fragility with the well-being of student loan borrowers.

Future research can focus on designing new approaches to loan repayment that can be used as a tool for human resource recruitment and retention by the employers, with employers paying a part or full amount of the loan based on the tenure of service. Further research is needed to find innovative design and implementation techniques in mortgage-based and income contingent payment methods.

Conclusions

Key takeaways

This review aimed at studying the factors affecting ELR by systematically reviewing articles and using technology powered solutions to visualize the output with the help of R studio. This study provides an overview of the current state of ELR and the challenges faced by borrowers in repaying their loans. The review highlights the measures taken to overcome these challenges, such as implementing effective loan management systems, increasing awareness about the loan repayment process, and providing job opportunities to borrowers. ELR in the

field of medicine highlights salary as the key factor for educational loan repayment and repayment must be incentivized by the government to work in the designated underserved areas by service option loan repayment programs. EL needs to be marketed by universities to increase their financial resources. EL can be custom designed based on identified intellectual capabilities of borrowers and marketed by banks to increase the human capital and recruit the intellectuals with service repayment options by employers to strengthen the banking industry. Insurance can be coupled and marketed with EL as a value-added product for the beneficiaries. In sum, this technology-enabled systematic literature review using R studio on ELR from articles indexed in Scopus database has delivered on its research objectives and its specific research questions pertaining to the performance analysis and science mapping of the field.

Limitations and future review directions

This review has the following limitations. The bibliometric data are retrieved from a single database, that is, Scopus. Though the usage of Scopus is justified as per prior studies (Donthu et al. 2021; Lim et al. 2022b), the study cannot completely discount the possibility of uncovering new insights on ELR documents indexed in other databases like web of science. Thus, future review can focus on ELR articles using web of science as a cross-check mechanism to either support or contradict the generalizability of the findings in this review.

This study uses bibliometric analysis techniques such as performance analysis and science mapping. Though this review accomplishes the listed objectives, it is important to note that other types of reviews can still be conducted. In this regard, future research can consider analysing using new science mapping methods and performance analysis techniques. This study uses R studio for Bibliometric analysis. The bibliometric studies in future research can focus on using other data visualization software applications such as VOSviewer and Gephi by combining bibliometric analysis with network visualization software (Donthu et al. 2021).

References

AL-Ghaswyneh, O.F.M. 2020. Marketing universities' services role in providing financial resources. *Journal of Financial Services Marketing* 25(3-4): 65-75. <https://doi.org/10.1057/s41264-020-00075-9>.

Article

Google Scholar

Anand, S., and K. Mishra. 2022. Identifying potential millennial customers for financial institutions using SVM. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-021-00128-7>.

Article

Google Scholar

Ananda, S., R.P. Kumar, and D. Singh. 2022. A mediation analysis of perceived service quality, customer satisfaction and customer engagement in the banking sector. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-022-00160-1>.

Article

Google Scholar

Aria, M., and C. Cuccurullo. 2017. bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics* 11(4): 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>.

Article

Google Scholar

Baker, H.K., K. Goyal, S. Kumar, and P. Gupta. 2023. Does financial fragility affect consumer well-being? Evidence from COVID-19 and the United States. *Global Business and Organizational Excellence* 42(6): 101-119. <https://doi.org/10.1002/joe.22209>.

Article

Google Scholar

Barnighausen, T., and D.E. Bloom. 2009. Financial incentives for return of service in underserved areas: A systematic review. *BMC Health Services Research* 9: 1-17. <https://doi.org/10.1186/1472-6963-9-86>.

Article

Google Scholar

Barr, N., B. Chapman, L. Dearden, and S. Dynarski. 2019. The US college loans system: Lessons from Australia and England. *Economics of Education Review* 71: 32-48. <https://doi.org/10.1016/j.econedurev.2018.07.007>.

Article

Google Scholar

Bhandary, R., S.S. Shenoy, A. Shetty, and A.D. Shetty. 2023. Attitudes toward educational loan repayment among college students: A qualitative enquiry. *Journal of Financial Counseling and Planning* 34(2): 281-292. <https://doi.org/10.1891/jfcp-2022-0069>.

Article

Google Scholar

Bhatia, S., and S. Singh. 2023. Exploring financial well-being of working professionals in the Indian context. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-023-00215-x>.

Article

Google Scholar

Boatman, A., C. Callender, and B. Evans. 2022. Comparing high school students' attitudes towards borrowing for higher education in England and the United States: Who are the most loan averse? *European Journal of Education* 57(2): 199-217. <https://doi.org/10.1111/ejed.12499>.

Article

Google Scholar

Brown, M., J. Grigsby, W. Van Der Klaauw, J. Wen, and B. Zafar. 2016. Financial

education and the debt behavior of the young. *The Review of Financial Studies* 29(9): 2490–2522. <https://doi.org/10.1093/rfs/hhw006>.

Article

Google Scholar

Cai, Y., B. Chapman, and Q. Wang. 2019. Repayment burdens of mortgage-style student loans in China and steps toward income-contingent loans. *Economics of Education Review* 71: 95–108. <https://doi.org/10.1016/j.econedurev.2018.10.006>.

Article

Google Scholar

Chapman, B. 2006. Income contingent loans for higher education: International reforms. *Handbook of the Economics of Education* 2: 1435–1503. [https://doi.org/10.1016/s1574-0692\(06\)02025-3](https://doi.org/10.1016/s1574-0692(06)02025-3).

Article

Google Scholar

Chapman, B., and L. Dearden. 2017. Conceptual and empirical issues for alternative student loan designs: The significance of loan repayment burdens for the United States. *The Annals of the American Academy of Political and Social Science* 671(1): 249–268. <https://doi.org/10.1177/0002716217703969>.

Article

Google Scholar

Chapman, B., and A. Doris. 2019. Modelling higher education financing reform for Ireland. *Economics of Education Review* 71: 109–119. <https://doi.org/10.1016/j.econedurev.2018.06.002>.

Article

Google Scholar

Chaudhary, N., and J. Kaur. 2018. An overview of education loans in India: A study of repayment performance. *Journal of Economics, Commerce, and Management* VI(1): 31–37.

Google Scholar

Chitra, R. 2019. Education loans in India shrink 25% in 4 yrs: *Indiatimes*. May 25. <https://timesofindia.indiatimes.com/business/india-business/edu-loans-in-india-shrink-25-in-4-yrs/articleshow/69490291.cms>. Accessed February 16, 2023.

Cobo, M.J., A.G. López-Herrera, E. Herrera-Viedma, and F. Herrera. 2011. Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology* 62(7): 1382–1402. <https://doi.org/10.1002/asi.21525>.

Article

Google Scholar

Collier, V.U., J.D. McCue, A. Markus, and L. Smith. 2002. Stress in medical residency: Status quo after a decade of reform? *Annals of Internal Medicine* 136(5): 384-390. <https://doi.org/10.7326/0003-4819-136-5-200203050-00011>.

Article

Google Scholar

Dearden, L., and P.M. Nascimento. 2019. Modelling alternative student loan schemes for Brazil. *Economics of Education Review* 71: 83-94. <https://doi.org/10.1016/j.econedurev.2018.11.005>.

Article

Google Scholar

Dezső, L., B. Bakó, and G. Neszveda. 2022. Correction to: Exploiting context-dependent preferences to protect borrowers. *Journal of Financial Services Marketing* 27(4): 306-307. <https://doi.org/10.1057/s41264-021-00124-x>.

Article

Google Scholar

Donthu, N., S. Kumar, D. Mukherjee, N. Pandey, and W.M. Lim. 2021. How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research* 133: 285-296. <https://doi.org/10.1016/j.jbusres.2021.04.070>.

Article

Google Scholar

Dutta, A., and P. Dey. 2019. Impact of education loan on employment and repayment in India. *IJAR* 9(2): 133-149.

Google Scholar

Dwyer, R.E., L. McCloud, and R. Hodson. 2012. Debt and graduation from American universities. *Social Forces* 90(4): 1133-1155. <https://doi.org/10.1093/sf/sos072>.

Article

Google Scholar

Ganapathy, S., A. Thangam, and K. Seethal. 2019. Perception of non performing assets (NPAs) in State Bank of India. *International Journal of Scientific & Technology Research* 8(11): 2721-2727.

Google Scholar

Hahn, A. 2023. 2023 student loan debt statistics: Average student loan debt: forbes. September 19. <https://www.forbes.com/advisor/student-loans/average-student-loan-statistics/>. Accessed February 16, 2023.

Ismail, S., A. Serguieva, and S. Singh. 2011. Integrative model of students'

attitude to educational loan repayment: A structural modelling approach. *Journal of International Education in Business* 4(2): 125-140. <https://doi.org/10.1108/18363261111189522>.

Article

Google Scholar

Kraus, S., M. Breier, W.M. Lim, M. Dabić, S. Kumar, D. Kanbach, D. Mukherjee, V. Corvello, J. Piñeiro-Chousa, E. Liguori, and D. Palacios-Marqués. 2022. Literature reviews as independent studies: Guidelines for academic practice. *Review of Managerial Science* 16(8): 2577-2595. <https://doi.org/10.1007/s11846-022-00588-8>.

Article

Google Scholar

Kumar, S., S. Sahoo, W.M. Lim, and L.P. Dana. 2022a. Religion as a social shaping force in entrepreneurship and business: Insights from a technology-empowered systematic literature review. *Technological Forecasting and Social Change* 175: 121393. <https://doi.org/10.1016/j.techfore.2021.121393>.

Article

Google Scholar

Kumar, S., J.J. Xiao, D. Pattnaik, W.M. Lim, and T. Rasul. 2022b. Past, present and future of bank marketing: A bibliometric analysis of *International Journal of Bank Marketing* (1983-2020). *International Journal of Bank Marketing* 40(2): 341-383. <https://doi.org/10.1108/IJBM-07-2021-0351>.

Article

Google Scholar

Ley, T.J., and L.E. Rosenberg. 2005. The physician-scientist career pipeline in 2005: Build it, and they will come. *JAMA* 294(11): 1343-1351. <https://doi.org/10.1001/jama.294.11.1343>.

Article

Google Scholar

Lim, W.M., and S. Kumar. 2023. Guidelines for interpreting the results of bibliometrics analysis: A sensemaking approach. *Global Business and Organizational Excellence*. <https://doi.org/10.1002/joe.22229>.

Article

Google Scholar

Lim, W.M., S. Kumar, and F. Ali. 2022a. Advancing knowledge through literature reviews: 'what', 'why', and 'how to contribute.' *The Service Industries Journal* 42(7-8): 481-513. <https://doi.org/10.1080/02642069.2022.2047941>.

Article

Google Scholar

Lim, W.M., T. Rasul, S. Kumar, and M. Ala. 2022b. Past, present, and future of customer engagement. *Journal of Business Research* 140: 439–458. <https://doi.org/10.1016/j.jbusres.2021.11.014>.

Article

Google Scholar

Lochner, L., T. Stinebrickner, and U. Suleymanoglu. 2013. The importance of financial resources for student loan repayment (No. w19716). National Bureau of Economic Research. <https://doi.org/10.3386/w19716>.

Article

Google Scholar

Miller, B., C. Campbell, B.J. Cohen, and C. Hancock. 2019. Addressing the \$1.5 trillion in federal student loan debt. *Center for American Progress* 1: 1–35.

Google Scholar

Moher, D., A. Liberati, J. Tetzlaff, D.G. Altman, PRISMA Group*. 2009. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine* 151(4): 264–269. <https://doi.org/10.7326/0003-4819-151-4-200908180-00135>.

Article

Google Scholar

Mongeon, P., and A. Paul-Hus. 2016. The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics* 106: 213–228. <https://doi.org/10.1007/s11192-015-1765-5>.

Article

Google Scholar

Mukherjee, D., W.M. Lim, S. Kumar, and N. Donthu. 2022. Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research* 148: 101–115. <https://doi.org/10.1016/j.jbusres.2022.04.042>.

Article

Google Scholar

Nerkar, G., and S. Dhongde. 2018. A critical analysis of educational loan schemes of banks and their role for Socio Economic development in India. *IJAR* 5(2): 1337–1343.

Google Scholar

O'Neill, B., B. Sorhaindo, J.J. Xiao, and E.T. Garman. 2005. Financially distressed consumers: Their financial practices, financial well-being, and

health. *Journal of Financial Counseling and Planning* 16(1): 73-87.

Google Scholar

Pathman, D.E., L. Goldberg, T.R. Konrad, and J.C. Morgan. 2013. State repayment programs for health care education loans. *JAMA* 310(18): 1982-1984.
<https://doi.org/10.1001/jama.2013.281644>.

Article

Google Scholar

Pathman, D.E., T.R. Konrad, and R.S. Hooker. 2014. Physician assistants and nurse practitioners in the National Health Service Corps. *JAAPA* 27(12): 35-43.
<https://doi.org/10.1097/01.jaa.0000456575.09015.24>.

Article

Google Scholar

Pathman, D.E., T.R. Konrad, T.S. King, D.H. Taylor Jr., and G.G. Koch. 2004. Outcomes of states' scholarship, loan repayment, and related programs for physicians. *Medical Care*. <https://doi.org/10.1097/01.mlr.00000128003.81622.ef>.

Article

Google Scholar

Pathman, D.E., T.R. Konrad, R.G. Sewell, J. Fannell, and T. Rauner. 2019. Satisfaction of the primary care, mental health, and dental health clinicians of the National Health Service Corps Loan Repayment Program. *Journal of Health Care for the Poor and Underserved* 30(3): 1197-1211.
<https://doi.org/10.1353/hpu.2019.0082>.

Article

Google Scholar

Pathman, D.E., J. Sonis, J.N. Harrison, R.G. Sewell, J. Fannell, M. Overbeck, and T.R. Konrad. 2022. Experiences of safety-net practice clinicians participating in the National Health Service Corps during the COVID-19 pandemic. *Public Health Reports* 137(1): 149-162.
<https://doi.org/10.1177/00333549211054083>.

Article

Google Scholar

Paul, J., W.M. Lim, A. O'Cass, A.W. Hao, and S. Bresciani. 2021. Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies* 45(4): 01-016.
<https://doi.org/10.1111/ijcs.12695>.

Article

Google Scholar

Rani, P.G. 2016. Financing higher education and education loans in India: Trends and troubles. *Journal of Social Science* 12(4): 182-200.

Google Scholar

Rosenblatt, R.A., C.H.A. Andrilla, T. Curtin, and L.G. Hart. 2006. Shortages of medical personnel at community health centers: Implications for planned expansion. *JAMA* 295(9): 1042-1049. <https://doi.org/10.1001/jama.295.9.1042>.

Article

Google Scholar

She, L., H. Waheed, W.M. Lim, and S. E-Vahdati. 2023. Young adults' financial well-being: Current insights and future directions. *International Journal of Bank Marketing* 41(2): 333-368. <https://doi.org/10.1108/IJBM-04-2022-0147>.

Article

Google Scholar

Shen, H., and A. Ziderman. 2009. Student loans repayment and recovery: International comparisons. *Higher Education* 57: 315-333. <https://doi.org/10.1007/s10734-008-9146-0>.

Article

Google Scholar

Skillman, S.M., M.P. Doescher, W.E. Mouradian, and D.K. Brunson. 2010. The challenge to delivering oral health services in rural America. *Journal of Public Health Dentistry* 70: S49-S57. <https://doi.org/10.1111/j.1752-7325.2010.00178.x>.

Article

Google Scholar

Tavares, F., E. Santos, and V. Tavares. 2023. Financial literacy in individuals trained in economics, management, finance, and accounting. *Global Business and Organizational Excellence*. 42(1): 111-120. <https://doi.org/10.1002/joe.22215>.

Article

Google Scholar

Tranfield, D., D. Denyer, and P. Smart. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management* 14(3): 207-222. <https://doi.org/10.1111/1467-8551.00375>.

Article

Google Scholar

Van Nguyen, T., and C.H. Lu. 2023. Financial intermediation in banks and the key role of intellectual capital: New analysis from an emerging market. *Journal of Financial Services Marketing*. <https://doi.org/10.1057/s41264-023-00220-0>.

Article

Google Scholar

Walsemann, K.M., G.C. Gee, and D. Gentile. 2015. Sick of our loans: Student borrowing and the mental health of young adults in the United States. *Social Science & Medicine* 124: 85-93. <https://doi.org/10.1016/j.socscimed.2014.11.027>.

Article

Google Scholar

Ziderman, A. 2004. Policy options for student loans schemes: Lessons from five Asian case studies, vol. 1, 1-117. Bangkok: UNESCO Bangkok.

Google Scholar

Zwier, S. 2021. Insurance-based marketing (IBM): A prevalent marketing strategy. *Journal of Financial Services Marketing* 26: 160-168. <https://doi.org/10.1057/s41264-021-00090-4>.

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Ethics declarations

Conflict of interest

We have no conflicts of interest to disclose.

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H52

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Abstract

Education is one undeniable pathway from poverty. Research has consistently shown the positive effects of higher education level on lifetime earnings. Financing to achieve this can lead to student loan debt, which has become a crisis affecting financial and health wellbeing among some borrowers and disparities in higher education access further exacerbated by the COVID-19 pandemic. Despite the fact that access to higher education has been deemed a right in Article 26 of the Universal Declaration of Human Rights, the student loan crisis threatens access for some. Lack of ratification of the document by the U.S. further pushes the need for critical discussion. Therefore, the purpose of this narrative review was to examine the state of the student loan debt crisis and raise implications for policy. WorldCat, SocINDEX, and Academic Search Complete databases were searched utilizing a combination of key words associated with college student loans and debt, economic justice. Findings showed student loan debt, repayment challenges, and inequities in higher education access remain widespread. There is a need for more social work-based empirical research on student loan debt and social work engagement that promotes critical conversations utilizing an economic justice perspective. Implications for social work practice, policy, and research are discussed.

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References

Alonso, J. (2023, May 10). Seeking payments for social work internships. Inside Higher Ed.
<https://www.insidehighered.com/news/students/careers/2023/05/10/seeking-payment-social-work-internships>

Anong, S. T., & Henager, R. (2021). Student loans and health-related financial hardship. *Journal of Student Financial Aid*, 50(2), 3.
<https://doi.org/10.55504/0884-9153.1715>

Article

Google Scholar

Belfield, C. R., & Bailey, T. (2011). The benefits of attending community college: A review of the evidence. *Community College Review*, 39(1), 46-68.
<https://doi.org/10.1177/0091552110395575>

Article

Google Scholar

Brooks, J. R., & Levitin, A. J. (2020). Redesigning education finance: How student loans outgrew the "debt" paradigm. *Georgetown Law Journal*, 109(1), 5-80.
<https://ssrn.com/abstract=3550070>

Google Scholar

Carnevale, A. P., Cheah, B., & Hanson, A. R. (2015). The economic value of college majors. Center on Education and the Workforce. <https://cew.georgetown.edu/wp-content/uploads/The-Economic-Value-of-College-Majors-Full-Report-web-FINAL.pdf>

Collins, B. & Dortch, C. (2022, August 4). The FAFSA Simplification Act. CRS Report R46909, Version 6. Updated. Department of Education Institute of Education Sciences. <https://eric.ed.gov/?id=ED626268>

Craig, J. D., & Raisanen, S. R. (2014). Institutional determinants of American undergraduate student debt. *Journal of Higher Education Policy and Management*, 36(6), 661-673. <https://doi.org/10.1080/1360080X.2014.957892>

Article

Google Scholar

Duncan, L. (2021, August 17). News: College spending trends are out of control, families paying the price. American Council of Trustees and Alumni. <https://www.goacta.org/news-item/news-college-spending-trends-are-out-of-control-families-paying-the-price/>

Eichelberger, B., Heather, M., & Rachel, F. (2017). Uncovering barriers to financial capability: Underrepresented students' access to financial resources. *Journal of Student Financial Aid*, 47(3), 5. <https://doi.org/10.55504/0884-9153.1634>

Article

Google Scholar

Fan, X., & Sturman, M. (2019). Has higher education solved the problem? Examining the gender wage gap of recent college graduates entering the workplace. *Compensation and Benefits Review*, 51(1), 5-12. <https://doi.org/10.1177/0886368719856268>

Article

Google Scholar

Federal Student Aid. (n.d.). COVID-19 emergency relief and student federal financial aid. <https://studentaid.gov/announcements-events/covid-19>

Flaherty, A., Haslett, C., & Jones II, A. (2023, July 1). Anger, defiance, fear over Supreme Court decision to block student loan forgiveness. ABC News. <https://abcnews.go.com/Politics/anger-defiance-fear-supreme-court-decision-block-student/story?id=100496587>

Flannery, M. E. (2022, October 25.) State funding for higher education still lagging. National Education Association. <https://www.nea.org/advocating-for-change/new-from-nea/state-funding-higher-education-still-lagging>

Fletcher, K. E., & Fuller, M. B. (2021). Does the house always win? An analysis to barriers of wealth building and college borrowing. *Journal of Student Financial Aid*, 50(1), 1-20. <https://doi.org/10.55504/0884-9153.1638>

Article

Google Scholar

Gilchrist, H. R. (2018). Higher education is a human right. *Washington University Global Studies Law Review*, 17(3), 645-676.
https://openscholarship.wustl.edu/law_globalstudies/vol17/iss3/9

Grand Challenges for Social Work. (n.d.). Build financial capability and assets for all. <https://grandchallengesforsocialwork.org/build-financial-capability-for-all/>

Hanson, M. (2021, December 19). Student loan default data. Education Data Initiative. <https://educationdata.org/student-loan-default-rate>

Hanson, M. (2022). College tuition inflation rate. Education Data Initiative. <https://educationdata.org/college-tuition-inflation-rate>

Jackson, V., & Mustaffa, J. V. (2022). Student debt is harming the mental health of black borrowers. The Education Trust.
<https://files.eric.ed.gov/fulltext/ED622829.pdf>

Jaschik, S. (2022, March 3). Education department clarifies rules on income share agreements. *Inside Higher Ed*.
<https://www.insidehighered.com/news/2022/03/04/education-department-clarifies-rules-income-share-agreements>

Johnson, C. L., O'Neill, B., Worthy, S. L., Lown, J. M., & Bowen, C. F. (2016). What are student loan borrowers thinking? Insights from focus groups on college selection and student loan decision making. *Journal of Financial Counseling and Planning*, 27(2), 184-198. <https://doi.org/10.1891/1052-3073.27.2.184>

Article

Google Scholar

Jones, J., & Schmitt, J. (2014). A college degree is not a guarantee. Center for Economic Policy Research. <https://cepr.net/documents/black-coll-grads-2014-05.pdf>

Kakar, V., Daniels, G. E., Jr., & Petrovska, O. (2019). Does student loan debt contribute to racial wealth gaps? A decomposition analysis. *The Journal of Consumer Affairs*, 53(4), 1920-1947.

Article

Google Scholar

Kim, J., & Chatterjee, S. (2021). Financial debt and mental health of young adults. *Journal of Financial Counseling and Planning*, 32(2).
<https://doi.org/10.1891/JFCP-18-00048>

Kromydas, T. (2017). Rethinking higher education and its relationship with social inequalities: Past knowledge, present state, and future potential. *Palgrave Communications*, 3(1). <https://doi.org/10.1057/s41599-017-0001-8>

Article

Google Scholar

Lambert, C. P., & Siegel, D. H. (2018). Social workers in higher education.

Social Work Today, 18(5), 16-19.
<https://www.socialworktoday.com/archive/S018p16.shtml>

Lee, T. (2022). Potential consequences of continued student loan forbearance, and blanket loan forgiveness. American Forum.
<https://www.americanactionforum.org/insight/potential-consequences-of-continued-student-loan-forbearance-and-blanket-loan-forgiveness/>

Lin, J. T., Bumcrot, C., Ulicny, T., Lusardi, A., Mottola, G., Kieffer, C., & Walsh, G. (2016). Financial capability in the United States 2016. FINRA Investor Education Foundation.

Google Scholar

Lin, J. T., Bumcrot, C., Mottola, G., Valdes, O., Ganem, R., Kieffer, C., Lusardi, A., & Walsh, G. (2022). Financial capability in the United States: Highlights from the FINRA Foundation National Financial Capability Study (5th Edition). FINRA Investor Education Foundation.
www.FINRAFoundation.org/NFCSReport2021

Looney, A., & Yannells, C. (2015). A crisis in student loans? How changes in the characteristics of borrowers and in the institutions, they attended contributed to rising loan defaults. Brookings.
<https://www.brookings.edu/wp-content/uploads/2015/09/LooneyTextFall15BPEA.pdf>

MacNaughton, G., & McGill, M. (2012). Economic and social rights in the United States: Implementation without ratification. *Northeastern University Law Journal*, 4(20), 365-406. <https://ssrn.com/abstract=2054736>

Google Scholar

McCowan, T. (2012). Is there a universal right to higher education? *British Journal of Educational Studies*, 60(2), 111-128.
<https://doi.org/10.1080/00071005.2011.648605>

Article

Google Scholar

McLendon, M. K., & Hearn, J. C. (2013). The resurgent interest in performance-based funding for higher education. *Academe*, 99(6), 25-30.

Google Scholar

Mirzoyan, S. (2020). The impacts and outcomes of the Higher Education Act of 1965 fifty-five years later (Master's Thesis). Northridge: California State University. <https://scholarworks.calstate.edu/downloads/bn9999317>. ScholarWorks.

Google Scholar

Mitchell, M., Leachman, M., & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget & Policy Priorities. <https://www.cbpp.org/research/state-budget-and-tax/state-higher-education-funding-cuts-have-pushed-costs-to-students>

National Center for Education Statistics. (2022). Price of attending an undergraduate institution. Condition of Education.
<https://nces.ed.gov/programs/coe/indicator/cua>

Soler, M. C. (2020). International evidence on income share agreements: Perceptions and characteristics of ISAs recipients. <https://doi.org/10.2139/ssrn.3452929>

Book

Google Scholar

Strumbos, D., Linderman, D., & Hicks, C. C. (2018). Postsecondary pathways out of poverty: City University of New York accelerated study in associate programs and the case for national policy. *Journal of the Social Sciences*, 4(3), 100-117. <https://doi.org/10.7758/rsf.2018.4.3.06>

Article

Google Scholar

Tan, E. (2014). Human capital theory: A holistic criticism. *Review of Educational Research*, 84(3), 411-445. <http://www.jstor.org/stable/24434243>

The White House. (2023). Fact sheet: President Biden announces new actions to provide debt relief and support for student loan borrowers. <https://www.whitehouse.gov/briefing-room/statements-releases/2023/06/30/fact-sheet-president-biden-announces-new-actions-to-provide-debt-relief-and-support-for-student-loan-borrowers/>

Ulbrich, T. R., & Kirk, L. M. (2017). It's time to broaden the conversation about the student debt crisis beyond rising tuition costs. *American Journal of Pharmaceutical Education*, 81(6), 101-101. <https://doi.org/10.5688/ajpe816101>

Article

Google Scholar

United Nations. (n.d.). Universal declaration of human rights. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

United States Government Accountability Office. (2023). Higher education: Department of Education should improve enforcement procedures regarding substantial misrepresentation by colleges. <https://www.gao.gov/products/gao-23-104832>

U.S. Department of Education. (2022a). Biden-Harris student debt relief plan explained. <https://studentaid.gov/debt-relief-announcement>

U.S. Department of Education (2022b). Education department announces permanent improvements to the public service loan forgiveness program and one-time payment count adjustment to bring borrowers closer to forgiveness. <https://www.ed.gov/news/press-releases/education-department-announces-permanent-improvements-public-service-loan-forgiveness-program-and-one-time-payment-count-adjustment-bring-borrowers-closer-forgiveness>

U.S. Department of Education. (2023). Release of revised student loan estimator. <https://fsapartners.ed.gov/knowledge-center/library/electronic-announcements/2023-09-21/release-revised-federal-student-aid-estimator>

U.S. Department of Education (n.d.). The Biden-Harris administration's student debt relief plan explained. <https://studentaid.gov/debt-relief-announcement>

West, L., & Denten, B. (2022). Students with loans face financial barriers to degree completion. Pew Charitable Trust. <https://www.pewtrusts.org/en/research->

and-analysis/articles/2022/10/24/students-with-loans-face-financial-barriers-to-degree-completion

Williams, A. J., & Oumlil, B. (2015). College student financial capability: A framework for public policy, research, and managerial action for financial exclusion prevention. *International Journal of Bank Marketing*, 33(5), 637-653. <https://doi.org/10.1108/IJBM-06-2014-0081>

Article

Google Scholar

Xiao, J. J., Porto, N., & McIvor M. I. (2019). Financial capability of student loan holders: Comparing college graduates, dropouts, and enrollees. SSRN. <https://doi.org/10.2139/ssrn.3321898>

Yoder, S. (2022). Twilight of income share agreements to pay for college. The Hechinger Report. <https://hechingerreport.org/twilight-of-income-share-agreements-to-pay-for-college/>

Zhan, M. (2020). Student loan debt and financial hardship among young adults. *Social Development Issues*, 42(2). <https://doi.org/10.3998/sdi.17872073.0042.203>

Zimmerman, S. D. (2014). The returns to college admission for academically marginal students. *Journal of Labor Economics*, 32(4), 711-754. <https://doi.org/10.1086/676661>

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Appendix
Appendix
Literature search
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Search type

Search terms

Years covered by search

Refinements

Number of results

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Advanced key words

student loan crisis

2012–2022

Keywords, articles only

748

WorldCat

Advanced key words

student loan debt

2012–2022

Keywords, articles only

1500

WorldCat

Advanced key words

social work and student loan economic justice

2012–2022

Keywords, articles only

274

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financial capability and student loan debt

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