



Can Capital Markets Be Harnessed for the Financing of Small and Medium-Sized Enterprises (SMEs) in Low- and Middle-Income Countries?

Christoph Sommer

Summary

SMEs are key to development, as they provide livelihoods and jobs for the majority of people in LMICs. Yet, their development is often hampered by constrained access to finance. SMEs mostly depend on bank loans for external finance. However, these have been insufficient to overcome SMEs' financing constraints, especially in LMICs, such that it seems pertinent to explore other financing sources. The World Bank and OECD have repeatedly pointed to capital markets (e.g. Thompson et al., 2018; World Bank, 2020a). Hence, this policy brief explores the role of capital markets for SME finance in LMICs.

Numerous challenges, both on the supply and demand sides, impede SMEs' involvement with capital markets. SMEs struggle with the costs of issuing securities, reporting and corporate governance requirements and, in the case of equity, with concerns about dilution of ownership. Investors on the demand side are discouraged by imperfect information and limited exit options. Consequently, SMEs hardly use equity or market-based debt, especially in LMICs.

However, capital markets can have an indirect positive effect on SME finance: Several financial instruments (e.g. securitisation, equity capital for banks) exploit the respective comparative advantages of banks (information-related activities) and markets (liquidity), and create interactions with benefit flows from markets to banks and vice versa, which result in their complementarity and co-evolution. Specifically, capital market development is associated with increases in bank lending, in particular to smaller and riskier firms (Sommer, 2024; Song & Thakor, 2010). Yet, this is not necessarily the first-best option to mitigate SMEs' financing constraints, since it often takes decade-long reforms to create suitable conditions for capital markets.

This has the following implications for policymaking:

- **Policymakers need to tailor their decisions to the most promising ways of fostering SME finance to local contexts.** While SME promotion may involve capital market development in some middle-income countries, this is still way off for many LMICs, as it may take strenuous institutional and structural reforms over a prolonged period to create an environment for thriving capital markets.
- **Policymakers should foster non-traditional instruments to provide SMEs with direct access to capital market financing.** Receivables and lending platforms are especially promising for LMICs and can be promoted through specialised regulatory frameworks, information and capacity-building, as well as co-investments and tax incentives.
- **Policymakers should scale up policies to improve SMEs' access to loans; this serves both as an immediate response to SMEs' financing constraints and as a complement to policies to ensure that banks' increased lending activities (spillovers from capital market development) can (also) be channelled towards SMEs.** Depending on country-specific bottlenecks, this may include addressing well-known problems in SME lending through the establishment of credit bureaus and registries as well as moveable asset registries; strengthening contract enforcement and insolvency laws; and implementing a regulatory framework conducive to digitalisation.

Disclaimer

This policy brief builds on the paradigm of economic growth. However, unfettered (global) economic growth with current (and currently projected new) technologies will lead to a climate catastrophe since it involves unsustainable levels of emissions and especially resource usage. However, this paradigm is applied since growth is needed in many low- and middle-income countries to achieve the SDGs.

Background

Small and medium-sized enterprises (SMEs) are pivotal for economies, as they account for at least 50 per cent of formal employment in low- and middle-income countries (LMICs) and substantially contribute to employment creation (Ayyagari, Demirguc-Kunt, & Maksimovic, 2014). Beyond that, they provide livelihoods for many more semi-formal and informal workers. The SME segment also contributes to economic development in a complementary manner to larger, more productive firms, in particular regarding innovation, inclusiveness as well as diversification and resilience: SMEs come up with technologies that are efficient in the specific local context or adapt existing innovations to the national or local context. Concerning inclusiveness, SMEs operate also in smaller markets and thus create economic momentum in diverse geographic areas beyond national economic hubs, that is, in environments that are less able to attract larger firms (OECD [Organisation for Economic Co-operation and Development], 2017); in addition, SMEs provide economic opportunities for disadvantaged and marginalised groups such as young people, women and minorities (Disse & Sommer, 2020). Since they move to other sectors, a vibrant SME segment fosters economic diversification and resilience, which is especially important for LMICs that are dependent on single sectors or industries and exposed to commodity price fluctuations (OECD, 2017).

Yet, a lack of access to finance constrains the development of many SMEs. The World Bank

Enterprise Surveys show that SME managers rank access to finance as their biggest obstacle. According to World Bank estimates, the unmet financing needs of SMEs in LMICs amount to a staggering USD 2.6 to 5.2 trillion (36-140% of outstanding SME loans) (Bruhn et al., 2017; Stein, Ardic, & Hommes, 2013). In order to close this massive financing gap, contributions beyond the banking sector – by far the most important source of external finance for SMEs – would be helpful. Hence, institutions with a development mandate, such as the World Bank and the OECD, have repeatedly suggested that capital markets can be harnessed (directly and indirectly) for SME finance (e.g. World Bank, 2020a). SMEs may benefit, on the one hand, from access to capital market financing and, on the other hand, from the positive spillover effects of capital market development on banks' lending activities, that is, increased loan availability for SMEs. This policy brief critically explores the (potential) role of capital markets for SME finance in LMICs and how they might be harnessed for SME finance.

Potential benefits and challenges of capital market financing for SMEs

SMEs can access market-based financing through equity finance (mainly publicly traded shares in stock exchanges or privately traded shares such as private equity (PE) and venture capital (VC)) or market-based debt financing (mainly bonds). There are several potential advantages of equity finance (for details, see Disse and Sommer (2020), whose discussion on the benefits and challenges of capital market financing is summarised in this section). SMEs benefit from the acquisition of long-term finance that comes without repayment obligations when issuing stocks. In addition, the sale of defined shares of ownership transfers some of the entrepreneurial risk to investors. Some SMEs may be unable to get (bank) loans due to their risk profile (high growth potential or new, unproven business models and/or limited collateral and financial track record), and hence rely on risk financing options in

the capital market; such firms usually exhibit great potential for economic dynamism with disproportionately large contributions to innovation, employment creation and growth. Relatedly, market-based finance is the most cost-effective choice for SMEs with certain profiles. Issuance on the capital market also increases SMEs' visibility and transparency with regard to financial performance, which can enhance creditworthiness and access to loans. Bonds have the advantage that they do not dilute ownership; and in comparison to bank loans, this market-based debt may come with lower interest rates and without bank restrictions on firms' activities.

However, there are considerable challenges that hamper SMEs' use of market-based finance. Because of direct costs (e.g. fees, advisory expenses, brokers' commissions) and indirect costs (e.g. meeting pre-listing and reporting requirements), it is relatively (more) expensive to raise smaller amounts through equity or bonds. Moreover, several SMEs struggle to meet reporting and corporate governance requirements because of an inadequate level of institutionalisation. Other SMEs disapprove of the dilution of ownership associated with stock issuance. Challenges also arise on the demand side, that is, for investors: Problems of imperfect information due to the (higher) opaqueness of SMEs and limited exit options due to poor market liquidity discourage investors from buying SME shares. With regard to bonds, investors lean even more towards well-established (large) firms with proven financial performance records and good reputations.

Empirical evidence underlines SMEs' lack of direct access to finance through capital markets

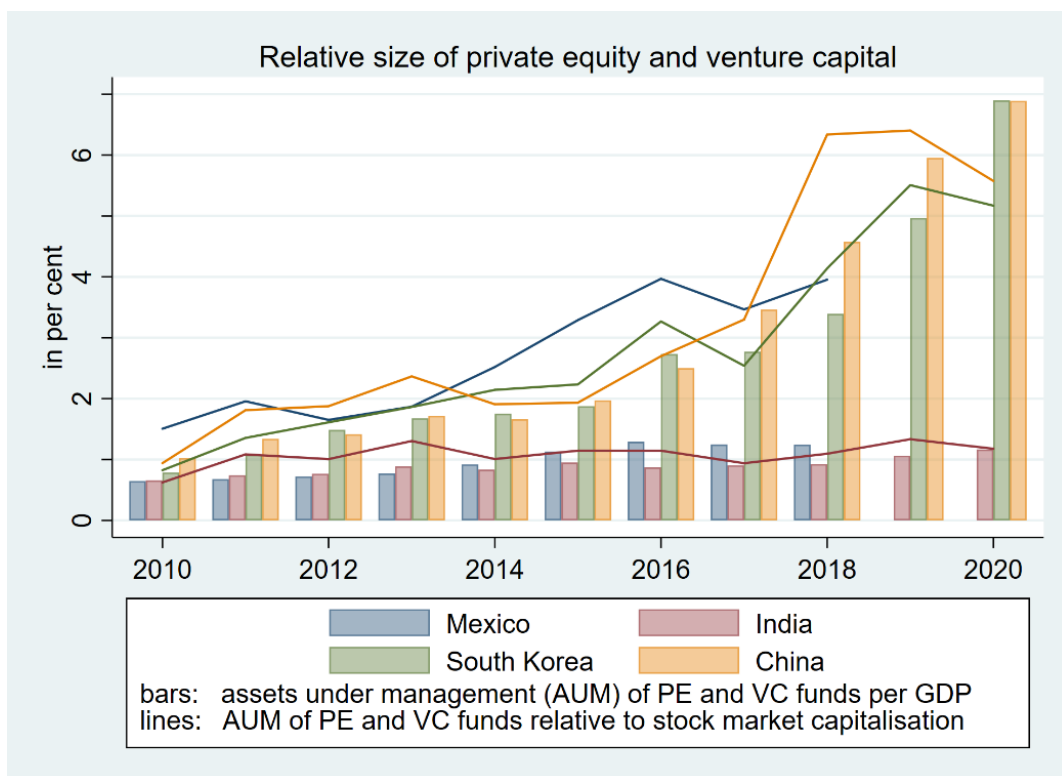
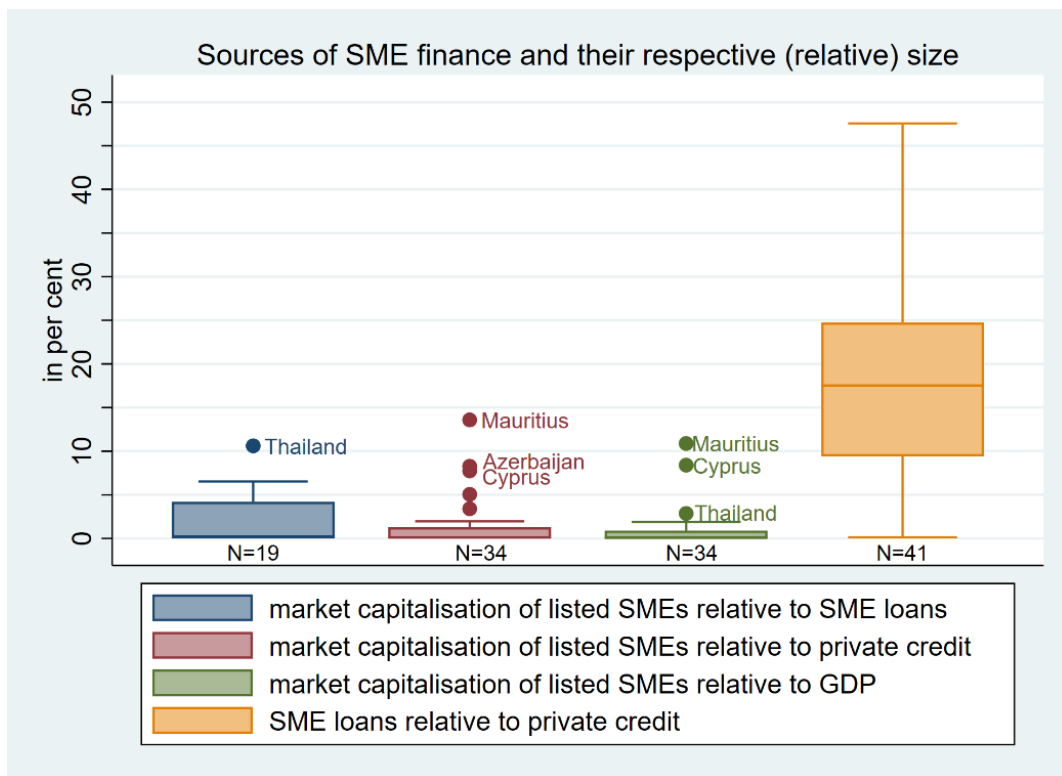
Due to the challenges described above, SMEs in LMICs rarely access finance through capital markets directly. The literature review in Sommer (2024), on which this section builds, shows that – across economies of different income levels – only a few of the largest firms issue shares in the vast

majority of countries. Even dedicated SME stock exchanges with lighter pre-listing and admission requirements mostly fail to change this pattern, as they suffer from limited market capitalisation and liquidity. Consequently, SMEs mostly rely on bank loans for external finance, as depicted in the upper panel of Figure 1 (yellow boxplot); the ratio of SMEs' publicly traded shares to SME loans (blue boxplot) or to private credit (red boxplot) is negligible in most countries (with the median country at 0 per cent, and the country at the 75 percentile (well) below 5 per cent).

The existing literature further documents that bond-issuing firms are even larger than equity-issuing firms and that bond markets, in general, can be described as underdeveloped in LMICs, which suggests that market-based debt instruments are even less suitable for SMEs.

Privately traded equity such as PE and VC, in contrast, has often been described as the most promising market-based instrument for SMEs in publications by World Bank and OECD authors (e.g. Ayyagari, Demirgüç-Kunt, & Maksimovic, 2017; Thompson et al., 2018). Yet, these markets are nascent and in their early stages, meaning that their actual contributions to SME finance are still marginal: Even in countries with vibrant and fast-growing capital markets – such as China and South Korea, where PE and VC have also grown substantially over the last years – assets under management of PE and VC funds (to all firms, not just SMEs) constitute a modest 6 per cent relative to gross domestic product (GDP), or 5 to 6 per cent relative to stock market capitalisation, as visualised in the lower panel of Figure 1. For the other countries with publicly available PE and VC data, contributions stagnated at around 1 per cent of GDP, despite reasonable (Mexico) or good (India) stock market performance in the same time span.

Figure 1: Relative importance of publicly and privately traded equity for SMEs



Note: The upper graph shows box plots: The bottom of the box visualises the value at the 25th percentile, the line in the box the median value and the upper end of the box the 75th percentile (whiskers extend up to 67 per cent of the box size; values outside that range are depicted as individual points).

Source: Sommer (2024); calculations based on data from Preqin (PE and VC figures from publicly available country reports), World Bank’s World Development Indicators (GDP) and Global Financial Development Database (stock market capitalisation), and IMF’s Financial Access Survey (SME loans)

Given this status quo, a central World Bank (2020a) publication on this topic points towards non-traditional instruments to provide SMEs with direct access to capital markets. The comprehensive report acknowledges the marginality of (mini-)bonds, equity issuance (also on dedicated SME exchanges) as well as PE and VC for SMEs, and instead points to the potential of platforms. It describes receivables platforms (debt solution) and lending platforms (peer-to-peer (P2P) lending; loan-based solution) as means suitable for SMEs to access working capital and credit through capital markets: SMEs can directly sell their receivables to – or respectively obtain loans directly from – a wide range of investors through these electronic platforms. Even though similar financial services are available through banks and other financial institutions, these market-based options make such services available for more SMEs and improve the conditions offered to SMEs due to increased competition. The advantage of these non-traditional instruments is that they do not require a (relatively) developed capital market, and that their feasibility and performance are not associated with the wealth of countries, which makes them applicable to many LMICs. (Note that respective fund vehicles, that is, receivables funds and SME loan funds, could address the scale problem, and thus could make these asset classes attractive for a wider range of investors, for example institutional investors. However, this requires a certain level of development of the capital market, consequently making it less suitable for many LMICs.) A respective platform solution for equity is given by equity crowdfunding; but the performance of equity crowdfunding tends to be better in countries with more developed equity markets, that is, it is less suitable for most LMICs.

Data from the Cambridge Centre for Alternative Finance show that the volumes mobilised through receivables platforms and lending platforms (P2P business lending) grew exponentially in LMICs (excluding China) between 2013 (first year of data) and 2019 (last year prior to the Covid-19 crisis). Volumes mobilised through equity crowd-

funding increased rapidly between 2013 and 2016 but have remained at a similar level since then. Despite this growth, these nascent markets jointly accounted only for USD 2.17 billion in LMICs (excluding China) in 2019 (USD 1.19 billion for lending platforms, USD 0.93 billion for receivables platforms and USD 0.05 billion for equity crowdfunding), such that the contributions to SME finance are miniscule (for comparison, the SME loans for India alone were USD 1,600 billion that year).

To sum up, SMEs' direct access to finance through capital markets is negligible in most countries, in particular in LMICs.

Capital markets' indirect contribution to SME finance

Despite the negligible role of capital markets in providing SMEs with direct access to finance, markets can contribute towards fostering SME finance through an indirect channel. This indirect effect is driven by the complementarity and co-evolution of capital markets and the banking sector. Song and Thakor (2010) have elaborated in their theoretical work on how banks and markets complement each other through their respective strengths. Banks are relatively better at screening, monitoring and other information-related activities, while markets excel at providing liquidity and access to a broad base of investors, which allows for cost-effective financing, since some investors may value the project surplus similarly to the firm seeking finance. The authors outline that several financial instruments exploit the respective comparative advantages and establish interactions between banks and markets, which results in benefit flows from banks to markets (e.g. securitisation, covered bonds) and from markets to banks (e.g. bank equity capital), and subsequently in the complementarity and co-evolution of markets and banks. Relatively cheap equity finance from capital markets allows banks (through bank equity capital) to improve their funding structures, such that they can extend loans to previously unserved firms and households – including riskier clients such as

SMEs, as they can meet higher capital requirements. Securitisation or covered bonds enable banks to fund lending activities through asset-backed securities instead of deposits, which allows for further lending expansions. Consequently, one of the central predictions of the theoretical work by Song and Thakor (2010) holds that capital market development is associated with increased bank lending, in particular to smaller and riskier firms. (Note that securitisation involves serious risks, as laid bare by the global financial crisis of 2007-2008, which was induced by irresponsible securitisation practices. Appropriate regulation and oversight is crucial in the balancing act of fuelling financial development through mutually reinforcing interactions between banks and markets (e.g. through securitisation) while safeguarding the soundness and stability of banks as well as the overall financial system.)

In a cross-country analysis of roughly 69,000 firm-level observations from 50 mostly LMICs for the period from 2006 to 2019, Sommer (2024) provides the first empirical evidence for this prediction, that is, for this indirect channel: Smaller firms in industries that are more dependent on external finance are more likely to have sufficient access to loans if they reside in economies with better-developed capital markets. In line with the arguments of Song and Thakor (2010), the effect runs through increased capital market usage by financial institutions and expanded lending activities. This further underlines that markets and banks co-evolve and, secondly, that capital markets primarily contribute to SME finance indirectly through their effect on bank lending and loan availability – the latter has also been put forth as a theoretical argument by World Bank and OECD authors (e.g. Thompson et al., 2018; World Bank, 2020a).

However, this does not imply that capital market development is the first-best option to foster SME finance for several reasons. First, establishing deep and liquid capital markets that generate such positive spillovers on SMEs' financing situation may require decade-long reforms to create

suitable framework conditions for capital markets. For many LMICs, this is not achievable in the near future. More immediate and direct policies that tackle SMEs' financing constraints in the short and medium term are indispensable until capital markets are established; most importantly, this involves addressing country-specific bottlenecks for bank loans to SMEs, that is, creating an environment that facilitates lending towards SMEs. Second, even in countries with well-functioning capital markets, it requires a banking sector and a broader financial system infrastructure that are equipped to channel loans to SMEs. Otherwise, capital market development may create positive spillovers on the banking sector, but the increased loan availability and lending activities will not be directed to SMEs. Hence, even in countries where capital market development is a suitable instrument to promote SME finance, these efforts need to be complemented by respective policies that create a favourable environment for lending to SMEs.

Implications for policymakers

Existing evidence and knowledge indicate that capital markets in LMICs are basically negligible for SMEs as direct sources of external finance, but that they create positive spillovers on banks' lending activities, and thus (potentially) on SMEs' access to loans. Yet, the establishment of well-functioning capital markets may involve – depending on national preconditions – a lengthy and challenging reform process. This has the following implications for policymakers.

(1) Policymakers need to tailor their decisions to the most promising ways of fostering SME finance to the respective national realities. For some middle-income countries, capital market development is a suitable tool for introducing risk-financing options to unlock the potential of the very small and unique group of SMEs with high growth potential, while at the same time exploiting the spillover effects on banks' lending activities that mitigate the financing constraints of the broader SME segment. For many LMICs, though, this is still a long way off, as it may take strenuous

institutional and structural reforms over a prolonged period of time to create an environment that is truly conducive to thriving capital markets. As outlined by a World Bank (2020b) publication, this requires the following: First, achieving **macro-economic stability**, most importantly low and stable inflation rates, good fiscal governance (large deficits are often associated with a crowding out of the private sector by the government), and well-established and solid government securities (considered as risk-free, and thus serve as reference for benchmarking the valuation of other domestic securities). Second, fostering a **relatively developed financial system** with a sound and competitive banking sector (banks provide market infrastructure and act as important (early) issuers and investors) and a sufficiently large domestic institutional investor base. Third, building a **solid legal and institutional environment** that can protect and enforce investors' rights (i.e. contract enforcement, and more fundamentally rule of law and the absence of corruption).

(2) Irrespective of national realities, policymakers can foster non-traditional instruments such as electronic platforms to provide SMEs with direct access to capital market financing. Most promising market-based instruments for LMICs are receivables platforms (debt solution) and lending platforms (loan-based solution), as their feasibility and performance are independent of a country's level of capital market development and wealth. Another interesting platform solution is equity crowdfunding, even though it is expected to face more challenges in LMICs than the previously mentioned platforms (World Bank, 2020a). In order to grow such non-traditional capital market instruments, policymakers, on the one hand, need to implement appropriate regulations: most importantly, a specialised regulatory framework (e.g. efficient rules for receivables' transfers) as well as robust supervisory and enforcement programmes for such new instruments. On the other hand, governments should consider measures to accelerate the development of such platforms; this may involve information and the capacity-building of stakeholders as well as

more intensive interventions such as potential co-investments for receivables and lending platforms or tax incentives for equity crowdfunding. (Beyond that, and more fundamentally, governments need to ensure the existence of a strong infrastructure for SME lending (credit information, registries, insolvency regimes, etc. – see World Bank, 2020a), since debt- and loan-based capital market instruments are reliant on this; these underlying fundamentals for well-functioning SME lending are taken up and spelt out in the following.)

(3) In countries where deep and liquid capital markets are only feasible in the longer run, policymakers should prioritise more direct policies and measures to improve SMEs' access to loans. Yet, also in countries on the verge of achieving well-functioning capital markets, policymakers should complement the reform efforts of capital market development with such measures to foster SME lending; this facilitates the development of market-based platform solutions and ensures that the banks' increased lending activities (as positive spillover effects from capital market development) can (also) be channelled towards SMEs. Such policies need to concentrate on country-specific bottlenecks in the provision of SME loans. The choice and design of these policies can be informed by the challenges and policy responses that have been discussed in the literature on SMEs' access to loans.

(3.1) Addressing the problem of information asymmetry, which is more pronounced in the context of SMEs, as they are more opaque and often lack collateral and/or financial track records. This may involve the establishment and/or digitalisation of systems sharing credit information, such as credit bureaus and credit registries, which facilitate banks' screening and creditworthiness assessments of applying SMEs. Research has shown that reporting requirements for such systems should also be extended to larger microfinance institutions in order to ensure a smooth transition from microfinance to conventional bank financing for small firms that outgrow microfinance (Sommer, 2022).

(3.2) Reforms may target SMEs' lack of suitable collateral by installing moveable asset registries, such that a wider range of firms' assets qualify as eligible collateral. The harmonisation and digitalisation of these registries facilitate the ease and response speed of inquiries, and they prevent fraudulent practices such as multiple pledging of the same moveable asset in different contractual arrangements.

(3.3) Policymakers may want to strengthen the relevant legal framework, which may include improvements in contract enforcement to encourage banks to engage in more lending relationships; but this may also comprise the introduction of adequate bankruptcy and insolvency laws to address SME managers' fears about over-indebtedness and personal liability for the firms' debts.

(3.4) Lastly, policymakers and regulators need to strike a balance in the regulatory framework between facilitating digitalisation in the financial sector – as this has the potential to mitigate several bottlenecks and challenges – and ensuring stability and integrity in the market as well as preventing exploitative financialisation. Scaling digital financial products is a policy with great potential for financial inclusion, as it increases the availability of financial services as well as their affordability: The costs both for service providers and consumers are reduced (a multitude of small

transactions can be handled instantly at minimal cost on the supply side; and consumers save time and resources as, for instance, online credit applications only take minutes and can be done via laptop or phone at any time (and location), and approval times are reduced from weeks to days or even minutes). Fostering digitalisation also constitutes a policy intervention empowering SMEs with limited managerial capabilities or SMEs that have been discouraged due to the cumbersome procedures of traditional (non-digital) financial services, since it greatly increases the simplicity and convenience of using financial services. Lastly, such policies enhance competition and the supply of financial services, both quantitatively and qualitatively, as digital finance facilitates the entrance of new players into the market. At the same time, regulators need to address the potential risks associated with digital finance (for more details on addressing the challenges of digital lending on credit markets and financial systems, see Sommer (2021)): most importantly, ensuring the integrity of (digital) savings and credit markets (through specific licences and reporting requirements for all digital financial service providers) and preventing exploitative financialisation (through the extension of consumer protection policies to digital financial services and by fostering financial literacy).

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