

University of Groningen

Introduction to contemporary issues in development finance

Abor, J. Y.; Adjasi, Charles; Lensink, Robert

Published in:
Contemporary Issues in Development Finance

DOI:
[10.4324/9780429450952-1](https://doi.org/10.4324/9780429450952-1)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2021

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Abor, J. Y., Adjasi, C., & Lensink, R. (2021). Introduction to contemporary issues in development finance. In J. Y. Abor, C. K. D. Adjasi, & R. Lensink (Eds.), *Contemporary Issues in Development Finance* (pp. 1-19). Routledge. <https://doi.org/10.4324/9780429450952-1>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Introduction to contemporary issues in development finance

*Joshua Yindenaba Abor, Charles Komla Delali Adjasi
and Robert Lensink*

1.1 INTRODUCTION

The importance of finance in the economic growth and development process cannot be overemphasised. The literature is replete with evidence that suggests that finance contributes significantly to the economic growth and development process in any country. Although the extant literature generally supports the fact that finance and, for that matter, the financial sector are necessary for spurring economic growth by mobilising savings for investments, some have argued in recent times that it can also be a cause of fragility (where regulation is ineffective), as witnessed during the global financial crisis, the eurozone crisis, and the banking crises observed in certain economies. When the financial sector does not function properly, opportunities for growth and development are lost, resulting in inequalities and in some cases crises. However, when the financial sector functions efficiently, it provides the avenues for market players to take advantage of investment opportunities by channelling funds for production, thus driving economic growth and development.

Discussions in the finance and growth literature thus focused on the level of financial sector development. This was also in line with the view that the finance–growth link is stronger in well-developed financial systems and led to substantial dialogue around the depth, size, efficiency, and outreach of the financial sector. The type and the structure of the financial system in particular, whether bank based or market based, also became important points of debate in the finance–growth nexus. By the mid 2000s, however, the discussion moved to financial inclusion and emphasised access to financial services by the low income. The development of mobile money as a way to increase access further boosted this literature on financial inclusion. Financial inclusion soon became a prominent part of growth-enhancing strategies of countries and international finance institutions. Here the main difference between financial inclusion and financial sector development is that the former concentrates issues of access and use of financial services for

the unbanked, while the latter deals with the development of the financial sector in general. Indeed, this difference becomes hazy because both can mean the same from a measurement point of view.

Economic growth has to do with the increase in the productive capacity of an economy in a year in relation to the previous year as measured by real gross domestic product (GDP). Economic development is also concerned with the process of creating and utilising physical, financial, human, and social assets to improve the economic well-being and quality of life of people in a community, region, or country. Whereas economic growth is a phenomenon of market productivity and an increase in nominal or real GDP, economic development is associated mainly with the economic and social well-being of people in a community, region, or country. The economic development efforts of countries must be sustained over time in order to produce positive economic and social outcomes. In the view of Seidman (2005), the economic development process creates assets that enable the community, region, or country to sustain and recreate its desired economic and community outcomes.

Unsurprisingly, the discussions in literature also moved to incorporate the need for inclusive growth. The emphasis was on the idea that growth must be beneficial to all and in particular for poverty reduction to be effective. Amid all of this has been the ever-constant debates around issues of causality: whether finance causes economies to grow, whether it is instead growing economies that result in higher financial development, and whether causality goes both ways and depends on stages of a country's development. There is also the vibrant debate on whether financial development can lift the welfare of poor households.

These discussions, however, do not question the fact that financing economic growth and development, especially in developing and emerging countries through the mobilisation of domestic resource as well as an appropriate level of external capital inflows, is an important issue. However, a financing gap develops when the financial system is inefficient and ineffective and when governments are also unable to mobilise resources. Precisely, development finance focuses on how domestic and the global financial systems facilitate the economic growth and development process. It also deals with structuring and reforming the financial system in ways that promote growth and development at both the macro level and the micro level in developing and emerging economies.

At the macro level, the focus is on financing the design and implementation of national development strategy, which is critical to the realisation of the country's development goals. Achieving country-specific development goals may also be related to the global development agenda. With respect to global development, the present emphasis is on how to finance the sustainable development goals (SDGs), which were set by the United Nations (UN) with a 2030 timeline (Biekpe, Cassimon, & Verbeke, 2017). The SDGs, otherwise known as the global goals, include 17 specific goals, which build on the progress made with respect to the millennium development goals (MDGs) and incorporate additional goals. Some of these new goals include reducing inequity, ensuring sustainable consumption and production patterns,

combatting climate change and its impact, promoting peaceful and inclusive societies, and providing justice, among others. Also, at the micro level, the concentration is on how individual households, local communities, and firms are able to access the necessary finance to support their growth and development aspirations. However, a certain financing gap tends to constrain the achievement of these development targets – hence the need to design the financial system to be able to support the growth and development process.

1.2 PURPOSE OF THIS BOOK

This book examines issues in development finance by focusing on how financial systems and innovations in financial resource flow can drive the economic growth and development process. This emerging discipline seems to be gaining widespread recognition and importance across the globe and in Africa in particular. The literature on development finance is enormous. However, no recent text is available that covers the wide range of the literature in this area. The main contribution of this book is that it provides comprehensive coverage of the various critical and contemporary issues in development finance by carefully integrating relevant theoretical underpinnings, empirical assessments, and practical policy issues. With the expansion of economic development initiatives across the globe comes an urgent need for expertise and skills in development finance to drive, support, and manage them.

The book tries to be as complete and up to date as possible regarding recent theoretical discussions in the broad field of development finance. Therefore, the book provides a valuable resource for development finance researchers and for students taking courses in, for example, development finance, finance for development, development economics, international finance, financial development policy, and economic policy management. Every chapter contains a set of review questions, which may be helpful for students to better absorb the information provided. Given that we deliberately avoid overly technical discussions in the main text – more technical details are provided in ‘boxes’ – also practitioners with only a limited theoretical economic background will find the book a useful reference.

This first introductory chapter provides an overview of the other chapters in the book. In different chapters, the book pays attention to the general theoretical and empirical discussion on the relationship between financial development and economic growth; the importance of microfinance; the role of different types of external capital flows, distinguishing between external private flows, foreign aid, and international remittance; the importance of international financial architecture; the role of sovereign debt and wealth management; the role of financing different sectors in the economy, such as medium-size enterprises, infrastructure, the agricultural sector, and the external sector; and the recent discussion on financial inclusion and economic growth, including issues like mobile money transfers. However, because development finance emerged as a result of market imperfection and limited capital available, this chapter starts by discussing

market imperfections and development finance. It also examines development finance interventions aimed at minimising the market imperfections and establishing development finance institutions to provide direct financing in the market. Finally, the chapter briefly discusses recent developments regarding financial inclusion and fintech.

1.3 MARKET IMPERFECTIONS AND DEVELOPMENT FINANCE

Development finance recognises the need to fill the gaps between capital required and capital available through various interventions. The financing gap is a result of financial market imperfections or the failure of financial markets to provide the requisite finance to support economic activity. Development finance interventions are aimed at ensuring the availability of capital when financial markets fail to supply the needed capital. These interventions include trying to curtail the imperfections in financial markets and institutions in order to improve the level of efficiency and establishing alternative development finance institutions to provide direct capital in the market.

At this stage, we bring up and discuss the concept of financial market imperfections. Financial market imperfection is concerned with the failure of financial markets to supply the required capital to finance economic activity. Market imperfections or financial market gaps occur when capital is not allocated in the most productive manner.

Microeconomic theory suggests that in perfect capital markets, capital is allocated perfectly, under the assumptions of complete markets, the perfect rationality of agents, and perfect or full information. Under these conditions, equilibrium is established when the interest rates clear the market when the supply of capital is equal to the demand for capital. However, when these assumptions are not present, market imperfections tend to occur. In the absence of perfect competition, suppliers of capital may seek to determine their own terms and may not be mindful of ensuring efficient allocation of capital. The high transaction costs and lack of information are a direct consequence of market imperfections.

Transaction costs are the costs of using the price mechanism, which include the cost associated with discovering relevant prices and the cost of negotiating and concluding contracts (Coase, 1937). In the financial market, financial institutions play an important role in contributing to reducing transaction costs. Minimising transaction costs is regarded as a necessary condition but not a sufficient condition for improving financial and economic efficiency. We now discuss how asymmetric information explains financial market imperfections. We also look at how imperfection in financial markets results in credit rationing.

1.3.1 Asymmetric information

A key feature of financial markets that results in market imperfection is asymmetric information¹ between users of finance and providers of finance. The application of asymmetric information to explain financial market

incompleteness, imperfections, and credit constraint is attributed to the work of Joseph Stiglitz in the 1980s. The problem of asymmetric information or information asymmetry arises because borrowers and providers of finance do not have equal access to information regarding the creditworthiness of the potential borrower. In more general terms, asymmetric information, sometimes referred to as information failure, describes a situation where one party to an economic transaction has better access to information than the other party does, resulting in an imbalance of power in transactions, which may cause the transaction to be skewed. The information-deficient party might make a different decision provided the information being withheld was made available. Asymmetric information may result in adverse selection and moral hazard.

ADVERSE SELECTION Adverse selection occurs when the lack of information in the financial market puts the lender in a position of being unable to distinguish good borrowers from bad ones. It occurs *ex ante*: before the lender provides a loan, or debt, contract to the borrower, on the basis of available information by the time of the event. It happens when the lender does not have the necessary tools to screen the borrower types and is thus unable to ascertain whether the borrower engages in riskier projects. For risky borrowers, there is a higher probability that projects will fail than for safe borrowers. However, if the project succeeds, the return will be higher for risky borrowers. In this situation, risky borrowers are likely willing to pay a higher interest rate than safe borrowers are. The consequence is that in case the bank increases the interest rate, safe borrowers decide not to borrow anymore, such that the bank ends up with a portfolio of only risky borrowers, a process indicated by the term ‘adverse selection’. The bank does not know who the risky borrower or the safe borrower is but realizes that an increase in interest rates may have ‘adverse selection’ effects. To avoid this, the bank may decide in times of access demand for credit not to increase the interest rate but simply to ration credit. Box 1.1 provides further discussion on credit rationing and its implications.

Stiglitz and Weiss (1981) explain that the adverse selection theory of credit markets is based on two key assumptions: lenders are not able to differentiate between borrowers with different levels of risk, and the loan contracts are subject to limited liability in the sense that in the event that the project generates returns lesser than the debt obligations, the borrowers will not be responsible for paying out of pocket. The consequence of adverse selection is that financial markets are not efficient, in that good projects will not be funded, while bad projects will be selected.

MORAL HAZARD Moral hazard results from the lack of information regarding the *ex post* behaviour of borrowers – that is, the behaviour of borrowers after a debt contract has been signed with a bank. In more general terms, moral hazard occurs when after entering into a contract, the incentives of the two parties involved change, to the extent that the risk associated with the contract is altered (Heffernan, 2006). It refers to the borrower’s engaging in high-risk strategies and applying the funds acquired for a purpose

different from that for which they were sourced. After acquiring loans, borrowers may undertake risky projects, since they are not fully responsible for the funds, and the inability of the lender to control how the borrower applies the funds may lead to moral hazard. With increases in interest rates, the borrower is likely to be involved in such risky projects so as to increase the expected returns, and if the project is successful, the borrower gains, but if it fails, the lender assumes the default risk.

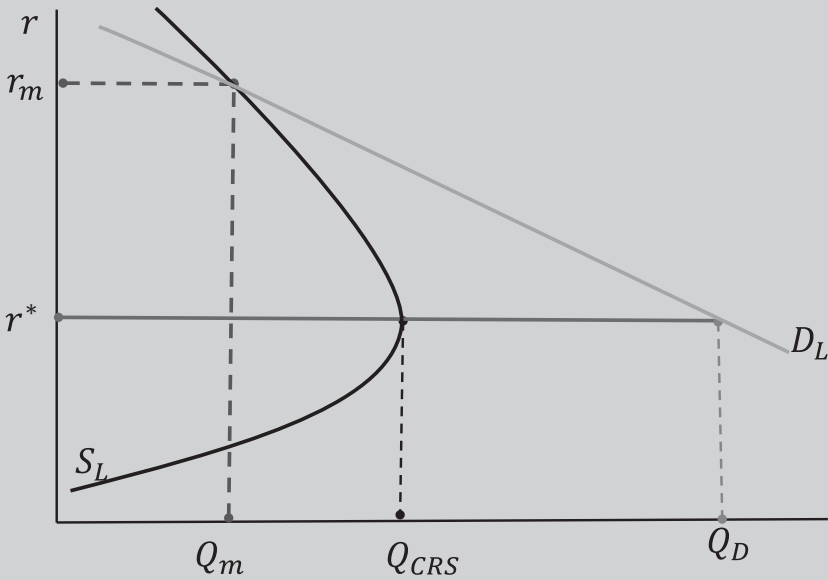
The default risk is one of the conditions of an imperfect market. The borrower may be in financial distress or become bankrupt, thus being unable to fulfil their indebtedness. Therefore, the promise and level of commitment by the borrower plays a significant role in the lending arrangement. One way by which the lender can secure the loan is to request the borrower to pledge collateral. Ray, Ghosh, and Mookherjee (2000) suggest that collateral minimises the default risk (for incentive reasons) and the lender's exposure in the event of default. In terms of reducing the default risk, the collateral makes the borrower's expected return of selecting risky projects lower than the expected return of safer projects. Thus, the borrower has no incentive for choosing risky projects. In the case reducing the lender's exposure, the loan contract is structured in such a way that the collateral provides the means by which the lender is able to recover all or substantial part of the loan given out in the event of default. There are, however, costs associated with the lender's seizing the pledged assets in the event of default.

BOX 1.1 Credit rationing and its implications

The concept of credit rationing has developed following the seminal papers by Jaffe and Russell (1976) and Stiglitz and Weiss (1981) and can be depicted by the market for supply and demand of loans.

An interest rate r^* maximizes the expected return to the bank. Excess demand can exist at this interest rate but not induce banks to increase the interest rate above r^* . Under such conditions, banks cut the supply of loans (backwards-bending supply), at interest rates above r^* where demand D_L exceeds the supply of funds (S_L). Unsatisfied borrowers bid up the interest rate until r_m , which marks the beginning of credit rationing. Some individuals can acquire loans, albeit at a higher interest rate, while others cannot. However, hiking the interest rate or reducing the collateral requirement could increase the riskiness of the lender or loan portfolio of the bank, either by discouraging safer investments or by encouraging borrowers to undertake riskier investment projects, thus reducing the lender's profits. The implication is to reduce the number of loans that the lender provides. In an extreme case, the backwards-bending supply curve touches the interest rate (vertical) axis, and there is full rationing and total exclusion for some large portion of individuals and entities.

FIGURE 1.1 Credit rationing and its implications



Credit rationing is a result of capital market imperfections, which are characterised by information asymmetry and its consequent adverse selection and moral hazard.

Keeton (1979), Stiglitz and Weiss (1981), and Jaffe and Stiglitz (1990) provide specific definitions of two types of credit rationing:

Type 1. Pure credit rationing happens when some individuals acquire loans, while apparently identical individuals, who are ready to borrow on exactly the same terms, are not able.

Type 2. Redlining arises when some identifiable groups of individuals, given a particular supply of credit, are not able to acquire loans at any interest rate, but given a larger supply of credit, they would.

1.4 DEVELOPMENT FINANCE INTERVENTIONS

We mentioned that development finance plays an important role in expanding capital availability to finance economic growth and development, and these include, first, minimising the imperfections in financial markets and institutions in order to improve on the level of efficiency and, second, establishing alternative financial institutions or development finance institutions to provide direct capital in the market. These two forms of interventions need to be regarded as complementary and should be used in ways that achieve the objectives of development finance. Next, we discuss each of these interventions or strategies.

1.4.1 Interventions for correcting market imperfections

These are concerned with reducing the main sources of inefficiencies that introduce gaps in the required and available finance. Interventions for perfecting the financial market include measures that aim at improving the performance and functioning of the financial market and institutions in ways that enhance available financing for development. This is crucial given the important role financial markets and institutions play in facilitating the supply of funds for financing economic activities.

The following are some of the interventions aimed at improving the operation and performance of the financial markets and institutions:

- *Ensuring effective financial market regulation* – the regulation of financial markets is necessary given their complex nature and importance in the economies they operate in. The regulation of the financial market ensures market participants are treated fairly and has implications for the performance of various financial institutions. The essence of regulating financial markets include protecting investors, preventing securities issuers from defrauding investors and hiding important information, promoting the stability of financial institutions, promoting competition and fairness in the trading of financial securities, restricting the level of activities of foreign entities in local markets and institutions, and controlling the level of economic activity.
- *Introducing risk management instruments* – this includes the means by which market players share their risk with counterparties. It may involve the use of insurance contracts and financial derivatives such as forwards, futures, options, swaps, and swaptions.
- *Reducing cost of contracting and information processing* – financial institutions handle huge volumes of transactions and tend to enjoy economies of scale related to contracting and processing information on securities. The low costs associated with contracting and processing would benefit investors and issuers of securities. Also, the ability of financial institutions to obtain information concerning potential borrowers and screening out bad credit risks helps in dealing with the problems in connection with adverse selection and moral hazards.
- *Providing efficient payment system* – providing for payment mechanisms like cheques, electronic transfers of funds, debit cards, and credit cards enables financial institutions to transform certain types of assets (i.e. those that could not be used in making payments) into other forms of assets that can be used to effect payment. The financial market provides the means of making payments without using physical cash, and this is necessary for the effective and efficient functioning of the market.
- *Introducing financial innovation* – attempts to reduce market imperfection also involve introducing financial innovation to improve on the level of efficiency in the financial market. Financial innovation entails the development of new financial products or services; the introduction of new processes or delivery systems that result in reducing costs and risks or providing enhanced services to meet the needs

of market participants; and the emergence of new kinds of financial service providers. The financial innovation process involves changes in financial instruments, institutions, markets, and practices. More generally, financial innovation tends to affect the nature and composition of monetary aggregates by introducing new financial instruments or changing existing financial instruments. Financial innovations result in reducing the transaction cost associated with transferring funds from lower-yielding money instruments to higher-yielding ones. Thus, participants in the financial system are able to minimise their risk and maximise their returns.

1.4.2 Establishing development finance institutions

Development finance institutions (DFIs) are alternative financial institutions that are concerned with providing long-term finance (e.g. long-term loans, equity, and risk guarantee instruments) to promote private investment for economic growth and sustainable development while ensuring they remain financially viable. They concentrate mainly on areas that providers of conventional finance tend to avoid and on markets, which have limited access to sources of domestic and external capital. DFIs are said to occupy the intermediary space between public aid and private investment by focusing on high-risk investments in sectors that have limited access to capital markets. They are capable of raising huge amounts of capital from the global capital markets for providing loans or equity investment on commercial and sometimes-concessional bases (Dickinson, n.d.; Abor, 2017). There are multilateral, regional, and bilateral or country-specific DFIs (see Box 1.2).

BOX 1.2 Types of DFIs

Multilateral DFIs include private sector outfits of international financial institutions (IFIs), which are founded by a number of countries and are subject to international law. They are generally owned by national governments but sometimes with ownership participation by international or private entities. They tend to have stronger financing capacity and provide the opportunity for close cooperation between governments.

The regional DFIs are essentially part of multilateral DFIs, but they tend to focus on specific regions and are owned by the governments of those regions.

Bilateral or country-specific DFIs operate mainly in developing and emerging economies and have the mandate of providing long-term capital to finance the private sector, with particular value-added development objectives on a sustainable commercial basis. Bilateral DFIs may also include microfinance institutions, state development banks, community development finance institutions, microenterprise funds, and revolving loan funds.

The traditional role of DFIs is to help address the failure or imperfections in financial markets. In the view of Dixit and Pindyck (1994), uncertainty significantly and negatively affects investment, which entails large sunk and irreversible costs and, where there is a choice, delaying the investment decision until additional information becomes available. The risks associated with such long-term investments tend to discourage private sector investors.

DFI assist in correcting risk perceptions, promoting favourable environment for private investment to thrive as well as providing social infrastructure and other activities that have positive economic outcomes. They tend to focus on developing countries with limited access to local and external capital markets by providing long-term finance for infrastructure projects in developing countries. DFIs facilitate private sector investment and provide risk guarantee that provide comfort for investors. They provide finance that is linked to the design and implementation of capacity-building programmes adopted by governments (te Velde, 2011).

DFIs also play an active role in financing small and medium-size enterprises (SMEs), which are often perceived as risky by other finance providers. In that case, they take the first mover advantage in markets with high growth potential. They often have a double bottom line: pursuing profit and pursuing development. On one hand, they invest for the purpose of generating returns, which enable them to undertake more investments. On the other hand, they facilitate the economic development of the countries they invest in (Dickinson, n.d.).

DFIs contribute by adding value to the economic development process. Dalberg (2009) mentions three ways by which DFIs do this:

- 1 Investing in underserved projects types and settings – the business model of DFIs is designed so that they are able to invest in highly risky projects in developing countries. They have the capacity to tolerate high risk and make long-term investments, especially in areas where private investors consider risky to commit resources to.
- 2 Investing in undercapitalised sectors – they specialise in investing in sectors such as agriculture, energy, the financial sector, and infrastructure, which are critical to driving economic growth.
- 3 Mobilising other investors – they promote sharing knowledge, setting standards, and collaboration, which helps attract other investors. Their track records enable other investors to scale up their investment, and they also build local capacity in fund management.

Chapter 7 of this book provides a more comprehensive discussion of DFIs in the context of the global financial system.

1.5 FINANCIAL DEVELOPMENT, FINANCIAL INCLUSION, AND FINTECH²

During the past decade, the discussion about finance and development has started to change, by focusing more specifically on possibilities to improve financial inclusion – that is, on different measures to improve access to finance for unbanked people; see also Chapter 10 in this book. Even if

financial development will lead to long-run economic growth, it is not clear at all that also poor people will gain a lot. Probably only if financial development operates on the so-called *extensive* margin, implying that it improves access to financial services by individuals who had no access to these services before, a process of financial development will be beneficial for the poor unbanked part of the society. If financial development operates on the *intensive* margin, and hence improves access to financial services only for those households and firms that already had access to finance, financial development will not help unbanked people and will likely increase inequality, at the least in the short run.

There is still an enormous lack of data regarding financial inclusion of poor people in the developing world. Fortunately, in 2011, the World Bank launched the Findex database, which is the world's most comprehensive database on financial inclusion around the world. The dataset covers more than 140 economies around the world, drawing on survey data. The initial survey round was followed by a second one in 2014 and a third one in 2017. The study shows that currently almost 70% of adults around the world have a bank account. Moreover, the study provides promising figures about a rise in financial inclusion in the last decade, also in developing countries, where bank account ownership increased from 55% to 63% between 2014 and 2017 (Demirgüç-Kunt, Leora, Dorothe, Saniya, & Jake, 2018). However, there are still considerable gaps in who has access to finance: women are much less likely than men to have a bank account; bank ownership is still much lower in developing countries than in the developed world, and especially adults with low education and without formal jobs are still often excluded from any financial services. Thus, a further increase in financial inclusion to provide access to financial services for still-unbanked poor people seems important.

Innovations in fintech are among the most promising developments in improving financial inclusion. Fintech refers to the emerging industry that uses technology to provide financial services. It is characterized as financial intermediation services delivered through mobile phones, computing devices using the internet, or cards linked to a secure digital payment system (Manyika, Lund, Singer, White, & Berry, 2016). The most widely adopted forms of fintech in developing countries, especially in sub-Saharan Africa, are mobile money and mobile financial services. Sub-Saharan Africa is even the only region where the share of adults with a mobile money account exceeds 10%. M-Pesa (see Box 1.3), a mobile phone-based money transfer service, launched in 2007 by VodafoneGroup plc and Safaricom in Kenya, was one of the first mobile network operators in sub-Saharan Africa. Mobile money accounts have now spread to new parts of sub-Saharan Africa, and the share of adults with a mobile money account has now surpassed 30% in various countries, such as Côte d'Ivoire, Senegal, and Gabon.

The success of M-Pesa has shown the possibility of leveraging simple non-internet-based mobile technology to extend financial services to large segments of unbanked poor people. It also shows the importance of designing a usage-based and low-cost transactional platform that enables low-income customers to meet a range of payment needs. Fintech is very much associated with mobile money. Yet fintech also includes other applications,

BOX 1.3 M-Pesa

M-Pesa was a small-value payment and store of value system using ordinary mobile phones. It was designed to enable customers receive and transfer funds securely by using ordinary mobile phones. Customers can also use it to pay bills such as water and electricity and store their money. M-Pesa was an immediate success: at the end of its first year, it had registered 1.2 million customers in Kenya and had 19 million customers by the end of 2018. M-Pesa payments consist of person-to-person (P2P) payments, which form a bulk, and person-to-business (P2B), business-to-person (B2P), and recently government-to-person (G2P) and government-to-business (G2B) payments. M-Pesa opened the door to formal financial services for Kenya's poor. It introduced small accessible and affordable loans, increased the scope of payment services, and created more-affordable financial options for the poor. M-Pesa has now expanded beyond the borders of Kenya and by the end of 2019 became Africa's most successful mobile finance case, with 37 million active customers and 11 billion transactions across seven countries: the Democratic Republic of Congo, Egypt, Ghana, Kenya, Lesotho, Mozambique, and Tanzania.

M-Pesa has also enhanced access to other economic and social infrastructure via its associated new product developments. For instance, in Tanzania, it has been used by a nongovernmental organization (NGO) – Comprehensive Community-Based Rehabilitation – to support patients to pay for travel cost to health facilities. M-Pesa has also enabled access to electricity for low-income households in Kenya and Tanzania. This is via a partnership-based system, M-KOPA, that allows households to acquire a solar-powered off-grid electricity kit and pay for it in small daily payments by using their M-Pesa account.

Source: Vodafone

like a distributed ledger technology (blockchains), which can interact with the Internet of Things (IoT) to lower transaction costs and ease financing and mobile payments.

In the literature, the terms 'mobile money', 'mobile financial services', 'digital payments', and 'digital finance' are often used interchangeably. However, there is a crucial difference in that 'digital' refers to services that require access to digital devices (internet), whereas, for instance, a simple text-based mobile phone can be used without accessing the internet.

Recently, a lot of research has been devoted to mobile money platforms and associated mobile wallet technologies, which enable the provision of financial services through a mobile phone. Initially, mobile money

referred mainly to person-to-person money transfers. However, mobile phones and more generally digital financial services transacted via mobile money platforms are now also used to pay bills, save money, conduct person-to-business payments, and receive payments (wages) and for investments (Suri, 2017; Apior & Suzuki, 2018). Mobile phones are also increasingly used to send and receive international remittances. See Chapter 5 in this book for an extensive discussion on the role of international remittances. In sub-Saharan Africa, the sending and receiving of remittances has even become the main use of mobile money (Demirgüç-Kunt et al., 2018). Mobile money platforms thus potentially offer wide accessibility (Osburg & Lohrmann, 2017) and may serve as conduits for financing different sectors in the economy, such as SMEs and smallholder farmers. They may also help to include the unbanked in the financial system (Klapper, El-Zoghbi, & Hess, 2016) and induce positive effects on education, health, employment, productivity, and poverty alleviation.

While the success of M-Pesa seems to provide evidence for the potentially enormous role of fintech in enhancing financial inclusion and raising the living standards of unbanked people in the developing world, the development of fintech in many countries in Africa, South America, and Asia has been problematic. Even a replication of M-Pesa outside Kenya was often unsuccessful, especially in countries where a more advanced banking network was already available, such as in South Africa. Overall, the fintech sector in sub-Saharan Africa remains small (Yermack, 2018).

Indeed, there are several limitations and risks, which make it unlikely that fintech will in the short run induce a process of financial inclusion that will improve the living standards of the majority of the still-unbanked adults. An important prerequisite of a successful rapid fintech development is the availability of a sound communications infrastructure (Yermack, 2018). However, in most developing countries, only a rudimentary communications infrastructure is available, characterized by limited access to broadband internet connections and smartphone handsets. To promote adequate investments, a supportive regulatory framework is needed. Yet most African governments have so far taken a hands-off approach to fintech regulation. Even if fintech were to be widely promoted, it can ensure and promote inclusive growth only if it meets the needs of disadvantaged groups. The uptake and use of mobile financial services in many developing countries will be limited due to low reading literacy and digital literacy levels (Nedungadi, Menon, Gutjahr, Erickson, & Raman, 2018). There is also a risk that specific fintech services will not be provided to poor rural communities, to save costs (Ozili, 2018). Entire geographic areas might be excluded from new technologies, and the new world of data and information, as the success of particular forms of fintech, especially if big data is involved, crucially depends on the availability of data scientists, who may not be available in several developing countries. Much more research on the potential and limitations of fintech is needed. However, fintech will not likely be a panacea for raising the living standards of the unbanked population in the developing world in the short run.

1.6 AN OVERVIEW OF THE CHAPTERS

In this section, we provide an overview of the various chapters. We have deliberately not distinguished different parts in the book, because the chapters can be combined in various ways to deal with subparts of the extant development finance literature. For instance, Chapters 1, 2, 3, 10, and 15 deal with domestic finance issues. Chapters 4, 5, and 6 discuss external finance, and Chapter 7 discusses the global financial architecture. Chapters 8 and 9 address issues on sovereign debt and wealth management, and Chapters 11, 12, 13, 14, and 15 discuss the financing of specific sectors of the economy.

In Chapter 2, Lordina Amoah, Charles Komla Delali Adjasi, Issouf Soumare, Kofi Achampong Osei, Joshua Yindenaba Abor, Ebenezer Bugri Anarfo, Charles Amo-Yartey, and Isaac Otchere discuss the theoretical and empirical literature regarding the role of the financial sector in inducing a process of economic growth. They also discuss financial repression, liberalization, and growth and the finance–growth nexus, highlighting the various hypotheses underpinning this relationship. Their chapter ends with a discussion of the importance of deposit-taking financial institutions and capital markets in the economic growth process.

In Chapter 3, Niels Hermes and Robert Lensink provide an up-to-date review of the role of microfinance in the process of development. The aim of this chapter is to discuss, in the face of the recent criticism, whether, and if so how, there is still a role to play for microfinance in promoting inclusive growth. They distinguish between the supply side of microfinance, focusing on analyses at the MFI level, and the demand side of microfinance, focusing on end users.

The next four chapters deal with external finance. These chapters discuss how various types of external capital flows (private capital flows, remittances, and foreign aid) affect growth and development. Moreover, it discusses the international financial architecture.

In Chapter 4, Elikplimi Komla Agbloyor, Alfred Yawson, and Pieter Opperman discuss the role of international private capital flows in promoting economic growth. The chapter explains the difference between various types of private capital flows, such as foreign direct investments (FDI) and foreign portfolio investment (FPI). It examines how these components of private capital flows drive growth and assesses the interactions between private capital flows and domestic investment.

In Chapter 5, Hanna Fromell, Tobias Grohmann, and Robert Lensink discuss the relationship between international remittances and development. They explain in detail the results and methodology of research that addresses international remittances from developed and developing countries. The chapter pays attention to, for example, the motivation for remittances, the impact of international remittances on economic growth, financial development, and inequality and poverty. The chapter ends with a discussion on policy tools to enhance the marginal impact of international remittance payments.

In Chapter 6, Matthew Kofi Ocran, Bernadin Senadza, and Eric Osei-Assibey deal with foreign aid and development. They describe the historical

origins of foreign aid and summarise trends in the volume of aid. The chapter also summarises the voluminous literature on aid effectiveness. The chapter concludes by discussing some alternatives for foreign aid.

After three chapters on the relationship between external capital flows and development, Joshua Yindenaba Abor, Angela Azumah Alu, David Mathuva, and Joe Nellis, in Chapter 7, discuss the system of global economic and financial governance – the so-called global financial architecture – that facilitates the flow of external capital. The chapter pays attention to the role of the institutions that make up the global financial architecture, such as the Bretton Woods institutions, including the International Monetary Fund (IMF), the World Bank Group, the World Trade Organization, the Bank for International Settlements (BIS), and the regional development finance institutions in developing and emerging countries. The chapter also addresses financial globalisation, global crises, and reform issues regarding the global financial architecture.

The next two chapters deal with sovereign management in developing countries. A distinction is made between sovereign wealth management and sovereign debt management.

In Chapter 8, Mbako Mbo and Charles Komla Delali Adjasi discuss sovereign wealth management in emerging economies. Sovereign wealth management deals with questions related to prudent public finance management. The chapter pays attention to the evolution and changing role of sovereign wealth management and asset-liability management in emerging economies. It also looks at asset allocation and risk management for sovereign wealth funds.

In Chapter 9, Amin Karimu, Vera Fiador, and Imhotep Paul Alagidede pay attention to what is known as sovereign debt management. The chapter discusses how governments in developing countries have managed their international debt, and how external debt affects economic growth. It also deals with questions related to renegotiating debt contracts, debt-relief policies, sovereign debt restructuring, and risk management frameworks. The chapter ends by analysing debt sustainability and a medium-term debt strategy.

In Chapter 10, Joshua Yindenaba Abor, Haruna Issahaku, Mohammed Amidu, and Victor Murinde discuss the relationship between financial inclusion and economic growth. Whereas Chapter 2 pays attention to the more general discussion of financial *development* and economic growth, this chapter deals with the more recent discussion on financial *inclusion* and economic growth. Financial inclusion, in theory, differs from financial development: financial development focuses on the development of the financial sector in general, whereas financial inclusion deals with the question who actually has access to the financial system and to what extent access to the financial sector has improved for certain groups, especially the poor, in a society. However, in terms of measurement, the difference between financial development and financial inclusion is often not clear. This chapter defines financial inclusion, provides a guide to its measurement, describes the trends in financial inclusion, discusses the determinants of and barriers to financial inclusion, and assesses the link between inclusive finance

and financial development. It also examines the effect of inclusive finance on economic growth, including the importance of recent innovations like mobile phone-based money transfers. The chapter ends by discussing the roles of institutional architecture in the nexus between financial inclusion and economic growth.

The next five chapters deal with financing particular sectors in the economy and its relevance for economic development. Distinctions are made between financing the agricultural sector, financing infrastructure, financing sustainable development, financing the external sector, and financing the private sector, especially SMEs.

In Chapter 11, Haruna Issahaku, Edward Asiedu, Paul Kwame Nkegbe, and Robert Osei discuss financing agriculture for inclusive development. The chapter examines how financing agriculture can promote inclusive development and reduce poverty and inequality. The specific topics covered include stylised facts on agriculture development, challenges of agriculture financing, financing opportunities, innovative financing models for agriculture and agriculture development, and inclusive development.

In Chapter 12, Gordon Abekah-Nkrumah, Patrick O. Assuming, Patience Aseweh Abor, and Jabir Ibrahim Mohammed pay attention to financing sustainable development. The main issues covered here are global actions for sustainable development, challenges and opportunities of sustainable development, conventional and innovative funding modes for sustainable development, and benefits derived from financing sustainable development. The chapter offers innovative ideas for financing sustainable development.

In Chapter 13, Steven Brakman and Charles van Marrewijk discuss international trade, finance, and development. This chapter covers topics such as models of trade, the political economy of trade policy, various trade agreements, and the effects of trade policy on economic growth and development. The chapter also pays attention to the main aspects of exchange rates and the related importance of forward-looking markets for understanding the power of financial forces. Finally, the chapter discusses issues on trade finance and concludes with a discussion of finance, investment, and development.

In Chapter 14, Saint Kuttu, Ashenafi Fanta, Michael Graham, and Joshua Yindenaba Abor discuss infrastructure financing and economic development. The chapter covers challenges and opportunities for infrastructure development, economic growth and development nexus, infrastructure financing models, a framework for enhancing private participation in infrastructure development, and risk management in infrastructure projects.

In the final chapter of the book, Chapter 15, Joshua Yindenaba Abor, Haruna Issahaku, Charles Komla Delali Adjasi, and Elikplimi Komla Agbloyor return to the finance and growth discussion that started in Chapter 2. Chapter 15, however, focuses on the role of the private sector in the financial development and economic growth discussion. The chapter argues that addressing the financing constraints of the private sector, especially those for SMEs, is necessary to drive growth in developing and emerging economies. The chapter provides an overview of the discussion related to the private sector and economic development, discusses the financing and

investment behaviour of firms, and examines how various forms of development finance contribute to private sector development and economic development.

1.7 CONCLUDING REMARKS

In this chapter, we have discussed the basic tenets of financial markets and their role in economic growth and development and pointed out the role of development finance and DFIs in financing growth and development. The chapter shows that financial markets can be replete with bottlenecks and inherent challenges, rendering it imperfect and incomplete. If not reduced or controlled, these challenges could destabilize the economy and cause crises. Some of the key financial market problems that result in market imperfection are asymmetric information between borrowers and lenders of finance and the presence of transaction costs. The asymmetric information prevents capital from being allocated in the most productive manner at an affordable cost. This creates financing gaps, rationing of credit, and market segmentation, rendering the financial market imperfect. This, coupled with significant transaction cost, creates market failures in financial markets. In the presence of these financial market failures, the economic growth and development process is heavily hampered and results in further gaps and developmental challenges in a country. This reiterates the importance of understanding the nature of financial systems and structuring appropriate interventions to finance activities to sustain the economic development efforts of countries over time in order to produce positive economic and social outcomes. Well-functioning and well-structured financial systems minimise the informational gaps and transactions cost. When the financial sector functions efficiently, it provides the avenues for market players to take advantage of investment opportunities by channelling funds for production, thus driving economic growth and development. We have also shown that the evolvement of fintechs has implications for the structure and depth of the financial system. In particular, fintechs provide innovative solutions by designing products that can be accessible for low-income populations and small businesses at a relatively lower cost. We do, however, note that for developing countries with low communications infrastructure, digital (internet) fintech-based solutions will be more costly to access than simple analogue fintech solutions.

Development finance deals with structuring and reforming the financial system in ways that promote growth and development at the macro and micro levels in developing and emerging economies. It focuses on how domestic and global financial systems facilitate the economic growth and development process. DFIs (be they multilateral, regional, and bilateral or country specific in structure) carry out this role by minimising the imperfections in financial markets and institutions in order to improve the level of efficiency and establish alternative financial institutions to provide direct capital in the market. DFIs therefore provide long-term finance (including long-term loans, equity, and risk guarantee instruments) to promote private investment, economic growth, and sustainable development.

Discussion questions

- 1 Discuss the issue of information asymmetry in financial markets. What measures can be used to reduce information asymmetry?
- 2 What are the necessary measures to ensure efficiency and effectiveness in the operation and performance of financial markets?
- 3 What is credit rationing? What are the consequences of credit rationing?
- 4 Using examples from your country, discuss the issue of transaction cost in financial markets.
- 5 Examine the place of development finance in addressing the issue of market imperfections in financial markets.
- 6 Discuss how development finance plays an important role in expanding capital availability to finance economic growth and development.
- 7 Discuss the various types of DFIs and their specific roles. How do DFIs add value to the economic development process?
- 8 How do fintechs address the issue of information asymmetry in financial markets?
- 9 Discuss the conditions under which fintechs can enhance financial inclusion.

Notes

- 1 The market consequences of information asymmetry were popularized by George Akerlof in his article 'The Market for Lemons: Quality Uncertainty and the Market Mechanism' in 1970. In 2001, the Nobel Memorial Prize in Economic Sciences was awarded to George Akerlof, Michael Spence, and Joseph Stiglitz for their work on analysing markets with asymmetric information.
- 2 This section draws heavily on Hinson, Lensink, and Mueller (2019).

References

- Abor, J. Y. (2017). *Entrepreneurial finance for MSMEs: A managerial approach for developing markets*. London: Palgrave Macmillan.
- Akerlof, G. A. (1970). The market for lemons: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488–500.
- Apiors, E., & Suzuki, A. (2018). Mobile money, individuals' payments, remittances, and investments: Evidence from the Ashanti Region, Ghana. *Sustainability*, 10(5), 1409.
- Biekpe, N., Cassimon, D., & Verbeke, K. (2017). Development finance and its innovations for sustainable growth. An introduction. In N. Biekpe, D. Cassimon, & K. Verbeke (Eds.), *Development finance: Innovations for sustainable growth* (pp. 1–16). London: Palgrave Macmillan.
- Coase, R. H. (1937). The nature of the firm. *Economica, New Series*, 4, 386–405.
- Dalberg. (2009). The growing role of the development finance institutions in international development policy. Retrieved from www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-the-growing-role-of-the-development-finance-institutions-in-international-development-policy-2009.pdf
- Demirgüç-Kunt, A., Leora, K., Dorothe, S., Sanjaya, A., & Jake, H. (2018). *The*

- global index database 2017: Measuring financial inclusion and the fintech revolution*. Washington, DC: World Bank.
- Dickinson, T. (n.d.). *Development finance institutions: Profitability promoting development*. Retrieved from www.oecd.org/dev/41302068.pdf
- Dixit, A. K., & Pindyck, R. S. (1994). *Investment under uncertainty*. Princeton and New York: Princeton University Press.
- Heffernan, S. (2006). *Modern banking*. Chichester: John Wiley & Sons Ltd.
- Hinson, R., Lensink, R., & Mueller, A. (2019). Transforming agribusiness in developing countries: SDGs and the role of fintech. *Current Opinion in Environmental Sustainability (COSUST)*, 41, 1–9.
- Jaffe, D. M., & Russell, T. (1976). Imperfect information, uncertainty, and credit rationing. *Quarterly Journal of Economics*, 90, 651–666.
- Jaffe, D. M., & Stiglitz, J. E. (1990). Credit rationing. In B. Friedman & F. Hahn (Eds.), *Handbook of monetary economics* (pp. 837–888). Amsterdam: Elsevier Science Publishers.
- Keeton, W. (1979). *Equilibrium credit rationing*. New York: Garland Press.
- Klapper, L., El-Zoghbi, M., & Hess, J. (2016). Achieving the sustainable development goals. *The Role of Financial Inclusion*, 23(5). Retrieved from www.ccgap.org.
- Manyika, J., Lund, S., Singer, M., White, O., & Berry, C. (2016). *Digital finance for all: Powering inclusive growth in emerging economies*. New York: McKinsey Global Institute.
- Nedungadi, P. P., Menon, R., Gutjahr, G., Erickson, L., & Raman, R. (2018). Towards an inclusive digital literacy framework for digital India. *Education+ Training*, 60(6), 516–528.
- Osburg, T., & Lohrmann, C. (2017). *Sustainability in a digital world*. New York: Springer International.
- Ozili, P. K. (2018, December). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329–340.
- Ray, D., Ghosh, P., & Mookherjee, D. (2000). Credit rationing in developing countries: An overview of the theory. In D. Mookherjee & D. Ray (Eds.), *A reader in development economics* (pp. 283–301). London: Blackwell.
- Seidman, K. F. (2005). *Economic development finance*. Thousand Oaks, CA: Sage.
- Stiglitz, J. E., & Andrew Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393–410.
- Suri, T. (2017). Mobile money. *Annual Review of Economics*, 9, 497–520.
- te Velde, D. W. (2011). *The role of development finance in tackling global challenges*. London: Overseas Development Institute.
- Vodafone. www.vodafone.com/what-we-do/services/m-pesa
- Yermack, D. (2018). *Fintech in Sub-Saharan Africa: What has worked well, and what hasn't*. Working Papers No. 25007. Cambridge, MA: National Bureau of Economic Research.