Introduction

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This Handbook reflects the emergence of finance and development as a distinct field of research over the last quarter-century. Although Bagehot (1873), Schumpeter (1912), Gurley and Shaw (1955), and Goldsmith (1969) emphasized the importance of the financial system for long-term economic success, this view was largely peripheral to the separate studies of economic development and financial economics until the 1990s. For example, Levine (2005) notes that textbooks on economic development written at the end of the 1980s typically did not discuss the role of finance, and financial economics was largely unconcerned with the impact of finance on long-run economic growth, development, poverty, and the distribution of income before the 1990s.

The finance and development literature took off in the 1990s, as researchers integrated two bodies of research. The endogenous growth models of Romer (1986, 1990) and Aghion and Howitt (1992) provided analytical frameworks for investigating the potential determinants of economic growth. Models of financial frictions provided insights into how the emergence of financial contracts, markets, and intermediaries influence managerial incentives, the operation of firms, and the allocation of resources – for example, Jensen and Meckling (1976), Stiglitz and Weiss (1981), Fama and Jensen (1983), Myers and Majluf (1984), Grossman and Hart (1986). In the 1990s, researchers started integrating financial frictions into endogenous growth models and exploring how differences in the functioning of financial systems shape economic growth – for example, Greenwood and Jovanovic (1990), Bencivenga and Smith (1991), Levine (1991), and King and Levine (1993a). The theoretical literature on finance has developed rapidly since then.

Empirical research on the relationship between finance and economic development also exploded. Early examples include King and Levine (1993a, 1993b), Jayaratne and Strahan (1996), Demirgüç-Kunt and Maksimovic (1998), Levine and Zervos (1998), and Rajan and Zingales (1998). Building on this early work, researchers have employed a variety of empirical methodologies, datasets, and historical studies to draw more confident inferences about and sharper insights into the finance–development nexus. This work has expanded to study the linkages between finance and poverty, the distribution of income, and the entry, growth, and exit of firms and the availability of financial services to those across the income distribution.

As evidence mounted concerning the importance of finance for economic development, the research spotlight focused with increasing intensity on the factors shaping the functioning of financial systems. This includes research into the legal, political, institutional, international, policy, and regulatory determinants of financial development. As such, the finance and development literature intersects with several other fields within economics (macroeconomics, international economics, development, finance, etc.) and with other disciplines, including political science, history, and legal studies.

This Handbook includes contributions from leading experts in the field of finance and development. To varying degrees, authors use insights from theory, econometric studies, and historical experiences to examine particular segments of the literature on finance and development. In particular, there are chapters that focus on the theory of finance and growth, empirical evaluations of the predictions emerging from these models, historical accounts of the dynamics between finance and economic development, the connections between the functioning financial systems and financial regulations, state ownership of banks, how politics, legal systems, and institutions shape the operation of financial systems, as well as chapters on the development effects of household and firm access to financial services. Taken together, these chapters provide an introduction to the field of finance and development, a critique of the existing state of research that points to areas needing additional research, and lessons for policy makers seeking to understand the connects between finance and economic prosperity.

The remainder of this introduction gives an overview of the different chapters and how they relate to each other.

PART I: THEORY AND EVIDENCE ON FINANCE AND GROWTH

The first three chapters provide broad overviews of the theoretical and empirical literature on financial and economic development.

Philippe Aghion, Peter Howitt and Ross Levine (Chapter 1, "Financial development and innovation-led growth") develop a unified model of financial development and innovation-led growth and use it to discuss an extensive literature that explores the implications of introducing credit constraints into the Schumpeterian growth paradigm. They highlight the impact of the quality of financial services on the rates of economic and international convergence of economies, the evolution of the distribution of income, and the interactive effects among finance, growth, and macroeconomic volatility. They relate the major implications emerging from these theoretical models to empirical findings on the relationship between finance and growth.

Franklin Allen, Xian Gu and Oskar Kowalewski (Chapter 2, "Financial structure, economic growth and development") analyze research on the relationship between financial structure and economic growth and development, where financial structure refers to the mixture of financial intermediaries and markets operating in an economy. Many observers distinguish between banks, which rely on private information and relationships with borrowers, and markets, which rely on arm's-length contracts and public information. The authors provide a critical review of theoretical and empirical assessments of the advantages and disadvantages of different financial structures. They stress that there is growing evidence concerning the interactions and complementarities among different components of the financial system in providing financial services to firms and households. The authors also discuss historical, political, and policy determinants of different financial structures across countries.

Alexander Popov (Chapter 3, "Evidence on finance and economic growth") reviews empirical research on the association between financial development and economic growth. A large number of studies discover a positive relationship that is robust to controlling for reverse causation, omitted variables, and measurement biases using different identification strategies. Some cross-country studies document important non-linearities in this relationship, with the largest estimated impact of finance on growth in middle-income countries. In moving to micro-level data, researchers have further ameliorated identification concerns, confirmed the positive impact of finance on growth, and delved deeper into the mechanisms through which financial markets and institutions affect the real economy. A more recent and rapidly growing body of research assesses the impact of financial system on income inequality and poverty alleviation.

PART II: HISTORIC ACCOUNTS

Five chapters discuss the development of the financial systems in specific regions or countries.

Howard Bodenhorn (Chapter 4, "Two centuries of finance and growth in the United States, 1790–1980") examines the relationship between finance and growth in the United States, from the country's birth until 1980. Professor Bodenhorn considers both the arch of the finance–growth relationship for the entire United States and also discusses research on differences in this relationship across regions and states. One important lesson from this literature is that the United States did not have an integrated, highly efficient financial system for much of its history. In assessing the role of the financial system in economic growth, the author not only considers commercial banks but also local savings and mutual banks as well as investment banks in funding large corporate and infrastructure projects.

Carsten Burhop, Timothy W. Guinnane and Richard Tilly (Chapter 5, "The financial system in Germany, 1800–1914") analyze the connections between the evolution of the German financial system until World War I and industrialization. The authors document the development of the different segments of the German financial system, which are still present today: privately owned banks, savings banks owned by local government, mutual cooperative banks, and securities markets. They also provide a critical review of the evidence linking privately owned universal banks to Germany's rapid industrialization in the late nineteenth century.

Hans-Joachim Voth (Chapter 6, "Finance and growth in the United Kingdom") provides a somewhat contrarian view of the role of the British financial system in fostering economic growth before the mid-1800s. He argues that during this period, the financial system helped channel funds into government coffers to fight expensive wars, which starved the private sector of resources and slowed industrialization. It was only in the second quarter of the nineteenth century – after the end of the Napoleonic Wars – that there was a reduction in government's demand for resources. As an increasing share of UK savings flowed to private enterprises, growth accelerated. Professor Voth also examines the linkages between the UK financial system and international capital flows during the later decades of the nineteenth century and the implications of those flows on UK economic growth.

Randall Morck and Bernard Yeung (Chapter 7, "East Asian financial and economic development") examine the cases of Japan, Korea and China. They start with the observation that Japan, an isolated, backward country in the 1860s, industrialized rapidly to become a major industrial power by the 1930s, while South Korea, among the world's poorest countries in the 1960s, joined the ranks of First World economies in little over a generation. Over the past three decades, China has followed a similarly explosive trajectory. All three cases highlight the importance of intensive investment in education, free markets, equity financing, early-stage coordination of firms in diverse industries via arrangements such as business groups, and political institutions that curb the power of socio-economic elites so that reforms and growth continue.

William Summerhill (Chapter 8, "Sovereign commitment and financial underdevelopment in nineteenth-century Brazil") provides a fascinating description of the development of the Brazilian financial system in the nineteenth century and its connections with economic development. As in Hans-Joachim Voth's analysis of the UK, Professor Summerhill argues that financial sector development in the decades immediately following Brazil's independence served mostly to channel funds to the government. Legislation limiting incorporation and regulatory barriers to the entry of new commercial banks undermined the development of a vibrant, competitive financial system that could support private sector development. Summerhill provides a skeptical perspective on whether the development of a government bond market will foster financial development.

PART III: FINANCE, GROWTH AND STABILITY

The five chapters in this section discuss different aspects of the relationship between economic and financial development as well as financial stability.

Allen N. Berger and Raluca A. Roman (Chapter 9, "Finance and the real economy: Evidence from the US") provide a detailed, perspicacious, and critical review of research on finance and growth within the United States. Compared to other countries, the United States has a very diversified financial sector and the authors separately evaluate the importance of (1) banks, (2) public debt markets, (3) private equity, and (4) public equity markets for economic growth. They also use the very rich history of regulatory reforms in the United States to document how financial sector reforms have impacted the performance and credit supply of banks and, ultimately, the real economy.

Norman Loayza, Amine Ouazad and Romain Rancière (Chapter 10, "Financial development, growth, and crisis: Is there a trade-off?") focus on the trade-off between the positive growth effects of financial development and its negative fragility effects in terms of higher economic volatility. While two largely separate literatures have explored the impact of finance on growth and the determinants of financial fragility, the authors review an expanding literature that integrates these two areas of research and examines whether there is a trade-off between the financial system's growth and volatility effects.

Patrick Honohan (Chapter 11, "The management and prevention of banking crises: Lessons from recent experience") discusses the causes and resolution of banking crises. While there were many financial crises in past centuries, there was been a notable increase in the frequency of financial crises after the end of the Bretton Woods regime in 1973. Since then, most countries have suffered at least one systemic banking crisis. The author critiques the resolution techniques that countries have used to address the most recent wave of banking crises, stressing that the seeds of the next crises may have already been planted by national responses to the global financial and eurozone crises. He also provides an assessment of recent regulatory reforms that aim at reducing the likelihood of future crises.

Facundo Abraham and Sergio L. Schmukler (Chapter 12, "Financial globalization: A glass half empty?") examine the implications of financial globalization since the 1970s on economic growth and stability. They document that the opening of capital accounts and financial markets has led to an increase in gross capital flows rather than net flows to developing economies. They note that research increasingly finds that (1) capital markets are segmented, with only large firms having access to international markets; and (2) international institutional investors are often transmitting shocks across countries. The authors argue that the net effects of financial globalization on economic development are far from being resolved.

Financial innovation has been rapid over the last 30 years, due in part to technological advances in telecommunication and information technology, and to financial regulations and supervisory practices that spurred the creation of new financial products. Thorsten Beck and W. Scott Frame (Chapter 13, "Technological change, financial innovation, and economic development") discuss financial innovation in the developing and developed economies. They critique a large literature that examines the positive – and negative – effects of financial innovation on economic growth and stability. They argue that while innovations are necessary for fostering and maintaining economic development, there are many questions about the regulation of new financial products and effects of financial innovations on economic fragility.

PART IV: POLICIES AND INSTITUTIONS

The chapters in this section survey research on the policies and institutions underpinning financial system development.

Financial intermediaries and markets, but especially banks, are among the most regulated sectors in economies. James R. Barth and Gerald Caprio Jr. (Chapter 14, "Regulation and supervision in financial development") reassess the role of financial regulation and supervision in financial stability and economic development. While historically, banks were regulated through a few rules, notably those that encouraged diversification and contained disincentives toward excessively risky activities, recent regulatory reforms have resulted in an increasing number and complexity of regulatory rules. The authors critically review the evidence on what works best, both historically and recently. Based on this literature review, Professors Barth and Caprio articulate principles that bank regulators might consider, such as avoiding the overly complex, one-size-fits-all approach that is now popular in high-income countries.

One important dimension of financial sector development is the ownership structure of banks. Government ownership of banks has often been seen as a solution when private markets do not provide sound financial services, while it is often government regulations that prevent private markets from providing sound financial services and government-owned banks often lend to the most politically connected rather than to the most promising firms. Similarly, foreign ownership of banks has been controversial, with some emphasizing the efficiency gains of foreign competition and others stressing that this competition destabilizes domestic banks and increases cross-border contagion. Robert Cull, Maria Soledad Martinez Peria and Jeanne Verrier (Chapter 15, "Bank ownership and economic development") review this enormous literature on both government and foreign bank ownership and document recent trends in both across the globe. The empirical evidence suggests that foreign-owned banks tend to be more efficient than domestic banks in developing countries, promote competition in host banking sectors, and help stabilize credit when host countries face idiosyncratic shocks. But there are trade-offs, as foreign-owned banks can also transmit external shocks and might not always contribute to expanding access to credit. The record on the impact of government bank ownership suggests few benefits, especially for developing countries.

Given the importance of financial sector development for economic development, why do we observe such a large variation in the efficiency and stability of financial systems across the globe? Thorsten Beck (Chapter 16, "What drives financial sector development? Policies, politics and history") reviews three different strands of the literature explaining this variation. First, the policy approach has identified macroeconomic stability, effective contractual and information frameworks and incentive-compatible financial safety nets as preconditions for sound and sustainable financial deepening. Second, the politics approach argues that the level and structure of financial development and the underlying institutional infrastructure is a function of political decision processes. The decisions do not necessarily maximize aggregate social welfare, but reflect the interests of the incumbent elites or coalitions of interest groups. A third approach focuses on exogenous determinants of financial sector development related to geographic endowments and history. This includes the law and finance approach, relating differences in financial sector development to different legal traditions as well as the endowment theory that relates current institutional and financial development to colonial experiences. There is evidence for all three approaches, but also important interactions between them.

Thomas Lambert and Paolo Volpin (Chapter 17, "Endogenous political institutions and financial development") focus on one of these three approaches and survey the literature on political economy of finance. The authors highlight the importance of political structures and institutions in the development and structure of financial systems and show how the distribution of political power in societies shape political decisions on the contracting institutions underpinning financial markets, with repercussions for who gets to access financial services.

PART V: ACCESS TO FINANCE

The three chapters in the last section discuss access to financial services by small enterprises and households as well as the increasingly important microfinance industry. While the empirical finance and growth literature has mostly focused on aggregate effects, the increasing availability of firm- and household-level data has enabled the documentation of the effect of access to and use of financial services for two specific groups: micro and small enterprises and previously unbanked households that are being catered to by microfinance institutions.

Meghana Ayyagari, Asli Demirgüç-Kunt and Vojislav Maksimovic (Chapter 18, "Financing SMEs and economic development") take stock of the empirical evidence on the financing challenges faced by small and medium-sized enterprises (SMEs) especially in developing countries. An extensive literature has documented that small and mid-sized enterprises face larger financing constraints than large firms and that these constraints are growth impeding. The authors discuss the underlying market frictions (transaction costs and risk) that underpin these higher constraints and discuss different policies and institutions to help alleviate them, including credit and collateral registries, competition and foreign bank entry. Beyond small enterprises, the authors also draw attention to young enterprises (i.e., start-ups), which often face considerable entry barriers to obtaining financing across the globe.

Only 62 percent of adults worldwide and 54 percent of adults in developing countries reported having access to formal financial services in 2014. Behind these averages, there is a large cross-country variation, ranging from over 90 percent in many European countries to less than 20 percent in many countries in Sub-Saharan Africa. Asli Demirgüç-Kunt, Leora Klapper and Dorothe Singer (Chapter 19, "Household finance and economic development") present recent data on the variation of financial inclusion across the globe and discuss the literature on the benefits and risks of access to and use of different types of financial services. While the evidence is mixed for credit services (with benefits concentrated in entrepreneurial population groups), research generally finds positive effects of expanding savings opportunities and payment services at the individual and aggregate levels.

Robert Cull and Jonathan Morduch (Chapter 20, "Microfinance and economic development") critically assess the social and economic impacts of microfinance on households and the profitability of microfinance institutions. They argue that claims about both impact and profits have been exaggerated, but so have claims about failure. There is important heterogeneity in both impact and profit, and microfinance holds real appeal in some contexts, especially where communities remain fundamentally underserved.

LOOKING FORWARD

As the different chapters in this Handbook show, the literature has expanded rapidly over the past decades, bringing together economists, historians, lawyers and political scientists. At the same time, research on financial sector development and its relationship with the real economy is thriving. The availability of more micro-datasets, such as household and enterprise surveys and credit registries with loan-level data allow old questions to be revisited and new ones to be addressed. And as the financial system develops, with new regulations and financial innovation changing the landscape, this poses new questions and new challenges for researchers.

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