Introduction

Our objective for the present book is to develop a unified analysis of topics relating to ‘money and banking.’ This approach is attractive, both pedagogically and scientifically, but is largely missing from popular instructional materials. We fill this gap by continually grounding our insights on first principles. In particular, we gradually build on the assumption that economic actors are ‘maximizers’ (that is, households maximize utility and firms maximize profit) to understand how monetary and financial services, and the politics that govern their production, influence economic performance.

Successful students will enjoy a lasting method with which to address important questions like the following:

- What is money and how does its supply relate to a) an economy’s consumption possibilities and b) fluctuations in economic performance (that is, business cycles)?
- Why have only history’s most recent societies enjoyed the benefits that ‘fiat’ monetary systems can produce (that is, currency systems that lack a commodity backing)?
- How can the governance of monetary authorities (for example, the United States’ Federal Reserve System) facilitate this enjoyment, and why do so many economies fall short on this dimension?
- How does the organization of intermediaries (that is, proximate suppliers of loanable funds) and governance of corporations (that is, proximate demanders of loanable funds) influence financial market efficiency?
- Is market discipline sufficient for financial market efficiency, or is public regulation necessary?
- Why is financial market efficiency so important for economic opportunity in general – that is, why is finance important for ‘Main Street’ as well as ‘Wall Street’?
- Why, despite this importance, do societies so often discourage financial development and thus forgo superior economic performance?

In lieu of offering a superficial treatment of these questions, we develop an analytical method for building firmly grounded and internally consistent explanations. This approach improves upon compartmentalized analyses

Figure I.1 Organization of the book

that can overwhelm students with long lists of apparently unrelated rationalizations, and leave them ill-prepared to address germane issues that regularly arise in personal and professional settings but fall outside the scope of what their courses can explicitly consider. Indeed, it encourages students to advance themselves into thinkers by focusing on the ability ‘to understand and not merely to remember’ (Hilton, 1997).¹ Figure I.1 illustrates how our book works toward this objective.

Part I begins by developing a set of analytical tools with which to firmly ground insights to money and banking in particular and (perhaps more importantly) human sociality in general. Our goal here is for readers to become comfortable with (a) the general process of reducing complex problems into simple ones so that those problems become tractable, but not irrelevant (that is, modeling) and (b) a particularly powerful method

of reduction – that is, assuming that units of observation (for example, households and firms) are ‘egoistic’ (self-interested) and logically deducing refutable implications therein.

Opening a study of money and banking in this manner creates at least two benefits. First, by making our analytical method transparent, it helps readers see how much confidence can be placed in what they ‘know.’ Second, it motivates why ‘money and banking’ topics are more than academic curiosities – they fundamentally influence economic performance.

Part I (Chapters 1–3) shines a bright light on this influence by making transparent an assumption that a (prerequisite) principles-level training can leave opaque – that is, the cost of transacting is negligible. In doing so, it not only strengthens our ability to ‘think like a social scientist,’ it also builds a bridge from students’ incumbent training to a set of phenomena that frequently falls under the ‘money and banking’ heading. Indeed, once readers confront the truism that transacting is costly, they begin to appreciate the capacity for monetary and financial governance to affect a society’s economic opportunities.

Our introductory model of the household’s problem in Part I implicitly assumes that spot-trades (those that occur at a point in time) take place in a well-developed monetary system. Absent such a system, however, households find themselves maximizing utility via ‘barter’ (a system where individuals trade only when they share a ‘double coincidence of wants’). There, the relatively high resource cost of consummating trades precludes superior (unanimously preferred) outcomes.

This departure from a ‘first best’ outcome motivates our investigation in Part II (Chapters 4–5) of how money, by facilitating spot-trades when a double coincidence of wants is absent, can improve the economic well-being of all households. We’ll learn that ‘fiat’ money (exchange media that lack a commodity backing) can improve economic performance, but societies nevertheless face persistent obstacles to developing and maintaining efficient monetary systems. In particular, ‘maximizers’ not only want to economize on transactions costs, they also want to opportunistically substitute ‘inflation taxes’ for ‘real taxes.’ Unless monetary authorities can credibly commit against such opportunism, individuals will lack the confidence that is necessary for fiat systems to economize on transactions costs.

In Part III (Chapters 6–9), we synthesize and extend contributions to an important field of macroeconomics – that is, ‘money and economic fluctuations.’ We do so by extending Part II’s investigation from a static to dynamic setting, and learn that whether money should be actively managed is also sensitive to the formation of expectations. To the extent that maximizing-behavior influences how individuals form expectations, activist

monetary policy can encounter difficulty when attempting to dampen economic fluctuations.²

But while an activist policy appears ineffective in this regard, political agents may nevertheless face a strong incentive against remaining passive. Indeed, after individuals form expectations about monetary policy, a political agent's 'best' action becomes to expand the money supply – that is, as policy interactions unfold, individuals' incentives become inconsistent with society's optimal plan. Part III thus complements Part II by further motivating the importance of governing monetary institutions so that otherwise egoistic political agents advance aggregate economic performance. We'll address this dimension of governance in Part IV (Chapters 10–12) by examining how the organization of central banking can influence economic performance.

Taken together, Parts I through IV (Chapters 1–12) develop, from the ground up, an understanding of how the production of monetary services should be and is organized. But while this understanding is 'deep,' it is not 'wide.' To be sure, it only illuminates how societies should (and do) organize spot market transactions – that is, trades at a particular instant in time. It leaves open, however, the related question of how maximizers can ease transacting across time. We treat this issue in Part V (Chapters 13–16) by rationalizing the existence of and prescribing organizational strategies for financial intermediation and corporate governance.

Rather than being a separate investigation, this one also builds from Part I's methodological foundation. In particular, we maintain consistency by again highlighting the capacity for transactions costs to discourage egoists from achieving their goals, and rationalizing observed features of financial markets (e.g., the organization of intermediaries and corporate governance systems) as emerging from incentives to economize on these costs.

Consider, for example, the goal of profit maximization. In Part I's introductory model, firms operate in a 'frictionless' economy, and thus freely choose inputs to equate each factor's marginal product and opportunity cost. But what happens when firms operate in a world that more closely portrays our empirical reality? In particular, what happens when a firm's opportunity to employ inputs conflicts with its access to requisite resources? In this richer setting, we find that the domain of inputs shrinks from what is possible for Part I's firms – that is, firms become 'cash constrained.' Consequently, just as households in Part II cannot achieve the level of utility that is available when bartering is costless, firms in Part V cannot achieve the profits that are possible when accessing financial capital is costless.

But just as Part II's households need not rest at an inferior barter outcome, Part V's firms need not rest at an inferior cash-constrained outcome. To see why, we again exploit our assumption that economic actors are maximizers. For example, recognizing that increased profits are

available except for cash constraints, an egoistic supplier of loanable funds might lend financial capital to expand a firm's set of feasible inputs. In this manner, successful intermediation can make everyone better off – that is, firms can pursue productive projects and lenders can share in consequent profits.

The capacity to realize superior payoffs rests, however, on whether suppliers of loanable funds can discourage demanders from opportunistically employing those funds. To be sure, note that maximizers not only want to economize on transactions costs, they also want to misrepresent the quality of assets being traded and strategically exploit bargaining positions (the strength of which can vary across a transaction's history). Left unchecked, the prospect of such unproductive actions will constrain a firm's opportunity to leverage capital-access into increased profits.

We'll thus learn that, for egoistic suppliers of capital to trade with egoistic demanders, economic actors must credibly commit against narrowly pursuing their own self-interests!³ This understanding will help us rationalize why, say, loanable funds tend to be traded via intermediaries such as banks rather than more directly. It will also help us see why firms adopt restrictive organizational structures (e.g., hand-tying capital structures) or employ external monitors (e.g., financial statement auditors).

Finally, it will offer insight to why financial governance is so important for economic well-being, and why productive governance nevertheless encounters considerable political resistance. In particular, we'll see that educating individuals about the merits of financial development may not be enough to encourage productive reforms (or discourage unproductive policies). Indeed, unless development policies address distributional constraints, even the most (technically) productive advances may go unrealized, and those that already exist will face considerable political risks.

NOTES

1. 'Adaptability to change is itself a hallmark of successful education, and it is change, not any specific technology, that most aptly characterizes life today and in the foreseeable future. A genuine education enables one to acquire, for oneself, the skills one happens, at a given stage of one's life, to need. A training, on its own, contributes almost nothing to education and produces distressingly ephemeral advantages' (Hilton, 1997).
2. We leave until Chapter 14 the consideration of how credit market frictions can channel monetary policy into real economic activity.
3. Miller (1991), Falaschetti and Miller (2001) and Skaperdas (2003), among others, examine such dilemmas.