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1

Introduction

Wealth, in a commercial age, is made up largely of promises. —ROSCOE POUND, 1945

A promise is a simple thing. It expresses an intention about the future. If I promise you today to meet you for lunch tomorrow, it means that today I intend to have lunch with you the next day, and I communicate my intention by making an explicit promise. To *promise* is to say more than just *maybe* or *perhaps* I'll have lunch with you; it is to offer a sincere assurance that we'll have lunch together; it is to say that I will try hard to show up. And our lunch plans are typically embedded in a social relationship: we may be friends, family, or colleagues, and so it makes sense that we would have a meal together. Ideally, the person making a promise genuinely means to fulfill it, has the capacity to fulfill it, and fully understands what they are committing to do. Ideally, the person to whom the promise is made also has full understanding of this intention about the future and finds it credible. And, ideally, promises made are promises kept.

People make lots of promises about matters great and small. They organize their social lives by making promises to have lunch, to meet at the movies, or to go to a party. At work, they promise to deliver a report by the end of the week. In business, people make promises about deliveries and payments. A parent promises children that they can play computer games, but only after they have finished their homework. An author promises to submit the final version of her book manuscript by a certain date. Important social occasions and rituals are marked by promises: an oath promising to

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tell the truth precedes testimony in a court of law; those who enter into high political office first make a solemn pledge; priests utter a sacred vow when they are ordained into the Dominican or Franciscan religious orders; and to gain access to Oxford University's venerable Bodleian Library a reader must promise "not to bring into the Library, or kindle therein, any fire or flame." A wedding vow is a special kind of promise that simultaneously transforms the legal and social status of two people from "unmarried" to "married." A contract is a very general type of legal commitment, built around promises to perform certain actions that together will constitute a transaction. People make promises when they want to shape the future, and when they want to fashion their own and others' expectations about the future. Prediction and enactment go together.

What exactly is a promise? According to philosopher John Searle (1976) it is a type of illocutionary speech act, 2 specifically a "commissive." The point of a commissive is to commit the speaker to a future course of action. Promises express the promisor's intention to bring words and deeds together by performing actions that comply with the promise.³ It isn't sufficient that a person secretly intends to do something; rather, they must express that intention in a way that is legible to others.⁴ And those who believe someone else's promise will adjust their expectations and actions accordingly. Of course, not all promises are credible. How do we know that a promisor will keep their promise? A promise to pay money embodied in a formal loan agreement clearly relies on extralinguistic institutions (i.e., law and courts) to help make the promise binding and credible. If someone fails to keep such a promise, the lender has legal recourse. But such recourse involves making the best of a bad situation that the lender surely wishes to avoid in the first place: it is generally better to lend to someone who keeps their promise than it is to have to sue someone who broke their promise.⁵ And people can make promises and come to agreements without relying on formal contracts or legal sanctions.6 Whether formal or not, a key issue for a promise concerns whether the promise seems believable. In the extreme, someone who promises the impossible, or something too good to be true, should not be believed.

Aside from its legal status, a promise also possesses a certain moral sanctity: it is right and proper to keep one's promises; an individual who does so will be praised as "trustworthy" or as someone whose "word is their bond." Keeping promises is generally a good thing, especially when they concern debts. This doesn't mean that people always keep their promises, of course, but it does bestow honor and status on those who do and dishonor upon those who don't. And this moral valence has a halo effect in the sense

ers.

that keeping promises in one realm of life can raise one's status in others. Trustworthiness, that is, the propensity to keep one's promises, is often considered to be a durable personality trait that will be manifested in many different life situations. Witnessed in one context, it can be generalized to others. But, as economist Timothy Guinnane (2005) points out, trustworthiness has become increasingly dependent on *institutions* (that, e.g., enforce contracts, record credit histories, and undergird loan collateral) rather than just *personalities*. The growth of the economy of promises depended much more on institutional development than on the improved moral fiber of ordinary Americans, and this institutional scaffolding has come from both public and private sources.

Credible promises have limits. Some are dictated by physical reality: one cannot credibly promise to travel faster than the speed of light, for example. Such limits don't change much over time. Other limits are set by legal reality, and these can change in important ways. For example, borrowers can't use property they don't own as collateral for a loan, and I cannot use my own body as collateral because I cannot transfer ownership of it to someone else. More generally, if economic rights are legally uncertain, they cannot function effectively as collateral. The water rights attached to land were highly valuable in the arid West but didn't possess enough legal clarity for lenders. Usury laws, which cap the interest rate charged for a loan, impose a different kind of legal constraint: if the statutory limit were set at 8 percent, then a borrower couldn't legally promise to pay more than that amount. In

This book is about the modern history of a particularly important kind of economic promise: the commitment to pay a monetary debt. ¹² Such promises undergird the credit that animates modern economies. Indeed, today we have a credit economy, an economy of promises. For example, a person buying a new car could pay cash, but more often they borrow money to purchase the car. In this way, one transaction (to purchase the car) becomes two (obtain a loan, then purchase the car). The lender provides money in exchange for the borrower's promise to repay the loan in a certain manner (perhaps making monthly payments that start next month and continue for four years). And by making a promise that the lender finds credible, the borrower can then use the borrowed funds to purchase a car. There is no need for the buyer to wait until she has saved enough money to cover the full cost. To the extent that they rely on credit, consumers make many promises, and those who sell to consumers receive many promises.

Just as businesses extend credit to their retail customers, and so accept their promises, businesses usually obtain trade credit from their own

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suppliers. Firms rarely pay cash for their goods and raw materials. Instead, they receive the goods and then have a conventional period of time (perhaps sixty days) in which to pay for them. In effect, they have borrowed from their own suppliers, and have given in exchange a promise to pay the money within sixty days. A supplier that finds its customers' promises to be credible will happily ship them goods and extend them credit, and suppliers know that giving credit is often necessary to make a sale. To the extent that they rely on credit (both giving and receiving), business also make and receive many promises. To give a sense of the sheer volume, consider that in 2019 U.S. corporations borrowed about \$1.75 trillion by issuing bonds, while in the same year U.S. households had \$4.18 trillion worth of outstanding consumer debt. That is a lot of promises. And all of them were directed toward the enactment of an imagined future in which money ebbs and flows, economic transactions occur, and promises are fulfilled. Credit brings this imagined future into the present.

The U.S. economy has always depended on credit and promises. 15 Since before the nation's founding, there was never enough hard currency to cover all the transactions that people wanted to execute, and barter wouldn't work except on a small scale. Whether money consisted of gold or silver coins, private banknotes, government-issued greenbacks, scrip, or anything else, cash was scarce and so of necessity people depended on credit. For trade over anything but short distances, payment by cash was impractical even if it was available. And of course people borrowed for many reasons. In an agrarian economy, farmers needed credit to purchase land, 16 and they had to buy seed and equipment in the spring but couldn't sell their crops until the fall harvest. So they borrowed from their suppliers on an annual basis. In turn, the country stores supplying farmers had to wait till the fall to be paid and so couldn't pay their own bills until then. They borrowed as well from wholesalers and suppliers. And then, wholesalers and suppliers borrowed from banks. Thus, a national rhythm of credit followed the annual cycle of planting, growth, and harvest. But if credit was necessary, it was also understood to be a dangerous necessity. Handled well, the household, farm, or business could thrive, obtaining and extending credit when needed, making payments as promised. But if credit were managed poorly, or if the borrower just had some bad luck, credit problems could drive people and businesses into bankruptcy.¹⁷ Troubled debtors were beholden to their creditors as they struggled to meet their obligations and keep their promises. And insolvency had a worrisome tendency to spread as the failure of one debtor threatened to pull down others. In a financial panic, cases of bankruptcy could multiply like an infectious disease.

Today, credit is more important than ever. Millions of households and businesses are knit together in a complex tangle of transactions, giving and receiving promises even though they are mostly strangers to each other. How is this possible? How can the economy function on the basis of promises among anonymous individuals? The mystery deepens if we appreciate the materiality of modern economic success and its embarrassment of riches. As compared to the past, today's households enjoy vast quantities of durable goods, living in large residences and consuming energy and objects at an unprecedented (and unsustainable) pace. But the tangible circulation and consumption of physical goods depends on the less obvious circulation of intangible promises. Indeed, the stages of a typical life course are now organized around credit: many people take out student loans to go to college; in or out of college, they obtain credit cards and by using them begin to build a credit record; they finance their first new car purchase with a loan; when they buy their first home, they usually take out a mortgage; if they start a small business, it will often involve loans from family. The debts from one stage of life affect someone's ability to move on to the next stage. 18 Someone short of cash and between paychecks obtains a short-term high-interest "payday" loan, or pawns a valuable object at a pawnshop. If they already own a home and need additional cash, they can take out a home equity loan. Unexpected medical expenses often put people into debt. To be fully an adult is to have experienced various forms of indebtedness, but it is not simply a matter of individual choice. Indeed, two of the types of debt just mentioned are actively supported by government policy: most student loans are guaranteed by the federal government, which encourages lenders to lend, and the interest paid on home mortgages receives favorable tax treatment, which encourages borrowers to borrow. Over their life course, individuals often begin to borrow in early adulthood, accumulate assets during their peak earning years, and in retirement live off those assets.

This spread of indebtedness throughout society is concerning: debts are burdensome and surely it is better to avoid them. Perhaps there are promises that people shouldn't make. Polonius famously advised his son to "neither a borrower nor a lender be," that is, to avoid credit altogether! But access to credit can help households and businesses remain afloat by enabling them to make necessary purchases or survive a current shortfall, and the ability to obtain a home mortgage on good terms helped many households accumulate wealth and enjoy upward mobility. Some have even argued that expanded access to credit among middle- and working-class households helped compensate for the recent stagnation in incomes and

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dramatic growth in inequality, relieving political pressure for redistributive public policies.¹⁹ The entire housing industry depends heavily upon credit, as does the automobile industry. Small and medium-sized firms are particularly reliant on bank loans and trade credit for their financing needs. Large American corporations raise long-term capital by issuing bonds, and they obtain short-term capital by issuing commercial paper or taking out bank loans. Sovereign governments, from local municipalities up to the federal government, are continuously borrowing to finance their operations. Credit circulates in many forms among many parties, and the recent process of "financialization" means that firms and households have become increasingly embedded in an expanding network of financial relationships and obligations.

Financialization entails issuing and accepting financial promises. Why make promises? Debtors borrow because they need money now and can credibly promise to repay it in the future. Debt is useful to the debtor: consumers can borrow to purchase a home or a new car; they can finance a college education or cover medical expenses. Businesses similarly use debt to finance an investment, to pay for supplies or inventory. Some businesses (e.g., private equity groups) are notorious for their reliance on debt and for maximizing leverage. A few more statistics illustrate the magnitude of the economy of promises: 21 in 2020, nonfinancial corporate businesses had \$7.26 trillion in outstanding debt securities (bonds) and \$3.89 trillion in loans. Among individuals in 2020, there was \$10.94 trillion worth of residential home mortgages. Many households and businesses have gone into debt, made promises, and become more financialized. Although they have made this choice, circumstances can tip the scales and favor debt. Government tax policy, for example, gives favorable treatment to mortgage interest payments by households and rewards debt over equity as a way to raise business capital. So the growth in financial leverage hasn't happened spontaneously.

People make promises for lots of reasons, but why accept them? Mostly, people believe a promise when it seems credible and they trust the promisor. My friends show up for lunch because they believe me when I promise to show up for lunch, at the appointed time and place. They find my promise credible, despite the fact that it isn't legally binding, and they adjust their expectations accordingly. More generally, if I and my friends find each other's promises to be credible, if we trust each other, then we can coordinate our future activities in advantageous ways. We can organize our futures together. The same holds true for the economic promises that undergird credit. Generally, lenders will lend if they trust the borrower, if they believe

the promises that the borrower has made to them. With credible promises, consumers can obtain the money they need to buy cars, homes, and other durable goods, and those who sell to them enjoy their business. Businesses can purchase what they need from their suppliers, and the latter can sell more goods. Firms can obtain the financing they require to obtain working capital or make long-term investments. And the overall economy can operate at a much higher level than would be possible if everyone had to pay cash up front for every transaction. The fact that firms regularly borrow shows that it is not only individuals who make credible promises but also organizations. Credit isn't just personal. And one of the real accomplishments of the modern credit economy has been to get people to trust others they don't know personally.

Formality can make promises more credible. It is one thing to casually mention a vague plan to repay a debt, but it is quite another to write such a promise on a piece of paper that is signed, dated, and witnessed and uses legally binding language. A formal promise, one that conforms with legal standards, allows the parties to the promise to invoke the coercive power of the law to enforce that promise. It is not, of course, that people do not trust those who make informal promises. Indeed, for some, their word is their bond and nothing more is required. However, other things being equal, a formal legal promise carries more weight, and its breach entails more consequence. Such promises are taken more seriously, and how such promises are encoded in law greatly affects their value and efficacy.²²

Sadly, people do not always keep their promises. Some prove to be untrustworthy, even if someone else trusted them. Some borrowers default on their loans, because of either choice or necessity, and so the lender suffers. Broken promises often lead to a kind of "postmortem" examination where people try to figure what went wrong: Was it due to unforeseen circumstances that made repayment impossible? Was it because someone chose to break their promise? The answer, which isn't always obvious, sets the stage for the next time that an individual makes a promise and affects whether others will believe them then. And because social life usually involves a succession of promises, rather than "one-shot deals," it is frequently possible to assess someone's current pledge against the backdrop of their own past promises. Promisors develop reputations, both good and bad, and however much promises are about the future, they are rooted in the past.

What happens when people break their promises and fail to pay their debts? The question of "whom to trust" is always posed against the backdrop of how to deal with broken promises and the associated non-payments,

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defaults, and insolvencies. Failure is one of the distinguishing features of a market economy, and the framework for it is set by bankruptcy law.²³ Certainly failure was a common experience in the business community.²⁴ Although those making or receiving promises can adjust for this unfortunate possibility, matters are not entirely up to them. Government policy sets the terms for what happens when people break their promises. As organizations that specialize in making loans, banks are forced by bank regulators to "recognize" broken promises and make financial provision for them. 25 Otherwise, lenders might be tempted to pretend that all is well with their clients, even if it isn't. Unpaid creditors have the right to sue the debtor in court, to garnish wages, or to repossess collateral. Personal and corporate bankruptcy rules determine the treatment of insolvent borrowers, how and when their assets are to be distributed among creditors, and whether a firm is reorganized or simply liquidated.²⁶ However, these rules don't apply when the borrower is itself a sovereign power. If a state government defaults on its debts, sovereign immunity complicates the situation and outcomes that would occur in the case of a private corporation, like closure and liquidation, don't happen. The states of Louisiana and Mississippi stopped payment on their debts in the 1840s, for example, but they didn't close down.

Failure sometimes stems from a debtor's temptation to over-promise. But frequently, failure follows from misfortune or bad luck: crops fail, people lose their jobs, families face unexpected medical expenses, unanticipated disasters occur. Going into debt is a convenient way to smooth household consumption in the face of variable income or unforeseen problems, to keep a troubled business afloat by borrowing from Peter in order to pay Paul, or to increase a firm's rate of profit by maximizing "leverage" through the issuance of debt rather than equity.²⁷ But even when it is taken on for good reasons, debt can become an overwhelming burden and debtors consequently break their promises. Lenders tend not to believe all the promises they hear, and their level of skepticism is conditioned, in part, on what might happen if those they trusted fail.

In general, there is no simple solution to the problem of broken promises. To *trust* everyone, to believe all promises, is to invite inevitable disappointment and loss. It is to be utterly naive. But to *distrust* everyone, to doubt all promises, is to enter a world of unsustainable caution, suspicion, and even paranoia. Universal mistrust of all by all will bring the economy to a halt.²⁸ Less dramatically, a bank loan officer who never makes a loan is soon out of a job.²⁹ The key question is: whom to trust?³⁰ How best to tell the difference between those who will, and those who won't, keep their promises? In the

case of credit, answering this question means telling the difference between those who are creditworthy and those who are not. It means forecasting the willingness and ability of a specific debtor to repay a particular debt sometime in the future. This is no simple task, but it is inescapable.

Lenders who accept promises can make two kinds of mistakes. First, they might trust someone who is untrustworthy and subsequently breaks their promise. This mistake has clear consequences: when a borrower defaults, the lender doesn't receive the money owed them. In the extreme case, the lender loses all their money. A second mistake involves not trusting someone who really is trustworthy. An opportunity is lost, but its magnitude is rarely obvious and it can seem purely hypothetical. The asymmetry between these two types of mistakes gives one greater salience than the other. To trust an untrustworthy borrower unambiguously means lost money, but to distrust a trustworthy borrower produces a less drastic outcome. This makes it easy to err on the side of caution and not lend to a creditworthy individual, even though the possibility of making the second kind of mistake remains real.

Today, many economic assets consist of nothing but promises. The longterm promise that a homeowner makes to repay a mortgage sits as an asset on the lending bank's balance sheet. The promises that customers make in order to receive goods from a supplier constitute another asset, the supplier's "accounts receivable." People who are extremely rich possess lots of intangible assets, with portfolios filled with corporate bonds and other financial promises. Unlike older forms of wealth (e.g., land, cattle, gold bars), promises are intangible. Their value does not reside in their material characteristics. In fact, physically they may be no more than words on a page or entries in an electronic database. But despite this immateriality, today they possess great economic value, and to be wealthy is to have accumulated a lot of promises. As of April 2019, the total value of commercial and industrial loans made by U.S. commercial banks equaled more than \$2.3 trillion, and the total of all motor vehicle loans was worth over \$1.1 trillion. At the same time, all outstanding one-to-four family residential mortgages were together worth over \$10.8 trillion,³¹ and the most exotic promises, financial derivatives, were also worth trillions.³² These staggering figures bear out Roscoe Pound's observation and underscore that promises constitute the intangible substance and value of the modern economy.

As financial promises, loans link together two distinctive groups, the lenders and the borrowers. Their ties to each other, and their interdependent roles, last so long as the debt remains outstanding. Much social science has been devoted to the analysis of other important economic distinctions

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including, for example, those between employers and employees, producers and consumers, blue-collar workers and white-collar workers, workers and capitalists, or owners and non-owners. The difference between debtors and creditors overlays and complicates these other, much studied, distinctions.³³ And it offers complications of its own because, among other things, debtors can also be creditors, operating on both sides at the same time. People give and receive promises simultaneously, and so have contradictory interests.

The key question in an economy of promises is about "whom to trust." It is the starting point of this book. Asking and answering this question occurs daily and pervasively, and has been going on for as long as people have borrowed money. How people have understood trustworthiness, how they assess it in others, and in what ways they have sought to signal their own trustworthiness have all evolved in important and surprising ways. What made an individual look like a good borrower in 1821 (high moral character) is not the same as in 2021 (high FICO score). A dispersed, localized, and informal evaluative process has become much more centralized, nationalized, formalized, and calculative. Instead of being judged by local lenders, who might also be neighbors, kin, or coreligionists, debtors are now continuously monitored by a small number of large credit rating agencies that unobtrusively accumulate "big data" and calculate precise scores. 34 This evolution undergirds the growth of the modern credit economy in the United States and its singular dependence on promises. Rather than rely on their own personal judgments, lenders increasingly used an extensive informational apparatus that identified borrowers, measured their financial means, tracked their credit record over time, and summarized their trustworthiness in a single number, scale, or rating. These new institutions shaped credit in the United States, but some have gained even greater global significance.³⁵ Rationalization, formalization, and quantification all suggest greater neutrality and objectivity.³⁶ But we will learn otherwise. Participants in the credit economy have also benefited from the development of a commercial legal framework that has made it easier to make legally binding promises and enforce debts. Furthermore, as lenders fine-tuned the terms under which they extended credit to consumers, some of them realized that it could be more profitable to lend to persons who did not fully repay their debts on time and who, in effect, bent but didn't break their own promises.³⁷ And the determination of trustworthiness remains subject to social influences favoring those who are similar and familiar over those who are not. As a rule, people tend to trust and affiliate with those who are like themselves.38

By studying how credit grew, this book helps us understand trust. We learn that trust is as much a product of institutions and social networks as it is about personalities and moral fiber. This means that the particularities of institutional history matter, especially when arrangements get "locked" into place. We will appreciate that claims about the contemporary decline of trust, or its disappearance in national politics, need to be tempered by the reality that our economy of promises couldn't function without a great deal of trust. But we must also discard some of the naively "solidaristic" and harmonious connotations of trust. Credit, promises, and trust are suffused with power, shaped by conflict, and riven with inequality.

During a financial crisis, many promises are disbelieved. Only the most credible promises (e.g., those issued by the national government or a central bank) become acceptable as market actors hunt for liquidity and rush to convert their assets into cash.³⁹ When failure becomes widespread during a severe depression, so many people break their promises that political pressure builds for the government to intervene. 40 Pervasive economic hardship suggests that many people may have broken their promises through no fault of their own. What to do with mass insolvency when it is obvious that a large proportion of the bankrupt were just unlucky rather than culpable? Sometimes governments try to support the ability of troubled debtors to make new and more credible promises, and so get credit flowing again. For example, during the 1930s the federal government created a variety of programs to help make homeowners' promises to repay their mortgages more trustworthy, and so encouraged more lending. Similarly, in the nineteenth century some states retroactively modified promises and set a moratorium on the ability of lenders to foreclose or seize collateral. And although the U.S. Constitution provides for a bankruptcy law, throughout the nineteenth century new federal bankruptcy statutes were repeatedly passed following an economic crisis in order to provide general relief to debtors, only to be repealed when creditor interests reasserted themselves. 41 Consequently, for substantial periods there was no federal bankruptcy statute in effect. Such episodes brought to the surface the deep connections between economy, law, and the polity, and reflected the ebb and flow of debtor interests in politics.

Financial promises are broadly affected by economic cycles. During an expansion, credit is cheap, speculative bubbles develop, and too many promises are issued and accepted. By contrast, a sharp downturn undermines the ability of debtors to keep their promises and often prompts some kind of policy intervention. ⁴² In periods of severe deflation, the burden on debtors intensifies because they repay their debts with money that is worth more

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(because overall prices declined). The converse situation involves inflation, where creditors suffer because the repayments they receive are worth less (because prices increased). Since loans are denominated in legal tender, a change in the general value of money means that a dollar loaned at one point won't have the same purchasing power as a dollar repaid later. Lenders and borrowers who perfectly anticipate inflation, or deflation, can simply adjust the terms of their debt contract. If inflation is a problem, for example, lenders can raise the nominal interest rate they charge and shorten the maturity of the loans they make. Or they can include an index clause that tracks changing costs⁴³ or a "gold clause" that requires payment in precious metal rather than currency. But mostly, lenders and borrowers don't perfectly anticipate the future, and the value of their obligations can be affected in unexpected ways. In periods of hyperinflation, the problem of trust becomes compounded by another: can one trust money?

The Premises of Promises

People are free to make their own promises, but not under circumstances of their own choosing.⁴⁴ If they want their promises to be legally binding, the menu of choices becomes limited. And some parties have the power to insist that promises comply with particular standards. Various government regulations have limited the kinds of promises that people could make. For example, the Uniform Small Loan Laws passed by many states in the early twentieth century set interest rates for small loans and required that lenders be transparent about loan terms so that borrowers could fully understand the promises they made (i.e., no hidden fees or misleading interest rates). At the federal level, the Equal Credit Opportunity Act tried to ensure that lenders treated promisors equally, regardless of whether they were male or female, black or white, old or young. Yet, legal rules sometimes induced creative circumvention. For example, adding "fees" to a transaction can raise the cost of a loan without breaching statutory interest rate caps. And federalism in America posed the problem of legal pluralism: much commercial law is state law, and hence varies from one state to the next. A loan provision that was legally binding in New York State may not have been legal in California, which obviously created difficulties if a New York creditor wanted to lend to a California debtor.45

Promises can be vague and informal or specific and formal. People are free to make vague promises, but their options are constrained if they want their promises to be formally recognized. This variation affects the

understandings of both promisor and others of what exactly the promisor has committed to do. Context resolves some although not all ambiguity, 46 but vague promises can lead to divergent understandings of what the promise really meant. They can produce disputes about whether the promisor has truly "kept her word." However, vagueness can also be useful by providing flexibility to a commitment that can then be adapted to unforeseen conditions. Imprecision, in other words, isn't always a problem. Consider two promises: "I promise to help you move" and "I promise to arrive at your apartment next Saturday at 9 A.M. and until 5 P.M. I shall pack boxes with household items, load them into the truck, drive the truck to the new location, and help unload the truck." The first is a vague and succinct promise, and obviously there are many ways to be of help on moving day. A promisor who performs any one of them can claim to have kept their promise. The second is a lengthier and more specific promise, and it would be relatively easy to determine if the promisor had kept her word (did she actually show up at 9 A.M.?). However, the second promise possesses less flexibility and may not be as adaptable to changed circumstances. For example, if the move has to be delayed until Sunday because of bad weather, showing up as promised on Saturday won't help.47

Legally binding promises are formal promises. But not everyone is qualified to make such a promise. To be sure that something which looks like a promise is authentic, it is necessary to consider whether the promisor can really issue such a promise (i.e., that they are recognized as a bona fide promise-maker). To promise is to commit to perform certain actions, and not everyone is deemed responsible for their own behavior or able to make future commitments on their own behalf. If a promise is a formal expression of an intention, then the legal status of a promise depends on the status of the promisor. An "IOU" note written by a five-year-old child isn't taken seriously. Similarly, a person who is insane, mentally "unsound," or experiencing acute dementia isn't legally held to account for their actions, including their promises. Matters become more complicated when persons aren't just making promises for themselves but on behalf of someone or something else. They must be authorized to act as a representative, trustee, agent, or fiduciary so that the promises they make bind whomever they represent.

Promises also vary in their uniformity, and there is a difference between standardized and idiosyncratic promises. ⁴⁹ The provisions of a "bespoke" promise can reflect the specific concerns of the individuals making and receiving the promise, and they express whatever distinctive bargain the lender and borrower have struck. Such uniqueness can make the promise

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valuable to both sides, precisely because it exactly reflects their goals and circumstances. Yet it can be harder to judge the credibility of a unique promise because one has to consider the likelihood of performance in light of an idiosyncratic situation about which information may be scarce: there is no baseline of past experience to draw upon. But people can make more standardized promises, too, and these are easier to assess. Since they conform to a standard, they involve elements that have been seen before, that are based on a template, and whose implications in a variety of settings are wellknown. Standardized promises can be judged in light of past experience with similar or identical promises. They are comparable. This difference matters because many economic promises have become increasingly standardized and then used at scale. Consider the widespread use of standard-form contracts in consumer finance, for credit cards. They usually come from the creditor side, and so the agreements are set by the credit card company on a take-it-or-leave-it basis. The two parties do not actually bargain over the terms of their deal. Frequently, cardholders don't even read the agreement (which consists of many pages of legal boilerplate) and so are not fully aware of the promise they have consented to make. In effect, such individuals make promises whose terms are set by the recipient of the promise and are not entirely understood by the promisor.

With standardized promises, one key issue concerns the standards themselves. Who sets them? Who writes the boilerplate? With considerable legal resources and ample experience in consumer finance, big credit card companies can set terms that favor creditors over debtors, and cardholders have little chance to remedy the situation except by shopping around for a better deal or forgoing credit cards altogether. But standards are sometimes set by third parties that neither borrow nor lend. In the 1930s, for example, the Federal Housing Administration (FHA) set uniform standards for home mortgage loans that soon were adopted by both lenders and borrowers. Such mortgages were said to be FHA-conforming, and could be insured by the federal government. In the 1960s and 1970s, the U.S. government passed several laws aimed at reducing racial and gender-based discrimination in credit markets, and these also helped standardize bank lending procedures and documentation. And recently the Consumer Finance Protection Bureau devised simple standardized loan agreements so that both the consumer borrower and the sophisticated corporate lender can understand the terms and conditions of the loan. Third parties, like the government, can also set standards that prohibit certain kinds of promises. Where applicable, usury laws typically set a cap on the interest rate that a lender can charge, and therefore the borrower

cannot make a legally binding promise to pay more. Exemption laws can prevent lenders from using certain kinds of property as collateral.⁵⁰

Debts can also arise without prior consent or explicit promises. In such cases, no lender has assessed the borrower's willingness and ability to repay. Someone who fails to pay their federal income taxes, for example, has turned the federal government into a creditor, although the government didn't agree to do so. Instead, the taxpayer decided not to meet their tax obligations. Situations involving involuntary creditors, in other words, do not depend on the prior acceptance of promises. A bank that loaned money to an insolvent firm is a creditor, as are the firm's unpaid employees. But the latter are involuntary creditors who didn't agree to lend their employer money. Rather, they were simply not paid the wages owed them. 51 Similarly, if that insolvent firm also produced environmental impacts that cause long-term harm, then those affected in the future will be owed compensation even though they didn't consent to become creditors. Or if fees, surcharges, or fines were imposed on someone convicted of a crime, they become an involuntary debtor to the state. 52 Nevertheless, involuntary debts constitute only a small proportion of total financial obligations.⁵³

Impersonal Promises

My discussion has thus far focused on promises as acts of individual persons. But many promises are impersonal in the sense that they are being issued by institutions rather than individuals: corporations, governments, nonprofits, nongovernment organizations, special purpose entities, and so forth. After states passed general laws of incorporation during the nineteenth century, the number and size of corporations grew dramatically, and they were granted the status of legal personhood. Entire sectors of the economy became dominated by large organizations that acted as both borrowers and lenders. Increasingly, the individuals who issued promises did so on behalf of an organization, and it was the organization that became obliged by the promise. If a firm borrows money from a bank, for example, the CEO or CFO signs the contract. But the promise binds the firm, not the person. And if the loan requires collateral, it is the firm's assets that secure the loan, not those of the individual.

When an organization makes a promise, it is no simple matter to determine its "intention" or "willingness" to repay. A corporation may have legal personhood, but that doesn't make it a person. Yet, legally an organization can be as bound by its obligations as is a natural person. Impersonal promises are promises nevertheless. In an economy where single-owner proprietorships

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have been displaced by large corporations, and where special purpose entities⁵⁴ are routinely created as part of financial engineering, impersonal trust is an important issue. Over the last two centuries, one of the biggest changes in the credit system has been that those issuing financial promises have shifted from real persons to fictive individuals: organizations of one sort or another. Who makes promises and is obligated by them has changed.

I have introduced promises in simple terms, but the history of credit in the United States reveals that people devised ways to put promises together, to build compound and collective promises. Simple promises can function like building blocks to construct more complicated promises. One example comes from a common method used to bolster the creditworthiness of an individual borrower: have another person act as guarantor or cosignor. If the debtor fails to repay, the guarantor promises to do so. In this way two promises, the original promise of the borrower and the conditional promise of the guarantor, are linked together, and it makes the lender more willing to lend. A person can also compound their own promises, as when a borrower uses collateral to secure a loan. The borrower's original promise is reinforced by an additional promise to hand over collateral in the event of non-payment. Modern lenders often require a borrower to insure the asset that serves as collateral for a loan (e.g., someone who gets a mortgage must insure their home). In this way, the original promise to repay the loan is accepted by the lender conditional on other promises regarding collateral and insurance.

Recently, through a process called "securitization," investment banks and others have taken many fairly simple promises, like home mortgages, and combined them to produce complex structured financial instruments like CDOs (collateralized debt obligations) and RMBSs (residential mortgagebacked securities).⁵⁶ And while the underlying assets, such as home mortgages, obligate individuals, the new instruments obligate impersonal legal entities like special purpose entities or special investment vehicles. Such aggregations created new possibilities for the assessment of promises. It was one thing to judge the credibility of an individual's promise to pay, and quite another to assess an entire pool of mortgages involving many such promises and structured in a specific fashion. Rather than gauge the particulars of a person's character, credit record, and situation, lenders have used increasingly sophisticated statistical approaches. They need not worry so much about whether a single person will repay their loan but instead focus on the average rate of repayment among a group of borrowers, on the desirability of a diverse portfolio of underlying loans to ensure uncorrelated risks, and on hard-to-calculate conditional probabilities. To accomplish this, lenders

shifted away from qualitative judgments about the trustworthiness of individual people, assessments that often focused on character and personal reputation, toward more standardized and numerically based evaluations of groups of borrowers. Quantification made it easier to aggregate judgments and put together pools of promises. Indeed, the quantification of trust is one of the most important developments that has occurred, and reflected a trend occurring in other areas of commerce (e.g., insurance) and public policy (e.g., cost-benefit analysis).⁵⁷

When formulated, a financial promise joins two parties: the promisor and the promisee. The legal system acts as third-party enforcer for legal promises. But the promise need not bind those same two parties until it is fully realized, because some promises are able to circulate. Although the promise was originally made by the borrower to the lender, the latter can sometimes pass the obligation on to someone else, usually by selling it, transferring it, or having it "discounted." 58 When this happens, and the promisor acts to satisfy their obligation, payment won't go to the person who originally loaned them the money. Instead, it will go to whoever possesses the promise at maturity, and the current possessor's right to enforce the promise is as strong in law as was that of the original promisee. This ability to circulate gives mobility to promises, and concerns their "negotiability." 59 It allows the original lenders to recover their capital well before the debt fully matures and severs the long-term tie that joined the original parties to a long-term debt. 60 It also creates the possibility of a secondary market for promises (where promises can be priced, among other things) and dislodges promises from the dyadic context of the originating lender and borrower. This change can greatly enlarge the number of creditors who, in effect, are willing to lend, but by making the role of creditor a more generalized and anonymous one, it loses some of the advantages that come from durable social relationships. Instead of owing money to a particular person, the debtor owes money to whoever holds the promissory note on the day it comes due (or, if it is an "on demand" note, whenever the holder presents it for payment). And that person could be a complete stranger. The advantage to knowing one's creditor, or having a personal relationship with them, becomes apparent when problems arise. Should the debtor be unable to pay the debt, a prior social connection with the creditor can help facilitate the negotiations or adjustments needed to keep the debtor current. Obligations can be restructured if the original terms prove too onerous and the debtor is threatened with insolvency, but those negotiations may be more difficult to bring to an amicable resolution when conducted with strangers.

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Interdependence

Promises create interdependencies among people, and are themselves interdependent. The most obvious interdependence arises directly between debtors and creditors: at one point, the debtor depends on the creditor (as a source of funding), and then later the creditor depends on the debtor to repay. The borrower is beholden to the lender and is only released from their obligation upon full repayment. Recent evidence suggests that for individuals, being a debtor is a stressful and burdensome situation, 61 and so dependency can be both an economic and personal problem. Whether on balance these interdependences are good or bad isn't always clear. The recent push for greater "financial inclusion" is motivated by the belief that giving poor people increased access to credit will make their lives better. 62 But the push against "predatory lending" reflects recognition that some forms of credit are harmful, even if borrowers "choose" to borrow. Some criticize the recent increase in household indebtedness and conclude that "consumer debt has stripped working people of their wealth and contributed to ever-widening inequality" (Ott and Hyman 2013: 29).

Interdependence grows when individuals make and accept promises at the same time. They are debtors to some and creditors to others, embedded in a complex network of multiple obligations. This means that their ability to keep their own promises often depends on whether others keep their promises to them. If a company's customers don't pay their bills, then the company has a harder time servicing its own bank loan. These complex and indirect interdependencies are one reason why problems can cascade quickly through a network of credit relationships: a firm's insolvency will hurt its creditors, its creditors' creditors, and eventually its creditors' creditors' creditors. In this way, failure becomes infectious. ⁶³ A financially troubled firm often has to protect itself by vigorously pursuing those who owe it money while at the same deferring payment to its creditors, in an attempt to buy time and preserve liquidity. The relationship between assets and liabilities isn't something that just sits on a balance sheet but rather is a tension enacted in real time by firms that are trying to survive. As debtors approach insolvency, new interdependencies arise among the creditors: if a debtor repays one, there is less money available to repay the others. Conflicting interests put creditors in a zero-sum game with each other and can set off a "rush to the assets."

This balancing act is particularly acute for the lending institutions that specialize in promises, that is, banks. A financial institution that takes

deposits and makes loans has to balance the promises it makes to some with the promises it receives from others. And it isn't simply a matter of equalizing assets with liabilities, for the liabilities are frequently short-term while the assets are long-term. There is, in other words, a maturity mismatch. Many nineteenth-century banking crises were sparked by worries among depositors that their bank couldn't keep its own promises and let them withdraw their money on demand. And as depositors lined up to claim their cash, banks could not retrieve the money they had loaned out to borrowers. Bank runs spread easily and could engulf solvent but illiquid institutions. Recently, banks that relied on "wholesale funding" in repo markets performed a different balancing act, but one that left them similarly vulnerable.

Credit-induced interdependencies pose a particular challenge because however well a creditor can evaluate and manage its debtors, it is difficult to deal with its debtors' debtors, whose indirect influence may nevertheless be significant. Trust is imperfectly transitive in that even if I trust someone (and lend them money), I cannot necessarily trust those that they trust (i.e., the people to whom they loaned money), although my fate depends on my debtors' debtors. ⁶⁶ Information about such persons is harder to obtain and necessarily indirect, and the channels of influence are weak. The uncertainty is greater, and the vulnerabilities more difficult to gauge. One of the biggest changes in the credit system concerns how borrowers become "legible" to those with no direct connection to them or prior knowledge about them, often through quantitative measurements and ratings.

Interdependence among creditors means they try to learn about rival claims for the simple fact that prior debts diminish creditworthiness. How to learn if someone already owes money?⁶⁷ How to know if a property is already mortgaged? Thanks to public registration systems it is possible to learn if an asset being offered as collateral has any prior liens against it, a fact that will interest a lender as prior liens typically have seniority. Other interdependencies arise from the fact that creditors often compete with each other, and this influences their willingness to lend and on what terms. Suppliers compete for customers, and generous credit terms are often part of the deal. Similarly, bankers compete for creditworthy customers. This means that although the decision to lend is made with a primary focus on the borrower's situation, lenders keep an eye on what their peers are doing as well.

The interdependencies created by promises do not necessarily provoke conflict, pitting debtor against creditor; nor do they always set rival claimants on a debtor against each other, where one's gain is the other's loss. In

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fact, promises can create a community of interest between the borrower and a lender. As a loan matures and until it is fully repaid, the lender has a genuine interest in the willingness and ability of the borrower to repay. Banks want their customers to succeed and repay their debts, and generally borrowers gain the support of their lenders. A particularly striking example occurred during the American Civil War, at a time when the political survival of the United States was in doubt. The secretary of the treasury explicitly noted that borrowing money helped to both fund the Northern war effort and create a financial constituency with an interest in the success of the Union. As creditors, Northern bondholders became strong supporters of the government to which they loaned money as their political loyalties were bolstered by financial ties.⁶⁸ Creating common interests was a great idea, but as with so many other good ideas, this one occurred in antiquity to a Greek, Eumenes, who protected himself in Alexander the Great's army by borrowing money from his enemies.⁶⁹ However much they disliked him, they needed to keep him alive.

Recognizing and managing the interdependencies that emerge from complex networks of promises remains a challenge. One partial solution concerns those who have claims on the same debtor. Conflict arises because a debtor who repays one creditor may not be able to repay another, a tradeoff that becomes especially acute when debtors run short of money. But if creditors can be rank-ordered so that some *must* be paid before others, the conflict is resolved.⁷⁰ And, indeed, seniority does exactly this by creating a priority ordering among competing claimants. By statute or contract, senior creditors gain access to a debtor's assets before junior creditors. Secured creditors, who have collateral, can seize a debtor's assets before unsecured creditors. Another interdependence applies to those who are simultaneously debtors and creditors, lending to some while borrowing from others. They can get squeezed if their own debts come due but their debtors are slow to pay. This vulnerability persists especially if the debts owed them have long-term maturities. If they can transfer or sell these assets, however, then the problem can be avoided. A wholesaler that can sell off its "accounts receivable" will transfer the credit risk associated with the debts its customers owe it, in exchange for cash that it can then use to settle its own obligations. When a bank "securitizes" its portfolio of home mortgages, it can accomplish something similar: the risk that people will fail to make their mortgage payments is transferred elsewhere. And some financial securities, like bonds, are negotiable securities, which makes them easy to sell.

Whom to Trust?

To lend money involves a practical question of trust. It requires that the lender believe that a debtor will keep their promises and repay their debts. But it is unrealistic to suppose that everyone does so, or that everyone should be trusted. A banker who trusts everyone will not last long. How do lenders decide whom to trust? How have they differentiated between the trustworthy and the untrustworthy? However much one might debate the general meaning of trust, much rests on the ability to make this practical distinction repeatedly, on a large scale and in a timely manner.

The question of whom to trust is an old one, but it is answered in new ways. In general, information is key. Lenders gather information about borrowers in order to learn who is, and who is not, trustworthy; they make predictions about that person's future actions. Sometimes the information is about personal character. If a lender knows enough about someone's personality, then they can decide whether that person is trustworthy. Frequently, such personal information circulates through social networks. A lender might learn about a borrower because they are directly acquainted, because they have mutual friends, or because they belong to the same group. Such informal means of information gathering work well on a small scale, in communities where social networks knit the population together, and where people know each other's "business." But they work less well on a mass scale, where lenders and borrowers are numerous, anonymous, geographically mobile, and socially disconnected from each other.

The modern credit economy operates on a mass scale, and although there are pockets bound together by social networks and face-to-face interactions, information about whom to trust generally has to be obtained through other means. A college student needing short-term cash can borrow from their parents, but to finance higher education today students usually require much more than what their families can muster. Today's lenders depend on a set of *institutions* that acquire, process, and distribute large volumes of formal information about individual and organizational borrowers, on a mass scale, and use that information to evaluate promises. These institutions emerged over the course of the nineteenth and twentieth centuries and have become critical to the operation of today's credit markets.

The shift toward formalized quantitative information about the trustworthiness of borrowers started with the establishment of mercantile agencies in the 1840s. The first such agency was founded by Lewis Tappan, a failed businessman who learned the hard way about the importance of good credit

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information, but other competing agencies soon appeared. 71 These for-profit establishments focused primarily on the problem of unsecured trade credit, extended from suppliers to their business customers. Relying on a growing network of correspondents and branch offices, they gathered information about individual businesses, organized and processed it, and then sold credit ratings and reports to their customers. In effect, they commodified credit information and helped suppliers deal with increasing numbers of anonymous customers. With the rapid development of the U.S. economy, this business expanded so that more and more firms were rated and the leading mercantile agencies (notably Dun's, and Bradstreet's) expanded across the country. Soon it was possible for a New York City wholesaler to learn about the creditworthiness of a firm in Peoria, Illinois, even if the wholesaler knew no one in Peoria nor had ever been there. Peoria may have been entirely outside the wholesaler's social networks, but it was not beyond the reach of the mercantile agency. The commercial success of these mercantile agencies in helping decide whom to trust inspired others, and consulting their information became a routine part of business practice.

Some rating agencies operated in the realm of high finance, classifying long-term bonds and helping to allocate capital for investment. Since 1909, agencies like Moody's gathered information about railroads, utility companies, corporations, state governments, municipalities, and even sovereign nations and issued ratings using a scale that has become familiar around the world. In effect, they tried to do for long-term bonds what the mercantile agencies had done for trade credit. Like the mercantile agencies, the bond raters initially adopted a "user pays" business model: they created information about debtors and then sold it to the investors who, presumably, used it to improve their own financial decisions. Many decades later, they switched to the "issuer pays" model. The most highly rated bonds, issued by the most trustworthy borrowers, are classified "Aaa" by Moody's. The next highest category of bonds are given the "Aa1" rating. Far below, the "Caa2" rating is given to so-called "junk bonds," which in the opinion of Moody's are speculative and subject to very high credit risk.⁷² Devised in the early twentieth century, this rating system was applied at the end of the century to the new financial instruments created through securitization and other types of financial engineering: mortgage-backed securities, asset-backed securities, collateralized debt obligations, and so on. One of the chief goals of this financial engineering was to create as many "Aaa"-rated securities as possible out of the underlying assets, because such a rating signaled to investors that a financial promise was as safe and trustworthy as could be.

A different group of rating agencies developed ways to evaluate individual borrowers in the context of consumer debt. Many local credit agencies operated in the nineteenth and twentieth centuries to help local merchants keep track of their customers, but in the 1950s, Fair, Isaac and Company created the FICO score, a numerical rating applied to individuals. Today, rating agencies like TransUnion, Experian, and Equifax compile vast data sets with information on roughly two hundred million U.S. consumers, with the highest scores given to the most creditworthy individuals. Lenders almost never possess direct knowledge of the personalities and character of consumers; instead they use the consumer's credit score when deciding whether to make a loan, or how to price it.

This new way to answer the question of whom to trust has become widespread, in part because it is so portable. The credit ratings applied to long-term bonds and the credit scores for individual borrowers were first created to help lenders make good choices, but people discovered other uses for them. Both in the United States and abroad, for example, financial regulatory agencies use bond ratings in their prudential regulations and to set bank capital requirements.⁷⁵ Insurance companies and employers have used consumers' credit scores in their product pricing and hiring decisions. Mortgage lenders use FICO scores to determine an applicant's eligibility for a loan. Landlords use ratings to review applications for rental housing.⁷⁶ And in the financial derivatives markets, ratings are used to measure counterparty risk and set collateral. 77 Under the Trump administration, the Department of Homeland Security even used low credit scores as grounds to reject a non-citizen's application for admission to the United States. 78 How ratings and scores are calculated remains a proprietary mystery, but this type of information can easily be incorporated into algorithmic decision making about credit. Starting in the 1990s, for example, Fannie Mae (also known as the Federal National Mortgage Association) developed its own "Desktop Underwriter" software to automate the underwriting process for residential home mortgages. And consumers can now go to an internet website, enter personal identifying information and submit an application, and then receive a loan decision almost instantly: there is no friendly loan officer at the other end, only computer code. Credit ratings have greatly benefited from improvements in technology that have made it easier and cheaper to acquire, store, and process large amounts of information. And that has made ratings ever more fateful.

A debtor's future ability-to-pay weighs heavily on the minds of creditors, and this too can be estimated numerically. For individuals, employment status mattered a great deal: did the borrower have a steady job and reliable income?

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The standardization of employment relations and the spread of wage labor made these questions easier to answer. The market value of assets owned by the debtor is another feature that can usually be measured: valuable assets can serve as collateral. Prior indebtedness is important, too: does the individual have other financial obligations that claim some of their earnings? For firms, the development of standardized accounting techniques provided quantitative measures of financial performance and made it possible to assess the ability of a business to service its debts. Audited balance sheets and profit-and-loss statements helped lenders judge the financial condition of a debtor firm, as well as make projections about its future status. For the largest publicly traded corporations, New Deal—era reforms played an important role in mandating the disclosure of standardized financial information.

The rise of credit rating and scoring fundamentally reshaped how people answered the question of whom to trust and how they evaluated financial promises. Today, credit has little to do with someone's inner personal character, except insofar as this is manifested in large, proprietary data sets and reflected in quantitative scores. Small worlds of local knowledge and qualitative judgments set in a context of close social networks have become broader landscapes with large-scale quantitative measurements and formal calculations, increasingly shaped and dissected by computer algorithms. In the past, successive generations of information technology supported the circulation of credit information. Thus, the national postal system, the telegraph, and later telephone systems all helped transmit growing volumes of information about credit.⁷⁹ Today, big data, artificial intelligence, and machine learning are refashioning the allocation of credit, and the role of human judgment will undoubtedly diminish. 80 But this is not entirely new, for the nineteenth century witnessed the first steps in the quantification of trustworthiness, and the ledgers of the original mercantile agencies stored large amounts of information in paper format.81

How to Do Other Things with Promises

The creation of a financial obligation means that someone lends to another person in exchange for a promise of future repayment. Promises are used by borrowers to secure resources, and that is the usage of primary interest here. But financial promises can be adapted to a variety of purposes, both good and bad. Credit involves differentiating between the trustworthy and the untrustworthy, but frequently differentiation turned into discrimination, and credit became an instrument for social inequity. Various forms of

lending discrimination have plagued credit markets, 82 and in the 1960s and 1970s political groups mobilized to ensure that racial minorities and women could enjoy equal access to credit. 83

Beyond simple profit, promises can be used by lenders to achieve various ends. For example, loans are a staple of public policy, offered by governments to direct resources toward favored economic sectors and recipients. A public loan program may offer below-market interest rates as a way to encourage borrowers to make promises they can more easily keep. Governments have used loans as an instrument of foreign policy, providing resources on favorable terms to clients they wish to support. Governments have also steered loans and loan guarantees to privileged domestic constituents. Consider how many countries support their agricultural sector with loans and credits, and note how much the U.S. government has sustained the housing market through various lending programs.⁸⁴ And if support doesn't come from a loan program, it can come from a loan guarantee program, where the government or some other agency guarantees repayment so that lenders will lend without worry. Governments can encourage specific types of loans by granting the income generated by the loan favorable tax treatment: giving bonds "tax-exempt" status is one way to encourage investors to buy them. Or it might subsidize certain types of loans, making them cheaper for borrowers and thus increasing loan activity. Finally, governments can directly bolster their own fiscal position by requiring, or encouraging, others to lend to them. For example, domestic banks have been "encouraged" to purchase federal or state bonds, and so in effect to lend to the government.

Some scholars have given pride of place to credit as a type of post-Keynesian economic policy. In the heyday of Keynesian economics after World War II, the U.S. government used fiscal and monetary tools to intervene in the economy, maintain aggregate demand, and smooth out business cycles. But Keynesian policy lost its standing in the "stagflation" era of the 1970s, to be replaced by monetarist and later neo-liberal policies. At roughly the same time, the postwar wage growth enjoyed by U.S. workers ground to a halt, and income inequality began to increase. If the federal government became more cautious about using public policy to maintain wage growth and boost the economy, as prescribed by Keynes, it nevertheless encouraged the expansion of private credit so that people with stagnant incomes could still enjoy a high standard of living, buying houses and purchasing durable goods. Private promises could serve a public purpose.

Nongovernment lenders also use loans as a type of support. When loan transactions are embedded in social networks, family members sometimes

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lend to their relatives not simply because they think it profitable but as an expression of support and familial solidarity. Family loans may be zero interest, and of indefinite maturity. Family members have often acted as loan guarantors, for similar reasons. Less amicably, loans can also be used to subordinate other persons. If the terms are especially onerous, or if the balance of power strongly favors lenders, then a loan can become an instrument of domination. "Debt peonage" arose when lenders kept borrowers in a state of durable indebtedness and subordination, using debt to maintain social hierarchies and as a means of control. Although different from outright slavery, debt peonage gave lenders a great deal of power and an interest in insuring that debtors never fully repaid their debts.

On the debtor side, the example of Eumenes illustrates that sometimes borrowing isn't just about the money. Debtors may seek loans not because they need additional resources but because they want supporters and constituents. To be sure, debtors are often beholden to their creditors, but there are circumstances where the balance shifts and the creditors become supporters of the debtor, if only because their financial interests become aligned. Bankers have long known about this danger, and admonished themselves not to lend too much to a single customer, lest they be in thrall to the debtor. To paraphrase John Maynard Keynes: "If I owe my bank \$1,000,000,000 and can't repay, then I'm in trouble. But if I owe my bank \$1,000,000,000 and can't repay, then my bank is in trouble." In effect, promisees can be captured by the promisor.

Promises and Power

It is tempting to view a financial promise as something like a partnership between equals: one person consents to make a promise, and the other agrees to receive it. But promises involve power and inequality in at least three important ways. First, and most obviously, power inheres within credit relationships. A debtor depends on their creditor and so the latter has power over them; debtors are beholden to creditors. This imbalance has been noted for centuries and commentators continue to affirm it.⁸⁷ Yet power within the debtor-creditor relationship isn't static, and it shifts and can even flip. Sometimes debtors dominate their creditors, as clever Eumenes recognized several millennia ago, and as too-big-to-fail banks realized more recently. At some point, creditors become so vulnerable to debtors that they lose their leverage. So as much as power exists within credit, one shouldn't assume that debtors are always subordinate.

Second, access to credit is itself a form of empowerment: it grants purchasing power to a debtor who otherwise wouldn't have it. Advocates for "financial inclusion" or the "democratization of finance" stress this because they recognize that people who are denied the ability to borrow face diminished life chances. Debt can help people solve their problems. Of course, the degree of empowerment varies. But in many lives there come moments when timely access to borrowed money would make the difference between failure and success.

The third way that power arises is less visible than the first two and operates in the background. This concerns the power to constitute credit relationships as such, to set their forms and preconditions, and to create the infrastructure that upholds credit.88 As lenders wonder which borrowers are creditworthy, the ability to define creditworthiness per se involves power. And as we shall see, this type of background power is currently shifting and cohering as a new privately owned informational apparatus bases the terms of creditworthiness on pervasive quantitative information about debtors. Personal qualities are turned into abstract quantities, and the latter are aggregated and analyzed in an increasingly centralized fashion by algorithms. The computational formula that generates a credit score weights some factors more than others, and includes some pieces of information while leaving others out, but it constitutes a practical definition of creditworthiness that is given widespread effect. By that formula, some debtors will look good and others will not. Similarly, the ability to set the overall terms of credit represents a form of power. Currently, the Federal Reserve uses open market operations and other policy instruments to set interest rates and determine the price of credit, and it is guided by the twin goals of price stability and economic growth. Low interest rates, and expectations about future interest rates, make all forms of credit cheaper, and the volume of promises and activity grows. High interest rates make promises dear, and so their volume shrinks. But the Fed was established in 1913, roughly at the halfway point of this story, and it took decades for it to create and then utilize its power over domestic credit markets.

Book Outline

The United States has always had an economy based on promises, but the manner in which questions about trust and trustworthiness have been posed and answered has changed in important ways. This evolution and expansion undergirded the rise of the modern credit economy, but it wasn't a smooth

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ride forward. Financial crises signaled the widespread collapse of promises and a collective disbelief in their credibility. Frequently, these collapses motivated public and private attempts to build new institutional scaffolding in support of promises: the 1837 crisis prompted the development of credit ratings; the depression of the 1890s justified passage of a permanent bankruptcy law; the 1907 crisis led to the establishment of the Federal Reserve System; and the Great Depression led to a multitude of public policies in support of financial promises. At various points, political groups believed the financial system to be deeply unfair, systematically privileging some over others. During the 1880s and 1890s, agrarian groups and populists attacked a monetary and banking system that failed to give them adequate credit. During the 1960s and 1970s, women and minorities criticized a discriminatory financial system that denied them full access to consumer and mortgage credit. In this book, I will describe the changes that have occurred, spell out their implications, and explain their significance. I have organized my analysis around different types of credit, offering a roughly chronological discussion of each in turn. I make no attempt to be exhaustive, and so there are types of credit that I overlook and historical details that I omit. I offer an interpretive essay rather than an encyclopedia of the history of credit.

Chapter 2 presents a fuller treatment of the relationship between credit and trust, defining trust and discussing the critical elements of the trust problem. It will identify some key analytical threads to follow in subsequent chapters. In chapter 3 I turn to trade credit and the invention of credit reporting and rating. Trade credit concerns short-term unsecured loans between suppliers and customers, and it sustains the supply chains upon which commerce depends. It also prompted the creation of credit rating in the middle of the nineteenth century. Chapter 4 discusses banks, which have always been foremost lending institutions. How banks operate as creditors is especially revealing given that lending is their specialty. Despite the recent emergence of a "shadow" banking system, for most of the last two centuries banks have been the primary creditor group. In chapter 5, I examine the other side of debt and focus on consumer borrowers. Many commentators have noted that the United States developed a "mass consumer" society, and it turns out that "mass credit" undergirded mass consumption. Inventing new ways to lend to growing numbers of individuals has been an important part of the development of the modern credit economy, and consumers are increasingly assessed using ratings and scores. Chapter 6 considers corporate debtors, and how it is that for-profit firms have been able to borrow. Long-term borrowing by corporations is usually done through the issuance of bonds, and

so this chapter also addresses the continued expansion of credit ratings and bond ratings in new debt markets. In chapter 7, I focus on one especially consequential form of borrowing: mortgages. A mortgage is simply a loan secured by real estate, but because of the significance of homeownership in the landscape of American society, and because where a family lives matters so much for things like education, employment, and economic opportunity, it is important to understand the history of this particular type of promise and how it has been shaped by public policy. Chapter 8 deals with broken promises. However much goodwill and optimistic expectations surround the making of promises, there are many disappointments. Debtors sometimes fail to fulfill their end of the bargain, and this is common enough that those who deal with promises must make provision. Lenders try to avoid this situation, of course, but when it arises what happens? The last empirical chapter deals with a unique class of borrowers: sovereign governments. Promises are made, enforced, and broken within a framework of rules that are set by government, so how do these rules apply when governments borrow? Sovereign immunity means that the enforcement of sovereign debts poses particular challenges and that the methods applied to ordinary debtors don't necessarily work. Ranging from school districts and municipalities to state and federal government, sovereign borrowers issue many promises to fund public policy. What role do public promises play?

Promises always join two sides at a minimum, the promisor and promisee, but in practice they invariably bring together many more. The dyadic promise often functions as a convenient fiction, for as financial promises are compounded, complicated, circulated, and multiplied, they create more complex communities of interdependence. These are not so easy to govern using bilateral instruments like contracts. ⁸⁹ And so other modes of public and private governance have come to play a role in managing the networks of interest created by credit. These shape credit in distinctive ways and help explain why change was so uneven across the different forms of credit.

Financial promises organize modern economic life. They can form a bridge between the present and the future, and a link between debtors and creditors. Promises are ubiquitous, and although some of them are never fully realized, they generally have worked well enough to sustain a system of credit that fuels the economy. When promises are broken on too great a scale, however, the results are spectacularly bad: financial panics, economic recessions, and even depressions. But if promises are hard to live with, they are impossible to live without. Pervasive distrust is no way to run an economy. The core elements of a promise are quite simple, but the

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growth of today's credit economy bore witness to the multiplication and increasing elaboration of promises. Promises-to-pay are now compounded, pooled and sliced, securitized, bought and sold. As in the past, the credibility of promises is carefully examined and evaluated. But unlike in the past, that assessment today occurs on a mass scale and is increasingly cast in the form of ratings, scores, and numbers. It is no longer a matter of looking someone in the eye and judging their character through a firm handshake. Quantification now plays a crucial role in the allocation of credit, and evaluation depends on an elaborate institutional apparatus that operates in the background: weighing, measuring, enumerating, and calculating.

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