Publisher's Note

Principles of Finance

Salem Press is pleased to introduce a new series, *Principles of Business,* to its collection. This volume, *Principles of Business: Finance* is the first of six volumes currently planned. Future volumes include Management, Marketing, Entreprenuership, Accounting, and International Business. This new resource introduces students and researchers to the fundamentals of these business topics using easy-to-understand language. Readers will obtain a solid start and deeper understanding and appreciation of these important and far-reaching business topics.

Entries in this volume range from "Bank Insolvency" to "Warrants & Convertibles" and are arranged in an A to Z order, making it easy to find the topic of interest. Each entry includes the following:

- An Abstract that provides a brief, concrete introduction to the topic and how the entry is organized;
- An Overview that offers clear presentation of the topic;
- Multiple subheads that anchor the reader to the various concepts being discussed;
- Suggested Reading list that relates to the entry;
- Detailed Bibliography.

The book begins with an introduction to business by editor Richard Wilson, PhD. Dr. Wilson offers a brief but concise look at the progression of finance from hunters and gatherers to bankers. He discusses how written language standardized trade, and how money facilitated contracts. Contracts allowed the expansion of immediacy of trade to the promise of paying for goods and services not yet produced. Interest, compound interest, and depositing surplus money followed – and the banking industry was born.

Added features include photographs of significant business leaders and illustrations and diagrams of relevant topics.

The back matter in *Principles of Business: Finance* is another valuable resource and includes:

- Detailed Glossary with 427 terms;
- Subject Index.

Salem Press extends its appreciation to all involved in the development and production of this work. The entries have been written and signed by scholars and experts in business. Without these expert contributions, a project of this nature would not be possible. A full list of contributor's names and affiliations follows this Publisher's Note. *Principles of Business: Finance* is available in print and as an e-book.

Introduction

Principles of Business: Finance is the first volume in the new *Principles of Business* series by Salem Press. Other volumes will cover management, marketing, entrepreneurship, accounting, international business, and more. *Finance*, as the first volume in the series, provides an important foundation for the rest of the volumes but, indeed, is just as important as a stand-alone topic as it relates to the success and well-being of all businesses and individuals around the world.

Understanding finance is necessary for new businesses, first and foremost to purchase the raw materials, supplies, and equipment needed to get a business up and running. Without the ability to buy things needed to operate, business owners simply could not begin. After initial success, businesses need continued financing to manage their cash flow over the ups and downs of the process. Production of goods and services always precedes sales and consumption, and payment for products may not be immediate.

Indeed, payment for goods and services itself may be subject to financing arrangements, particularly in the long supply chains that are now commonplace. Taxes, insurance, transportation, and other costs of doing business may also need to be financed before payments and profits are possible. Final end users may also need financing in order pay for the products and benefits they receive. The entire economic process depends of the liquidity that lubricates the process, with banks and their equivalents a separate and indispensable industry on its own. This is painfully clear if we look at failed societies in deep depressions due to the failure to keep the process going. Chaos and even violence are the frequent result.

Hunting/Gathering to Banking

Understanding finance in the twenty-first century may benefit from a brief history lesson. Evidence indicates that human beings have existed for at least 70,000 to 100,000 years. For the first several tens of thousands of years, they struggled as gatherers and hunters with only primitive tools and fire to supplement their natural born intelligence (Diamond, 2005). Their naturally developed power of oral communication made survival possible and gradually led to migration across the globe (Wells, 2003). As remarkable as their survival and migration are, it took human beings thousands of years to settle in small communities and begin farming. With farming supplementing, and then supplanting, hunting and gathering, they gradually produced the meager surplus that led to bartering for better tools. Ultimately, written language was created (Wilson, 2016).

With written language, the pace of progress quickened. Writing made keeping accounts possible so that trade could be managed and tracked. This created standards, trading a cow for a certain number of bushels of grain, for example. Writing eventually propagated the idea that value could be imputed to something called “money,” which made trade even easier.

Contracts were the next natural development, extending the trading of immediate goods and services for those not yet produced and services not yet delivered. Such contracts could only be legitimated and valued if some system of government and law—however primitive—enforced the contracts. Government and rule of law began its long and tortuous process. Replacing the rule of power with the rule of law produced a much improved process, one that is still not complete or perfected (Wilson, 2001).

Following the development of money, contracts, and the rule of law, the value of future-oriented transactions led to recognition that a form of payment was needed for this service, leading to interest and compound interest. This was a hard concept to accept initially, indicated by the contempt with which money lenders were initially (and in some quarters still are) held. Usury (lending money at an exorbitant interest) was the charge leveled against such money lenders; borrowers refusing to pay the interest claimed they were only paying “rent” which led to the eventual replacement of “rent” with the more candid “interest.”

Another major step forward was taken when interest was broken down into separate loans for discrete time periods, each with a renewable payment of interest on top of the original loan plus the interest paid on it. The miraculous power of compound interest was born. This created an incentive for those with a surplus of money to lend it to the money changers with the promise of compound interest, protected by a contract enforced by a government following the rule of law.

The next giant step occurred when those with surplus money deposited it with the money facilitators (bankers and their equivalents), who lent the money to those who needed it and were willing to pay compound interest to get it. Investment and tremendous economic development were now possible. The banking system was the inevitable—but not immediate—result.

NEED FOR REFERENCE WORKS

From the beginning of time until 2003, humankind collected an estimated 5 exabytes of data (5 exabytes = 1 quintillion bytes). Now, we collect 5 exabytes of data every two days, and it is expected that within two years we will collect that amount every few minutes (Tapscott, 2011).

This explosion of information makes reference books such as this all the more necessary. Unlike textbooks, which are often arranged as a single story, so that missing a bit of knowledge early in the book makes it difficult to understand the connection to a bit of knowledge later in the book, reference books feature stand-alone essays, each providing concise introductions and core facts.

Success of this volume is due to the contributors, listed with each essay and with a short bio in the front matter. Most have graduate degrees in economics and years of experience in business. The diversity of their backgrounds—cultural anthropologists to librarians—is valuable because non-business professionals often offer language that is more accessible than that of business specialists, whose explanations may be narrowly focused.

The essays in this volume are written for a varied audience. Our goals included attention to clarity of wording and avoidance of unnecessary jargon. For those readers who desire more specific information on any one topic, each essay includes a list of further reading.

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Bank Insolvency and Failure

ABSTRACT

Economic historians point out that bank failures have been a part of commercial banking enterprises since the Roman Empire and that a bank failure can be seen as a corrective and thus an element of long-term economic health. Bank insolvency and bank failure not only impact bank employees, executives, shareholders, and depositors but also negatively impact the wider community's confidence in banks as the holders of monies and as the financial center of a region. During the 2008 global economic crisis, more than three hundred banks failed in the United States alone.

OVERVIEW

Although banking is regarded by most customers as primarily a service industry providing a kind of safehouse for keeping significant amounts of personal funds, a bank is actually more an intermediary business engaged in transactions that use depositor account funds to invest in a variety of enterprises. In return for paying interest on monies held in accounts, banks use that money as part of a community (and sometimes global) marketplace, providing critical funding that sustains an economic pipeline for the wider community. Indeed, a bank cannot provide the basic services that customers expect without using the money in its keeping to create a robust business portfolio of its own. Such deposits provide the capital for the bank to pursue investment opportunities for the bank itself.

Each bank location is part of a wider network that usually constitutes a very large banking institution. As banks grew larger, their growing assets both enabled and drove such industry innovations as travelers checks, compound interest, negotiable certificates of deposit, automated teller machines, and online and mobile banking (Thomas, 2015). These big banks that can, of course, fail big but can also be empowered to forward significant projects, using depositors' monies to fund community construction and infrastructure projects; to create and sustain the local housing industry by providing support for mortgage arrangements; to undergird real estate rental networks by acting as intermediary between landlords and renters; to support promising local businesses and/or to provide long-term support for established businesses (and their expansion plans) as a way to maintain community economic stability; and to maintain critical utilities such as electricity and water by acting as agent between consumers and utility providers.

A bank is a business and, like all businesses, operates to make a profit. That profit is determined largely by the soundness of the bank's lending policies, the quality of its loan practices, and the general economic savvy of its management team that oversees that bank's financial stability and growth. Risk Based Capital (RBC) minimum ratios are imposed on banks by regulating agencies, requiring adequate liquid capital to balance risk. In other words, if the bank makes a risky investment that turns into a loss, the bank must have sufficient cash in reserve to continue operating. When a bank cannot meets its risk-adventures, the bank teeters toward insolvency. A bank is said to fail when it cannot service its outstanding debt. Banks that cannot sustain RBC are also considered to have failed (Parnes, 2012).

In response to the Great Depression, a variety of legislation (most of it passed in the decade immediately after the 1929 national economic collapse) put into place a system to protect depositor money held in U.S. banks. For nearly a century, banks have been regulated by the Federal Deposit Insurance Corporation, an independent oversight agency chartered in 1933 to maintain the stability and integrity of the U.S. banking system. The intention of such a national entity, supported by the faith and credit of the federal government, is to prevent banks from floundering by using the financial resources of the federal government to insure individual deposits (up to $250,000) as a way to ensure depositor confidence and prevent "bank runs," that is, large scale withdrawals on short notice in response to fears of an imminent bank failure. The FDIC may also intervene in a bank facing insolvency, with federal banking administrators taking over critical operations. If such intervention succeeds, the bank returns to financial viability (either through realigning its own resources and putting its house in order or by arranging for its acquisition by healthier banks) without impacting bank customers, thus containing the potential for widespread economic disaster. Bank failure impacts not only those with accounts at the bank or those who work at the bank but also those whose businesses are supported by that bank's investments, which is termed a "spillover effect" (Cebula, Koch & Fenili, 2011). In addition, a single bank failure (or far worse the failure of a system of networked banks) can create a much wider environment of panic. Entire communities suddenly restrict normative buying and spending habits, which undermines local businesses (Ramirez & Shively, 2012).

The Great Recession

The 2008 financial crisis was triggered in part by a crisis in mortgage dealing. Banks, particularly in California, Texas, and Florida, interested in the potential for long-term lucrative real estate dealings, backed long-shot housing deals significantly below mortgage rates, hoping that long-term real estate market health would cover their financial returns in a big way. In addition, banks invested heavily in construction deals designed to provide housing to cover the demand. It was a high-risk venture. When the global recession upended those assumptions and the demand for housing dried up, banks faced huge losses and in many cases lacked the liquid assets to continue operating (Chennells & Wingfield, 2015).

As the housing market turned stagnant and houses went unsold, creating a large surplus of available housing, many home owners who had taken advantage of the lower introductory mortgage rates suddenly could not meet their obligations. Dozens of banks lost excessive amounts of invested funds and began to face massive revenue shortfalls (Cole & White, 2012). The FDIC protected the integrity of the banking system and individual savings and business investments to ensure that the insolvency of the banks entangled in the real estate debacle did not, in turn, implode the wider banking system itself.

APPLICATIONS

If a bank can be modeled as a business rather than as a service, causes of the movement toward insolvency—that is the tipping point at which a bank's assets are less than its liabilities—are at once as complicated and as simple as any other business's movement toward bankruptcy. A bank faces insolvency when there has been a significant loss of assets (most often through risky investments and/or loan programs) to the point where the bank can no longer transact the normative operations of a bank: handling and distributing funds for customers, maintaining the integrity of its loan and investment operations, and providing the opportunity for securing loans for potential businesses and entrepreneurs. Those who rely on the bank's financial support for their businesses need the reassurance that such a pipeline is open and secure, and bank depositors need to have timely access to their funds. Without that, a bank faces critical and often urgent questions about its operations and its future.

The reasons why banks can face such a dire predicament are in fact the reasons why any business faces catastrophic financial failure: poor management generally; uninformed network oversight; poor risk management assessments; and a lack of common sense risk diversification. Although economists are quick to point out that banks fail for a variety of reasons well beyond the control of a bank's executive management staff. A bank may be impacted by, for example,political and military events; the poor management of businesses into which the bank has poured its resources; international economic fluctuations and stressors in a global consumer market that is often a most volatile dynamic of supply and demand; the reliability and currency of technology support. Banks, however, usually fall into insolvency for reason that center largely on their own management team.

Banks require tight control of decisions to invest bank funds. Rogue investment managers willing to take grand risks for the potential of large payoffs can determine a bank's often rapid spiral into insolvency. In addition, investing in private and public works is highly competitive. Banks compete against each other to secure the most promising projects, and competitive measures can hamper financial stability (Fungáčová & Weill, 2013). Further, poor management structure can cause investments to accumulate within and around a few massive (and often risky) projects. Lack of diversification can create a domino effect should that centerpiece project fail.

Banks edge toward financial distress when they are directed by ineffective management who often neglect to follow sound (if conservative) protocols for finance management. Bank managers can be inexperienced or promoted too soon; they might lack sound judgment; they might act on ill-advised or inappropriate policy initiatives; they may simply be greedy; they can be poorly advised; they can operate on faulty and/or incomplete information; they may be willing to take inappropriate risks. Without adequate oversight within the bank's organization, management may resort to recordkeeping obfuscation, trying to contain the problem (and potential panic) by denying or minimizing its dimension in the hopes that the market will correct itself or that other investment strategies will pay off.

Such malfeasance runs counter to the foundational premise of banking: Banking succeeds only with complete transparency, critical information about operations available to management, shareholders, investors, and accounts holders. That careful, often choreographed conspiracy of providing minimum information (or even misinformation) only creates significantly more complicated dimensions to the problem.

At the point when the bank has become substantively undercapitalized, the bank's management team notifies the FDIC of its emergency situation in a notarized letter. Timeliness is everything. FDIC intervention is considered a last resort to be called upon only when traditional free-market forces would otherwise dictate bank failure (Adler, 2008). At that point, the FDIC can operate in basically one of two capacities: as conservator or as receiver. If the potential impact of the mismanagement and the financial losses have not seriously impacted the bank's system of operations, it can act as a conservator of the floundering bank, shore up its operations, restructure its management team by offering it to qualified buyers and investors, but essentially maintain that bank's integrity as an independent operating system in an effort to restore it to full health as its own entity under new management. If the bank faces systemic failure, the FDIC can act swiftly to facilitate a receivership and take over the bank, shut down its operations (most often for 60 days or fewer), substantially review all levels of its operations, fire its directing officers, and in that time market the bank's viable operations and investments to healthy banks.

Merging the failing bank to another bank (called a bridge bank) ensures some level of continuity of its still-viable operations. This procedure is termed a "purchase and assumption transaction" and is widely viewed as the most viable remediation for an insolvent bank. The FDIC oversees arrangements for a healthy bank to purchase the failed bank's assets, including giving it the opportunity to perform due diligence by reviewing the books of the distressed bank and thus apprising it of the dimension of the problem and the risk it, in turn, would be taking.

The most efficient and most effective rescue occurs when a single bank, itself healthy and in the market for aggressive expansion, acquires the entire operations of a single failed bank, that is a single bank agrees to assume financial responsibility and provide a significant infusion of capital to an insolvent bank and agrees to underwrite that bank's losses and assume responsibility for continuing its services and for protecting its customers and their savings. Termed "whole bank purchase and acquisition," such a protocol is widely viewed as the least disruptive operation. Often the incoming bank is heralded through marketing and advertising as a way to minimize the potential for panic among shareholders, customers, creditors, and businesses, and to minimize what is termed "contagion," that is, a feeling of anxiety and financial unease among other banks within the system or within the same community.

VIEWPOINTS

Given the volatile nature of the financial industry and the unexpected shocks that regularly impact the local and global money network, bank insolvency and bank failures are an inevitable and even acceptable event. Banks cannot operate under the assumption that 100 percent of their operations will be sound and safe. Banks can anticipate but not foresee shocks. In the United States, for example, the protective net of the FDIC nearly eliminates the potential for the sort of nation-wide catastrophic loss of confidence that signaled the start of the Great Depression. Government collapse and the rapid devaluation of a national currency, however, have caused banking crises in a number of nations in the twenty-first century, most notably Greece, Chile, and Japan. Few economists dispute the critical need for banks to have that sort of holdings guarantee, and, despite conservative anti-government advocates who see such intervention as dead-end bailouts, the quick intervention of the FDIC in the operations of faltering banks have been shown to staunch a problem by rescuing a bank and its position with its immediate economic environment.

Banks are self-directed until they reach the point at which ill-advised policies and high-risk strategies begin to negatively impact operations. Economists argue that only a bank's robust and very hands-on and aware (that is, informed) regulatory superstructure can maintain the sound operations of a bank, whatever its size and whatever its holdings. Risks need to be prudent and thoroughly examined; loan strategies need to be carefully weighed and evaluated by the bank's fullest range of financial experts. Management needs to be directly answerable for all financial enterprises in which it engages, short and long term. But failing that, the best avenue for addressing the reality of a bank's insolvency is prompt remediation to preserve the integrity of that bank and prevent its problems from impacting other banks within that network or, far more catastrophic, all banks in a region.

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–Joseph Dewey