CHAPTER 1
Introduction

"The judicious operations of banking enable him to convert this dead stock into active and productive stock; into materials to work upon, into tools to work with, and into provision and subsistence to work for; into stock which produces something both to himself and to his country."

– The Wealth of Nations Book II: Of the Nature, Accumulation, and Employment of Stock, Adam Smith

WHY A BOOK ON BANK INVESTING?

We believe that bank investing can be a fruitful pursuit. As authors of a book on the topic we have a vested interest, but we ask the reader to consider the following:

1. The most successful investor of our times, Warren Buffett, has had a sizeable investment in banks over time (close to a third of his portfolio weight used to be in banks). This is based on the minority investments in publicly listed entities, and we do not include Berkshire's operating subsidiaries.
2. Banks allow you to make macroeconomic bets since they are highly levered to business cycles.
3. Bank investing allows you to scale your knowledge, as they have relatively homogenized business models.
4. At the same time, banks are diverse enough to drive meaningful dispersion in price performance. This divergence of performance can be taken advantage of by an astute and prepared security analyst.
5. Banks are great vehicles to make specific investment plays on geographic regions, demographic trends (suburban to urban migration, aging), industries (agriculture, tech, energy), news flow (trade/tariffs, weather), real estate subsectors (NYC office, bay area apartments), and investing themes such as ESG, cryptocurrency, and venture capital.
6. The largest asset on a bank's balance sheet is its loan book. This is not directly analyzable; one cannot walk up to a bank and ask permission

to view the loan book. There are limited instances when a small bank is getting re-capitalized that its loan book may be made available in a selective sample manner, but those are very limited instances.

This information asymmetry makes it tougher but also in some instances rewards the diligent and dogged analyst. This relative opacity makes banks very different from an allied sector such as REITs. The real estate assets of a REIT are tangible and can be toured and independently assessed. There is a large CRE market where real estate assets trade, and one can use that to value the assets of REITs. We highly recommend an excellent book on the topic of REITs by our good friend Stephanie Krewson-Kelly and her co-author R. Brad Thomas. That book is *The Intelligent REIT Investor: How to Build Wealth with Real Estate Investment*.

7. Fintech disruption is real, but to understand this phenomenon one needs to understand the sector being disrupted. It is not a coincidence that some of the biggest fintech names have applied for and obtained a bank charter. That is a validation that a charter can provide benefits exceeding the regulatory cost. Finally, we believe that fintech disruption is creating an investing opportunity to play the digital divide between banks that embrace technology successfully and those that get left behind. Banks have to start viewing themselves as fintechs with the ability to accept deposits.

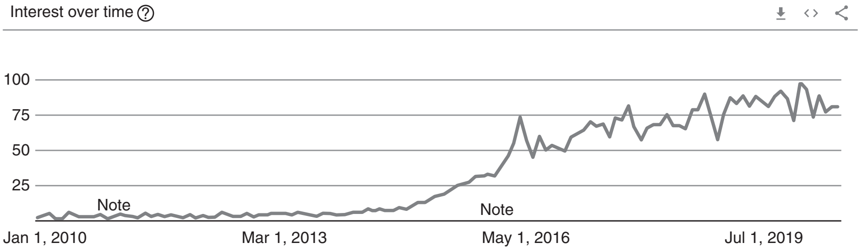
FINTECH ONSLAUGHT

The fintech onslaught is just getting started. There is no denying that fintech is disrupting the banking business. The challengers and "potential" challengers range in size from minnows being dreamt up in dorm rooms to giants such as Amazon. A study by the consulting firm Bain and Company in 2018 postulated that Amazon's banking services, if launched, could grow to more than 70 million US consumer relationships over a five-year period. See the link below: https://www.bain.com/insights/bankings-amazon-moment/

This would be the same size as Wells Fargo, founded in 1852, which is the fourth largest bank in the country. We are not privy to the plans of Amazon, but we are not surprised by the hypothetical growth trajectory of a potential challenger who has significant heft and has consumed entire industries. While not surprising, it is unsettling that someone takes 168 years to become the fourth largest bank and then find themselves rivaled by a digital upstart who took five years to get to the same size.

The relentless fintech onslaught has seen skyrocketing valuation, a burgeoning number of players, increasing interest in the concept, and a barrage of news flow all reinforcing each other.

EXHIBIT 1.1 Interest over Time for Search Term *Fintech*



Source: Google Trends

Fintech unicorns, of which there are 58, have an aggregate valuation of $213.5B according to CB Insights. Nearly every transaction one would traditionally do with a bank can now be done through a fintech using a mobile app on your smartphone. The fintechs include SoFi, Earnest (owned by Navient), Chime, Varo, Money Lion, Stash, Square, Kabbage, OnDeck, Affirm, Klarna, Greensky, Afterpay, and a long list of vendors covering residential mortgage loans, student loans, online checking and savings, SMB loans, point-of-sale financing, and more. The list is endless, and there is a virtual tapestry of fintech logos that cover a variety of areas.

Interest in fintech has grown immensely as can be seen in Exhibit 1.1, a chart of Google trends on the search term *fintech* over the last 10 years.

AN OPPORTUNITY TO LEVEL THE PLAYING FIELD

While innovation is exciting, it is important to not get caught up in the fintech narrative and lose sight that ultimately banking at its core is about accepting deposits, making loans profitably, acquiring customers efficiently, and engaging with customers meaningfully to increase the cross-sell of products. It is also important to remember that several new age fintech lenders have not been fully cycle tested.

Branchless banks are not a new concept. Telebank, a division of TeleBanc Financial of Arlington, VA, was founded in 1990 and operated with a branchless strategy initially using the telephone network. Security First Network Bank (SFNB), founded in 1995, was a pure internet bank.

While branchless banking is at least 30 years old, the new age of the challenger banks is fueled by powerful smartphones, a mobile app ecosystem, and a bunch of critical technologies and APIs that allow the orchestration of bank transactions and activities in a seamless manner.

Banks, especially regional and community banks, have a lot to worry about given this relentless onslaught from nimble start-ups and the level of tech spending at the large banks. The largest seven banks in the country are collectively spending upwards of $45B on technology. Smaller banks will not be able to match that level of spending. However, in this David versus Goliath struggle, all is not lost for David.

It is accurate and intuitive that smaller banks simply do not have the resources (both talent and budget) to compete with the large banks. However, if they partner with the right technology vendors, for efficient digital acquisition of customers, frictionless services provided via mobile and online, and reassuring levels of cyber security, David will more than match Goliath.

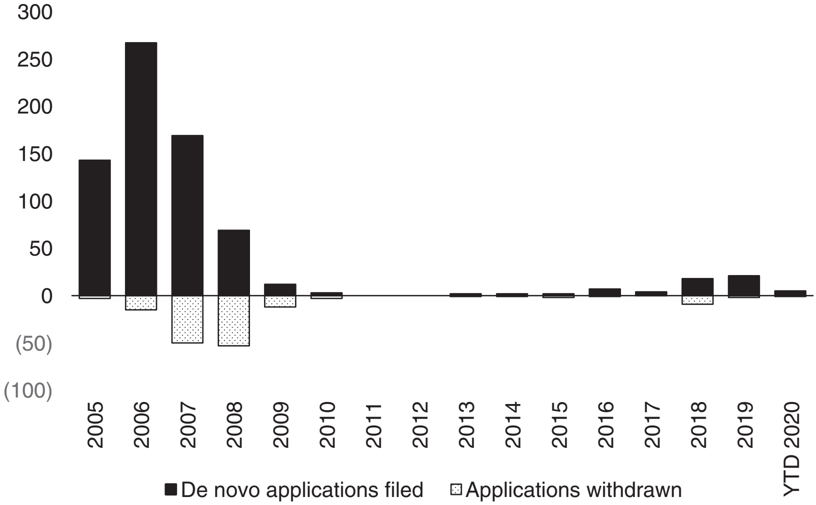
In order to compete successfully banks, large and small, have to reimagine themselves as a fintech with a bank charter.

While they can't match the large banks in spending billions on technology a year, there is no one stopping small banks from architecting a vision for their digital journey and propelling this journey by embracing the right set of technologies. As anecdotes we can think of numerous examples of smaller banks across the country that have embraced technology appropriately and have seen great success with the ramp of customers using mobile and significantly better customer service scores.

The challenge to embarking on a successful digital journey is in part cultural and in some ways limited by imagination. A license to accept deposits and submit oneself to regulatory supervision does not imply that banks need to handcuff themselves to the past. It is time for small banks to unshackle themselves and embrace their digital future.

While the digital future is exciting, we have to accept that the bank model is a double-edged sword when it comes to regulation: on the one hand it affords protection and the ability to accept deposits, but on the other hand the burden can be onerous for small banks. Thus, on the one hand, we have seen fintechs that have shown interest in seeking bank charters, which validates the view that the bank model is a source of strength albeit one that needs to be reinvigorated with new technology. On the other hand, there are fintechs that do not wish to seek a bank charter in part due to their view that the regulatory burden is not worth their while; where required, these fintechs partner with banks white labeling the product. The increasing regulatory burden is one reason we believe that the number of de-novo applications has been well below pre-Global Financial Crisis (GFC) levels (Exhibit 1.2).

EXHIBIT 1.2 De Novo Bank Applications



Source: S&P Global Market Intelligence
Note: as of 6/9/2019

We are very encouraged by the steps taken by FDIC Chair Jelena McWilliams to encourage new bank formation. Here are comments she made in the 2018 FDIC Annual Report.

> *"One of my top priorities as FDIC Chairman is to encourage more de novo formation, and we are hard at work to make this a reality . . .*
>
> *De novo banks are a key source of new capital, talent, ideas, and ways to serve customers, and the FDIC will do its part to support this segment of the industry."*
>
> *"The FDIC also took robust steps this year to reduce the regulatory burden on community banks, without sacrificing safety and soundness or consumer protections. We eliminated over one-half of the more than 800 pieces of supervisory guidance outstanding. We also launched a pilot program to use technology to reduce the number of on-site days needed to conduct an examination, and took other steps to reduce the costs of examinations to our regulated institutions."*
>
> *– Message from the Chairman, FDIC 2018 Annual Report*

FINTECH TRAILBLAZERS

We will be interviewing a few management teams of banks that have both successfully adopted technology as well as a fintech CEO who is a key supplier to the fintech arms race between banks.

PAST IS PROLOGUE: THE ULTIMATE FINANCIAL INNOVATION

It is a given that banks today are a deeply integrated cornerstone in modern economies. And when we say "banks," what we really mean is the fractional reserve banking system. That is, the pooling together of deposits and the subsequent lending out of most of those deposits. Without this system, vast sums of wealth would be stuck "dead" in vaults, generating zero economic value and massively increasing friction within the economy. Indeed, a world without banks is a hard one to imagine, but modern banking was not always around.

The story goes that European goldsmiths in the seventeenth century served as "depositories" for precious metals, charging customers a small fee to store their wealth within their vaults. The goldsmiths would issue redeemable receipts, which would represent their physical holdings. At the time, fees were a necessity. Security, bookkeeping, and other expenses to maintain a vault were all costly. Even so, customers were willing to pay this fee, as the alternative of protecting your own wealth was even more expensive and frankly, risky.

Soon these goldsmiths realized the vast majority of wealth within the walls of their vaults was collecting dust, and so they began to lend out and earn interest on a portion of these deposits. A portion of money was kept as "reserves" to service potential withdrawals. These loaned-out monies would be spent or invested, making their way through the economy and eventually ending up as another deposit in another vault, ready to be lent out again, creating a virtuous multiplier. Thus, fractional reserve banking was born.

Though it seems straightforward, at the time this must have been a groundbreaking innovation. Imagine being a depository customer at one of these goldsmiths, and suddenly being offered interest to have them protect and bookkeep your wealth!

Further developments, such as the permanent issuance of banknotes, central banking, and the eventual decoupling of a currency to an underlying commodity (i.e., the transition from the gold standard to fiat), soon followed. But the fundamental nuts and bolts of gathering and lending deposits remain in place today.

THE HERE AND NOW

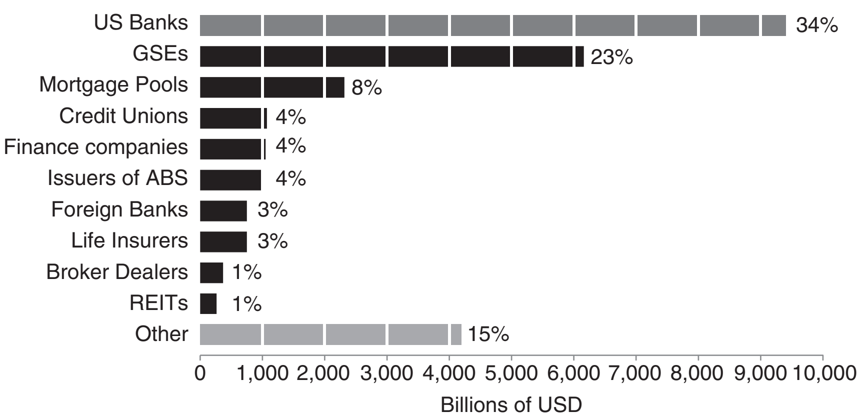
Today, the pooling of deposits to create credit is foundational to the efficient allocation of resources from those that have (depositors) to those that need (borrowers), and is an important mechanism for the application of monetary policy.

In the United States, banks have accumulated over $13 trillion in deposits, and thanks to the fractional-reserve banking system, a huge chunk of these deposits has been productively lent out into every corner of the economy.

Banks are certainly not the only financial intermediary in town though. The Federal Reserve's Z.1 Tables show us that although banks have a plurality of the total loan market, banks only hold about a third of the $27 trillion in total loans that exist in the economy (Exhibit 1.3). Banks contend with Government Sponsored Entities (like Fannie Mae and Freddie Mac) and other private institutions like asset-backed securities issuers and finance companies. Out of all of these, credit unions are perhaps the most similar in form and function.

Banks also have a meaningful physical presence and are ubiquitously woven into the built environment around us through extensive ATM and branch networks. Despite the seeming pervasiveness of banks, America as a whole remains underbanked. The Federal Deposit Insurance Corporation (FDIC) recently reported that 19% of households in the United States (a whopping 24 million households) were "underbanked," while an additional 8.5 million households were unbanked altogether (2017 FDIC National Survey of Unbanked and Underbanked Households). We recommend *The*

EXHIBIT 1.3 Loans Held Across All Sectors



Source: Federal Reserve

Unbanking of America by Lisa Servon for more on this topic. That said, the remaining population is overbanked to a degree. According to the World Bank, commercial bank branches per 100,000 adults sit in the thirties for the United States, as compared to mid-twenties for other high-income countries. In a city like Dallas, there are 74 different banks with 370 branches between them competing for customers. Only three of these banks have a deposit market share greater than 5%.

The map in Exhibit 1.4 shows all US bank branches (except Hawaii and Alaska) as well as state level population density, illustrating the non-uniform distribution of branches.

The banking industry has been going through a remarkably steady period of consolidation, even despite economic cycles. The total number of FDIC-insured depositories peaked in 1985 at 18,000, and now sits below 6,000 (Exhibit 1.5).

Shifting to a public securities market perspective, banks make up a meaningful proportion of aggregate market value. For instance, if we look at the S&P 500, financials are about 10% of the index. Within financials, banks are the largest *subsector* at $3.0 trillion, and incredibly, have a market value equal to that of some *entire* industries in the S&P 500 such as energy and industrials:

https://eresearch.fidelity.com/eresearch/markets_sectors/sectors/sectors_in_market.jhtml

Community Banks are a type of bank that focuses on banking local communities, deriving the majority of their income from spread income, that is arbitraging the spread between interest paid on gathered deposits and interest earned on loans. Community banks are deeply embedded within their local communities, and as a result they have an integral understanding of the communities they operate within. This local expertise is irreplaceable when it comes to efficient reallocation of capital. Whereas the J.P. Morgans of the world have the size and scale to bank multinational corporations, community banks have the ability to devote their resources in a bespoke way for their local communities.

The term *community banks* has never had a strict definition, though often times an asset cap is used as a proxy. Most put this asset cap in the $10 billion range, which we find reasonable. However, we will resist committing to a hard number, as inflation and the regulatory environment make this somewhat of a moving target.

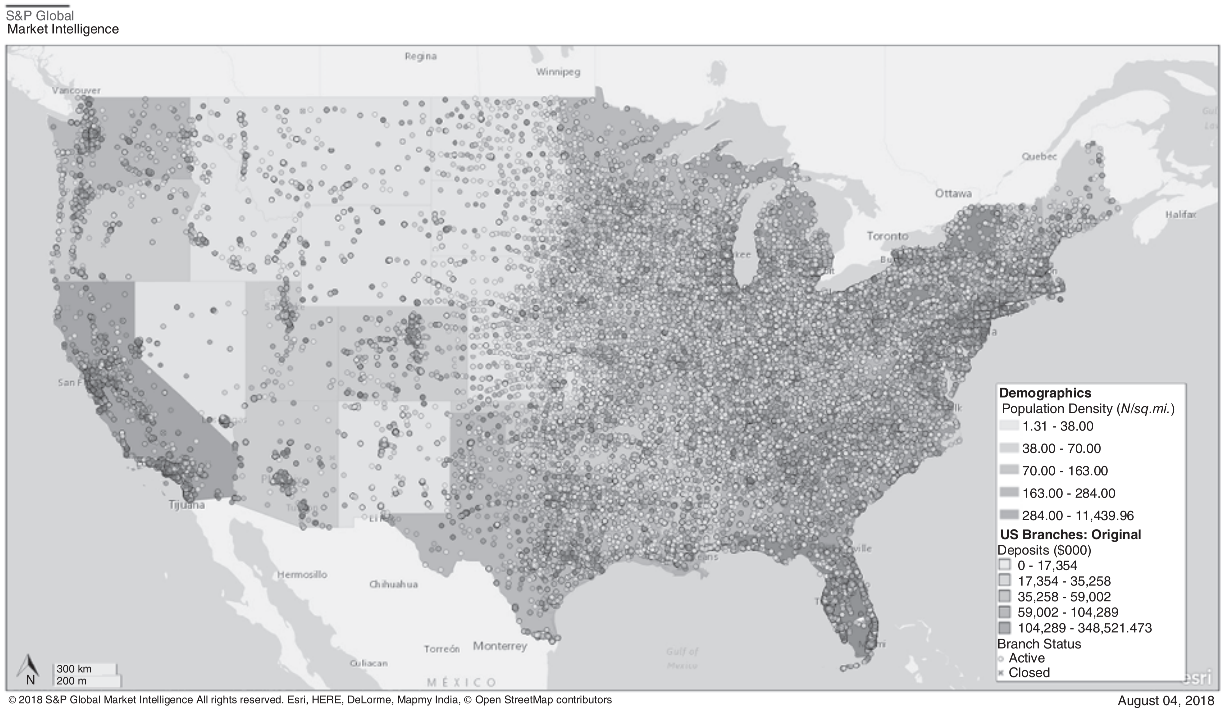
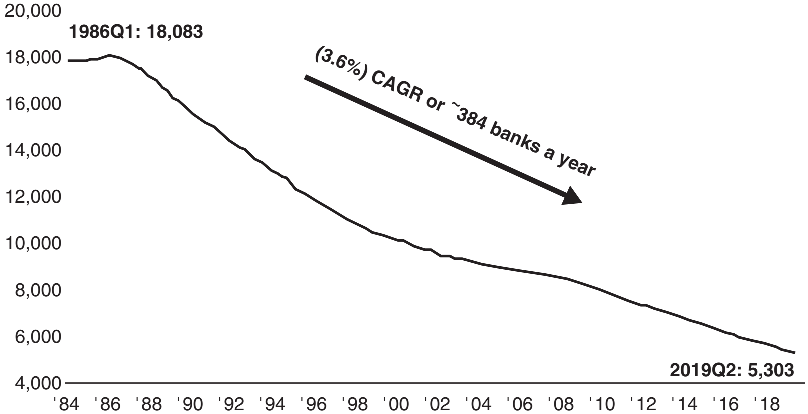


EXHIBIT 1.4 Distribution of Bank Branches and Population
Source: S&P Global Market Intelligence

EXHIBIT 1.5 Number of Banks



Source: FDIC

WHY INVEST IN COMMUNITY BANKS?

For starters, there are a lot of them to choose from. Nearly 800 publicly traded banks have assets below $10 billion, giving any potential investor a huge pool of investable securities. Further, once you've familiarized yourself with the peculiarities of the industry, your knowledge will be mostly applicable to this rather homogeneous business model.

That's not to say that returns *within* the bank space are homogenized though. There is enough specialization within the industry, whether it be geographically or in lending and deposit gathering strategies, that performance can vary wildly between banks. For instance, a business bank based in Texas would benefit more from rising oil prices and a rising Fed Funds rate, than a mortgage bank based in the Northeast.

Consolidation is also a secular tailwind that benefits bank investors as well. For instance, in 2017 there were a total of 305 deals announced, and 80 of the targets were publicly traded, implying nearly 1 in 10 publicly traded banks were taken out in just one year.

In this book, you will get insights from interviews conducted with real industry leaders, from those that operate banks, and those that invest in bank stocks and in the credit markets. Further, we will provide the requisite information that any investor would want to know, including the idiosyncrasies in financial statement analysis, capital and credit, the regulatory environment, and valuation. Ultimately, we hope to leave you with all the tools necessary to be successful in investing in bank stocks.

This book gives you the essential tool kit to become a successful bank investor. It packages practical lessons, theoretical knowledge, and historical context, all into one compelling and entertaining book. This is a basic 101 on investing in banks, as there is a lot of material that has been left on the cutting room floor. We are sure to have made some errors as well. We invite readers to send all comments to bankinvesting101@gmail.com.