Heartland Financial USA, INC

$HTLF

October 2nd, 2023

Financials

HayatFinancial

Target

Rating	Outperform
Current Price	$29.38
Price Target	$40.96
Implied Upside	39.41%
Action Recommended	Initiate Position

Key Statistics

52 Week Price Range	$26.10 - $51.61
50-Day Moving Average	$49.39
Estimated Beta	1.11
Dividend Yield	4.13%
Market Capitalization	$1.24B
3-Year Revenue CAGR	6.92%

Trading Statistics

Diluted Shares Outstanding	42.65M
Average Volume (3-Month)	0.17M
Institutional Ownership	69.98%
Inside Ownership	1.70%

Margins and Ratios

EBT (LTM)	21.34%
Net Income Margin (LTM)	15.87%
P/E (LTM)	5.93x
Debt to Equity Value	(.05x)

Investment Thesis

Underappreciation of Deposit Stability

In the wake of regional bank failures of SVB and Signature bank, deposits began to flee from regional banks based on consumer uncertainty around their stability. The secondary effects on the market led to the regional bank index decreasing 30%. The market is misappropriating Heartland's deposits as unstable when the company has been able to grow deposits by 4% YTD due to its focus on community banking and small business service. Deposits are also heavily diversified across geography and industry which dampens the threat of a single industry or customer greatly effecting deposits.

Pivot to Net-Zero Agriculture Growth Opportunities

HTLF has continued to pivot its portfolio into recessionary resistant products in anticipation of a mild recession. One such product is agriculture, which made up more than 13% of total loans outstanding before 2010 and was the only loan product to see growth throughout the entirety of 2009. Coming back to the end 2021, HTLF developed its new food and agribusiness division, resulting in more than 20% growth of the loan product through 2022. With the clear shift to agriculture, the bank has an opportunity to grow its market share as a result of Net-Zero commitments made by the 134 Net-Zero Banking Alliance member banks. These large commercial banks all have 2030 goals in place, which result in their agriculture loans constricting in the near term and approaching zero in the long run, giving HTLF an opportunity to expand its market share in the sector.

Misrepresentation of Commercial Real Estate Exposure

Legitimate doubts about the solvency of commercial office real estate business have exacerbated the regional banking problem. Lack of refinancing options paired with a lower demand due to the move to hybrid work has put large stress on the CRE creditors to collect and have led to higher doubtful payment rates. Heartland, however, only has around 3.5% of loans concentrated in office space CRE and has already reevaluated its CRE holdings and is confident in the property's stability and diversification decreasing the firm's exposure to this headwind. This counter positions Heartland well as it will be able to continue to provide credit to debtors looking to refinance at the current higher rates.

Five-Year Stock Chart

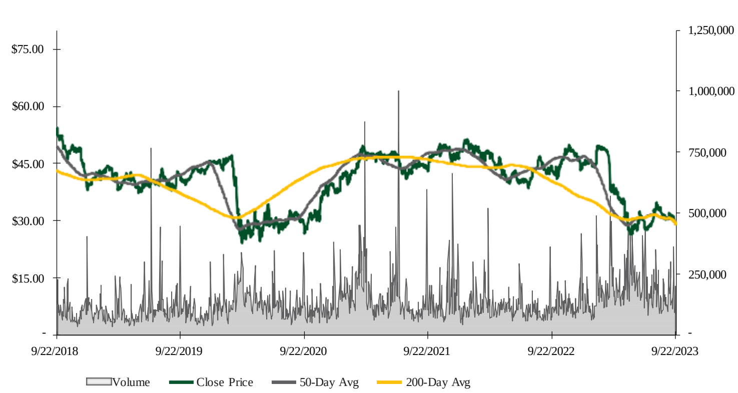
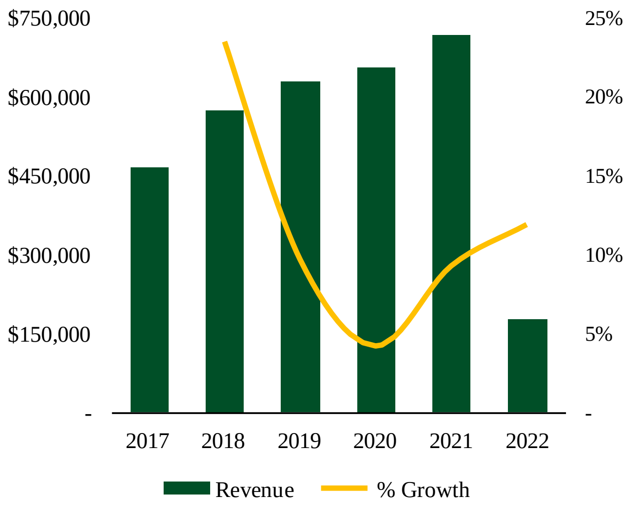
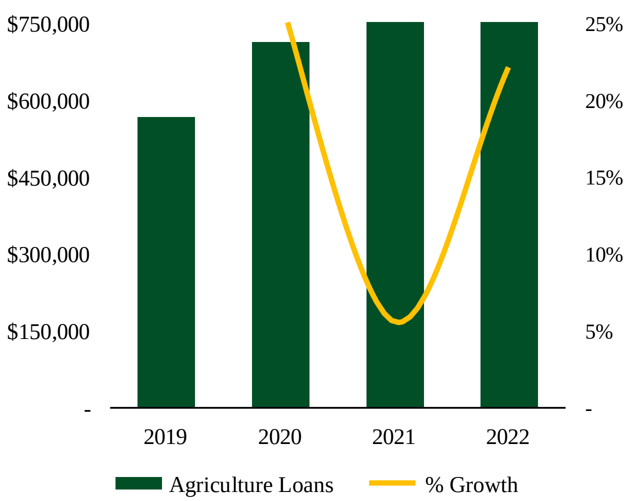


Figure 1: Historical Revenue



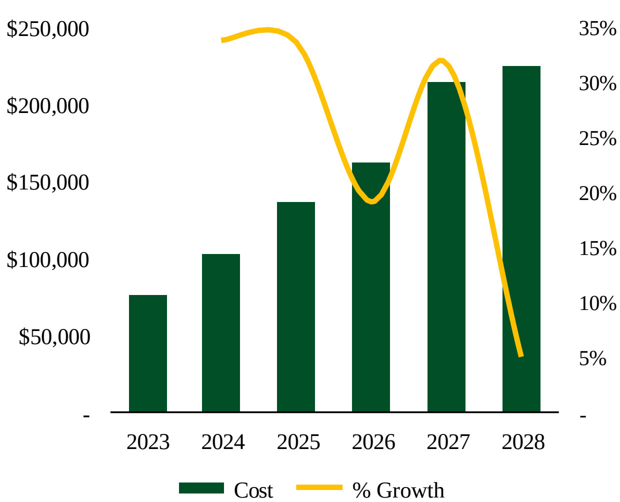
Source: SEC Filings

Figure 2: Historical Agriculture Loans



Source: SEC Filings

Figure 3: Equity Cost



Source: $HTLF Spreads

Business Overview

Heartland Financial USA Inc. is a bank holding company with over $20 billion in assets operating across 12 states through its community bank brands. The company was founded in 1981 in Dubuque, Iowa with its headquarters now located in Denver, Colorado. The company provides services for all layers of commercial and consumer banking through its community brands. The company operates 119 locations across the 12 states with Colorado, Arizona, Texas, Wisconsin, and New Mexico being its largest areas by deposits. The company earns and retains business through creating strong community ties and providing full stack banking solutions to generate further revenue.

Revenue Segments

Heartland makes revenue largely from interest rate arbitrage in which it may give out higher yielding debt for low-cost interest expense deposits. The company also makes non-interest related revenue mostly from fees. Revenue is not reported or broken up by segment however, Heartland provides a wide array of services to its broad consumer base, including:

Commercial Banking

Commercial banking services are tailored to the region in which the community bank is located. Services include business loans, lines of credit for both operational and working capital purposes as well as commercial real estate in both owner occupied and investment grade purposes. Alongside the lending activities, Heartland puts a large focus on its treasury management services which include the basic functions of distribution, collection and payment of cash. Heartland has a specialized group of bankers with expertise in CRE (commercial real estate), healthcare, agriculture, and other banking specific areas to assist the market banks and optimize loan and valuation performance.

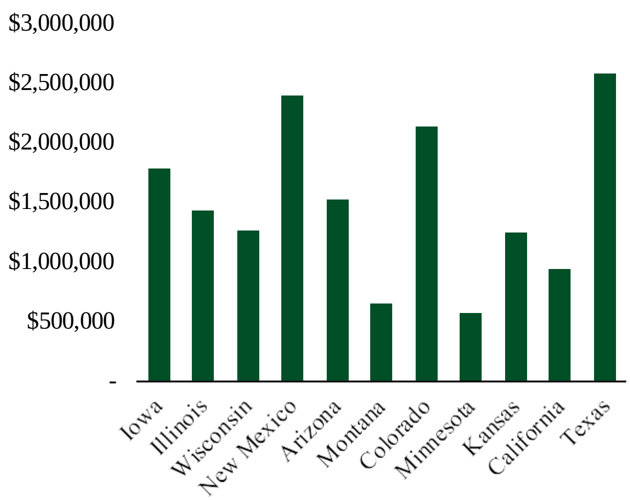
Agricultural Loans

As mentioned in the general description, loans originate on a community bank basis with specialized lending groups acting in support. As such, in the rural bank areas, groups with expertise in the specific sectors assist the community bankers in loan origination. Agricultural loans make up around 8% of total loans with all loans made in secondary markets requiring real estate collateral. These loans provide unique credit risks associated with crop disease which is built into the cash flow projections that underwrite the loans and also include collateral from machinery and crops. Additionally, HTLF works with the USDA and Farm Services Agency (FSA) to help agriculture customers in obtaining credit enhancement products such as loan guarantees, interest assistance, and crop insurance.

Consumer, Small Business Banking and Residential Real Estate

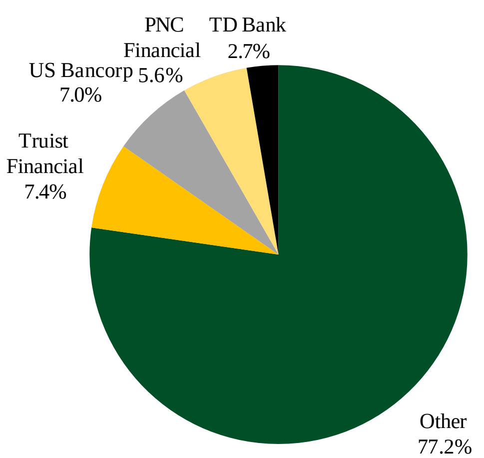
The consumer sector provides the basic banking services such as checking and savings accounts as well as ATM machines and debit and credit cards. These products provide extra non-interest-based revenue that limits the exposure to interest volatility and provides extra income. This sector also includes the consumer lending services which include auto, home, fixed rate mortgages as well as personal lines of credit.

Figure 4: Deposits by Region



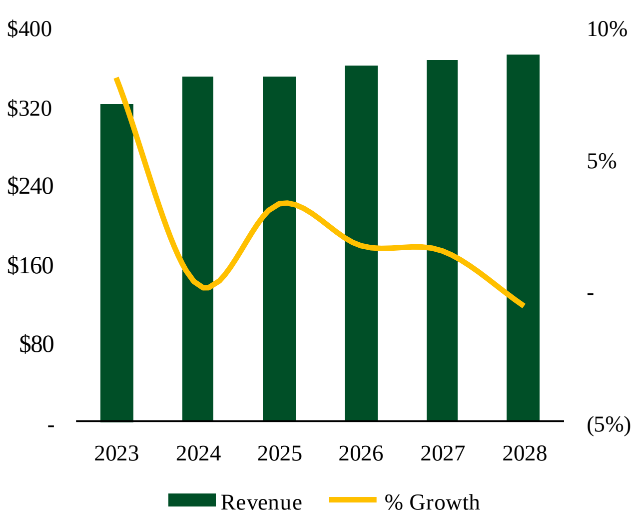
Source: SEC Filings

Figure 5: Regional Banking Sector Market Share



Source: IBIS World

Figure 6: Projected Industry Revenue Growth (Billions)



Source: IBIS World

Wealth Management and Retirement Plan Services

This sector includes the 401k and profit-sharing services that Heartland manages and currently totals $3.62 billion in AUM. Heartland has also partnered with LPL Financial to provide brokerage services and products such as mutual funds and individual retirement services.

Geographical Breakdown

Heartland Financial has 11 subsidiary banks across 12 states. Subsidiary banks include Dubuque Bank and Trust Company (10.75% of deposits), Illinois Bank & Trust (8.68% of deposits), Wisconsin Bank & Trust (7.60% of deposits), New Mexico Bank & Trust (14.55% of deposits), Arizona Bank & Trust (9.26% of deposits), Rocky Mountain Bank (3.93% of deposits), Citywide Banks (12.89% of deposits), Minnesota Bank & Trust (3.47% of deposits), Bank of Blue Valley (7.53% of deposits), Premier Valley Bank (5.65% of deposits), and First Bank & Trust (15.68% of deposits). Heartland manages these branches via its central office located in Denver, Colorado. Asie from increasing efficiencies across the bank, the central office also provides support in the structure of industry specific loans, such as agriculture, which may require crop yields for collateral, as well as support in gaining new business. Management of the bank make it clear that the firm balances out its stronger, but more volatile, growth opportunities in the West and Southwest regions with more stable bank markets in the Midwest.

Industry

The United States banking system has three institutional sizes, commercial, regional, and community. Commercial banks are large institutions that can have trillions of dollars in assets and typically operate on both a domestic and international level. Community banks are smaller entities that operate in a particular city or state and grow by utilizing strong connections within their serviceable area. The middle of these two extremes leaves a considerable opportunity that regional banks have the ability to take advantage of.

Regional Banking and the Banking System in the United States

The Federal Reserve defines regional banks as banking organizations with assets anywhere between $10-$100 billion. This broad definition results in a massive industry which does about $147.8 billion in net profit and has total revenue's hovering at about $322.6 billion. Unlike community banks, regional banks will typically operate in multiple states. However, this does not always hold true, especially in larger states such as Texas. Both the southeast and Midwest regions have a major reliance on regional banks due to the size and lack of population density these regions possess. Lower levels of population density tend to result in a need for more bank branches so that firms can effectively reach customers. Additionally, the southwest, west, and previously mentioned southeast, have the highest share of regional banking establishments vs share of the population, making these areas of incredible importance to the industry. Looking towards the future, growth of the entirety of the industry is hard to estimate as it tends to be highly dependent on the region a bank serves. Those in high growth regions will likely see strong growth stemming from the economic development around them. Vice-versa, entities in areas experiencing economic stagnation, will have a hindrance in their ability to continue developing. Keeping this in mind, high interest rate levels relative to the recent past, which will be touched on further later on, have resulted in an expected industry CAGR of about 1-2% over the next 5 years. Regional banking institutions operate in a similar vein as other sized banks, with typical products and services including real estate loans, commercial and industrial loans, personal loans, car loans, credit cards, and other non-interest-bearing deposit services. Funds for distribution into either loan products or security investment(s) stem from one primary source, deposits.

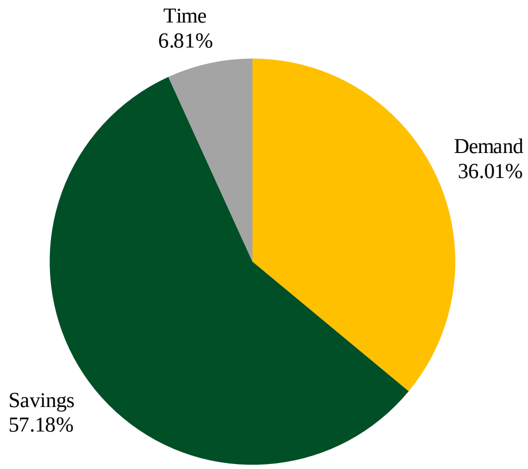
The cost of deposits is one of the major cost's banks must endure and unfortunately, it's also one of the major competitive factors between banks. Higher yields on interest rates tend to result in an increase in deposits but result in a contraction of the interest margin. Typically, when interest rates rise, the cost of deposits for banks will rise in tandem in order to be competitive. Due to this fact, an important metric to track for banks is their "deposit beta". A deposit beta is the percentage of change in the market rate that banks have to pass on to their customers. Banks have had to closely follow the market rate in recent months due to drastic increases in interest rates and the competition that is caused from that, with some having beta's up to or above 100%. However, according to data from NYU, the deposit beta for officially defined regional banks has historically been approximately 38%. Part of decreasing this beta revolves around the makeup of the deposits on a bank's balance sheet.

Deposits have two fundamental types, demand deposits and time deposits. Demand deposits include checking, saving, and money market accounts. These styles of accounts typically have a wide interest spread as the funds in these deposits are "cheaper" for a bank to utilize. However, as the name implies, demand deposits are able to be "demanded" by customers and can be held in an account for an unknown amount of time. To diversify this risk, banks offer time deposits to customers. Time deposits include certificates of deposit (CD) and individual retirement accounts (IRA). These account types have set limits on the timing of withdrawals, however, due to this restriction on the consumer, they result in a lower spread for the bank to take advantage of when loaning the funds back out into the market. It is important to note that with this business model, there is an inherent risk that is being adopted. Loans can go into default, investments into securities can lose value, and customers can pull their deposits causing bank runs. Due to this, the industry faces significant regulatory barriers.

With banking being one of the most regulated industries globally, there are a seemingly unending number of regulations that must be followed for a bank to be deemed "compliant". One of the main forms of compliance that can be easily tracked across institutions is a firm's "tier 1 capital ratio". The tier 1 capital ratio is defined as a bank's tier 1 capital – that is its equity capital (common stock, retained earnings, etc) and disclosed reserves – divided by its total risk-weighted assets. For context, risk-weighted assets are the weighted average of products banks have on their balance sheet, such as previously mentioned loans and investment securities. The ratio is incredibly important for two reasons: Firstly, following the 2008 housing market crisis, it was determined that banks were too funded by debt and had little to no capital readily available to absorb losses, which was partly to blame for the crisis. Secondly, due to this conclusion, the regulatory minimum has been set at 6%. If an entity fails to meet this requirement (or any other regulation), the FDIC may step in and issue fines, corrective programs, or seize the bank in its entirety. The regulatory nature of the industry as well as bank's operating strategies tend to be similar across asset size categories. However, regional banks do have a few unique characteristics that further separate them from both community and commercial banks.

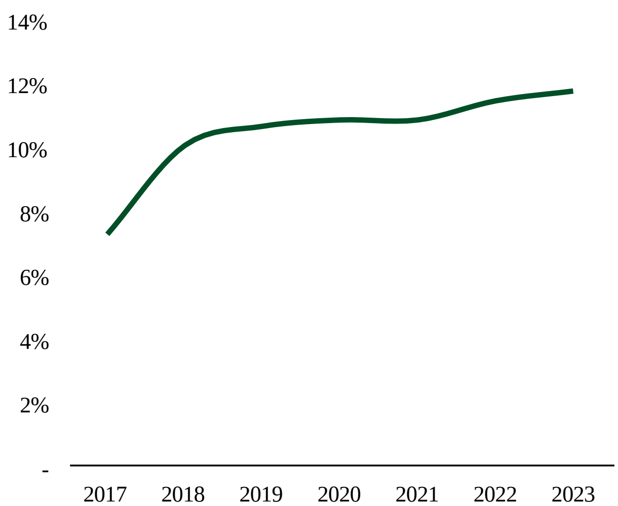
Regional banks attempt to differentiate themselves from larger commercial banks by fostering competitive relationships in the communities they serve. This is primarily done by establishing a positive presence in the community one operates in while offering more tailored products with superior customer service than their commercial bank counterparts. Regional banks are common sponsors of events across the country, and larger firms can be seen sponsoring college football stadiums, such as Huntington Bancshares, who have their logo on the University of Minnesota stadium. Smaller banks typically focus on community events, and

Figure 7: HTLF Historical Deposit Mix



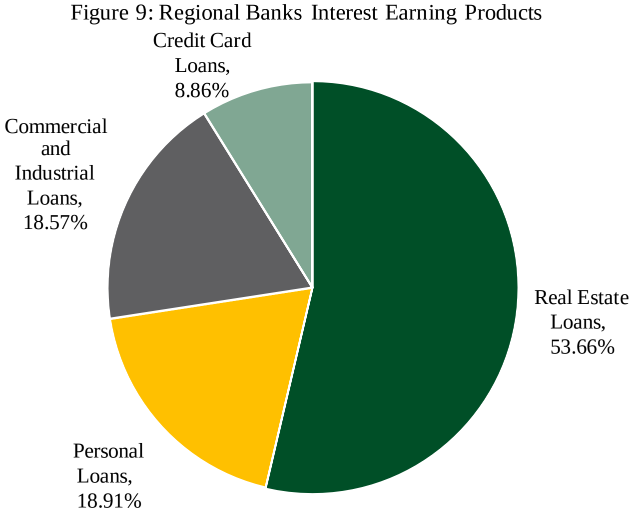
Source: SEC Filings

Figure 8: HTLF CET1 Historical Ratio



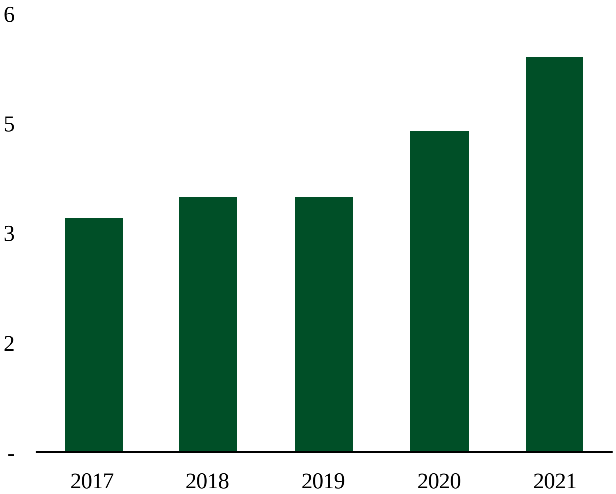
Source: S&P CapIQ

Figure 9: Regional Banks Interest Earning Products



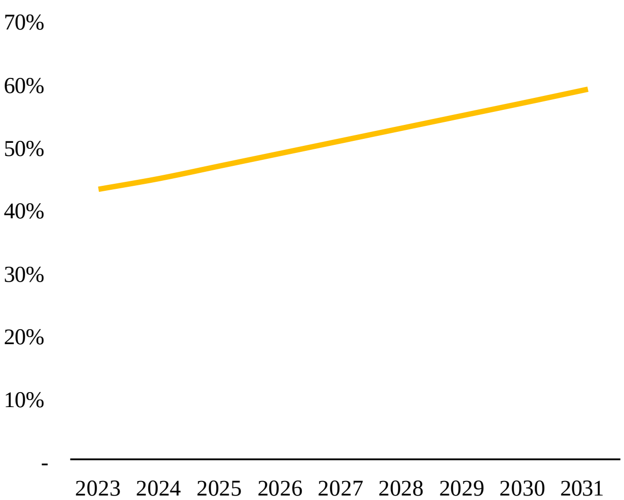
Source: IBIS World

Figure 10: U.S. Total Annual Business Applictions (millions)



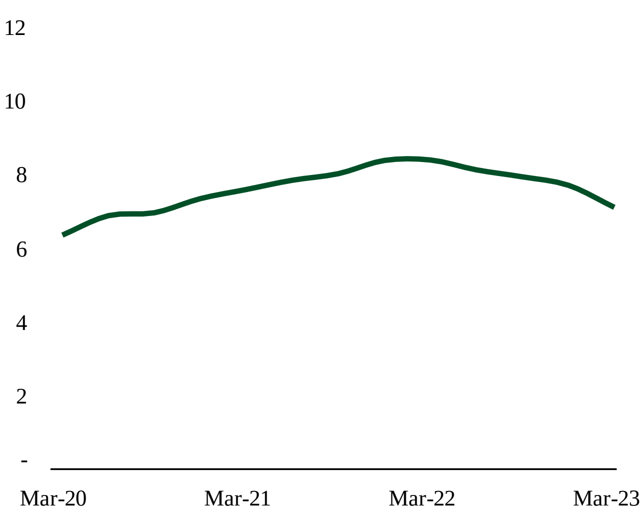
Source: Economic Innovation Group

Figure 11: HTLF Projected Efficiency Ratio



Source: $HTLF Spreads

Figure 12: Uninsured Deposits at U.S. Banks



Source: S&P Global

they offer promotional events for their customers to take part in. More tailored products and superior customer service go hand in hand with the most successful regional banks commonly placing praise on their team's ability to offer a superior experience for the end customer. It's important to note that for regional banks, this end "customer" is typically a small business. A small business can be defined in a host of ways, but commonly its seen as a business with revenues between $1 - $40 million, or 100-1,500 employees. About 66% of these small business bank with a regional bank, and with about 4 million business registrations every year, 25% of which lasting 15 years or more, there is a steady stream of opportunities for regional banks to take advantage of. Looking at non-interest revenue, regional banks operate on a spectrum. For some, non-interest revenue is not a primary focus and is primarily comprised of fees on products. However, other entities that are typically larger place a focus on this revenue stream to hedge against lending activity downturns and thus, offer investment banking services and other commission-generating products and teams.

Looking toward the future, as regulations continue to increase and barriers to entry make *entering* the industry less appealing, consolidation, success in growing deposits, and technological advancements will be the major trends that define success between regional banking competitors. Technology includes both customer-facing activities, such as mobile banking, as well as back-office activities that improve efficiency. The effectiveness of this investment can be seen in a ratio called the "efficiency ratio". The efficiency ratio is defined as total non-interest expenses divided by total revenues. The lower this ratio, the more effective/efficient a bank's back office is at managing expenses. In Q2 of 2023, banks with an asset size between $50-$99 billion had an average efficiency ratio of about 53.46% and banks between $5-$49 billion had an average efficiency ratio of about 57.48%. In aggregate, the larger a bank is, the more likely it is to have a lower efficiency ratio; however, this does not always hold true as there are of course always exceptions.

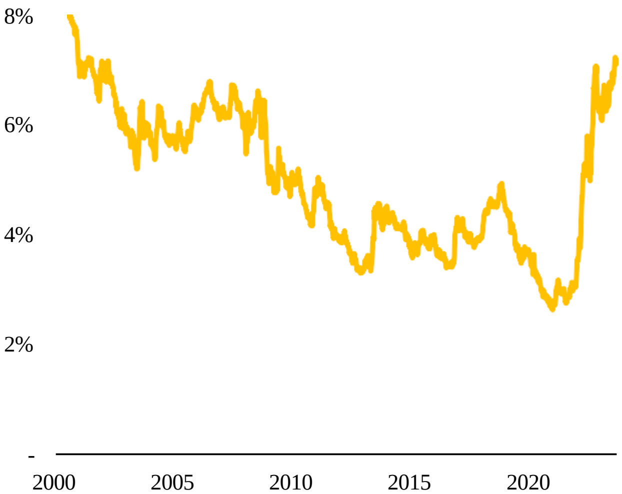
Discussion of Recent Bank Failures

Historically, banking organizations have been operationally straightforward, with marginal changes in the overall industry besides large-scale macro trends such as the shift to online banking platforms and variation in interest rates. They are typically seen as safe investments that pay strong dividends and have opportunities for periodic growth. However, when things do go wrong, it can have industry-wide effects that result in significant long-term changes.

There has been unnervingly high volatility throughout all classes of banking in the months since the failure of four separate institutions: Silicon Valley Bank, Signature Bank, First Republic Bank, and Heartland Tri-State Bank, a smaller community bank located in Kansas (not to be confused with Heartland Financial). These four banks had a combined deposit base of approximately $368 billion and as a result have almost immediately resulted in an increase in regulations throughout the financial services industry as well as a decrease of approximately $31.5 billion to the FDIC's Deposit Insurance Fund. These regulations primarily affect banks with assets over $100 billion so while they do not directly affect regional banks, especially smaller ones such as Heartland Financial, the indirect implications have only begun to make rounds across the market.

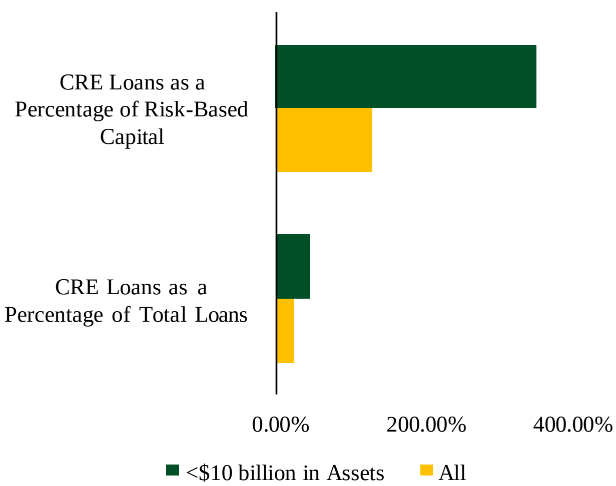
One thing to note is the discrepancy between how much the FDIC paid out in deposit insurance and these banks total deposit base at the time of failure. Looking at the totals previously stated, approximately 91% of deposits were uninsured at these institutions at the time of failure. Unacceptably high uninsured deposit bases put firms at a higher risk of a deposit flight as depositors can quickly become wary of the financial health of the institution they bank at. This fear can spread across the country and result in additional bank runs which in the case of both Signature

Figure 13: Historical 30-Year Fixed Rate Mortgage U.S. Average



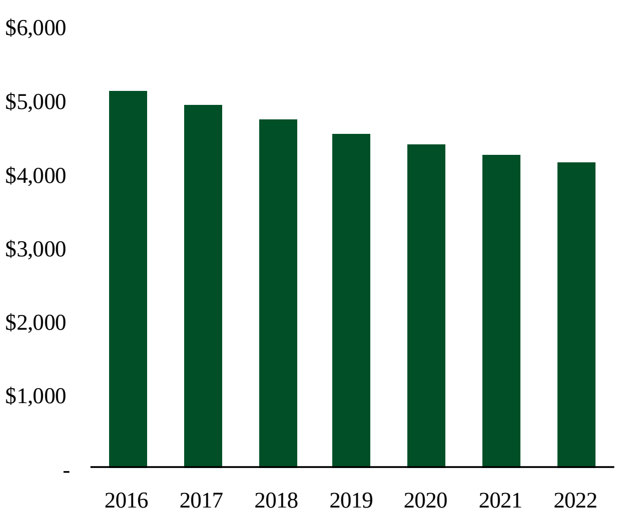
Source: FRED

Figure 14: Banking Real Estate Exposure by Asset Size



Source: Federal Reserve Bank of St. Louis

Figure 15: Number of FDIC-insured banks in the United States



Source: Statista

Bank and First Republic, can be detrimental. When this is combined with poor risk management strategies, any sized bank can become at risk of solvency in a matter of days. The question is then, why did this issue seem to target primarily regional banks? This is because multiple of the largest institutions are deemed "too big to fail" banks by the United States government and thus, regional banks can be seen as risky in tumultuous times.

The concern for the regional banking industry's financial health has begun to slowly subside as new regulations continue to be rolled out and the deposit flight seen across the board in March has tapered off, but the possibility of failure is everlasting. Due to this fact, recognizing the need for conservatism in the industry is important in understanding the drivers of smart, safe, and sustainable growth for any banking institution.

Macro factors

Interest Rates

On July 26, the United States FED raised interest rates by 25 basis points to 5.25%-5.5%, bringing borrowing costs to their highest level since January of 2001. Rising interest rates increases the interest expenses for banks as they must both borrow funds at a higher rate and pay a stronger yield to customers to persuade depositors to keep their deposit at one institution rather than transfer to another. However, with rising rates also comes the opportunity to lend out debt at a higher rate to customers. Due to this relationship with interest rates on both the cost and revenue side of the business, success in high interest rate environments is defined by those who can maintain customer deposits whilst not also causing a simultaneous contraction of their net interest margin. Looking forward, interest rates are anticipated to stay elevated relative to the near zero environment the United States was in before the COVID Pandemic, even if there is a decrease in inflationary pressures. FOMC members have forecasted rates to stay at or above 4% until 2025, and then from there on out a terminal rate of about 2.9%. This projection is further backed by SOFR futures, which are currently projecting SOFR rates of almost 4% as far as 2032.

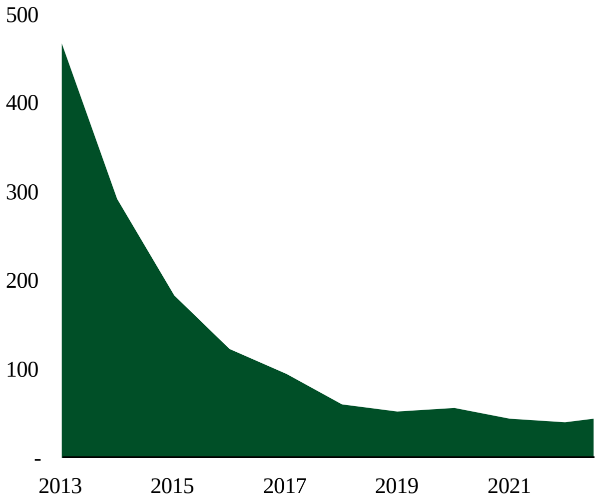
United States Real Estate Market

Regional banks are especially dependent on the economic health of the regions they operate in. As a result of interest rates rising, mortgage rates have hit approximately 7.18% as of August 31, a rate not seen since the early 2000's. With massive portions of total loan activity for banks stemming from the real estate market, a slow down in this area can be a roadblock for banks to overcome. This issue is especially prevalent for regional banks who operate in markets that have been unevenly impacted from slowdowns and a lack of return to office trends such as San Francisco, however, this characteristic can be seen as a positive for the banks operating in areas seeing growth such as Austin. Local real estate, whether commercial or residential, is a driving force that can be seen as either a tail or headwind, depending on the area of coverage.

Recent Banking Failures

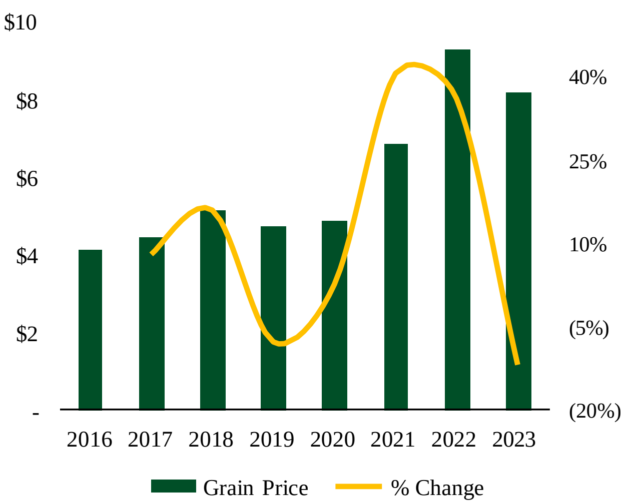
As discussed previously, Silicon Valley Bank was taken over by the FDIC on March 10, 2023, as it was at risk of becoming insolvent from depositor flight. This sent shockwaves around the industry and resulted in multiple institutions being shut down or taken over as they were unable to handle the stress. While this turmoil has begun to ease, it is still top of mind for many and has resulted in most all regional banks raising the rates they pay depositors in an attempt to persuade them to keep their deposits with the bank. In tandem with this rate rise, margins have been crunched as financial proficient depositors have moved their funds

Figure 16: Number of FDIC-Insured "Problem" Institutions



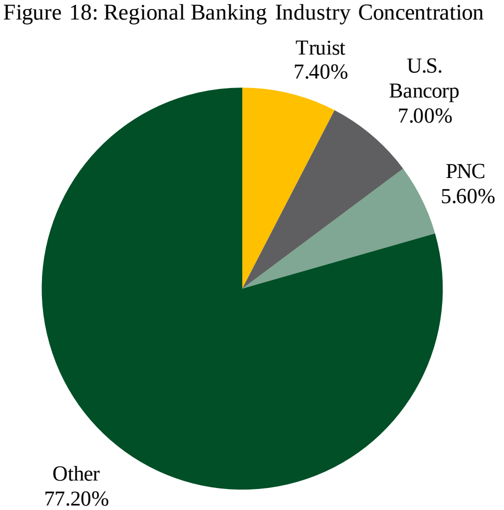
Source: FDIC

Figure 17: Prices Received for Wheat by Month - U.S.



Source: USDA

Figure 18: Regional Banking Industry Concentration



Source: IBIS World

from demand deposit accounts, into time deposit accounts in an effort to take advantage of the yields being offered. The balancing act for banks moving forward will be how they can remain competitive and convince depositors to keep their funds within their institution instead of another while also maintaining margins.

Increasing Banking Regulations

While the banking industry has some of the most prudent regulations of all industries in the United States, the previously discussed banking failures have resulted in an increase in regulations being forced upon institutions. Regulations, such as increases to capital levels for banks with more than $100 billion in assets, are being put into writing with the expectation that compliance must be achieved within five years of enactment. The “harshest” of these regulations has been forced on the entities seen as “too big to fail” or large regional banks, who under a rule proposed on August 29, 2023, would have to issue about $70 billion in fresh debt as part of an effort to bolster resilience in the sector. This debt requirement would put the larger regional banks closer to par with “too big to fail” institutions who already have a swath of debt requirements put in place. These regulations are especially impactful in the regional banking sector compared to banking as a whole as the definition of a regional bank isn’t fully encompassed by these regulations. Some entities will have an opportunity to take advantage as larger firms are put into newly enacted regulatory handcuffs. However, these smaller firms are seen as riskier for depositors for exactly this reason, so the strategies between firms on how they go about maintaining margins and deposits will be fascinating to watch.

Grain Prices

The price of grain hit an all time high in May of 2022 and has been on a decline since. This peak can be attributed to a host of factors including the Russian Ukraine conflict, increased demand led by China, drought-reduced supplies, and high energy prices to name a few. With agricultural loans typically secured on either machinery, real estate, or crops, they are particularly at risk to price fluctuations as loans can be made based on crop yield and cash flow projections. With the price of grain being so affected by multiple different influences, firms will need to remain prudent on a host of factors both when making loans and when monitoring their loan portfolios.

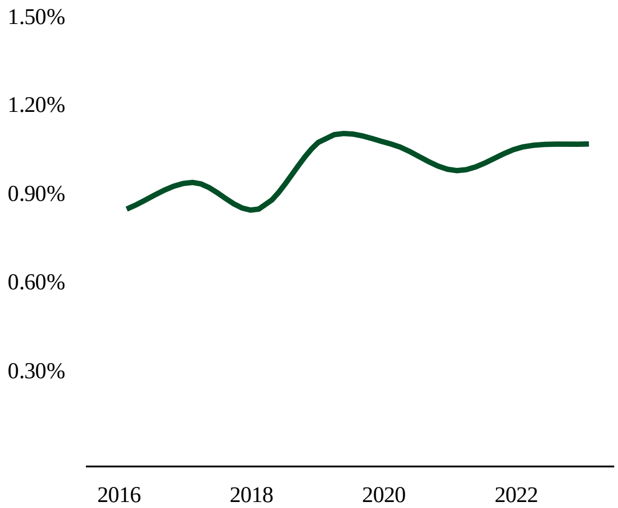
Competition

The regional banking industry has low concentration levels while competition levels are high. Competition comes in the form of deposits as well as competition for labor talent and loan services. Firms win based on the rates they are able to provide and charge as well as the reputation they have within the region that their bank operates within. Shifts in the economic environment that banks operate are also very important to the success of the bank. The shift towards online banking has had a negative effect on regional banking industry since the geographic advantage that regional banks have over national banks is diminished.

Due to the heavy regulation of the banking industry, firms are very competitive in maintaining and growing their deposit levels. Deposits provide cheap capital and the ability to give out more loans and still stay within regulatory capital minimums. As such, in order to retain deposits, especially in the wake of the regional bank failures and high-rate environment, firms offer higher rates on deposits to attract customers to stay at a firm.

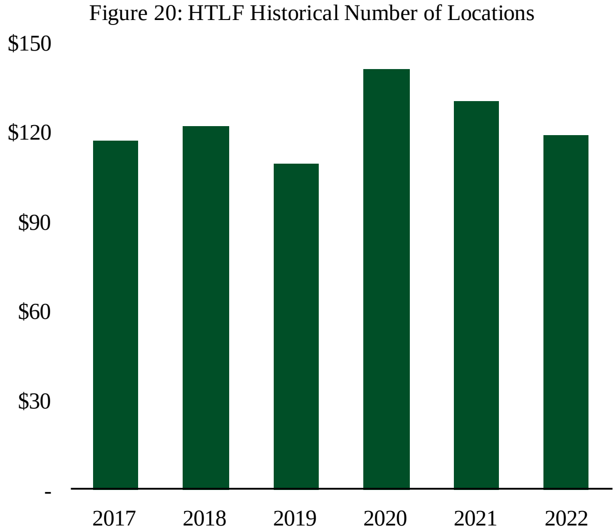
Succeeding within this industry depends greatly upon the quality of management in terms of risk management as well as strategic acquisitions and loan

Figure 19: HTLF Historical ROA



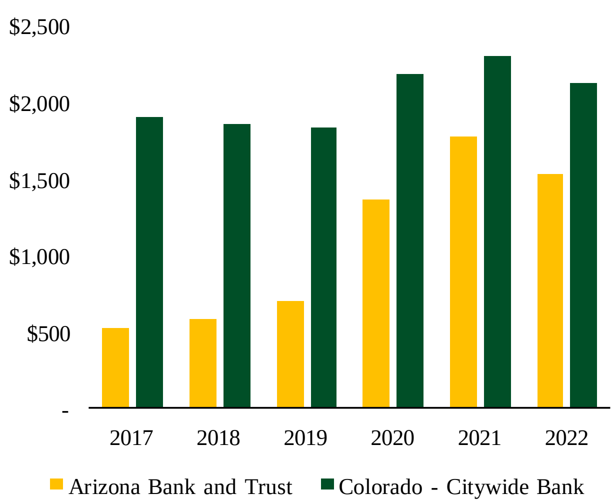
Source: SEC Fillings

Figure 20: HTLF Historical Number of Locations



Source: Company 10-k

Figure 21: HTLF Deposits in Arizona and Colorado (millions)



Source: SEC Filings

underwriting. Aside from that, maintaining strong customer relationships to ensure deposit stability and win loan business is vital to the success of regional banks. Heartland's model of community bank branding and emphasis on diversifying its offerings will allow the company to overcome the strong competitive forces by differentiating from large national banks.

Strategic Positioning

Due to the highly regulated and competitive nature of the banking industry, Heartland has been very precise in terms of its product offerings as well as its size. Increasing assets leads to stricter regulation for banks as they become more important to the overall health of the economy. Heartland's total assets as of Q2, 2023 was $20.2 billion placing it within the $50 billion threshold of bank regulation under the Dodd-Frank Act. This requires banks to submit to greater stress testing as well as a liquidity coverage ratio. While Heartland's status as a holding company excuses it from public disclosure of its stress tests the company of course still performs internal stress testing.

In terms of the broader banking industry, Heartland is incredibly small and must compete with not only megabanks with trillions in assets, but new fintech companies looking to fill different niches. On this front Heartland fills the valuable niche of small business and agricultural lending that is vital to our economy but does not move the needle for those large banks. Heartlands average loan for non-owner occupied CRE is $1.3 million, well below the threshold for almost any large bank. As for agricultural lending, the move to net-zero initiatives from many banks means no funding to the emission heavy industry giving Heartland a competitive advantage within the vital industry.

Business Growth Strategies

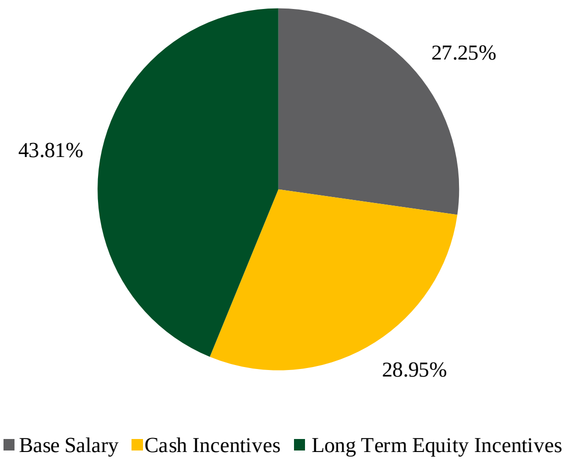
The company overtly states its five key strategic focuses: Strategic customers acquisition and retention, enhancing customer experience, attracting and retaining talent, efficiency improvements to operate effectively and prudent risk management and credit discipline. In 2022 alone the company added over 1,300 new commercial customers as well investing in verticals to hedge against interest rate changes. The company has chosen this plan to ensure deposit levels while many of its competitors lose their deposits due to bank uncertainty.

Aside from Heartland's strategic positioning related to its regulation bracket, the company remains focused on optimizing its branch locations. As of June 30, 2023, Heartland operates a total of 117 locations but has been strategically optimizing that number by selling branches where it sees fit resulting in a reduction of 8% in 2022. In line with that, the company has reduced its number of full-time or equivalent employees by 11%.

Geographically, Arizona and Colorado have historically been strong areas for the company and going forward the company has focused investments where growth potential lies. Management has stated they hope to balance the growth opportunities within the Southwestern and Western areas with the stability that comes from the Midwestern areas going forward.

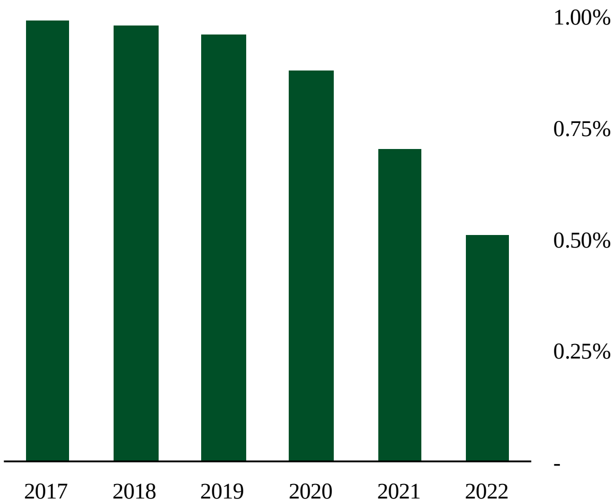
It is important to note that because of the high levels of regulation in the industry, the company must stay within the regulatory thresholds that limit the amount of risk-weighted assets (loans, securities, etc.) companies have compared to risk free capital on their balance sheet. Because of that, in order to grow revenue, banks must increase the book value of their equity mostly through retained earnings by decreasing dividend payments or increasing net income.

Figure 22: CEO Pay



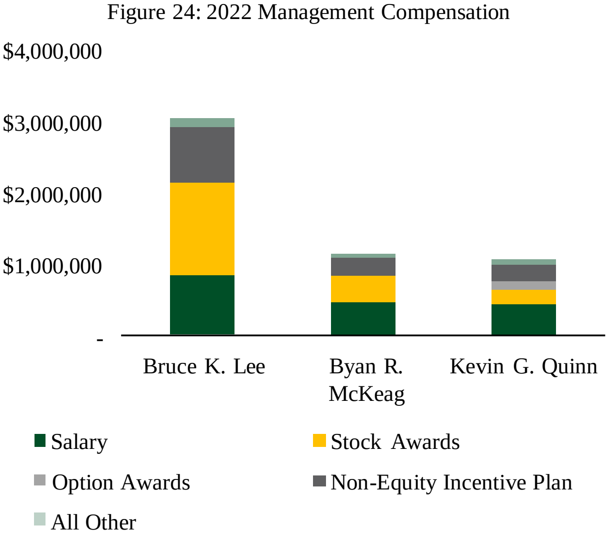
Source: Proxy Statement

Figure 23: Historical Nonperforming Loans to Total Assets



Source: SEC Filings

Figure 24: 2022 Management Compensation



Source: SEC Filings

Going forward, Heartland will grow through continued strategic acquisitions as well as creating stronger customer loyalty and a more diverse suite of products to generate more revenue. As banks provide near substitute services, the brand loyalty and community aspect of Heartland's business is vital to its success. It's niche of serving small businesses and agriculture also provide a vital service to the economy that is too small to move the needle for large banks. Also, slightly counterintuitively, regional bank failures provide an opportunity for Heartland to recruit skilled employees that have lost their jobs and reduce the number of firms to compete with.

Management has stated that to compete and win against large regional as well as megabanks, they must maintain strong community ties. Outside of relationships, the company must stay price competitive. The company's strategy on this point is to consolidate support services to reduce expenses and reach economies of scale. By strategically reducing underperforming branches and centralizing support services, management can provide vertical-specific expertise at each of its community banks based on branch needs.

Management and Employee Relations

With the "quite quitting" job market currently in place, it is important to note how Heartland Financial employees view the bank as its high touch point business model is dependent on a strong employee base. As of year-end 2022, Heartland Financial had 91% of its more than two thousand total employees participate in an engagement survey and it received its highest average score since the inception of the survey back in 2017. Through a tumultuous job market for employers trying to retain talent, the three-plus years of ever-increasing scores is a testament to the improvements in Heartland Financials development of its teams across the bank.

Bruce K. Lee – President and CEO

Mr. Bruce Lee joined Heartland Financial in 2015 and brings more than 30 years of experience in the banking industry to the firm. Previously, Mr. Bruce Lee spent 12 years at Fifth Third Bank where he held numerous leadership positions with progressive responsibilities. A native from the Midwest, Mr. Bruce Lee rounds out his banking experience with a commitment to the communities he serves by being a trustee for the Cincinnati Orchestra, as well as a board member at the Medical College of Ohio Foundation, Siena Heights University, and the University of Findlay. Mr. Bruce Lee earned his Bachelor of Arts degree in business administration and management from the previously mentioned Siena Heights University in Michigan.

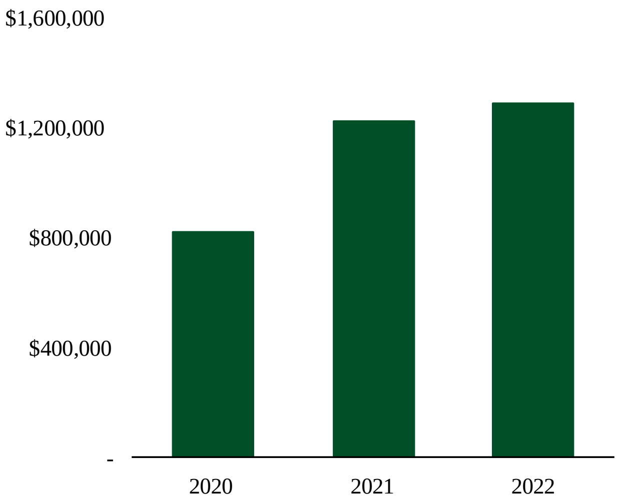
Bryan R. McKeag – Executive Vice President, Chief Financial Officer

Prior to joining Heartland Financial back in 2013, Mr. Bryan R. McKeag served as Executive Vice President, Corporate Controller and Principal Accounting Officer with Associated Banc-Corp in Green Bay Wisconsin as well as a previous role as an audit professional and Senior Audit Manager at KPMG LLP for nine years. Mr. Bryan McKeag obtained his Bachelor of Science degree in accounting from the University of Wisconsin-La Crosse and is a member of the American Institute of Certified Public Accountants.

Nathan R. Jones – Executive Vice President, Chief Credit Officer

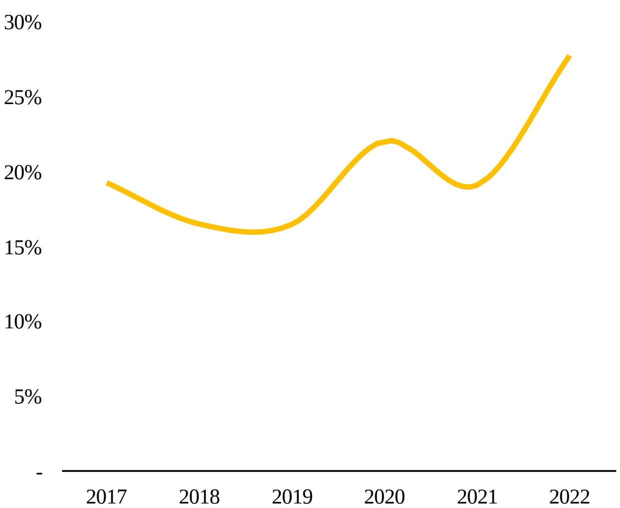
Mr. Nathan Jones joined Heartland Financial's leadership team in July of 2020 and brings over 20 years of experience, previously working for Bank of America, BMO Harris, First Horizon, and Fulton Financial. Mr. Nathan Jones is responsible for leading the credit administration organization and providing leadership in formulating HTLF's credit policies, processes, and practices as well as oversight

Figure 25: Bruce K. Lee (CEO) Historical Stock Awards



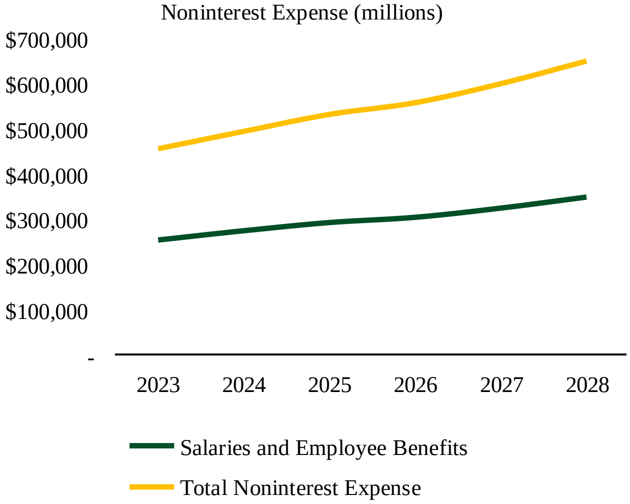
Source: SEC Filings

Figure 26: Historical Payout Ratio



Source: $HTLF Spreads

Figure 27: HTLF Salaries and Employee Benefits and Total Noninterest Expense (millions)



Source: SEC Filings

of regulatory and compliance matters related to credit, including the management of credit risk. Since 2020, he has reduced both the banks nonperforming assets to total assets and nonperforming loans to total loans by about 37% each. Mr. Nathan Jones earned a degree in psychology and a Master of Business Administration from Southern Methodist University in Texas.

Tamina L. O'Neill – Executive Vice President, Chief Risk Officer

Ms. Tamina O'Neill brings extensive senior management experience to one of the most imperative positions in the bank. Over 30 years ago Ms. Tamina O'Neill began her career at LaSelle Bank/ABN AMRO, a prominent bank at the time owned by a multinational global financial institution. Throughout her career she has been involved or led teams in government lending, commercial banking compliance, corporate compliance, operational risk, and enterprise risk. Most recently before her current position at Heartland Financial, she served as SVP Director of Enterprise Risk Management/Operational Risk for Fifth Third Bank. Ms. Tamina O'Neill compliments her extensive work experience with an undergraduate degree from Dominican University, graduating Magna Cum Laude, and an MBA from the University of Chicago – Booth School of Business concentrating in finance/strategy.

Kevin G. Quinn – Executive Vice President, Chief Banking Officer

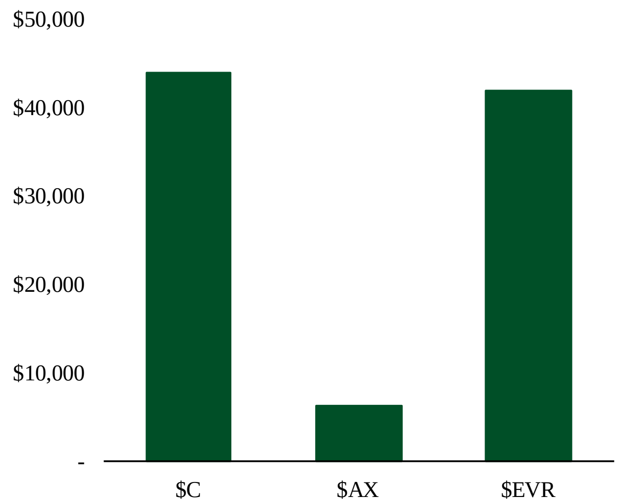
Mr. Kevin Quinn joined Citywide Banks, a subsidiary of Heartland Financial, as President and CEO in 2009 and has leadership responsibility for markets within Heartland Financial. He brings over 35 years of experience to the bank joined Citywide Banks from Arizona Business Bank (CoBiz Financial) where he served as President and Chief Operating Officer. While at CoBiz Financial, Mr. Kevin Quinn was responsible for the initial transition to the Arizona Market. Mr. Kevin Quinn received his undergraduate degree from Northern Colorado (Greeley) with a degree in business administration/general business as well as a graduate degree from the University of Delaware (Newark) Stonier graduate school of banking. At home in Denver, Mr. Kevin Quinn is an active member of the community, serving on the boards at the "Denver Health Authority" and "Colorado Concern"

Management Guidance

Heartland Financial's management in the recent past will give guidance for a full year and adjust said guidance as the year goes on. Throughout investor presentations and earnings calls, there were very limited examples of the firm giving hard quantitative goals beyond the current fiscal year as most long-term goals are qualitative objectives. Some of these objectives include continuing to improve the firms efficiency ratio, maintaining granular low-cost core deposits, and a long-term focus on earnings per share growth in tandem with ever-increasing dividends, something they've done for 40+ years.

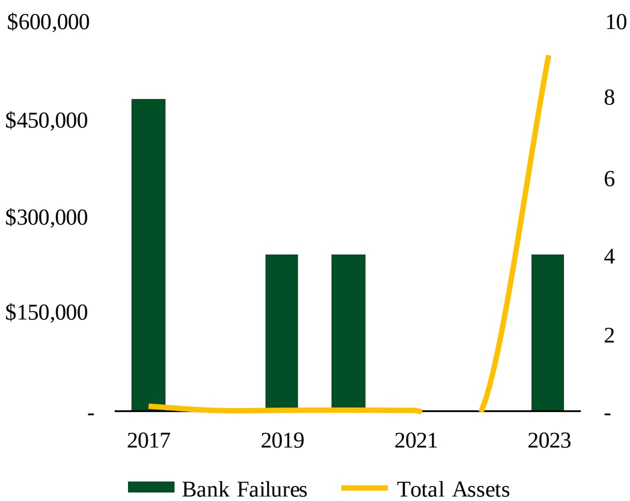
With that being said, in the past short-term quantitative guidance can be relied upon as again, both confirmations and changes to the given guidance are made every quarter in the year. Thus, looking forward to the rest of fiscal 2023, at the start of the year, management laid the groundwork in a few key areas: loan growth, deposit growth, provision for credit losses, core non-interest income, recurring operating expenses, the running tax rate, and the expectation of a mild recession starting in 2023, then rolling over to 2024. The changes for all of these categories have been minimal, with projected loan growth being 2% per quarter, customer deposit growth of 1% per quarter, provisions for credit losses of $3-$5 million per quarter, core non-interest income of $31-$32m per quarter, recurring operating expenses of $109-$110 million per quarter, a running tax rate of 23-24%, and confirmation of a mild recession for the near future. Additionally, management added an estimate for the net interest margin to be just above 3.20% due to near-

Figure 28: HF Portfolio Bank Holdings Market Value



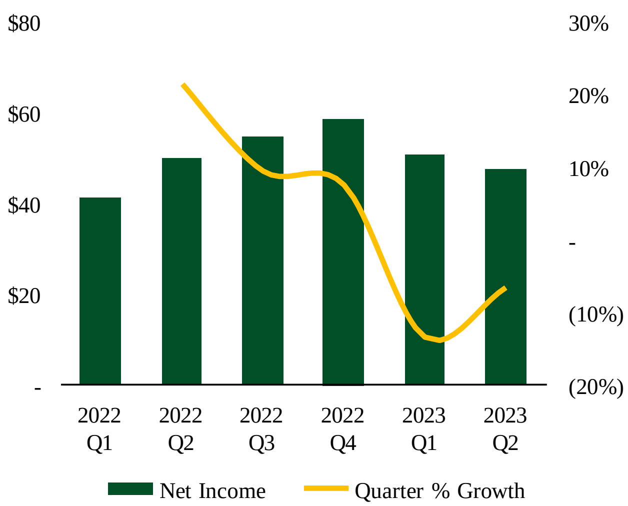
Source: HF Portfolio Holdings

Figure 29: Total Bank Failures in the U.S. (millions)



Source: FDIC

Figure 30: Net Income per Quarter



Source: SEC Filings

term contractions it is seeing as this reduced margin is likely to be temporary in the long term. Finally, the firm gave an update to its charter consolidation plan, confirming that by the end of the year the $20 million consolidation will be completed, and the benefits of said plan will be about $20 million per year in cost reductions.

With the small adjustments being made to guidance throughout the year, and the consistency of said guidance despite the surprise of the already discussed bank failures, it is incredibly likely that through the ladder half of fiscal 2023, management's guidance will be trustworthy, and any error will be nominal. Additionally, the accuracy of management's guidance despite almost unprecedented volatility in the banking markets, is a testament to Heartland Financials' strengthening balance sheet and operational efficiency.

Portfolio Strategy

Heartland Financial is eligible for both the long-only value Tall Firs Portfolio benchmarked on the Russell 3000 and the small-cap growth Alumni Fund Portfolio benchmarked on the Russell 2000. Currently, the group is underweight in financials in both portfolios, with the Tall Firs Portfolio being about 1% underweight and the Alumni Fund being about 6.75% underweight. Heartland Financial an opportunity to invest in a regional bank that operates on the community level. In the Tall Firs Portfolio, the group only sees banking exposure through the "too big to fail" Citigroup. This firm offers important exposure to non-interest services as well as international banking opportunities, but they miss a direct focus on key regional markets that Heartland Financial specializes in. For the Alumni Fund, the group again sees strong non-interest exposure through Evercore and online banking through Axos Financial.

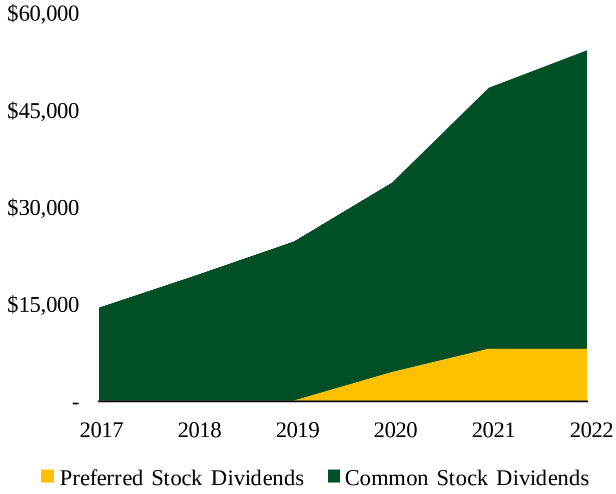
Axos Financial could be argued to be the most similar entity to HTLF in the portfolio, as it operates as a smaller-scale consumer bank relative to giants like Citigroup. However, it utilizes an almost fully online business model, giving it access to the entirety of the country, and yet it relies on real estate loans that are 41% concentrated in California and 25% in New York. Thus, while the two firms operate similarly, there are still massive regions of opportunity we are currently missing out on. HTLF would give the portfolio much-needed exposure to large growing regions that can be accessed via a provenly strong community banking business model whose stock is yet to rebound from overreactions back in March of 2023 fully.

Recent News

US Financial Regulators Green Lit New Rules Aimed at Reducing the Cost of Bank Failures – CNN

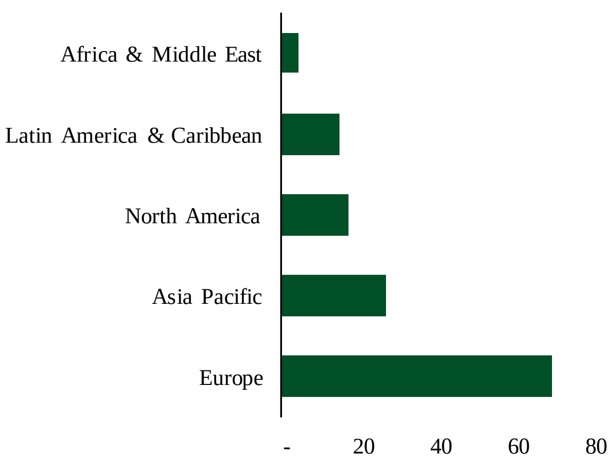
On Tuesday August 29, 2023, US financial regulators signed off on new rules to prepare large and regional banks in the case of failure. New requirements would include banks with over $100 billion in assets issue around $70 billion in long-term debt to assist in absorbing losses if they are at risk of becoming insolvent. If the new rule on long-term debt is finalized after the agencies review comments, the banks would have a three-year transition period before they are required to comply. This proposed rule would be effectively shifting the risk of a banks insolvency away from depositors and over to bondholders and thus, would likely lead to increase bond yields, and contract net interest margins. This proposed regulation would not affect Heartland Financial directly as it doesn't meet the proposed asset size minimum, but the indirect effects could send waves throughout the industry.

Figure 31: HTLF Total Dividends (thousands)



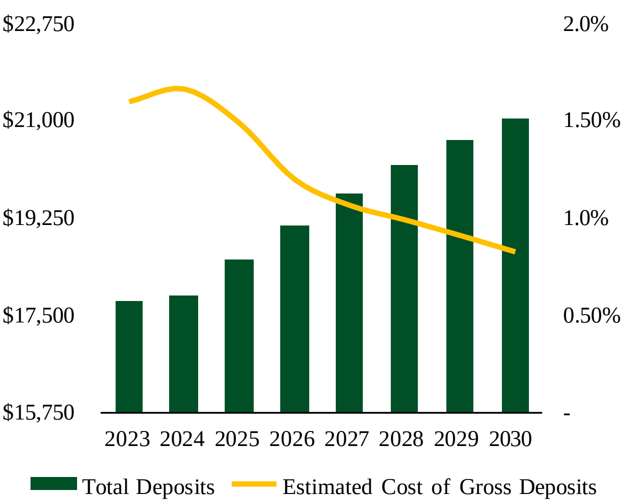
Source: SEC Filings

Figure 32: Net-Zero Banking Alliance Members by Region Worldwide



Source: Statista

Figure 33: HTLF Projected Cost of Gross Deposits (millions)



Source: HTLF Spreads

Heartland Financial USA, INC. ("HTLF") Reports Quarterly and Year to Date Results as of June 30, 2023 – Nasdaq

On July 31, 2023, Heartland Financial released its results for the quarter ending June 30, 2023. Highlights of said results include an increase to the firms noninterest expense of approximately 3% YoY primarily stemming from a 27% increase in credit card expenses, and a $209,000 increase to fraud losses. Additionally, the firm gave an update on significant changes to its loan portfolio by category. There were four main changes in the loan portfolio this quarter: C&I loans increased by 4% since the beginning of the year, commercial real estate lending increased 4% since the start of the year, agriculture loans decreased 9% since the start of the year, and residential real estate loans decreased 3% since the start of the year. Finally, the firm reported a strong return on average assets of 1.02%, up YoY, and a return on average tangible common equity (non-GAAP) of 18.63%, up more than 23%. While an earnings release is of course standard, seeing strong results with positive increases YoY in multiple important valuation metrics in a weakened economic environment is encouraging for the firm moving forward.

Heartland Financial USA, Inc ("HTLF") Announces Common Stock and Series E Preferred Stock Dividends – CBS 42

On July 19, 2023, Heartland Financial announced that its Board of Directors approved a dividend of $175 for Series E Preferred Stock, resulting in a dividend of $0.4375 per depository share. This preferred dividend will be distributed on October 16, 2023 to preferred stockholders on record as of October 2, 2023. Additionally, the firms Board of Directors approved a common stock dividend of $0.30 for the quarter. The dividend is payable on August 25, 2023 to stockholders on record by August 11, 2023, and represents the 40th straight year of either a maintained or increased common stock dividend. With the historical expectation that banking institutions pay dividends to its shareholders, it is encouraging to see that historically in a wide variety of economic environments, HTLF has been able to provide value to its shareholders without issue.

Catalysts

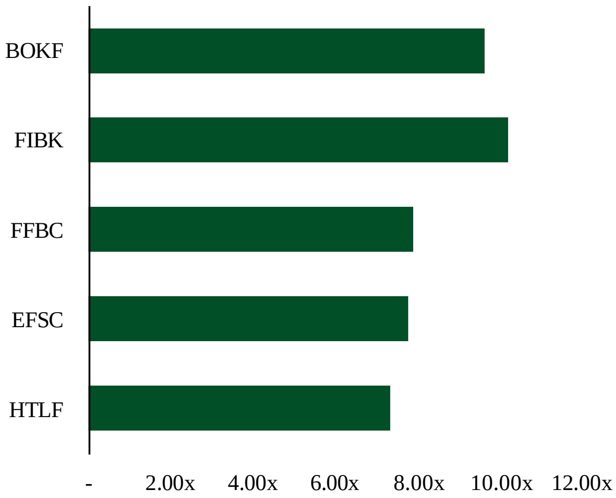
Upside

- With other banks taking on net zero initiatives, HTLF will have the opportunity to continue growing its already strong agriculture portfolio
- Effective branch consolidation will allow for HTLF to lower its efficiency ratio and reduce its back office costs
- HTLF's strength in the Midwest gives it a stable revenue base to utilize in its push for growth in the South and Southwest
- HTLF has a proven track record of dividend growth in a host of economic environments, proving its resiliency through recessionary environments

Downside

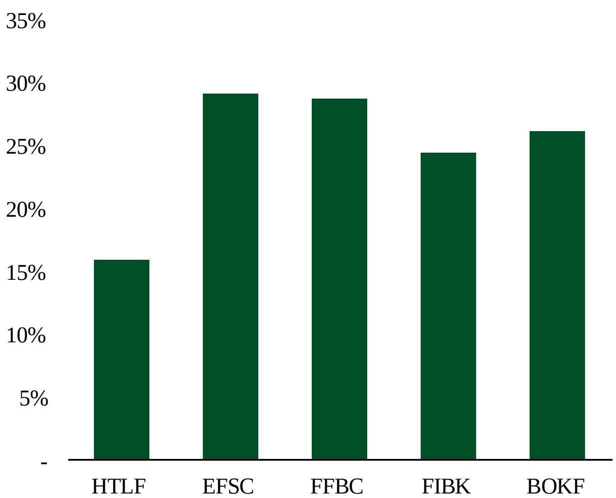
- With depositors moving towards interest-bearing accounts, the cost of deposits for HTLF will likely continue to increase in the near term
- As competition from larger commercial banks continues to increase, regional banks can be at risk if they fail to compete effectively
- As HTLF continues to grow, it may result in an increase in regulatory restrictions that can restrict the banks ability to utilize its deposit base

Figure 34: Comparables P/E



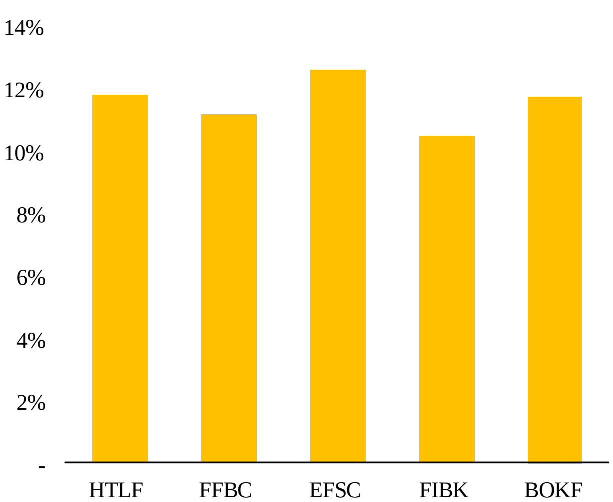
Source: HTLF Spreads

Figure 35: Comparables Current Net Income Margin



Source: HTLF Spreads

Figure 36: Comparable Common Tier 1 Capital Ratio %



Source: S&P Capital IQ

Comparable Analysis

When screening comparable companies for Heartland Financial, it was important to take a multitude of factors into account. With HTLF's unique business model, growth strategies, size, and loan/product offerings, we were prudent in screening companies that operated in similar regions with comparable product offerings and business models. With that in mind, we weighed comparables based on a firm's similarity in customer base, business model, loan/product offerings, and asset size. Additionally, we used a mix of the P/E and P/TBV multiples, each weighted at 50%. We elected to give the Price to Tangible Book Value a 50% weighting as it gives insight into what HTLF's market value is relative to peers in terms of each firms tangible assets. With regional banking's use of physical locations, we feel this metric is an important one to take account of. For the Price to Earnings, we gave this a 50% weighting as it gives a view into how HTLF is trading based off its expected net income relative to peers. By mixing the two weightings, we have a look at HTLF's value from both a tangible balance sheet and income statement point of view. Finally, with the highly competitive banking industry and comparables we feel accurately depict certain aspects of HTLF's business, we gave weight to our relative valuation. However, since no comparable was able to perfectly encompass Heartland Financial across the board, we only gave the model a weighting of 30% in our final valuation.

Enterprise Financial Services Corp – 35%

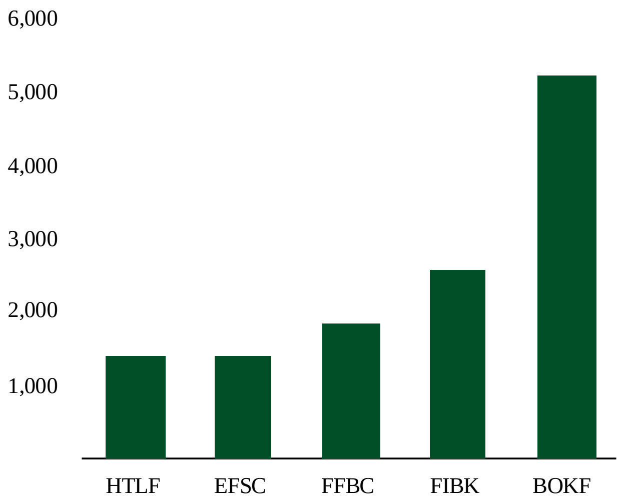
Enterprise Financial Services Corp is headquartered in Clayton, Missouri, and services individuals and corporate customers primarily in Arizona, California, Kansas, Missouri, Nevada, and New Mexico with both banking and wealth management products. The firm has total assets of approximately $13.8 billion, a tier 1 capital ratio of 12% relative to HTLF's 12.05%, and a $11.6 billion deposit base made up of 33% noninterest-bearing relative to HTLF's 28%. EFSC has an identified acquisition growth strategy with two acquisitions in the recent past and a business model that revolves around a "relationship-oriented distribution and sales approach" targeting primarily privately held businesses. Additionally, EFSC has a return on tangible equity of about 18.13% compared to Heartland Financial's 18.07% and a majority of loans focused on "commercial and industrial" areas. Due to these similarities, we included Enterprise Financial Services Corp in our valuation. However, due to the difference in size, securities as a percent of total assets, and smaller deposit base, we have weighed the firm at 35% of total.

First Financial Bancorp– 10%

First Financial Bancorp is headquartered in Cincinnati, Ohio, and services both individuals and businesses with commercial lending, real estate lending, and consumer financing products. The bank primarily serves customers in Ohio, Kentucky, Illinois, and Indiana, operating almost as a very large community bank. The firm has total assets of approximately $17 billion, a tier 1 capital ratio 11.64%, and an approximately $12.8 billion deposit base made up of 28% noninterest-bearing demand deposits. The firm utilizes a strategy dependent on strong customer relationships with consistency throughout economic downturns and it leverages a strong efficiency ratio of about 44%. Due to the bank's similar size to HTLF, capital ratio's, and similar business strategy, we have included it as a comparable company. However, due to the firms incredibly concentrated area(s) of operation as well lack of acquisition activity, we have weighted it at 10% of total.

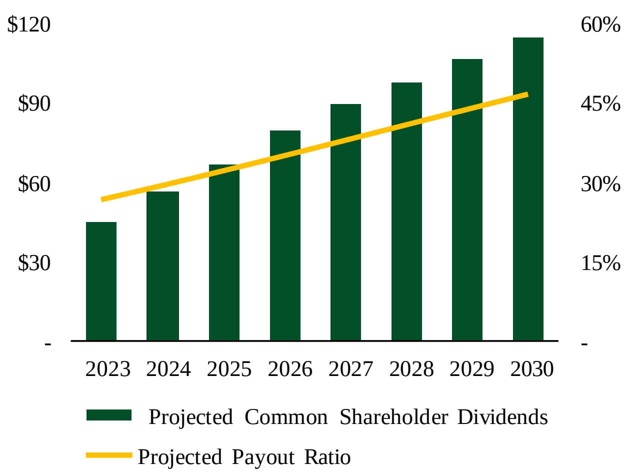
First Interstate BancSystem Inc– 40%

Figure 37: Comparables Equity Value (millions)



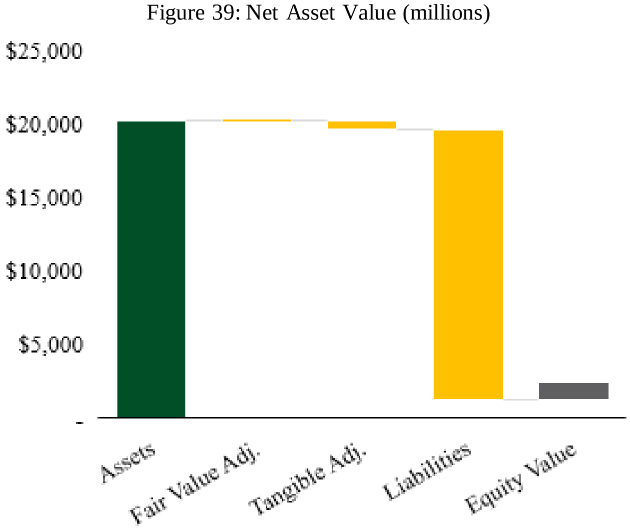
Source: HTLF Spreads

Figure 38: Projected Common Shareholder Dividends and Payout Ratio(millions)



Source: HTLF Spreads

Figure 39: Net Asset Value (millions)



Source: HTLF Spreads

First Interstate BancSystem is headquartered in Billings, Montana, and has customers in numerous states , including Arizona, Colorado, Idaho, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, Oregon, South Dakota, Washington, and Wyoming, with its strongest presence being in Montana and Wyoming. Additionally, the firm has a total asset base of approximately $30 billion, a tier 1 capital ratio of 10.76%, and a noninterest-bearing deposit base of about $6.5 billion, 27.6% of total deposits. The firm operates in each end market with a community banking business model offering real estate, consumer, commercial, agricultural, and other loans to individuals and businesses. Due to the banks incredibly similar operating markets and business model it has been included as a comparable. However, due to its larger asset base and decrease in deposits throughout the fiscal year, it has been weighted at 40% of total.

BOK Financial Corp – 15%

BOK Financial Corp is headquartered in Tulsa, Oklahoma, and services customers in Oklahoma, Texas, New Mexico, Northwest Arkansas, Colorado, Arizona, Kansas, and Missouri. The bank has three principal lines of business, Commercial Banking, Consumer Banking, and Wealth Management. The firm has a total asset base of $49.2 billion, a tier 1 capital ratio of 12.13%, and a noninterest-bearing deposit makeup of about 32% of the total $33 billion deposit base. The firm has developed a long-term strategy of growing its leadership position in Oklahoma through expansion in high-growth markets around the Oklahoma market as well as strategically acquiring companies that bring value to the firm in its end markets. Due to a similar growth strategy as HTLF as well as similar regions of operations in the southwest, BOK Financial Corp has been included as a comparable. However, due to BOK's substantially larger size, and different lines of business, it has been weighted at 15% of total.

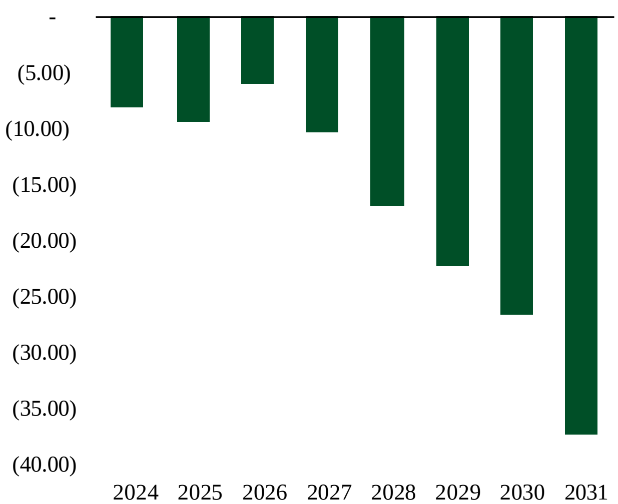
Dividend Discount Model

The dividend discount model makes the assumption that a firm's stock value is derived from the present value of all future dividend payments. As HTLF is a smaller regional bank, its dividend can be seen as in important investment factor by some and thus, we have included the model in our projections. HTLF has either reaffirmed or increased its dividend every year for the last 40 plus years, and in our projections we have maintained this trend. We projected based off of HTLF's payout ratio, a metric defined as total dividends paid to common stockholders divided by net income. We've projected the payout ratio increasing from 27% in Q2 of 2023, up to 51% in the terminal year. While this is somewhat aggressive growth relative to the recent past, we feel that with an increased income base stemming from high rates, the firm will likely be able to distribute an elevated portion of funds back to shareholders. These projections result in a dividend per share of $3.26 in the terminal year and a PV per share (and thus price per share) of $28.36, resulting in a 2.5% overvaluation. We have weighted the dividend discount model at 0% in our final valuation as while Heartland Financial's dividend history is strong, its historically low payout ratio indicates the firm tends to reinvest its profits back into itself in order to grow, rather than distribute earnings back to shareholders. It of course still does distribute funds back to shareholders, but rather a minority of said funds. Thus, for us to weight the DDM would imply that we think this trend would change when it likely will not within the projected timeframe as HTLF has been distributing dividends back to shareholders for more than 40 years.

Net Asset Value

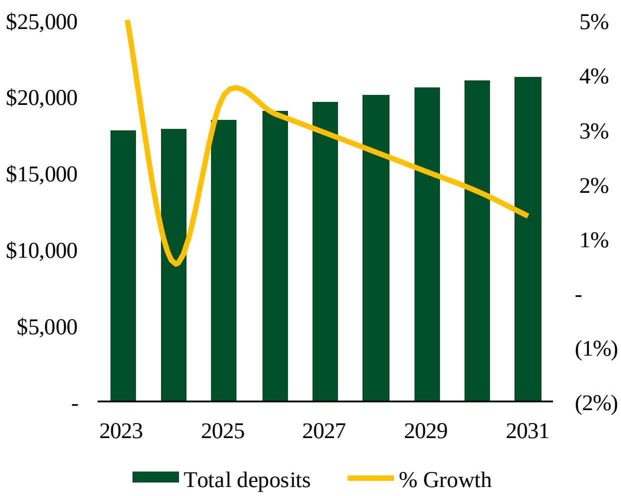
The Net Asset Value model (NAV) takes the fair value of a firms assets less its liabilities to arrive at the fair value of shareholder equity. Additionally, in our

Figure 40: PV of Excess Equity Value



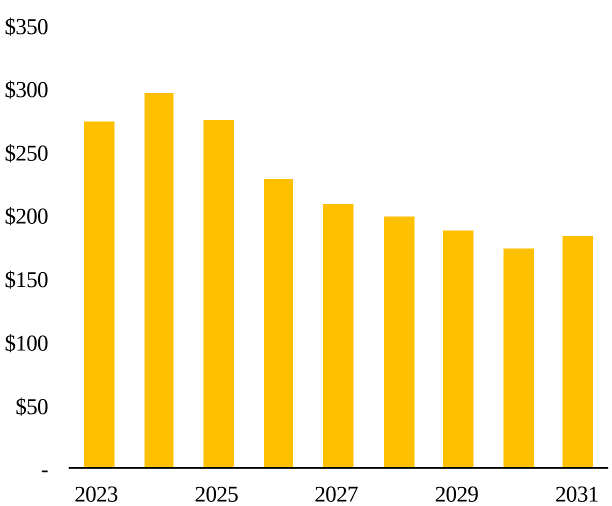
Source: $HTLF Spreads

Figure 41: Total Deposits Projections



Source: $HTLF Spreads

Figure 42: Projected Interest Expense (thousands)



Source: $HTLF Spreads

NAV model, we did not include intangible assets when finding our fair value of shareholder equity as we opted to find tangible equity. The majority of items on the balance sheet are recorded at their fair value except for held-to-maturity securities. On the balance sheet, these securities have an at cost value of about $834 million, however due to rising interest rates the fair value of these securities today as reported by the firm is about $806 million. Taking the fair value of tangible assets less liabilities, we arrive at a fair value of tangible equity of about $1.2 billion, resulting in an implied share price of $28.92, an almost perfectly fairly valued valuation. We weighted the NAV model at 0% in our final valuation as we don't feel the pure fair value of tangible equity is a fully accurate representation of HTLF in the long run. The bank has growth potential that isn't encompassed on the fair value of its assets today, such as $1.3 billion in cash flow from its securities in the next 12 months, and to ignore those would be to ignore the full value of the company.

Excess Returns Analysis

The normal DCF analysis does not work for financial institutions as these companies use debt differently than the model assumes. As such, banks call for a different valuation method, namely the excess returns model. The excess returns model takes a firm's net income after accounting for preferred dividends paid out and looks at how much equity a firm generates over the cost of said equity. The value is then discounted using the cost of equity to work back to present value. After discounting our "excess returns" in projected years, we add the tangible value of equity by taking the book value of equity and subtracting intangible assets. To find the total value of equity we add the discounted value of terminal equity to the tangible book value and the present value of our excess returns as well as the discounted change in equity over the projected years to account for the new equity value the firm creates.

Additionally, we developed a tangible excess returns model which subtracts intangible assets from the equity value when looking at the excess return. Besides this subtraction, all else is projected the same as the typical excess returns mode.

We decided to weight the tangible excess returns model at 70% of our total valuation. We chose to do this as the tangible excess returns model is a more accurate representation of the firms value, especially when said firm is a regional bank that operates out of physical locations. This also allows us to get a snapshot of how the market is undervaluing the industry via the previously discussed relative valuation.

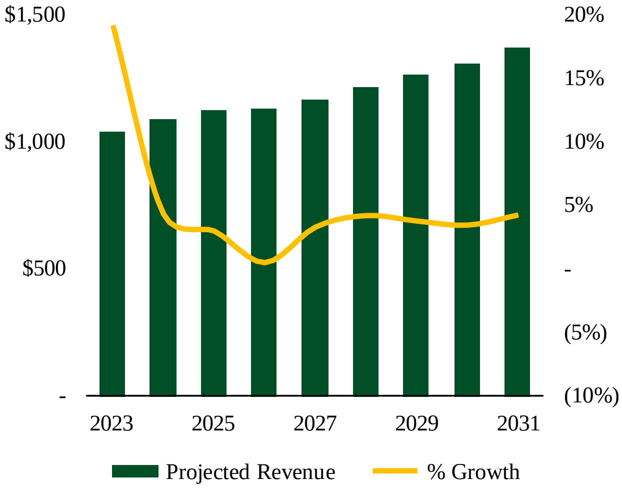
Deposits

We projected deposits based on locations and the guidance management has given stating that the southwest and western regions are projected to grow at a faster pace while the Midwest will have lower but more predictable growth. The majority of the other projections are based off of the deposits projection since banks use the capital from deposits to make loans and are required to stay in line with regulatory ratios based off deposits. In an effort to be as accurate as possible we broke up our projections based on the location and assumed the number of locations to be constant.

As for the type of deposit, we used historical averages of the percent of total deposits for time, demand and savings. We then trended deposits to that historical average and assumed that the percent makeup of deposits would be equivalent across each location as the company does not give that level of breakdown.

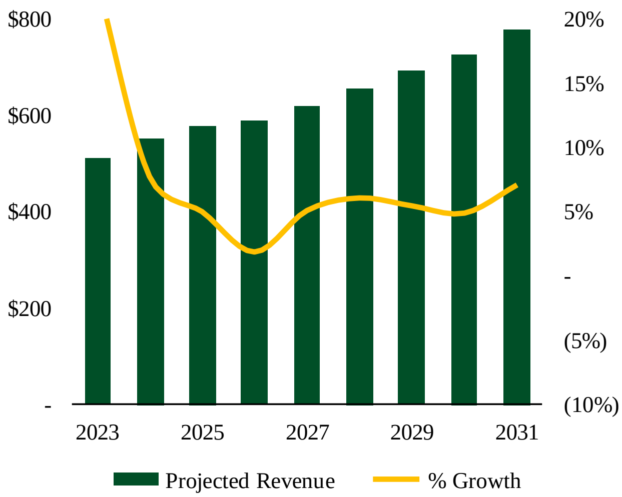
Interest Rates

Figure 43: Projected Revenue (thousands)



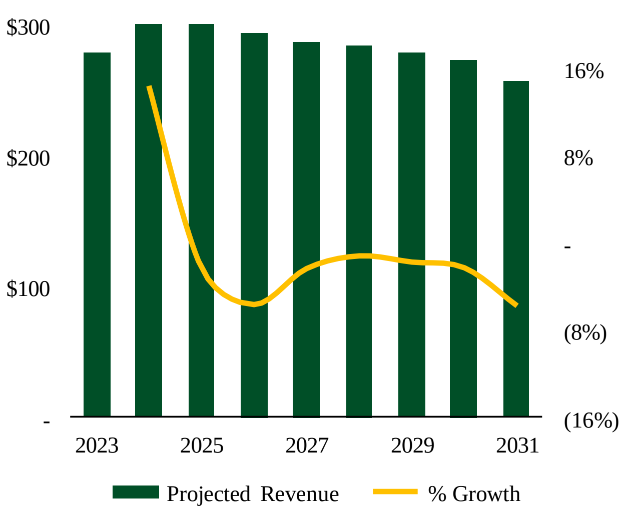
Source: $HTLF Spreads

Figure 44: Projected Loan Income (thousands)



Source: $HTLF Spreads

Figure 45: Securities Income (thousands)



Source: $HTLF Spreads

Since the interest expense is such a vital line item for banks and is almost directly related to the federal funds and SOFR rate, we used futures for SOFR from Pensford to project future SOFR rates.

Interest Expense on Deposits

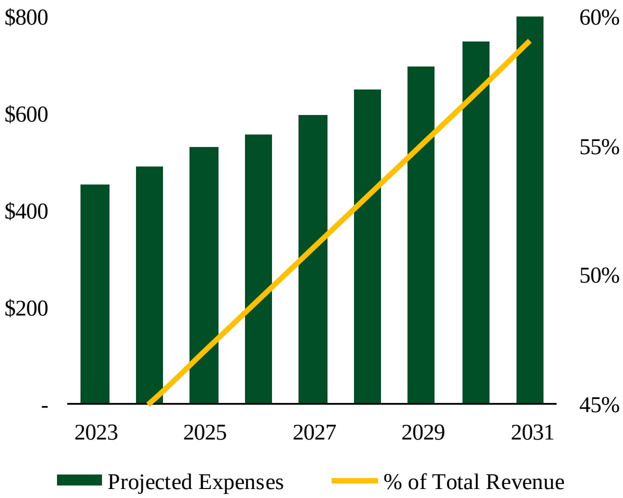
Working off our interest rates projections, we calculated the average spread that the firm was able to get from its deposits and used the historical averages excluding 2021 and 2020 where rates were near zero. From there we assumed that the firms will be able to expand the spread it earns in the near term as rates are at a high level. With that we backed into what the banks interest offer will be to deposits and calculated the expense per location to find its interest expense on deposits.

Revenue Model

We broke our revenue projections into two main sections: interest and non-interest income. Interest income includes all interest related products such as loans and securities and gains or losses on federal funds sold. Non-interest income is made up of fees and service charges. For non-interest income, the two main drivers are interest and fees on loans and securities. HTLF breaks down its loan portfolio with an “average balance sheet” which gives the average loans outstanding per loan product and the average rate on these loans in the period. The main assumptions in the projections are the loan categories percent of total deposits, allowance for credit losses and the average interest rate earned on that product in the period.

For the percent of total deposits, most all loan types on the “average balance sheet” had a renaming in 2019, thus most terminal year percent of totals were three-year historical averages from 2019-2022. This does not include two loan categories, agriculture, and real estate construction. We’ve grown agriculture as a percent of total deposits from 4.75% in Q2 2023, to 10% of total deposits in the terminal year. This is due to the thesis that the agriculture loan portfolio will have the opportunity to grow immensely as Net-Zero commitments constrict larger commercial banks. For real estate construction, we have grown its percent of total deposits from 5.73% in Q2 2023, to 10% in the terminal year. This is done as HTLF has made it clear that in the current economic uncertainty we are facing, it is moving its loan portfolio into one that is more prepared to weather a storm of sorts. Real estate construction loans can be highly cyclical and are typically short term loans used for bridge financing so they face unique risks in economically uncertain times. As the economy improves over time, we felt 10% was a conservative estimate for its percent of total deposits in the terminal year as historically back in 2019 and 2020, it made up more than 20% of total deposits. For the allowance for credit losses, we took three-year historical averages for every loan category except for non-owner occupied real estate, which we rose to 2%, up from .71% in Q2 2023. The raise was taken in an abundance of caution despite HTLF not being entirely dependent on office real estate as non-owner occupied real estate includes office real estate. Over the next two quarters we maintained the current level of allowance for credit losses as the company’s model for this calculation currently involves 66% quantitative forecasting, and 33% economic/quantitative forecasting. This mix gives us confidence that estimates are accurate in the short term. For the average interest rate, we trended current spreads towards HTLF’s average spread in 2018 and 2019 per loan product in the terminal year. We then added these spreads to the previously discussed cost of deposits to arrive at an average interest rate per product. Taking each product multiplied by its average interest rate, we arrived at an implied loan interest income. From here, we subtracted the allowance for credit losses and added back implied fees from the historical error to arrive at a final “interest and fees on loans”.

Figure 46: Non-Interest Expenses



Source: $HTLF Spreads

Figure 47: Beta's

Beta	Levered	Weight
1-Year Daily Regresed	0.99	-
3-Year Daily Regressed	0.87	-
5-Year Daily Regressed	1.11	100.00%
1-Year Weekly Regressed	0.71	-
3-Year Weekly Regressed	0.95	-
5-Year Weekly Regressed	0.97	-
1-Year Vasicek	0.68	-
3-Year Vasicek	0.65	-
5-Year Vasicek	0.82	-
Bottom-up	0.35	-
Weighted Beta		1.11

Source: $HTLF Spreads

Figure 48: Final Valuation

Valuation Method	Price Target	Weight
Excess Returns	40.52	-
Tangible Excess Returns	41.88	70.00%
Dividend Discount Model	23.54	-
Net Asset Value	28.92	-
Relative Valuation	38.81	30.00%
Implied Share Price	40.96	
Current Share Price	29.38	
Undervalued	39.41%	

Source: $HTLF Spreads

For securities, we allocated each taxable and non-taxable securities by historical percent of total deposits. We then projected the yield on each security type by looking at the historical spread and took the historical averages of the years in which we were not in a near-zero rate environment. Then multiplying the total amount of each security type, by its total yield, we arrived at a final "taxable interest on securities" and "nontaxable interest on securities".

For non-interest income, we trended line items in one of two ways. For a majority of line items we trended to conservative growth estimates in the terminal year. However, we followed the growth in our projected loan balances and trust expenses for service charges and fees, loan servicing income, and trust fees as these line items tend to grow in tandem with these items.

Operating Expenses

Interest expense is of course one of the primary expenses for HTLF; however, it only makes up about 33% of total expenses currently and historically takes up less than 10% of total revenues. The other expenses are made up primarily from "salaries and employee benefits". This expense currently makes up about 23% of total revenues, but historically has made up more than 30%. In our projections we have this expense slowly increasing to 29% in 2028, and then approaching an average from 2017-2019 which results in a terminal value of 34% of total revenues. These projections were done as HTLF's consolidation efforts will continue to drive the expense down in the near term, as it has over the last 4 quarters. However, in an effort to maintain our conservatism, we have risen this expense towards the terminal year as the people within a banking organizations can be an incredibly persuasive differentiating factor for customers, especially at the regional level.

One thing to note in our projections is that we have assumed every year after 2023 will have an annual tax rate of the U.S. corporate tax rate, 21%. In 2023, management has given guidance of a run rate between 23 and 24%, thus in Q3 and Q4, we have a tax rate of 23.5% which results in a full-year tax rate of 23.55%. We do not feel this slightly elevated tax rate will continue into perpetuity as historically, HTLF has seen a tax rate between 19% and 20%, hence our corporate 21% tax rate assumption.

Beta

Our beta of 1.11 and was derived by taking the 5-year daily levered beta as we are projecting the equity value. We chose the 5 year daily as we wanted as many data points as possible that were in non-zero rate environments. The 5 year daily gives us access to data in 2018, 2019, 2022, and 2023, all of which are non-zero rate environments.

Recommendation

In March of this year, the regional banking industry took a severe downturn with multiple large entities being seized by the FDIC. Heartland Financial has been lumped into the industry drop due to their size, however, it is well poised for an economic downturn of any sorts. The firm has minimal exposure to office CRE, a diversified lending portfolio, and almost double the regulatory tier 1 capital ratio. With this positioning, HTLF is able to continue optimizing its back-office consolidation strategies, while also pivoting towards growth areas such as agriculture. Due to HTLF's strong dividend yield, strong positioning in the event of an economic downturn, proven resiliency, intrinsic growth opportunities, diverse and granular deposit base, and our group's lack of exposure to financial stocks relative to the benchmark(s) we track, we are recommending the group initiate a position in Heartland Financial with a possible upside of 40%.

Appendix 1 – Relative Valuation

Relative Valuation												
$ in thousands		Valuation		NTM Metric			EV/		Price/			
Ticker	Company Name	Enterprise Value	Equity Value	Revenue	EBT	Net Income	Revenue	EBT	Earnings	Book Value	Tangible Book Value
HTLF	Heartland Financial USA Inc	1,207,348	1,253,067	1,077,528	229,951	171,043	1.12x	5.25x	7.33x	0.67x	0.99x
EFSC	Enterprise Financial Services Corp	1,647,800	1,390,689	619,320	237,300	180,090	2.66x	6.94x	7.72x	0.86x	1.12x
FFBC	First Financial Bancorp	2,699,987	1,846,367	817,790	292,760	234,450	3.30x	9.22x	7.88x	0.86x	1.76x
FIBK	First Interstate Bancsystem Inc	4,773,750	2,581,350	1,042,350	336,610	254,280	4.58x	14.18x	10.15x	0.83x	1.34x
BOKF	BOK Financial Corp	7,688,343	5,223,920	2,081,540	700,610	544,320	3.69x	10.97x	9.60x	1.07x	1.39x
Mean		*3,603,446*	*2,459,079*	*1,127,706*	*359,446*	*276,837*	*3.07x*	*9.31x*	*8.53x*	*0.86x*	*1.32x*
Median		*2,699,987*	*1,846,367*	*1,042,350*	*292,760*	*234,450*	*3.30x*	*9.22x*	*7.88x*	*0.86x*	*1.34x*

Comparable Weightings
35.00%
10.00%
40.00%
15.00%

Multiple	Implied Price	Weight
EV/Revenue	93.22	-
EV/EBT	58.61	-
Price/TBV	38.81	100.00%
Price/Book	38.30	-
Price/Earnings	36.06	-
Price Target	**38.81**	
Current Price	**29.38**	
Undervaluation	**32.11%**	

Statistics Comparison								
$ in thousands			Margins		Growth			
Ticker	Company Name	Debt to Equity Ratio	EBT Margin	Net Margin	Revenue NTM	Revenue NTM +1	Net Income NTM	Net Income NTM +1
HTLF	Heartland Financial USA Inc	(0.05x)	21.34%	15.87%	12.87%	(2.88%)	(19.08%)	(14.22%)
EFSC	Enterprise Financial Services Corp	0.13x	38.32%	29.08%	3.07%	NA	(14.77%)	NA
FFBC	First Financial Bancorp	0.46x	35.80%	28.67%	(0.68%)	NA	(10.13%)	NA
FIBK	First Interstate Bancsystem Inc	0.85x	32.29%	24.39%	(6.38%)	(4.74%)	(13.74%)	(6.87%)
BOKF	BOK Financial Corp	0.47x	33.66%	26.15%	(2.10%)	(3.94%)	(14.77%)	(6.88%)
Mean		*0.37x*	*32.28%*	*24.83%*	*1.36%*	*(3.85%)*	*(14.50%)*	*(9.32%)*
Median		*0.46x*	*33.66%*	*26.15%*	*(0.68%)*	*(3.94%)*	*(14.77%)*	*(6.88%)*

Financials											
$ in thousands			NTM Metric			Growth					
Ticker	Company Name	Revenue	EBT	Net Income	LTM Revenue	Revenue NTM +1	Net Income LTM	Net Income NTM +1	Book Value	Tangible Book Value	Intangible Assets
HTLF	Heartland Financial USA Inc	1,077,528	229,951	171,043	954,633	1,109,478	211,360	199,391	1,858,990	1,261,334	597,656
EFSC	Enterprise Financial Services Corp	619,320	237,300	180,090	600,860	NA	211,310	NA	1,618,233	1,238,525	379,708
FFBC	First Financial Bancorp	817,790	292,760	234,450	823,420	NA	260,870	NA	2,143,419	1,048,929	1,094,490
FIBK	First Interstate Bancsystem Inc	1,042,350	336,610	254,280	1,113,400	1,094,215	294,800	273,040	3,121,200	1,931,200	1,190,000
BOKF	BOK Financial Corp	2,081,540	700,610	544,320	2,126,200	2,166,930	638,620	584,510	4,867,397	3,753,402	1,113,995
Mean		*1,127,706*	*359,446*	*276,837*	*1,123,703*	*1,456,874*	*323,392*	*352,314*	*2,721,848*	*1,846,678*	*875,170*
Median		*1,042,350*	*292,760*	*234,450*	*954,633*	*1,109,478*	*260,870*	*273,040*	*2,143,419*	*1,261,334*	*1,094,490*

Appendix 2 – Excess Return Analysis

Excess Returns *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Interest Revenue	363,658	465,820	514,329	536,612	588,760	674,656	916,487	960,264	988,976	990,599	1,023,900	1,068,900	1,110,216	1,147,747	1,202,968
% YoY Growth	*NA*	*28.09%*	*10.41%*	*4.33%*	*9.72%*	*14.59%*	*35.85%*	*4.78%*	*2.99%*	*.16%*	*3.36%*	*4.39%*	*3.87%*	*3.38%*	*4.81%*
Interest Expenses															
Interest on Deposits	18,279	35,667	63,734	30,287	14,797	56,880	314,241	296,512	274,649	228,163	208,431	198,699	186,473	172,148	182,122
% Total Interest Revenue	9.81%	13.68%	5.89%	2.76%	9.66%	8.43%	34.29%	30.88%	27.77%	23.03%	20.36%	18.59%	16.80%	15.00%	15.14%
Interest on Short-Term Borrowings	678	1,696	1,748	610	471	2,717	6,266	6,126	5,856	5,412	5,125	4,861	4,540	4,168	3,817
% Total Interest Revenue	0.47%	0.38%	0.12%	0.09%	0.46%	0.40%	0.68%	0.64%	0.59%	0.55%	0.50%	0.45%	0.41%	0.36%	0.32%
Interest on Other Borrowings	14,393	14,503	15,118	13,986	12,932	16,823	22,529	22,321	20,501	20,377	20,854	21,605	22,379	23,184	24,104
% Total Interest Revenue	3.99%	3.25%	2.72%	2.41%	2.86%	2.49%	2.46%	2.32%	2.07%	2.06%	2.04%	2.02%	2.02%	2.02%	2.00%
Total Interest Expense	33,350	51,866	80,600	44,883	28,200	76,420	343,036	324,958	301,006	253,952	234,411	225,165	213,392	199,499	210,043
% of Total Interest Revenue	*9.17%*	*11.13%*	*15.67%*	*8.36%*	*4.79%*	*11.33%*	*37.43%*	*33.84%*	*30.44%*	*25.64%*	*22.89%*	*21.07%*	*19.22%*	*17.38%*	*17.46%*
% Growth	*NA*	55.52%	55.40%	(44.31%)	(37.17%)	*170.99%*	*348.88%*	(5.27%)	(7.37%)	(15.63%)	(7.69%)	(3.94%)	(5.23%)	(6.51%)	5.29%
Net Interest Income	**330,308**	**413,954**	**433,729**	**491,729**	**560,560**	**598,236**	**573,451**	**635,305**	**687,971**	**736,647**	**789,489**	**843,735**	**896,824**	**948,248**	**992,925**
% of Total Interest Revenue	***90.83%***	***88.87%***	***84.33%***	***91.64%***	***95.21%***	***88.67%***	***62.57%***	***66.16%***	***69.56%***	***74.36%***	***77.11%***	***78.93%***	***80.78%***	***82.62%***	***82.54%***
Provision (benefit) for Credit Losses	15,563	24,013	16,657	67,066	(17,575)	15,370	17,733	21,328	24,796	27,672	31,532	35,977	40,545	45,201	50,818
% of Total Interest Revenue	*4.28%*	*5.15%*	*3.24%*	*12.50%*	*(2.99%)*	*2.28%*	*1.93%*	*2.22%*	*2.51%*	*2.79%*	*3.08%*	*3.37%*	*3.65%*	*3.94%*	*4.22%*
Net Interest Income After Provsion for Credit Loss	**314,745**	**389,941**	**417,072**	**424,663**	**578,135**	**582,866**	**555,718**	**613,977**	**663,174**	**708,975**	**757,957**	**807,758**	**856,279**	**903,047**	**942,107**
% of Total Interest Revenue	***86.55%***	***83.71%***	***81.09%***	***79.14%***	***98.20%***	***86.39%***	***60.64%***	***63.94%***	***67.06%***	***71.57%***	***74.03%***	***75.57%***	***77.13%***	***78.68%***	***78.32%***
Total Noninterest Revenue	102,022	109,160	116,208	120,291	128,935	128,264	129,741	132,278	137,439	142,732	148,117	153,706	159,891	167,634	169,820
% YoY Growth	*NA*	*7.00%*	*6.46%*	*3.51%*	*7.19%*	*(0.52%)*	*1.15%*	*1.96%*	*3.90%*	*3.85%*	*3.77%*	*3.77%*	*4.02%*	*4.84%*	*1.30%*
Total Revenue	465,680	574,980	630,537	656,903	717,695	802,920	1,046,227	1,092,541	1,126,415	1,133,331	1,172,017	1,222,606	1,270,107	1,315,381	1,372,789
% YoY Growth	*NA*	*23.47%*	*9.66%*	*4.18%*	*9.25%*	*242.14%*	*293.59%*	*4.43%*	*3.10%*	*0.61%*	*3.41%*	*4.32%*	*3.89%*	*3.56%*	*4.36%*
Noninterest Expenses															
Salaries and Employee Benefits	171,407	196,118	200,541	202,668	240,114	254,478	251,750	272,368	290,581	302,193	322,672	347,201	371,705	396,362	425,565
% of Total Revenue	*36.81%*	*34.11%*	*31.80%*	*30.85%*	*33.46%*	*31.69%*	*24.06%*	*24.93%*	*25.80%*	*26.66%*	*27.53%*	*28.40%*	*29.27%*	*30.13%*	*31.00%*
Occupancy	22,244	25,328	25,450	26,554	29,965	28,155	27,164	30,531	33,709	36,161	39,717	43,853	48,073	52,392	57,398
% of Total Revenue	*4.78%*	*4.41%*	*4.04%*	*4.04%*	*4.18%*	*3.51%*	*2.60%*	*2.79%*	*2.99%*	*3.19%*	*3.39%*	*3.59%*	*3.78%*	*3.98%*	*4.18%*
Furniture and Equipment	11,061	12,529	12,100	12,514	13,323	12,499	12,149	13,843	15,463	16,757	18,569	20,664	22,810	25,015	27,559
% of Total Revenue	*2.38%*	*2.18%*	*1.92%*	*1.90%*	*1.86%*	*1.56%*	*1.16%*	*1.27%*	*1.37%*	*1.48%*	*1.58%*	*1.69%*	*1.80%*	*1.90%*	*2.01%*
Professional Fees	36,474	43,510	50,022	54,068	64,600	65,606	61,390	66,850	71,750	75,036	80,539	87,085	93,656	100,297	108,120
% of Total Revenue	*7.83%*	*7.57%*	*7.93%*	*8.23%*	*9.00%*	*8.17%*	*5.87%*	*6.12%*	*6.37%*	*6.62%*	*6.87%*	*7.12%*	*7.37%*	*7.62%*	*7.88%*
FDIC Inusurance Assessments	-	-	-	-	-	-	3,035	-	-	-	-	-	-	-	-
% of Total Revenue	-	-	-	-	-	-	*0.29%*	-	-	-	-	-	-	-	-
Advertising	7,229	9,565	10,028	5,235	7,257	6,221	11,087	11,496	11,769	11,756	12,070	12,500	12,891	13,252	13,728
% of Total Revenue	*1.55%*	*1.66%*	*1.59%*	*0.80%*	*1.01%*	*0.77%*	*1.06%*	*1.05%*	*1.04%*	*1.04%*	*1.03%*	*1.02%*	*1.01%*	*1.01%*	*1.00%*
Core Deposit Intangibles and Customer Relationship Intangibles Amortization	6,077	9,355	11,972	10,670	9,395	7,834	10,462	11,474	12,395	13,039	14,073	15,293	16,525	17,774	19,927
% of Total Revenue	*1.30%*	*1.63%*	*1.90%*	*1.62%*	*1.31%*	*0.98%*	*1.00%*	*1.05%*	*1.10%*	*1.15%*	*1.20%*	*1.25%*	*1.30%*	*1.35%*	*1.45%*
Other Real Estate and Loan Collection Expenses	2,461	3,038	1,035	1,340	990	950	1,319	1,740	2,168	2,558	3,034	3,571	4,132	4,716	5,377
% of Total Revenue	*0.53%*	*0.53%*	*0.16%*	*0.20%*	*0.14%*	*0.12%*	*0.13%*	*0.16%*	*0.19%*	*0.23%*	*0.26%*	*0.29%*	*0.33%*	*0.36%*	*0.39%*
(Gain) Loss on Sales/Valuations of Assets, net	2,475	2,208	(19,422)	5,101	588	(1,047)	123	-	-	-	-	-	-	-	-
% of Total Revenue	*0.53%*	*0.38%*	*(3.08%)*	*0.78%*	*0.08%*	*(0.13%)*	*(0.01%)*	-	-	-	-	-	-	-	-
Acquisition, Integration and Restructuring Costs	-	2,564	3,227	5,381	5,331	7,586	7,316	9,416	11,539	13,453	15,818	18,488	21,272	24,169	27,456
% of Total Revenue	-	*0.45%*	*0.51%*	*0.82%*	*0.74%*	*0.94%*	*0.70%*	*0.86%*	*1.02%*	*1.19%*	*1.35%*	*1.51%*	*1.67%*	*1.84%*	*2.00%*
Partnership Investment in Tax Credit Projects	-	-	-	3,801	6,303	5,040	5,638	6,100	6,509	6,770	7,230	7,780	8,330	8,883	9,539
% of Total Revenue	-	-	-	*0.58%*	*0.88%*	*0.63%*	*0.54%*	*0.56%*	*0.58%*	*0.60%*	*0.62%*	*0.64%*	*0.66%*	*0.68%*	*0.69%*
Other Noninterest Expenses	38,247	49,673	54,208	43,631	53,946	56,055	61,890	68,136	73,864	77,955	84,377	91,943	99,592	107,364	116,455
% of Total Revenue	*8.21%*	*8.64%*	*8.60%*	*6.64%*	*7.52%*	*6.98%*	*5.92%*	*6.24%*	*6.56%*	*6.88%*	*7.20%*	*7.52%*	*7.84%*	*8.16%*	*8.48%*
Total Noninterest Expense	297,675	353,888	349,161	370,963	431,812	443,377	453,323	491,955	529,747	555,678	598,098	648,379	698,986	750,223	811,124
% of Total Revenue	*63.92%*	*61.55%*	*55.38%*	*56.47%*	*60.17%*	*55.22%*	*43.33%*	*45.03%*	*47.03%*	*49.03%*	*51.03%*	*53.03%*	*55.03%*	*57.03%*	*59.09%*
Income Before Income Taxes	**119,092**	**145,213**	**184,119**	**173,991**	**275,258**	**267,753**	**232,136**	**254,300**	**270,866**	**296,029**	**307,975**	**313,084**	**317,184**	**320,458**	**300,804**
% of Total Revenue	*25.57%*	*25.26%*	*29.20%*	*26.49%*	*38.35%*	*33.35%*	*22.19%*	*23.28%*	*24.05%*	*26.12%*	*26.28%*	*25.61%*	*24.97%*	*24.36%*	*21.91%*
Income Taxes	43,820	28,215	34,990	36,053	55,335	55,573	54,860	53,403	56,882	62,166	64,675	65,748	66,609	67,296	63,169
Effective Tax Rate	*36.80%*	*19.43%*	*19.00%*	*20.72%*	*20.10%*	*20.76%*	*23.63%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*
Net Income (Loss)	**75,272**	**116,998**	**149,129**	**137,938**	**219,923**	**212,180**	**177,275**	**200,897**	**213,984**	**233,863**	**243,301**	**247,336**	**250,575**	**253,162**	**237,635**
% of Total Revenue	*16.16%*	*20.35%*	*23.65%*	*21.00%*	*30.64%*	*26.43%*	*16.94%*	*18.39%*	*19.00%*	*20.64%*	*20.76%*	*20.23%*	*19.73%*	*19.25%*	*17.31%*
Preferred Dividends	(58)	(39)	-	(4,451)	(8,050)	(8,050)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)
% of Total Revenue	*0.01%*	*0.01%*	*0.00%*	*0.68%*	*1.12%*	*1.00%*	*0.77%*	*0.74%*	*0.71%*	*0.71%*	*0.69%*	*0.66%*	*0.63%*	*0.61%*	*0.75%*
Net Income (Loss) Attributable to Common Stockholders	**75,214**	**116,959**	**149,129**	**133,487**	**211,873**	**204,130**	**169,226**	**192,848**	**205,935**	**225,814**	**235,252**	**239,287**	**242,526**	**245,113**	**229,586**
% of Total Revenue	*16.15%*	*20.34%*	*23.65%*	*20.32%*	*29.52%*	*25.42%*	*16.17%*	*17.65%*	*18.28%*	*19.92%*	*20.07%*	*19.57%*	*19.09%*	*18.63%*	*16.72%*
Dividends Paid to Common Stockholders	14,499	19,318	24,607	29,468	40,509	46,199	45,193	56,652	66,200	79,020	89,144	97,668	106,061	114,236	113,420
Changes to Retained Earnings	60,715	97,641	124,522	104,019	171,364	157,931	124,033	136,196	139,734	146,794	146,108	141,619	136,466	130,877	116,166
Changes to Preferred Stock	(419)	(938)	-	110,705	-	-	-	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*0.56%*	*0.80%*	-	*82.93%*	-	-	-	-	-	-	-	-	-	-	-
Changes to Common Stock	3,833	4,524	2,227	5,390	181	192	178	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*5.10%*	*3.87%*	*1.49%*	*4.04%*	*0.09%*	*0.09%*	*0.11%*	-	-	-	-	-	-	-	-
Changes to Capital Surplus	175,333	239,386	96,762	222,226	9,873	9,008	11,779	13,756	14,653	16,014	16,660	16,936	17,158	17,335	16,272
% Net Income Attributable Common Stockholders	*233.11%*	*204.68%*	*64.88%*	*166.48%*	*4.66%*	*4.41%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*
Misc. Change In Equity	-	280	(1,272)	(14,891)	-	-	-	-	-	-	-	-	-	-	
% Net Income Attributable Common Stockholders	-	*0.24%*	*0.85%*	*11.16%*	-	-	-	-	-	-	-	-	-	-	-
Change in Accumulated Other Comprehensive Income (Loss)	11,079	(7,175)	30,723	73,645	(78,471)	(614,254)	44,766	-	-	-	-	-	-	-	
% Net Income Attributable Common Stockholders	*14.73%*	*6.13%*	*20.60%*	*55.17%*	*37.04%*	*300.91%*	*26.45%*	-	-	-	-	-	-	-	-
Beginning BV of Common Equity	740,916	991,457	1,325,175	1,578,137	2,079,231	2,182,178	1,735,055	1,915,811	2,065,763	2,220,150	2,382,958	2,545,726	2,704,281	2,857,905	3,006,117
Ending BV of Common Equity	991,457	1,325,175	1,578,137	2,079,231	2,182,178	1,735,055	1,915,811	2,065,763	2,220,150	2,382,958	2,545,726	2,704,281	2,857,905	3,006,117	3,138,556
Cost of Equity	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%
Equity Cost	78,237	104,693	139,932	166,643	219,556	230,427	183,213	202,300	218,134	234,437	251,628	268,816	285,559	301,780	317,431
Excess Equity Return	**(3,023)**	**12,266**	**9,197**	**(33,156)**	**(7,683)**	**(26,297)**	**(13,987)**	**(9,452)**	**(12,199)**	**(8,623)**	**(16,377)**	**(29,529)**	**(43,032)**	**(56,668)**	**(87,845)**
Cummulative Cost of Equity	1.11	1.11	1.11	1.11	1.11	1.11	1.05	1.22	1.35	1.49	1.65	1.83	2.02	2.23	2.47
Return on Equity	8.68%	10.10%	10.27%	7.30%	9.94%	10.42%	9.27%	9.69%	9.61%	9.81%	9.55%	9.12%	8.72%	8.36%	7.47%
Present Value								**(8,131)**	**(9,492)**	**(6,068)**	**(10,424)**	**(17,001)**	**(22,409)**	**(26,691)**	**(37,424)**
								1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5

Implied Efficiency Ratio *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Revenue	465,680	574,980	630,537	656,903	717,695	802,920	1,046,227	1,092,541	1,126,415	1,133,331	1,172,017	1,222,606	1,270,107	1,315,381	1,372,789
% Growth	*NA*	*23.47%*	*9.66%*	*4.18%*	*9.25%*	*36.32%*	*91.53%*	*4.43%*	*3.10%*	*0.61%*	*3.41%*	*4.32%*	*3.89%*	*3.56%*	*4.36%*
Noninterest expenses	297,675	353,888	349,161	370,963	431,812	443,377	453,323	491,955	529,747	555,678	598,098	648,379	698,986	750,223	811,124
% Growth	*NA*	*18.88%*	*-1.34%*	*6.24%*	*16.40%*	*9.87%*	*8.47%*	*8.52%*	*7.68%*	*4.89%*	*7.63%*	*8.41%*	*7.81%*	*7.33%*	*8.12%*
Efficiency Ratio	63.92%	61.55%	55.38%	56.47%	60.17%	55.22%	43.33%	45.03%	47.03%	49.03%	51.03%	53.03%	55.03%	57.03%	59.09%

Appendix 3 – Tangible Excess Returns

Excess Returns *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Interest Revenue	363,658	465,820	514,329	536,612	588,760	674,656	916,487	960,264	988,976	990,599	1,023,900	1,068,900	1,110,216	1,147,747	1,202,968
% YoY Growth	*NA*	*28.09%*	*10.41%*	*4.33%*	*9.72%*	*14.59%*	*35.85%*	*4.78%*	*2.99%*	*0.16%*	*3.36%*	*4.39%*	*3.87%*	*3.38%*	*4.81%*
Interest Expenses															
Interest on Deposits	18,279	35,667	63,734	30,287	14,797	56,880	314,241	296,512	274,649	228,163	208,431	198,699	186,473	172,148	182,122
% Total Interest Revenue	*9.81%*	*13.68%*	*5.89%*	*2.76%*	*9.66%*	*8.43%*	*34.29%*	*30.88%*	*27.77%*	*23.03%*	*20.36%*	*18.59%*	*16.80%*	*15.00%*	*15.14%*
Interest on Short-Term Borrowings	678	1,696	1,748	610	471	2,717	6,266	6,126	5,856	5,412	5,125	4,861	4,540	4,168	3,817
% Total Interest Revenue	*0.47%*	*0.38%*	*0.12%*	*0.09%*	*0.46%*	*0.40%*	*0.68%*	*0.64%*	*0.59%*	*0.55%*	*0.50%*	*0.45%*	*0.41%*	*0.36%*	*0.32%*
Interest on Other Borrowings	14,393	14,503	15,118	13,986	12,932	16,823	22,529	22,321	20,501	20,377	20,854	21,605	22,379	23,184	24,104
% Total Interest Revenue	*3.99%*	*3.25%*	*2.72%*	*2.41%*	*2.86%*	*2.49%*	*2.46%*	*2.32%*	*2.07%*	*2.06%*	*2.04%*	*2.02%*	*2.02%*	*2.02%*	*2.00%*
Total Interest Expense	33,350	51,866	80,600	44,883	28,200	76,420	343,036	324,958	301,006	253,952	234,411	225,165	213,392	199,499	210,043
% of Total Interest Revenue	*9.17%*	*11.13%*	*15.67%*	*8.36%*	*4.79%*	*11.33%*	*37.43%*	*33.84%*	*30.44%*	*25.64%*	*22.89%*	*21.07%*	*19.22%*	*17.38%*	*17.46%*
% Growth	*NA*	*55.52%*	*55.40%*	*-44.31%*	*-37.17%*	*170.99%*	*348.88%*	*-5.27%*	*-7.37%*	*-15.63%*	*-7.69%*	*-3.94%*	*-5.23%*	*-6.51%*	*5.29%*
Net Interest Income	**330,308**	**413,954**	**433,729**	**491,729**	**560,560**	**598,236**	**573,451**	**635,305**	**687,971**	**736,647**	**789,489**	**843,735**	**896,824**	**948,248**	**992,925**
% of Total Interest Revenue	***90.83%***	***88.87%***	***84.33%***	***91.64%***	***95.21%***	***88.67%***	***62.57%***	***66.16%***	***69.56%***	***74.36%***	***77.11%***	***78.93%***	***80.78%***	***82.62%***	***82.54%***
Provision (benefit) for Credit Losses	15,563	24,013	16,657	67,066	(17,575)	15,370	17,733	21,328	24,796	27,672	31,532	35,977	40,545	45,201	50,818
% of Total Interest Revenue	*4.28%*	*5.15%*	*3.24%*	*12.50%*	*(2.99%)*	*2.28%*	*1.93%*	*2.22%*	*2.51%*	*2.79%*	*3.08%*	*3.37%*	*3.65%*	*3.94%*	*4.22%*
Net Interest Income After Provsion for Credit Loss	**314,745**	**389,941**	**417,072**	**424,663**	**578,135**	**582,866**	**555,718**	**613,977**	**663,174**	**708,975**	**757,957**	**807,758**	**856,279**	**903,047**	**942,107**
% of Total Interest Revenue	***86.55%***	***83.71%***	***81.09%***	***79.14%***	***98.20%***	***86.39%***	***60.64%***	***63.94%***	***67.06%***	***71.57%***	***74.03%***	***75.57%***	***77.13%***	***78.68%***	***78.32%***
Total Noninterest Revenue	102,022	109,160	116,208	120,291	128,935	128,264	129,741	132,278	137,439	142,732	148,117	153,706	159,891	167,634	169,820
% Growth	*NA*	*7.00%*	*6.46%*	*3.51%*	*7.19%*	*-0.52%*	*1.15%*	*1.96%*	*3.90%*	*3.85%*	*3.77%*	*3.77%*	*4.02%*	*4.84%*	*1.30%*
Noninterest Expenses															
Salaries and Employee Benefits	171,407	196,118	200,541	202,668	240,114	254,478	251,750	272,368	290,581	302,193	322,672	347,201	371,705	396,362	425,565
% of Total Revenue	*36.81%*	*34.11%*	*31.80%*	*30.85%*	*33.46%*	*31.69%*	*24.06%*	*24.93%*	*25.80%*	*26.66%*	*27.53%*	*28.40%*	*29.27%*	*30.13%*	*31.00%*
Occupancy	22,244	25,328	25,450	26,554	29,965	28,155	27,164	30,531	33,709	36,161	39,717	43,853	48,073	52,392	57,398
% of Total Revenue	*4.78%*	*4.41%*	*4.04%*	*4.04%*	*4.18%*	*3.51%*	*2.60%*	*2.79%*	*2.99%*	*3.19%*	*3.39%*	*3.59%*	*3.78%*	*3.98%*	*4.18%*
Furniture and Equipment	11,061	12,529	12,100	12,514	13,323	12,499	12,149	13,843	15,463	16,757	18,569	20,664	22,810	25,015	27,559
% of Total Revenue	*2.38%*	*2.18%*	*1.92%*	*1.90%*	*1.86%*	*1.56%*	*1.16%*	*1.27%*	*1.37%*	*1.48%*	*1.58%*	*1.69%*	*1.80%*	*1.90%*	*2.01%*
Professional Fees	36,474	43,510	50,022	54,068	64,600	65,606	61,390	66,850	71,750	75,036	80,539	87,085	93,656	100,297	108,120
% of Total Revenue	*7.83%*	*7.57%*	*7.93%*	*8.23%*	*9.00%*	*8.17%*	*5.87%*	*6.12%*	*6.37%*	*6.62%*	*6.87%*	*7.12%*	*7.37%*	*7.62%*	*7.88%*
FDIC Inusurance Assessments	-	-	-	-	-	-	3,035	-	-	-	-	-	-	-	-
% of Total Revenue	-	-	-	-	-	-	*0.29%*	-	-	-	-	-	-	-	-
Advertising	7,229	9,565	10,028	5,235	7,257	6,221	11,087	11,496	11,769	11,756	12,070	12,500	12,891	13,252	13,728
% of Total Revenue	*1.55%*	*1.66%*	*1.59%*	*0.80%*	*1.01%*	*0.77%*	*1.06%*	*1.05%*	*1.04%*	*1.04%*	*1.03%*	*1.02%*	*1.01%*	*1.01%*	*1.00%*
Core Deposit Intangibles and Customer Relationship Intangibles Amortization	6,077	9,355	11,972	10,670	9,395	7,834	10,462	11,474	12,395	13,039	14,073	15,293	16,525	17,774	19,927
% of Total Revenue	*1.30%*	*1.63%*	*1.90%*	*1.62%*	*1.31%*	*0.98%*	*1.00%*	*1.05%*	*1.10%*	*1.15%*	*1.20%*	*1.25%*	*1.30%*	*1.35%*	*1.45%*
Other Real Estate and Loan Collection Expenses	2,461	3,038	1,035	1,340	990	950	1,319	1,740	2,168	2,558	3,034	3,571	4,132	4,716	5,377
% of Total Revenue	*0.53%*	*0.53%*	*0.16%*	*0.20%*	*0.14%*	*0.12%*	*0.13%*	*0.16%*	*0.19%*	*0.23%*	*0.26%*	*0.29%*	*0.33%*	*0.36%*	*0.39%*
(Gain) Loss on Sales/Valuations of Assets, net	2,475	2,208	(19,422)	5,101	588	(1,047)	123	-	-	-	-	-	-	-	-
% of Total Revenue	*0.53%*	*0.38%*	*(3.08%)*	*0.78%*	*0.08%*	*(0.13%)*	*(0.01%)*	-	-	-	-	-	-	-	-
Acquisition, Integration and Restructuring Costs	-	2,564	3,227	5,381	5,331	7,586	7,316	9,416	11,539	13,453	15,818	18,488	21,272	24,169	27,456
% of Total Revenue	-	*0.45%*	*0.51%*	*0.82%*	*0.74%*	*0.94%*	*0.70%*	*0.86%*	*1.02%*	*1.19%*	*1.35%*	*1.51%*	*1.67%*	*1.84%*	*2.00%*
Partnership Investment in Tax Credit Projects	-	-	-	3,801	6,303	5,040	5,638	6,100	6,509	6,770	7,230	7,780	8,330	8,883	9,539
% of Total Revenue	-	-	-	*0.58%*	*0.88%*	*0.63%*	*0.54%*	*0.56%*	*0.58%*	*0.60%*	*0.62%*	*0.64%*	*0.66%*	*0.68%*	*0.69%*
Other Noninterest Expenses	38,247	49,673	54,208	43,631	53,946	56,055	61,890	68,136	73,864	77,955	84,377	91,943	99,592	107,364	116,455
% of Total Revenue	*8.21%*	*8.64%*	*8.60%*	*6.64%*	*7.52%*	*6.98%*	*5.92%*	*6.24%*	*6.56%*	*6.88%*	*7.20%*	*7.52%*	*7.84%*	*8.16%*	*8.48%*
Total Noninterest Expense	297,675	353,888	349,161	370,963	431,812	443,377	453,323	491,955	529,747	555,678	598,098	648,379	698,986	750,223	811,124
% of Total Revenue	*63.92%*	*61.55%*	*55.38%*	*56.47%*	*60.17%*	*55.22%*	*43.33%*	*45.03%*	*47.03%*	*49.03%*	*51.03%*	*53.03%*	*55.03%*	*57.03%*	*59.09%*
Income Before Income Taxes	**119,092**	**145,213**	**184,119**	**173,991**	**275,258**	**267,753**	**232,136**	**254,300**	**270,866**	**296,029**	**307,975**	**313,084**	**317,184**	**320,458**	**300,804**
% of Total Revenue	*25.57%*	*25.26%*	*29.20%*	*26.49%*	*38.35%*	*33.35%*	*22.19%*	*23.28%*	*24.05%*	*26.12%*	*26.28%*	*25.61%*	*24.97%*	*24.36%*	*21.91%*
Income Taxes	43,820	28,215	34,990	36,053	55,335	55,573	54,860	53,403	56,882	62,166	64,675	65,748	66,609	67,296	63,169
Effective Tax Rate	*36.80%*	*19.43%*	*19.00%*	*20.72%*	*20.10%*	*20.76%*	*23.63%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*	*21.00%*
Net Income (Loss)	**75,272**	**116,998**	**149,129**	**137,938**	**219,923**	**212,180**	**177,275**	**200,897**	**213,984**	**233,863**	**243,301**	**247,336**	**250,575**	**253,162**	**237,635**
% of Total Revenue	*16.16%*	*20.35%*	*23.65%*	*21.00%*	*30.64%*	*26.43%*	*16.94%*	*18.39%*	*19.00%*	*20.64%*	*20.76%*	*20.23%*	*19.73%*	*19.25%*	*17.31%*
Preferred Dividends	(58)	(39)	-	(4,451)	(8,050)	(8,050)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)	(8,049)
% of Total Revenue	0.01%	0.01%	-	0.68%	1.12%	*1.00%*	0.77%	0.74%	0.71%	0.71%	0.69%	0.66%	0.63%	0.61%	0.75%
Net Income (Loss) Attributable to Common Stockholders	**75,214**	**116,959**	**149,129**	**133,487**	**211,873**	**204,130**	**169,226**	**192,848**	**205,935**	**225,814**	**235,252**	**239,287**	**242,526**	**245,113**	**229,586**
% of Total Revenue	*16.15%*	*20.34%*	*23.65%*	*20.32%*	*29.52%*	*25.42%*	*16.17%*	*17.65%*	*18.28%*	*19.92%*	*20.07%*	*19.57%*	*19.09%*	*18.63%*	*16.72%*
Current EPS (Common)	2.65	3.52	4.14	3.58	5.01	4.80	3.97	4.52	4.83	5.29	5.52	5.61	5.69	5.75	5.38
Current Dividends Per Share (Common)	0.51	0.59	0.68	0.80	0.96	1.09	1.06	1.33	1.55	1.85	2.09	2.29	2.49	2.68	2.66
Retention Ratio	*80.75%*	*83.24%*	*83.57%*	*77.65%*	*80.84%*	*77.29%*	*73.29%*	*70.62%*	*67.85%*	*65.01%*	*62.11%*	*59.18%*	*56.27%*	*53.39%*	*50.60%*
Payout Ratio	*19.25%*	*16.76%*	*16.43%*	*22.35%*	*19.16%*	*22.71%*	*26.71%*	*29.38%*	*32.15%*	*34.99%*	*37.89%*	*40.82%*	*43.73%*	*46.61%*	*49.40%*
Dividends Paid to Common Stockholders	14,499	19,318	24,607	29,468	40,509	46,199	45,193	56,652	66,200	79,020	89,144	97,668	106,061	114,236	113,420
Changes to Retained Earnings	60,715	97,641	124,522	104,019	171,364	157,931	124,033	136,196	139,734	146,794	146,108	141,619	136,466	130,877	116,166
Changes to Preferred Stock	(419)	(938)	-	110,705	-	-	-	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*0.56%*	*0.80%*	-	*82.93%*	-	-	-	-	-	-	-	-	-	-	-
Changes to Common Stock	3,833	4,524	2,227	5,390	181	192	178	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*5.10%*	*3.87%*	*1.49%*	*4.04%*	*0.09%*	*0.09%*	*0.11%*	-	-	-	-	-	-	-	-
Changes to Capital Surplus	175,333	239,386	96,762	222,226	9,873	9,008	11,779	13,756	14,653	16,014	16,660	16,936	17,158	17,335	16,272
% Net Income Attributable Common Stockholders	*233.11%*	*204.68%*	*64.88%*	*166.48%*	*4.66%*	*4.41%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*	*6.85%*
Misc. Change In Equity	-	280	(1,272)	(14,891)	-	-	-	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	-	*0.24%*	*0.85%*	*11.16%*	-	-	-	-	-	-	-	-	-	-	-
Change in Accumulated Other Comprehensive Income (Loss)	11,079	(7,175)	30,723	73,645	(78,471)	(614,254)	44,766	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*14.73%*	*6.13%*	*20.60%*	*55.17%*	*37.04%*	*300.91%*	*26.45%*	-	-	-	-	-	-	-	-
Change in Goodwill	108,916	155,053	54,677	129,660	-	-	-	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*144.81%*	*132.57%*	*36.66%*	*97.13%*	-	-	-	-	-	-	-	-	-	-	-
Change in Intangible Assets	12,428	12,276	1,209	(6,305)	(9,395)	(7,834)	(3,503)	-	-	-	-	-	-	-	-
% Net Income Attributable Common Stockholders	*16.52%*	*10.50%*	*0.81%*	*(4.72%)*	*(4.43%)*	*(3.84%)*	-	-	-	-	-	-	-	-	-
Beginning BV of Tangible Common Equity	590,442	719,639	886,028	1,083,104	1,460,843	1,573,185	1,133,896	1,318,155	1,468,107	1,622,494	1,785,302	1,948,070	2,106,625	2,260,249	2,408,461
Ending BV of Tangible Common Equity	719,639	886,028	1,083,104	1,460,843	1,573,185	1,133,896	1,318,155	1,468,107	1,622,494	1,785,302	1,948,070	2,106,625	2,260,249	2,408,461	2,540,900
Cost of Equity	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%	10.56%
Tangible Equity Cost	62,348	75,990	93,560	114,370	154,258	166,120	119,734	139,191	155,025	171,327	188,519	205,706	222,449	238,671	254,321
Excess Tangible Equity Return	**12,866**	**40,969**	**55,569**	**19,117**	**57,615**	**38,010**	**49,493**	**53,657**	**50,910**	**54,487**	**46,733**	**33,581**	**20,077**	**6,442**	**(24,735)**
Cummulative Cost of Equity	1.11	1.11	1.11	1.11	1.11	1.11	1.05	1.22	1.35	1.49	1.65	1.83	2.02	2.23	2.47
Return on Tangible Equity	11.48%	14.57%	15.15%	10.49%	13.97%	15.08%	13.80%	13.84%	13.33%	13.25%	12.60%	11.80%	11.11%	10.50%	9.28%
Present Value								**46,157**	**39,611**	**38,345**	**29,747**	**19,334**	**10,455**	**3,034**	**(10,538)**
								1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5

Appendix 4 – Revenue Model

Total Revenue *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Revenue	465,680	574,980	630,537	656,903	717,695	802,920	1,046,227	1,092,541	1,126,415	1,133,331	1,172,017	1,222,606	1,270,107	1,315,381	1,372,789
% Growth	*NA*	*23.47%*	*9.66%*	*4.18%*	*9.25%*	*11.87%*	*30.30%*	*4.43%*	*3.10%*	*0.61%*	*3.41%*	*4.32%*	*3.89%*	*3.56%*	*4.36%*
														CAGR	3.45%

Interest Income *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Interest and Fees on Loans	304,006	393,871	424,615	424,941	444,137	477,970	629,214	600,690.27	630,844.82	642,665.67	675,464.83	716,555.49	755,715.71	792,748.25	848,999.5
% Growth	*NA*	*7.81%*	*0.08%*	*4.52%*	*7.62%*	*7.62%*	*31.64%*	*(4.53%)*	*5.02%*	*1.87%*	*5.10%*	*6.08%*	*5.47%*	*4.90%*	*7.10%*
% of Total Revenue	*108.31%*	*91.15%*	*82.62%*	*82.77%*	*81.18%*	*NA*	*68.65%*	*62.55%*	*63.79%*	*64.88%*	*65.97%*	*67.04%*	*68.07%*	*69.07%*	*70.58%*
Taxable Interest on Securities	38,365	54,131	73,147	98,263	125,01	169,54	246,87	306,022	305,523	296,065	295,895	298,649	299,851	299,593	296,62
% Growth	*NA*	*35.13%*	*34.34%*	*27.22%*	*35.62%*	*35.62%*	*45.61%*	*23.96%*	*(0.16%)*	*(3.10%)*	*(0.06%)*	*0.93%*	*0.40%*	*(0.09%)*	*(0.99%*
% of Total Revenue	*14.89%*	*15.70%*	*19.11%*	*23.30%*	*28.80%*	*NA*	*26.94%*	*31.87%*	*30.89%*	*29.89%*	*28.90%*	*27.94%*	*27.01%*	*26.10%*	*24.66%*
Nontaxable Interest on Securities	19,698	14,120	9,868	12,484	19,268	24,006	33,368	46,520	45,577	44,837	45,508	46,665	47,618	48,374	50,312
% Growth	*NA*	*(30.11%)*	*26.51%*	*54.34%*	*24.59%*	*24.59%*	*39.00%*	*39.42%*	*(2.03%)*	*(1.63%)*	*1.50%*	*2.54%*	*2.04%*	*1.59%*	*4.01%*
% of Total Revenue	*3.88%*	*2.12%*	*2.43%*	*3.59%*	*4.08%*	*NA*	*3.64%*	*4.84%*	*4.61%*	*4.53%*	*4.44%*	*4.37%*	*4.29%*	*4.21%*	*4.18%*
Interest on Federal Funds Sold	42	-	4	-	1	11		-	-	-	-	-		-	
% Growth	*NA*	*NA*	*(100.00%)*	*NA*	*1000.00%*	*1000.00%*	*(100.00%)*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
% of Total Revenue	-	*0.00%*	-	*0.00%*	*0.00%*	*NA*	-	-	-	-	-	-	-	-	
Interest on Interest Bearing Deposits in Other Financial Institutio	1,547	3,698	6,695	924	344	3,125	7,031	7,031	7,031	7,031	7,031	7,031	7,031	7,031	7,031
% Growth	*NA*	*81.04%*	*(86.20%)*	*(62.77%)*	*808.43%*	*808.43%*	*125.00%*	-	-	-	-	-	-	-	
% of Total Revenue	*1.02%*	*1.44%*	*0.18%*	*0.06%*	*0.53%*	*NA*	*0.77%*	*0.73%*	*0.71%*	*0.71%*	*0.69%*	*0.66%*	*0.63%*	*0.61%*	*0.58%*
Total Interest Income	**363,658**	**465,820**	**514,329**	**536,612**	**588,760**	**674,656**	**916,487**	**960,264**	**988,976**	**990,599**	**1,023,900**	**1,068,900**	**1,110,216**	**1,147,747**	**1,202,96**
% Growth	*NA*	*28.09%*	*10.41%*	*4.33%*	*9.72%*	*14.59%*	*35.85%*	*4.78%*	*2.99%*	*.16%*	*3.36%*	*4.39%*	*3.87%*	*3.38%*	*4.81%*
% of Total Income	*78.09%*	*81.01%*	*81.57%*	*81.69%*	*82.03%*	*84.03%*	*87.60%*	*87.89%*	*87.80%*	*87.41%*	*87.36%*	*87.43%*	*87.41%*	*87.26%*	*87.63%*
														CAGR	3.46%

Non-Interest Income *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Service Charges and Fees	39,183	48,706	52,157	47,467	59,703	68,031	76,017	76,446	79,238	81,857	84,274	86,464	88,400	90,061	91,344
% Growth	*NA*	*24.30%*	*7.09%*	*(8.99%)*	*25.78%*	*13.95%*	*4.19%*	*0.56%*	*3.65%*	*3.31%*	*2.95%*	*2.60%*	*2.24%*	*1.88%*	*1.42%*
% of Interest Income	*38.41%*	*44.62%*	*44.88%*	*39.46%*	*46.30%*	*53.04%*	*58.59%*	*57.79%*	*57.65%*	*57.35%*	*56.90%*	*56.25%*	*55.29%*	*53.73%*	*53.79%*
Loan Servicing Income	5,636	7,292	4,843	2,977	3,276	2,741	3,554	3,646	3,855	4,062	4,263	4,456	4,641	4,815	4,971
% Growth	*NA*	*29.38%*	*(33.58%)*	*(38.53%)*	*10.04%*	*(16.33%)*	*29.65%*	*2.60%*	*5.74%*	*5.35%*	*4.95%*	*4.55%*	*4.15%*	*3.75%*	*3.25%*
% of Total Revenue	*5.52%*	*6.68%*	*4.17%*	*2.47%*	*2.54%*	*2.14%*	*2.74%*	*2.76%*	*2.81%*	*2.85%*	*2.88%*	*2.90%*	*2.90%*	*2.87%*	*2.93%*
Trust Fees	15,818	18,393	19,399	20,862	24,417	22,570	22,570	22,598	22,655	22,740	22,853	22,996	23,169	23,371	23,605
% Growth	*NA*	*16.28%*	*5.47%*	*7.54%*	*17.04%*	*(7.56%)*	-	*0.13%*	*0.25%*	*0.38%*	*0.50%*	*0.63%*	*0.75%*	*0.88%*	*1.00%*
% of Total Revenue	*15.50%*	*16.85%*	*16.69%*	*17.34%*	*18.94%*	*17.60%*	*17.40%*	*17.08%*	*16.48%*	*15.93%*	*15.43%*	*14.96%*	*14.49%*	*13.94%*	*13.90%*
Brokerage and Insurance Commissions	4,033	4,513	3,786	2,756	3,546	2,986	2,727	2,523	2,366	2,246	2,160	2,103	2,073	2,069	2,090
% Growth	*NA*	*(16.11%)*	*(27.21%)*	*28.66%*	*(15.79%)*	*(15.79%)*	*(8.67%)*	*(7.46%)*	*(6.26%)*	*(5.05%)*	*(3.84%)*	*(2.63%)*	*(1.42%)*	*(0.21%)*	*1.00%*
% of Total Revenue	*3.95%*	*4.13%*	*3.26%*	*2.29%*	*2.75%*	*2.33%*	*2.10%*	*1.91%*	*1.72%*	*1.57%*	*1.46%*	*1.37%*	*1.30%*	*1.23%*	*1.23%*
Capital Markets Fees	-	-	-	-	-	-	14,560	16,744	18,921	21,002	22,892	24,495	25,719	26,491	26,756
% Growth	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*15.00%*	*13.00%*	*11.00%*	*9.00%*	*7.00%*	*5.00%*	*3.00%*	*1.00%*
% of Total Revenue	-	-	-	-	-	-	*11.22%*	*12.66%*	*13.77%*	*14.71%*	*15.46%*	*15.94%*	*16.09%*	*15.80%*	*15.76%*
Securities (losses) gains	6,973	1,085	7,659	7,793	5,910	(425)	(2,046)	(2,046)	(2,046)	(2,046)	(2,046)	(2,046)	(2,046)	(2,046)	(2,046
% Growth	*NA*	*(84.44%)*	*605.90%*	*1.75%*	*(24.16%)*	*(107.19%)*	*381.41%*	-	-	-	-	-	-	-	-
% of Total Revenue	*6.83%*	*0.99%*	*6.59%*	*6.48%*	*4.58%*	*(0.33%)*	*(1.58%)*	*(1.55%)*	*(1.49%)*	*(1.43%)*	*(1.38%)*	*(1.33%)*	*(1.28%)*	*(1.22%)*	*(1.20%)*
Unrealized (loss) gain on Equity Securities, Net	-	212	525	640	58	(622)	70	-	-	-	-	-	-	-	-
% Growth	*NA*	*NA*	*NA*	*(62.77%)*	*808.43%*	*(1172.41%)*	*(111.25%)*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
% of Total Revenue	-	*0.19%*	*0.45%*	*0.53%*	*0.04%*	*(0.48%)*	*0.05%*	-	-	-	-	-	-	-	-
Net Gains on Sale of Loans Held for Sale	22,251	21,450	15,555	28,515	20,605	9,032	4,981	4,981	4,988	5,002	5,024	5,053	5,089	5,132	5,18
% Growth	*NA*	*(3.60%)*	*(27.48%)*	*83.32%*	*(27.74%)*	*(56.17%)*	*(44.85%)*	-	*0.14%*	*0.29%*	*0.43%*	*0.57%*	*0.71%*	*0.86%*	*1.00%*
% of Total Revenue	*21.81%*	*19.65%*	*13.39%*	*23.71%*	*15.98%*	*7.04%*	*3.84%*	*3.77%*	*3.63%*	*3.50%*	*3.39%*	*3.29%*	*3.18%*	*3.06%*	*3.05%*
Valuation Adjustment on Servicing Rights	21	(46.00)	(911.00)	(1,778.00)	1,088.00	1,658.00	-	-	-	-	-	-	-	-	
% Growth	*NA*	*(319.05%)*	*1880.43%*	*95.17%*	*(161.19%)*	*52.39%*	*(100.00%)*	-	-	-	-	-	-	-	-
% of Total Revenue	*0.02%*	*(0.04%)*	*(0.78%)*	*(1.48%)*	*0.84%*	*1.29%*	-	-	-	-	-	-	-	-	-
Income on Bank Owned Life Insurance	2772	2,793	3,785	3,554	3,762	2,341	4,624	4,670	4,717	4,764	4,812	4,860	4,908	4,958	5,007
% Growth	*NA*	*0.76%*	*35.52%*	*(6.10%)*	*5.85%*	*(37.77%)*	*50.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*	*1.00%*
% of Total Revenue	*2.72%*	*2.56%*	*3.26%*	*2.95%*	*2.92%*	*1.83%*	*3.56%*	*3.53%*	*3.43%*	*3.34%*	*3.25%*	*3.16%*	*3.07%*	*2.96%*	*2.95%*
Other Noninterest Income	5335	4,762	9,410	7,505	6,570	19,952	2,684	2,715	2,746	3,106	3,885	5,325	7,937	12,782	12,910
% Growth	*NA*	*(10.74%)*	*97.61%*	*(20.24%)*	*(12.46%)*	*203.68%*	*(94.85%)*	*1.15%*	*1.13%*	*13.11%*	*25.09%*	*37.07%*	*49.06%*	*61.04%*	*1.00%*
% of Total Revenue	*5.23%*	*4.36%*	*8.10%*	*6.24%*	*5.10%*	*15.56%*	*2.07%*	*2.05%*	*2.00%*	*2.18%*	*2.62%*	*3.46%*	*4.96%*	*7.63%*	*7.60%*
Total Non-Interest Income	**102,022**	**109,160**	**116,208**	**120,291**	**128,935**	**128,264**	**129,741**	**132,278**	**137,439**	**142,732**	**148,117**	**153,706**	**159,891**	**167,634**	**169,820**
% Growth	*NA*	*7.00%*	*6.46%*	*3.51%*	*7.19%*	*(.52%)*	*1.15%*	*1.96%*	*3.90%*	*3.85%*	*3.77%*	*3.77%*	*4.02%*	*4.84%*	*1.30%*
% of Total Income	*21.91%*	*18.99%*	*18.43%*	*18.31%*	*17.97%*	*15.97%*	*12.40%*	*12.11%*	*12.20%*	*12.59%*	*12.64%*	*12.57%*	*12.59%*	*12.74%*	*12.37%*
														CAGR	3.42%

Appendix 5 – Loans and Securities Model

Loans Receivable Held to Maturity $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	8,186,134	9,104,278	10,030,629	12,361,077	15,679,773	17,029,398	17,743,070	17,843,148	18,494,809	19,106,121	19,670,419	20,181,423	20,633,376	21,021,180	21,320,427
Cost of Gross Deposits	0.36%	0.25%	0.63%	0.25%	0.09%	0.33%	1.60%	1.66%	1.49%	1.19%	1.06%	0.98%	0.90%	0.82%	0.85%
Commercial and industrial	-	-	2,530,809	2,534,799	2,645,085	3,464,414	3,601,628	3,679,258	3,873,040	4,062,429	4,245,598	4,420,719	4,585,997	4,739,715	4,875,673
Allowance for Credit Losses	NA	NA	34,207	38,818	27,738	29,071	36,016	37,435	40,083	42,753	45,422	48,068	50,666	53,192	55,570
% Growth	NA	NA	NA	0.16%	4.35%	30.98%	3.96%	2.16%	5.27%	4.89%	4.51%	4.12%	3.74%	3.35%	2.87%
Loan Category % of Deposits	-	-	25.23%	20.51%	16.87%	20.34%	20.30%	20.62%	20.94%	21.26%	21.58%	21.90%	22.23%	22.55%	22.87%
Allowance for Credit Losses % of Loan Category	NA	NA	1.35%	1.53%	1.05%	0.84%	1.00%	1.02%	1.03%	1.05%	1.07%	1.09%	1.10%	1.12%	1.14%
Average Yield	NA	5.70%	5.23%	4.86%	4.38%	4.57%	6.11%	6.24%	6.13%	5.90%	5.83%	5.82%	5.80%	5.78%	5.88%
Spread	NA	5.45%	4.60%	4.61%	4.29%	4.24%	4.51%	4.58%	4.64%	4.70%	4.77%	4.83%	4.90%	4.96%	5.02%
Paycheck Protection Program	-	-	-	957,785	199,883	11,025	4,152	-	-	-	-	-	-	-	
Allowance for Credit Losses	NA	NA	-	-				-	-	-	-	-	-	-	
% Growth	NA	NA	NA	NA	(79.13%)	(94.48%)	(62.34%)	(100.00%)	NA	NA	NA	NA	NA	NA	NA
Loan Category % of Deposits	-	-	-	7.75%	1.27%	0.06%	0.02%	-	-	-	-	-	-	-	-
Allowance for Credit Losses % of Loan Category	NA	NA	NA	-	-	-	-	NA	NA	NA	NA	NA	NA	NA	NA
Average Yield	NA	-	-	3.25%	5.53%	13.64%	1.27%	1.66%	1.49%	1.19%	1.06%	0.98%	0.90%	0.82%	0.85%
Spread	NA	(0.25%)	(0.63%)	3.00%	5.44%	13.31%	(0.33%)	-	-	-	-	-	-	-	-
Owner Occupied Commerical Real Estate	-	-	1,472,704	1,776,406	2,240,334	2,265,307	2,484,030	2,509,784	2,613,618	2,712,581	2,805,643	2,891,811	2,970,151	3,039,810	3,097,116
Allowance for Credit Losses	NA	NA	7,921	20,001	19,214	13,948	15,232	16,185	17,681	19,210	20,757	22,309	23,854	25,376	26,834
% Growth	NA	NA	NA	20.62%	26.12%	1.11%	9.66%	1.04%	4.14%	3.79%	3.43%	3.07%	2.71%	2.35%	1.89%
Loan Category % of Deposits	-	-	14.68%	14.37%	14.29%	13.30%	14.00%	14.07%	14.13%	14.20%	14.26%	14.33%	14.39%	14.46%	14.53%
Allowance for Credit Losses % of Loan Category	NA	NA	0.54%	1.13%	0.86%	0.62%	0.61%	0.64%	0.68%	0.71%	0.74%	0.77%	0.80%	0.83%	0.87%
Average Yield	NA	5.01%	5.59%	4.88%	4.19%	4.13%	4.49%	4.80%	4.87%	4.82%	4.94%	5.11%	5.27%	5.43%	5.71%
Spread	NA	4.76%	4.96%	4.63%	4.10%	3.80%	2.89%	3.14%	3.38%	3.63%	3.88%	4.12%	4.37%	4.61%	4.86%
Commercial and Commercial Real Estate	4,809,875	5,731,712	-	-	-	-	-	-	-	-	-	-	-	-	
Allowance for Credit Losses	40,048	50,043	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Growth	NA	19.17%	(100.00%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Loan Category % of Deposits	58.76%	62.96%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Allowance for Credit Losses % of Loan Category	0.83%	0.87%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average Yield	4.96%	5.36%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spread	4.60%	5.11%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Residential Mortgage	624,279	673,603	-	-	-	-	-	-	-	-	-	-	-	-	
Allowance for Credit Losses	2,224	1,785	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Growth	NA	7.90%	(100.00%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Loan Category % of Deposits	7.63%	7.40%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Allowance for Credit Losses % of Loan Category	0.36%	0.26%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average Yield	4.61%	4.63%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spread	4.25%	4.38%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Consumer	447,484	440,158	-	-	-	-	-	-	-	-	-	-	-	-	
Allowance for Credit Losses	9,156	5,182	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Growth	NA	(1.64%)	(100.00%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Loan Category % of Deposits	5.47%	4.83%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Allowance for Credit Losses % of Loan Category	2.05%	1.18%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average Yield	8.05%	7.50%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Spread	7.69%	7.25%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-Owner Occupied Owner Real Estate	-	-	1,495,877	1,921,481	2,010,591	2,330,940	2,538,452	2,573,337	2,688,637	2,799,528	2,904,886	3,003,612	3,094,660	3,177,054	3,246,856
Allowance for Credit Losses	NA	NA	7,584	20,873	17,908	16,539	50,769	51,467	53,773	55,991	58,098	60,072	61,893	63,541	64,937
% Growth	NA	NA	NA	28.45%	4.64%	15.93%	8.90%	1.37%	4.48%	4.12%	3.76%	3.40%	3.03%	2.66%	2.20%
Loan Category % of Deposits	-	-	14.91%	15.54%	12.82%	13.69%	14.31%	14.42%	14.54%	14.65%	14.77%	14.88%	15.00%	15.11%	15.23%
Allowance for Credit Losses % of Loan Category	NA	NA	0.51%	1.09%	0.89%	0.71%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Average Yield	NA	5.68%	6.23%	4.92%	4.45%	4.52%	5.54%	5.80%	5.82%	5.73%	5.79%	5.91%	6.02%	6.14%	6.37%
Spread	NA	5.43%	5.60%	4.67%	4.36%	4.19%	3.94%	4.14%	4.34%	4.53%	4.73%	4.92%	5.12%	5.32%	5.51%
Real Estate Construction	-	-	2,530,809	2,534,799	2,645,085	1,076,082	1,016,223	1,005,730	1,025,644	1,042,171	1,055,066	1,064,124	1,069,192	1,070,173	1,066,021
Allowance for Credit Losses	NA	NA	8,677	20,080	22,538	29,998	30,487	28,258	26,865	25,314	23,619	21,797	19,865	17,847	15,749
% Growth	NA	NA	NA	0.16%	4.35%	(59.32%)	(5.56%)	(1.03%)	1.98%	1.61%	1.24%	0.86%	0.48%	0.09%	(0.39%)
Loan Category % of Deposits	-	-	25.23%	20.51%	16.87%	6.32%	5.73%	5.64%	5.55%	5.45%	5.36%	5.27%	5.18%	5.09%	5.00%
Allowance for Credit Losses % of Loan Category	NA	NA	0.34%	0.79%	0.85%	2.79%	3.00%	2.81%	2.62%	2.43%	2.24%	2.05%	1.86%	1.67%	1.48%
Average Yield	NA	5.23%	5.56%	4.65%	4.60%	5.23%	6.97%	6.98%	6.75%	6.41%	6.22%	6.10%	5.96%	5.83%	5.81%
Spread	NA	4.98%	4.93%	4.40%	4.51%	4.90%	5.37%	5.32%	5.27%	5.22%	5.16%	5.11%	5.06%	5.01%	4.95%
Agircultural and Agricultural Real Estate	511,588	565,408	565,837	714,526	753,753	920,510	975,869	1,126,349	1,317,755	1,516,548	1,721,162	1,929,849	2,140,713	2,351,744	2,558,451
Allowance for Credit Losses	4,258	4,953	5,680	7,129	5,213	2,634	4,080	5,047	6,301	7,708	9,265	10,968	12,810	14,779	16,847
% Growth	NA	10.52%	0.08%	26.28%	5.49%	22.12%	6.01%	15.42%	16.99%	15.09%	13.49%	12.12%	10.93%	9.86%	8.79%
Loan Category % of Deposits	6.25%	6.21%	5.64%	5.78%	4.81%	5.41%	5.50%	6.31%	7.13%	7.94%	8.75%	9.56%	10.38%	11.19%	12.00%
Allowance for Credit Losses % of Loan Category	0.83%	0.88%	1.00%	1.00%	0.69%	0.29%	0.42%	0.45%	0.48%	0.51%	0.54%	0.57%	0.60%	0.63%	0.66%
Average Yield	4.75%	5.16%	5.25%	4.77%	4.38%	4.38%	5.53%	5.68%	5.59%	5.39%	5.35%	5.36%	5.37%	5.37%	5.49%
Spread	4.39%	4.91%	4.62%	4.52%	4.29%	4.05%	3.93%	4.02%	4.11%	4.20%	4.29%	4.37%	4.46%	4.55%	4.64%
Residential Real Estate	-	-	832,277	840,442	829,283	853,361	830,963	842,713	880,812	917,489	952,374	985,104	1,015,333	1,042,737	1,066,021
Allowance for Credit Losses	NA	NA	1,504	11,935	8,427	7,711	8,310	8,546	9,058	9,565	10,063	10,549	11,016	11,461	11,868
% Growth	NA	NA	NA	0.98%	(1.33%)	2.90%	(2.62%)	1.41%	4.52%	4.16%	3.80%	3.44%	3.07%	2.70%	2.23%
Loan Category % of Deposits	-	-	8.30%	6.80%	5.29%	5.01%	4.68%	4.72%	4.76%	4.80%	4.84%	4.88%	4.92%	4.96%	5.00%
Allowance for Credit Losses % of Loan Category	NA	NA	0.18%	1.42%	1.02%	0.90%	1.00%	1.01%	1.03%	1.04%	1.06%	1.07%	1.08%	1.10%	1.11%
Average Yield	NA	4.99%	4.97%	4.81%	4.34%	4.02%	4.22%	4.52%	4.59%	4.54%	4.64%	4.80%	4.96%	5.12%	5.39%
Spread	NA	4.74%	4.34%	4.56%	4.25%	3.69%	2.62%	2.86%	3.10%	3.34%	3.58%	3.82%	4.06%	4.30%	4.54%
Consumer	-	-	443,332	414,392	419,524	506,713	513,895	538,869	581,432	624,289	667,063	709,361	750,775	790,894	828,531
Allowance for Credit Losses	NA	NA	4822	12770	9050	9582	9,746	10,543	11,724	12,963	14,252	15,581	16,942	18,322	19,691
% Growth	NA	NA	NA	(6.53%)	1.24%	20.78%	1.42%	4.86%	7.90%	7.37%	6.85%	6.34%	5.84%	5.34%	4.76%
Loan Category % of Deposits	-	-	4.42%	3.35%	2.68%	2.98%	2.90%	3.02%	3.14%	3.27%	3.39%	3.51%	3.64%	3.76%	3.89%
Allowance for Credit Losses % of Loan Category	NA	NA	1.09%	3.08%	2.16%	1.89%	1.90%	1.96%	2.02%	2.08%	2.14%	2.20%	2.26%	2.32%	2.38%
Average Yield	NA	8.16%	6.06%	5.41%	4.96%	4.97%	6.90%	7.14%	7.13%	7.01%	7.05%	7.14%	7.23%	7.32%	7.52%
Spread	NA	7.91%	5.43%	5.16%	4.87%	4.64%	5.30%	5.47%	5.64%	5.82%	5.99%	6.16%	6.33%	6.50%	6.67%
Total loans receivable held to maturity	6,393,226	7,410,881	9,871,645	11,694,630	11,743,538	11,428,352	11,965,211	12,276,041	12,980,938	13,675,035	14,351,791	15,004,579	15,626,821	16,212,128	16,738,669
% Growth	NA	15.92%	33.20%	18.47%	0.42%	(2.68%)	4.70%	2.60%	5.74%	5.35%	4.95%	4.55%	4.15%	3.75%	3.25%
% of Deposits	78.10%	81.40%	98.42%	94.61%	74.90%	67.11%	67.44%	68.80%	70.19%	71.57%	72.96%	74.35%	75.74%	77.12%	78.51%
Allowance for credit losses	55,686	61,963	70,395	131,606	110,088	109,483	154,639	157,481	165,486	173,503	181,476	189,344	197,046	204,518	211,496
Loans receivable, net	6,337,540	7,348,918	9,801,250	11,563,024	11,633,450	11,318,869	11,810,571	12,118,560	12,815,452	13,501,532	14,170,316	14,815,235	15,429,775	16,007,611	16,527,174
% Growth	NA	15.96%	33.37%	17.97%	0.61%	(2.70%)	4.34%	2.61%	5.75%	5.35%	4.95%	4.55%	4.15%	3.74%	3.25%
% of Deposits	77.42%	80.72%	97.71%	93.54%	74.19%	66.47%	66.56%	67.92%	69.29%	70.67%	72.04%	73.41%	74.78%	76.15%	77.52%

	8.00%	7.63%	5.73%	6.11%	6.42%	8.05%	8.16%	9.18%	10.15%	11.09%	11.99%	12.86%	13.70%	14.51%	15.28%

Estimated Loan Interest Income $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Estimated Loan Interest Income	327,672	400,594	546,528	550,340	521,737	514,829	667,479	710,116	745,863	764,755	802,903	848,575	892,305	933,846	992,57
% Growth	NA	22.25%	36.43%	0.70%	(5.20%)	(1.32%)	29.65%	6.39%	5.03%	2.53%	4.99%	5.69%	5.15%	4.66%	6.29%
Allowance for Credit Losses	55,686	61,963	70,395	131,606	110,088	109,483	154,639	157,481	165,486	173,503	181,476	189,344	197,046	204,518	211,49
% Growth	NA	11.27%	13.61%	86.95%	(16.35%)	(0.55%)	41.25%	1.84%	5.08%	4.84%	4.60%	4.34%	4.07%	3.79%	3.41%
% of Deposits	0.68%	0.68%	0.70%	1.06%	0.70%	0.64%	0.87%	0.88%	0.89%	0.91%	0.92%	0.94%	0.95%	0.97%	0.99%
% of Gross Loans	0.87%	0.84%	0.71%	1.13%	0.94%	0.96%	1.29%	1.28%	1.27%	1.27%	1.26%	1.26%	1.26%	1.26%	1.26%
Calculated Net Loan Interest Income	271,986	338,631	476,133	418,734	411,649	405,346	512,840	552,635	580,377	591,252	621,428	659,231	695,258	729,328	781,08
% Growth	NA	24.50%	40.61%	(12.06%)	(1.69%)	(1.53%)	26.52%	7.76%	5.02%	1.87%	5.10%	6.08%	5.47%	4.90%	7.10%
Actual Interest and Fees on Loans	304,006	393,871	424,615	424,941	444,137	477,970									
Implied Fees as a % of Total	10.53%	14.02%	(12.13%)	1.46%	7.31%	15.19%									

						0.00%									

Estimated Securities Interest Income $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	8,186,134	9,104,278	10,030,629	12,361,077	15,679,773	17,029,398	17,743,070	17,843,148	18,494,809	19,106,121	19,670,419	20,181,423	20,633,376	21,021,180	21,320,427
Cost of Gross Deposits	0.36%	0.25%	0.63%	0.25%	0.09%	0.33%	1.60%	1.66%	1.49%	1.19%	1.06%	0.98%	0.90%	0.82%	0.85%
Taxable	1,629,936	1,999,321	2,522,365	3,901,202	6,135,732	6,335,586	6,653,651	6,568,196	6,680,600	6,769,725	6,834,089	6,872,525	6,884,215	6,868,714	6,609,442
% Growth	NA	22.66%	26.16%	54.66%	57.28%	3.26%	5.02%	(1.28%)	1.71%	1.33%	0.95%	0.56%	0.17%	(0.23%)	(3.77%)
% of Deposits	19.91%	21.96%	25.15%	31.56%	39.13%	37.20%	37.50%	36.81%	36.12%	35.43%	34.74%	34.05%	33.36%	32.68%	31.00%
Yield	2.35%	2.71%	2.90%	2.52%	2.04%	2.68%	4.10%	4.15%	3.97%	3.67%	3.52%	3.44%	3.35%	3.26%	3.12%
Spread	1.99%	2.46%	2.27%	2.27%	1.95%	2.35%	2.50%	2.49%	2.48%	2.47%	2.46%	2.46%	2.45%	2.44%	2.27%
Nontaxable	617,267	439,894	313,197	424,199	799,823	965,474	998,474	996,603	1,025,223	1,051,076	1,073,848	1,093,258	1,109,064	1,121,070	1,128,063
% Growth	NA	(28.74%)	(28.80%)	35.44%	88.55%	20.71%	3.42%	(0.19%)	2.87%	2.52%	2.17%	1.81%	1.45%	1.08%	0.62%
% of Deposits	7.54%	4.83%	3.12%	3.43%	5.10%	5.67%	5.63%	5.59%	5.54%	5.50%	5.46%	5.42%	5.38%	5.33%	5.29%
Yield	4.91%	4.06%	3.99%	3.73%	3.05%	3.15%	4.50%	4.66%	4.57%	4.37%	4.33%	4.35%	4.36%	4.36%	4.49%
Spread	4.55%	3.81%	3.36%	3.48%	2.96%	2.82%	2.91%	3.00%	3.09%	3.18%	3.27%	3.36%	3.45%	3.54%	3.63%
Calculated Taxable Securities Income	38,303	54,182	73,149	98,310	125,169	169,794	272,532	272,774	265,044	248,295	240,856	236,446	230,678	223,726	206,241
% Growth	NA	41.45%	35.01%	34.40%	27.32%	35.65%	300.00%	0.09%	(2.83%)	(6.32%)	(3.00%)	(1.83%)	(2.44%)	(3.01%)	(7.82%)
Calculated Nontaxable Securities Income	30,308	17,860	12,497	15,823	24,395	30,412	44,956	46,433	46,886	45,967	46,494	47,508	48,307	48,898	50,626
% Growth	NA	(41.07%)	(30.03%)	26.62%	54.18%	24.67%	317.86%	3.29%	0.98%	(1.96%)	1.15%	2.18%	1.68%	1.22%	3.53%
Calculated Securites Income	68,611	72,041	85,645	114,133	149,564	189,153	278,861	319,207	311,930	294,262	287,350	283,954	278,984	272,624	256,867
% Growth	NA	5.00%	18.88%	33.26%	31.04%	26.47%	47.43%	14.47%	(2.28%)	(5.66%)	(2.35%)	(1.18%)	(1.75%)	(2.28%)	(5.78%)
Actual	68,670	72,004	85,638	114,065	149,400	193,550									

Appendix 6 – IE on Deposits Model

Net Interest Income	330,308	413,954	433,729	491,729	560,560	598,236	573,451	635,305	687,971	736,647	789,489	843,735	896,824	948,248	992,925

Average Deposits $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Demand Deposits	2,643,945	3,265,532	3,384,341	4,554,479	6,230,851	6,131,760	5,056,775	5,207,270	5,523,876	5,837,064	6,143,925	6,441,491	6,726,791	6,996,918	7,242,266
% of total	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Savings	4,044,032	4,779,977	5,530,503	6,718,413	8,311,825	9,737,100	9,048,966	9,130,039	9,494,613	9,840,600	10,164,351	10,462,373	10,731,403	10,968,482	11,160,511
Estimated Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of total	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
SOFR Rate	1.79%	1.98%	2.20%	0.36%	0.40%	1.64%	5.09%	5.07%	4.11%	3.83%	3.77%	3.80%	3.82%	3.84%	3.88%
Spread from SOFR Rate	1.26%	1.71%	1.35%	0.11%	0.29%	1.16%	3.50%	3.00%	2.00%	2.17%	2.33%	2.50%	2.67%	2.83%	3.00%
Time Deposits	902,255	1,058,769	1,115,785	1,088,185	1,137,097	1,160,538	3,637,329	3,505,839	3,476,320	3,428,457	3,362,143	3,277,559	3,175,182	3,055,779	2,917,650
Estimated Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of total	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
SOFR Rate	1.79%	1.98%	2.20%	0.36%	0.40%	1.64%	5.09%	5.07%	4.11%	3.83%	3.77%	3.80%	3.82%	3.84%	3.88%
Spread from SOFR Rate	0.92%	1.07%	0.71%	(0.90%)	(0.10%)	0.76%	1.25%	2.00%	1.97%	1.94%	1.91%	1.88%	1.84%	1.81%	1.00%
Total Average Deposits	8,186,134	9,104,278	10,030,629	12,361,077	15,679,773	17,029,398	17,743,070	17,843,148	18,494,809	19,106,121	19,670,419	20,181,423	20,633,376	21,021,180	21,320,427
% Growth	NA	11.22%	10.17%	23.23%	26.85%	8.61%	4.19%	0.56%	3.65%	3.31%	2.95%	2.60%	2.24%	1.88%	1.42%
Estimated Cost of Gross Deposits	0.36%	0.25%	0.63%	0.25%	0.09%	0.33%	1.60%	1.66%	1.49%	1.19%	1.06%	0.98%	0.90%	0.82%	0.85%
	7,590,232	9,104,278	10,030,629	12,361,077	15,679,773	17,029,398	17,743,070	17,843,148	18,494,809	19,106,121	19,670,419	20,181,423	20,633,376	21,021,180	21,320,427

Implied Deposits Expenses	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Savings and Money Market Accounts	11,107	25,123	47,069	16,560	9,063	46,623	138,874	188,913	200,246	163,383	145,834	135,703	123,734	110,241	98,118
% of Interest Expense	37.87%	105.85%	68.51%	44.53%	57.47%	84.77%	50.71%	63.71%	72.91%	71.61%	69.97%	68.30%	66.35%	64.04%	53.88%
Time Deposits	7,172	10,544	16,665	13,727	5,734	10,257	134,963	107,599	74,403	64,780	62,598	62,996	62,739	61,907	84,004
% of Interest Expense	24.45%	44.43%	24.26%	36.91%	36.36%	18.65%	49.29%	36.29%	27.09%	28.39%	30.03%	31.70%	33.65%	35.96%	46.12%
Total Interest on Deposits Expense	**29,328**	**23,734**	**68,703**	**37,186**	**15,769**	**55,001**	**273,837**	**296,512**	**274,649**	**228,163**	**208,431**	**198,699**	**186,473**	**172,148**	**182,122**
% Growth	NA	(19.07%)	189.47%	(45.88%)	(57.59%)	248.79%	397.87%	8.28%	(7.37%)	(16.93%)	(8.65%)	(4.67%)	(6.15%)	(7.68%)	5.79%
% of Interest Revenue	8.06%	5.10%	13.36%	6.93%	2.68%	8.15%	29.88%	30.88%	27.77%	23.03%	20.36%	18.59%	16.80%	15.00%	15.14%

Iowa - Dubuque Bank and Trust Company $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	1,084,415	1,214,541	1,290,756	1,456,908	1,750,071	1,768,057	1,803,418	1,837,483	1,870,149	1,901,318	1,930,894	1,958,785	1,984,902	2,009,162	2,029,254
Number of Locations	11	10	6	6	7	8	8	8	8	8	8	8	8	8	8
Deposit / Location	98,583	121,454	215,126	242,818	250,010	221,007	225,427	229,685	233,769	237,665	241,362	244,848	248,113	251,145	253,657
Deposit / Location % Growth	NA	23.20%	77.13%	12.87%	2.96%	(11.60%)	2.00%	1.89%	1.78%	1.67%	1.56%	1.44%	1.33%	1.22%	1.00%
% of Total Deposits	13.25%	13.34%	12.87%	11.79%	11.16%	10.38%	10.16%	10.30%	10.11%	9.95%	9.82%	9.71%	9.62%	9.56%	9.52%
Calc. Demand	350,243	435,633	435,502	536,802	695,446	636,623	513,974	536,243	558,561	580,867	603,102	625,203	647,108	668,751	689,311
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	535,712	637,665	711,673	791,849	927,710	1,010,943	919,743	940,209	960,072	979,273	997,756	1,015,466	1,032,346	1,048,345	1,062,245
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	119,521	141,243	143,581	128,256	126,915	120,491	369,701	361,030	351,517	341,178	330,036	318,116	305,448	292,065	277,699
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**3,885**	**3,014**	**8,189**	**3,596**	**1,655**	**5,913**	**28,782**	**30,535**	**27,772**	**22,705**	**20,460**	**19,285**	**17,938**	**16,454**	**17,334**
% Growth	NA	(22.42%)	171.68%	(56.09%)	(53.97%)	(71.93%)	224.77%	6.09%	(9.05%)	(18.24%)	(9.89%)	(5.74%)	(6.98%)	(8.28%)	5.35%

Illinois Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	692,227	715,482	1,167,905	1,338,677	1,496,262	1,427,277	1,498,641	1,566,912	1,631,330	1,691,145	1,745,638	1,794,128	1,835,991	1,870,670	1,889,37
Number of Locations	10	10	10	10	9	6	6	6	6	6	6	6	6	6	6
Deposit / Location	69,223	71,548	116,791	133,868	166,251	237,880	249,773	261,152	271,888	281,858	290,940	299,021	305,998	311,778	314,896
Deposit / Location % Growth	NA	3.36%	63.23%	14.62%	24.19%	43.08%	5.00%	4.56%	4.11%	3.67%	3.22%	2.78%	2.33%	1.89%	1.00%
% of Total Deposits	8.46%	7.86%	11.64%	10.83%	9.54%	8.38%	8.45%	8.78%	8.82%	8.85%	8.87%	8.89%	8.90%	8.90%	8.86%
Calc. Demand	223,574	256,630	394,052	493,240	594,587	513,918	427,113	457,281	487,232	516,658	545,238	572,648	598,561	622,654	641,79
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	341,967	375,646	643,938	727,589	793,166	816,091	764,307	801,763	837,470	871,024	902,028	930,104	954,897	976,083	989,024
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	76,296	83,206	129,915	117,848	108,509	97,268	307,221	307,868	306,628	303,464	298,371	291,375	282,533	271,933	258,55
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**2,480**	**1,776**	**7,409**	**3,304**	**1,415**	**4,773**	**23,918**	**26,038**	**24,225**	**20,195**	**18,497**	**17,664**	**16,593**	**15,319**	**16,139**
% Growth	NA	(28.40%)	317.28%	(55.41%)	(57.17%)	237.32%	401.09%	8.87%	(6.96%)	(16.63%)	(8.41%)	(4.50%)	(6.07%)	(7.67%)	5.35%

Wisconsin Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	890,835	927,821	941,109	1,057,369	1,070,161	1,250,251	1,325,266	1,397,419	1,465,738	1,529,253	1,587,025	1,638,162	1,681,847	1,717,352	1,734,52
Number of Locations	17	17	14	13	12	11	11	11	11	11	11	11	11	11	1
Deposit / Loctation	52,402	54,578	67,222	81,336	89,180	113,659	120,479	127,038	133,249	139,023	144,275	148,924	152,895	156,123	157,684
Deposit / Loctation % Growth	NA	4.15%	23.17%	21.00%	9.64%	27.45%	6.00%	5.44%	4.89%	4.33%	3.78%	3.22%	2.67%	2.11%	1.00%
% of Total Deposits	10.88%	10.19%	9.38%	8.55%	6.83%	7.34%	7.47%	7.83%	7.93%	8.00%	8.07%	8.12%	8.15%	8.17%	8.14%
Calc. Demand	287,721	332,792	317,531	389,591	425,262	450,177	377,701	407,817	437,774	467,198	495,697	522,867	548,307	571,622	589,19
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	440,081	487,130	518,891	574,694	567,291	714,871	675,886	715,036	752,461	787,641	820,068	849,250	874,727	896,084	907,96
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	98,186	107,900	104,687	93,084	77,608	85,203	271,680	274,566	275,503	274,414	271,260	266,045	258,812	249,646	237,36
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**3,192**	**2,303**	**5,970**	**2,610**	**1,012**	**4,181**	**21,151**	**23,222**	**21,766**	**18,262**	**16,816**	**16,129**	**15,200**	**14,064**	**14,817**
% Growth	NA	(27.86%)	159.30%	(56.29%)	(61.22%)	313.13%	405.86%	9.79%	(6.27%)	(16.10%)	(7.92%)	(4.09%)	(5.76%)	(7.47%)	5.35%

New Mexico Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	1,229,324	1,307,464	1,565,070	1,749,963	2,308,939	2,392,887	2,464,674	2,535,533	2,605,260	2,673,648	2,740,489	2,805,576	2,868,702	2,929,661	2,988,25
Number of Locations	17	17	17	17	24	21	21	21	21	21	21	21	21	21	2
Deposit / Location	72,313	76,910	92,063	102,939	96,206	113,947	117,365	120,740	124,060	127,317	130,499	133,599	136,605	139,508	142,298
Deposit / Location % Growth	NA	6.36%	19.70%	11.81%	(6.54%)	18.44%	3.00%	2.88%	2.75%	2.63%	2.50%	2.38%	2.25%	2.13%	2.00%
% of Total Deposits	15.02%	14.36%	15.60%	14.16%	14.73%	14.05%	13.89%	14.21%	14.09%	13.99%	13.93%	13.90%	13.90%	13.94%	14.02%
Calc. Demand	397,045	468,963	528,056	644,780	917,530	861,605	702,432	739,959	778,117	816,820	855,974	895,482	935,240	975,140	1,015,07
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	607,298	686,452	862,919	951,129	1,223,965	1,368,209	1,256,984	1,297,390	1,337,453	1,377,061	1,416,101	1,454,456	1,492,009	1,528,646	1,564,24
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	135,493	152,050	174,095	154,055	167,444	163,073	505,258	498,184	489,690	479,767	468,415	455,639	441,452	425,875	408,93
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**4,404**	**3,245**	**9,929**	**4,319**	**2,184**	**8,002**	**39,335**	**42,135**	**38,688**	**31,928**	**29,039**	**27,623**	**25,926**	**23,992**	**25,526**
% Growth	NA	(26.33%)	206.00%	(56.50%)	(49.44%)	266.48%	391.54%	7.12%	(8.18%)	(17.47%)	(9.05%)	(4.88%)	(6.14%)	(7.46%)	6.40%

Arizona Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	522,490	574,762	693,975	1,357,158	1,768,793	1,523,001	1,614,381	1,703,172	1,788,331	1,868,805	1,943,558	2,011,582	2,071,930	2,123,728	2,166,203
Number of Locations	8	7	6	10	9	9	9	9	9	9	9	9	9	9	9
Deposit / Location	65,311	82,109	115,663	135,716	196,533	169,222	179,376	189,241	198,703	207,645	215,951	223,509	230,214	235,970	240,689
Deposit / Location % Growth	NA	25.72%	40.86%	17.34%	44.81%	(13.90%)	6.00%	5.50%	5.00%	4.50%	4.00%	3.50%	3.00%	2.50%	2.00%
% of Total Deposits	6.38%	6.31%	6.92%	10.98%	11.28%	8.94%	9.10%	9.55%	9.67%	9.78%	9.88%	9.97%	10.04%	10.10%	10.16%
Calc. Demand	168,753	206,156	234,148	500,049	702,886	548,386	460,099	497,047	534,124	570,934	607,057	642,055	675,480	706,885	735,830
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	258,115	301,765	382,631	737,634	937,635	870,824	823,334	871,485	918,069	962,528	1,004,300	1,042,836	1,077,609	1,108,124	1,133,933
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	57,588	66,841	77,196	119,475	128,273	103,791	330,948	334,641	336,138	335,344	332,200	326,691	318,840	308,719	296,440
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**1,872**	**1,426**	**4,403**	**3,349**	**1,673**	**5,093**	**25,765**	**28,303**	**26,557**	**22,317**	**20,594**	**19,805**	**18,725**	**17,392**	**18,504**
% Growth	NA	(23.80%)	208.66%	(23.92%)	(50.06%)	204.49%	405.86%	9.85%	(6.17%)	(15.96%)	(7.72%)	(3.83%)	(5.45%)	(7.12%)	6.40%

Montana - Rocky Mountain Bank $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	424,487	424,700	468,314	538,012	640,757	646,636	672,501	696,880	719,528	740,215	758,720	774,843	788,403	799,243	807,236
Number of Locations	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Deposit / Location	42,449	47,189	52,035	59,779	71,195	71,848	74,722	77,431	79,948	82,246	84,302	86,094	87,600	88,805	89,693
Deposit / Location % Growth	NA	11.17%	10.27%	14.88%	19.10%	0.92%	4.00%	3.63%	3.25%	2.88%	2.50%	2.13%	1.75%	1.38%	1.00%
% of Total Deposits	5.19%	4.66%	4.67%	4.35%	4.09%	3.80%	3.79%	3.91%	3.89%	3.87%	3.86%	3.84%	3.82%	3.80%	3.79%
Calc. Demand	137,100	152,332	158,009	198,232	254,625	232,834	191,663	203,374	214,903	226,141	236,981	247,314	257,031	266,029	274,207
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	209,701	222,978	258,210	292,417	339,664	369,735	342,976	356,582	369,382	381,247	392,056	401,691	410,048	417,031	422,560
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	46,786	49,390	52,094	47,363	46,468	44,068	137,863	136,924	135,244	132,826	129,683	125,838	121,324	116,183	110,468
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**1,521**	**1,054**	**2,971**	**1,328**	**606**	**2,163**	**10,733**	**11,581**	**10,685**	**8,840**	**8,040**	**7,629**	**7,125**	**6,545**	**6,896**
% Growth	NA	(30.70%)	181.89%	(55.31%)	(54.36%)	256.87%	396.32%	7.90%	(7.73%)	(17.27%)	(9.05%)	(5.11%)	(6.60%)	(8.14%)	5.35%

Colorado - Citywide Bank $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	1,895,540	1,848,373	1,829,217	2,181,511	2,291,912	2,120,378	2,205,193	2,287,888	2,367,964	2,444,923	2,518,270	2,587,523	2,652,211	2,711,886	2,766,123
Number of Locations	26	25	23	23	20	19	19	19	19	19	19	19	19	19	19
Deposit / Location	72,905	73,935	79,531	94,848	114,596	111,599	116,063	120,415	124,630	128,680	132,541	136,185	139,590	142,731	145,585
Deposit / Location % Growth	NA	1.41%	7.57%	19.26%	20.82%	(2.62%)	4.00%	3.75%	3.50%	3.25%	3.00%	2.75%	2.50%	2.25%	2.00%
% of Total Deposits	23.16%	20.30%	18.24%	17.65%	14.62%	12.45%	12.43%	12.82%	12.80%	12.80%	12.80%	12.82%	12.85%	12.90%	12.97%
Calc. Demand	612,219	662,976	617,179	803,785	910,763	763,483	628,480	667,688	707,244	746,942	786,565	825,884	864,661	902,654	939,615
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	936,416	970,443	1,008,560	1,185,681	1,214,939	1,212,394	1,124,648	1,170,674	1,215,633	1,259,257	1,301,273	1,341,413	1,379,413	1,415,014	1,447,971
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	208,922	214,954	203,478	192,045	166,209	144,502	452,065	449,526	445,087	438,724	430,432	420,226	408,137	394,218	378,537
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**6,791**	**4,587**	**11,605**	**5,384**	**2,167**	**7,091**	**35,194**	**38,019**	**35,164**	**29,197**	**26,684**	**25,476**	**23,969**	**22,208**	**23,629**
% Growth	NA	(32.46%)	152.99%	(53.60%)	(59.74%)	227.16%	396.32%	8.03%	(7.51%)	(16.97%)	(8.61%)	(4.53%)	(5.91%)	(7.35%)	6.40%

Minnesota Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	178,036	560,399	574,369	789,555	719,489	571,025	582,446	593,366	603,750	613,561	622,765	631,328	639,219	646,410	652,875
Number of Locations	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Deposit / Location	178,036	280,200	287,185	394,778	359,745	285,513	291,223	296,683	301,875	306,781	311,382	315,664	319,610	323,205	326,437
Deposit / Location % Growth	NA	57.38%	2.49%	37.46%	(8.87%)	(20.63%)	2.00%	1.88%	1.75%	1.63%	1.50%	1.38%	1.25%	1.13%	1.00%
% of Total Deposits	2.17%	6.16%	5.73%	6.39%	4.59%	3.35%	3.28%	3.33%	3.26%	3.21%	3.17%	3.13%	3.10%	3.08%	3.06%
Calc. Demand	57,502	201,005	193,792	290,914	285,912	205,608	165,997	173,166	180,323	187,448	194,516	201,507	208,395	215,158	221,773
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	87,952	294,224	316,685	429,134	381,400	326,502	297,047	303,616	309,945	316,014	321,803	327,290	332,457	337,286	341,757
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	19,623	65,171	63,892	69,507	52,177	38,915	119,401	116,585	113,482	110,099	106,445	102,531	98,367	93,967	89,344
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**638**	**1,391**	**3,644**	**1,949**	**680**	**1,910**	**9,296**	**9,860**	**8,966**	**7,327**	**6,599**	**6,216**	**5,777**	**5,294**	**5,577**
% Growth	NA	118.03%	162.01%	(46.52%)	(65.08%)	180.66%	386.77%	6.08%	(9.07%)	(18.28%)	(9.94%)	(5.81%)	(7.06%)	(8.37%)	5.35%

Kansas - Bank of Blue Valley $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	563,638	489,471	1,016,743	1,138,264	1,179,294	1,239,066	1,301,019	1,359,565	1,413,948	1,463,436	1,507,339	1,545,023	1,575,923	1,599,562	1,615,557
Number of Locations	9	9	12	11	10	9	9	9	9	9	9	9	9	9	9
Deposit / Location	62,626	54,386	84,729	103,479	117,929	137,674	144,558	151,063	157,105	162,604	167,482	171,669	175,103	177,729	179,506
Deposit / Location % Growth	NA	(13.16%)	55.79%	22.13%	13.97%	16.74%	5.00%	4.50%	4.00%	3.50%	3.00%	2.50%	2.00%	1.50%	1.00%
% of Total Deposits	6.89%	5.38%	10.14%	9.21%	7.52%	7.28%	7.33%	7.62%	7.65%	7.66%	7.66%	7.66%	7.64%	7.61%	7.58%
Calc. Demand	182,043	175,564	343,050	419,397	468,630	446,149	370,791	396,770	422,306	447,091	470,807	493,139	513,775	532,416	548,783
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	278,443	256,985	560,593	618,662	625,142	708,475	663,520	695,667	725,873	753,742	778,892	800,964	819,636	834,623	845,689
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	62,123	56,922	113,100	100,205	85,522	84,441	266,709	267,129	265,768	262,603	257,640	250,919	242,512	232,523	221,085
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**2,019**	**1,215**	**6,450**	**2,809**	**1,115**	**4,144**	**20,764**	**22,593**	**20,997**	**17,476**	**15,972**	**15,212**	**14,242**	**13,099**	**13,800**
% Growth	NA	(39.85%)	431.02%	(56.45%)	(60.30%)	271.55%	401.09%	8.81%	(7.06%)	(16.77%)	(8.61%)	(4.76%)	(6.37%)	(8.03%)	5.35%

California - Premier Valley Bank $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	705,142	639,194	707,814	836,984	1,051,286	929,725	957,617	985,148	1,012,240	1,038,811	1,064,781	1,090,070	1,114,597	1,138,282	1,161,047
Number of Locations	8	8	8	8	6	6	6	6	6	6	6	6	6	6	6
Deposit / Location	88,143	79,899	88,477	104,623	175,214	154,954	159,603	164,191	168,707	173,135	177,464	181,678	185,766	189,714	193,508
Deposit / Location % Growth	NA	(9.35%)	10.74%	18.25%	67.47%	(11.56%)	3.00%	2.88%	2.75%	2.63%	2.50%	2.38%	2.25%	2.13%	2.00%
% of Total Deposits	8.61%	7.02%	7.06%	6.77%	6.70%	5.46%	5.40%	5.52%	5.47%	5.44%	5.41%	5.40%	5.40%	5.41%	5.45%
Calc. Demand	227,746	229,267	238,817	308,389	417,762	334,765	272,921	287,502	302,327	317,365	332,577	347,928	363,375	378,878	394,392
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	348,347	335,593	390,261	454,912	557,285	531,600	488,385	504,084	519,650	535,039	550,207	565,110	579,701	593,935	607,768
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	77,719	74,334	78,736	73,682	76,239	63,360	196,311	193,563	190,263	186,407	181,996	177,033	171,520	165,468	158,887
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**2,526**	**1,586**	**4,490**	**2,066**	**994**	**3,109**	**15,283**	**16,371**	**15,032**	**12,405**	**11,283**	**10,732**	**10,073**	**9,322**	**9,918**
% Growth	NA	(37.21%)	183.08%	(54.00%)	(51.87%)	212.74%	391.54%	7.12%	(8.18%)	(17.47%)	(9.05%)	(4.88%)	(6.14%)	(7.46%)	6.40%

Texas - First Bank & Trust $ in thousands	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Total Deposits	-	861,629	574,369	2,622,716	2,397,350	2,578,197	2,732,889	2,879,782	3,016,571	3,141,005	3,250,940	3,344,404	3,419,654	3,475,223	3,509,975
Number of Locations	-	8	2	32	22	19	19	19	19	19	19	19	19	19	19
Deposit / Location	NA	107,704	287,185	81,960	108,970	135,695	143,836	151,567	158,767	165,316	171,102	176,021	179,982	182,906	184,736
Deposit / Location % Growth	NA	NA	166.64%	(71.46%)	32.96%	24.52%	6.00%	5.38%	4.75%	4.13%	3.50%	2.88%	2.25%	1.63%	1.00%
% of Total Deposits	-	9.46%	5.73%	21.22%	15.29%	15.14%	15.40%	16.14%	16.31%	16.44%	16.53%	16.57%	16.57%	16.53%	16.46%
Calc. Demand	-	309,050	193,792	966,348	952,662	928,329	778,873	840,423	900,964	959,601	1,015,410	1,067,464	1,114,859	1,156,731	1,192,292
% of Total Deposits	32.30%	35.87%	33.74%	36.85%	39.74%	36.01%	28.50%	29.18%	29.87%	30.55%	31.23%	31.92%	32.60%	33.29%	33.97%
Calc. Savings	-	452,377	316,685	1,425,482	1,270,832	1,474,166	1,393,773	1,473,536	1,548,606	1,617,773	1,679,867	1,733,793	1,778,559	1,813,310	1,837,351
Average Interest Rate	0.53%	0.27%	0.85%	0.25%	0.11%	0.48%	1.59%	2.07%	2.11%	1.66%	1.43%	1.30%	1.15%	1.01%	0.88%
% of Total Deposits	49.40%	52.50%	55.14%	54.35%	53.01%	57.18%	51.00%	51.17%	51.34%	51.50%	51.67%	51.84%	52.01%	52.18%	52.35%
Calc. Time Deposits	-	100,202	63,892	230,886	173,856	175,702	560,242	565,822	567,000	563,631	555,663	543,147	526,236	505,182	480,332
Average Interest Rate	0.88%	0.92%	1.49%	1.26%	0.50%	0.88%	3.84%	3.07%	2.14%	1.89%	1.86%	1.92%	1.98%	2.03%	2.88%
% of Total Deposits	11.02%	11.63%	11.12%	8.80%	7.25%	6.81%	20.50%	19.65%	18.80%	17.94%	17.09%	16.24%	15.39%	14.54%	13.68%
Total Interest Expense	**-**	**2,138**	**3,644**	**6,473**	**2,267**	**8,622**	**43,616**	**47,855**	**44,796**	**37,510**	**34,448**	**32,928**	**30,905**	**28,460**	**29,983**
% Growth	NA	NA	70.41%	77.64%	(64.97%)	280.30%	405.86%	9.72%	(6.39%)	(16.27%)	(8.16%)	(4.41%)	(6.14%)	(7.91%)	5.35%

Appendix 7 – Interest Rates and Interest on Other Borrowings

Total Interest Income Gross Margin *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Interest Income	363,658	465,820	514,329	536,612	588,760	674,656	916,487	960,264	988,976	990,599	1,023,900	1,068,900	1,110,216	1,147,747	1,202,968
SOFR	1.26%	1.98%	2.20%	0.36%	0.04%	1.63%	5.44%	5.07%	4.11%	3.83%	3.77%	3.80%	3.82%	3.84%	3.88%
% Growth	*NA*	*57.08%*	*11.35%*	*-83.67%*	*-89.17%*	*4082.75%*	*233.92%*	*-6.84%*	*-18.94%*	*-6.86%*	*-1.54%*	*0.77%*	*0.60%*	*0.49%*	*1.06%*
Total Interest Expense	33,350	51,866	80,600	44,883	28,200	76,420	343,036	324,958	301,006	253,952	234,411	225,165	213,392	199,499	210,043
% of Interest Income	*9.17%*	*11.13%*	*15.67%*	*8.36%*	*4.79%*	*11.33%*	*37.43%*	*33.84%*	*30.44%*	*25.64%*	*22.89%*	*21.07%*	*19.22%*	*17.38%*	*17.46%*
% Growth	*NA*	*55.52%*	*55.40%*	*-44.31%*	*-37.17%*	*170.99%*	*NA*	*-5.27%*	*-7.37%*	*-15.63%*	*-7.69%*	*-3.94%*	*-5.23%*	*-6.51%*	*5.29%*

Interest on Other Borrowings *$ in thousands*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Estimated Interest on trust preferred offerings	4,330	6,282	5,877	3,445	3,405	10,023	13,768	13,299	11,934	11,583	11,569	11,690	11,802	11,909	12,052
% of Total	*30.08%*	*43.31%*	*38.87%*	*24.63%*	*26.33%*	*59.58%*	*59.58%*	*59.58%*	*58.21%*	*56.84%*	*55.47%*	*54.11%*	*52.74%*	*51.37%*	*50.00%*
Estimated Other	10,063	8,221	9,241	10,541	9,527	6,800	9,340	9,022	8,567	8,794	9,286	9,916	10,577	11,275	12,052
% of Total	*69.92%*	*56.69%*	*61.13%*	*75.37%*	*73.67%*	*40.42%*	*40.42%*	*40.42%*	*41.79%*	*43.16%*	*44.53%*	*45.89%*	*47.26%*	*48.63%*	*50.00%*
Total Interest on Other Borrowings	14,393	14,503	15,118	13,986	12,932	16,823	23,108	22,321	20,501	20,377	20,854	21,605	22,379	23,184	24,104
% Growth	NA	0.76%	4.24%	-7.49%	-7.54%	30.09%	37.36%	-3.41%	-8.15%	-0.60%	2.34%	3.60%	3.58%	3.60%	3.97%

Implied Average Fixed Interest Rate
3.81%
Assumed Growth in the Terminal Year
0.66%

Average SOFR per Year — Source: Pensford

2023	2022	2021	2020	2019	2018
4.85%	1.63%	0.04%	0.36%	2.20%	1.98%

Data Compiled: 09/20/2023

Average SOFR per quarter — Source: Pensford

Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
0.09%	0.71%	2.15%	3.62%	4.50%	4.97%	NA	NA

Data Compiled: 09/20/2023

Average 3-Month LIBOR in 2017
1.26%

Source: Pensford

Year	Forward 3-Month SOFR
2023	5.09%
2024	5.07%
2025	4.11%
2026	3.83%
2027	3.77%
2028	3.80%
2029	3.82%
2030	3.84%
2031	3.88%
2032	3.92%

Quarter	Forward 3-Month SOFR Rate
Q3	5.34%
Q4	5.44%

Data Compiled on 09/20/2023

Appendix 8 – Net Asset Value (NAV)

Net Asset Value - Fair Value Assets & Liabilities *$ in thousands*	
Asets	
Cash and Due from Banks	317,303
Interest Bearing Deposits with Other Banks and Other Short-Term Investments	82,884
Cash and Cash Equivalents	400,187
Time Deposits in Other Financial Instituions	1,490
Securities:	
Carried at Fair Value	5,798,041
Held to Maturity	806,942
Other Investments, at cost	72,291
Loans Held for Sale	14,353
Loans Receivable:	
Held to Maturity	11,717,974
Allowance for Credit Losses	(111,198)
Loans Receivable, net	11,606,776
Premiss, Furniture and Equipment, net	186,679
Premises, Furniture and Equipment Held for Sale	3,741
Other Real Estate, net	2,677
Goodwill	576,005
Core Deposit Intangibles and Customer Relationship Intangibles, net	21,651
Servicing Rights, net	-
Cash Surrender Value on Life Insurance	195,793
Other Assets	510,359
Total Assets	**20,196,985**
Liabilities	
Deposits:	
Demand	4,897,858
Savings	8,772,596
Time Deposits	3,993,089
Total Deposits	17,663,543
Short-Term Borrowings	44,364
Other Borrowings	372,403
Accrued Expenses and Other Liabilities	285,416
Total Liabilities	**18,365,726**

Assumptions	
Fair Value Tangible Assets	19,599,329
Fair Value Liabilities	18,365,726
Fair Value Tangible Equity	1,233,603
Shares Outstanding	42650
Implied Share Price	28.92
Current Share Price	29.38
Overvalued	(1.55%)

Net Asset Value - Assets & Liabilities *$ in thousands*	
Asets	
Cash and Due from Banks	317,303
Interest Bearing Deposits with Other Banks and Other Short-Term Investments	82,884
Cash and Cash Equivalents	400,187
Time Deposits in Other Financial Instituions	1,490
Securities:	
Carried at Fair Value	5,798,041
Held to Maturity	834,673
Other Investments, at cost	72,291
Loans Held for Sale	14,353
Loans Receivable:	
Held to Maturity	11,717,974
Allowance for Credit Losses	(111,198)
Loans Receivable, net	11,606,776
Premiss, Furniture and Equipment, net	186,679
Premises, Furniture and Equipment Held for Sale	3,741
Other Real Estate, net	2,677
Goodwill	576,005
Core Deposit Intangibles and Customer Relationship Intangibles, net	21,651
Servicing Rights, net	-
Cash Surrender Value on Life Insurance	195,793
Other Assets	510,359
Total Assets	**20,224,716**
Liabilities	
Deposits:	
Demand	4,897,858
Savings	8,772,596
Time Deposits	3,993,089
Total Deposits	17,663,543
Short-Term Borrowings	44,364
Other Borrowings	372,403
Accrued Expenses and Other Liabilities	285,416
Total Liabilities	**18,365,726**

Appendix 9 – Dividend Discount Model (DDM)

Dividend Discount Model *$ in Thousands Except Dividends Per Share*	2017A	2018A	2019A	2020A	2021A	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E
Dividends Declared per Common Share	0.47	0.56	0.67	0.70	0.96	1.09	1.06	1.33	1.55	1.85	2.09	2.29	2.49	2.68	2.66
% Growth YoY	*NA*	*19.69%*	*19.76%*	*4.59%*	*36.88%*	*288.72%*	*360.61%*	*25.35%*	*16.85%*	*19.37%*	*12.81%*	*9.56%*	*8.59%*	*7.71%*	*(0.71%)*
Net Income	75,214	116,959	149,129	133,487	211,873	204,130	169,226	192,848	205,935	225,814	235,252	239,287	242,526	245,113	229,586
% Growth YoY	*NA*	*55.50%*	*27.51%*	*(10.49%)*	*58.72%*	*248.10%*	*395.80%*	*13.96%*	*6.79%*	*9.65%*	*4.18%*	*1.72%*	*1.35%*	*1.07%*	*(6.33%)*
Dividends Paid to Common Stockholders	14,499	19,318	24,607	29,468	40,509	46,199	45,193	56,652	66,200	79,020	89,144	97,668	106,061	114,236	113,420
Basic Shares Outstanding	*31,054*	*34,568*	*36,767*	*42,096*	*42,278*	*42,468*	*42,650*	*42,650*	*42,650*	*42,650*	*42,650*	*42,650*	*42,650*	*42,650*	*42,650*
Common Shareholder Payout Ratio	0.19	0.17	0.17	0.22	0.19	0.23	0.27	0.29	0.32	0.35	0.38	0.41	0.44	0.47	0.49
% Growth YoY	*NA*	*(14.32%)*	*(0.10%)*	*33.79%*	*(13.39%)*	*18.37%*	*18.00%*	*10.00%*	*9.43%*	*8.86%*	*8.29%*	*7.71%*	*7.14%*	*6.57%*	*6.00%*
Discounted Dividend								1.14	1.21	1.30	1.33	1.32	1.29	1.26	1.13
Discount Period								*1.5*	*2.5*	*3.5*	*4.5*	*5.5*	*6.5*	*7.5*	*8.5*

Assumptions	
Dividend Growth	2.00%
CAPM	10.56%
Terminal CAPM	10.64%
Sum of PV Distributions	10.44
Terminal Value	30.76
PV of Terminal Value	13.11
Implied Price	23.54
Current Price	29.38
Overvalued	(19.87%)

Appendix 10 – Valuation Summary

Excess Returns Assumptions			
Risk Free Rate	4.29%	Excess Equity Return in Terminal Year	(104,498)
Terminal Risk Free Rate	4.37%	Tax Rate	21.00%
Beta	1.11	Terminal Growth Rate	2%
Market Risk Premium	5.65%	Terminal Value of Excess Equity	(1,208,833)
% Equity	100.00%	PV of Terminal Value of Equity	(514,991)
% Debt	-	Tangible Book Value	1,261,334
Terminal ROE	10.00%	Sum PV of Excess Return	(161,070)
CAPM	10.56%	Intangible Assets	597,656
Terminal CAPM	10.64%	Discounted Change in Equity	545,125
Book Value In Terminal Year	3,138,556	Value of Equity	1,728,054
Net Income in Terminal Year	229,586	Cost of Financial Distress	NA
Terminal Cost of Equity	334,084	Fully Diluted Shares	42,650
		Implied Price	$40.52
		Current Price	$29.38
		Undervalued	37.91%

Tangible Excess Returns Assumption			
Risk Free Rate	4.29%	Excess Equity Return in Terminal Year	(40,880)
Terminal Risk Free Rate	4.37%	Tax Rate	21.00%
Beta	1.11	Terminal Growth Rate	2%
Market Risk Premium	5.65%	Terminal Value of Excess Equity	(477,599)
% Equity	100.00%	PV of Terminal Value of Equity	(203,468)
% Debt	-	Tangible Book Value	1,261,334
Terminal ROE	10.00%	Sum PV of Excess Return	183,105
CAPM	10.56%	Discounted Change in Equity	545,125
Terminal CAPM	10.64%	Value of Tangible Equity	1,786,096
Tangible Book Value In Terminal Year	2,540,900	Cost of Financial Distress	NA
Net Income in Terminal Year	229,586	Fully Diluted Shares	42,650
Terminal Cost of Equity	270,466	Implied Price	$41.88
		Current Price	$29.68
		Undervalued	41.10%

Net Asset			
Fair Value of Tangible Assets	19,599,329	Fair Value of Tangible Equity	1,233,603
Fair Value of Liabilities	18,365,726	Fully Diluted Shares	42,650
		Implied Price	28.92
		Current Price	29.38
		Overvalued	(1.55%)

Dividend Discount Model Assumptions			
Dividend Growth	2.00%	Terminal Value	10.44
CAPM	10.56%	PV of Terminal Value	13.11
Terminal CAPM	10.64%	PV per Share	23.54
Sum of PV Distributions	10.44	Implied Price	23.54
		Current Price	29.38
		Overvalued	(19.87%)

Valuation Method	Price Target	Weight
Excess Returns	40.52	
Tangible Excess Returns	41.88	70.00%
Dividend Discount Model	23.54	
Net Asset Value	28.92	
Relative Valuation	38.81	30.00%
Implied Share Price	40.96	
Current Share Price	29.38	
Undervalued	39.41%	

Implied Price (Cost of Equity)

Adjusted Beta	9.57%	10.07%	10.56%	11.07%	11.57%
0.91	46.53	44.90	43.37	41.82	40.38
1.01	44.87	43.29	41.83	40.34	38.95
1.11	43.45	41.93	40.52	39.08	37.74
1.21	42.14	40.68	39.31	37.91	36.62
1.31	41.02	39.59	38.26	36.91	35.65

Undervalued/(Overvalued) (Cost of Equity)

Adjusted Beta	9.57%	10.07%	10.56%	11.07%	11.57%
0.91	58.38%	52.82%	47.63%	42.36%	37.44%
1.01	52.71%	47.36%	42.37%	37.30%	32.57%
1.11	47.89%	42.72%	37.91%	33.01%	28.44%
1.21	43.44%	38.45%	33.79%	29.05%	24.63%
1.31	39.61%	34.76%	30.24%	25.64%	21.35%

Implied Price (Cost of Equity)

Tax Rate	9.57%	10.07%	10.56%	11.07%	11.57%
19.00%	44.69	43.13	41.67	40.19	38.81
20.00%	44.07	42.53	41.09	39.64	38.27
21.00%	43.45	41.93	40.52	39.08	37.74
22.00%	42.83	41.33	39.94	38.52	37.20
23.00%	42.21	40.74	39.36	37.96	36.66

Undervalued/(Overvalued) (Cost of Equity)

Tax Rate	9.57%	10.07%	10.56%	11.07%	11.57%
19.00%	52.11%	46.80%	41.84%	36.80%	32.10%
20.00%	50.00%	44.76%	39.87%	34.91%	30.27%
21.00%	47.89%	42.72%	37.91%	33.01%	28.44%
22.00%	45.78%	40.69%	35.94%	31.11%	26.61%
23.00%	43.67%	38.65%	33.97%	29.22%	24.78%

Implied Price (Cost of Equity)

Market Risk Premium	9.57%	10.07%	10.56%	11.07%	11.57%
3.65%	50.64	48.85	47.18	45.48	43.90
4.65%	46.51	44.88	43.36	41.81	40.36
5.65%	43.45	41.93	40.52	39.08	37.74
6.65%	41.08	39.66	38.32	36.97	35.71
7.65%	39.20	37.84	36.58	35.29	34.09

Undervalued/(Overvalued) (Cost of Equity)

Market Risk Premium	9.57%	10.07%	10.56%	11.07%	11.57%
3.65%	72.35%	66.26%	60.58%	54.80%	49.42%
4.65%	58.32%	52.76%	47.57%	42.30%	37.39%
5.65%	47.89%	42.72%	37.91%	33.01%	28.44%
6.65%	39.83%	34.97%	30.44%	25.83%	21.54%
7.65%	33.42%	28.81%	24.50%	20.12%	16.04%

Implied Price (Cost of Equity)

Risk Free Rate	9.57%	10.07%	10.56%	11.07%	11.57%
3.29%	43.45	41.93	40.52	39.08	37.74
3.79%	43.45	41.93	40.52	39.08	37.74
4.29%	43.45	41.93	40.52	39.08	37.74
4.79%	43.45	41.93	40.52	39.08	37.74
5.29%	43.45	41.93	40.52	39.08	37.74

Undervalued/(Overvalued) (Cost of Equity)

Risk Free Rate	9.57%	10.07%	10.56%	11.07%	11.57%
3.29%	47.89%	42.72%	37.91%	33.01%	28.44%
3.79%	47.89%	42.72%	37.91%	33.01%	28.44%
4.29%	47.89%	42.72%	37.91%	33.01%	28.44%
4.79%	47.89%	42.72%	37.91%	33.01%	28.44%
5.29%	47.89%	42.72%	37.91%	33.01%	28.44%

Beta	Levered	Weight
1-Year Daily Regresed	1.00	
3-Year Daily Regressed	0.86	
5-Year Daily Regressed	1.11	100.00%
1-Year Weekly Regressed	0.74	
3-Year Weekly Regressed	0.84	
5-Year Weekly Regressed	0.92	
1-Year Vasicek	0.69	
3-Year Vasicek	0.65	
5-Year Vasicek	0.82	
Bottom-up	0.35	
Weighted Beta		**1.11**

Appendix 11 – Sources

Company Investor Relations page
Company presentations
Databases available through UO Libraries
Earnings call transcripts
IBIS World
Inside ownership
Mergent Online
NYU Stern
Press releases
Prospectuses
SEC Filings
SP CapitalIQ
SP Global