Yale SCHOOL *of* MANAGEMENT

Commercial Banking Industry Report

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Banking: Bigger is Better

Short-Term Valuation: Overweight
Long-Term Valuation: Overweight

- Interest Rates – Greenspan is not that powerful. Banks are still poised to do well despite a rising interest rate environment.
- Economic and rate trends are favorable for both supply and demand of funds.
- Competition has forced diversification – boding well for larger banks.
- We initiate coverage with an Overweight rating.

Industry Summary

- A flattening of the yield curve, with short term interest rates increasing close to a full percentage point and long term rates remaining stable, will contract margins between the 10-year Treasury and 3-Month Treasury. This however is not as negative for the industry as is widely believed.

- For large banks, the trend to diversify into non-interest sources of income can be a beneficial contributor to income growth, although banks of all sizes still need to recognize the importance of traditional banking business.

- The industry is highly concentrated, with the top five banks ranked by deposits representing 40% of the industry. This has caused the industry to be split into those that can compete on scale and scope, and those that need to rely on traditional banking business.

- An increased focus on retirement will stem the declining savings rates, and combine with rising incomes to provide growth in bank deposits.

- The improving economy, combined with stable long term rates will continue to drive the demand for loans, especially residential real estate.

- Bush's Social Security overhaul is a huge unknown, but one that we don't foresee providing a huge benefit to the industry.

- Based on short and long term growth prospects, large banks within the industry should continue their strong performance.

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Interest Rates

Live by the Spread. . .Live by the Spread

There has been much speculation that the yield curve is entering a period of flattening, due to rate increases by the Federal Reserve. This is actually a likely scenario, given that during the last twenty years there have been four periods of Fed tightening, and in each case the spread between the 10-year Treasury Bond and the 3-month Treasury Note has contracted.

Spread Between 10-year and 3-month

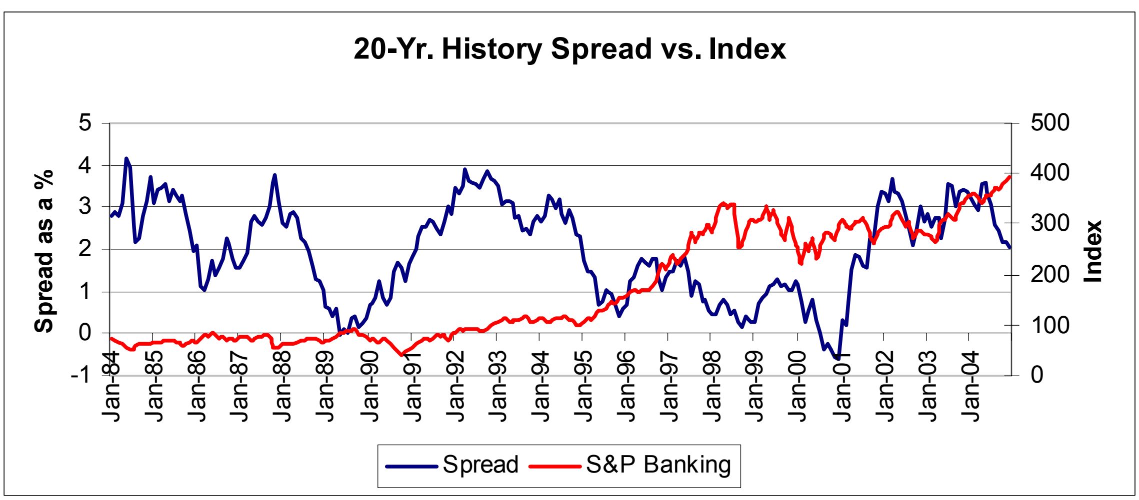
Exhibit 1

Dates Start	End	Spread Start	End
May-83	Aug-84	2.18	2.16
Mar-88	Mar-89	2.86	0.4
Dec-93	Apr-95	2.78	1.36
Jan-99	Jul-00	0.29	0.01

Data Source: Global Financial Data, Inc. and Yahoo! Finance

The problem is the belief that when spreads are tightening, banks are a poor investment. Intuition would certainly lead us to believe that since banks lend at long rates, and finance their lending by borrowing at the short rate, banks that live by this spread should die by the spread as well. However, history has actually proved this to be an inconsistent theory. Comparing the overall level of the S&P Commercial Bank Index to the historical spread between the 10-year Treasury and the 3-Month Treasury, you can visually see no connection.

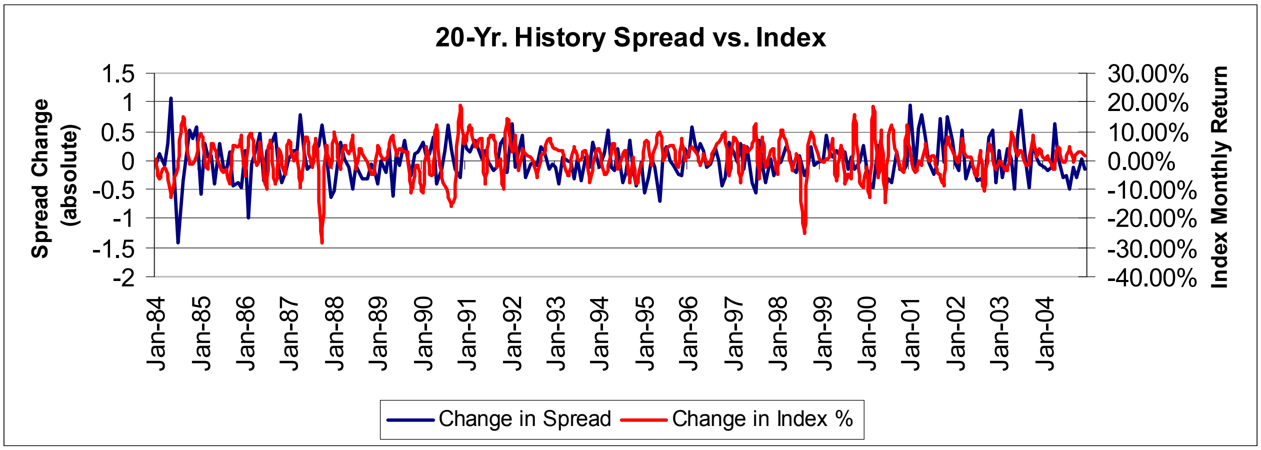
Exhibit 2



Data Source: Global Financial Data, Inc. and Yahoo! Finance

Looking at the following graph of the absolute change in the spread versus the change in the Index shows that on a monthly basis, both are quite volatile.

Exhibit 3



Data Source: Global Financial Data, Inc. and Yahoo! Finance

Even more telling is when you look at the correlations on the following tables between the spread (both level and change) and returns from the S&P Commercial Bank Index. Not only is there very little correlation, but the correlations are actually negative, indicating that when the spread is low returns would be higher. This is very counterintuitive, and something that most of Wall Street has not considered.

Exhibit 4

10-year history		*S&P Banking Returns*	*Spread*
	S&P Banking Returns	1	
	Spread	-0.06818	1

20-year history		*S&P Banking Returns*	*Spread*
	S&P Banking Returns	1	
	Spread	-0.07	1

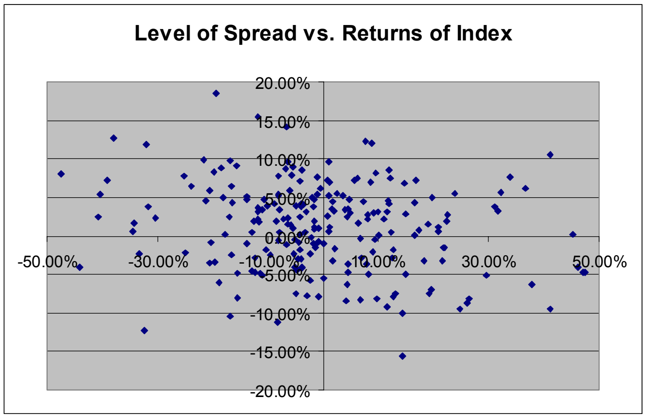
10-year history		*S&P Banking Returns*	*Change in Spread*
	S&P Banking Returns	1	
	Change in Spread	-0.03496	1

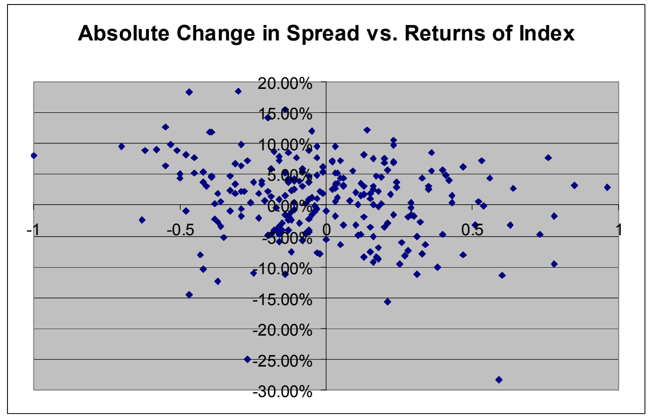
20-year history		*S&P Banking Returns*	*Change in Spread*
	S&P Banking Returns	1	
	Change in Spread	-0.21485	1

Data Source: Global Financial Data , Inc. and Yahoo! Finance

This can easily be seen graphically, by plotting both the level of the spread as well as the absolute change of the spread on the x-axis, and the returns of the Index on the y-axis. These are represented on the two following graphs.

Exhibit 5





Data Source: Global Financial Data, Inc. and Yahoo! Finance

One final revelation between the spread and returns is the regression of the S&P Banking Index versus the absolute change in the spread. As can be seen, there is no predictive power (with an almost non-existent R^2).

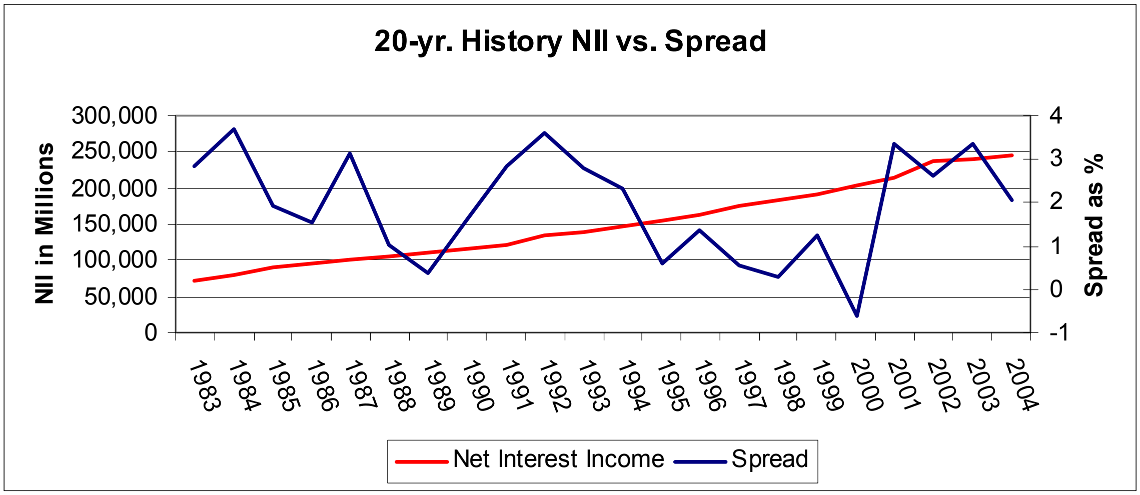
Exhibit 6

Regression Statistics	
Multiple R	0.214853
R Square	0.046162
Adjusted R Square	0.042154
Standard Error	0.062968
Observations	240

Data Source: Global Financial Data, Inc. and Yahoo! Finance

What we can conclude is that the spread tightening should give no indication on whether or not banking stocks will have positive or negative returns. The reasons for this are tied to net interest income, which is the difference between interest income and interest expense. If the change in the market spread had a strong effect on banks profitability, it would be reflected in their net interest income. However, looking at the following graph of industry wide net interest income versus the spread between the 10-year Treasury and the 3-month Treasury, it is clear that over the past twenty years, net interest income has been rising steadily despite a very volatile spread.

Exhibit 7



Data Source: FDIC and Yahoo! Finance

The reasons for this behavior are three-fold. The first has to do with a bank's funding source. Banks have several options with which they can fund their loans, including core-deposits, non-core deposits, internal capital, and fed funds. A move away from core-deposits towards non-core deposits helps banks switch from short-term rate instruments like savings and CD's towards either non-interest or long-term interest sources such as checking accounts, brokered deposits, and borrowings.[1] Having these different funding sources allows a bank to selectively set short-term interest rate exposure.

A second reason for the low impact of spread changes has to do with banks' selectivity on loan rates. There has been a trend towards using variable interest loans, which are tied to short rates (usually either Prime, or LIBOR). Thus, even if a bank's funding costs are rising, their income from such variable interest loans will rise proportionately.

Finally, banks are well aware of the dangers rates could potentially pose, and thus have become very adept at hedging their interest rate exposure.

So while most of the street is concerned about a flattening of the yield curve, this should not be considered the only risk for the industry. It is important to focus on the other industry drivers as well when assessing the potential for Commercial Banks.

Net interest income versus Non-interest income

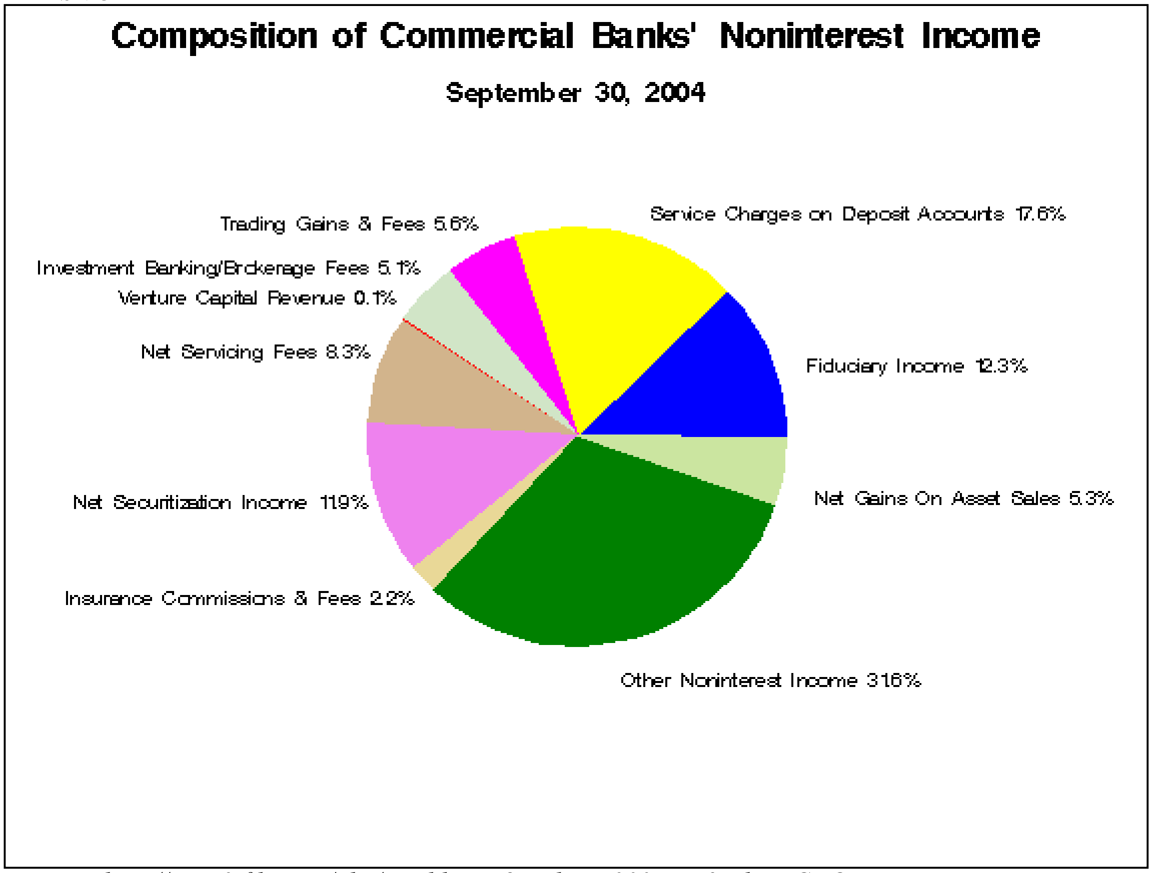
Banks doing less traditional banking

[1] http://www.olsonresearch.com/IRData/2004Q2/Cover.htm

Banks are continually moving into more diversified financial services and products. Traditionally, banks have made most of their money on the difference between the interest rates that they receive on the money that they loan out and the rates that they pay on their borrowed funds, or more formally net interest income. However, non-interest income has become an increasingly more important part of a banks income statement, particularly for large and more diversified banks.

Non-interest income comprises many different types of fee based activities, including deposit account service fees, investment banking fees, trust services, and loan securitization income. Here is a chart that gives us a feel for the breakdown of non-interest income at commercial banks:

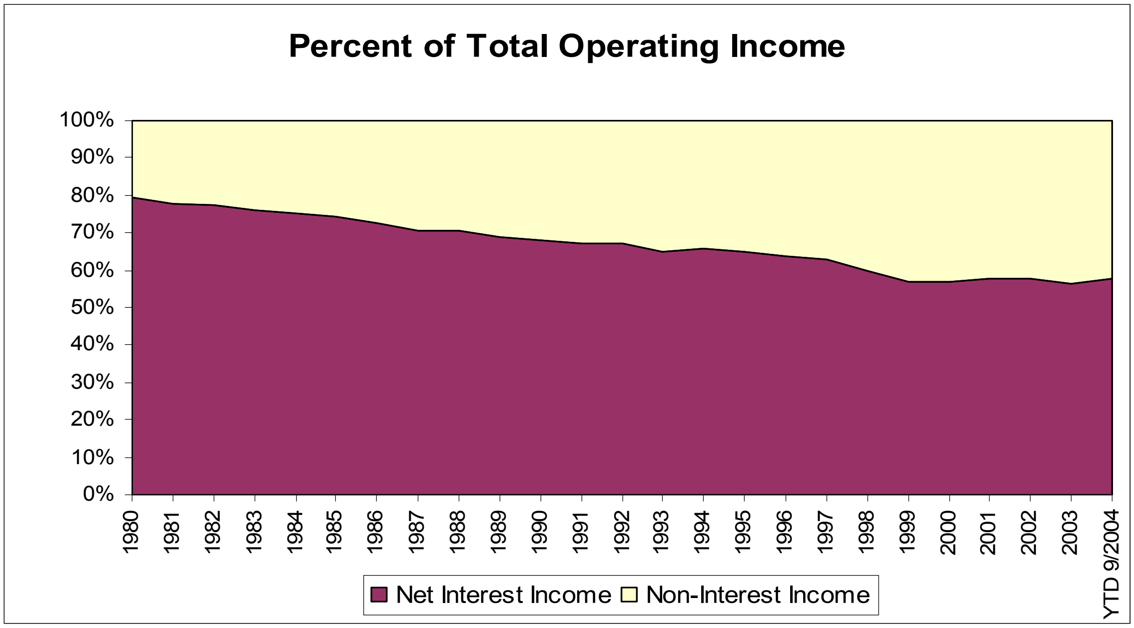
Exhibit 8



http://www2.fdic.gov/qbp/grtable.asp?rptdate=2004sep&selgr=CNONII

Many of these fee based activities are seen as diversifiers away from the inherent risks (mostly interest rate risk) in the traditional banking model that we referred to in the beginning of this section. Increased competition and mergers and acquisitions within the industry have coincided with and supported this perceived diversification benefit, as banks have moved into these new areas of income generation as a catalyst for growth. This belief has fueled the industry-wide increase in non-interest income as you can see in the following exhibit. Since 1980, non-interest income has climbed from 20% of a company's operating income (which is net interest income plus non-interest income) to currently just over 42%.

Exhibit 9



Data: www.FDIC.gov

Although diversification has been the main driver towards this new business model, there are risks associated with this heavier reliance on non-interest income. First, we have shown in the section above on interest rates that fluctuations in the yield curve do not predict changes in net interest income, and more exactly net interest income is a consistent growth item, and therefore one that should not be ignored.

Another risk is based on a study put out by the Federal Reserve Bank of Chicago in 2004, where DeYoung and Rice argue that even though higher accounting rates of returns are associated with more fee-based activities on a bank's income statement, these higher returns also come with more volatility, therefore reducing their risk-adjusted rates of return. The same study showed how underlying this risk is the increased volatility of bank's earnings as the percentage of non-interest income increases.[2]

Taking these risks into consideration for the industry as a whole, we do not feel that this trend towards non-interest income is favorable. Individual banks need to find their optimal mix of net interest and non-interest income, which will change dependent on the size of the bank. Smaller and more regional banks that pride themselves on relationship based loaning cannot compete with larger banks for fee based activities. They must continue to focus on growing their net interest income.

[2] Robert DeYoung and Tara Rice, *How do Banks Make Money? The fallacies of fee income* (4Q / 2004, The Federal Reserve Bank of Chicago Publications)

Larger and more diversified banks, on the other hand, have successfully followed this business model in the recent past. DeYoung and Rice also point out this with their argument that larger banks that are well positioned with a good strategy can improve their return with more diverse fee based activity.[3] We feel that larger banks will continue to diversify towards a larger portion of non-interest income because they have a competitive advantage in these areas due to their economies of scale. The growth in fee based activities will stem from these major drivers (all further explored in other sections of this report):

- Increase in deposits & corresponding fees
- Increase in overall M&A activity and investment banking fees
- Increase in need for fiduciary services
- More emphasis on loan securitization

In summary, although we think that the industry as a whole has under-estimated the importance of net interest income, larger diversified banks will continue to be successful with this new model.

Competition

The Changing Tide of Competitive Forces

The industry has gone through tremendous change, not just over the last decade but even over just the last few years. Both the transition from net interest income, to a blended balance of net interest income and non-interest income, and the flurry of mergers and acquisitions has dramatically altered the competitive landscape for today's banks.

The only thing going well for banks on the competitive front is the relative barriers to entry. While starting a bank is a somewhat difficult task, in today's environment surviving as a start-up bank is extremely difficult. As the industry has become more reliant on fee generation, the tools employed to drive the fees are only profitable on a large scale. Thus, new banks are at an extreme disadvantage compared to the now very large national banks that can take advantage of their economies of scale.

Unfortunately, while entering the banking industry as a start-up may be difficult, banks face fierce competition from non-traditional banking sources. One new emergence is the internet bank. Since the majority of non-interest expense for most banks is payroll and occupancy, internet banks have a huge advantage in regards to cost structure. Also threatening banks is the shifting of assets from savings type products such as CD's, into the stock market. More households are becoming comfortable placing their savings into the stock market, which threatens the core deposits of banks. While this may help on fee generation if the customers conduct their market transactions through the bank's

[3] Robert DeYoung and Tara Rice, *How do Banks Make Money? A variety of business strategies* (4Q / 2004, The Federal Reserve Bank of Chicago Publications)

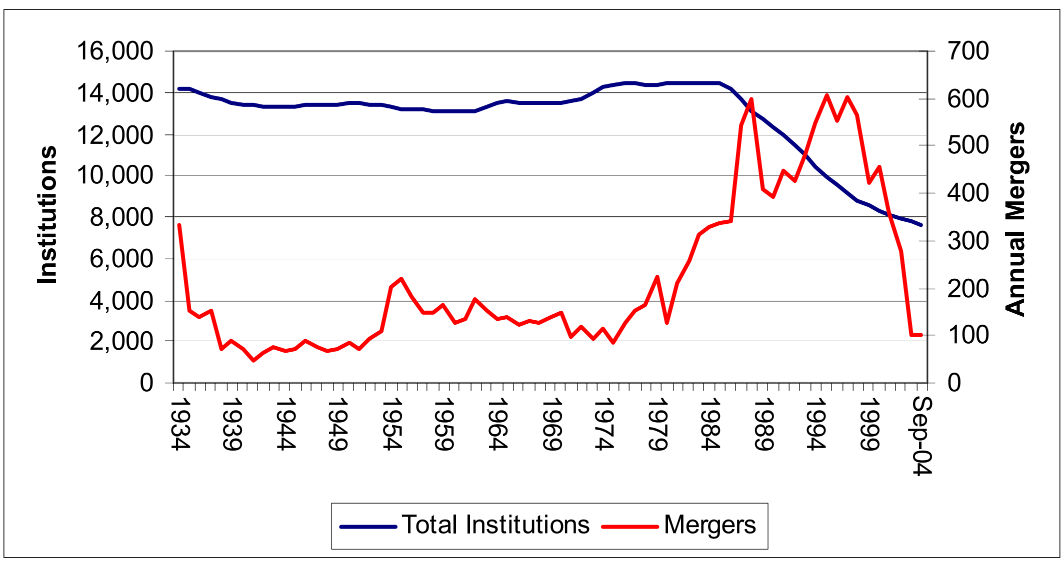
brokerage, they now face competition from companies that focus solely on market transactions.

Regarding the threats posed by competition from outside the industry, is the fact that customers have become less loyal. When banks relied more on net interest income, the relationships they had with their customers were more personal. Additionally, the legacy of information used to acquire loans made it in consumer's interests to stay with their current bank. However, with more focus on fee generation consumers have less commitment to their banks. Loans are now streamlined and based upon models which have lowered the switching costs to the consumer.

Also regarding switching costs, the consumer has less reason to keep their money with an institution. Since consumers no longer have close relationships with their banks, when their CD matures consumers are likely to shop around for the best rate before re-investing. The only advantage the banks have in this instance is that they have started offering services such as internet bill payment services at no fee. Once consumers have established these services, it can be difficult to then relocate funds to a new institution. While this has helped save some deposits, it has done so to the detriment of fee income.

Finally, starting in the eighties, and continuing even through recently there has been a tremendous amount of merger and acquisition activity.

Exhibit 10



Data Source: FDIC

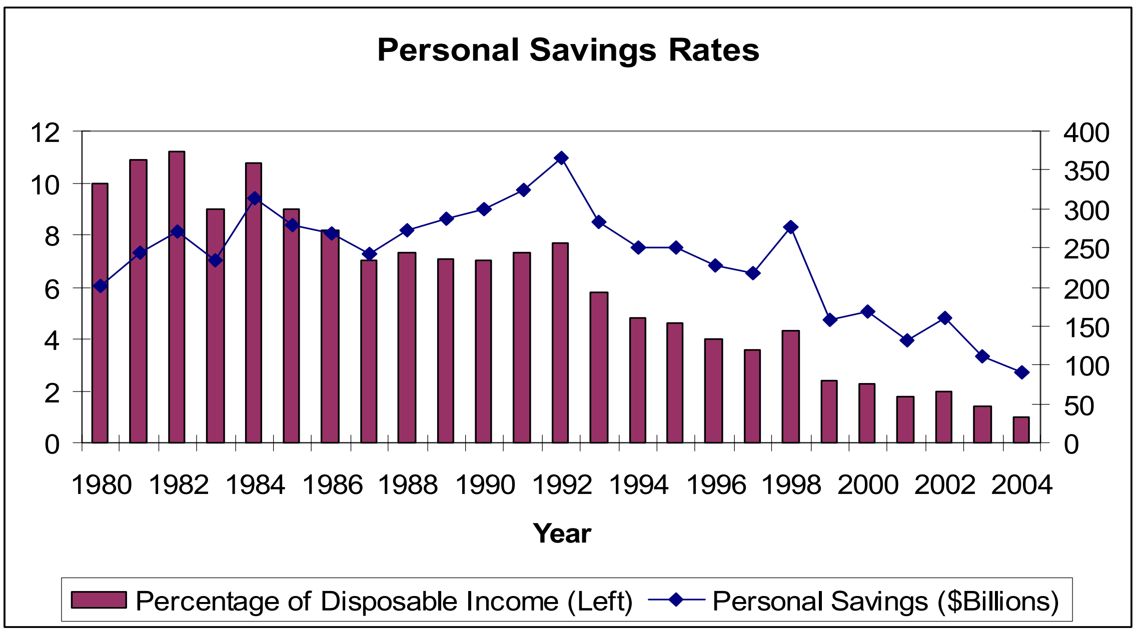
This has resulted in a highly consolidated industry where the top five companies ranked by deposits represent 40% of the 7,660 institutions. Looking forward, these top five companies possess a superior advantage to their peers due to their sheer size. The large scale of these institutions has reduced the unit costs of transactions to ranges that smaller institutions can not compete with. For small and medium sized institutions that try too much to diversify, and take too strong of a non-interest income approach, survival against these five large players will be extremely difficult.

Savings Trends and Deposit Growth

A penny saved…

Personal savings rates are consistently lower, but deposits continue to trend higher. Personal savings rates have decreased to all time lows since the 1930's here in the U.S.[4] The level of personal savings has decreased along with this rate, even though personal income levels continue to rise. Americans on average only saved 1% of their disposable personal income in 2004, including in their employer and personal retirement accounts. This 1% figure for the whole year is also artificially inflated as the personal savings rate was 3.4% in December 2004 due to the huge special dividend Microsoft paid to their shareholders.

Exhibit 11



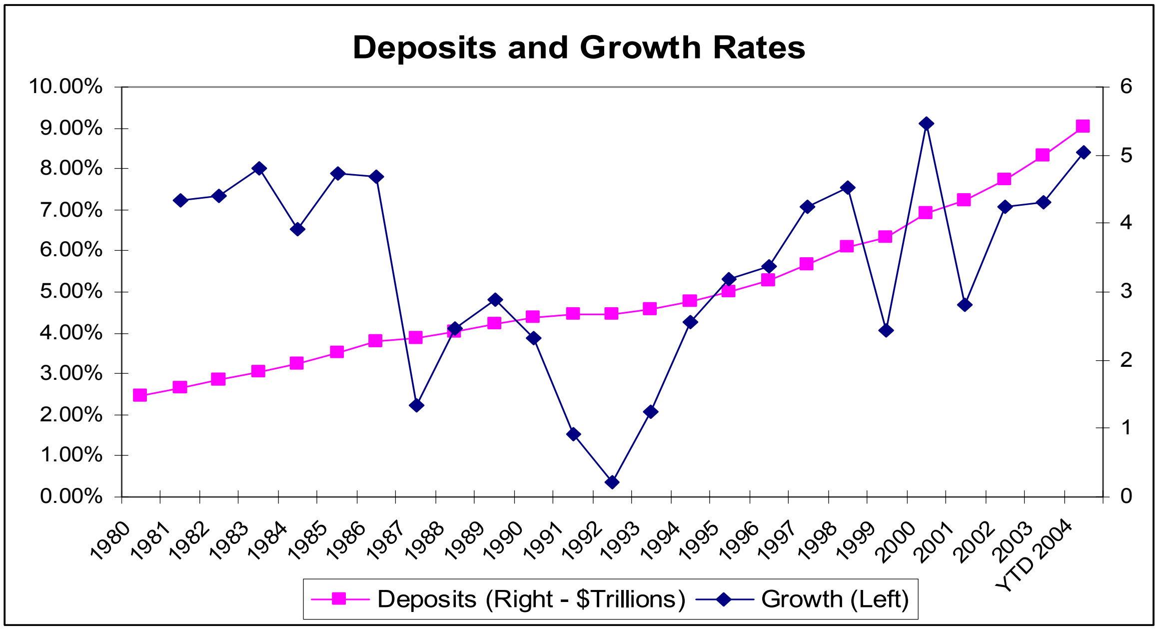
Data: Bureau of Economic Analysis

With most economic indicators pointing in favorable directions and the baby boomers getting close to retirement age, we think that the generation following these baby boomers will begin to foresee the need to save more as they see how their parents are in need of some extra income during retirement. We predict the savings rate as a percentage of disposable income to stabilize in the next year and to slightly increase in the next few years to up around 2 – 3 %. This would increase the amount of savings as income levels continue to grow.

[4] Based upon data from Bureau of Economic Analysis

This savings will trickle through to personal bank deposits. The lowest growth rate in the past 10 years in total deposits was 4% in 1999, and total deposits grew year to date over 8% through September 2004, fueled by increasing uncertainty in capital markets. We expect this growth rate to continue in coming years, being driven by the increase in savings levels that we just talked about. This proves favorable for banks as deposits continue to be the greatest source of funding, making up over 72% of their total liabilities.[5] Since deposit account service fees is one of the biggest sources of fee-based income, as we discussed earlier, this is again more favorable for diversified banks in the future.

Exhibit 12



Data: www.FDIC.gov

Loan Demand

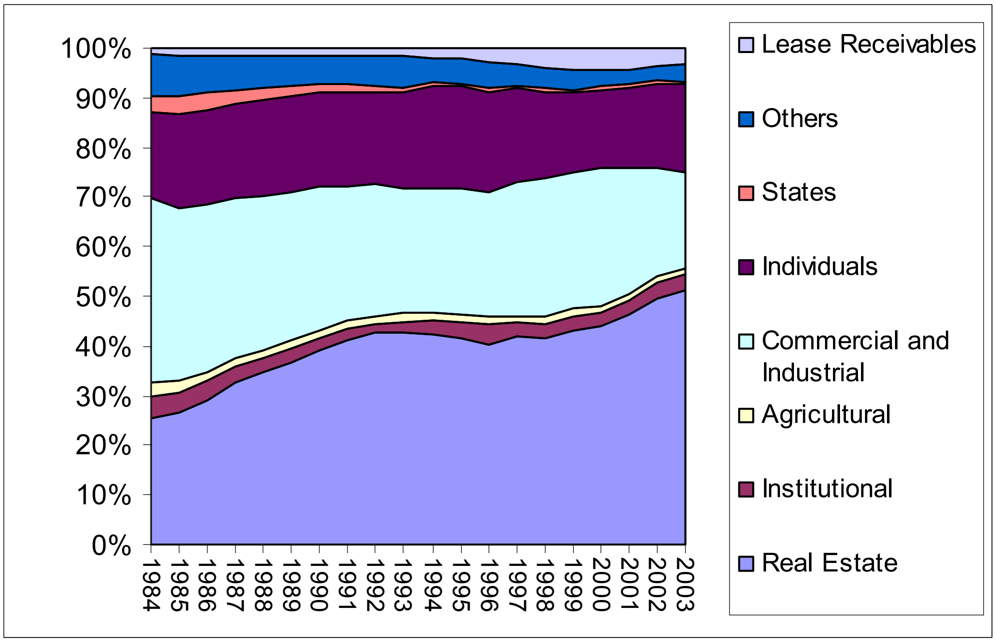
Are you In-Demand?

In order for banks to grow their earnings, they will have to rely on growth in demand. Since so many banks' net income is comprised of almost equal weights of net interest income and non-interest income, it is important to know what drives demand of both these factors. However, as discussed previously in this report, one of the largest drivers of non-interest income sources is demand deposit growth. Demand deposit growth was further explored in the section on savings. Thus, the key area left to explore is what prompts growth in Net interest income.

[5] Based upon data for all commercial banks from www.FDIC.gov

For net interest income, the largest demand driver is the long-term interest rate. One reason for this is the composition of banks' loan portfolios. Looking at the following chart of the industry as an aggregate, it is obvious that over the last twenty years, real-estate loans have become the dominant segment of lent funds.

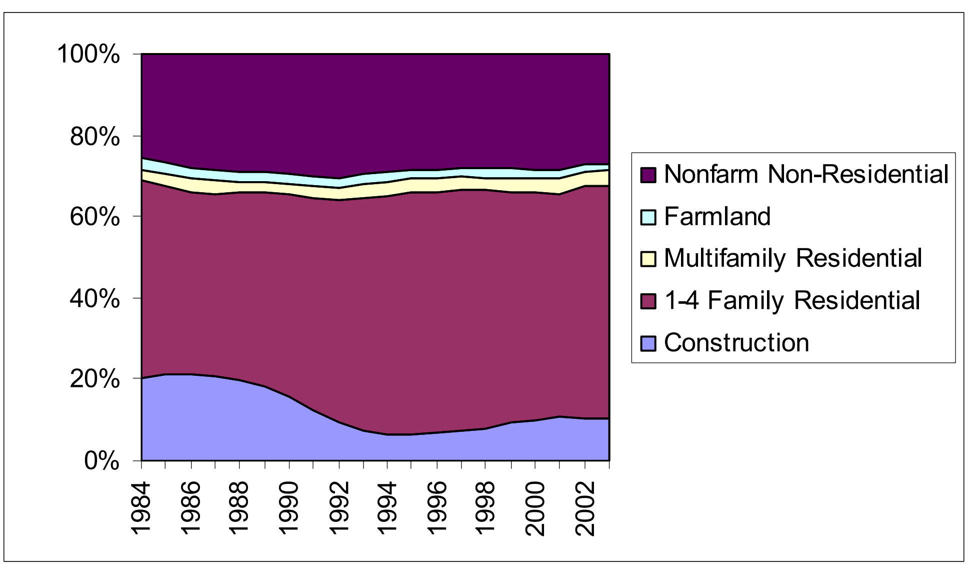
Exhibit 13



Data Source: FDIC

Further, within the real-estate loan category it is loans for single and small family housing that is the driver of earnings.

Exhibit 14



Data Source: FDIC

Therefore, the primary demand driver for loans is the demand of family residential loans. This demand is closely tied to the economy as a whole, and level of interest rates. It is anticipated that the economy will continue to expand based on all current economic indicators.

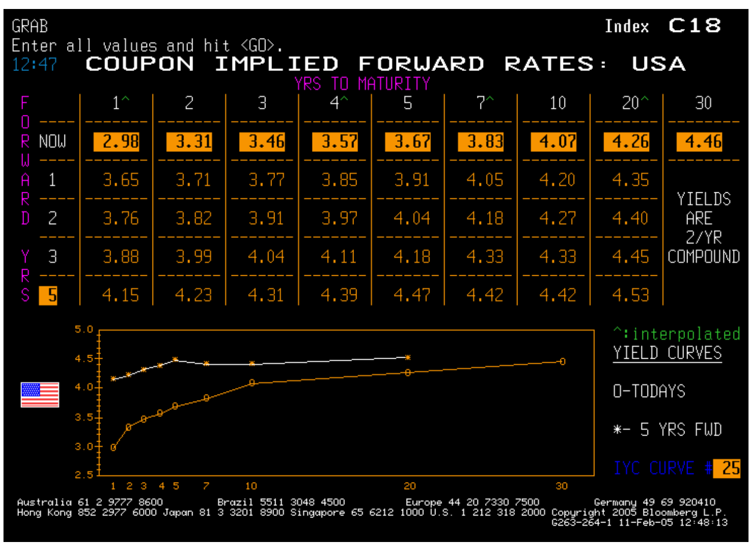
Exhibit 15

THE ECONOMY: SEVEN INDICATORS		
The indicator	**what it's telling us**	**next update**
Consumer Confidence	Rebounding Growth	February 22
Retail sales	Rebounding Growth	February 15
Leading Economic Indicators	Rebounding Growth	February 17
Manufacturing Activity (ISM)	Growth slower than forecast	March 1
Industrial Production	Rebounding Growth	February 16
Jobs Growth	Moderate Growth	March 4
Inflation (CPI)	Inflation threat surfacing	February 23

Source: http://money.cnn.com/news/economy/

In addition to expected economic growth, long-term interest rates, which are used as a reference for residential borrowing, are expected to only rise slightly. In fact, looking at implied forward rates, the 10-year Treasury is only expected to rise from a current 4.07% yield to 4.42%.

Exhibit 16


GRAB
Index C18
Enter all values and hit <GO>.
12:47 COUPON IMPLIED FORWARD RATES: USA

YRS TO MATURITY

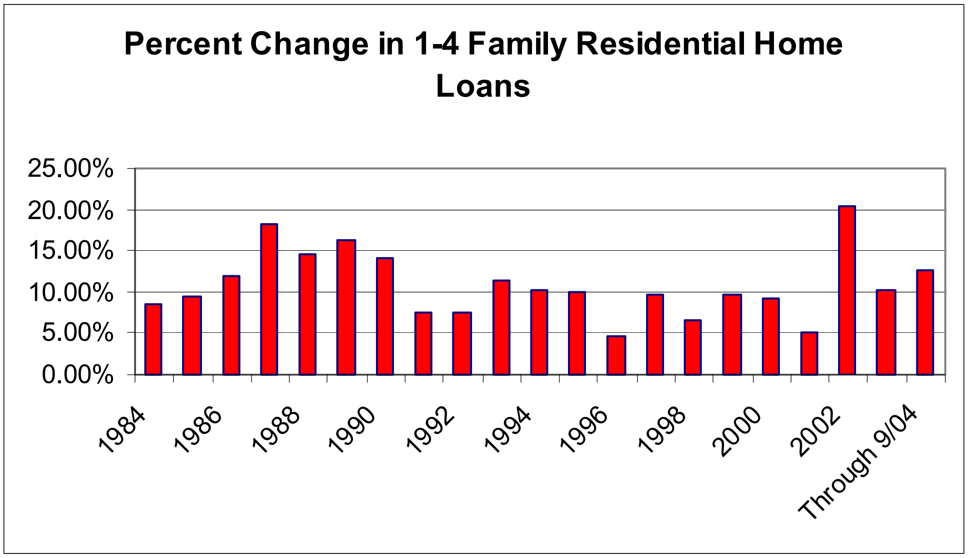
FORWARD YRS	1^	2	3	4^	5	7^	10	20^	30
NOW	2.98	3.31	3.46	3.57	3.67	3.83	4.07	4.26	4.46
1	3.65	3.71	3.77	3.85	3.91	4.05	4.20	4.35	YIELDS ARE 2/YR COMPOUND
2	3.76	3.82	3.91	3.97	4.04	4.18	4.27	4.40	
3	3.88	3.99	4.04	4.11	4.18	4.33	4.33	4.45	
5	4.15	4.23	4.31	4.39	4.47	4.42	4.42	4.53	

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 920410
Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2005 Bloomberg L.P.
G263-264-1 11-Feb-05 12:48:13

Source: Bloomberg

The small rise in the 10-year rate will not be enough to significantly impact the strong annual growth in 1-4 Family Residential loans that has been seen in recent years.

Exhibit 17



Data Source: FDIC

Ever since the 10-year rate consistently stayed below 5% starting mid 2002, loan growth has been over 10%. Growth in 2002 was 20.28%, 2003 growth was 10.15%, and 2004 growth through the end of September was already up 12.72%.

Interestingly, this loan growth is just the growth in loans that companies keep on the books. The large diversified banks actually securitize a majority of their residential loans. Most the loans that are kept on the books are their high yielding loans, such as jumbo loans. The only other reason loans are kept on the books is if they do not conform to certain standards for securitization, or if the market has recently been flooded with a specific subtype of mortgage backed securities.

The expected continued strong demand for residential loans will keep the growth of loans on the books strong. With home values continuing to increase, the percentage of jumbo loans within the residential loan category should not subside. Thus, the residential loan growth will contribute to both net interest income from loans kept on the books, and it will help non-interest income with the growth in securitized loans.

The Future of Social Security

President Bush's Social Security plan is not looking like a win-win for banking companies. One opinion in the area of the future of savings that we wanted to address is President Bush's proposed overhaul of Social Security benefits, with regards to possible PSA's (Personal Savings Accounts). In his state of the union address, the president did mention that he is leaning towards a system in line with the government employee retirement plan, or the Thrift Savings Plan, which has a choice of 4 broad market investment strategies which are managed by one investment advisor.

Many banking proponents feel that some portion or at least a choice in the PSA's should be for some sort of federally insured deposit, so as to mitigate the risk to employees who do not want to take on the potential risks inherent in the securities markets. Even though we think this is a long shot, if this was to be a choice in the President's plan it would cause an influx of funds into banks. This is not a huge short term impact, but if this was the route taken by the government, the long term implications are far-reaching for banks.

However, this would most likely only affect a few key banks that would meet the governments' approval, so as not to complicate the investment plan for beneficiaries. One of President Bush's main concerns for social security reform is to keep the basics of the plan as simple as possible for people approaching retirement as well as for younger people who would benefit the most from the new plan. Along this line, if insured deposits was an investment choice, it would most likely mimic the government retirement plan and the accounts would only be kept at a couple (or possibly even only one) bank. Even if there was one bank that got all the funding, the spread that the bank makes would most likely have to be in line with government regulations, and therefore would not create extremely profitable accounts.

We understand that this is a huge unknown for the future of the banking industry, and we are taking a conservative viewpoint. We believe that President Bush will most likely continue with his ideas aligned with the TSP, and therefore this would only benefit a select few investment associates, and would not prove far reaching in the banking industry. However, if our beliefs are not proven in coming years, it would only add to our favorable outlook for the industry.

Regulation

Regulation that prevented financial services conglomerates is long gone. The era of regulation preventing banks from pursuing other financial services has diminished with the passing of the Gramm-Leach-Bliley Act in 1999, which formally did away with the strict rules of the Glass-Steagall Act of 1933, although deregulation was beginning in the 1980's and 1990's.[6] Banks are not just restricted to banking services anymore, as they are free to delve into other financial services such as insurance and investments all under the same roof. This deregulation has been one of the major catalysts for growth in large diversified financial companies in the past few years, and we believe will continue in the future as these large banks continue to pursue new businesses.

[6] DeYoung and Rice, *How Banks Make Money: Fallacies of fee income*

This is not to say that regulation is non-existent at banks. Banking compliance regulation is still strict. One area that did receive increased attention recently is the corporate governance provisions of The Sarbanes-Oxley Act of 2002. Although this act does affect many diversified banks that partake in investment activities, it does seem that corporate governance is a market wide push and therefore the banking industry would not be at a relative disadvantage.

The Basel II Accord is another compliance type regulation that was finalized in June 2004 with an effective date of December 2006. Basel II is based off of the three pillars of minimum capital requirements, supervisory review, and market discipline. U.S. regulators feel that Basel II is mostly for international banks since existing supervision in the U.S. already has similar constraints.[7] Therefore, Basel II will only be applied to the top ten U.S. banks, which would include our proxy industry. However, we do not feel that they will have a huge impact on the U.S. banking industry.

Valuation

Industry Valuation - Large-Cap Banks

For our industry valuation, we chose to focus on the five largest banks, ranked by deposits. For the drivers of the industry as a whole discussed in the body of this report, we began by focusing on all commercial banks with a summary viewpoint as to how this proves for these larger banks. We have taken these drivers and incorporated them into our valuations.

The following large, diversified financial services companies make up over 40% of the total level of deposits of over 7,660 commercial banks within the U.S., according to FDIC data. Their combined market capitalization is over $770 billion. These companies provide a broad range of financial services, including consumer and commercial banking, investment banking, insurance, and investments.

- **Bank of America** (NYSE: BAC)
  - Price: $46.82, 52W H/L: 47.47/38.51, 52W Price Chg: 14.8%
- **Citigroup Corp.** (NYSE: C)
  - Price: $49.40, 52W H/L: 52.88/42.10, 52W Price Chg: -0.18%
- **JPMorgan Chase & Co.** (NYSE: JPM)
  - Price: $37.48, 52W H/L: 43.84/34.62, 52W Price Chg: -6.67%
- **Wachovia Corporation** (NYSE: WB)

[7] http://www.riskglossary.com/articles/basle_committee.htm#Basle%20II

  - Price: $56.01, 52W H/L: 56.02/43.05, 52W Price Chg: 17.87%

- **Wells Fargo & Co.** (NYSE: WFC)
  - Price: $60.30, 52W H/L: 64.04/54.32, 52W Price Chg: 5.11%

Using the aggregated industry data, we projected growth in income and expense items through 2009 to derive our expected Net Income growth. The price information for our proxy industry was derived using market cap weightings, whereas the other financial information, including number of shares, was aggregated on an absolute basis from each company's statements.

Here is a breakdown of each item's projected 5-year growth rates (please see Exhibit 20 below and also the appendix for detailed financials):

- Based on higher growth in loan demand, which is tied to stable long term interest rates and a growing economy, we project interest income to increase at 5% per year. This growth rate is conservative given the historical growth of 8.3% per year since 1996.

- While we don't think that the flattening of the yield curve is a major negative, when combined with increased competition from non traditional sources, banks may have to increase the yield that they offer. Therefore, we are projecting a tightening in their interest spread with interest expense growing at 7% per year. This is also a very conservative estimate as interest expense has only grown at 2.8% per year since 1996.

- Through this projection, net interest income will increase a total of 21% from 2004 through 2009, representing an annualized increase of 3.9%.

- We expect Provision for Loan Losses to grow consistent with interest income at 5% per year.

- It is our belief that these larger banks will continue to increase their sources of non interest income, therefore we expect this income number to increase at an annual rate of 7%, still below the annualized growth rate of 12.3% from 1996 through 2004.

- Since the majority of non interest expense is made up of labor and is highly dependent upon the banks' level of assets, we foresee a steady growth rate of 5%, consistent with the growth in provisions.

- In 2004, net non operating gains and losses were high due to a high level of consolidation (acquisitions by Bank of America, JPMorgan Chase, and Wachovia), and we expect this to trend down towards more normal averages.

- We assumed 31% effective corporate tax rate.

- These projections equate to a total growth in Net Income from 2004 through 2009 of 59.6%, annualized at 9.8%. For comparison, historical annual growth from 1996 through 2004 was 14.3%.

Over the past 5 years, interest rates have been at historic lows, and have caused an unusual environment for banks. This is why we chose to base our projections off of data from 1996 through 2004, which encapsulates a number of different cycles through the interest rate environment.

These NI growth projections were then used with a Dividend Discount Model (Exhibit 19 below) to formulate a long term expected annual return of 9.39%. This was derived using our projected growth rates for years 2005-2009, followed by a trend down to a constant long term net income growth of 6% in 2015.

The dividend payout is very high right now, close to about 50% due to the reduced tax law on dividend income. Although analysts expect the payout to remain near 45%, we used a 40% payout rate to be conservative with the idea that should the favorable tax treatment of dividends be removed, payout rates would return to the historical average near 40%.

Combining all of these factors into the model provided the implied long term expected annual return of 9.39%, which is just below the implied consensus forecast of 9.87%, which assumes the same constraints of our model except that it uses a 5-year annualized growth of 11.26% in Net Income according to analyst estimates for the 5 companies.

For the short term return, we took our earnings per share for 2005, and used the industry historical P/E ratio (14.5x) to derive a valuation for YE2005. When compared to the current price, this equated to a return from now until the end of 2005 of 6.80%.

You can see our projection tables on the following pages of this report.

We believe that these banks are currently undervalued based on these projections, and offer an above average return when combined with their dividend yield for the remainder of 2005 as well as in the long term.

Exhibit 18

	BAC	WFC	WB	JPM	C	Industry
Market Cap (in Millions)	**189,153**	**101,907**	**89,616**	**133,429**	**256,386**	**770,491**
Price	**46.82**	**60.30**	**56.01**	**37.48**	**49.40**	**48.91**
Earnings per share	**3.50**	**4.15**	**3.26**	**1.24**	**3.27**	**2.97**
P/E (ttm)	**13.4**	**14.5**	**17.2**	**30.2**	**15.1**	**16.5**
Earnings Yield	**7.47%**	**6.88%**	**5.82%**	**3.31%**	**6.62%**	**6.07%**
ROA	**1.27%**	**1.64%**	**1.06%**	**0.39%**	**1.15%**	**1.02%**
ROE	**14.19%**	**18.52%**	**10.40%**	**4.23%**	**15.60%**	**11.89%**
Asset Turnover	4.59%	7.03%	4.61%	3.72%	5.72%	4.96%
Profitability	27.72%	23.33%	22.93%	10.36%	20.10%	20.66%
Leverage	11.14413	11.29903	9.839912	10.95329	13.57935	11.60729
Dividend Payout	**45.23%**	**44.91%**	**43.25%**	**87.40%**	**48.13%**	**49.89%**
Dividend Yield	**3.38%**	**3.09%**	**2.52%**	**2.89%**	**3.19%**	**3.03%**

Our Projected Long-Term Return	**9.39%**
Long-Term Consensus Return	**9.87%**
Year-End 2005 Target Price (assuming 14.5 P/E)	**52.24**
Implied Return through YE2005	**6.80%**

Prices as of Close Friday February 11, 2005. Financials as of YE2004. Currency: USD
Industry pricing data is market-cap weighted
Data Sources: Bloomberg, Yahoo Finance, Thomson Financials

Dividend Discount Models

Exhibit 19

Aggregate Valuation (from Street)	
Current P/E Ratio	16.47
Current Earnings (ttm)	2.97
Dividend Payout	40.00%
Growth over next 5 years	11.26%
Growth starting at year 11	6.00%
Implied Long Term Return	9.87%

Aggregate Valuation	
Current P/E Ratio	16.47
Current Earnings (ttm)	2.97
Dividend Payout	40.00%
Growth over next 5 years	9.8%
Growth starting at year 11	6.00%
Implied Long Term Return	9.39%

Exhibit 20

Aggregate Proxy Industry Income Statement
(in Millions USD)

	Our Projections					
	2009(E)	**2008(E)**	**2007(E)**	**2006(E)**	**2005(E)**	**2004**
Interest Income	228,181	217,316	206,967	197,112	187,725	178,786
-Interest Expenses	83,443	77,984	72,883	68,115	63,659	59,494
Net Interest Income	**144,738**	**139,331**	**134,084**	**128,997**	**124,067**	**119,292**
-Provision for Loan Losses	16,160	15,391	14,658	13,960	13,295	12,662
Net Int Inc Aft Prov	**128,578**	**123,940**	**119,427**	**115,037**	**110,772**	**106,630**
+Non Interest Income	157,707	147,390	137,748	128,736	120,314	112,443
-Non Interest Expense	171,447	163,283	155,507	148,102	141,050	134,333
Operating Income (Losses)	**114,838**	**108,047**	**101,667**	**95,671**	**90,036**	**84,740**
-Net Non-Oper Losses(Gains)	3,500	3,500	3,500	3,500	5,500	14,557
Pretax Income	**111,338**	**104,547**	**98,167**	**92,171**	**84,536**	**70,183**
-Income Tax Expenses (Credits)	34,515	32,410	30,432	28,573	26,206	21,889
Inc(Loss) bef Extraord Items/Min. Interest	**76,823**	**72,138**	**67,735**	**63,598**	**58,330**	**48,294**
-Minority Interest	400	400	400	400	400	411
-XO (G)L Net Of Tax	0	0	0	0	0	0
Net Income/Net Profit (Losses)	**76,423**	**71,738**	**67,335**	**63,198**	**57,930**	**47,883**
-Total Cash Preferred Dividends	140	140	140	140	140	136
-Total Cash Common Dividends	30,569	28,695	26,934	25,279	23,172	23,823
Reinvested Earnings	**45,714**	**42,903**	**40,261**	**37,779**	**34,618**	**23,924**
Earnings Growth	6.53%	6.54%	6.55%	9.09%	20.98%	4.44%

Effective Tax Rate of 31%
Data Sources: Bloomberg, Yahoo Finance, Thomson Financials

Appendix

The following pages contain the company income statements and balance sheets as well as the proxy aggregate industry statements that we compiled with data from Bloomberg, Thomson Research, and Yahoo Finance sources. The market information is from the close on Friday, February 11, 2005, and the financial information is from the companies fiscal year end December 31, 2004.

Aggregate Proxy Industry Income Statement
(in Millions USD)

	2004	2003	2002	2001	2000	1999	1998	1997	1996	Annuualized Growth Rate
Interest Income	178,786	146,632	150,475	170,259	181,099	154,604	148,800	141,602	94,735	8.3%
-Interest Expenses	59,494	46,441	55,898	86,241	106,542	82,199	85,644	79,026	47,632	2.8%
Net Interest Income	**119,292**	**100,191**	**94,577**	**84,018**	**74,557**	**72,405**	**63,156**	**62,576**	**47,103**	**12.3%**
-Provision for Loan Losses	12,662	14,733	21,186	16,724	11,334	7,899	9,360	7,148	4,794	12.9%
Net Int Inc Aft Prov	**106,630**	**85,458**	**73,391**	**67,294**	**63,223**	**64,506**	**53,796**	**55,428**	**42,309**	**12.2%**
+Non Interest Income	112,443	97,695	84,536	81,759	99,350	88,960	71,828	66,033	44,529	12.3%
-Non Interest Expense	134,333	114,763	105,383	102,115	108,524	99,856	88,319	81,560	59,608	10.7%
Operating Income (Losses)	**84,740**	**68,390**	**52,544**	**46,938**	**54,049**	**53,610**	**37,305**	**39,901**	**27,230**	**15.2%**
-Net Non-Oper Losses(Gains)	14,557	468	2,482	5,970	5,133	574	5,383	2,545	567	50.0%
Pretax Income	**70,183**	**67,922**	**50,062**	**40,968**	**48,916**	**53,036**	**31,922**	**37,356**	**26,663**	**12.9%**
-Income Tax Expenses (Credits)	21,889	21,663	16,316	14,099	17,890	18,797	11,136	13,516	9,878	10.5%
Inc(Loss) bef Extraord Items/Min. Interest	**48,294**	**46,259**	**33,746**	**26,869**	**31,026**	**34,239**	**20,786**	**23,840**	**16,785**	**14.1%**
-Minority Interest	411	428	97	87	99	251	228	212	47	31.1%
-XO (G)L Net Of Tax	0	-17	-1,552	-872	46	127	0	0	334	**Not Material**
Net Income/Net Profit (Losses)	**47,883**	**45,848**	**35,201**	**27,654**	**30,881**	**33,861**	**20,558**	**23,628**	**16,404**	**14.3%**
-Total Cash Preferred Dividends	136	134	162	201	238	296	409	655	621	
-Total Cash Common Dividends	23,823	17,009	13,290	12,175	11,728	10,499	8,645	7,119	4,317	
Reinvested Earnings	**23,924**	**28,705**	**21,749**	**15,278**	**18,915**	**23,066**	**11,504**	**15,854**	**11,466**	
Earnings Growth	4.44%	30.25%	27.29%	-10.45%	-8.80%	64.71%	-12.99%	44.04%		

Effective Tax Rate of 31%

Data Sources: Bloomberg, Yahoo Finance, Thomson Financials

Aggregate Proxy Industry Balance Sheet

(in Millions USD)

	2004	2003	2002	2001	2000
Cash&Near Cash Items	112,277	95,527	91,601	98,837	92,990
Mrktable Sec & Other ST Invts	1,893,006	1,419,229	1,228,924	1,106,992	989,261
Commercial Loans	672,311	588,006	607,550	600,561	623,590
Consumer Loans	1,307,685	892,697	748,953	664,310	624,912
Other Loans	43,483	33,404	31,354	45,114	37,343
Total Loans	2,023,479	1,514,107	1,387,857	1,309,985	1,285,845
Reserve For Loan Loss/RE Loss	33,734	29,724	29,826	28,243	24,905
Loans & Mortgages	1,989,745	1,484,383	1,358,031	1,281,742	1,260,940
LT Investments	330	5,444	6,178	1,525	3,419
Other Assets/Def Chgs&Oth	677,621	555,636	523,243	515,714	439,735
Total Assets	4,672,979	3,560,219	3,207,977	3,004,810	2,786,345
Tot Deposits/Sec Deposits	2,272,018	1,683,372	1,530,540	1,416,389	1,256,422
ST Borrowings	1,028,783	884,519	807,750	731,781	726,927
Other ST Liabilities	100,813	182,292	171,854	127,890	149,946
LT Borrowings	582,783	334,260	267,077	241,584	235,331
Other LT Liabilities	285,992	214,221	188,513	252,956	214,242
Total Liabilities	4,270,389	3,298,664	2,965,734	2,770,600	2,582,868
Total Shareholders' Equity	402,590	261,555	242,243	234,210	203,477
Total Liabilities and Equity	4,672,979	3,560,219	3,207,977	3,004,810	2,786,345

Data Sources: Bloomberg, Yahoo Finance, Thomson Financials

Ticker: BAC US Equity Income Statement

BANK OF AMERICA CORP

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Interest Income	43227	31643	32161	38293	43258
Interest Expenses	14430	10179	11238	18003	24816
Net interest income	28797	21464	20923	20290	18442
Provision for Loan Losses	2769	2839	3697	3892	2535
Net Int Inc Aft Prov	26028	18625	17226	16398	15907
Non interest income	22220	17363	14201	14823	14514
Non Interest Expense	26124	20127	18436	19404	18083
Operating Income (Losses)	22124	15861	12991	11817	12338
Net Non-Oper Losses(Gains)	903	0	-488	1706	550
Pretax Income	21221	15861	13479	10111	11788
Income Tax Expenses (Credits)	7078	5051	4230	3319	4271
Inc(Loss) bef Extraord Items	14143	10810	9249	6792	7517
XO (G)L Net Of Tax	0	0	0	0	0
Net Income/Net Profit (Losses)	14143	10810	9249	6792	7517
Total Cash Preferred Dividends	16	4	5	5	6
Total Cash Common Dividends	6389	4277	3704	3627	3382
Reinvested Earnings	7738	6529	5540	3160	4129
Sales/Revenue/Turnover	65447	49006	46362	53116	57772

Ticker: BAC US Equity Consolidated Balance Sheet

Name: BANK OF AMERICA CORP

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Cash&Near Cash Items	28936	27084	24973	26837	27513
Mrktable Sec & Other ST Invts	392051	221083	183809	165834	141195
Commercial Loans	193930	131304	145170	163898	203542
Consumer Loans	327907	240159	197585	165255	188651
Other Loans	0	0	0	0	0
Total Loans	521837	371463	342755	329153	392193
Reserve For Loan Loss/RE Loss	8626	6163	6358	6875	6838
Loans & Mortgages	513211	365300	336397	322278	385355
LT Investments	330	247	1026	1049	1187
Other Assets/Def Chgs&Oth	175929	122731	114746	105766	86941
Total Assets	1110457	736445	660951	621764	642191
Tot Deposits/Sec Deposits	618570	414113	386458	373495	364244
ST Borrowings	232316	159561	124106	100988	131809
Other ST Liabilities	17928	24526	23566	14868	22402
LT Borrowings	100755	63150	58957	56434	53249
Other LT Liabilities	41243	27115	17545	27459	22859
Total Liabilities	1010812	688465	610632	573244	594563
Total Shareholders' Equity	99645	47980	50319	48520	47628
Total Liabilities and Equity	1110457	736445	660951	621764	642191

Ticker: WFC US Equity Income Statement

WELLS FARGO & COMPANY

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Interest Income	20967	19418	18459	19201	18725
Interest Expenses	3817	3411	3977	6741	7860
Net interest income	17150	16007	14482	12460	10865
Provision for Loan Losses	1717	1722	1684	1780	1329
Net Int Inc Aft Prov	15433	14285	12798	10680	9536
Non interest income	12909	12353	10757	7741	8843
Non Interest Expense	17399	17190	14711	12782	11888
Operating Income (Losses)	10943	9448	8844	5639	6491
Net Non-Oper Losses(Gains)	174	-29	-10	160	-58
Pretax Income	10769	9477	8854	5479	6549
Income Tax Expenses (Credits)	3755	3275	3144	2056	2523
Inc(Loss) bef Extraord Items	7014	6202	5710	3423	4026
XO (G)L Net Of Tax	0	0	276	0	0
Net Income/Net Profit (Losses)	7014	6202	5434	3423	4026
Total Cash Preferred Dividends	0	3	4	14	17
Total Cash Common Dividends	3150	2527	1873	1710	1569
Reinvested Earnings	3864	3672	3557	1699	2440
Sales/Revenue/Turnover	33876	31771	29216	26942	27568

Ticker: WFC US Equity Consolidated Balance Sheet

Name: WELLS FARGO & COMPANY

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Cash&Near Cash Items	12903	15547	17820	16968	16978
Mrktable Sec & Other ST Invts	86199	72222	88940	77988	56604
Commercial Loans	98515	168065	124527	81759	82205
Consumer Loans	184861	78080	61955	81320	67272
Other Loans	4210	6928	5996	9420	11647
Total Loans	287586	253073	192478	172499	161124
Reserve For Loan Loss/RE Loss	3762	3891	3819	3761	3719
Loans & Mortgages	283824	249182	188659	168738	157405
LT Investments	0	5021	4721	0	0
Other Assets/Def Chgs&Oth	44923	45826	49057	43875	41439
Total Assets	427849	387798	349197	307569	272426
Tot Deposits/Sec Deposits	274858	247527	216916	187266	169559
ST Borrowings	21962	36953	47102	47897	37925
Other ST Liabilities	19583	17364	18201	16777	14409
LT Borrowings	73580	51348	36549	28415	24045
Other LT Liabilities	0	137	110	0	0
Total Liabilities	389983	353329	318878	280355	245938
Total Shareholders' Equity	37866	34469	30319	27214	26488
Total Liabilities and Equity	427849	387798	349197	307569	272426

Ticker: WB US Equity Income Statement

WACHOVIA CORP

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Interest Income	17288	15080	15632	16100	17534
Interest Expenses	5327	4473	5677	8325	10097
Net interest income	11961	10607	9955	7775	7437
Provision for Loan Losses	257	586	1479	1067	754
Net Int Inc Aft Prov	11704	10021	8476	6708	6683
Non interest income	10779	9394	7873	6271	6815
Non Interest Expense	14222	12749	11289	9559	9213
Operating Income (Losses)	8261	6666	5060	3420	4285
Net Non-Oper Losses(Gains)	444	443	387	1127	3582
Pretax Income	7817	6223	4673	2293	703
Income Tax Expenses (Credits)	2419	1833	1088	674	565
Inc(Loss) bef Extraord Items	5398	4390	3585	1619	138
Minority Interest	184	143	6	0	0
XO (G)L Net Of Tax	0	-17	0	0	46
Net Income/Net Profit (Losses)	5214	4264	3579	1619	92
Total Cash Preferred Dividends	0	5	19	6	0
Total Cash Common Dividends	2255	1665	1366	1032	1888
Reinvested Earnings	2959	2594	2194	581	-1796
Sales/Revenue/Turnover	28067	24474	23505	22371	24349

Ticker: WB US Equity Consolidated Balance Sheet

Name: WACHOVIA CORP

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Cash&Near Cash Items	11714	11479	12264	13917	9906
Mrktable Sec & Other ST Invts	196394	150333	104417	91252	83712
Commercial Loans	131196	107466	109097	106308	80240
Consumer Loans	92644	58105	54000	57493	43520
Other Loans	0	0	0	0	0
Total Loans	223840	165571	163097	163801	123760
Reserve For Loan Loss/RE Loss	2757	2504	2798	2995	1722
Loans & Mortgages	221083	163067	160299	160806	122038
LT Investments	0	0	0	0	1643
Other Assets/Def Chgs&Oth	64133	76153	64859	64477	36871
Total Assets	493324	401032	341839	330452	254170
Tot Deposits/Sec Deposits	295053	221225	191518	187453	142668
ST Borrowings	85115	84786	46251	53020	59425
Other ST Liabilities	37	10552	22910	11454	0
LT Borrowings	46759	31888	34584	33098	23305
Other LT Liabilities	16225	17643	13995	16972	13425
Total Liabilities	443189	366094	309258	301997	238823
Total Shareholders' Equity	50135	34938	32581	28455	15347
Total Liabilities and Equity	493324	401032	341839	330452	254170

Ticker: JPM US Equity Income Statement

JPMORGAN CHASE & CO

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Interest Income	30595	23444	25284	32181	36643
Interest Expenses	13834	11107	13758	21379	27131
Net interest income	16761	12337	11526	10802	9512
Provision for Loan Losses	1686	1540	4331	3185	1377
Net Int Inc Aft Prov	15075	10797	7195	7617	8135
Non interest income	26336	20919	18088	18248	22291
Non Interest Expense	29294	21588	20156	20776	21393
Operating Income (Losses)	12117	10128	5127	5089	9033
Net Non-Oper Losses(Gains)	5923	100	2608	2523	300
Pretax Income	6194	10028	2519	2566	8733
Income Tax Expenses (Credits)	1728	3309	856	847	3006
Inc(Loss) bef Extraord Items	4466	6719	1663	1719	5727
XO (G)L Net Of Tax	0	0	0	25	0
Net Income/Net Profit (Losses)	4466	6719	1663	1694	5727
Total Cash Preferred Dividends	52	51	51	66	96
Total Cash Common Dividends	3858	2838	2754	2731	2354
Reinvested Earnings	556	3830	-1142	-1103	3277
Sales/Revenue/Turnover	56931	44363	43372	50429	58934

Ticker: JPM US Equity Consolidated Balance Sheet

Name: JPMORGAN CHASE & CO

Currency: USD

	2004	**2003**	**2002**	**2001**	**2000**
Cash&Near Cash Items	35168	20268	19218	22600	23972
Mrktable Sec & Other ST Invts	495541	365315	366353	299779	322533
Commercial Loans	135067	83097	91548	104864	119460
Consumer Loans	267047	136421	124816	112580	96590
Other Loans	0	0	0	0	0
Total Loans	402114	219518	216364	217444	216050
Reserve For Loan Loss/RE Loss	7320	4523	5350	4524	3665
Loans & Mortgages	394794	214995	211014	212920	212385
LT Investments	0	176	431	476	589
Other Assets/Def Chgs&Oth	231745	170158	161784	157800	155869
Total Assets	1157248	770912	758800	693575	715348
Tot Deposits/Sec Deposits	521456	326492	304753	293650	279365
ST Borrowings	237373	233825	268937	221192	228586
Other ST Liabilities	63265	71226	66227	56063	76517
LT Borrowings	153779	48149	38137	33208	47238
Other LT Liabilities	75722	45066	38440	47813	40754
Total Liabilities	1051595	724758	716494	651926	672460
Total Shareholders' Equity	105653	46154	42306	41649	42888
Total Liabilities and Equity	1157248	770912	758800	693575	715348

Ticker: C US Equity	Income Statement				
CITIGROUP INC					
	2004	**2003**	**2002**	**2001**	**2000**
Sales/Revenue/Turnover	106908	94713	92556	99160	111826
Interest Income	66709	57047	58939	64484	64939
Trading Acct. Profits (Losses)	4587	5630	4028	5781	6787
Com & Fee Earn/Inc from REO	23617	21979	20404	20982	21701
Other Operating Income (Losses)	11995	10057	9185	7913	18399
Interest Expenses	22086	17271	21248	31793	36638
Net Revenue	84822	77442	71308	67367	75188
Total Expenses Plus Provision for Losses	53527	51155	50786	46394	53286
Operating Income (Losses)	31295	26287	20522	20973	21902
Net Non-Oper Losses(Gains)	7113	-46	-15	454	759
Pretax Income	24182	26333	20537	20519	21143
Income Tax Expenses (Credits)	6909	8195	6998	7203	7525
Inc(Loss) bef Extraord Items	17273	18138	13539	13316	13618
Minority Interest	227	285	91	87	99
XO (G)L Net Of Tax	0	0	-1828	-897	0
Net Income/Net Profit (Losses)	17046	17853	15276	14126	13519
Total Cash Preferred Dividends	68	71	83	110	119
Total Cash Common Dividends	8171	5702	3593	3075	2535
Reinvested Earnings	8807	12080	11600	10941	10865
Provision for Loan Losses	6233	8046	9995	6800	5339
Non-Interest Expenses minus provision	47294	43109	40791	39594	47947
Non-interest income	40199	37666	33617	34676	46887

Ticker: C US Equity	Consolidated Balance Sheet				
Name: CITIGROUP INC					
	2004	**2003**	**2002**	**2001**	**2000**
Cash&Near Cash Items	23556	21149	17326	18515	14621
Mrktable Sec & Other ST Invts	722821	610276	485405	472139	385217
Commerical Loans	113603	98074	137208	143732	138143
Consumer Loans	435226	379932	310597	247662	228879
Other Loans	39273	26476	25358	35694	25696
Total Loans	588102	504482	473163	427088	392718
Reserve For Loan Loss/RE Loss	11269	12643	11501	10088	8961
Loans & Mortgages	576833	491839	461662	417000	383757
LT Investments and Others	0	0	0	0	0
Other Assets/Def Chgs&Oth	160891	140768	132797	143796	118615
Total Assets	1484101	1264032	1097190	1051450	902210
Tot Deposits/Sec Deposits	562081	474015	430895	374525	300586
ST Borrowings	452017	369394	321354	308684	269182
Other ST Liabilities		58624	40950	28728	36618
LT Borrowings	207910	139725	98850	90429	87494
Other LT Liabilities	152802	124260	118423	160712	137204
Total Liabilities	1374810	1166018	1010472	963078	831084
Total Shareholders' Equity	109291	98014	86718	88372	71126
Total Liabilities and Equity	1484101	1264032	1097190	1051450	902210

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