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## USA Banks

### Ticker Rating Target

BAC	UNDERPERFORM	\$8.00
BBT	SELL	\$14.00
C	UNDERPERFORM	\$3.00
CMA	UNDERPERFORM	\$16.00
FITB	SELL	\$2.00
JPM	UNDERPERFORM	\$24.00
KEY	SELL	\$6.00
PNC	UNDERPERFORM	\$17.00
STI	SELL	\$8.00
USB	SELL	\$10.00
WFC	UNDERPERFORM	\$14.00

# Banks

## Seven deadly sins of banking

We are initiating on US banks with an Underweight sector rating given the ongoing consequences of increased risk taking by banks in seven different areas. A key implication is that loan losses (to total loans) should increase to levels that exceed the Great Depression. While certain mortgage problems are farther along, other areas are likely to accelerate, reflecting a rolling recession by asset class. New government actions might not help as much as expected, especially given that loans have been marked down to only 98 cents on the dollar, on average.

### Higher Structural Risk

- The seven deadly sins of banking include greedy loan growth, gluttony of real estate, lust for high yields, sloth-like risk management, pride of low capital, envy of exotic fees, and anger of regulators.
- To a degree, each reflects a way that banks tried to compensate for lower natural rates of growth by taking more risk.
- The effect was to front-load earnings only to have back-ended costs, the brunt which is getting felt today. The consequences of this risk, while not new, seem only midstream and have more to go.

### Cyclical pressures

- We expect loan losses to loans to increase from 2% to 3.5% by year-end 2010 given ongoing problems in mortgage and an acceleration in cards, consumer credit, construction, commercial real estate and industrial.
- Pre-tax, pre-provision profits should get hurt more than in the past given a greater portion of market sensitive fees, higher deposit insurance, and fall-out from a higher risk securities portfolio, as well as a historically high starting level of consumer debt.
- Most of our estimates are below consensus.

### Government actions are a Catch-22

- The government can go easy on the banks but, if so, would leave many of the toxic assets on balance sheet (at least as it relates to loans vs. securities).
- Alternatively, overly tough actions will trigger the need for large capital raises by the banks.
- Relaxation of mark-to-market accounting rules impacts balance sheets by only one-quarter to one-third or less and, where it could impact, reflects a potential artificial accounting-induced capital injection that does not change the economics.

### Conference call today

We are hosting a conference call to discuss US banks along with Eric Fishwick, CLSA's Head of Economics Research, and guest accounting expert Bob Willens, who will discuss mark-to-market accounting. The call is today, Monday 6 April at 11am EST; Phone #: 800 423-9703 (Int: 706 634-5206). ID: 94038768.

## Executive summary

We're initiating coverage of US banks with a sector Underweight given increases in problem loans and the government's inability to quickly resolve problem loans that, on average, are marked to only 98 cents on the dollar. Our estimates are mostly below consensus. We start with 11 US large-cap banks and intend to expand this coverage.

Structurally, excessive risk is reflected by our theme of the "seven deadly sins of banking" given greedy loan growth, a gluttony of real estate, lust for high yields, sloth-like risk management, pride of low capital, envy of exotic fees, and anger of regulators. The consequences of this risk, while not new, seem only midstream and have more to go.

Cyclically, loan losses (as a percentage of loans) should exceed the Depression by late 2010 given a rolling recession by asset class from mortgage and construction to cards, commercial real estate, corporate and other areas. Government can help but the industry is in a Catch-22 since either 1) efforts go easy on banks and leave the toxic assets on balance sheet or 2) go hard and require large, new dilutive capital raises after stress tests are completed in late-April, which should hurt traditional banking more. Thus, the industry may transition from the financial crisis (late stages of capital market write-downs) only to have more severe consequences of the economic crisis (loan losses).

While upcoming earnings should be better than 4Q08 (less marks), asset quality trends should remain at least as negative. Our ratings are Underperforms and Sells for all of our initial coverage of 11 banks (ratings are relative to the S&P500). For individual company ratings, please see our 11 separate company notes. We will provide basic reports on the largest banks over the next several months and a more detailed industry report in the next few weeks.

We start our coverage with the largest money center and regional banks (and intend to expand coverage later to include processing banks and brokers). Our initial ratings include Sells on BB&T, SunTrust, US Bancorp, Fifth Third, and KeyCorp, and Underperforms on Bank of America, Citigroup, JP Morgan, Comerica, PNC, and Wells Fargo.

Figure 7

### US Banks coverage

Company	Ticker	Rating	Price	CLSA Estimates		Consensus		Price
				2009	2010	2009	2010	Target
Bank of America	BAC	U-PF	\$7.43	\$0.25	\$0.90	\$0.49	\$1.43	\$8
Citigroup	C	U-PF	2.78	-1.25	-0.05	-1.00	0.00	3
JPMorgan Chase	JPM	U-PF	28.34	1.00	2.25	1.54	2.60	24
BB&T	BBT	SELL	17.87	1.40	2.10	1.54	2.20	14
Comerica	CMA	U-PF	19.3	-0.12	0.70	-0.08	0.99	16
Fifth Third Bancorp	FITB	SELL	3.22	-0.80	-0.10	-0.53	0.46	2
KeyCorp	KEY	SELL	8.42	-0.75	-0.15	-0.57	0.35	6
PNC Financial	PNC	U-PF	35.18	2.40	3.75	2.70	4.34	17
SunTrust	STI	SELL	13.72	-1.60	0.45	-1.52	1.09	8
U. S. Bancorp	USB	SELL	15.72	0.90	1.40	1.11	1.68	10
Wells Fargo & Co.	WFC	U-PF	15.94	0.80	1.80	1.13	1.91	14

Source: Calyon Securities (USA) Inc.

**Three short-term considerations**

This conclusion for our Underweight industry stance is based on our outlook for the 12-month period. Nevertheless, there are three major near-term events that are worth monitoring.

- **First, 1Q09 earnings will get reported later in April.** We expect much lower capital market write-downs, and perhaps none at some banks, mitigated by ongoing increases in problem assets. As such, the industry may finally be transitioning from the financial crisis with its various write-downs (approaching \$400 billion for US financials), to the economic crisis with its commensurate increases in loan losses that still have a ways to go. The implication is that traditional banks – most of the banks in our initial coverage – will have relatively worse comparisons versus capital market-oriented firms, which should have a favorable delta in the amount of capital market write-downs and certain activities, such as investment-grade issuance.
- **Second, stress tests should be complete by late-April.** This involves regulators indicating to banks the amount of capital that they will need based on stress scenarios. Given that securities portfolios have been written down closer to market values than loans, traditional banks with more loans seem to have the greatest regulatory risk as part of this process, given the potential requirement for large capital raises.
- **Third, the PPIP gets started, probably in May.** We believe that the program should have a better chance of working for securities as opposed to loans, except in the cases where loans have been marked down as part of an acquisition (Wells Fargo, PNC, parts of others). Thus, capital market-oriented firms, which typically mark-to-market (at least relatively more so), should be advantaged versus the traditional banks.

**These actions by regulators do not preclude other options that were on the table before PPIP was announced**

One more point should not be forgotten. These actions by regulators do not preclude other options that were on the table before the PPIP was announced. Indeed, once assets are sold, this could potentially justify taking more harsh actions, either greater capital raises or even nationalization. In short, we see more downside with government programs regarding those bank stocks with more traditional banking since this business – aside from when involving an acquisition – is not marked to market. More generally, changing regulatory rules along with asset quality concerns is a key reason for our negative bias on the group.

Below is a discussion of the backdrop for our Underweight rating, as summarized by “The seven deadly sins of banking” which will be updated in more detail in a few weeks.

## Initiating Banks coverage - Underweight

Bank earnings were front-loaded given the higher risk embedded in their activities. The seven deadly sins of banking are ways that US banks increased risk to generate revenues. These actions front-loaded earnings and back-ended costs, the brunt which is being felt today. These "sins" were not created in a day but typically over 10-15 years. In almost each case, the extent of the transgression, meaning excessive risk, could be described as somewhere between the worst in a decade and the worst ever. Below is our list with a summary of the issue:

- **Greedy** loan growth – once in a generation excess
- **Gluttony** of real estate – historic asset concentration
- **Lust** for high yields – loan losses exceed Depression (est.)
- **Sloth**-like risk management – highest ever consumer debt
- **Pride** of low capital – lowest level in 25 years
- **Envy** of exotic fees – exotic turns toxic w/\$400 billion of charges
- **Anger** of regulators – consequences of past lobbying

### Consequences are only midstream

The impact of excessive risk, while already seen, still has more to go in our opinion, especially given a rolling recession by asset class. While mortgage losses may be half way to the peak, card and consumer losses may only be about one-third of the way and industrial and commercial real estate problems (except construction) seem in the early stages. Loan losses, as a percentage of loans, will likely pass the level of the Great Depression. Other pressures to income should include lower revenues (less loans and fees), higher expenses (more oversight costs), and dilution of shares outstanding (insufficient capital), likely leading to ongoing earnings shortfalls through 2010. Per the balance sheet, banks will likely need a permanently higher capital and reserve levels, implying lower ROEs and less reserve releases when the cycle is over.

### Ongoing downward earnings bias

Even with below-consensus estimates, we still have a negative bias given seven separate areas of excessive risk. The housing bubble is only one of the seven factors, reflecting our view that issues reflect not only a mortgage bubble but a larger credit bubble. Compounding the problem is that many of these risks have never been tested at their current size in a downturn. Moreover, the fallout from these seven areas of excessive risk – each one significant in its own right – gets compounded by having them impact collectively. This is not to say that some banks cannot benefit while others suffer, though few may be able to escape the industry headwinds.

### Slower natural rate of growth only partly to blame

A key macro issue is that the natural rate of bank revenue growth slowed given a more mature industry and a lower rate of nominal GDP. A key micro issue is that bankers failed to recognize this tougher reality. While efficiency gains seem to have created economic value for the industry, much of the industry's growth over the past decade seems to have evolved from a high level of risk versus economic value creation. Accomplices include managements, directors, shareholders, analysts, regulators, and financial companies other than banks such as

Industrial and commercial real estate problems (except construction) seem in the early stages

Some banks can benefit while others suffer, though few may be able to escape the industry headwinds

**Banks must now embrace lower levels of risk, leverage, growth, returns, and maybe even size**

government-sponsored entities, mortgage lenders, mortgage brokers, insurers, and other nonbanks that helped to drag down good banks along with the bad.

### **Atonement means less risk**

Atonement is possible. For this, banks must set targets that are easier to achieve with more consistency and less chance of big one-time problems. Banks must now embrace lower levels of risk, leverage, growth, returns, and maybe even size. Banks can either accept the reality or risk a repeat of the mishaps of the recent period. The deadly nature of these sins is evidenced by the failure and disappearance of many large financial firms over the past year. Atonement also means placing nonbanks under the bank supervisory umbrella so that they can be more closely regulated. In addition, some parts of the financial industry could emerge sooner than others, such as capital market-oriented firms that have taken relatively more of their balance sheet write-downs, at least compared to traditional banks. However, over the long term there is a real possibility that the regulatory pendulum swings all the way back to 1934, whether via a re-enactment of Glass-Steagall, a new way of measuring market concentration (not only deposits), or other moves that lead to a break-up of certain large banks. Even short of this, there is a chance that banks move in the direction of becoming more akin to large public financial utilities.

Does atonement also mean smaller size? While there are 8,300 US banks, the 10 largest comprise three-fourths of total US banking industry assets, up from one-fourth two decades ago; this increase reflects the high degree of consolidation. Indeed, the three largest money center banks (Citigroup, JP Morgan Chase, and Bank of America) were 16 times larger at the end of 2008 than in 1988, reflecting their enormous increase in size and complexity. Citi is in the process of downsizing and, at a minimum, regulators may curtail risk-taking and require higher capital levels at firms that, given their size, are potential threats to economic stability.

Figure 1

**The three largest banks are 16 times larger than two decades ago**

Total Assets as of 2008 (\$ in bil.)				
Rank	Bank	Assets	Mkt. Share	
1	Bank of America	\$ 2,485	18%	
2	JPMorgan Chase	\$ 2,175	16%	
3	Citigroup	\$ 1,945	14%	
4	Wells Fargo	\$ 1,310	10%	
5	Goldman Sachs	\$ 885	6%	
6	Morgan Stanley	\$ 659	5%	
7	PNC Financial	\$ 291	2%	
8	U.S. Bancorp	\$ 266	2%	
9	Bank of New York Mellon	\$ 237	2%	
10	SunTrust	\$ 189	1%	
11	State Street	\$ 174	1%	
12	Capital One	\$ 166	1%	
13	BB&T	\$ 152	1%	
14	Regions Financial	\$ 146	1%	
15	American Express	\$ 126	1%	
<b>Top 5</b>		<b>\$ 8,800</b>	<b>64%</b>	
<b>Top 10</b>		<b>\$ 10,442</b>	<b>76%</b>	
<b>Top 15</b>		<b>\$ 11,206</b>	<b>82%</b>	
<b>Total</b>		<b>\$ 13,743</b>		

Figure 2

US Bank Assets as of 1988 (\$ in bil.)				
Rank	Bank	Assets	Mkt. Share	
1	Citicorp	\$ 205	6.6%	
2	Chase Manhattan	\$ 96	3.1%	
3	BankAmerica	\$ 94	3.0%	
4	J.P. Morgan	\$ 81	2.6%	
5	Chemical Banking	\$ 76	2.4%	
6	Security Pacific	\$ 76	2.4%	
7	Manufacturers Hanover	\$ 70	2.2%	
8	First Interstate Bancorp	\$ 58	1.9%	
9	Bankers Trust New York	\$ 56	1.8%	
10	Wells Fargo	\$ 45	1.4%	
11	First Chicago	\$ 44	1.4%	
12	PNC Financial	\$ 37	1.2%	
13	Bank of Boston	\$ 34	1.1%	
14	Continental Bank	\$ 32	1.0%	
15	Mellon Bank	\$ 31	1.0%	
<b>Top 5</b>		<b>\$ 553</b>	<b>18%</b>	
<b>Top 10</b>		<b>\$ 857</b>	<b>27%</b>	
<b>Top 15</b>		<b>\$ 1,036</b>	<b>33%</b>	
<b>Total</b>		<b>\$ 3,131</b>		

Note: Industry assets as of 4Q08 for commercial banks plus adjustments for GS, MS, AXP assets not included in FDIC data. BAC assets proforma for MER per a company presentation. Excludes Fannie Mae (\$912 billion) and Sallie Mae (\$169 billion). Source: SNL Financial, FDIC

**The industry must deal with legacy issues and first pay for the excesses of the bubble period**

**Hope, but only after dealing with legacy issues**

The good news is that market disruptions can improve both the demand for bank loans and the pricing. The issue is that the industry must deal with legacy issues and first pay for the excesses of the bubble period. New government programs that can help are evolving but, so far, seem insufficient to fully deal with the issues. Since only an estimated one-fourth to one-third of bank assets are marked to market, any program to discard problem assets is either going to miss much of the issue or severely penalize banks and require large capital raises.

**Redemption, or is it resurrection?**

There are three factors that would make us more positive on the group. First, we recommend getting more aggressive as the industry moves closer to the peak in problem assets; however, this does not seem likely in the next 12 months. Second, bank regulation needs to become clearer given what we feel has been a rapid changing of the rules, sometimes in unpredictable ways. Third, toxic assets needs to be resolved, either with sales, insurance, or capital raises that leave no doubt about the bank's cushion for problems. Also, we will look to act opportunistically with individual banks that can either benefit from the turmoil or which have unique valuations for their level of risk.

While this report does not cover the rapidly changing government programs, the fundamental drivers are based on the consequences of excessive risk-taking over the past decade or more. In this context, below is a summary of the seven deadly sins of banking.



## Seven deadly sins of banking

### Greedy loan growth – once-in-a-generation excess

This decade, the pace of loan growth versus its natural rate (nominal GDP) was the widest in a generation. This type of excess seems to occur about once every 40 years, or enough time for those who made the prior mistakes to retire. The issue was less the reported pace of loan growth, which matched the average of the prior decade (8%), than the failure of bankers to realize that the natural rate declined given a decline in nominal GDP from an average of 8% during the prior three decades to 5% this decade. Loans overshot this decade and now will likely undershoot versus nominal GDP.

### Gluttony of real estate – historic asset concentration

The fastest loan growth this decade has been in home equity and construction (20% annual), along with mortgages and other commercial real estate. Phase one of the problems reflected borrowers that probably should have never gotten the loans, especially at it relates to subprime mortgages. Phase two reflects the more credit-worthy borrowers that face issues given unemployment concerns. In addition to loans, banks increased their concentration in securities. The percentage of mortgage-backed securities (now \$1 trillion) increased from 15% in 1982 to 40% in 1992 to 65% today, whereas Treasury holdings declined from over one-third to only 2%. Now, these securities will likely refinance at lower rates at a time when banks have limited to no capacity to add new MBS.

### Lust for high yields – worse loan losses than the Depression

Banks' greater risk-taking reflected not only faster loan growth and greater concentration but also a higher risk mix of loans. This improved loan yields, only to back-end loan losses. The result is that we expect loan losses to increase from 2% of loans to a peak of 3.5% by late 2010. If so, this would be higher than the peak of the Depression of 3.4% (1934). In particular, during the Depression, banks did not have home equity or credit card loans, and never before had the record high percentage of construction loans. Relative to the Depression, these three areas alone add an estimated 100 basis points to our loss estimate.

### Sloth-like risk management – highest consumer debt in history

Banks en masse lent to over-levered consumers. Consumer debt (to GDP) is the highest in history at 100% vs. 70% at the start of the decade, 50% in 1985, and only 37% in 1929. This leveraging reflected the US more generally, given an increase in US debt to 3.5 times GDP, higher than the Depression of 3.0. Going forward, this implies lower fees related to consumer borrowing (cards, mortgages, etc.) and fewer new loans given ongoing deleveraging, mitigated by better pricing on new loans and potential re-intermediation opportunities as business comes from nonbanks and capital markets.

### Pride of low capital – highest leverage in 25 years

The industry increasingly and falsely felt comfortable with higher levels of leverage. The level of banks' tangible common equity and reserves (to total assets) declined to the lowest level in 25 years as of a couple years ago and now is in the process of getting rebuilt. The brokerage industry, too, increased leverage from 20 in 1980 to 30 in 2000 to a peak of 50 late this decade and similarly faces deleveraging. The result partly stemmed from their acting like leveraged bond funds with more wholesale borrowings. Banks increased the percentage of wholesale funding from one-third to one-half since the early 1990s, reflecting the higher funding risk that helped to facilitate risk related to leverage.

Once every 40 years, or enough time for those who made the prior mistakes to retire

Treasury holdings declined from over one-third to only 2%

We expect loan losses to increase from 2% of loans to a peak of 3.5% by late 2010

This leveraging reflected the US more generally

Result partly stemmed from acting like leveraged bond funds with more wholesale borrowings

**Still chance for ongoing write-downs in areas such as leveraged loans, private equity, and other areas**

**An increase in regulatory oversight can increase expenses, cause the largest banks to become more akin to public utilities, and create investing uncertainty until all the regulatory rules are known**

### **Envy of exotic fees – exotic turns toxic**

US financials will soon approach about \$400 billion of capital market write-downs since 2007. While these write-downs seem in the later stages, there still is the chance for ongoing write-downs in areas such as leveraged loans, private equity, and other areas. All fee revenues are not created equally, given annuity-like service charges and low capital-intensive revenue related to insurance; however, these other fee areas are more volatile or lumpy, and these more volatile fees have come to represent a significant portion of fee revenues at banks, increasing from 20% of the total in 1980 to 30% in 1990 to 40% today. This is the first time that this level of fees has been subjected to a major downturn, creating uncertain fallout.

### **Anger of regulators**

While regulators seemed to have insufficient authority over some of the worst nonbank offenders (mortgage brokers, insurers, etc.), in our opinion they nevertheless appeared to get too close to the industry that they regulated. Bank lobbying may have been too successful. Most banks paid zero deposit insurance premiums from 1996-2006 and now, as these rates increase we estimate they will cost a permanent 3% to EPS. The SEC's decision in 1998 related to SunTrust made it more difficult for banks to reserve for problem loans, leading to uniquely low reserves going into this recession. Moreover, the budgets of all regulators were reduced at the wrong time, in our opinion. For instance, during the peak, Goldman Sachs generated the equivalent of the SEC's annual budget every two weeks. The FDIC's headcount got slashed by a whopping three-fourths since the early 1990s. An increase in regulatory oversight is a permanent change that can increase expenses, cause the largest banks to become more akin to public utilities, and create investing uncertainty until all the regulatory rules are known.



Bank revenue growth typically follows nominal GDP

These problems built up over an extended period; the solutions will take time, too

Our estimates are mostly well below consensus and we maintain a negative bias

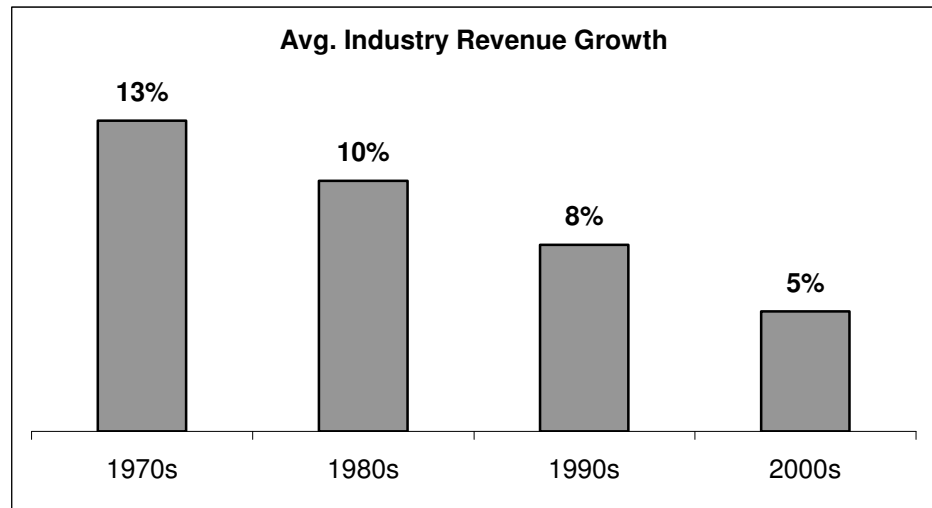
## The root of bank evil – excessive risk

### Disinflation created a backdrop for lower bank revenue growth

The ability of banks to drive revenues ever further is getting harder. One reason is disinflation, that is, a reduced pace of inflation which, in turn, lowers nominal GDP. For example, growth in nominal GDP this decade averaged only half of that of the prior three decades (4% this decade vs. 8% from 1970-2000). Bank revenue growth typically follows nominal GDP, one reason that bank revenues declined from 13% in the 1970s, 10% in the 1980s, 8% in the 1990s, and 5% this decade, as shown in the chart below.

Figure 3

#### Average industry revenue growth



Source: FDIC; US banking industry

### The sin of omission: banks failed to recognize slower growth

Banks tried to overcompensate for unrealistic growth targets by taking more risk, as reflected by the seven deadly sins of banking. The fallout is an expected \$1.0-\$1.5 trillion of losses at US banks between loan and capital market issues.

### Risk increased over a decade or more

This increased risk taking did not happen over a short period. Instead, the change reflected a structurally higher level of risk that only became more fully apparent during the cyclical downturn. Some aspects became apparent this decade (more exotic fees), whereas evidence of higher risk in other areas became apparent a decade or more ago (more high risk loans, risky securities, real estate concentration, balance sheet leverage, more consumer leverage, and increased wholesale borrowings). Given the extended time over which these problems were built, the solutions, likewise, should take time, too.

### Consequences will continue to be felt through income

Bank revenue growth should continue its multi-decade decline, especially as banks decrease the level of risk. Revenues consist of 60% of traditional banking, which should suffer from reduced loan growth after a period of excessive growth, mitigated by the extent that banks re-intermediate as more business flows back from the capital markets. The other 40% are fee revenues which, while having already suffered, can still be impacted by lower stock market, capital markets, and activity fees. Expenses (typically 60% of revenues) will likely look less favorable given increased oversight, regulatory, and problem asset costs. Costs for loan losses should continue to increase, a fallout from years of higher risk

loan generation. EPS should further be pressured from more shares outstanding as banks continue to raise capital to provide cushions for losses. Our estimates are mostly well below consensus and we maintain a negative bias.

**Atonement involves lower leverage, returns, and growth**

The main issue is that banks must deal with legacy issues, especially the \$7 trillion of loans on bank balance sheets. However, banking will not be a troubled business forever. Indeed, for selected banks that are in a position to lend, there may never be as much demand and at such good prices for their products, that is, both better sales and pricing power. Also, while loan losses are in the earlier stages, capital market write-downs seem further down the road. For the longer term, banks can atone for greedy loan growth by showing more stability, for the gluttony of real estate with greater diversification, for the lust of high yields by de-risking, for sloth-like risk management of over-levered consumers by developing more products that allow customers to save, for the pride of low capital by de-levering and capital raising, for the envy of exotic fees by going back to basics, and for the anger of regulators by acting pro-actively to facilitate favorable relationships with them, especially since banks have little choice given increased populist anger against the banks.

**Issues for next couple years – how big is the hole?**

The main issue over the next couple years is the level of loan losses, which we expect to exceed the level of the Great Depression, with losses increasing from 2% of loans to 3.5% (above 3.4% in 1934) or, under a stress scenario, at 5.5%. On a base of \$7 trillion of industry loans, this implies annual losses of about \$250-\$400 billion, or probably in the range of \$600 billion to \$1 trillion over three years. Thus, while capital market write-downs of almost \$400 billion seem in the later stages, higher costs for problem loans could result in total industry losses of \$1.0-1.5 trillion.

**Higher costs for problem loans could result in total industry losses of \$1.0-1.5 trillion**

Figure 4

**Base case for loan losses**

Loan	\$ of Loans	% of Total	Historical Losses	Peak Losses	Prior Peak	Current Losses	Projected Losses	BPS Contribution
Residential Mortgage	\$ 1,299	19%	0.20%	0.37%	4Q03	1.24%	2.50%	0.24
Home Equity	\$ 776	11%	0.32%	0.48%	1993	1.88%	6.50%	0.52
C&I	\$ 1,418	21%	0.84%	2.15%	4Q01	1.35%	2.30%	0.20
Core CRE	\$ 956	14%	0.16%	1.52%	1992	0.24%	1.52%	0.18
Construction	\$ 534	8%	0.49%	4.56%	1992	4.98%	8.00%	0.24
Credit Card	\$ 405	6%	4.29%	7.85%	1Q02	6.25%	9.50%	0.19
Other Consumer	\$ 594	9%	1.06%	1.52%	2Q03	2.69%	4.00%	0.11
Other	\$ 859	13%	0.30%	0.92%	1993	0.90%	1.00%	0.01
<b>Total Loans</b>	<b>\$ 6,841</b>		<b>0.85%</b>	<b>3.42%</b>	<b>1934</b>	<b>1.91%</b>	<b>3.56%</b>	<b>1.69</b>

Source: Federal Reserve; FDIC; Calyon Securities (USA) estimates

Figure 5

Stress scenario for loan losses

Loan	\$ of Loans	% of Total	Historical Losses	Peak Losses	Prior Peak	Current Losses	Projected Losses	BPS Contribution
Residential Mortgage	\$ 1,299	19%	0.20%	0.37%	4Q03	1.24%	5.00%	0.71
Home Equity	\$ 776	11%	0.32%	0.48%	1993	1.88%	9.00%	0.81
C&I	\$ 1,418	21%	0.84%	2.15%	4Q01	1.35%	3.50%	0.45
Core CRE	\$ 956	14%	0.16%	1.52%	1992	0.24%	2.00%	0.25
Construction	\$ 534	8%	0.49%	4.56%	1992	4.98%	11.00%	0.47
Credit Card	\$ 405	6%	4.29%	7.85%	1Q02	6.25%	14.00%	0.46
Other Consumer	\$ 594	9%	1.06%	1.52%	2Q03	2.69%	6.00%	0.29
Other	\$ 859	13%	0.30%	0.92%	1993	0.90%	2.00%	0.14
<b>Total Loans</b>	<b>\$ 6,841</b>		<b>0.85%</b>	<b>3.42%</b>	<b>1934</b>	<b>1.91%</b>	<b>5.44%</b>	<b>3.57</b>

Source: Federal Reserve; FDIC; Calyon Securities (USA) estimates

**This cushion for losses should fully offset the expected remaining losses, albeit with a gap**

**Mitigating consideration – banks generate new capital**

The mitigating consideration is that banks have newly generated earnings to help offset these losses. Over the next six years, we estimate that banks have \$1 trillion of new earnings that can help cushion expected losses, that is, \$1 trillion of pre-tax, pre-provision profits (“PPP”). Note that, if correct, this cushion for losses should fully offset the expected remaining losses, albeit with a gap between the time that the losses occur versus the time when earnings are generated. Nevertheless, the point is that banks should generate significant amounts of newly generated internal capital.

The estimate of the \$1 trillion of new capital over six years reflects an estimated per year amount of \$180 billion, or 10% less than the 4Q08 core run-rate of \$200 billion for the industry. The key question is whether a 10% reduction to the run-rate is correct. On the one hand, this haircut could seem to penalize banks too much given an average increase, not a decline, of 3% over 16 recessions over the past century, showing a degree of resiliency to bank results before credit costs. The worst case was a 37% decline over four years during the Depression (1929-1933), or an average annual decline of 9%.

Figure 6

**Pre-provisions, Pre-tax profits ("PPP") at banks in past recessions**

Recession	PPP	
	Growth	CAGR
1920-1921	18%	9%
1923-1924	0%	0%
1926-1927	-7%	-4%
1929-1933	-37%	-9%
1937-1938	-18%	-9%
1945	16%	16%
1949	4%	4%
1953-1954	11%	6%
1957-1958	6%	3%
1960-1961	12%	6%
1970	8%	8%
1973-1975	53%	15%
1980-1982	27%	8%
1990-1991	3%	2%
2001	6%	6%
2007-2008	-10%	-5%
Average	6%	3%

Note: Growth computed from the start of the recessionary year. Source: FDIC; NBER

**Headwinds are different than in the past**

On the other hand, there are three factors that can each hurt growth by 3%, including higher deposit insurance, less consumer loan growth, and downward pressure on the margin of historically high levels of holdings of mortgage-backed securities. Also, banks will likely look to downsize balance sheets to improve capital, which reduces the level of assets that generate earnings. Moreover, the full impact of a decade-plus of higher risk-taking during a cyclical downturn is still unclear but likely negative. In sum, our best estimate after reviewing a range of scenarios is a decline of 10% after considering a typical increase of 3% less 9% for the three factors above and an additional downward bias given deleveraging.

With this backdrop, we will discuss the seven deadly sins of banking in more detail in an upcoming report. Please see our separate 11 company notes in conjunction with this report.

## Other Companies Mentioned

Bank of America (BAC; \$7.60; UNDERPERFORM)  
 BB&T Corp. (BBT; \$18.16; SELL)  
 Citigroup (C; \$2.85; UNDERPERFORM)  
 Comerica Inc. (CMA; \$19.54; UNDERPERFORM)  
 Fifth Third Bancorp (FITB; \$3.28; SELL)  
 JP Morgan Chase Co. (JPM; \$29.28; UNDERPERFORM)  
 KeyCorp (KEY; \$8.54; SELL)  
 PNC Financial Services Group Inc. (PNC; \$35.80; UNDERPERFORM)  
 SunTrust Banks, Inc. (STI; \$13.82; SELL)  
 US Bancorp (USB; \$15.97; SELL)  
 Wells Fargo & Co (WFC; \$16.34; UNDERPERFORM)

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