FDIC Outlook

SUMMER 2004

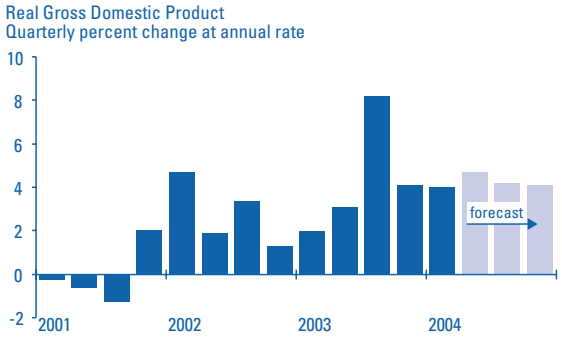
Special Feature This Quarter

In Person: An Interview with Bank One Chief Economist Diane Swonk ►
FDIC Chief Economist Richard Brown interviews Bank One Chief Economist and Senior Vice President Diane Swonk about the housing market, consumer credit, the role of the U.S. dollar, and the outlook for business in the United States and abroad. *See page 3.*

Bank One Chief Economist Diane Swonk: Finding the Stories Behind the Numbers.

Regional Outlook in Charts

The U.S. Economy Is Expected to Grow at About a Four Percent Pace This Year



Source: Bureau of Economic Analysis, Macroeconomic Advisers forecast.

Nationally, solid economic growth is expected for the rest of 2004, which bodes well for regional economies. More than two years after the recession's end, job growth finally is strengthening. Nevertheless, manufacturing job losses continue to weigh down overall job growth in some of the FDIC Regions. While the FDIC's outlook for banks remains positive, the industry faces some challenges. Among other things, rising interest rates may affect some consumers in high-risk lending segments and could cause stress in certain housing markets where prices have been more volatile than the nation's. Another challenge is high concentrations of commercial real estate—particularly in the San Francisco and Atlanta Regions—coupled with poor market fundamentals. Overall, the banking industry is well positioned to meet these challenges, with earnings and capital levels at or near record levels. *See page 14.*

In Focus This Quarter

Does Net Interest Margin Matter to Banks?
Secular forces have contributed to major changes in revenue sources for banks, particularly very large institutions. For these banks, the significance of net interest margin as a performance metric is not what it used to be. *See page 15.*

Bank Investment Portfolios: Strong Gains since 2000—Will They Continue?
Given the inverse relationship between bond values and interest rates, gains on securities sold supported strong aggregate bank profitability throughout the recession and subsequent recovery. However, in a rising interest rate environment, higher securities yields may not offset declines in bond values. *See page 20.*

Implications of Rural Depopulation in the Great Plains for Community Banks
Banks located in depopulating rural counties reported lower growth rates than banks in growing rural counties. However, some banks have employed strategies to remain successful, despite the unfavorable demographic trends unfolding around them. *See page 26.*

Letter from the Executive Editor

To the Reader:

The goal of the ***FDIC Outlook*** is to provide useful, risk-focused information to bankers, examiners, financial analysts, policymakers, and the public. At the FDIC, we constantly strive to improve the way we communicate information and have changed ***FDIC Outlook*** several times to meet the needs of our readers.

With this issue of ***FDIC Outlook***, we are continuing to refine our presentation of data and analysis. Part of this approach involves making ***FDIC Outlook*** more visual. For example, we will continue to feature graphical executive summary analyses of economic and banking issues, such as the *FDIC Regional Outlook in Charts*. This graphical analysis first appeared in the Spring 2004 edition.

Another aspect of our new approach is the selection of more dynamic topics. This means that we will not always feature articles from every FDIC region but will focus in each edition on a few key issues facing banks. Periodically, we also will publish special features and thematic editions. Our first special feature is this edition's interview with Diane Swonk, Chief Economist and Senior Vice President of Bank One.

Ongoing dialogue with our readers has been invaluable. On the basis of that feedback, in January 2003 we launched ***FDIC State Profiles***, an Internet-based publication that provides an executive summary–style analysis of economic and banking trends and financial performance data for each state. These analyses have proven to be enormously popular, especially for bankers looking for timely information about their marketplace. ***FDIC State Profiles*** are available at *www.fdic.gov/bank/analytical/stateprofile/index.html*.

As always, we want to hear from you so we can continue to ensure that we are providing useful, accessible, timely, and forward-looking risk analysis. After you read this edition, let us know what you think. Please provide your comments or suggestions on ***FDIC Outlook*** to Rae-Ann Miller, Associate Director, Division of Insurance and Research at the FDIC, at 202-898-8523 or *rmiller@fdic.gov*.

Sincerely,

Maureen E. Sweeney
Executive Editor

Bank One Chief Economist Swonk: "Fundamentals always dominate."

FDIC Chief Economist Brown discusses the U.S. economy's outlook and how economics is used in bank risk management.

In Person: An Interview with Bank One Chief Economist Diane Swonk

On April 6, 2004, FDIC Chief Economist Richard A. Brown sat down with Diane Swonk, Chief Economist and Senior Vice President, Bank One Corporation, to discuss the outlook for the U.S. economy and how economics is used in bank risk management.

Mr. Brown: Thank you for taking the time to talk to us for the FDIC Outlook. I'd like to start by asking you about the household sector. Consumers have carried the economy during and after the recession and, in the process, have run up a lot of debt, especially mortgage debt. So, the question is, are consumers living on borrowed time?

Ms. Swonk: Not at the moment. What we saw during the last mortgage refinancing boom is that consumers did something very unusual. Not only was it an extraordinarily large refinancing boom in 2003 and 2002, far swamping anything we'd seen before, but consumers paid down but did not close out existing credit lines. In the past we've told them, "Close out."

They also were extremely rational, mostly locking into low rates rather than adjustable rates, in ways we'd never seen before. That means that they're somewhat sheltered as rates rise going forward, for their mortgages at least. And that's a good thing.

So consumers were extremely rational. Some of them refinanced a couple of times, as I did. I'd like to say my forecast was perfect on interest rates, but it wasn't. So I refinanced more than once myself, seeing how extraordinarily low rates went.

But locking into low, fixed rates is a really important thing for consumers, because in the next step in the cycle, when rates go up and people go back into adjustable, that's when you really start to worry more about indebtedness, five years down the road from that.

The other thing that consumers really have done is to clean up their balance sheets. Debt service burdens remain relatively low. Consumers have freed up their ability to go back into debt in a major way, and they have more access to credit than ever before. What that

means is that there is liquidity to oil up the machine, and consumers have it at their fingertips at the very moment that jobs are coming back. And that's great news, of course; we'll need consistent job growth to be able to service that debt. My concern is not that consumers will have a problem going forward in supporting growth, but that they will continue to support too much because they have an ability to spend that's really quite strong. And then they'll have some incentive to spend, because the labor market is finally starting to show signs of improving as well. So they'll be confident in taking on more debt again.

And that could eventually lead us to move to a new equilibrium level of defaults, as it did in the early 1990s when we saw an extraordinary surge in defaults. That can be good for the economy—"creative destruction," as Greenspan puts it. But on the other side of it, as banks, we need to be aware of the situation. Consumers are going to be a great growth sector and are going to be very important for banks, but banks need to approach the business wisely.

Consumer lenders have been on a long learning curve where they've learned a little bit about subprime lending and making credit more widely available. Credit cards used to be a privilege. Membership was a privilege, as one of my competitors once said, and now credit is a right. And that's good.

The democratization of credit is a great thing, but there are consequences to it as well. We have to remember going forward that what we've done is to open up the ability to leverage up as we've never seen in this country. That's not bad in and of itself—it's only bad if we're not pricing that risk accurately.

Very true. Let me go further with the topic that you just touched on, which is the democratization of credit, something that we at the FDIC have written about also. You talked about it as having good consequences and bad, but—above all—being intertwined with the long-term rise in personal bankruptcy filings and higher consumer credit losses. So, as this expansion kicks into gear and we get some job growth, how much of a reduction might we see in bankruptcy filings and consumer credit losses?

Well, I think we'll see that we're going to get a temporary reprieve, which is good. And some of that is a legacy of earlier mortgage restructuring, and some of it's because the economy is improving.

But remember, bankruptcy filings were going up almost the entire 1990s, even as we saw unemployment rates plummet. So the good news is we've gone through the first phase of democratization, and I think we've learned something from that first phase. I think we're trying to find that new equilibrium level, which is probably a little lower than the recent highs, but not a lot lower. And that's in a good economic cycle.

We have to remember as bank risk managers that the downside risk is also much greater. We've been in an extraordinarily long period of low interest rates or falling rates, and at this stage it seems clear that we're moving into a period where there are going to be rising rates and even rising real interest rates. Part of this could be a normalization of rates by the Federal Reserve, and part of it could be an adjustment of risk premiums in the financial markets, where there is little or no risk premium at all right now. We're going to be running federal budget deficits with the current account deficit. And that, in and of itself, over time delivers real rates, although not necessarily in the near term. It's a time thing—it takes a long time to unwind.

So even though consumers are starting from a good financial base, the reality is that we're also going to be leveraging up more than ever before. The endgame may be a much higher equilibrium level of losses if we're not pricing for that changing environment.

One of the critical things that we try to do at Bank One is look for where the world is going to zig instead of zag. And it's very natural for people to extrapolate from the most recent past to forecast the future, especially when it comes to credit risk.

For consumer credit risk, the recent past sets the stage, but not necessarily the trajectory, for where we're going. Although we'll see near-term improvement, the next drop is going to be a much more severe situation, because we're moving into an environment that's going to be very different from how we ended the last expansion, with low interest rates and the ability to refinance in a way that was unprecedented.

Let's talk about the so-called "housing bubble." You have expressed some concerns about recent increases in home prices, which have reached double-digit rates in many areas. And clearly a broad decline in home prices would be bad not only for consumer spending but also for consumer credit quality. Should we be concerned about a housing bubble?

I think regionally there are always a couple of areas to be concerned about. The Midwest is one of them. Nine out of 21 metropolitan areas that actually had declines in housing prices last year were in the industrial Midwest, which was the hardest hit by employment losses. Most of these declines were by 2 percent or less. (See Table 1.)

You have to remember that even as interest rates rise in response to an improving economic situation, you get an offset in terms of employment for housing demand. Over the next several years, we're going to have better employment and better income gains to help absorb some of the shock from rising interest rates.

We did get a little additional liquidity to go into asset prices in a low inflation environment over the past couple years, but most markets are pretty well balanced. We don't have the extreme blocks of regional bubbles that we did in the early 1990s. Back then, many consumers couldn't restructure their debt, because their homes were still underwater even as the Federal Reserve was easing rates.

You do not see that kind of thing now. So even though, in general, we need less money down to get into a home and we hold less equity in our homes than we did in the past, total housing equity has surged quite a bit to offset what we've extracted. There is some cushion still there.

So I'm not overly concerned about a housing market bubble. We'd need to see fairly severe employment losses to really get a burst in the bubble. And even the places where employment was really hit hard—Akron, Ohio, for instance—you saw a decline in home prices that was mild.

I think you have to think about it in the context of what it really takes to burst the housing market bubble. Where the housing market overall saw a run-up in appreciation, there were also some markets that were already readjusting. Home values in Silicon Valley, for example, were falling much of the time that home values elsewhere experienced price increases. Now *there* was a market that you really were worried about, because it was clearly a bubble funded by the dot-com boom.

And you also have to remember that there is an asymmetry. The key is the kind of equity people hold in their home. For the most part, the last thing consumers want to lose is their home. They will hold on to their home for as long as they can. As an investment, it is different from other kinds of asset classes, because you actually live in it as well as own it.

Table 1

What's Your Home Worth?

Median home value in selected metropolitan areas as of fourth quarter 2003, with percent change in the median price during the preceding year.

Metropolitan Area	Median Price	Annual Percent Change
Akron, OH	$111,600	–5.3
Baltimore, MD	$217,800	14.9
Champaign, IL	$112,400	–2.2
Ft. Myers, FL	$156,500	12.8
Ft. Wayne, IN	$90,300	–3.0
Houston, TX	$132,800	–0.8
Los Angeles, CA	$382,200	24.5
Milwaukee, WI	$179,100	–1.2
Providence, RI	$240,700	16.8
Tulsa, OK	$109,000	–2.1
U.S. Average	$174,800	7.6

Source: Bank One Corporation, *One View*, March 2004; National Association of Realtors (Haver Analytics).

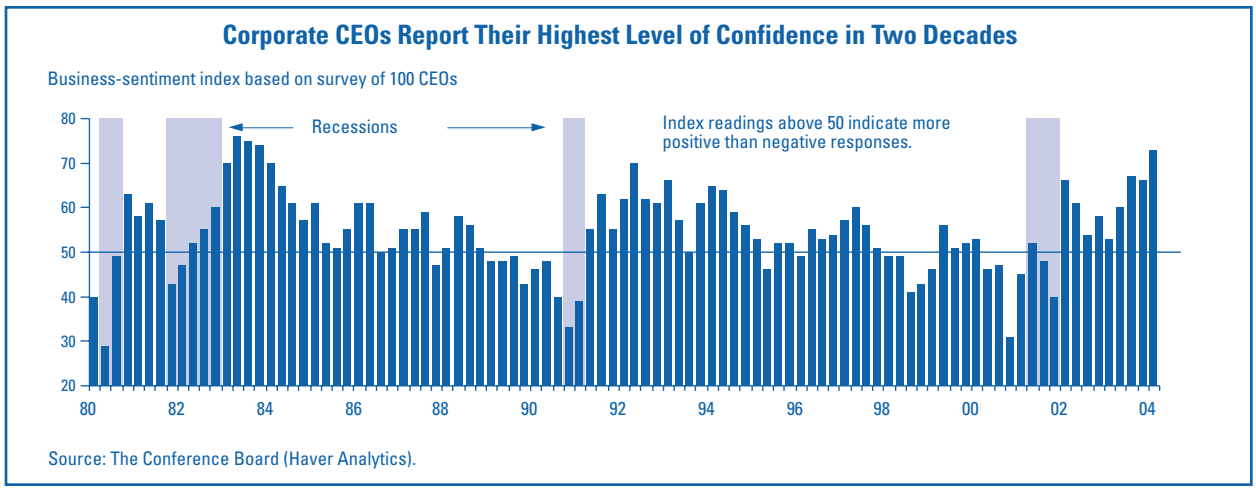
Unlike a telecom stock?

Yes. It is very different; it is not comparable. That is why it takes a pretty severe condition for someone to have to part with their home.

Democratization of credit is another issue here that is separate from housing market growth. They say mortgage defaults have been at record highs. Well, a record number of people have access to housing now, and there are more people on the margin than ever. There's a cost to that in the risk-return ratio. They're not all "A" borrowers. But, on the other side of it, there are societal benefits that are huge. We have the highest home-ownership rates in the world. High home-ownership rates are directly tied—once controlled for income—to higher rates of high school attainment and lower rates of teenage pregnancy.

What we have to realize is that it's the banks that bear the risk of that democratization of credit, and there are huge societal benefits that pay off for everybody down the road. But as lenders, we're the ones who are bearing

Chart 1



a new kind of market risk and opportunity. We have to be careful in assessing how far we want to go to get anybody into a home, because there is a cost as well as a reward for that.

Let's switch to the business sector. This time last year, we were talking to corporate executives about the sluggishness of the economy and their apparent risk aversion. And they told us it wasn't necessarily because of concerns about corporate governance reform, it wasn't even necessarily uncertainty about Iraq, but it was related instead to the weakness they saw in global demand. Their order books weren't filling up.

Now, to what extent do we see evidence that global demand has recovered in the intervening year? And how has that shaped the outlook for business investment and hiring?

A key report by the Conference Board just came out showing the highest level of corporate CEO confidence in two decades. (See Chart 1.) Part of that is just a bounceback from the exceedingly low levels of last year. But we see firms that have hiring plans today—especially small businesses—that didn't exist six months ago. Top-line revenue growth is beginning to grow along with overall demand.

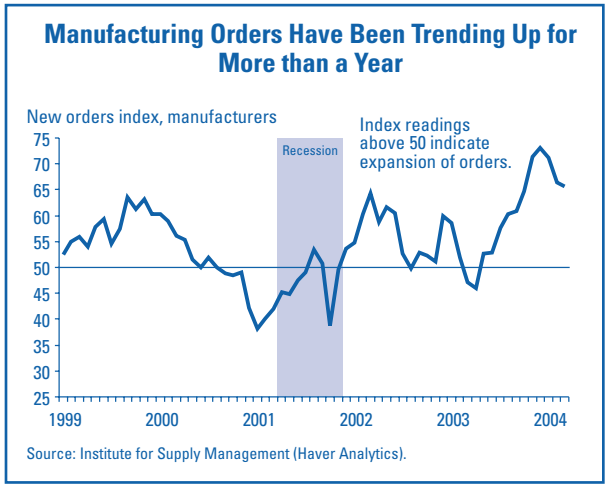
We saw the turn in domestic demand about the second quarter of last year before we saw the tax cuts hit. Tax cuts exacerbated the rebound in demand. But there was still this hesitancy. The feeling was "Fool me once, shame on you; fool me twice, shame on me." You know, it's a "Show Me" economy. I want to see my order books backed up before I'm going to really commit to hiring.

In the first quarter of this year, somewhere around January, we started to see a dramatic shift among our clientele, particularly in the heavy manufacturing sector that had been so hard hit, where all of a sudden they were saying, "You know what? Our order books are filling up."

And if you look at things like the Institute for Supply Managment survey and orders in general, they have been trending up for more than a year. (See Chart 2.) They were all at such low levels that it took a while to feel good about it. Remember, the benchmark was the bubble of the late 1990s.

Now we're to the point where order books are filling up to the degree that they actually have to bring new production capacity online.

Chart 2



We've also got some shortages of raw materials and steel bottlenecks and things like that all starting to come into play. It's interesting to me that this year, after facing deflation screams by a lot of our industrial Midwest clientele a year ago, they're now saying, "Your inflation figures are too low. We're going to have inflation through the roof."

And they have to understand: they're important, but they're not the only sector in the economy. The reason we didn't have widespread deflation then is the same reason why we're not going to have a sharp, widespread acceleration in inflation now just because we're experiencing raw materials prices going up. But it is an interesting issue, how much the situation has changed.

Now we're on the heels of record profits and record cash flow. As lenders, we'd like for there to be more interest in borrowing, but the bottom line is that we can finance a pretty strong recovery and investment in this country without much of a pickup in business borrowing.

Large corporations have restructured their balance sheets much like consumers did. They're cleaned up, they're ready to go, and they've got access to easy credit in many ways, from equity markets right through to the debt markets, which are much deeper than they were just a year ago. We've been seeing a recovery in business investment since the second quarter of last year, but what's interesting is seeing it broaden in 2004.

The first phase of it was sort of a high-tech reinvestment boom. We were replacing computers that we had bought for 1999 through Y2K. Service on them had expired, and even though the computers still ran just fine, we had to replace them because the leases had expired and things like that. They've got a very short shelf life. It's almost impossible to call a computer a durable good given how quickly they get replaced these days.

On the other side of it, we're now seeing the heavy truck sector coming back extremely strong, going from about a 150,000 run-rate last year to an estimated 250,000 this year. The heavy truck sector is one of those great lead industries in the manufacturing sector, because you need trucks to move stuff around. Whether it be retail goods or anything else that needs to be moved in this economy, you need trucks to do it.

So, clearly, order backlogs are building. We're hearing from our companies that shipments are picking up in the 15 to 20 percent range, but orders are picking up in the 30 to 40 percent range. We also have exceedingly tight inventories. That provides a little extra momentum—even if you didn't have demand, you'd have to replenish inventories a little bit. But with demand growing, you also are more willing to hold higher inventories. And so we're set up well on momentum.

"You know, it's a 'Show Me' economy. I want to see my order books backed up before I'm going to really commit to hiring."

D. Swonk

In terms of global demand, that's been picking up a little bit as well. The export situation has been improving slowly, in part due to the decline in the dollar. The situation abroad, although not terrific, is no longer deteriorating. And all of that is adding to a much brighter outlook for the U.S. economy.

You always have to be careful that you don't bite the hand that feeds you. People complain about the deficits we run with China, but with the rest of the world, China doesn't run very much of a deficit. In fact, with much of the world, they run surpluses. Part of the reason is that China has supported the economies of the rest of Asia that are many of our big buyers. So you want to be careful about saying that China is a problem, because if you knock China out, all of a sudden you knock out many of your developing countries in Asia. One of the reasons Japan is coming back is because China has been a big buyer of its goods.

In an election year, you often hear sound-bite solutions to complex problems. But I think you have to be very cautious not to look for sound-bite answers to complex problems. And the issue on trade is rather complex, but we're all better off with free trade than with protectionism.

Before we move to policy issues, I wanted to follow up on commercial loans. We've seen them decline at FDIC-insured institutions for 12 consecutive quarters. The decline has been led or dominated by large banks that make loans to large corporate borrowers.

You cited some of the fundamentals that are back, and you also cited some of the factors that are restraining borrowing, including access to the capital markets. Give us, on balance, your outlook for when that number will turn positive again. How much of a recovery in C&I [commercial and industrial] loan volumes do you see later this year?

I think we still probably have got a very soft first half of the year through June or so, but as we get into the second half of the year, there are a couple of factors that may be pushing up commercial lending. First, the underlying fundamentals for investment activity are improving, which is the number one thing to look at. But cash flow will also remain strong, although year-on-year profit gains are going to be tougher to get the comparisons on, because we're already coming off an extremely good quarter.

"I think you have to be very cautious not to look for sound-bite answers to complex problems."

D. Swonk

So by the end of the year, instead of a 30 percent year-over-year gain, we'll be looking at more like 18 percent, which is still spectacular. But all of a sudden, if you start investing, you'll be using some of that cash flow.

The other issue is that capital markets have gotten a lot deeper. Equity markets have gotten deeper. But I think as the fear of rates going up increases, there will be some rush to lock in to some kind of borrowing. So there will be an opportunity in the second half of the year for banks to step up and say, "Here's your chance, guys. This is it on low rates."

We have had a Fed that's been very restrained, very willing to be patient, and we have a lot of liquidity. There is not a lot of risk out there, and C&I loan growth should help strengthen the economy in the second half of the year. We expect it to accelerate into the fourth quarter. Many people have criticized us for having C&I loan growth pegged at around 4 percent in the first quarter and saying we're way too low—and now everyone's revised down to us, so I'd love to be surprised now. By the end of the year, I think we are looking at 5 percent growth.

One of the reasons is that the ability to fully expense certain types of capital expenditures will expire at the end of this year, and many of our capital equipment producers are already saying, "Yeah, we need to think about it—we'll get to that in the second half." So it sets up a second half of the year surge in many of the kinds of purchases that require C&I loan growth as well.

In terms of timing, we may end up borrowing a bit of investment activity from the beginning of 2005, but it could set up for a very nice second half of this year. I caution people, though, that if they get a really great fourth quarter, to take it with a grain of salt—they may want to average it with the first quarter, because it could simply reflect people slipping in under the change in the tax law.

Another experiment that will show that tax policy affects behavior.

That's right. It does affect behavior.

You touched on something else also. There is an interesting debate that we see developing with regard to inflation. Some have said that the commodity price increases we've seen recently are a harbinger of a wider price inflation that will be a replay of what we saw in the 1970s. Others say no, it's different this time—we have essentially a deflationary global economy, which makes inflation a very remote concern at this stage. What is your outlook for inflation, and what does it imply for Fed policy?

I guess there is no real black and white to inflation this year. I think one of the greatest issues in inflation is that we've got some of these temporary bottlenecks in raw material price increases and we've found ourselves in a high-productivity environment, so we've been very, very able to absorb a lot of that shock. Commodity prices are only one piece of a very complex inflationary puzzle.

More important, and maybe more subtle, than that is that many of the deflationary factors that people were really concerned about have disappeared. And

that could, in turn, lead to some concerns going forward about inflation.

My own view is that we could get some relief on oil prices—and that takes a lot of the pressure out of the equation. At prices this high you tend to get lots of cheating at OPEC, and we may already see that kind of activity picking up. And that's great, because we'd like to see oil prices come down a bit.

In my view, we are in an environment where deflationary pressures are abating, unveiling some of the underlying inflationary pressures in this economy, which are not overwhelming but certainly are there.

I believe we have now reached a point of price stability. If you look at the underlying core inflation numbers, whether it be the Personal Consumption Expenditures Core Index or the Consumer Price Index, we've seen a stabilization. We no longer have disinflation, prices are no longer falling, so we're stabilizing. The question is, when is inflation going to move up? Well, inflation is inertial, so we should expect it to move up slowly, but we should also expect it to move up.

There are two issues there. One is that the Fed certainly feels it has a little bit of wiggle room to allow inflation to move up. That may be a case of "Be careful what you wish for." If you get price stability, do you really want to be there? The other issue, though, is once you start chasing inflation, you have to play catch-up, and we're starting with a Fed funds rate that is extremely accommodative.

Ideally, the Fed would like to have a gradual increase in rates that the markets can adjust to. Nobody wants disorderly change; they want it all to be very orderly. Also ideally, I think, with the stronger employment numbers, seeing the Fed move up by the end of this year to 1.5 percent in the Fed funds rate would be welcome news, because it would set the stage for a more gradual pickup in rates over the course of the next couple years. Now, "gradual" is a relative term. I've got the Fed funds rate close to 4 percent by the end of 2005!

Four times where it is now.

Exactly. And that is a lot of heavy lifting for the Fed to do in an orderly way. And, you know, the question is whether they will be able to do it in an orderly way. Many people are saying that we need to be more preemptive, but this is a Fed that says no, we need to be more reactive. I think we need about three-quarters of a million to a million in employment gains before the Fed feels comfortable moving, so we're not there yet. It'll be volatile in the next couple of months, but you can certainly envision the Fed statements beginning to express a balance of risks to inflation as they gradually start to take the security out of the system. It will start out gradual, but in 2005 it could be much more aggressive.

And the Fed will prepare the markets for that. They've already begun to say, "Rates are going to go up, you know they're going to go up—OK, guys?" Just *when* will depend on how strong the economy is. When the rates do go up, we like to see it be nice and orderly and gradual. But how many times do we really get our wish in that way? Life usually has a lot more surprises in it. My concern is that there will be a much less orderly rise in rates in 2005.

The real challenge for the Fed will be to manage the bond market so that it doesn't go too far in the other direction. Because clearly, the bond market went too far in accommodation in thinking that deflation or disinflation was forever in the prices of bond deals, which is sort of silly, and the bond markets can change pretty quickly—and quick changes are hard.

Do you get the impression that we are at the end of a 20-year cycle of disinflation with short-term interest rates at a 45-year low, and that we are turning a corner? That's a very uncertain place to be, as evidenced by the bond market's reaction last summer. They weren't quite sure whether to turn that corner.

There were a number of factors behind the bond market reaction, but yes, there is no question there is uncertainty. The interesting thing is that, for the most part, most traders in the bond market have been in a bull market their whole lives, and that lack of experience is something that you worry about, because we are at a turning point. The Fed is coming out and saying, "Eventually we're going to have to raise rates, guys. You know that, right? We're patient, but patient doesn't mean *no* rate increases."

Inflation is stabilizing, and if the economy improves, even if inflation didn't accelerate, you'd still have to

raise rates so you wouldn't have to worry about it later on.

The Fed is also firing these warning shots, saying that if we get into structural federal budget deficits again, along with current account deficits, and we get dollar depreciation—that may eventually work into prices. These are all things we have to worry about. So we can't take it in a vacuum. And the problem is, like I said earlier, people's natural tendency is to take the most recent past and forecast the future. The most recent past often sets the stage. And the fact that we're at 45-year lows should tell you something—it's not sustainable. So prepare yourself.

The problem is, it's very difficult to time. What you have to do is be ready to move as soon as the market moves, which means you're not going to get the market low, and you won't be able to fully hedge yourself, as a lending institution, against higher rates. However, it is probably a good time to go ahead and start hedging, because once rates begin to move upward, it will probably be part of a long process, not a short-term adjustment.

I'm interested in your views on the current account deficit and the dollar. Here again, there seem to be opposing views, although the reality is probably in the middle. One view is that the United States is spending beyond its means, which could result in an unstable dollar—a collapse scenario for the dollar. Another school of thought sees the U.S. current account deficit as structural and not unrelated to the fact that many countries and firms around the world really depend on exports to the United States, so there's a long-term structural global imbalance. Is either view accurate? And how does a half-trillion-dollar current account deficit ultimately resolve itself?

Well, first, we do have a structural trade deficit—the rest of the world relies on us because we rely on the rest of the world for our goods. We are the most efficient economy in the world, and we have the highest capacity to consume and invest of anyone in the world. So all else being equal, given purchasing power parity or anything you want to throw in there, we would be running a structural current account deficit, importing more than we're exporting, because we have this insatiable demand that is allowed in this country because of the freedom and depth of our capital markets.

> ***"It is probably a good time to go ahead and start hedging, because once rates begin to move upward, it will probably be part of a long process, not a short-term adjustment."***
>
> ***D. Swonk***

The last time we had a merchandise trade surplus was right after the recession in the 1990s. At that time, we had everything possible going to help the current account: weak demand here, strong demand abroad, and a weak dollar.

We had foreign contributions for the war then, too.

Yes, so that was an extraordinary period of time. And to get back to that kind of balance, that's a heck of a lot to ask of the world and us. It would take a recession here to do it, along with an extraordinarily weak dollar reminiscent of its plunge in the late 1980s and early 1990s.

This time we've had a reasonable, orderly decline in the dollar. In the near term, I think there is actually room for stabilization in the next year or so, and maybe even some appreciation, as we start to get into a situation where rates are rising in the U.S. and world economies are improving as well. Going forward, we should continue to do better than the rest of the world, and in a higher rate environment that just tends to favor cash flows into the U.S. We'll also continue to see a better return on capital for a while. And that should be favorable to the dollar, to at least keep it stabilized given the counterpressures or crosscurrents of a large current account deficit.

The other issue is that the dollar alone can't do the heavy lifting. It's a very crude tool given that many of the countries that we have trade deficit problems with do not have floating currency. China is only one example. And, frankly, even if the dollar depreciated 40 percent against China and they moved to a basket of currencies, that wouldn't change—in fact, it's still cheaper to produce in China than it is here.

The larger issue over time is going to be very difficult for us. I think we'll get some cyclical improvement in federal deficits, which will take some pressure off so we can deal with some fundamental problems in the federal budget deficit that no one really wants to deal with, because they hurt. It's painful. And you need almost a crisis type of situation like we had in the early 1990s when the balanced budget accord was pushed through to actually deal with things like the federal budget deficit.

My fear is that the persistence of the twin deficits (federal budget and current account), even with momentary improvements, is going to cause an enormous amount of pressure on the dollar over the next five to ten years. What we could be talking about is dethroning the U.S. dollar over time as the world reserve currency. I think no one has really thought about what that means, moving to a basket of currencies where the euro is one player in that basket, the dollar is one player in that basket, and perhaps the yen is another player in that basket. Having the dollar as the reserve currency has been another reason why we have been able to afford the luxury of carrying such a large amount of debt as a share of GDP, unlike any other economy in the world. People say it's just the depth of our capital market. Well, who's to say other countries that are reforming are not going to have depth to their capital markets also?

I think we're running a large risk of losing that status as the world's gold reserve, sort of a gold currency. It's not real gold, but it is the reserve currency of the world. In fact, gold ore is traded in dollars. Europe has not had to pay higher oil prices because it is the dollar that has depreciated.

But on the other side of it, the dollar's status as a reserve currency has afforded us lower interest rates and more debt than any other country in the world would be allowed to carry—it really is extraordinary. What we are doing is walking into a world where I think you could see a very substantial collapse in the dollar in the next five to ten years if we don't do some things to improve that and, as a result, lose some of our status as a world reserve currency.

That would be a very different world for us to deal with. We would have to deal with the same kind of consequences as many of our trading partners when they go into debt. And we would be expected, like firms and individuals and the rest of the world, to make an attempt to pay back our debts. That's something we're not entirely used to in this country.

So it's a structural change. And that gets into my role at the bank, looking at the world and what could go wrong, what could go right—no matter what could change. How do you position yourself for that change when it comes? Be aware, this is where the potholes are and this is where the opportunities are. Every change is an opportunity, as long as you anticipate it.

It's very difficult to anticipate these regime changes, waking up in a different world where the dollar is no longer king.

Right. But it is better to be thinking about them now than to let them sneak up on you.

That leads to the next question, which relates to your role at the bank. I would like you to discuss the role of point forecasts versus the type of analysis you just described, which is a scenario analysis. Which is more important in terms of the usefulness in decision making, risk management, that sort of thing? Or do both have a role?

The market requires point forecasts. You have to remember what economics is at the end of the day—it's the study of collective human behavior. It's not this magic black box of numbers that we spew out for markets to move by on a daily basis, and it's one of the main reasons that I don't work on the trading floor.

I think that fundamentals always dominate, and, over time, economics is most powerful over a two- to five-year horizon. For planning purposes and risk management, economics is most useful in identifying which industries are really going to boom if we're positioning the bank this way and which industries we need to worry about. It's more powerful in all those ways, picking winners and losers, than saying the Fed will move a quarter-point on this date. The reality is that we know the Fed is going to move within the next 18 months. But by how much is it going to move? We can guess with a reasonable amount of certainty, but the reality is that it is more important to know that we are shifting, that we are at a turning point, and to know how to position yourself for that turning point as it comes.

> *"Every change is an opportunity, as long as you anticipate it."*
>
> *D. Swonk*

In terms of my role at the bank, I've done risk management, I've done the equivalent to ALCO [asset-liability committee] and those kinds of committees. But more often than not, economists get asked the wrong questions. I think the role of an economist is to help define the questions so that they can be answered in a meaningful way, rather than let the market determine the questions in a less meaningful way. I think we spend too much time on point estimates, although they're important, and that's where the articles are written and that's where brand equity can be generated in answering those questions.

The reality in terms of adding value to your company is to help strategically, and economics is just incredibly well suited for that. That's where, especially for lenders, you need to understand where strength in consumer borrowing is going to be—which is very, very strong in traditional areas—but you need to price the risk, you don't just ride the wave. That's a really important thing to be calling. It's important to call that heavy manufacturers are going to be coming back, and don't write off and leave behind all these great customers you've had a relationship with because they're not coming back at that particular moment. Obviously, you want to be selective, but you want your institution to be there for them, because they are going to make it back.

> *"You have to remember what economics is at the end of the day—it's the study of collective human behavior. It's not this magic black box of numbers…"*
>
> *D. Swonk*

So my view is that you add a lot more by identifying structural change and using the power of economics in terms of what it really tells us about collective human behavior, the decisions that are being made out there, and the repercussions of the decisions you make, rather than just focusing on the point estimates.

With that said, every point estimate of the economy should reflect a story. Far too often, you'll see forecasts that aren't consistent. We all have our different theories and our own model that points out what is consistent and what is not. If we're not going to be consistent at some point, we're saying that history is changing. Are we willing to make that bet, theoretically? Is the world really changing, or is it we're just wrong on our point estimates? You want a consistency in your point estimates where someone can read the forecast and see a story—for instance, that the consumer sector is moving from being the leading sector to holding its own, but is no longer the driver of the U.S. economy, or that investment is moving from being a drag on growth to a booming sector in both traditional as well as high-tech equipment. Those are consistency issues, and there are stories in the numbers.

I teach MBAs, and their final project is to be a stock analyst and value a company. I teach them the economics of it, and what I teach them is, "Don't worry so much about what every word of a Fed statement says. Worry about where things are going from here, and what the story in the forecast is." If you are going to write about your company in the context of the economy, you better have your logic consistent. Even if you don't agree with me about what the macro picture says about the individual winners and losers—and all are tied, inherently, it goes in both directions—you had better understand what you are saying. Everybody has their own sound-bite answers, and everyone wants to hang onto that, but that's not really a part of strategy, and that does not represent long-term understanding.

At the end of the day, we focus so much on quarter-to-quarter movements, day-to-day movements in the market, and, frankly, is that where the press comes? Absolutely. And that's where brand equity can be generated, and the role that I play as a face for the bank. But I always say that's the icing on the cake—I still have to bake the cake. And the baking of the cake is to understand what all the inconsistencies are in the longer run and the structural changes that are emerging. Because you can have someone coming to you and saying, "You made an interesting point—you didn't just talk about employment. You made another point about that that was something that caught my attention." And that's what you want to do, to make

people get an "Aha," and give them a toolbox to understand the world going forward.

You impressed people at the FDIC when you spoke to our November 2002 economic roundtable.[1] A lot of people at the FDIC, especially those who are not economists, said, "Diane's the first economist who I really understood. She tied her story to things that were tangible to me." The story behind the numbers is something that you really bring across.

I am very much an applied economist, and, believing in that, my job is that of an economic translator. I take what really brilliant people say and try to make it make sense in the real world. So they make me look really smart. That part about being an economic translator, you have to take out all that academic stuff and say, "This is what it really means for you." That's part of the job for an economist in any company. Everything I have done is useless if I'm not helping someone to think, and I have not helped them to understand their world in a better way. Communication, at the end of the day, is the only way to do that.

I don't like to invoke my privilege in being a woman, but it's not always been an advantage in my profession to be a woman. I've learned to make lemonade out of lemons on this issue, and I think I have more latitude in making economics real and interweaving, talking about my children as an illustration, because what we tend to forget is that economics is about the thousands of decisions that we make every single day, whether we are going to spend time enjoying our children, for example, and not make money during that period of time.

That's a base decision of human behavior. Most of us work to live, we don't live to work. I love what I do with a passion, and I understand that everything we do is economic, but at the end of the day, it is important to be able to relate that to people so they can understand it more in their own world. We all understand economics—we all do it all the time. My challenge is to get people to be aware of how they're making decisions and how those decisions influence the rest of the world.

You have been very generous with your time and your willingness to talk through all these issues with us and to bring your own personal experiences to it.

It's been my pleasure. It really is. I mean, this is what it's all about, to get people to think a little differently than they have. This is what I do.

Mary Ledwin Bean provided editorial assistance for this article. Photographs are also by Ms. Bean.

In Person Profile: Diane Swonk

Diane Swonk is Director of Economics, Chief Economist, and Senior Vice President at Bank One Corporation in Chicago, where she manages the bank's Corporate Economics Group, and is a Clinical Professor for DePaul University's MBA program. She recently published her first book, *The Passionate Economist: Finding the Power and Humanity Behind the Numbers*.

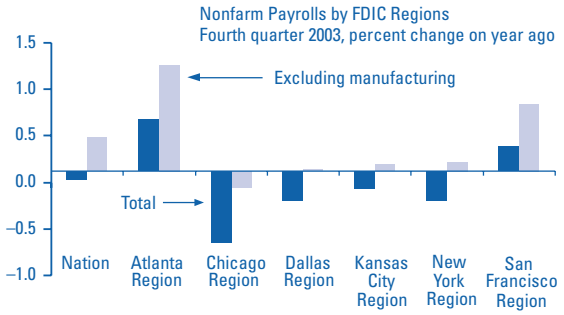
Ms. Swonk began her career with First Chicago Corporation. She is a national economic consultant and appears regularly on television and in major financial publications. She served on the Board of the National Association for Business Economics (NABE) and the Finance Committee for the Executive Club of Chicago and is a director of the Illinois Economic Education Association. She was named "Business Leader of the Year" by the YWCA of Metropolitan Chicago and an NABE Fellow for her outstanding contributions to business economics. Ms. Swonk was one of the *Wall Street Journal*'s "Star Forecasters," was named "Top Woman in Finance in Chicago" by *Today's Chicago Woman*, and was just named one of the most influential women in business by the *Chicago Sun-Times*.

Ms. Swonk earned her master's in economics with honors from the University of Michigan and her MBA with honors from the University of Chicago.

[1] For a summary of this event, see http://www.fdic.gov/news/conferences/econ_agenda.html.

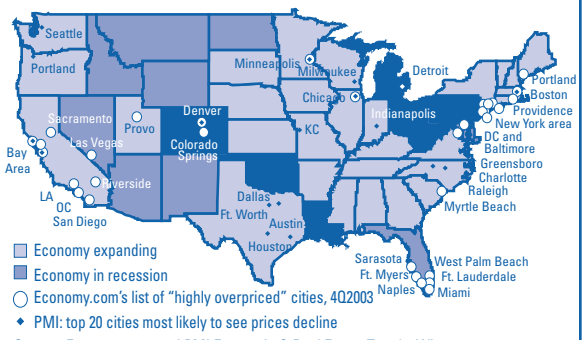
Regional Outlook in Charts

Job Growth Appears to Be Strengthened, but Manufacturing Job Losses Have Weighed Heavily on Overall Job Growth in Some FDIC Regions



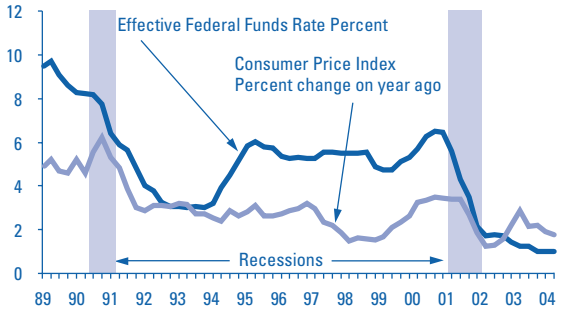
Source: Bureau of Labor Statistics.

Home Prices in Some Markets May Be More Vulnerable to Negative Economic Shocks, Such as a Sharp Rise in Interest Rates



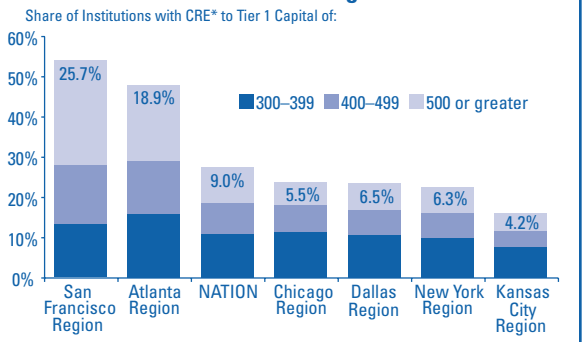
Source: Economy.com and PMI Economic & Real Estate Trends, Winter 2004.

With Short-Term Interest Rates at a 45-Year Low, a Rate Hike May Be Inevitable, if Not Imminent, Which Could Cause Strain in Some Sectors



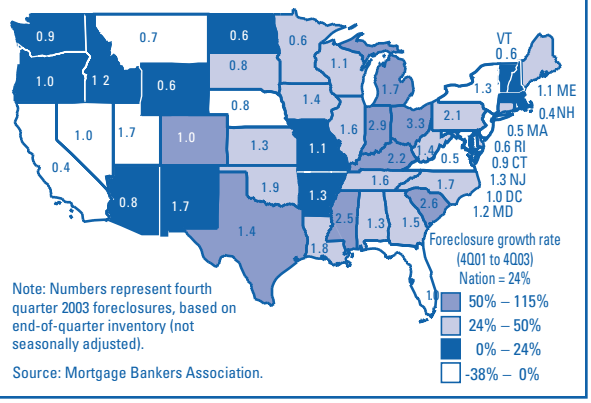
Source: Federal Reserve, Bureau of Labor Statistics.

Commercial Real Estate (CRE) Exposures Are Elevated, Particularly in the FDIC's Atlanta and San Francisco Regions



*CRE includes construction and development, multifamily, and nonresidential loans.
Source: FDIC, data as of fourth quarter 2003.

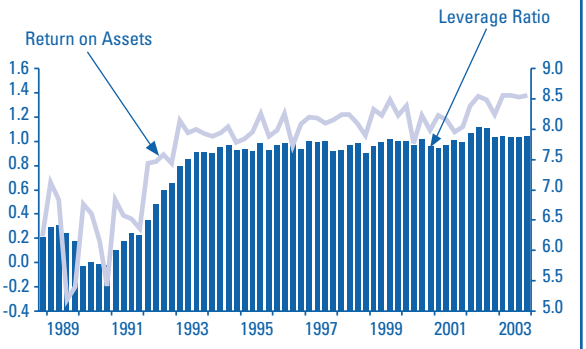
The Mortgage Foreclosure Rate Has Escalated in the Midwest, Southwest, and Southeast



Note: Numbers represent fourth quarter 2003 foreclosures, based on end-of-quarter inventory (not seasonally adjusted).

Source: Mortgage Bankers Association.

The Banking Industry Is Well Poised to Absorb Problems, Given High Earnings and Strong Capital



Source: FDIC.

Does Net Interest Margin Matter to Banks?

On the surface, the answer to this question seems obvious. Net interest margin (NIM) is the difference between income generated by earning assets, such as loans and securities, and expenses incurred on interest-bearing liabilities, such as deposits and borrowings. Because banks are in the business of intermediation—taking funds from depositors and other sources and investing in interest-bearing assets—of course NIM matters. But, for some banks, it does not matter as much as it used to.

Over the past 25 years, deregulation, technology, and market forces have contributed to increased competition and significant changes in revenue sources for insured institutions. These trends have resulted in a secular decline in NIM and a concurrent increase in other revenue sources, particularly at very large institutions. As a result, the significance of NIM as a performance yardstick is not what it used to be. This article will focus on trends in NIMs and analyze institutions of similar asset size to identify reasons for differences in NIM performance.

For the purposes of this article, we have divided the commercial banking industry into three segments:[1]

- Megabanks—commercial banks with assets over $100 billion.
- Large and midsized banks—commercial banks with assets of $1 billion to $100 billion.
- Community banks—commercial banks with assets under $1 billion.

The article also explores whether alternative metrics exist that measure earnings performance more effectively than NIM.

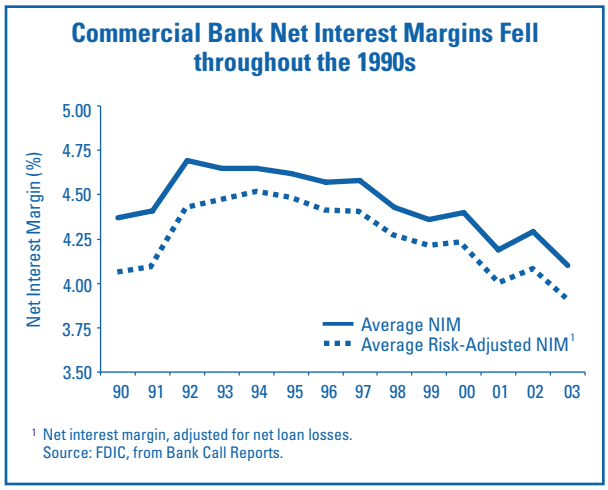
[1] The article focuses on commercial banks because of the historical importance of net interest income as a revenue source. Before deregulation and the development of secondary markets, thrifts almost exclusively underwrote residential mortgages, with fee income earned in origination and servicing. Funding sources were mainly savings and time deposits. The cost structure of thrifts was significantly below that of commercial banks because of lower underwriting and deposit-servicing costs. Therefore, NIMs have been historically much narrower for thrifts.

Secular and Cyclical Factors Have Affected NIMs

The average NIM for the industry had fallen from 4.69 percent in 1992 to 4.10 percent by year-end 2003 (see Chart 1). NIMs for the banking industry have been under secular pressure for some time, partly as a result of increased price competition within the banking industry and from nonbanking firms that offer bank-like products. Improvements in technology and other marketplace innovations contribute to price competition. For example, in the past, loan and deposit pricing were largely set in local markets; they still are in some areas, but technology is leading to a convergence in pricing. One result is that depositors can now easily use the Internet to locate and move money to the offering with the highest yield.

Cyclicity has also played a role in the decline of NIMs, particularly in recent years. Yields on loans have fallen as a result of nominal interest rates at a level that has not been seen since the 1950s. Moreover, despite the current steepness of the yield curve, banks have not recently reaped much benefit in lower costs, as the persistent nature of low interest rates has caused depositors to resist further decreases in deposit rates, thus creating an effective "floor" for deposit costs.

Chart 1



Risk-Adjusted Margin

An alternative way to analyze NIM performance is by using a risk adjustment process for credit costs. Credit costs, namely net loan losses, are inherent in almost all forms of lending and should be considered when analyzing returns. The adjustment of loan yields and, ultimately, the margin for credit costs can facilitate comparisons among different types of institutions. For example, NIMs of credit card banks are usually much higher than those of community banks, because credit cards tend to be a riskier business line that yields higher revenues than the more traditional business mix of a typical community bank. However, adjusting for losses, margins between the two become much more comparable.

The NIM charts in this article show the unadjusted traditional NIM in a solid line and the risk-adjusted margin in a dashed line. In Chart 1, for the entire industry, the average risk-adjusted margin has fallen 52 basis points since 1992, while the average unadjusted NIM has fallen 59 basis points. The two metrics have been very close over the measurement period, compared with a much greater variance during the crises of the late 1980s and early 1990s. This closeness is due to improved credit performance over the measurement period. This improved performance has resulted from improved risk management and underwriting processes; enhanced regulatory requirements; and a shift in portfolio lending from large commercial real estate development and business lending to consumer-related lending (single-family mortgages and residential construction).

NIM Trends for the Three Asset Size Groups

As a group, megabanks have the lowest reported NIM in the industry. The median NIM for megabanks had fallen from 4.35 percent in 1994 to 3.84 percent by year-end 2003 (see Chart 2, next page). Although NIMs for megabanks are lower than those for the other groups, megabank NIMs have not shown a greater decline over time; that is, historically, these banks have reported the lowest NIMs. As we discuss later in this article, significant differences in business strategies and availability of options between megabanks and other groups are major factors in lower megabank NIMs.

The NIMs of large and midsized banks have fallen much more than those of megabanks. The median NIM for large and midsized banks fell from 4.55 percent in 1994 to 3.91 percent by year-end 2003, a drop of 64 basis points. This drop was much greater than the corresponding 49 basis point decline at megabanks. Interestingly, the risk-adjusted NIMs for the same period for both groups fell about the same amount: For large and midsized banks, the risk-adjusted NIM fell 72 basis points; for megabanks, it fell 71 basis points. Risk-adjusted NIM at megabanks was adversely affected by credit losses on some very large corporate borrowers that experienced problems during the recent recession.

The NIM at community banks has experienced compression almost identical to that at megabanks. The median NIM for community banks had fallen from 4.59 percent in 1994 to 4.11 percent by year-end 2003. The 48-basis-point decline in the median NIM for community banks approximates the 51-basis-point decline for megabanks during the same period.

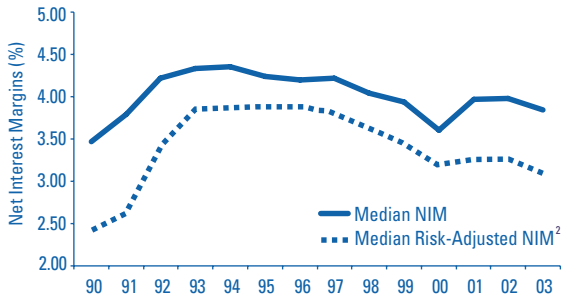
Megabanks Have Diversified Their Income Streams, Resulting in Less Reliance on NIM

The narrowing NIM at megabanks is part of a gradual alteration of the income stream over the past two decades, in which these banks have purposefully reduced their dependence on spread income. On average, megabanks' net interest income as a share of total revenue fell from 90 percent in 1984 to 65 percent in 2003 (see Chart 3, page 18).

Several factors have driven the change in earnings composition for megabanks. Traditional key lending areas—such as a large corporate loans—have diminished, in both volume and yield, as a result of competition, technology, and other market forces, including the expansion of the capital markets. To replace this lost revenue, megabanks have expanded into new business lines—such as investment banking, asset management, and insurance—to generate fee income and grow revenue. Megabank managers have sought to diversify their revenue streams to lessen their dependence on any one source and reduce the volatility in revenue over time.

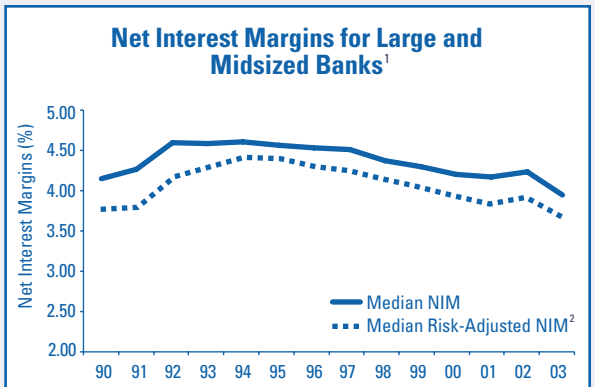
NIM Has Fallen for All Three Segments of the Banking Industry

Chart 2a



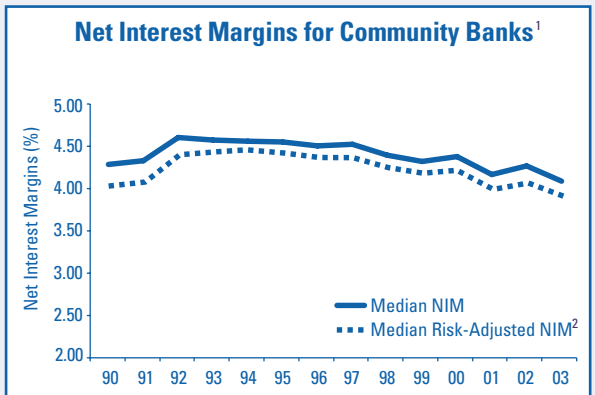
[1] Includes commercial banks with assets over $100 billion at year-end 2003.
[2] Net interest margin, adjusted for net loan losses.
Source: FDIC, from Bank Call Reports, merger-adjusted data.

Chart 2b



[1] Includes commercial banks with assets between $1 billion and $100 billion at year-end 2003.
[2] Net interest margin, adjusted for net loan losses.
Source: FDIC, from Bank Call Reports, merger-adjusted data.

Chart 2c

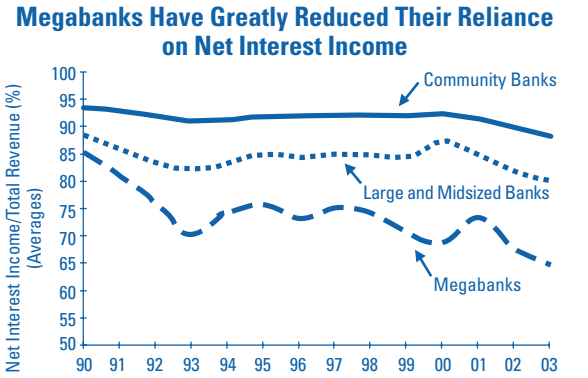


[1] Includes commercial banks with assets less than $1 billion at year-end 2003.
[2] Net interest margin, adjusted for net loan losses.
Source: FDIC, from Bank Call Reports, merger-adjusted data.

Community banks, on the other hand, still rely heavily on net interest income. For these banks, net interest income as a share of total revenue fell slightly, from roughly 95 percent in 1984 to 89 percent in 2003. Additionally, while there has been an increase in fee income at community banks, for the most part, this income is closely related to net interest income rather than a result of expansion into new business lines. These fees are mainly associated with deposit accounts: monthly service charges, check-cashing fees, and insufficient funds charges. Price increases for these items are the main reason for the small increase in the proportion of fee income to total revenue.

The size of the megabanks (over $100 billion) suggests institutions with the scale and management to operate multiple business lines over multiple geographies and with the largest array of strategic and funding options. Conversely, the size of the community banks (under $1 billion) suggests institutions that operate a traditional local banking business. Income streams at the large and midsized bank group—$1 billion to $100 billion—are more complicated to analyze because of the mixed composition of this group. Some banks in the group tilt more toward the traditional, while the larger banks may emulate the megabanks in terms of business lines and strategies. Still others may be niche players.

Chart 3



Note: Megabanks are commercial banks with assets of $100 billion or more, large and midsized banks are commercial banks with assets between $1 billion and $100 billion, and community banks are commercial banks with assets less than $1 billion.
Source: FDIC, based on Bank Call Reports (merger-adjusted average data).

Because of the varied nature of the banks in the large and midsized group, the change in revenue stream falls at the midway point between that of megabanks and that of community banks. Net interest income as a share of total revenue fell from 90 percent in 1984 to 80 percent in 2003. The rate of decline has picked up somewhat in the past three years as declines in interest rates have prompted these banks to seek alternative revenue sources and technology improvements have made it easier to access these sources.

Diversifying Income Streams Has Been Beneficial for Megabanks

Historically, earnings have deteriorated during economic downturns as credit costs generally rise. However, record levels of income were generated during the recent recession, partly because of increased revenue from business lines not tied to net interest income. Earnings problems were also muted at megabanks by the relatively mild nature of the recession and a shift in portfolio lending from commercial (where most credit problems were concentrated) to consumer lending. In addition, advances in active credit portfolio management techniques and the development of secondary markets have created new options for managing and transferring credit risk.

Risk management processes have become more sophisticated at megabanks, so that optimization of the NIM ratio often is not a primary goal. A principal focus among managers in this group is the maximization of revenue and total shareholder return. Business lines are scrutinized to determine whether they are exceeding a specified hurdle rate of return on a risk-adjusted basis. Simply stated, business lines with risk-adjusted returns above the hurdle rate are adding economic profit while those below are not.

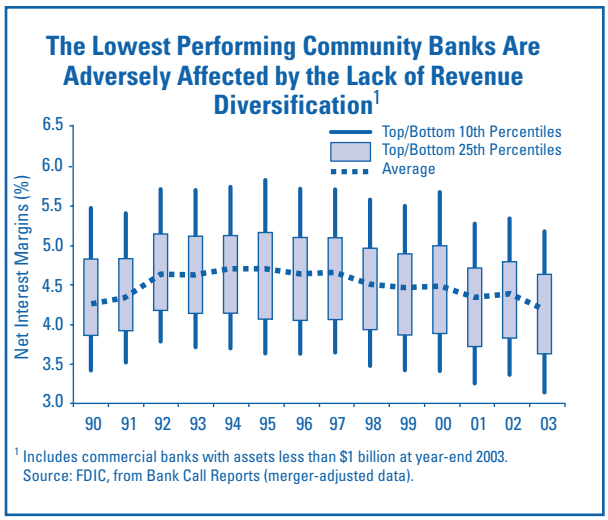
This hurdle rate methodology is also used to determine the overall profitability of individual customer relationships at megabanks. While one product or service in a relationship may not exceed the hurdle rate of return, other products or services sold to the same customer could raise the overall profitability of the relationship above the prescribed minimum. For example, commercial credit facilities offered by megabanks may be priced below the business line return hurdle. This loss-leader strategy is used to cross-sell other, higher margin, products that lead to profitable relationships in the long run.

A number of banks in the large to midsized group are able to diversify income streams and employ some of the same revenue optimization techniques as megabanks. However, among community banks, the lack of diversification in the income stream has magnified the current cyclical pressures on NIM. Because of the heavy reliance on NIM and the prolonged and very low level of nominal interest rates, which has created a floor on deposit costs, 40 percent of community banks experienced a decline in net interest income in 2003. In 2002, only 18 percent of community banks saw net interest income fall. At many community banks, the year-over-year drop in net interest income occurred even though earning assets rose as a share of total assets. Community banks in the bottom 10th percentile had a 2003 NIM of only 3.14 percent, the lowest level in 20 years (see Chart 4, next page).

As NIM's Usefulness as a Performance Benchmark Diminishes for the Largest Banks, Are There Alternatives?

Because several factors have changed the revenue stream of the industry over the past two decades, NIM may no longer be the most effective tool for measuring performance. The change is most evident at the megabanks that now control the majority of assets in the industry. Because the megabank group disproportionately influences the NIM aggregate trend, NIM has become less useful as a tool for measuring industry performance.

Chart 4



Megabanks themselves focus much more on net interest income than NIM in their earnings discussions with equity analysts and investors. One metric that could be used is risk-adjusting margins for credit costs, as described in the text box on page 16. Another metric could be the calculation of the ratio of pretax net income to gross revenues. In this calculation, gross revenues are defined as interest income plus fee income. Essentially, this measure determines the percentage of total revenue that flows to the bottom line; it allows greater comparability across different business models, balance sheet and off-balance sheet structures, and tax status. In Chart 5 the time-series pro forma graphic for pretax net income to gross income shows the very strong earnings performance of the banking industry over the past decade—during the past few years in particular.

Several megabanks are now publicly disclosing their internal performance metrics, such as risk-adjusted return on capital, economic profit, and shareholder value added. These disclosures not only contribute to more complete information on earnings performance but also indicate the risks that are being taken to achieve those earnings.

While NIM may be losing some of its relevance, as long as banks serve as intermediaries, it provides a useful, though not exclusive, measure of earnings performance. For the more than 7,300 community banks and many of the banks in the large and mid-sized group, NIM is still a very important performance measure.

At the FDIC and other bank regulatory agencies, examiners are trained to analyze the quality and composition of earnings sources rather than focusing solely on ratio analysis and peer group comparisons. This is particularly true at large financial institutions, where the complexity and uniqueness of each institution require a more comprehensive and idiosyncratic evaluation.

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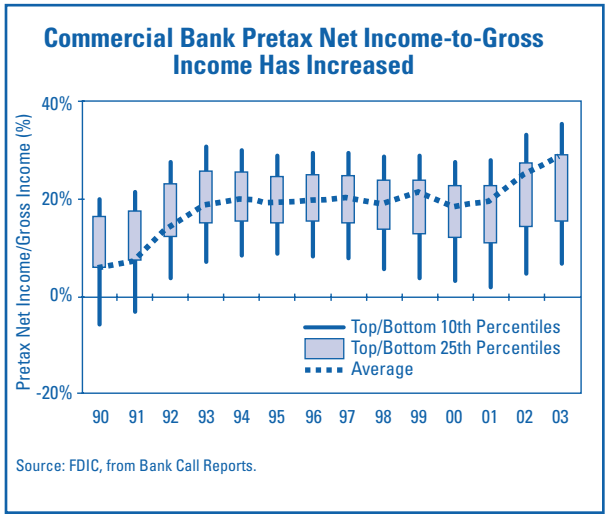
Chart 5



Bank Investment Portfolios: Strong Gains since 2000—Will They Continue?

Investment portfolios have traditionally served multiple purposes at banks. A well-managed securities portfolio can reduce a bank's credit risk profile and the volatility of the income stream. Additionally, securities portfolios can provide an alternative investment opportunity in times of sluggish loan demand and can serve as a source of liquidity to fund bank operations. Over time, the increased availability of other liquidity options and the search for higher yields has led to reductions in the relative size of bank securities portfolios. Moreover, yield pressures and supply constraints have changed the composition of the securities portfolio, resulting in far less reliance on U.S. Treasury securities.

Recently, through a period of historically low interest rates, banks benefited from the inverse relationship between bond values and interest rates and realized significant securities gains. As reported in the ***FDIC Quarterly Banking Profile***, gains on securities sold supported strong aggregate bank profitability throughout the recession and subsequent recovery.[1] However, as banks sold securities and rebuilt their portfolios, replacement securities often had low yields because of changes in prevailing interest rates.

This article examines the reasons behind the changes in the size and composition of bank securities portfolios. It also discusses how the inverse relationship of bond prices to interest rates may affect bank earnings and capital cushions going forward, particularly in a rising interest rate scenario. The implications of rising interest rates on debt security yields and valuations will be influenced in part by shifts in the composition of securities portfolios, the magnitude of interest rate changes, and the shape of the yield curve.[2]

Funding Alternatives and Yield Pressures Influence Banking Investment Strategies

Securities portfolios have represented a shrinking proportion of most bank balance sheets over the past decade. The median securities-to-total-asset ratio dropped from 30 percent at year-end 1994 to 23 percent by year-end 2003. Even the smallest banks now have numerous liquidity alternatives, a situation that contributes to this decline. In the past, banks maintained securities portfolios to provide a source of liquidity and to help meet deposit outflows or loan demand. Now, banks of all sizes commonly have an array of liquidity options, such as interbank or Federal Home Loan Bank borrowing lines and access to brokered or Internet deposits.

In addition, in the trade-offs among returns, liquidity, and credit risk, securities generally pay lower yields than loans. Thus, when lending opportunities are abundant, as has been the case over the past decade, the incentive is strong to maintain higher loan balances and lower security balances.

Until the early 1990s, insured institutions traditionally invested heavily in federal, state, and local government bonds, with some exposure to U.S. Agency (agency) debt and mortgage-backed securities (MBS).[3] However, banks have increasingly shifted securities investments away from default-free U.S. Treasury (UST) instruments and toward agency-issued notes, MBS, and various other debt issues.[4] For instance, between 1994 and 2003, the share of institutions with at least 25 percent of securities invested in UST instruments plummeted, while banks investing above this threshold in agency, pass-through MBS, municipal securities, and other debt classes increased (see Chart 1, next page).[5]

Yield considerations as well as developments in the capital markets contributed to the shift in investment portfolio mix. In general, MBS, agency, and other debt securities offer more attractive yields than UST instru-

[1] To view the fourth quarter 2003 and other editions of the *FDIC Quarterly Banking Profile*, go to http://www2.fdic.gov/qbp/qbpSelect.asp?menuItem=QBP.

[2] Data used for this article came from Call Reports filed by commercial banks. Because of differences in data availability, information from Thrift Financial Report filers was not used.

[3] U.S. Agency securities include direct debt issued by government-sponsored enterprises (GSEs) such as Fannie Mae, Freddie Mac, and Ginnie Mae; MBS include bonds backed by single-family mortgages issued through private parties or GSEs.

[4] Other debt instruments include asset-backed securities, trust preferred securities, and foreign government bonds.

[5] In a pass-through MBS structure, principal, interest, and prepayments made on the underlying pool of mortgages are passed through to the ultimate certificate holders. In contrast, investors in non-pass-through MBS such as collateralized mortgage obligations and real estate mortgage investment conduits receive cash flows structured differently from the payments on the underlying mortgages.

Chart 1

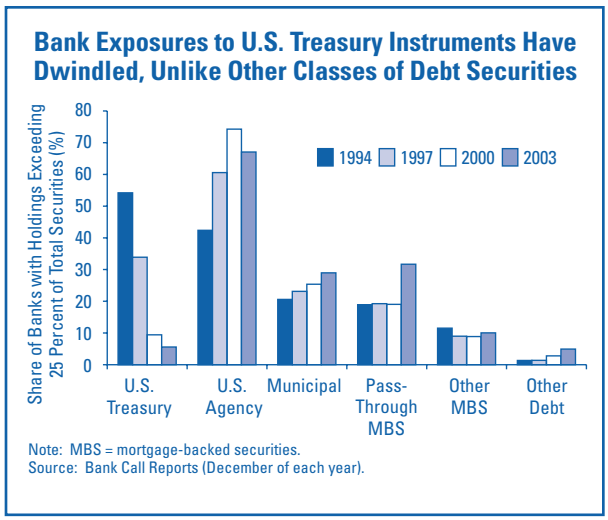
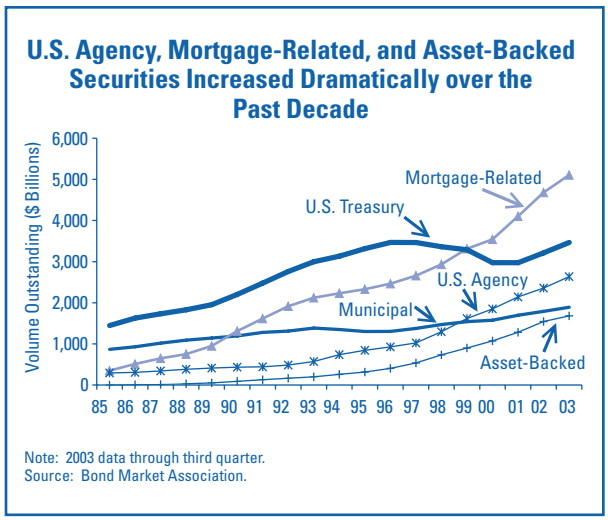


Chart 2



ments, reflecting in part the potentially higher credit and interest rate risk of these investments. In addition, secondary market developments throughout the 1990s and considerable mortgage refinancing activity over the past three years accelerated both MBS and agency debt issuance. According to the ***Bond Market Association***, agency and MBS debt issuance outpaced UST issuance over the past several years.[6] By 1999, the volume of outstanding MBS instruments exceeded outstanding UST obligations (see Chart 2).

The Shift Away from USTs May Have Increased the Risk Profile of Bank Securities Portfolios

MBS and agency bonds pose unique interest rate risks compared with UST securities, because most MBS and many agency securities contain embedded options. MBS have option risk, as mortgage borrowers have the right to prepay their loans. During periods of refinancing activity induced by low interest rates, MBS holders tend to receive cash flows earlier than originally expected, forcing them to reinvest proceeds at the prevailing lower interest rates. Conversely, MBS holders may face extension risk when prepayments fall because of rising rates and the expected life of the investment increases. In other words, with many MBS investments, the investor receives money faster when reinvestment options are less desirable and more slowly when similar but higher yielding securities are available.

Similarly, agency bonds can have option risk, because they often are callable or "structured." For Call Report purposes, structured notes include "debt securities whose cash flow characteristics (coupon rate, redemption amount, or stated maturity) depend upon one or more indices and/or that have embedded forwards or options."[7] Structured notes have never been a large portion of community bank securities portfolios; however, they have come in and out of favor as investment options as interest rates and yield-curve steepness have changed (see Chart 3, next page).[8]

Structured notes can be appropriate investment vehicles, and not all structured notes carry the same degree of risk. Many banks were drawn to structured notes in the early 1990s, because they were issued by government-sponsored enterprises and had attractive yields compared with those of other agency bonds or notes. Typically, initial yields were high, but the embedded options were very difficult to price. Some institutions found themselves with highly depreciated, low-paying investments when interest rates moved higher. In fact, on a median basis, banks that held structured notes reported net unrealized losses on these instruments between 1995 and 2000 and

[6] Data on the composition of bond markets are from the Bond Market Association website at http://www.bondmarkets.com/Research/osdebt.shtml.

[7] For additional information, see the instructions for the preparation of schedule RC-B of the *Consolidated Reports of Condition and Income* (http://www.ffiec.gov/ffiec_report_forms.htm), which define structured notes to include step-up bonds, index amortizing notes, dual index notes, deleveraged bonds, range bonds, and inverse floaters.

[8] Generally, the federal agencies that issue most structured notes (Federal Home Loan Bank, Fannie Mae, and Freddie Mac) do so when interest rates are low and the yield curve is steep.

Chart 3

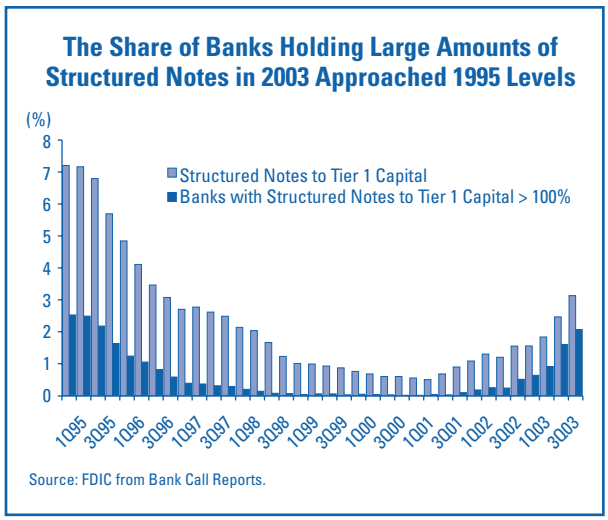
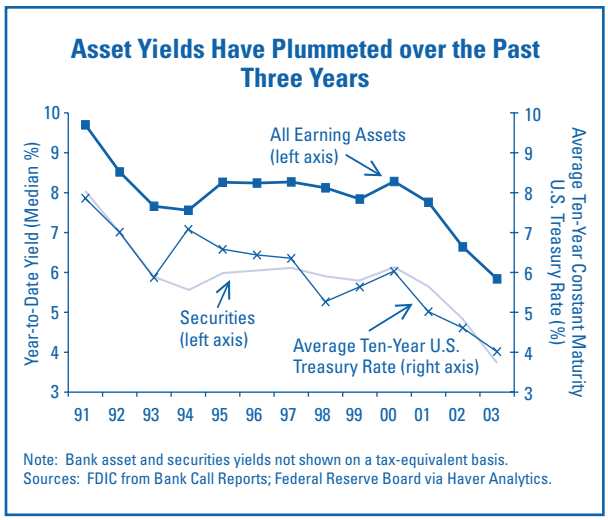


Chart 4



registered only mild appreciation throughout 2001, 2002, and 2003.[9]

While some structured notes have very little credit risk, virtually all have characteristics that require prepurchase scrutiny and ongoing assessment of their sensitivity to interest rate movements. Data on structured note issuance as well as anecdotal reports suggest that these instruments currently tend to be relatively straightforward step-up bonds; in the early 1990s, they were more likely to feature exotic derivative aspects.[10] Managers of insured institutions should understand the unique characteristics of these instruments and how they might fit into the bank's overall strategies for investment and interest rate risk management. Because of the embedded options, structured notes need to be monitored closely during the holding period.[11]

Low Interest Rates Hampered Bond Yields and Boosted Market Values

Declining interest rates pushed the median 2003 year-end yield on securities among insured commercial banks to 3.73 percent, down steadily from 6.13 percent in 2000 (see Chart 4). Given their positive correlation with changes in interest rates, investment portfolio yields likely will improve should rates rise prospectively, as cash flows are invested at progressively higher rates. This correlation was demonstrated when rising interest rates in the 1994 to 1995 and 1999 to 2000 periods provided a temporary lift to bond yields.

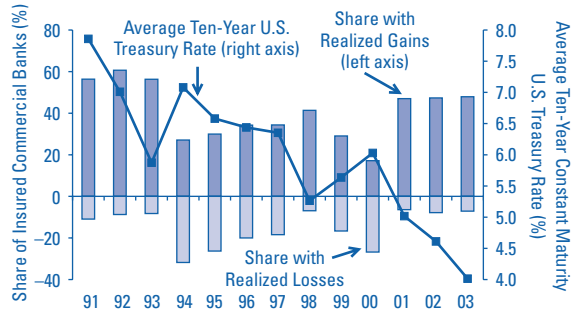
During a period of increasing interest rates, however, rising securities yields may not offset declines in bond values, especially as there is typically a lag in the repricing dates for securities. For instance, indices compiled by ***Merrill Lynch*** on total bond returns, which include recurring yield income as well as price changes, suggest that interest rate increases during 1994 to 1995 and 1999 to 2000 created negative year-over-year total returns in many bond classes, because declines in bond values outweighed yield increases.

In addition to boosting earnings, securities appreciation can serve as a cushion to capital and liquidity in the form of unrealized gains. Financial statements prepared in accordance with generally accepted accounting principles (GAAP) adjust asset and capital balances for unrealized gains and losses on available-for-sale debt securities.[12] Although regulatory capital standards do not include such adjustments, the agencies recognize that large unrealized losses may impair earnings in the event securities

[9] Because Call Report information on structured notes was not collected until 1995, data are not available for 1994 and earlier.
[10] Mauro, Martin J., and Michele Chesnicka, *Merrill Lynch Fixed Income Digest*, January 8, 2004, p. 9.
[11] For additional information on risks posed by structured notes, refer to the 1998 *Interagency Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities*, http://www.fdic.gov/regulations/laws/rules/5000-4400.html#5000supervisoryps.

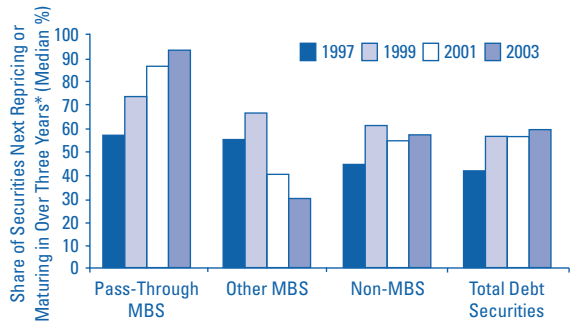
[12] For additional details on GAAP treatment of held-to-maturity, available-for-sale, and trading securities, refer to Financial Accounting Standard Number 115. As of December 31, 2003, banks classified most securities as available-for-sale and reported associated unrealized gains in GAAP capital accounts.

Chart 5



Sources: FDIC from Bank Call Reports; Federal Reserve Board via Haver Analytics.

Chart 6



*Other mortgage-backed securities (MBS) shown according to expected average life.
Source: FDIC from Bank Call Reports (December of each year).

have to be sold to meet liquidity needs. Similarly, unrealized losses may limit liquidity options, as bank management may decide not to sell investments because of the potential effect on earnings and capital.

Unrealized gains and losses on bank balance sheets have fluctuated over time, depending on the level and direction of interest rates. Rising interest rates during periods in the early and late 1990s drove down bond values and caused net portfolio depreciation. After periods of rising interest rates at the end of 1994 and 1999, the median net unrealized loss-to-amortized-cost ratios among insured banks were negative 3.14 percent and negative 1.90 percent, respectively. However, declining interest rates over the past few years enabled many insured banks to augment earnings by selling higher yielding securities for gains. Whereas only 17 percent of insured banks reported gains on the sale of securities during 2000 (a period of rising interest rates—see Chart 5), nearly half of insured banks realized securities gains during 2001, 2002, and 2003.

How Will Increasing Interest Rates Affect Securities Portfolios?

Changes in portfolio mix have contributed to a general lengthening of investment maturities, which implies that investment portfolios may have greater price risk. As of year-end 2003, debt securities with a next-earliest repricing, maturity, or estimated average life of more than three years typically accounted for 59 percent of securities held by insured banks, up from 41 percent in 1997.[13] Most of the lengthening occurred in the pass-through MBS segment, which often accounts for a large share of total securities (see Chart 6).

While Chart 6 suggests that the estimated average life of non-pass-through MBS declined over a six-year period, this may not indicate declining interest rate risk in this category. For instance, estimated average lives among non-pass-through MBS appear to have lengthened during 1999— a period of rising interest rates—but shortened as interest rates declined during subsequent years. Although the specific types of MBS held in this category cannot be known with certainty on the basis of Call Report data alone, this alternating pattern of extension and contraction in estimated average life may be symptomatic of heightened interest rate and prepayment risk.[14] Thus, the estimated lives of these instruments could lengthen quickly should interest rates rise sharply. Understanding the maturity or duration profile of an investment product is important, because—given an equal change in short-term and long-term interest rates (that is, a parallel yield curve

[13] Per Call Report instructions, banks report non-pass-through MBS according to estimated average life. For other categories of debt securities, banks report by earliest repricing or maturity date. The estimated average life calculation considers expected prepayments and is dollar- and time-weighted. As a result, it is not equivalent to contractual maturity or expected final maturity.

[14] Because non-pass-through MBS are issued in tranches that differ in terms of priority for receiving principal and interest payments on the underlying pool of mortgages, some classes may have relatively more or less exposure to prepayment risk. Continuous declines in mortgage interest rates during 2001, 2002, and parts of 2003 triggered so much refinancing activity that some tranches that were contractually last in line to receive principal cash flows ended up receiving payments earlier than expected.

Chart 7

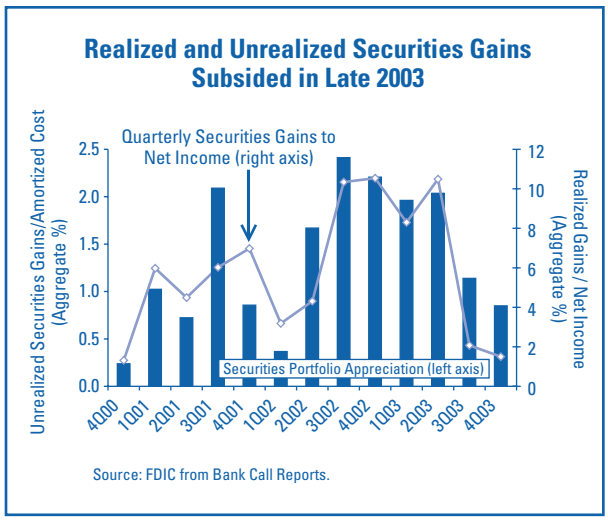
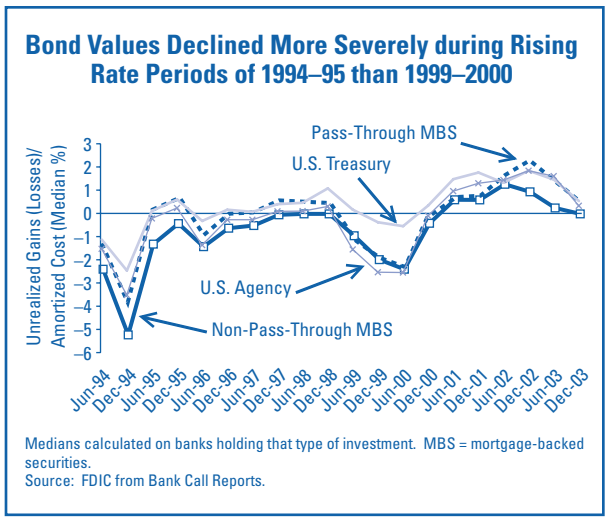


Chart 8



shift)—bonds with longer maturities may exhibit larger percentage-point price swings.

Not surprisingly, as long-term rates rose in the second half of 2003, aggregate securities gains and portfolio appreciation decelerated among the nation's banks (see Chart 7).[15] In the future, the effects of rising interest rates on bond valuations will ultimately depend on how quickly rates increase and the shape of a post-shift yield curve (for example, flat versus steep).

If both short- and long-term rates change by equal amounts, prices for longer duration bonds likely would decline by a greater magnitude than prices for shorter duration investments. However, if the yield curve flattens because short-term rates rise faster than long-term rates, prices for bonds with shorter durations could suffer disproportionately.

For instance, interest rates increased sharply and in a parallel fashion during 1994, maintaining a very steep yield curve. These conditions triggered relatively large amounts of unrealized losses in bank bond portfolios, in particular for agency and MBS securities (see Chart 8). However, when both long- and short-term rates increased during 1999, the rate rise was less severe and the yield curve was flatter than that in 1994. As a result, although the bonds depreciated in value, the correction was less pronounced.

[15] For a discussion of the elements that contributed to interest rate volatility during 2003, see "Causes and Implications of Recent Interest Rate Volatility," *FDIC Outlook*, Winter 2003 (http://www.fdic.gov/bank/analytical/regional/ro20034q/na/infocus.html).

Should interest rates move up sharply, institutions with portfolios of longer-term assets might be faced with the prospect of holding many securities to maturity at below-market interest rates or realizing losses to reinvest in new assets with higher yields. Most institutions may be able to hold depressed securities until maturity and technically never realize a loss, but the trade-off is lower yields over time.

Banks Are in the Business of Managing Risk

Banks have been investing in securities for many years, and individual bank managements adopt policies and strategies to manage their portfolios under various scenarios, balancing loan demand, liquidity needs, and the effects of interest rates on yields and values. Some banks use the securities portfolio as a hedge to reduce credit risk or interest rate risk elsewhere on their balance sheets. Bank investment policies and strategies are typically dynamic and unique to individual institutions and, as a result, are a key area of review for bank directors, auditors, and examiners.

Innovation in the capital markets results in the introduction of new types of investment vehicles, which can make investment selection more difficult and challenge efforts to model the potential effects of changing interest rates on investment holdings. In this environment, it is incumbent upon bank managers and directors to understand fully the unique characteristics of each investment they own. As noted in the *Interagency Supervisory Policy Statement on Investment Securities and End-User Derivatives Activities*, risk limits associated with

capital market activities should be consistent with a bank's strategic plans and overall asset/liability management objectives. Policies should seek to manage market, credit, liquidity, and interest rate risks. In addition, insured institutions that have increased their holdings of interest-sensitive investments and have purchased investments with extended maturities or repricing intervals must ensure that these holdings fit into their overall asset and liability management strategies.

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Implications of Rural Depopulation in the Great Plains for Community Banks

The United States is currently undergoing a major demographic event: the depopulation of a significant number of rural counties. This subject has been under review by the FDIC for a number of years. For example, an FDIC report examined rural depopulation trends in the **Kansas City** Region and concluded that while depopulation is a slow-moving event, it does have an effect on the economic viability of counties experiencing out-migration and on the banks operating in those counties.[1] In particular, that report found that lack of growth was the most prominent negative factor affecting community banks in counties with declining populations. These banks reported lower growth rates for assets, loans, deposits, and core deposits than banks in growing rural counties.

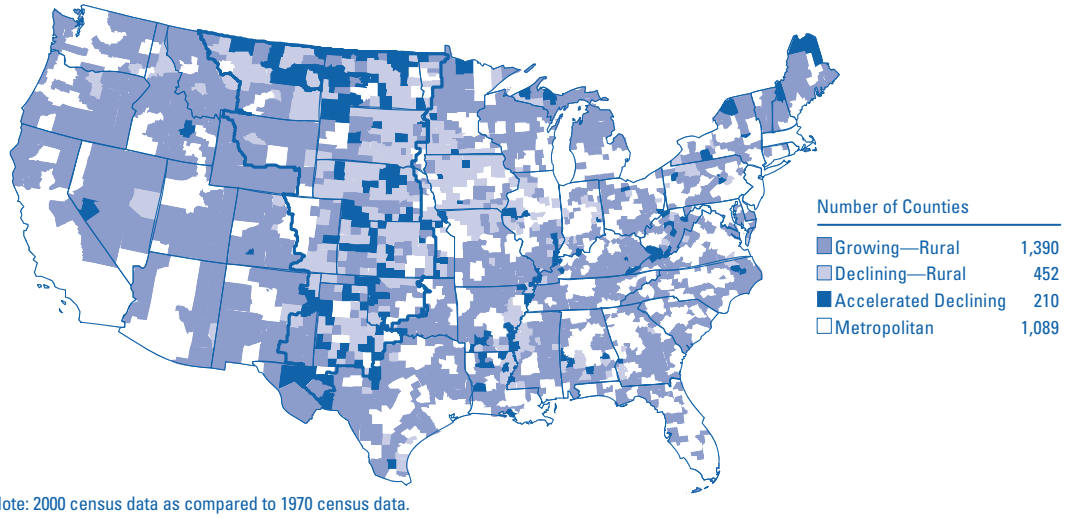
This article again examines performance trends of community banks located in depopulating counties.[2] However, it also attempts to identify strategies that some banks have employed to remain successful, despite the unfavorable demographic trends unfolding around them. The article is an excerpt of an expansive analysis of rural depopulation trends in the United States and rural bank performance that was released on May 18, 2004, as part of the FDIC's *Future of Banking in America* (www.fdic.gov/bank/analytical/future).

Depopulation Trends Are Most Pronounced in the Great Plains

The analysis in this report employs a method developed by the FDIC in which counties are divided into categories depending on their rurality and on population trends between 1970 and 2000 (see Map 1). Rural counties that added population over the 30-year span are called "growing counties"; rural counties that lost population at a relatively constant rate are called "declining counties"; and rural counties that not only lost population but saw the rate of loss increase in the 1990s are called "accelerated declining counties." Metropolitan counties, which almost universally added population, were not analyzed in this report.

Map 1

Rural Depopulation Is Most Prevalent in the Great Plains



Note: 2000 census data as compared to 1970 census data.
The Great Plains is outlined above.
Source: Bureau of the Census.

[1] Anderlik, John M., Jeffrey W. Walser, Christopher J. Sesler, and Troy D. Osborne, *Kansas City Regional Outlook*, first quarter 2000, http://www.fdic.gov/bank/analytical/regional/ro20001q/kc/index.html.

[2] Community banks are defined as FDIC-insured banks and thrifts with assets of less than $250 million at year-end 2002.

As Map 1 shows, rural depopulation is most prevalent in the middle of the country but can also be seen in the South and Northeast. Our analysis in this article focuses on the Great Plains region (outlined in the map on page 26), because the problem of rural depopulation is far more advanced there than anywhere else in the country. In fact, of the 424 rural counties in the Great Plains region, 304 (72 percent) are either declining or accelerated declining counties.

The Great Plains region is also striking from a banking perspective. As of year-end 2003, either declining or accelerated declining counties were home to more than 500 community banks—more than half of all community banks in the Great Plains. In addition, banks in the Great Plains tend to be much smaller than banks located elsewhere. The median size of a bank in the Great Plains is just $56 million, and only about $39 million in rural counties with declining populations. Institutions in other depopulating areas are significantly larger—even the Corn Belt's median bank has $89 million in assets—reflecting the fact that although other regions may also be experiencing depopulation, their financial institutions have much larger beginning customer bases.

Rurality Affects Growth Rates, but Not Performance Measures

Despite the demographic challenges that face the Great Plains, rural community banks headquartered there report performance measures that are in line with community banks located elsewhere. As Table 1 indicates, measures related to earnings and asset quality are very similar, and Great Plains community banks have considerably higher levels of equity capital. The most significant difference between the groups of institutions is the level of farm loans. Not surprisingly, community banks in the rural Great Plains have a far higher concentration of farm loans than do community banks in other rural areas. This leaves Great Plains' financial institutions much more dependent on federal farm policy and vulnerable to swings in net farm income caused by commodity price fluctuations, persistent drought conditions, and unexpected impacts, such as the "mad cow" discovery that led to a steep drop in cattle prices in early 2004. A challenge rural bank managers continuously confront is that many rural farm banks have few local options with which to diversify their loan portfolios.

Table 1

Great Plains Rural Community Banks Perform Similarly to Those in the Rest of the Nation (%)

	2003	2002	2001	2000	1999
GP—Pretax ROA	1.44	1.49	1.42	1.59	1.55
Nation—Pretax ROA	1.44	1.51	1.39	1.50	1.54
GP—Net Interest Margin	4.12	4.25	4.17	4.34	4.24
Nation—Net Interest Margin	4.05	4.24	4.08	4.24	4.23
GP—Loans-to-Assets Ratio	58.51	59.59	58.92	59.25	57.45
Nation—Loans-to-Assets Ratio	61.94	62.39	63.02	64.52	63.04
GP—Total PD Loan Ratio	2.59	2.89	2.86	2.53	2.50
Nation—Total PD Loan Ratio	2.59	2.82	2.92	2.62	2.29
GP—Net Charged-Off Loans	0.31	0.34	0.46	0.30	0.30
Nation—Net Charged-Off Loans	0.30	0.33	0.31	0.23	0.22
GP—Equity Capital	10.97	11.19	10.95	10.81	10.16
Nation—Equity Capital	10.52	10.59	10.25	10.34	10.05
GP—Ag Loans/Total Loans	40.33	40.68	40.84	40.35	40.81
Nation—Ag Loans/Total Loans	13.76	13.68	13.27	13.22	13.42
GP—Ag Inst./Total Inst.	79.97	80.08	80.44	81.22	82.21
Nation—Ag Inst./Total Inst.	28.46	28.55	28.07	28.62	29.03

Notes: "GP" refers to banks and thrifts with less than $250 million in assets in rural counties in the Great Plains. "Nation" refers to banks and thrifts with less than $250 million in assets in rural counties in the United States, excluding the Great Plains.

Source: Bank and Thrift Call Reports.

Table 2

Great Plains Metro Community Banks Have Grown Balance Sheets Far More Quickly than Rural Banks

Annualized Growth Rate (%) between Year-End 1993 and Year-End 2003

Great Plains County Type	Total Assets	Total Loans	Total Deposits	Core Deposits
Metropolitan	8.87	11.16	8.61	7.87
Rural	4.37	6.77	3.84	3.04
Rural County Breakdown:				
Growing	4.78	6.96	4.28	3.47
Declining	4.04	6.32	3.45	2.64
Accelerated Declining	4.10	7.16	3.61	2.84

Note: All growth rates are merger-adjusted. "Community banks" are as defined in this article.
Source: Bank and Thrift Call Reports.

In comparing community bank performance in the rural Great Plains, it is interesting to note that institutions in growing, declining, and accelerated declining counties perform similarly. Earnings measures are generally satisfactory regardless of the institution's location, although institutions in growing counties have earned a bit more pretax revenue, largely through higher sources of noninterest income. Net interest margins (NIMs) are similar, as declining and accelerated declining county banks have offset lower loan yields with lower funding costs. Loan quality measures tend to favor growing county institutions moderately, but institutions in declining and accelerated declining counties offset this difference with higher levels of equity capital.

Similarly to national comparisons, differences in farm loan levels exist within the Great Plains region. Growing county community banks have about 30 percent of all loans invested in farm loans, while community banks in depopulating areas average just under 50 percent. Growing counties, which likely are adding to their populations through nonagricultural job growth, tend to offer community banks more diversified lending opportunities.

Growth rates clearly show that depopulation trends have adversely affected community banks. Because declining populations translate into dwindling bases of potential borrowers and depositors, growth rates for total assets, loans, and deposits for community banks in declining and accelerated declining counties have been lower than the corresponding growth rates in growing counties' financial institutions. Table 2 shows a ten-year trend of annualized growth rates for balance sheet accounts. The most striking point in the table is the difference in the Great Plains region between metropolitan community banks and those in rural areas. Across the board, the economic vibrancy of metropolitan areas has translated into higher growth rates. In rural areas, community banks in growing counties were able to increase assets, loans, and deposit accounts at a significantly higher rate than declining or accelerated declining institutions.

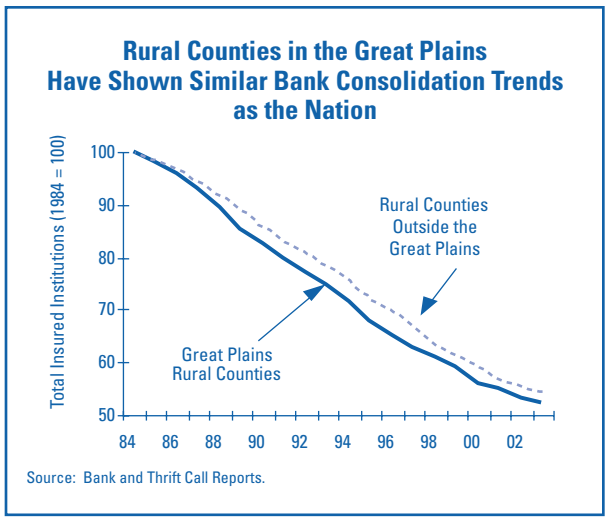
Demographic Problems Have Not Yet Accelerated Consolidation Trends

The number of insured banks and thrifts has been declining in the United States for more than two decades.[3] Because of the large number of depopulating rural counties in the Great Plains region, one might expect that bank consolidation would have been more severe in that region. However, reductions in the number of banks in the Great Plains are similar to those in rural areas in the rest of the nation (see Chart 1, next page). Perhaps surprisingly, the reduction in insured institutions is consistent among all three types (growing, declining, and accelerated declining) of Great Plains rural counties.

Although consolidation trends in Great Plains rural community banks have been consistent with national figures, two trends suggest that consolidation in the Great Plains may increase in the future. First, the elderly population in depopulating counties is very large. At some point in the relatively near future, these

[3] For more information on bank charter declines see "The Declining Number of Banking Organizations: Will the Trend Continue." *FDIC Future of Banking Series* at www.fdic.gov/bank/analytical/future/index.html.

Chart 1



people are going to begin to pass away, taking a disproportionate amount of banking business with them. Second, many rural community banks in the Great Plains may lack adequate succession plans. In many cases, when the owner/operators of these institutions retire, no family members are ready to take their places, because the younger relatives have long since migrated to counties with more economic opportunities. And because of the shortage of young professionals in rural areas, no qualified nonfamily members may be available to take over the operations. In such cases, owner/operators may simply continue working well into their retirement-age years. When these bankers finally do retire, their institutions may be sold, which could increase the pace of rural bank consolidation.

What Strategies Can Help Rural Community Banks Remain Successful?

While many counties in the Great Plains face similar economic issues, community banks in the region have responded differently and reported disparate operating results. Two metrics— profitability and growth— were used to try to identify common strategies employed by the more successful rural banks. Most analysts would agree that profitability is an appropriate measure of success. For the purposes of this analysis, profitability is measured by the five-year pretax return-on-assets (ROA) ratio.[4] Asset growth is also often used as an indicator of success, although some banks can achieve success in other metrics (such as profitability) without significant growth. For this analysis, growth is measured by the five-year annualized asset growth rate, adjusted to negate the effects of mergers.

Among the 483 banks studied, profitability and growth performance differed significantly from bank to bank. Annualized profitability ranged from a low of –1.07 percent to a high of 3.53 percent, with the middle 80 percent of banks in the range of 0.62 percent to 2.10 percent. Annualized asset growth ranged from –11.71 percent to 79.65 percent, with the middle 80 percent of banks falling between –0.51 percent and 9.04 percent.

To analyze relatively high- and low-performing institutions, each of the two metrics was divided into thirds, creating a nine-cell matrix (see Table 3, next page). The corner cells contain summary analyses for the 203 banks at the upper and lower levels of both performance metrics. The other 280 institutions, which fall into the middle range, are lumped into a single unit, the Middle Cross, and used as a control group for the analysis.

In looking at the data for the corner banks, one might ask, for example, about the successful business strategies of the 49 community banks in the upper right-hand corner (those that reported high asset growth and high profitability). By contrast, why do the 61 institutions in the lower left-hand corner report both low growth and low profitability? The other corners indicate institutions that were able to achieve high profits despite low growth and those that reported high growth but low profits.

Briefly, here are the reasons for the widely disparate performances of community banks in the corners of the matrix:

Low-growth/high-earnings banks. These institutions have maintained a high level of profitability in the absence of asset growth by controlling operating costs extremely well. Seventy percent of these banks operate a single (albeit likely large) banking office, which helps keep costs down. Lending activity and capital levels also suggest effective management strategies.

High-growth/high-earnings banks. These banks tend to be larger (as Table 3 shows, the median bank in

[4] Pretax ROA is used in lieu of after-tax ROA, because some institutions have adopted Subchapter S status, in which they do not pay income taxes and thus have a much higher after-tax ROA than non-Subchapter S institutions.

Table 3

Have Some Great Plains Community Banks Found a Recipe for Success?

Five-Year Annualized Pretax ROA Range

	Low Growth	Middle Growth	High Growth
1.57% to 3.53%	**Low Asset Growth/High Pretax ROA** Number of Institutions 44 Median Total Assets $41.2MM Asset Growth Rate 0.56% Pretax ROA 1.90%		**High Asset Growth/High Pretax ROA** Number of Institutions: 49 Median Total Assets $54.8MM Asset Growth Rate 7.47% Pretax ROA 1.96%
1.05% to 1.57%		**Middle Cross** Number of Institutions: 280 Median Total Assets $40.4MM Asset Growth Rate 3.99% Pretax ROA 1.44%	
(1.07)% to 1.05%	**Low Asset Growth/Low Pretax ROA** Number of Institutions 61 Median Total Assets $21.5MM Asset Growth Rate –0.80% Pretax ROA 0.64%		**High Asset Growth/Low Pretax ROA** Number of Institutions 49 Median Total Assets $37.5MM Asset Growth Rate 9.10% Pretax ROA 0.76%
Five-Year Annualized Growth Rate Range	**(11.71)% to 1.91%**	**1.91% to 4.88%**	**4.88% to 79.65%**

Notes: 1. Asset growth figures are merger-adjusted, asset-weighted, annualized five-year growth rates.
2. Pretax ROA figures are for merger-adjusted, asset-weighted, annualized five-year pretax return-on-asset performance.
3. A total of 483 institutions analyzed above met the following descriptives:
a. as of December 31, 2003, had total assets of $250 million or less;
b. were established on December 31, 1993, or earlier;
c. were headquartered in rural counties within the Great Plains region with either a declining population or an accelerated declining population.

Source: Bank and Thrift Call Reports.

this group is the largest in the matrix), allowing them to control operating costs through scale efficiencies. They achieved the highest NIMs by maintaining reasonable funding costs and maximizing loan volumes in relation to total assets. Many banks in this group have branches in metropolitan areas or growing rural counties, which helps explain why they have been able to achieve higher than average asset growth.

Low-growth/low-earnings banks. These institutions are the smallest, with a median asset size of just $21.5 million. They report by far the lowest NIMs of any group, have not controlled costs well, and have significantly higher levels of past-due loans than the other groups. Nearly two-thirds of these institutions operate a single banking office.

High-growth/low-earnings banks. Like high-growth/high-earnings banks, these institutions have aggressively pursued growth through branching activities but without the earnings success. These banks report lower than average NIMs coupled with the highest operating costs of any group.

One strategy bankers are pursuing is branching activity. Because community banks in depopulating counties have declining customer bases, many institutions have turned to branching in more economically vibrant areas to attract new loan and deposit customers. Many institutions that have achieved high asset growth have adopted this strategy (see Table 4, next page).

However, banks have had varied success in pursuing their branching strategies. A case can be made that

Table 4

Community Banks with High Growth Are More Likely to Have Branched into Metropolitan Areas or Counties with Growing Populations

Matrix Category	Total Institutions	Unit Bank	%	Multibranch—All Branches in HQ County	%	Multibranch with Only Depopulating County Branch(es)	%	Multibranch with Metro County Branch(es)	%	Multibranch with No Metro County but with Growing County Branch(es)	%
High Growth/ High Earnings	49	19	39	7	14	11	22	3	6	9	18
Low Growth/ High Earnings	44	31	70	9	20	3	7	1	2	0	0
High Growth/ Low Earnings	49	17	35	8	16	11	22	8	16	5	10
Low Growth/ Low Earnings	61	40	66	12	20	3	5	3	5	3	5
Middle Cross	280	150	54	39	14	43	15	25	9	23	8
Totals	483	257	53	75	16	71	15	40	8	40	8

Sources: Bank and Thrift Call Reports (dated December 31, 2003); FDIC Summary of Deposits (dated June 30, 2003, for branch data).

branching into metropolitan and growing rural counties was a primary factor in high-growth/high-earnings banks' success, as nearly one-quarter of those banks have done so. By contrast, just 10 percent of low-growth/low-earnings banks have branched into more economically vibrant counties.

On the other hand, branching can be somewhat of a risky proposition, depending on management's knowledge of new markets, expertise in new types of lending activities, and ability to control expenses. Nearly half of the high-growth/low-earnings banks operate branches outside their home county, which may suggest that these banks' strategies may not have been as successful as those of the high-growth/high-earnings banks. However, about 22 percent of the high-growth/low-earnings banks that branched did so into other depopulating rural counties, which may have adversely affected their earnings prospects.

What Does the Future Hold for Great Plains Rural Community Banks?

Continuing depopulation in many rural areas of the Great Plains will pose challenges for community banks. Community bank consolidation in the Great Plains has yet to outpace that in other rural areas in the nation, but the aging of the customer base and of bank managers and owners could result in increased consolidation.

In the meantime, strategic options available to community banks in depopulating counties are somewhat limited. In the short term, community bank success in rural areas could depend on management's willingness to take well-conceived risks, such as branching into more economically vibrant areas. However, management teams should ensure that they have the expertise to branch without unduly increasing their institutions' risk profiles. Another viable strategy may be to streamline their institutions, cutting costs wherever possible to compensate for the absence of local growth opportunities.

Technology, such as the Internet, coupled with the spread of broadband access into rural areas, potentially holds some promise for depopulating counties and their banks. In theory, the Internet could enhance the ability of farmers, rural customers, and rural businesses to access information, goods, and services, possibly increasing the economic viability of rural areas. Companies could locate their businesses in rural areas, taking advantage of lower labor and land costs, while marketing their products to geographically dispersed end users, creating a "bridge from" rural communities to other areas.

However, technology and the Internet may be a double-edged sword, allowing larger banks and financial companies to create a "bridge to" rural communities by offering their products in areas where it is not feasible to locate a physical branch. Because larger financial organizations typically have a wider array of

products than rural banks, and their size allows them some scale benefits in the cost of providing banking services, they may become very formidable competitors of rural institutions as the Internet becomes increasingly diffused in rural areas.[5]

On a positive note, rural depopulation has been occurring over a long period, which has given bank management and owners time to react to and manage the issue. Rural bank managers should continue to monitor the situation and develop business plans accordingly. The FDIC will also continue to monitor and analyze rural depopulation trends and their effects on banking.

John M. Anderlik, CFA, Regional Manager
Richard D. Cofer, Senior Financial Analyst

[5] Walser, Jeffrey, The Information Superhighway: Panacea or Threat for Rural America? *Kansas City Regional Outlook*, third quarter 2002, http://www.fdic.gov/bank/analytical/regional/ro20023q/kc/index.html.

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