

# TEN

FEDERAL RESERVE BANK OF KANSAS CITY

Winter 2006

Inside:

**Katrina's Lingering  
Effects on Farming**

**Internet Banking**

**Garden City's  
Unbanked**

**Bankruptcy**



A METROPOLITAN ISSUE:  
**CAN CITIES AND SUBURBS  
PEACEFULLY COEXIST?**



# TEN

WINTER 2006

## **A METROPOLITAN ISSUE: CAN CITIES AND SUBURBS PEACEFULLY COEXIST? ..... 10**

As with many U.S. cities, the effects of suburbanization are evident in Kansas City. Can cities and suburbs cooperate for the greater good?

## FEATURES



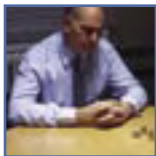
### **RUNNING ON EMPTY: GAUGING THE LINGERING EFFECTS OF HURRICANE KATRINA ON TENTH DISTRICT FARMERS .....2**

The third-strongest hurricane in U.S. history is leaving its mark on Tenth District agriculture in the form of higher input costs and shipping problems.



### **BANKING ON THE FUTURE: REACHING OUT TO THE HISPANIC POPULATION IN RURAL KANSAS .....6**

Wary of banks, many customers utilize alternative sources like check cashing centers.



### **A LOOK AT BANKRUPTCY IN THE TENTH DISTRICT AND BEYOND .....16**

What factors drive bankruptcy, and what will be the effects of 2005's Bankruptcy Abuse Prevention and Consumer Protection Act?



### **ONLINE BANKING COMES OF AGE .....22**

The shakeout of Internet-only banks was not at all an isolated phenomenon, but part of a broader picture of the dot-com boom/bust cycle.

## DEPARTMENTS

- 1     PRESIDENT'S MESSAGE**
- 26    ABOUT...**
- 30    NOTES**
- 33    FED DIRECTORY**

## Local Thinking

In organizing a system of 12 regional Federal Reserve Banks, the creators of the Federal Reserve believed that the strength of our nation's money and banking system would be best preserved if it was not concentrated in any single region of the United States.

Occasionally, I am asked if this regional design, created nine decades ago, is still necessary. I always respond that anyone who has a sense of financial and political history, or appreciates the dangers of concentrated power, financial or otherwise, can answer only with a resounding "yes."

The Reserve Banks provide a number of services for financial institutions in their respective districts. In addition to supervisory and regulatory responsibilities, the regional Banks provide financial services including check processing and the distribution of currency and coin to the financial institutions in their districts.

The benefits of our regional structure extend into other areas as well.

Economists located at each of the regional Reserve Banks help to bring a unique and important perspective on economic conditions into the Federal Reserve's monetary policy discussions. These economists are able to offer policymakers an independent viewpoint on regional activity with an understanding of how that activity relates to broader national and world economies.

At the Federal Reserve Bank of Kansas City, our economists monitor evolving regional conditions through a number of methods. Often this local analysis, drawn in part from discussions with our district's business and industry leaders, can create a picture of economic conditions that is more current than what can be seen solely through the available economic data.

Because this regional input is so vital, I am pleased to tell you that the Federal Reserve Bank of Kansas City is now expanding its regional research program. We recently made a significant change in the structure of our branch operations and are cur-

rently placing regional economists in our branches in Denver, Oklahoma City and Omaha. These individuals carry the credentials and experience in regional economics that will enable them to contribute substantially to our understanding of regional conditions.

Like their counterparts in Kansas City, these branch economists will also be conducting research examining developments within the district while also exploring the national and international issues that are important to the business and industry of our region.

Research currently under way at the Bank includes a look at how the workforce in our region matches up with the future demands of employers. Other projects are exploring how changing food consumption patterns worldwide may offer new opportunities for our region's farmers and examining the efficiency and efficacy of the low-income housing tax credit program. Our banking-related research includes an examination of financial innovation and electronic banking, while a project underway in our payments system research group examines competition among payment networks and merchant acceptance of cards.

To fully appreciate the work of our economists, visit [www.KansasCityFed.org](http://www.KansasCityFed.org), where you will find several decades' worth of research from our Bank economists.



A handwritten signature in black ink that reads "Thomas M. Hoenic". The signature is fluid and cursive.

**THOMAS M. HOENIG, PRESIDENT**  
FEDERAL RESERVE BANK OF KANSAS CITY





# Running on Empty

■ Gauging the Lingering Effects of Hurricane Katrina on Tenth District Farmers

**BY TONI LAPP, SENIOR WRITER**

It's harvest time in rural Kansas, and Tom Boehm has decided to take a gamble on his 3,000-acre farm near Olathe. He normally would have fertilized his freshly harvested fields in November, but fertilizer—at \$500 a barrel for anhydrous ammonia—was through the roof, so he decided to bide his time, hoping the price of fertilizer would fall before spring. After all, just two years ago, the same barrel of petroleum-based fertilizer cost \$182.

Boehm was a bit uneasy with his gamble, yet he took another one. Rather than immediately selling his soybeans at the currently low price, he rented space

in a grain elevator in the hopes that prices would rise.

Just getting the soybeans to the elevator was a challenge, however. Because of difficulties in shipping crops in the aftermath of Hurricane Katrina, storage elevators were at capacity.

This past hurricane season was one of the worst on record in the United States. Agriculture was impacted by three major hurricanes, but effects wrought by Katrina on transportation and fertilizer costs will linger for some time to come, say experts.

Boehm had to wait by the phone for days before he got word that there would be room for his crop. When he finally was told to come, he arose at 3 a.m. to

get in line, sleeping in his truck until it was his turn to deposit his crop. Some farmers who didn't arrive as early were turned away after waiting in line, he said.

While the most immediate impact from the hurricane occurred in the Gulf of Mexico states, lingering effects of Hurricane Katrina can be felt many miles from the Gulf, months after the August storm that came ashore as one of the costliest and deadliest hurricanes in U.S. history.

What was Katrina's impact on agriculture, and how long might it last? Assessments of near-term impacts are beginning to emerge. Mark Drabenstott, vice president and director of the Center for Rural Study of Rural America, and Jason Henderson, senior economist at the Center explored how higher energy prices and new concerns about export infrastructure could affect agriculture in the future. Their research, "Katrina and Rita: Lingering Effects on Agriculture," can be found in the October issue of *Main Street Economist*, a publication of the Federal Reserve Bank of Kansas City.

## Fueling up

Byron Finley knew the price of fuel was on the increase the day before it was time for him to take delivery of the diesel, which he buys 1,000 gallons at a time and stores on a tank at his farm in Edgerton, Kan. He tried, unsuccessfully, to negotiate a prepayment of the fuel, which was then selling for \$2.22. (Fuel purchased to be used on a farm is exempt from federal taxes, because it is not used on public roads.) The next day, the price was 21 cents higher, and he had no choice but to pay the price—it was harvest time.

For farmers like Finley, Hurricane Katrina came at the worst possible time, spiking diesel prices when they most heavily use fuel. Compounding Finley's frustration was the fact that prices later began to drop well below the price he had paid for the fuel stored in his 1,000-gallon tank.

Even before hurricane season, a steady increase in petroleum prices had led the U.S. Department of Agriculture (USDA) to forecast increased energy costs in agriculture. Then Hurricane Katrina shut down nearly all of the

Gulf's oil and natural gas production facilities, halted oil imports and closed refineries. USDA estimates that every 10 percent increase in fuel and energy costs leads to an \$85 million spike in agricultural production costs.

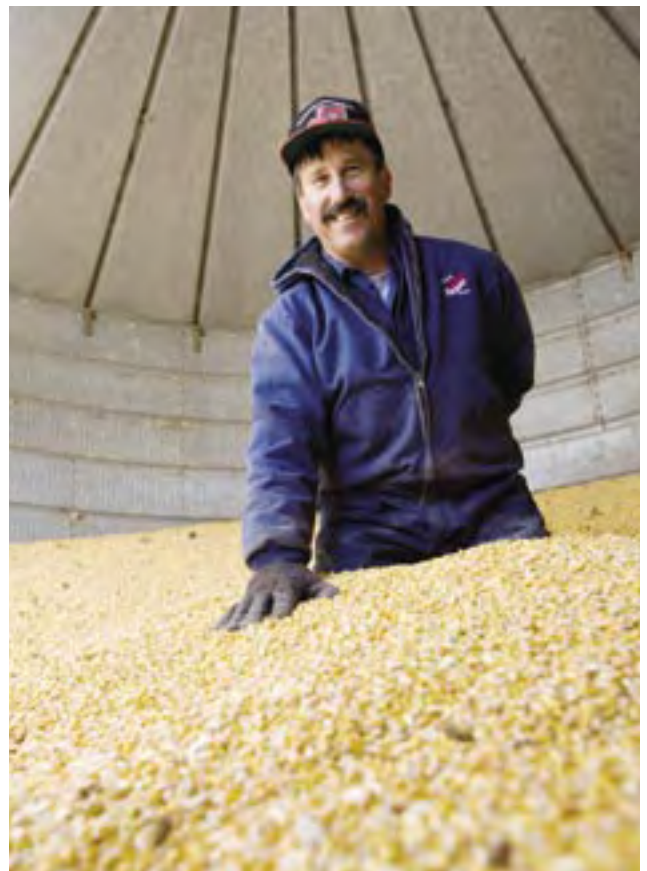
By fall, many farm lenders were reporting additional operating loan requests for the fall harvest, said Henderson.

Anecdotal evidence from farmers like Boehm suggests that the effects of Katrina will last beyond harvest. In November, Boehm was pondering money-saving tactics—one being to "chisel plow" his field, rather than turn over the soil completely, which uses more fuel. Finley said he resorted to a "no-till" method long ago, so is already saving as much fuel as he can. While this might sound like an easy

---

**TOM BOEHM, A FARMER NEAR OLATHE, KAN.,** says he is considering planting soybeans rather than corn this spring. Soybeans don't require as much fertilizer, which could cost 50 percent more this year than last year.

---



# THE EBBS AND FLOWS

---

## OF SHIPPING ON THE MISSISSIPPI

**M**uch grain that is harvested in the Tenth District finds its way down the Mississippi River, where it is exported from the ports of south Louisiana and New Orleans.

Corn, soybeans and wheat all move down the river, literally the main artery in the U.S. shipping infrastructure. Top destinations once grains reach the Gulf include Japan, Egypt, Mexico, China and Taiwan, South Korea and the Netherlands.

Hurricanes are not the only weather condition that affects shipping by barge; low water or ice on the river can prevent barges from moving.

Financial wires cover river conditions with intensity, filing reports that follow daily barge traffic statistics. Grain terminals and elevators on the river follow the reports to determine how full barges can be loaded. Market analysts follow the reports to gauge export activity and to see if water levels drop. The latter forces a domino effect: when the movement of grain is impeded, backlogs of grain form and prices move.

Lower water levels reduce barge efficiencies. Losing an inch of depth typically means offloading 17 tons of cargo per barge.

Even though farmers do not pay for shipping, they indirectly pay for shipping increases. Grain usually passes through several changes in ownership from producers to final consumers. When a farmer sells grain, the transportation, storage and conversion costs are generally the responsibility of the new owner. When the new owner incurs increased shipping costs, the owner might absorb the increases and narrow the profit margin. But when this is not possible,

the buyer will either purchase grain at a lower price or sell grain at a higher price.

After Katrina, traffic on the river was completely shut down for days, and remained interrupted for weeks. "It was like an accident that happens on the interstate," said Jason Henderson, senior economist at the Federal Reserve Bank of Kansas City's Center for the Study of Rural America. "It takes awhile for everyone to get back up to speed."

If anything, Hurricane Katrina exposed the vulnerability of transporting so much of the nation's grain by barge down the Mississippi. Mark Drabenstott, vice president and director of the Center for the Study of Rural America, cautioned about relying too much on that as a sole mode of transport.

"Katrina demonstrated a risk to agriculture from being so heavily dependent on Mississippi shipping," he said.

Immediately after the hurricane, corn and soybean prices plummeted in places that ship virtually all

of their harvest down the river because there was a backlog of grain at river elevators. By contrast, prices rose in western Iowa and eastern Nebraska, as these areas typically ship their harvest by rail to the Northwest.

"This sharp divergence in crop prices may spark a fresh dialogue on diversifying the nation's grain transportation system," said Drabenstott.



PHOTO BY KEITH WOOD/GETTY IMAGES

**T**

solution, farmers say that eventually the soil has to be turned over, or else yields begin to fall off.

### Shipping

Concerns remain over what effects the next big storm may have on transportation. About half of all U.S. grain exports travel down the Mississippi River to the Gulf of Mexico. The hurricane halted grain exports out of the Mississippi River for nearly two weeks. When

river elevators or terminals were unable to ship grain down the river, any grain they accepted had to be held in storage. This led to situations such as what Boehm endured, waiting for days to get the call to bring his soybeans in.

Some experts have talked about more long-term threats, possibly losing business to grain-producing countries that don't have difficulties with exportation paths.

"If anything, Hurricane Katrina highlighted



how tight the transportation capacity for U.S. food exports is,” said Henderson. “If global demand grows, we have to find capabilities to move grain out of the Midwest, be it rail or the Mississippi River.”

In fact, railways saw an increased demand in the aftermath of Katrina. According to the USDA, rail shipments were up 15 percent year to date in December and continue to run higher than year-ago levels. Yet, barge shipping remains the most economical method of transportation. In 2004, the cost of shipping corn by barge from Minnesota to the Gulf of Mexico was half the cost of rail, said Henderson.

“One quickly senses why those of us in agriculture value what we know to be our best natural comparative advantage in trade—the Mississippi River and its tributaries,” said Timothy Gallagher, a member of the North American Export Grain Association.

Gallagher’s organization is concerned with maintaining the nation’s waterways. He testified about the issue before the House Committee on Agriculture in October.

“As Katrina forced an extended closure of the ports of New Orleans and south Louisiana—including all 10 grain export facilities—an already tight river transportation situation became desperate,” he said in his testimony.

Just as the rest of the country saw a leap in prices at the pump after Katrina, exporters saw a leap in shipping rates on the Mississippi—from 51 cents a bushel the day before Katrina hit to 97 cents a bushel on Sept. 8.

River transportation remains the prime means of moving crops, said Gallagher.

“Rail and truck alternatives to replace the capacity and cost effectiveness of the river system are simply nonexistent,” he said. “Rail shipping is already at full capacity and there is a labor shortage of certified truck drivers. Moreover, shipping by barge remains the most fuel efficient, lowest cost and overall efficient method of transporting the necessary volume of agricultural commodities to export.”

## **A new business plan**

Mike Matson of the Kansas Farm Bureau said farmers have had to make adjustments in

the wake of Katrina.

“The business plan that most producers had in place (before Katrina) was already in place,” he said. “It was difficult to make adjustments—they had to eat the price hikes in the fall. The pencils are getting sharpened and farmers and ranchers are looking at next year’s business plan.”

Input costs such as that for fertilizer are a significant part of a farmer’s business plan, said Matson.

“If fertilizer costs 50 percent more this year than last year, there are going to be hard decisions to make,” he said. “They might choose to plant something else.”

Boehm said he is considering planting soybeans rather than corn this spring. Soybeans don’t require as much fertilization.

Boehm laments the fact that in the global economy, his crops are selling at the same price that they sold for 20 years ago, yet many of his inputs have gone up. Furthermore, farmers overseas aren’t facing the challenges wrought by Katrina.

Farmers such as Boehm are doing the math and coming up with solutions for the problems of higher input costs, said Matson.

“Chances are many of them will find a way to pay for it,” he said. “They will make cuts somewhere else.”

He is making a dire prediction: “They will spend less on Main Street. This will affect rural economies. If agriculture production is suffering, it won’t be long before small town Main Streets will be suffering.”

**T**

## **FURTHER RESOURCES**

**KATRINA AND RITA: LINGERING EFFECTS ON AGRICULTURE**

[www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).

God Bless America - Dios bendiga América



**TO BUILD** relationships with Hispanics in its community, this Garden City, Kan., bank opened a branch in the plant of an area meatpacker, where many Hispanics are employed.

grants worked. At the facility, modeled after branches found in grocery stores, workers could cash paychecks, apply for loans or transfer funds to family in other countries.

Clearly, this is one financial institution that has adapted its business strategies to meet the needs of a changing customer base.

Similarly, other financial institutions may want to consider ways to reach these consumers, says Fred Ramos, president of the Tulsa Hispanic Chamber of Commerce and a director of the Federal Reserve Bank of Kansas City's Oklahoma City Branch. He said that financial institutions

wanting to serve Hispanics need to be aware of sociocultural nuances.

"Hispanics want personal contact—they want to talk to the bank president," he said.

Hispanic consumers will likely remain loyal to the businesses with which their families have done business, Ramos said.

In addition to cultural characteristics, socioeconomic characteristics vary among well-established Hispanic populations in high-concentration areas and newer immigrant populations in high-growth areas. Established Hispanic residents are more likely to be bilingual and have higher incomes than newer, less-established immigrants. Rural and suburban areas in

# BANKING ON THE FUTURE

## Reaching out to the HISPANIC population in RURAL KANSAS

**BY ERIC ROBBINS, POLICY ECONOMIST**

**I**n 2002, a year before Census Bureau officials announced that Hispanics had become the largest minority group in the United States, officials of a Garden City, Kan., bank were already contemplating how to reach their area's burgeoning minority population. After all, many of these consumers do not obtain financial services from banks, but utilize alternative sources like check cashing centers. They are "unbanked."

The solution? If unbanked consumers wouldn't go to the bank, the bank would go to them. A Garden City bank opened a branch in a meatpacking plant where many immi-



the Midwest and Southeast are attracting growing numbers of these new immigrants.

In order to gain perspective on strategies bankers use to build rapport with Hispanics, representatives of the Federal Reserve Bank of Kansas City conducted a field study in Garden City, which has a population that is 42 percent Hispanic.

## Changing demographics

In the Tenth District, New Mexico and Colorado have the highest percentages of Hispanic residents, many of whom are concentrated around metropolitan areas. However, as the map on page 8 indicates, some rural counties have high percentages of Hispanic residents as well. The Census Bureau has forecast that the nationwide population will be 20 percent Hispanic by 2030. Nine counties in southwestern Kansas already have Hispanic populations that exceed this.

Many Hispanics are attracted to agriculture-related employers, such as meatpacking plants. Garden City, which 25 years ago was predominantly white, is now a town of great ethnic diversity, with many immigrants who work at food processing companies. Communities such as this could suggest the future for other rural areas.

The Federal Reserve's Survey of Consumer Finances found that 9 percent of U.S. households are unbanked—they do not maintain demand deposit accounts, savings accounts or other transaction accounts with financial institutions. Of these unbanked households, a disproportionate percentage includes minority households. Thirty-four percent of U.S.-born Hispanic residents are unbanked, and an even larger percentage of Mexican immigrants are unbanked—53 percent. Thus, the Hispanic population represents a largely untapped banking market whose numbers and buying power are growing quickly.

Instead of traditional banking services, these unbanked households use alternative money service businesses (MSBs), such as check cashing outlets and money transfer agents. Many Hispanic consumers have a significant need for services that allow them to send money to fami-

ly members in their home country. These services, called remittances, have traditionally been provided by MSBs. However, as the demand for remittance services has grown, more and more financial institutions have developed remittance products.

As more banks and credit unions provide services that compete with MSBs, unbanked consumers may benefit from reduced fees and better access to their pay if they become banked. Generally, banks offer check cashing and money remittance services at a lower cost than MSBs.

In addition, as these individuals move into the financial mainstream, they can develop credit histories that may enable them to purchase homes and obtain consumer credit.

## A case study

Socioeconomic and cultural barriers stand in the way of reaching many Hispanic consumers. The study by the Federal Reserve Bank of Kansas City included a survey regarding the banking habits of Hispanic consumers designed to elicit some of these barriers.

Among the 109 Hispanic consumers that were surveyed, about 62 percent said they have accounts with banks and use banks to cash their paychecks. However, when sending money to family members abroad, the majority of survey respondents said they use MSBs such as Western Union and MoneyGram. MSBs are also the predominant service provider that Hispanics use to pay their bills. Most of those surveyed pay their bills with money orders or cash; only 34 percent use checks.

What accounts for the large number of Hispanic consumers who are unbanked? The most often-cited reason for remaining unbanked was the lack of personal identification documents that are required by banks to

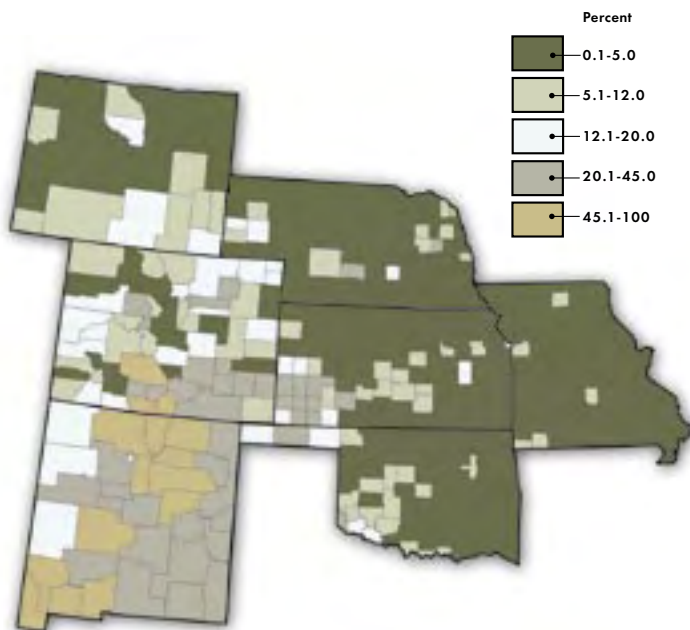
---

**WHEN SENDING MONEY** to family members in foreign countries, the majority of survey respondents said they use money service businesses such as Western Union and MoneyGram.

---



## PERCENT HISPANIC POPULATION BY COUNTY (Tenth District States)



SOURCE: Census 2000, U.S. Census Bureau

**NOTE:** Comments cited by anonymous survey respondents are in italics. The 109 individuals interviewed by the Federal Reserve Bank of Kansas City completed surveys at the Finney County Community Learning Center or are the result of one-on-one discussions in a Garden City housing development. Thus, the results may be subject to some self-selection bias.

establish accounts. As a result of the USA Patriot Act, financial institutions are required to establish procedures for verifying their customers' identities—so-called Customer Identification Programs, or CIPs.

Although financial institutions may accept a variety of identification documents to meet these requirements, many banks find the requirements too cumbersome or confusing to utilize. And even though many banks are willing to develop CIPs that utilize identification documents from foreign governments or consulates, some Hispanic consumers are discouraged nonetheless by the level of scrutiny they face in establishing an account. One survey respondent's comment is illustrative: *"I think the main problem with going to banks is having to give them so many forms of identification; it seems so complicated."*

Another important factor cited by many of those interviewed is language barriers. *"I*

*prefer going to a place where they speak Spanish,"* said one respondent.

Therefore, language and identification requirements are significant entry barriers to Hispanic consumers. However, Ramos cautions against focusing solely on the language barrier. Businesses should not rely solely on bilingual communication to develop relationships with Hispanic consumers, he said.

"Businesses get distracted with the bilingual issue—we have cultural characteristics such as loyalty, a sense of family and place, which businesses are missing," he said, noting that many second-generation Hispanics do not speak Spanish. He also believes that financial institutions must educate Hispanic consumers on financial products.

Many Hispanics are unaware of the money remittance services that are available from their own banks or prefer those of MSBs because of convenience. Several of the largest MSBs have offices throughout Latin America. Hispanic consumers may prefer to send money through a source that is close to their family member at home. One respondent incorrectly thought that a bank had to have branches in Mexico in order to send money to relatives there.

Still other survey respondents expressed distrust of financial institutions. This sociocultural barrier is described by a comment from one respondent: *"My father put money in a Mexican bank. He soon started losing money for no reason. When he came here, he never trusted banks."*

### Strategies to reach Hispanics

Several financial institutions in Garden City are working to overcome barriers related to language, culture and misconceptions about identification requirements. Representatives of the Federal Reserve Bank of Kansas City interviewed the presidents of three banks, one thrift and one credit union. All of these financial institutions aggressively explore methods of serving their market, including unbanked Hispanic consumers.

Language may pose the biggest entrance barrier to Hispanic consumers, but also may be overcome more easily than other barriers. A common strategy among those interviewed is

to employ bilingual staff members, including bilingual managers. Another method to overcome language barriers is to ensure that account-opening documents, financial disclosures, brochures and other documents are available in Spanish.

In addition to offering bilingual financial services, these institutions work to address the other socioeconomic and cultural issues mentioned earlier by working through local employers, community organizations and schools to improve financial literacy among the unbanked. One institution established mini-banks at local elementary schools in order to introduce financial concepts to children. Others provide financial education workshops at large area employers. By working through local community organizations, financial institutions can develop relationships with unbanked consumers and overcome the distrust they may have.

Dealing with identification requirements is also a necessary step before financial institutions can effectively serve the unbanked Hispanic market. The customer identification requirements are flexible and allow banks to determine which documents they will accept from consumers. New immigrants can obtain identification from their country's consulate in the United States—the consular or Matrícula card. The Internal Revenue Service also issues Individual Tax Identification Numbers to individuals, regardless of immigration status, who cannot obtain a Social Security number. These various identification documents are being accepted in order to fulfill the CIP requirements.

Garden City financial institutions employ several strategies to attract Hispanic customers that could be replicated in other markets. Some of these are innovative, such as the branch established at the meat-packing plant. That bank also installed a check cashing machine to enable bank customers and noncustomers to cash company checks drawn on that bank. Still another area bank is building a Hispanic branch operated by bilingual staff.

Several institutions also provide financial products that might be well-suited for this market segment. One participating institution

offers a dual account debit card to its customers. The customer receives two debit cards. One of these cards, which can be given to a relative in a separate location, is linked to a sub-account that is accessible at participating ATMs or at the point-of-sale worldwide. Rather than sending monthly remittance payments, consumers can simply deposit money into the designated sub-account—thereby incurring lower fees and obtaining more beneficial exchange rates. Some employers also offer payroll payments via a plastic debit card, reducing the check cashing fees paid by unbanked employees.

## Going forward

Hispanics' buying power is increasing quickly. The disposable income of Hispanics reached \$686 billion in 2004 and will reach \$1 trillion in 2009, accounting for 9 percent of total U.S. purchasing power, according to the Selig Center for Economic Growth.

The changing U.S. population will require adaptive business strategies. As the fastest growing minority group in the United States, Hispanics are attracting a great deal of attention from all business sectors.

As Hispanic consumers build capital and need more advanced financial services, financial institutions must be prepared to go beyond just the basic relationships they have established with these consumers and create new products to meet their expanding financial needs.

T

## FURTHER RESOURCES

STRATEGIES FOR BANKING THE UNBANKED: HOW BANKS ARE OVERCOMING ENTRANCE BARRIERS

[www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).



## BY TONI LAPP, SENIOR WRITER

**I**n 1999, Kansas City, Mo., reached a dubious milestone: The city proper was surpassed in population by its suburban neighbor, Johnson County, Kan.

This reflected a phenomenon of shifting population that has been seen in cities around the country. The trend at times has led to an us-against-them mentality between suburbanites and urban dwellers.

“Suburbs have prospered for the last 50 years, while many of the large cities they surround have stagnated,” says Jordan Rappaport, an economist with the Federal Reserve Bank of Kansas City who has studied the issue. “Because of that, many people perceive that cities and suburbs tend to grow at each other’s expense—and thus compete for residents and jobs.”

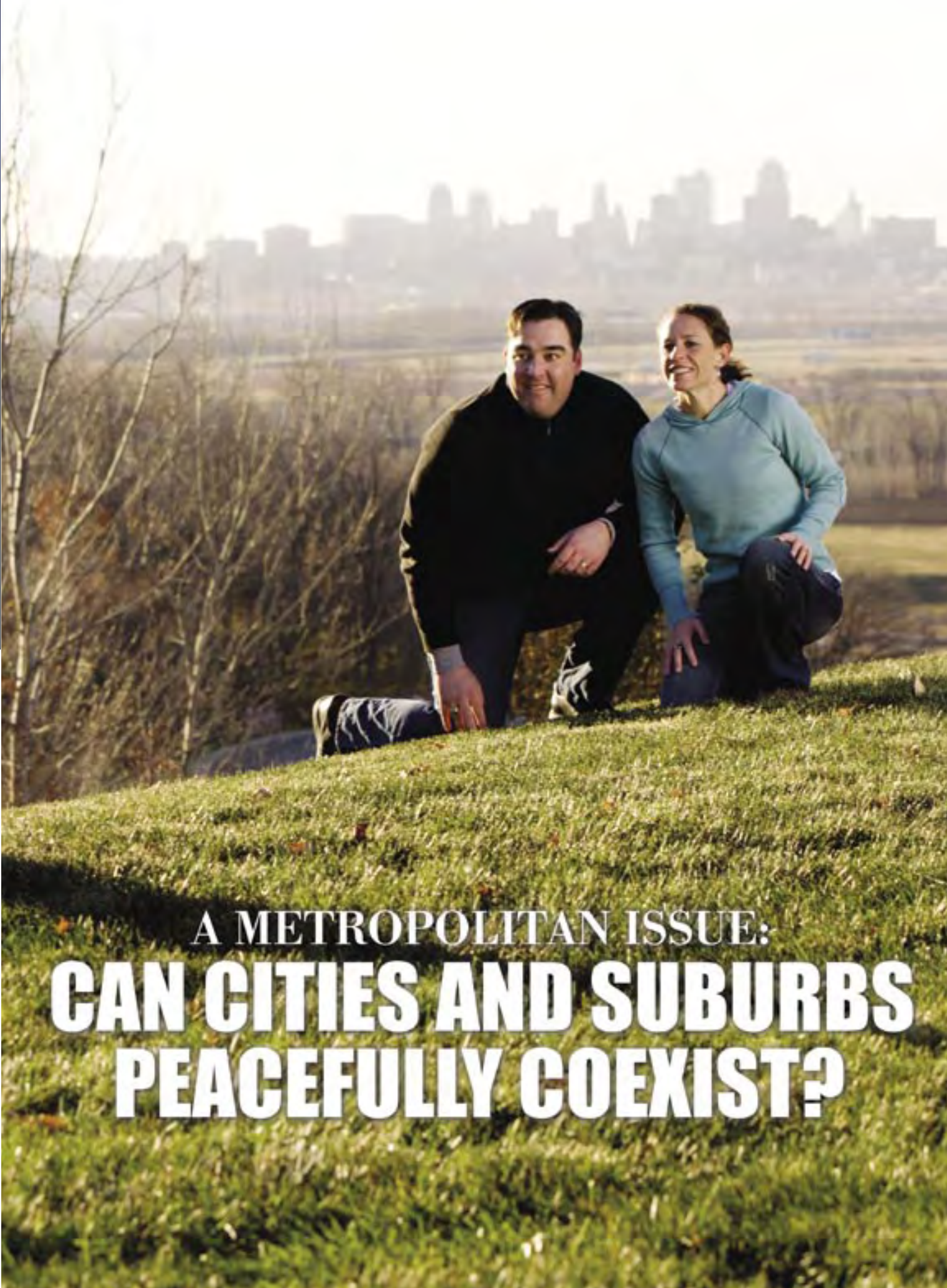
Rappaport says that while there is some truth to this perception, more often cities grow or decline together. For this reason, they have strong incentive to cooperate.

Rappaport, whose research “The Shared Fortunes of Cities and Suburbs” was published in the *Economic Review*, a quarterly journal published by the Bank’s Economic Research Department, notes that many economic forces have driven the trend known as suburbanization: the interstate system of the 1950s that resulted in highways connecting suburbs to cities, Americans’ increasing wealth and the ensuing desire for larger homes, and federal tax policy that encouraged home ownership.

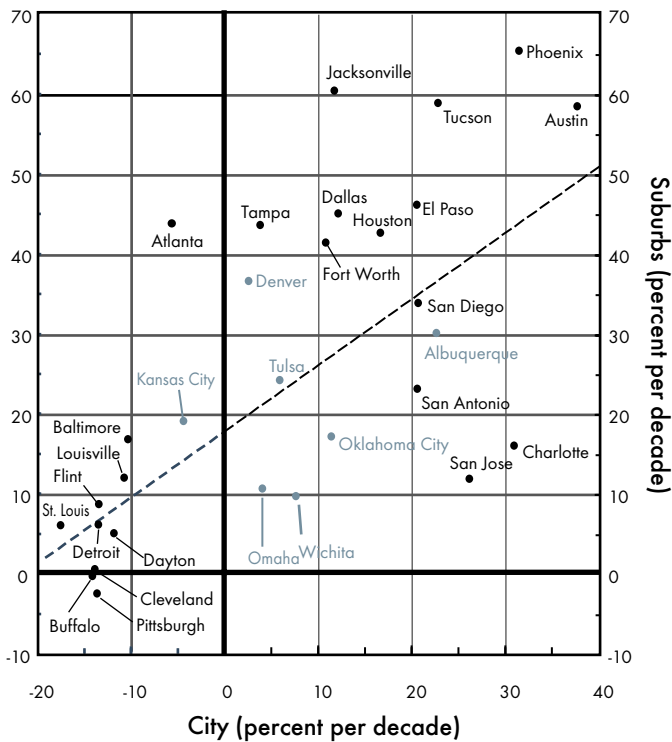
The shifting population brings many implications—from taxation to development issues to competition for employers. Like true siblings, cities and suburbs seem to be immersed in a rivalry. The question is, can the two learn to cooperate for the greater good?







A METROPOLITAN ISSUE:  
**CAN CITIES AND SUBURBS  
PEACEFULLY COEXIST?**



**LOOKING AT THE METRO AREAS** on a graph charting their growth, a pattern emerges, indicated by the dashed line: The cities that grew the most also had the most suburban growth, and vice versa.

**NOTE:** Tenth District cities are indicated in blue

## Sum of all parts

There is more to the issue of suburbanization than just the shifting of populations from cities to suburbs and back, in some cases.

For his study, Rappaport tracked the growth—and sometimes contractions—of a number of large metro areas and charted them in the graph above according to their suburban and urban growth.

He found that there was a strong positive correlation between city and suburban growth; that is, the faster a metro area's urban portion grew, the faster its suburbs grew as well. On the flip side, the faster a metro area lost urban population, the slower its suburbs grew.

For example, from 1970 to 2000, Kansas City's suburban growth was consistently below the Tenth District average. During the same time period, its urban growth similarly lagged. The positive correlation between city and suburban growth can be seen when comparing Kansas City with another Tenth District city. Fort Collins, Colo., had the fastest urban population growth from 1970 to 2000, and it experienced suburban population growth nearly twice the District average.

"Why do some metro areas grow more than others?" Rappaport asks. "That is more important than whether people choose to live in the city or suburb. They grow and contract together."

Because of Americans' increasing wealth and mobility, Rappaport thinks that metro areas that offer more amenities are the winners in this climate of change, whether those amenities are natural attributes, like mountains and lakes, or man-made attractions, like museums and zoos. A metro area that blends lively urban cores along with healthy suburbs would offer the best of both worlds.

## Taking a regional approach

Some in the Kansas City region argue that trying to build consensus across the Missouri-Kansas state line introduces a wrinkle that other metro areas don't have to contend with.

While many Kansas City area officials on both sides of the debate played down the implications of the population trend between the city and Johnson County, another chapter on city-suburban divide was written recently when the Johnson County city of Overland Park contemplated building an arena, prompting some in Kansas City, which currently is planning a new arena, to question whether having one more arena would be good for the region. Overland Park officials ultimately rejected public assistance for such a venture, and were applauded by *The Kansas City Star* editorial board in a column headlined, "'No' was the right answer."

"When the Sprint Center in downtown Kansas City is finished in 2007, the metropolitan area will have sufficient facilities to handle sporting events, concerts and family shows," the editors wrote of the building currently under construction in the city center.

Steve Rose, columnist for *The Johnson County Sun*, defended the notion of an arena in Overland Park.

"There probably will be an arena (in Overland Park)," he said. "There will be some redundancy, but there will be competition. That's the way the world works whether you're talking about a car dealer or restaurant. That's the way the market works. It



means everybody has to work harder.”

However, Bob Marcusse, president and CEO of the Kansas City Area Development Council, or KCADC, contends that the state line brings a competitive advantage. The KCADC in 2004 launched a dual initiative, OneKC and ThinkKC, dedicated to marketing Kansas City as a region to businesses and individuals.

“A city is a product that competes for customers,” he says. Those “customers” are companies that bring jobs to a region. Kansas City, as a region, is able to offer a choice of two state governments and tax systems to prospective customers.

That said, “it’s hard enough to do big things,” Marcusse concedes. “But if you are divided, it’s even harder.”

Marcusse says that companies and individuals—who are relocating select a region first, and then narrow their decision, pinpointing a municipality within the region in which to settle.

No fewer than 18 counties, spanning 6,750 square miles and enveloping more than 100 municipalities, band together to be included in OneKC’s branding initiative.

## Neighborhoodly competition

Terrence Dunn, who is married to the mayor of Leawood, Kan., says that if he didn’t live in the southern Johnson County suburb, he would live in Kansas City’s urban core with all its amenities—art museums, concert halls and urban architecture. Living in Leawood gives Dunn, the president of J.E. Dunn Group of construction companies and member of the Greater Kansas City Chamber of Commerce, a unique perspective on suburbanization.

He also observes that suburbs often have gotten a bad rap for lacking cultural and entertainment activities. Much is being done in the suburbs to enhance their cultural and entertainment amenities, all to the good.

“There are strategies in suburbia to improve (quality of life), but also an understanding that for suburbia to survive, the urban core must survive,” Dunn said.

He notes further that the city of Leawood made the decision not to use tax increment financing to encourage the boom of retail stores that has characterized that city.

But increasingly, suburban cities are using tax abatements to lure development, often going head-to-head against their neighbors.

In 2005, Applebee’s restaurant chain made headlines by announcing it would move its headquarters from Overland Park, Kan., to neighboring Lenexa, Kan. That city offered to suspend 90 percent of the corporation’s property taxes for 10 years.

“Unfortunately, these things happen all the time,” says Jody Craig, public affairs director for Mid-America Regional Council, or MARC.



**ONEKC IS A BRANDING** initiative that markets Kansas City as a region to businesses and individuals.

“If everyone got together and agreed not to do that sort of thing, we’d be better off.”

MARC, a metropolitan planning organization, or MPO, has no authority to control the use of tax abatements. MPOs were mandated by the federal government decades ago to

# Charting Tenth District growth

To get a full picture of an area's growth, one should look at metropolitan population, not just city or suburban population. Jordan Rappaport, senior economist at the Federal Reserve Bank of Kansas City, compiled the chart below depicting the fastest-growing metro areas in the Tenth Federal Reserve District.

As the chart illustrates, the last few decades have seen phenomenal growth in some Tenth District metro areas. A number of trends are at work, says Rappaport.

"The main determinant of growth seems to be natural and cultural amenities, which include attributes like good weather and nearby recreational opportunities, as well as art museums and other cultural institutions," he said.

Witness the eye-popping growth of Santa Fe, N.M.

Americans increasingly have more disposable income, and thus have increased their willingness to pay a premium to live someplace with high quality of life.

Santa Fe and Albuquerque are also among "sunbelt" destinations whose growth was helped in the last half of the 20th century from the advent of air conditioning.

In addition, a metro area's industrial complex plays a major role. Fort Collins, Boulder and Colorado Springs—in addition to boasting close proximity to abundant natural amenities—have enjoyed growth of local industry, namely high-tech services and manufacturing, says Chad Wilkerson, policy economist at the Federal Reserve Bank of Kansas City.

serve as a conduit for federal transportation funds. Although MPOs have long had an official role in regional transportation planning, their importance has increased as transportation related problems in metropolitan areas have increased.

MARC is among a handful of MPOs that leverage their powers to address more than transportation problems, targeting issues such as congestion, air quality and safety.

The use of tax abatements to compete for businesses in neighboring jurisdictions reflects

communities at their least cooperative. But Kansas City and its suburbs do cooperate in important ways, Craig notes.

When Kansas City, Mo., received millions in funds as part of the Urban Area Security Initiative for emergency preparedness, it cooperated with eight counties to appropriate the funds through MARC for a regional approach. It would make little sense for only Kansas City to be prepared for a disaster, when two-thirds of the area's population resides in suburbs in seven counties surrounding the city, after all.

"To have eight counties and dozens of cities agreeing on how to spend a very large pot of funds is quite remarkable," says Craig.

## Special districts: A tale of two metros

There are many benefits to cooperation among local governments because their policies can have far-reaching effects. For instance, applying pollution regulations in just one locality would be ineffective, since the air is shared by municipalities.

Similarly, the cost of many services—sewer, water, trash collection—can be shared by communities. The higher the number of users, the more the cost can be spread.

Many metropolitan areas have discovered the advantage of creating special tax districts—especially water districts and sewer districts—to

provide services that are shared across borders.

The broad perspective shows that amenities like museums, parks, stadiums and arenas benefit an entire metro area, says Rappaport. Taking the concept of special districts a step further, some metro areas have pioneered the

### Tenth District Metro Growth 1970 to 2000

Rank	Metro Area	Growth Rate per Decade (%)
1	Fort Collins, Colo.	40.3
2	Sante Fe, N.M.	33.0
3	Colorado Springs, Colo.	30.6
4	Boulder, Colo.	29.8
5	Denver	24.8
6	Albuquerque, N.M.	24.7
7	Lawrence, Kan.	19.8
8	Oklahoma City	14.6
9	Tulsa, Okla.	14.4
10	Lincoln, Neb.	13.3
11	Cheyenne, Wyo.	13.0
12	Kansas City, Mo.-Kan.	9.2
13	Wichita, Kan.	8.5
14	Omaha, Neb.	7.2
15	Pueblo, Colo.	6.1

idea of creating such districts to finance an amenity that is located at a single site but benefits residents of an entire metro area.

An act of Congress was required to place a bistate tax initiative on the ballot in the Kansas City area, because it proposed a special district that would cross state lines. In 1996, voters in four counties—three in Missouri and one in Kansas—approved the bistate tax to pay for the restoration of the historic Union Station and the construction of the adjoining Science City museum. Wyandotte County in Kansas rejected the five-year, eighth-cent sales tax.

The effort achieved the renovation of Kansas City's historic landmarks. While it has struggled to be self-sufficient financially, many in the Kansas City metro area—both in the city and suburbs—are optimistic that the museum will draw increasing attendance from residents and their guests of the special tax district that funded it.

In principle, the funding of an amenity that provides entertainment for an entire area is eminently sensible, said Rappaport. To justify such a public subsidy, an amenity should benefit people throughout a metro area, he said.

In 2004, officials went to voters in the same five counties with a bid to support another special district. Dubbed "Bistate II," half of the proceeds of the quarter-cent sales tax would have paid for renovations at the Truman Sports Complex in Jackson County, Mo. The other half would have funded arts and cultural organizations in the metro area, with \$50 million going to the construction of a performing arts center in downtown Kansas City. For the measure to pass, three counties were required to approve, but only voters in Jackson County voted in favor. Clearly, officials were unable to convince residents of the five counties that they would all benefit from the measure that would fund primarily facilities in Jackson County.

An excellent model of a special district supporting sports and cultural amenities exists elsewhere in the Tenth District, says Rappaport.

In the Denver metro area, a Scientific and Cultural Facilities District, or SCFD, receives support from seven counties. It was created in

1988 when voters approved a tenth-cent sales tax, which has been renewed twice by voters. Four organizations—the Denver Art Museum, the Denver Botanic Gardens, the Denver Museum of Nature and Science, and the Denver Zoo—collectively receive 59 percent of



---

**IN 1996, VOTERS IN FOUR COUNTIES** approved a special tax district to raise funds to renovate Kansas City's Union Station and build the adjoining Science City museum. An act of Congress was required to put the issue on ballots, because the district crossed state lines.

---

the proceeds. Another 28 percent of the proceeds are allocated to regional organizations that prove to have appeal through the metropolitan area. The remaining proceeds are allocated by councils within the participating counties to more than 200 local organizations, such as small theaters and art centers.

Richard Wobbekind, director of business research at the University of Colorado, praises the tax. So many arts events throughout the region boast the SCFD sticker—"it encourages buy-in," he said.

"Denver seems to have gotten it right," says Rappaport.

**T**

## FURTHER RESOURCES

THE SHARED FORTUNES OF CITIES AND SUBURBS

[www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

---

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).



A man in a blue checkered shirt and dark tie is sitting at a wooden desk. His hands are clasped together on the desk. In the foreground, there are several stacks of coins. The background is dark and out of focus.

**A LOOK AT  
BANKRUPTCY  
IN THE TENTH DISTRICT  
AND BEYOND**



**BY KELLY EDMISTON, SENIOR ECONOMIST  
AND KATE FISHER, RESEARCH ASSOCIATE, COMMUNITY AFFAIRS**

**P**ersonal bankruptcy filing rates have risen dramatically over the past decade. From 1990 to 2003, the national filing rate jumped 103 percent, with a 29 percent increase between 2000 and 2003 alone. The increase was even more marked in the Tenth Federal Reserve District over that period. In 2000, 53 in every 10,000 people over the age of 18 in the Tenth District filed for bankruptcy (see graph on page 21). By 2003, the latest year for which complete data are available, that number had jumped to 75 in every 10,000, a 43 percent increase.

Alarming increases in bankruptcy filing rates over the last decade were largely the impetus for the Bankruptcy Abuse Prevention and Consumer Protection Act, which went into effect in October 2005. The primary goals of the legislation were to steer more petitioners from Chapter 7 (liquidation) to Chapter 13 (reorganization), where more debt would be repaid, and to quash blatant abuses of the bankruptcy system, especially with regard to exemptions.

Congress expressed concerns about the underlying causes of bankruptcy in deliberations over the new law, as effective policy is based on solid research. In an effort to help address these concerns and to inform what will surely be a continuing policy debate, the Community Affairs Department at the Federal Reserve Bank of Kansas City has studied the determinants of nonbusiness bankruptcy filing rates in U.S. counties. An extension of the study investigates regional differences in chapter choice, including the high share of Chapter 7 filings in the Tenth District relative to the nation.

The Community Affairs study evaluates 68 potential determinants of bankruptcy to explore the difference in filing rates across the country. Among the most salient determinants from a policy perspective are state exemption levels and

wage garnishment laws, proximity to gambling establishments, and degree of social stigma associated with bankruptcy filing. The study found that each of these key factors is an important underlying determinant of bankruptcy filing rates.

### **The new bankruptcy law**

Perhaps the most significant change in the new law is the effort to steer more bankruptcy petitioners away from Chapter 7 toward Chapter 13. Chapter 7 requires the liquidation of nonexempt assets, the proceeds of which are distributed to creditors according to a preference system. Exemptions can include personal property and homesteads and are determined by either state or federal statutes. Debts are then immediately discharged, unless they are nondischargeable debts such as court-ordered payments, student loans and certain tax obligations.

Chapter 13 allows debtors to keep their assets, as long as payments are made, while paying creditors—out of future earnings—a portion of what is owed according to a repayment plan developed and administered by a bankruptcy trustee. At the end of the repayment period, which lasts no more than five years, debtors who have fulfilled the requirements of their Chapter

13 reorganization plan will be discharged from the balance of their dischargeable debts. Chapter 7 filings accounted for about 71 percent of all nonbusiness bankruptcies in the United States in fiscal year 2003. In the same year, the proportion in the Tenth District was over 85 percent.

Under the new law, a means test determines, in part, whether or not a petitioner is allowed to proceed under Chapter 7. Specifically, cases in which the debtors have income exceeding the median in their state of residence and, after covering necessary expenses and paying priority debt payments such as alimony, child support, and taxes, are able to contribute a minimal amount toward their debts, will be converted to Chapter 13. The American Bankruptcy Institute estimates that means testing will affect from 3.6 percent to 15 percent of petitioners.

Opinions vary on the likely repercussions of a bankruptcy system tied to a means test. Those who favor the provision believe it will still allow a fresh start for those in need while promoting personal responsibility. Those who oppose means testing believe that standardizing individual situations using median incomes and government-calculated necessary expenses will unfairly hurt many who declare bankruptcy because of “nonstandard” circumstances, such as costly medical conditions or the failure of self-financed startup businesses.

Other provisions included in the new legislation are aimed at curbing abuse. For example, the amount of dischargeable debt attributable to luxury items and cash advances acquired close to the time of filing is reduced as a means of preventing debtors from accumulating large amounts of unsecured debt with the intention of quickly discharging it.

Many of the abuse prevention provisions pertain to exemptions and dischargeability. The most prominent exemption in bankruptcy is the homestead exemption. It allows debtors to exempt either a portion of their home equity or their residence in its entirety. Because non-exempt assets (such as deposit accounts) are easily converted to home equity (i.e., by selling assets and paying off mortgage debt), high homestead exemptions offer protection for all kinds of wealth, not just actual homesteads. Homestead



exemptions vary greatly from state to state. Six states—Florida, Iowa, Kansas, North Dakota, South Dakota, and Texas—have exemptions that are unlimited in value. For other states, the value of the homestead exemption ranges from \$5,000 (Maryland) to \$500,000 (Minnesota), with a mean exemption of \$63,527. Some states allow only their own exemption levels to be used, other states allow debtors to choose either the state or the federal exemption, and a few states have no state exemption, leaving the federal exemption as the only option.

The new bankruptcy legislation requires a longer period of ownership before filing in order to qualify for a homestead exemption, making it harder for debtors to exempt properties purchased immediately before filing for bankruptcy.

Finally, the threshold for dismissal as a result of abuse of the system has been lowered from that of “substantial abuse” to “simple abuse.”

Clearly there is a rising trend in nonbusiness bankruptcy filings, and the new bankruptcy legislation will affect a significant number of future petitioners. The law likely will reduce the proportion of Chapter 7 filings and eliminate some abuses, but tightening bankruptcy law is not an





PHOTOS BY MARIO TAMA/GETTY IMAGES

---

**PEOPLE WAIT IN LINE** to enter U.S. Bankruptcy Court Oct. 14. People across the nation filed bankruptcy petitions before the new federal law took effect, setting tougher standards for bankruptcy protection.

---

ultimate solution to the alarming increase in bankruptcy filing rates observed across the Tenth District and the rest of the nation.

### **Why so many bankruptcies?**

In the Community Affairs study, three factors stand out as underlying determinants of personal bankruptcies: state exemption levels and wage garnishment laws, proximity to gambling establishments, and the degree of social stigma associated with bankruptcy filing

To examine the effects of homestead exemptions on bankruptcy filing rates, information on homestead exemptions (for a married couple) was collected from a search of the bankruptcy codes for all 50 states and the District of Columbia. A variable was then created for each county to reflect the homestead exemption in its state as a fraction of the median house value in the county. The results indicate that higher

homestead exemption levels are associated with higher bankruptcy filing rates. Specifically, for every percentage point increase in the proportion of the median home price covered by homestead exemption, the bankruptcy filing rate increases by 0.9 filings per 10,000 households. For Missouri, the most populous state in the Tenth District, that would amount to an additional 197 or so bankruptcy filings, or 0.5 percent of annual filings for the year ended June 30, 2005.

When an individual or married couple files for bankruptcy protection, future earnings are protected from garnishment. Federal law protects from garnishment an amount equal to 30 times the federal minimum wage or 75 percent of disposable earnings, whichever is



greater. States are allowed to offer more generous protections, and many do. North Carolina, South Carolina and Texas protect all earnings from garnishment.

The idea behind this exemption is to give bankruptcy filers a “fresh start” and to provide proper work incentives for filers following discharge. Because of this, wage garnishment often spurs bankruptcy filings. Naturally, the greater the amount of an individual’s wages that can be legally garnished, the greater the incentive to file for bankruptcy protection. Hence, bankruptcy filing rates, everything else being equal, are



# The effects of gambling on bankruptcy

Legalized gambling has grown rapidly in the United States over the last two decades, spurred largely by the introduction of gaming on Indian reservations in the 1980s. Commercial gaming expanded shortly thereafter.

Casino gaming in some form—Indian or commercial—is now allowed in 33 states, and gambling of some form, including state lotteries, is allowed in all but two states—Hawaii and Utah. In 2003, the latest date for which complete data are available, consumer gambling losses were \$72.9 billion, suggesting that the total wager in that year was around \$962 billion, which reflects an increase of over 25 percent in four years.

The mechanism whereby gambling would lead to a greater likelihood of filing for bankruptcy is by raising debt levels relative to income. Problem gambling has been shown to increase with the availability of gambling opportunities.

The National Opinion Research Center, in a combined patron and telephone survey, found that the prevalence of “problem and pathological gambling” roughly doubles within 50 miles of a casino. If bankruptcy is associated with problem gambling, therefore, bankruptcy also should be associated with proximity to gambling establishments. The Research Center report revealed that 19.2 percent of “pathological gamblers” have filed for bankruptcy at least once, compared with 5.5 percent for “low-risk gamblers” and 4.2 percent for nongamblers.

The Federal Reserve analysis reveals that the closer a county is to a casino of some type, the higher its bankruptcy filing rate, although the magnitude of the effect is quite small. An additional 100 miles closer to a casino is associated with four additional bankruptcy filings per 10,000 households. Card rooms and race tracks, however, do not appear to have a significant effect on bankruptcy filing rates, and the presence of a state lottery is associated with lower bankruptcy filing rates.

PHOTO ABOVE BY SANTI VISALLI/GETTY IMAGES

expected to be positively related to the proportion of wages that can be legally garnished. The results bear this out, indicating that overall bankruptcy filing rates increase significantly with the proportion of wages subject to garnishment.

The effects of social stigma on bankruptcy filing propensities are impossible to estimate directly because stigma cannot be directly measured. Instead, the effects of stigma must be inferred from other results. To the extent that social stigma varies regionally, geographic variables at least partly will pick up the differences. The idea is that filing for bankruptcy is likely to be less stigmatizing the more that neighbors file for bankruptcy. This is one approach employed here.

Bankruptcy filing rates differ substantially across geographic areas in the United States, but there appear to be patterns that are geographically localized and that cross state boundaries. These patterns suggest that stigma likely plays a role in explaining regional variations in bankruptcy filing rates. Study results indicate that indeed a county’s bankruptcy filing rate is higher if the rate is higher in surrounding counties, and the effect declines as counties get farther away.

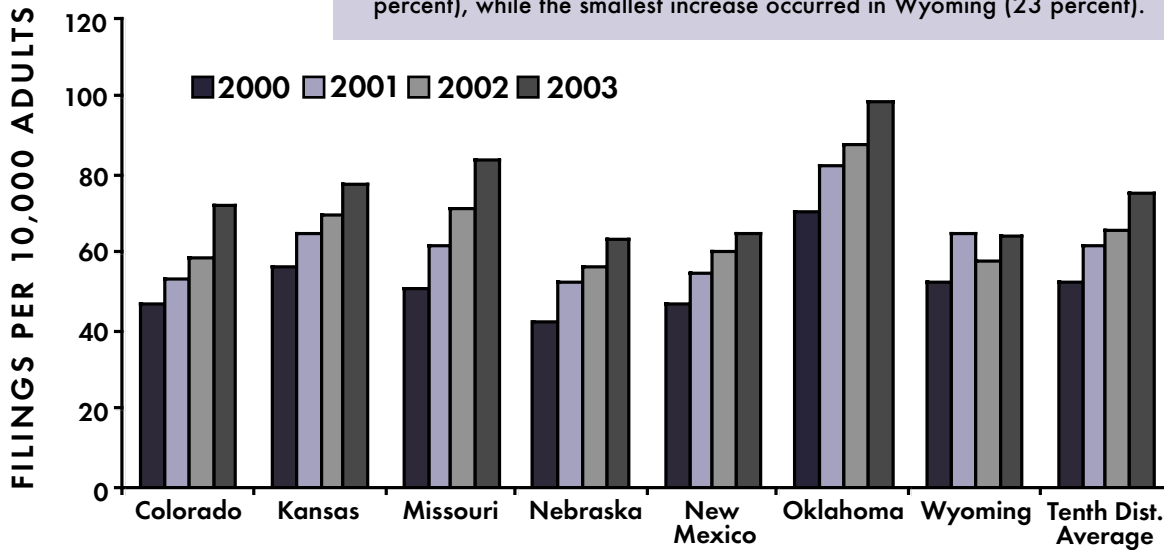
A second way to measure the role of stigma is to include a set of variables representing adherence to various religious groups, with the assumption that different religions have different views on the acceptability of defaulting on debt payments and filing for bankruptcy. The Community Affairs analysis shows that bankruptcy filing rates differ among various religious affiliations, a further indication that social stigma is an important factor in bankruptcy filings.

Numerous other variables were included in the analysis. The proximity of legalized gambling was studied, and is discussed in the sidebar to the left. Demographic variables such as age, race and education level play an important role in explaining differences in bankruptcy filing rates across counties, as does the share of the population that is disabled and the share of the population that is on public assistance. Filing rates also increase with the proportion of the population that does not have health insurance.

Results also indicate that the greater the

## TENTH DISTRICT BANKRUPTCY FILING RATES, 2000 - 2003

AMONG TENTH DISTRICT STATES, Oklahoma consistently had the highest filing rates from 2000 to 2003 while Nebraska had the lowest. The Tenth District portion of Missouri exhibited the greatest increase in the filing rate during the period (61 percent), while the smallest increase occurred in Wyoming (23 percent).



share of the population that is married, and even more so the share that is divorced, is associated with higher bankruptcy filing rates, relative to the share of the population that has never been married. Unsurprisingly, average total debt relative to average income and an index of past due bills for the average person in a county is associated with higher filing rates. Finally, the more vehicles that are owned and the greater the percentage of debt appropriated to autos for the average person, the greater the county bankruptcy filing rate. Greater housing costs also are associated with greater filing rates, but high owner occupancy rates lead to lower filing rates.

### A new era in bankruptcy

The new bankruptcy law likely will have some effect on filing rates by curbing abuses and forcing more petitioners into a reorganization plan that requires them to pay part of their debts. The Community Affairs study suggests that exemption and garnishment laws also should be evaluated to ensure that consumers are offered some protection and a fresh start without being given too much incentive to engage in risky financial behavior that may lead to bankruptcy.

But efforts to change consumer behavior through education likely will have the greatest impact, as many of the factors shown to affect

bankruptcy filing rates, such as gambling, debt composition, home ownership, and prompt payment of bills, are reflections of financial decisions, and good decisions require considerable knowledge.

Congress recognized this in the new law, which also requires that bankruptcy petitioners see a credit counselor before filing for bankruptcy and take a personal finance course before being granted discharge from debts. With this in mind, the Community Affairs Department of the Federal Reserve Bank of Kansas City currently is undertaking a related study designed to evaluate the efficacy of personal finance courses in changing financial behavior.

T

## FURTHER RESOURCES

NEW INSIGHTS IN THE DETERMINANTS OF REGIONAL VARIATION IN PERSONAL BANKRUPTCY FILING RATES

[www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).





**BY ZHU WANG, ECONOMIST**

**W**hat a difference a decade makes. When Security First Network Bank, the first Internet-only bank, started its service in 1995, online banking was a brand new concept that few consumers had ever heard of. Ten years later, online banking has become an indispensable part of average American life. Now, about 40 million U.S. households actively use their online bank accounts by checking balances, paying bills or transferring funds. The Internet has dramatically transformed consumers' banking experience.

However, implementing this banking innovation was not a smooth and painless process for the banking industry. The Internet-only banks that pioneered the

adoption and development of this new technology did not fare well despite their early success. Before 2000, about 50 dot-com banks had entered the industry and were generating great market value. However, as the graph on page 24 illustrates, by 2003, their stock price index dropped by 80 percent from the peak, and nearly half of them exited, either by being sold, closed or declaring bankruptcy.

### **Motivation**

The shakeout of Internet-only banks was not at all an isolated phenomenon, but part of a broader picture of the dot-com boom/bust cycle. As Internet technology became commercially available in the middle of the 1990s, a huge

wave of dot-com firms that conducted their business exclusively online entered the market. During a short period in the late 1990s, about 7,000 to 10,000 new substantial dot-com companies were established. However, by 2003, nearly 5,000 of them exited, of which about 4,000 were sold and 1,000 closed or declared bankruptcy. From peak to bottom, the Dow Jones Internet stock index plummeted by 93 percent and the Nasdaq composite lost 78 percent of its value.

What can explain the striking market turbulence of dot-coms in general and the shakeout of dot-com banks, specifically? It might be tempting to suggest market irrationality—a financial bubble. But even if a bubble did exist, it still remains a mystery what changes of real fundamentals, if any, could have induced the bubble to form and burst in the first place. Finding a deeper answer to this question may provide insight to industry executives in dealing with technology innovation and market turbulence in the future.

### The trajectory of innovation

To better understand the rise and fall of dot-coms, the key is to look into the nature of Internet innovation and the resulting dynamic competition among firms of different types in the market, in particular, online pure-plays, firms that do business purely on the Internet, versus traditional brick-and-mortar firms.

It may be hypothesized that when the Internet initially arrived, new dot-com firms found it profitable to enter the market to compete with the incumbent brick-and-mortar firms. Their entry was especially facilitated by the lower entry cost associated with the online technology. That may explain the early entry and early success of dot-coms.

However, the incumbent firms also had the option to get online. If the Internet turned out to be complementary to existing brick-and-mortar technology, the dot-coms would eventually lose their advantage. That may explain the dot-coms' later exits.

Moreover, it took time for Internet innovation to diffuse among incumbent firms. Before many brick-and-mortar firms could successfully

turn themselves into click-and-mortar, there was room for dot-coms to thrive. However, as more and more incumbents went online, less and less room was left for dot-coms to survive. That may explain why the shakeout eventually started.

During this dynamic process of industry evolution, the share of online sales to total sales kept rising, while the share of dot-coms kept falling.

In the early days of e-commerce, the market was excited about the potential competitive advantages that Internet firms had over traditional ones. By eliminating its physical operations, the pure-plays could lower substantially the cost of entry into the market. Internet firms enjoyed further advantages, including access to wider markets, lower inventory costs, ability to bypass intermediaries, lower menu costs enabling more rapid response to market changes, ease of bundling complementary products, ease of offering 24/7 access, and so on.

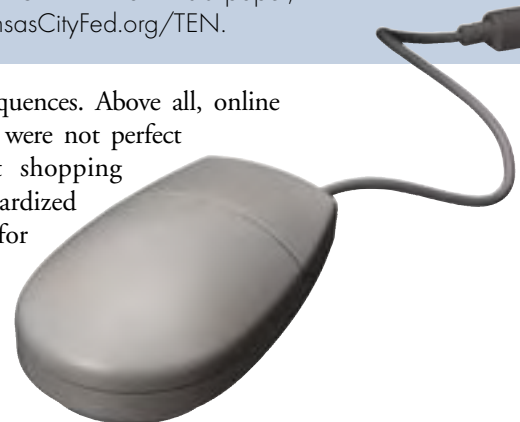
However, the market experienced that eschewing physical space for cyberspace did not

## FURTHER RESEARCH

Zhu Wang's full paper, "Technology Innovation and Market Turbulence: A Dot-com Example" explains market turbulence as industry dynamics triggered by technology innovation. When a major technology innovation arrives, a wave of new firms implement the innovation and enter the market. If the innovation complements existing technology, some new entrants will be forced out as incumbent firms adopt the innovation. It is shown that the diffusion of Internet technology among traditional brick-and-mortar firms is indeed the driving force behind the rise and fall of dot-coms and the growth of e-commerce.

TO READ THE FULL TEXT of Zhu's paper, go to [www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN).

come without consequences. Above all, online and offline channels were not perfect substitutes. Internet shopping fits better with standardized goods and services, for instance, buying books, which do



not require personal contact with the item or a large physical shopping space. Conversely, it fits less well for the category of “experience” goods and services, such as clothing, where customers need first-hand experience with the item. Also, Internet firms incur extra costs by running high-tech systems that require a more expensive labor force and by offering additional physical delivery channels.

Most important, click-and-mortar firms create a multichannel enterprise that is greater than the sum of the individual channels because they have great sources of synergy across the online and offline channels. The sources include common infrastructures, common operations, common marketing, and common customers.

An example of the use of a common infrastructure is when a firm relies on the same

others that can enable them to take better advantage of an innovation like e-commerce.

Eventually, traditional firms were able to capitalize on these synergies between their existing and new online service delivery channels to beat the dot-coms at their own game.

## Banking on dot-coms

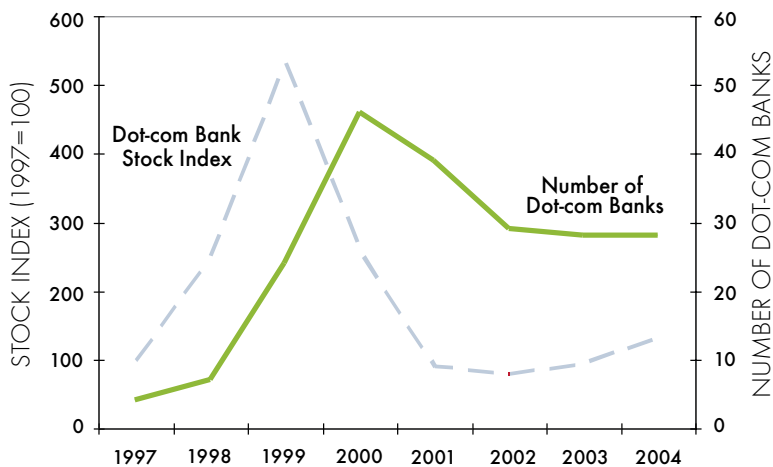
As suggested, the key to explaining the dot-com shakeout in the banking industry is to compare the competitive positions of pure Internet banks against their competitors with brick-and-mortar branches. Similar to other e-commerce industries, the core strategy of an Internet-only banking model is to reduce overhead expenses by eliminating the physical branch channel. However, it turns out that the online channel is not a perfect substitute for the branch channel, but rather, a good complement. The number of ATMs or brick-and-mortar offices per bank actually has been increasing since the mid-1990s, together with the increasing adoption of online banking.

Exploring the synergy between online and offline channels reveals that a click-and-mortar bank typically delivers standardized, low-value-added transactions such as bill payments, balance inquiries, account transfers and credit card lending through the inexpensive Internet channel, while delivering specialized, high-value-added transactions such as small business lending, personal trust services and investment banking through the more expensive branch channel. By providing more service options

to its customers, a click-and-mortar bank is able to retain its most profitable customers and generate more revenue from cross-selling.

A study by the Federal Reserve Bank of Chicago compared the performance between Internet-only full-service banks and their branching counterparts from 1997 to 2001. The results show that Internet-only banks, on average, had a lower asset return. That is because of their lower interest margins and fee income, lower levels of loan and deposit generation, lower business loans, and higher noninterest expense

## STOCK INDEX AND NUMBER OF DOT-COM BANKS



logistics system or shares the same IT infrastructure for both online and offline sales. An order processing system shared between e-commerce and physical channels is a good example of a common operation. This can enable, for example, improved tracking of customers' movements.

These various synergy sources are represented in the many forms of complementary assets that click-and-mortar firms possess, such as existing supplier and distributor relationships, experience in the market, a customer base, and



on equipment and skilled labor.

As more and more banks go online, the competitive pressure in the online banking market has surely increased. According to data collected by federal banking regulators, 75 percent of depository institutions have adopted a website in 2004 compared to 35 percent in 1999, and 60 percent reported websites with transaction capability in 2004 compared to 37 percent in 2000. Even more important, the online technology gap between Internet banks and traditional banks also has been closing. Based on the research conducted by GomexPro, six Internet banks ranked among the top ten for the "Best Online Banking Service" in 1999, but the number dropped to two in 2001, then to one in 2003.

Consequently, online-only banks have lost market share to their multichannel competitors. As the table to the right reveals, the number of unique visitors to multichannel banks climbed from 6.4 million in July 2000 to 13.4 million in July 2001, while the traffic to online-only banks fell from 1.2 million to 1.1 million. In the meantime, the shakeout of online-only banks started in 2000, with the number declining from around 50 in 2000 to less than 30 in 2003.

Security First Network Bank, the first dot-com bank, was one of the casualties. Acquired by Royal Bank of Canada in 1998, its Internet operations were discontinued in 2002, and Internet transaction accounts were sold to RBC Centura Bank. Other dot-com survivors have generally adjusted their strategies, trying to avoid head-on competition with big click-and-mortars. For example, ING Direct, the largest dot-com bank today, offers services on saving accounts but not checking, and encourages their customers to keep their old bank accounts.

## Final thoughts

As discussed, the dot-com shakeout can be explained as equilibrium industry dynamics triggered by the Internet innovation that is complementary to the old brick-and-mortar technology.

## TRAFFIC TO BANKING SITES HOME & WORK USERS

	July 2000	July 2001	% Change
<b>Total Websites</b>	76.9 million	92.2 million	19.8%
<b>Banking Sites</b>	10.4 million	18.5 million	77.6%
<b>Multichannel Banking</b>	6.4 million	13.4 million	110.5%
<b>Online-Only Banking</b>	1.2 million	1.1 million	-8.1%
<b>MULTICHANNEL BANKS</b>			
<b>Chase</b>	957,000	3.7 million	281.1%
<b>Wells Fargo</b>	2 million	3.5 million	74%
<b>Citibank</b>	1.7 million	3.5 million	101.9%
<b>Bank of America</b>	1.5 million	3.3 million	119.4%
<b>Bank One</b>	536,000	1.1 million	112.5%
<b>Fleet</b>	501,000	900,000	79.6%
<b>ONLINE-ONLY BANKS</b>			
<b>Netbank</b>	688,000	461,000	-33%
<b>Juniper</b>	N/A	382,000	N/A
<b>E*Trade Bank</b>	359,000	238,000	-33.7%
<b>Wingspan Bank</b>	282,000	closed	N/A
<b>SOURCE: Juniper Media Metrix</b>			

In a market impacted by a significant technology innovation, the shakeout of new entrants tends to occur if the following conditions are met: (1) the innovation creates some advantages for pure-play entrants (e.g. low entry cost and/or low operation cost); (2) the innovation is complementary to existing technology; and (3) it takes time for the innovation to diffuse among incumbents using traditional technology.

Empirical evidence reveals that those are indeed the features of e-commerce in general and online banking in specific. Therefore, the dot-com shakeout would occur even without any market uncertainty or irrationality, though those factors also probably played a role in this process.

Nowadays, consumers may see how seamlessly the Internet has integrated itself into the economy, but they may also want to give some thought to how market forces have found their way through the turbulence to make all this happen.

Senior writer Toni Lapp contributed to this report.

**T**

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).



## HARRY TRUMAN'S OFFICE

The Federal Reserve Bank of Kansas City is currently in the process of constructing a new headquarters that will allow the Bank to consolidate into a single location offices currently spread across three separate downtown Kansas City buildings.

For several years, the Bank's staff and operations have been simply too large to be located in the single building at 925 Grand Blvd., but that was not always the case. In fact, when the Bank opened its then-new headquarters in November 1921, there was enough unused space in the building that the Bank leased offices to outside tenants. Among the many tenants over the years was the nation's 33rd president, a man whose Bank office may have been appropriate considering his well-known motto: The Buck Stops Here.

### Truman stops here

Although Harry Truman would eventually

have an office at the Truman Library in Independence, his first post-White House office was in the Federal Reserve Bank of Kansas City.

After eight years with staff members eager to meet his every need, the former president came back to the Kansas City area eager to start doing things for himself—including getting himself to work.

Truman's arrival at the Bank for his first day in the new office was recounted in a 1970 oral history interview of reporter Robert G. Nixon by the Truman Library.

"The morning after (Truman's) return to Independence, he got into his open car and drove the 15 miles or so into Kansas City. He parked his car in a parking lot adjacent to the Federal Reserve Building and walked across the street to the entrance where I was waiting," Nixon said.

Truman was accompanied by a Secret Service agent. Nixon, an International News Service correspondent who had covered the

Truman White House, joined the men as they walked into the Bank and took the elevator up to Truman's new office in the southwest corner of the 11th floor.

"The Secret Service agent was a few steps ahead, and, as usual, he started to open the door. The president said, in a loud voice, 'Please, wait. Let me open my own door. This is the first time in eight years that I have been able to open my own door, and I'm going to do it now.' The Secret Service agent smiled and drew back. The president swung the door open, with a big, broad smile on his face, and we all trooped into his office," Nixon said.

As one of the building's many tenants, Truman was spotted regularly by Bank employees. Although he would often have lunch at downtown Kansas City locations including the Kansas City Club and the Muehlebach Hotel, he did visit the Bank's cafeteria from time to time.

"On occasion he would come up to the dining room and have lunch," said Wil Billington, retired executive vice president who joined the Bank in 1952, shortly before Truman's arrival here the following year. "It was interesting to chat with him. The decisiveness you hear people talk about was clearly there."

Although Billington, an economist, was able to talk with Truman about business and the economy, it is the more personal discussions that he recalls today.

"He was always upset about the reporters chastising his daughter for her musical performances," Billington said. "Things like that."

This more personal side of Truman was noted by others who met with the former president in what was then office 1107, one of four offices leased by Truman and his staff.

Philip C. Brooks, the first director of the Truman Library, had his first meeting with Truman in the Bank office. Brooks recounted the experience while he was conducting a 1964 oral history interview.

Brooks said he was expecting a formal introduction as he waited in a reception room outside Truman's office.

"Pretty soon, as was normal—but I did

not know it was normal—instead of being ushered into the august presence of the former president, Mr. Truman came walking out into that outer lobby with a smile on his face, and shook hands," Brooks said.

Truman was on his way to get some of his daughter's items out of storage and asked Brooks to come along. The two men left the building and began walking to another downtown location.

"This was the first experience I had had of walking with him on the street and having just odd people along the street say 'Hello, Harry,' and 'How are you, Harry,' and just shake hands. It was quite an experience."

---

**HARRY TRUMAN** sitting at the desk in his office at the Federal Reserve Bank of Kansas City.

---





## The job of a former president

Although Truman had time for personal greetings and his well-known public walks—he once said a daily two-mile walk before breakfast was the key to a long life—the former President certainly was not living the life of a leisurely retiree.

“He would have been reporting to work there (at the Bank) probably six days a week when he was in town,” said Ray Geselbracht, special assistant to the director at the Truman Presidential Museum and Library.

During the period of 1953 until the completion of the Truman Library in 1957, Geselbracht said Truman’s days included the activities expected for a former president: there are photos of him meeting with reporters and other visitors; he was active in campaigning for his party’s candidates and was busy responding to the numerous letters he received.

“He was meticulous about answering his correspondence,” Geselbracht said. “I don’t know that he let many letters go by unanswered.”

But much of Truman’s time at his Bank of-

## FIRST TRUMAN MEDAL FOR ECONOMIC POLICY PRESENTED TO GREENSPAN



Alan Greenspan was presented the first Truman Medal for Economic Policy at an October luncheon in Kansas City.

The award was established by the Harry S. Truman Library Institute to provide a forum for recognizing exceptional economic policy contributions.

The award’s name reflects on the creation of the Council of Economic Advisers (CEA) under President Truman. The Employment Act of 1946 established the

CEA to provide the president analysis and advice related to national and international economic policy issues.

Greenspan was presented the award for his long and distinguished career in public service and his extraordinary contributions to the formation of economic policy. In addition to his more-than-18-

year tenure as chairman of the Board of Governors of the Federal Reserve, Greenspan was recognized for his service as chairman of President Ford’s Council of Economic Advisers and chairman of the National Commission on Social Security Reform.

The Truman Medal will be presented every two years, with recipients selected by the Truman Medal organizing committee: The Harry S. Truman Library Institute; The Henry W. Bloch School of Business and Public Administration at the University of Missouri-Kansas City; The Economic Club of Kansas City; and the Missouri Council on Economic Education.



office was spent working on his memoirs. Volume one, "Year of Decision," was published in 1955 while "Years of Trial and Hope" was published the following year.

Truman also was busy planning for the Truman Library.

Tom L. Evans, a Kansas City businessman, talked about early Library planning in a 1963 oral history interview with the Library.

According to a transcript of the interview, a group of Kansas City residents were working on plans to build the Truman Library on the campus of what was then known as the University of Kansas City—today, the University of Missouri, Kansas City. Supporters had picked a location along Rockhill Road, a location that Evans said in the transcript "couldn't have been a more beautiful spot."

A long-time friend of Truman's who often had lunch with the former president as a way of helping him adapt to the nuances of civilian life, Evans took Truman to the campus for a look at the site.

"He wasn't very enthused; in fact, he wasn't enthused at all," Evans said.

Evans finally asked Truman about the site and the former president said he would prefer to locate the Library in Independence.

When asked why he had not previously mentioned Independence as a site for the Library, Truman told Evans that he "didn't want to cause any trouble."

The former president had initially hoped to locate the Library on his family farm, but when that plan proved unfeasible, supporters began the push for the Rockhill Road location. The conversation with Evans may have been Truman's first opportunity to suggest Independence as the Library's site.

Evans contacted Independence city officials, who started a process that eventually resulted in the city transferring title to what was then called Slover Park, along with some neighboring properties, over to the Truman Library.

Truman broke ground on the privately funded Library in the spring of 1955. He moved out of his office at the Bank, and into the Truman Library in 1957.

---

**TRUMAN AT HIS DESK** during rehearsal for his appearance on a Ford Foundation television program.

---



Although his former office at the Bank has been remodeled numerous times over the years, Truman's connection to the Federal Reserve Bank of Kansas City continues to this day. The nearly 500-piece Truman coin collection, featuring coins minted under each president since George Washington, is on loan to the Bank from the Truman Library and is on public display. The Bank's connection with Truman will continue when the Bank moves to its new headquarters where the coin collection will be featured prominently in the lobby.

**T**

---

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).

## Bank establishes new division, branch structure

The Federal Reserve Bank of Kansas City recently announced the promotion of two economists to the newly formed positions of branch executive at the Bank's Denver and Oklahoma City Branches.

Michael Orlando, formerly a senior economist in the Bank's Economic Research Department, was promoted to vice president and Denver branch executive while Chad Wilkerson, formerly a policy economist in the Bank's Economic Research Department, was promoted to assistant vice president and Oklahoma City branch executive.

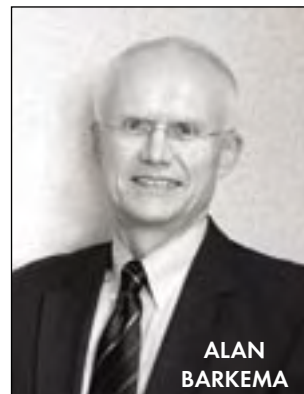
Both report to Alan D. Barkema, who was recently promoted to senior vice president over the Bank's Division of Regional, Public and Community Affairs. Barkema was previously the Tenth District's Community Affairs Officer.

Orlando joined the Bank in 2000 as an economist and was promoted to his senior economist position in 2004. His research covers a wide range of topics on the organization and behavior of industry, including the energy industry, research and development, and corporate governance. He holds a bachelor's degree in Petroleum and Natural Gas Engineering from Pennsylvania State University, an M.B.A. from Tulane, and master's and Ph.D. degrees in economics from Washington University in St. Louis.

Wilkerson joined the Bank in 1998 as a research associate and was promoted to policy

economist in 2002. His research has focused on the Tenth District's regional economy, particularly in the area of regional and local labor markets. Wilkerson has a bachelor's degree in Institutions & Policy from William Jewell College and a master's degree in Public Policy Studies from the University of Chicago.

Assuming Barkema's role as the Tenth District's community affairs officer is Paul Coquillet, who moves from his role as assistant vice president in the Bank's Consumer Affairs Department. Community Affairs specifically focuses on community development issues within the District, sponsoring economic and financial education activities and programs as well as conducting research and sponsoring forums and conferences. Coquillet has been with the Bank since 1979, and had served since 1995 with the Consumer Affairs Department.



## Board Chairman and Deputy Chairman named for 2006

Robert A. Funk, Chairman of the Board and CEO, Express Personnel Services International, Oklahoma City, was renamed chairman of the Federal Reserve Bank of Kansas City's Board of Directors for 2006. Lu M. Cordova, Chairman, CTEK Angels, Denver, was named deputy chairman.

Reserve Bank directors meet monthly to oversee the Bank's operations and policies, and to confer on economic and banking developments. The Board includes nine



directors, six of whom are elected by member banks in the seven states of the Tenth Federal Reserve District. The remaining three directors are appointed by the Board of Governors of the Federal Reserve System to represent the general public.



*Bank Anniversaries*

*Banks Marking Milestones (years) as Federal Reserve Members*

STATE BANK	Winfield	KS	87
CO. BANK & TRUST OF LA JUNTA	La Junta	CO	81
LUSK STATE BANK	Lusk	WY	71
ST. MARYS STATE BANK	Saint Marys	KS	69
STATE BANK OF NEW MEXICO	Taos	NM	67
COMMUNITY BANK & TRUST	Neosho	MO	63
BANK OF HOLDEN	Holden	MO	60
COLORADO MOUNTAIN BANK	Westcliffe	CO	26
BANK AT BROADMOOR	Colorado Springs	CO	25
FIRST STATE BANK	Wheatland	WY	24
ADAMS BANK & TRUST	Ogallala	NE	10
COMMUNITY STATE BANK	Poteau	OK	10
FIRST BANK & TRUST	Broken Bow	OK	5
GUARANTEE STATE BANK	Lawton	OK	5
LAMAR BANK & TRUST	Lamar	MO	5
TOWN & COUNTRY BANK	Ravenna	NE	5
BANK OF COMMERCE	Chanute	KS	1
BANK OF EUFAULA	Eufaula	OK	1
BANK OF PARSONS	Parsons	KS	1
CHETOPA STATE BANK & TRUST	Chetopa	KS	1
FIRST NEODESHA BANK	Neodesha	KS	1
FIRST STATE BANK THAYER	Thayer	KS	1
FIVE POINTS BANK OF HASTINGS	Hastings	NE	1
HOME STATE BANK	Erie	KS	1
THUNDER BANK	Sylvan Grove	KS	1
UNION STATE BANK	Everest	KS	1
UNITED BANK & TRUST	Marysville	KS	1

## Jackson Hole Symposium proceedings available

Copies of the proceedings from the Federal Reserve Bank of Kansas City's 29th annual economic symposium, "The Greenspan Era: Lessons for the Future," will be available free of charge beginning in February. Electronic versions of the individual papers and remarks are available on the Bank's website, [www.KansasCityFed.org](http://www.KansasCityFed.org).

Speakers at the event, which was featured in the Fall 2005 issue of *TEN*, were asked to examine Alan Greenspan's Chairmanship as a period of time and to identify keys to continued economic stability. The proceedings book includes the papers presented at the symposium, as well as the associated commentary and discussion.

The Bank has also published proceedings for the International Payments Policy Conference, "Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities?"

The books can be requested by e-mail at [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).

**T**

## FURTHER RESOURCES

THE EFFECT OF WEALTH AND OWNERSHIP ON FIRM PERFORMANCE

U.S. AGRICULTURAL CREDIT CONDITIONS: RISING ENERGY PRICES BOOST FARM COSTS

THE WEALTH OF REGIONS

INTERNET BANKING: AN EXPLORATION IN TECHNOLOGY DIFFUSION AND IMPACT

NETWORK COMPETITION AND MERCHANT DISCOUNT FEES

The Federal Reserve Bank of Kansas City research above is available at [www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).



# Tour<sup>the</sup> Fed



**Register online** for a  
tour of Federal Reserve offices in  
Kansas City, Denver, Oklahoma City  
and Omaha. Tours are available for  
business, civic, senior citizen,  
general public and school groups  
high school age and above. Tours  
include an overview of the Federal  
Reserve System, its functions,  
structure and history, as well as a  
glimpse of operations areas.

*For more information or to submit a tour reservation request, visit [www.KansasCityFed.org/tours](http://www.KansasCityFed.org/tours)*

## Online Resources

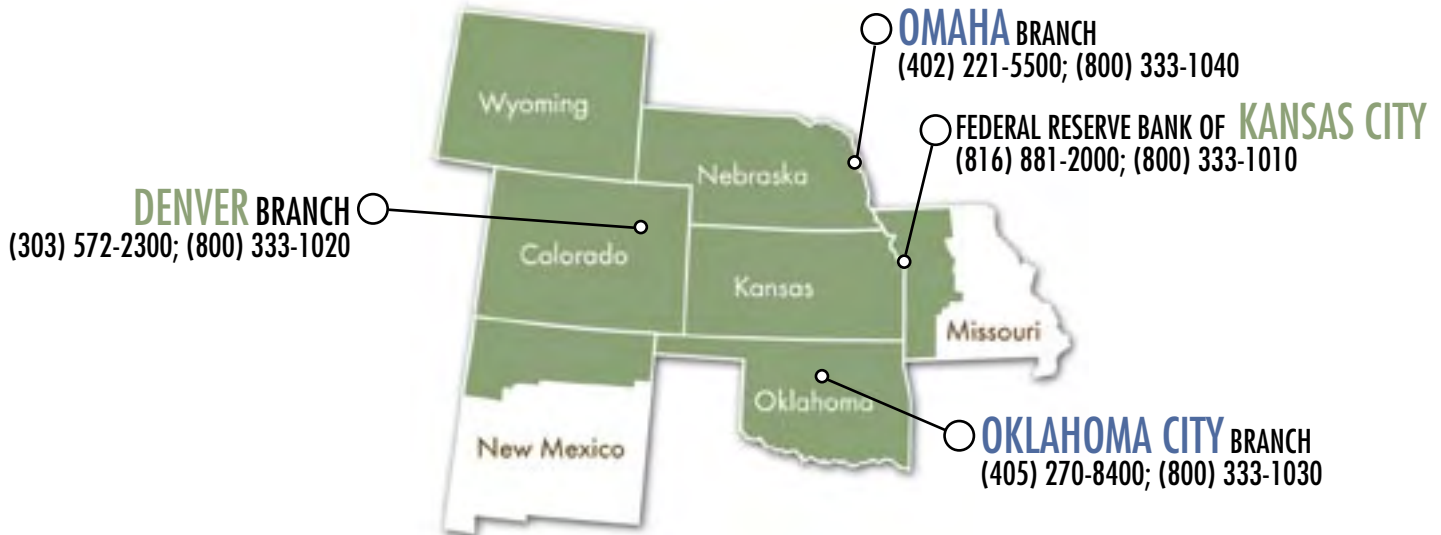
### THE BANK HAS A NUMBER OF ONLINE RESOURCES AVAILABLE ON BANKING AND ECONOMIC ISSUES:

BOARD OF GOVERNORS: [www.federalreserve.gov](http://www.federalreserve.gov)

FEDERAL RESERVE PUBLICATIONS: [www.newyorkfed.org/publications](http://www.newyorkfed.org/publications)

EDUCATOR AND STUDENT RESOURCES: [www.FederalReserveEducation.org](http://www.FederalReserveEducation.org)

# Fed directory



## WINTER 2006

VOLUME 1 • NUMBER 3 • ISSN 1554-7469

VICE PRESIDENT &  
PUBLIC INFORMATION OFFICER: Diane Raley  
PRODUCTION ADVISOR: Lowell Jones  
EDITOR: Timothy Todd  
MANAGING EDITOR Jim Saladin  
SENIOR WRITER: Toni Lapp  
ART DIRECTOR: Angela Anderson Miles  
MAGAZINE DESIGNER: Sabine Sonnenberg Polak  
COPY EDITOR: Sara Brunsvold  
CONTRIBUTORS: Kelly Edmiston, Kate Fisher,  
Eric Robbins, Zhu Wang

TEN is published quarterly by the Federal Reserve Bank of Kansas City. The views and opinions expressed in TEN are not necessarily those of the Federal Reserve Bank of Kansas City, the Federal Reserve System, its Governors, officers or representatives.

The Tenth Federal Reserve District includes western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico.

### To get a **FREE** subscription to

# TEN



## visit us online at

[www.KansasCityFed.org/TEN](http://www.KansasCityFed.org/TEN)

or call 816-881-2683





# STAY IN TOUCH



[www.KansasCityFed.org](http://www.KansasCityFed.org)

**SUBSCRIBE TO E-ALERTS FROM THE FEDERAL RESERVE BANK OF KANSAS CITY AND BE NOTIFIED OF THE LATEST DEVELOPMENTS IN:**

- Community Development
- Consumer Information
- Economic Research and Data
- Education
- Media Releases
- Payments System Research
- Services for Financial Institutions
- Supervision and Regulation

**BE NOTIFIED OF UPDATES TO KANSAS CITY FED PUBLICATIONS, INCLUDING:**

- *TEN*
- *Economic Review*
- *Financial Industry Perspectives*
- *Main Street Economist*

*Visit the Federal Reserve Bank of Kansas City*

Federal Reserve Bank of Kansas City  
925 Grand Boulevard  
Kansas City, MO 64198-0001

CHANGE SERVICE REQUESTED

PRESORTED STANDARD  
U.S. POSTAGE  
PAID  
CONSOLIDATED  
MAILING CORPORATION