TEN

FEDERAL RESERVE BANK OF KANSAS CITY

Summer 2015

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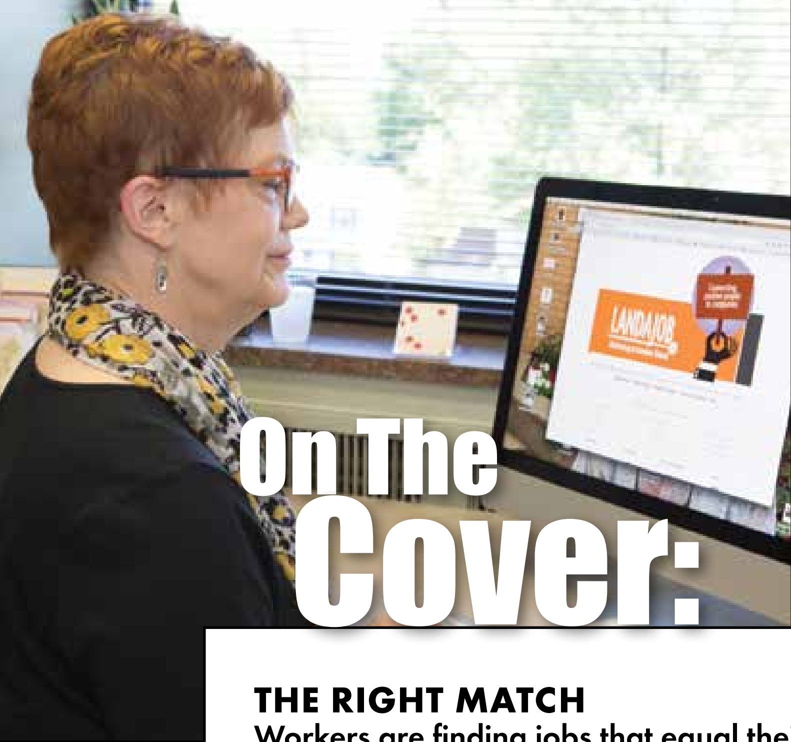
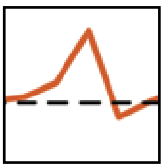


TEN

Summer 2015

On The Cover:

FEATURES



IN EVERY ISSUE

Five Simple Lessons from the Fed

Editors note: This message was adapted from a speech President George delivered May 9, 2015, at Missouri Western State University in St. Joseph, Mo.

President Robert Vartabedian, members of the university's board of governors, administration and faculty, distinguished guests, friends and proud families, and most of all, the Missouri Western State University Class of 2015: I am deeply honored to be here and to receive this honorary degree. As a graduate of this fine institution myself, it is a tremendous privilege to be addressing you today.

It is a proud year for Missouri Western and for you to be celebrating the school's centennial. A century ago, 35 students, the first class from this institution, each paid an annual tuition bill of $40 and enrolled in classes taught by eight faculty members. Like you, they faced an uncertain future at home and abroad. Overseas, Europe was involved in a war, and the United States was undergoing a time of incredible change, both economically and politically. For decades, most jobs in the United States were on the farm. But, work in the United States was shifting from an agricultural focus to a more urban and industrialized system, thanks to innovations such as Henry Ford's introduction of the assembly line in 1913.

Technology was advancing at a rapid pace, offering opportunities to those ambitious enough to take them. Innovation wasn't limited to business, however. In the political realm, the Progressive movement led to the formation of new institutions, like the Federal Reserve, and numerous other reforms related to workplace safety, fair competition and women's right to vote.

It was an era marked by big ideas, and new colleges and universities, such as this one, sprung up and flourished across the country. One-hundred years ago, Woodrow Wilson, who had previously led a university, was the president. He had earlier reminded a graduating class at Swarthmore College: "You are not here merely to make a living. You are here in order to enable the world to live more amply, with greater vision, with a finer spirit of hope and achievement. You are here to enrich the world, and you impoverish yourself if you forget the errand."

If I stopped now, you might have heard my best advice. But I am charged with postponing the receipt of your diploma for a few more minutes, so I'll continue.

Much has changed since Wilson spoke to those students, but you probably share many of the concerns about the future that they had. There continues to be tension in many parts of the world, and the economy is facing another period of rapid change, driven by improvements in technology and the creation of new types of jobs that didn't exist a few years ago. As the economy shifted a century ago from an agricultural one to an industrial focus, it is now undergoing another transition led by advances in technology and communication.

There have been many changes over the past 100 years at Missouri Western as well. This institution now has an enrollment of more than 5,600 students and a campus that includes dozens of buildings. And I think it's fair to say that your annual tuition bill has

been more than the $40 those 35 students paid in 1915.

But, Woodrow Wilson's admonishment to college students a century ago remains sound and it rings true even today: "You are not here merely to make a living. … You are here to enrich the world." Those are profound and inspiring words, and they represent a call to action and purpose. But the reality is that after four years of college, you might well be sitting there thinking, "What's wrong with wanting to make a living?" It's a fair question.

Thirty-five years ago, like you, I wore the traditional mortarboard and gown while I sat in a metal folding chair with great anticipation. There were no more finals, and I was looking forward to a paycheck and moving into my own place. I was completely focused on making a living. I was waiting for the world to enrich me.

Within two years of graduation from Missouri Western, with a degree from the business school, I had a job and a husband. My first job ended after 18 months. Fortunately, my marriage has lasted longer—30 years and counting. I went to work in 1982 for the Federal Reserve as a bank examiner. In 2011, I was selected to be the Bank's president and chief executive officer.

New employees often ask me about my career path at the Fed and whether I knew early on that I wanted to be the president of a Federal Reserve Bank. I didn't. I had neither a master plan nor a carefully constructed series of strategic moves to reach the position I'm in today. The truth is, I was focused on making a living.

Don't get me wrong. My work at the Federal Reserve was not mundane. I worked hard and found the work meaningful and challenging. And each assignment became the rung to the next one.

But it was my first job at the Fed as a bank examiner trainee that left the biggest impression on me. As a bank examiner, your job is to identify risks and to explain them clearly to a banker and to your boss. Being curious and asking the right questions turned out to be more important than having all the answers. Sometimes the banker disagreed with your judgments and was unhappy with the outcomes of the exam. Sometimes the bank failed and the owners lost everything. That's not easy when you're 24-years-old and sitting across the desk from someone with three decades or more of experience. And so you learn to do your homework and to think hard about the consequences and to listen carefully to make sure you understood. You had to rely

on other members of the exam team—each contributed to some part of the exam with different expertise and experience. Sometimes you'd work all day to analyze an issue and were sure you had it nailed, only to get some new piece of information the next morning that made you rethink your conclusions.

Those experiences have continued to shape my perspective as a leader and as a policymaker. As president of the Kansas City Fed, I serve as a member of the Federal Open Market Committee. Every six to eight weeks, this committee meets to make decisions about interest rates. The room where these meetings take place in Washington, D.C., is stately—even intimidating. There is an oval-shaped mahogany table that can seat more than 20 people. Instead of sitting across the desk from a banker, I find myself sitting across the table from the Federal Reserve chairman.

For more than 100 years, others have been seated there to make decisions that affect the nation's economy. These decisions are expected to be independent, thoughtful and well informed, because they affect the lives of every American.

So, I'd like to close by condensing my bank examiner experience into five simple lessons that have served me well for many years. And as you go out to make a living, you might consider them:

1) Be prepared: There really are no shortcuts to doing your best. Few people can successfully wing it. Most of us have to spend time and make sacrifices to be prepared for that interview, completing a job assignment, earning a raise. Life is a test, but that preparation arms you with knowledge and gives you confidence.

2) Be flexible: Things won't always go as planned. And sometimes, we build plans that can fall apart. If you can learn to accept that life is full of change and unpredictability, you'll adapt and cope.

3) Be brave: You will have to make choices of consequence. It is not always clear what the right answer is, but make sure you are asking the right questions.

4) Be humble: Regardless of how confident you may be, you are not always right. Listen carefully to others. You might learn something.

5) Be grateful: Everyday someone is doing work that makes your job easier, safer and less stressful. Look around you today—I suspect some of those people are right here.

And so, as you cross this stage today and accept your diploma, enjoy your feeling of accomplishment. In the days ahead, remember: Your degree does not represent what you know but what you are capable of learning. If you keep that in mind, I'm confident you will do more than make a living. You will enrich the world.

Esther L George

ESTHER L. GEORGE, PRESIDENT
FEDERAL RESERVE BANK OF KANSAS CITY

MAKING A CONNECTION

REGIONAL FEDERAL RESERVE PRESIDENTS SERVE IN SEVERAL CAPACITIES, ONE OF WHICH IS A CONDUIT BETWEEN THEIR FEDERAL RESERVE DISTRICTS' COMMUNITIES AND THE NATION'S CENTRAL BANK. Presidents also use their expertise to help communities outside their district. In fulfillment of her role, Kansas City Fed President Esther George made recent visits to several communities.

Esther George speaks at the Vail Symposium, April 9, 2015, moderated by former Kansas City Fed Board Chairman Richard Bard.

Kelli Grant, CNBC online, interviewed George at the Council for Economic Education's Vantage Point Symposium at the Harvard Club, March 2015, in New York City.

George gave the keynote address at the Central Exchange in Kansas City earlier this year. George , right, is pictured with Cici Rojas, president and CEO of Central Exchange.

George spoke at the "Finance and Society," on May 6. Pictured with George from left to right: Catherine Rampell, columnist, Washington Post, and Kat Taylor, co-CEO, Beneficial State Bank.

George, right, is pictured with Pat "Duke" Dujakovich, president of the Greater Kansas City AFL-CIO and Labor Co-Chair of the Kansas City Labor-Management Council. George provided the keynote address April 16 at the Labor-Management Council's 2015 Anniversary Meeting.

PHOTO BY GARY BARBER

THE RIGHT MATCH

Workers are finding jobs that equal their education and training

More than 8 million Americans lost their jobs in the Great Recession, exacerbating a steady 30-year decline in middle-skill jobs and an increase in higher-skill and lower-skill jobs. The result? A dysfunctional mismatch of occupational opportunities.

Workers who saw their middle-skill occupations replaced by technology or shipped overseas sought lower-skill jobs, pushing out other qualified candidates and first-time workers. Although the number of high-skill jobs increased, the number of applicants exceeded openings, pushing many jobseekers into the few available middle-skill and lower-skill jobs. Employers who were hiring during the recovery had their pick of candidates as dozens if not hundreds of people applied for one opening.

This environment compelled some workers to drop out of the labor force, creating what economists describe as a shadow labor force—unemployed workers who neither sought new employment nor collected unemployment benefits, and economists remain unsure when or if these workers will return to the labor force full time.

The segment of the labor force ages 16 to 25 was most affected by the recession. Economists measured this segment as having the highest unemployment rate in the labor force, and nearly half of all recent college graduates were unemployed or underemployed.

Recent research, however, shows the labor market is changing course.

Improvement in the jobs market

Federal Reserve Bank of Kansas City economists Didem Tüzemen and Jonathan Willis say the job market is showing signs of significant improvement, especially within the last year.

Twelve million jobs have been added to private payrolls since the Great Recession and the unemployment rate has fallen from 10 percent to 5.5 percent for May. The first part of the recovery, 2010-11, saw an increase in middle-skill jobs, while high-skill and low-skill jobs growth remained below pre-recession levels. Then, as the recovery continued, 2012-15, there was strong growth in high-skill level jobs and moderate growth in middle-skill jobs. Low-skill-level jobs have yet to reach pre-recession levels.

LANDA WILLIAMS, founder and recruiter for LandaJob Marketing & Creative Talent in Kansas City.

Tüzemen and Willis used micro-level data from the Current Population Survey, also known as the household survey, to examine what types of jobs have been added during the recovery. They found "demand in the labor market over the last three years has been strongest for highly educated workers." Employment for workers with a bachelor's degree or higher has grown faster than workers with less education.

Still, overall employment is improving. Tüzemen and Willis found that over the past year "employment growth edged higher for workers with less than high school education and workers with some college education." There are also signs of improvement in workers finding employment aligned with their training and education.

"I would agree with that assessment," said Landa Williams, founder and recruiter for LandaJob Marketing & Creative Talent.

Williams founded Status Pro, a Kansas City recruitment firm for the advertising industry, in 1985, and formed LandaJob, a division of Status Pro, in 1992. Williams manages recruiting and business development for ad agencies, public relations firms, interactive and marketing-communications corporations.

When the recession took hold, companies cut back on training, marketing, advertising and communication campaigns. There was a lack of business confidence, similar to consumer confidence, Williams said.

"A lot of people got out of the industry. Some were lucky and had enough to retire on, but younger people went in different directions," she said.

In the past couple of years, business confidence has been on the upswing.

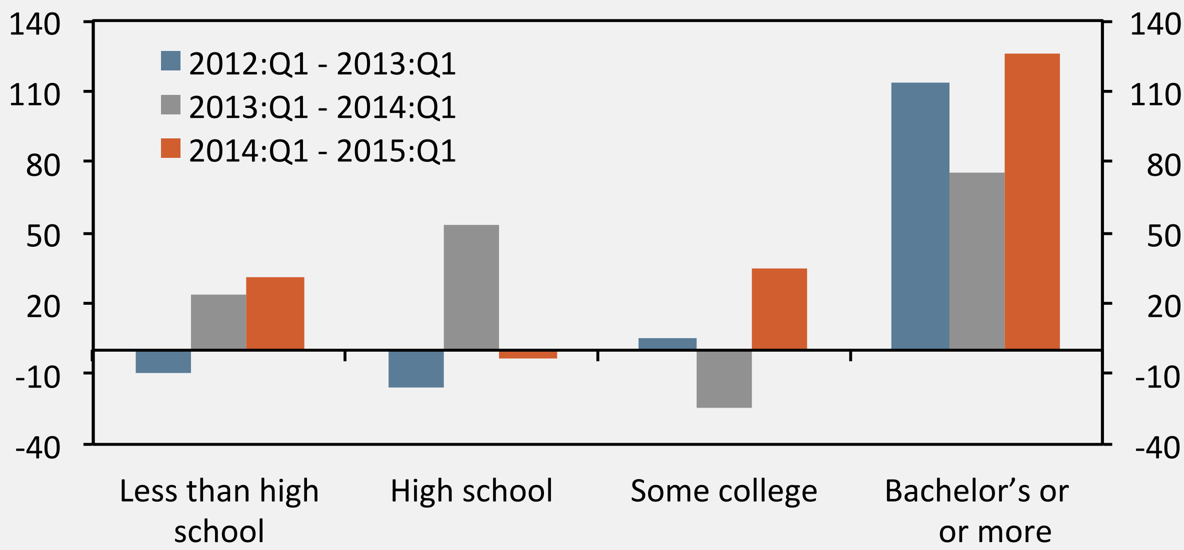
"Companies are opening up and hiring," Williams said. "Sometimes it's been two steps forward and two steps back, but it's definitely happening."

The upswing, however, has created a conundrum within the marketing-communication industry.

"Now when clients come to us they want people with three to five years of experience,"

AVERAGE MONTHLY EMPLOYMENT CHANGE

in thousands



Sources: Current Population Survey; Didem Tüzemen and Jonathan Willis

Williams said. "Because they weren't hiring and young people went elsewhere, we don't have anyone in that range. We have a lot of beginners and one-year people, and people with lots of experience, but not three to five."

The biggest improvement in the last year has been compensation.

"Compensation wasn't moving for the longest time, at all. It wouldn't budge," Williams said. "We are now seeing salaries ticking up because there is some real competition to hire the rock stars."

Many of the rock stars are recent college graduates.

"The millennials are something else," she said. "They work hard and they're serious, a lot more serious than our generation."

Williams says the younger generation's drive to succeed is a result of the recession and the amount of college debt students have when they enter the workforce full time. The latter part is a partial result of a 30-year labor market trend—many jobs in the market require a college degree.

> "A lot of people got out of the industry. Some were lucky and had enough to retire on, but younger people went in different directions."

Before the Great Recession

Tüzemen and Willis say the U.S. labor force in the past three decades has shifted away from middle-skill occupations. Technological advancements and the use of computers in the workplace have led to an increase in high-skill occupations. Similarly, the labor market has been affected by a shift toward low-skill occupations associated with growth in the service industry.

They call this shift "job polarization."

Tüzemen and Willis used data from the household survey to study the labor force from 1983 to 2012. They chose this period because job classifications matched in all the years studied, unlike job classifications in the 1960s and 1970s.

They classify middle-skill jobs as occupations that require workers to perform routine tasks and can be replaced or enhanced by technology, occupations such as production, sales, office and administrative. High-skill jobs include occupations that involve nonroutine tasks and a high level of education, such as medicine, engineering, education, management, finance and legal. Low-skill jobs include occupations where technology cannot easily replace humans, but the work doesn't require a high level of education. These include food preparation, cleaning and other physical labor.

The economists say occupational shifts within each industry, not just one industry, caused job polarization. Reasons for the occupational shifts included a decline in labor unions and growth in the global marketplace. These influences and others increased trade flows and the shipment of middle-skill jobs overseas where labor costs are cheaper.

"The large shift in employment away from manufacturing reduced the overall employment share of workers in middle-skill occupations, but this was partially offset as workers moved to middle-skill occupations in expanding industries such as education and health," the economists explain.

Despite job polarization, the U.S. labor market has grown nearly 50 percent in the last 30 years.

TAWANA FREESE was fortunate to stay with the same company throughout the financial crisis and recovery. She knew, however, that if she wanted to reach her career goals in today's jobs market, she would need a college degree. She graduated this June.

Recession temporarily halts shift

The Great Recession caused many companies to either downsize or close. Others merged or sent operations overseas to weather the crisis. With fewer jobs available, many workers found themselves on the wrong side of the labor trend.

Today's workers tend to be more educated than in previous years. During the recession, there was an increased demand for older workers with higher levels of education. The demand prompted many baby boomers—the largest age segment of the labor force—to delay retirement and remain in their jobs longer. This delay reduced alternatives for younger workers and pushed them either into low-skill jobs or back in the classroom to obtain more education. Many experienced middle-skill workers were similarly affected—they lacked the qualifications to compete in the modern marketplace, causing them either to seek more training and education or accept jobs below their experience.

Another interesting trend emerged early in the recovery. Despite gains in the number of middle-skill jobs—the sector hit hardest in the recession—many workers found the labor market so unwelcoming that they remained unemployed and received extended unemployment benefits beyond normal cycles. Some older workers facing the prospect of unemployment took early retirement. Workers with full-time jobs stayed put and some even took pay cuts or moved into lower-paying positions within their companies to avoid being laid off and losing their company-provided benefits.

As the recovery continued, high-skill jobs began to show the most gains and the unemployment rate dropped. Low-skill occupations, however, remain stagnant and still struggle to reach pre-recession levels.

Preparing for the future

Tawana Freese, 43, saw the writing on the wall more than five years ago. Her data management group was being eliminated and she had limited job alternatives.

"I just started knocking on every door I could to stay within that company," she said.

Freese obtained a position as a project administrator for the company, which entailed more administrative duties than project management.

"I think I got the job because I was an internal candidate," she said. "I had on-the-job experience and it was probably more cost-effective to hire someone from within than train someone new, but the position did require a college degree, and I didn't have one."

The position gave Freese security and the time to evaluate her future. She knew if she wanted to advance further into today's labor environment and reach her goals, she would have to attend college.

"My biggest fear was I hadn't been back to school in so many years," she said.

She's also a single mother—meaning her family would have to make sacrifices. Although her older son helped take care of their Olathe, Kan., household, she still felt the toll it took on the family.

"It's tough being a single parent, working full time and trying to maintain a GPA," she said.

Freese reprioritized over the last year—making more time for family and letting her GPA fall slightly—but everything paid off. She graduated in June from the University of Phoenix with a bachelor's degree in psychology.

"It's sad because there are a lot of talented people who can do the work, but they aren't given the chance because they don't have the degree," she said. "With a college degree, I'm hoping my prospects are good."

After working 11 years for her current employer, Freese plans to seek a position as a psychology assistant. And she doesn't plan to stop there. She wants to earn a master's degree in industrial organizational psychology and eventually move into counseling.

"But I'm going to wait until my daughter graduates high school before getting my master's," she said.

"I hope at my age I'm able to find something and build a decent nest egg," she added.

Fortunately for Freese, the jobs market is much better than when she entered college.

According to Tüzemen and Willis, "employers continued to hire those with the greatest education levels for high-skill jobs;" however, workers with lower levels of education also have found opportunities in high-skill occupations.

Tüzemen and Willis's research also found that workers with a bachelor's degree no longer dominated growth in middle-skill jobs.

"In fact, workers with less than a high school education experienced the strongest growth in middle-skill jobs. Workers with a high school education shifted notably away from low-skill jobs toward middle- and high-skill jobs."

KEVIN WRIGHT, EDITOR

FURTHER RESOURCES

"Opportunity Knocks: Improved Matching of Jobs and Workers"
By Didem Tüzemen and Jonathan Willis
www.KansasCityFed.org/publications/research/mb

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.

CHANGING TIMES

Community bank mergers increase since the recession

A number of small and medium-size banks have voluntarily merged or consolidated operations since the Great Recession due to shrinking profit margins, tepid loan demand, low interest rates and the demand and cost of staying current with banking technology and regulations. These voluntary mergers have significantly reduced the number of community banks.

The decline, however, isn't necessarily a recent event; rather it is part of a 30-year trend. The number of U.S. banks has dropped from about 14,500 in the mid-1980s to 5,600 today. Recent research by Kansas City Fed economists indicates the decline happened for many reasons, "such as failures during periods of crisis, consolidation spurred by the relaxation of state-branching and national interstate banking restrictions, and voluntary mergers between unaffiliated banks."

Voluntary mergers

An analysis by Kansas City Fed economists found that since the end of the Great Recession voluntary mergers have been the primary reason for the decline in community banks. Even in the crisis periods of the late 1980s, early 1990s, and 2007-09, the number of mergers exceeded the number of failures every year.

Troy Davig, senior vice president and director of research, Charles S. Morris, vice president and economist, and Kristen Regehr, assistant economist, at the Federal Reserve Bank of Kansas City, and Michal Kowalik, a financial economist at the Federal Reserve Bank of Boston, studied bank mergers from 2011-14. They analyzed the financial characteristics of banks with assets of $1 billion or less that were acquired by an unaffiliated bank. They focused on community banks because mergers involving larger banks are rare, particularly banks with assets of more than $10 billion.

"For example, about 90 percent of the 1,500 mergers since 2007 involved a bank with less than $1 billion in assets," the economists explained.

The economists say the owners of acquired banks may have sought to exit the industry by selling their businesses, while acquiring banks may have looked for opportunities to expand. The acquired banks were generally smaller, less profitable, less efficient and in weaker condition—more susceptible to future financial problems—than nonacquired banks.

Acquiring banks can gain several benefits from mergers. Banks can expand their business and revenue quickly and reduce risk by diversifying asset portfolios, funding sources and fee-generating activities. Acquiring a bank that operates in different markets or business lines will often increase diversification. To reduce risk, however, the acquiring bank must have a strong understanding of the new market's characteristics and risks, along with expertise in new business lines. Otherwise, the risk of the combined institution could increase.

A stronger future

President and CEO Tom McGavran had put the State Bank of Delphos, Kan., up for sale last year.

"He felt the best option for the continuing of his bank was to sell it to another community bank, to merge with another bank that would have the same values and relationship-style banking that he has done," said, David Brownback, president and CEO of Citizens State Bank, which acquired State Bank of Delphos and merged operations in March.

"We are very similar banks," Brownback said. "We're relationship bankers. We're conservative, we're rural. We know rural county-seat banking; we're also ag banks."

DAVID BROWNBACK, president and CEO of Citizens State Bank of Ellsworth, Kan. His bank recently merged with State Bank of Delphos in Delphos, Kan.

The operational size of Citizens doubled when it acquired State Bank of Delphos' locations in Delphos, Minneapolis and Glasco. Citizens, based in Ellsworth, Kan., now has six offices in five communities. It's total assets grew from $120 million to more than $160 million.

Unlike many bank mergers, McGavran and his employees stayed on to manage and operate the former State Bank of Delphos locations.

"He's an outstanding banker and I've known him for many years," Brownback said of McGavran. "We will certainly use the expertise of his staff. They're very good bankers."

Brownback said it was an "ideal acquisition" for Citizens—helping grow its customer base and strengthening its future. The bank now has a presence in a four-county area in north central Kansas. The merger also is ideal for former State Bank of Delphos customers. Because of Citizens' size, it's able to offer its new acquired customers more services, such as fixed-rate residential real estate loans and trust services.

"They weren't able to offer that before the acquisition," Brownback said.

Overhead costs for community banks have increased in recent years due to technological advancements and new regulations.

"By growing we can spread that cost over a bigger base, so we can become more efficient as we grow," Brownback said. "I think there is a limit, but I think we haven't reached it."

Because there are fewer community banks, Brownback said, it may appear that banks are struggling, or worse, failing. When he was a bank examiner in the 1970s, there were more than 600 banks in Kansas. Today, there are more than 200.

"We are becoming more efficient, not weaker" he said. "We certainly have more locations than in 1977, and offer more services, especially with the improvements in technology, than ever before."

Changing times

Steven Burrus, senior vice president at American Heritage Bank, headquartered in Sapulpa, Okla., thinks the mergers represent a change in the community banking system, and more broadly, changes in rural Middle America.

"Many community banks had three generations of family who ran them, but now they don't have anyone who wants to take over," Burrus said. "It's just me talking, but the next generation doesn't always want to continue in the banking business. That fourth generation wants to be an architect in Minneapolis or a doctor in Chicago."

He says community bank mergers and consolidations reflect what's happening in many rural communities.

"I recently read about how small cities in western Kansas are considering consolidation because of the loss of population," he said.

The loss of population and businesses in rural communities makes it difficult for small community banks to provide services because the community can't generate the business necessary to stay viable.

"We see it as banks have to get to a certain size to remain viable, at least in my opinion, given the regulatory environment we're in," Burrus said.

Many small community banks can't afford full-time compliance officers and the staff needed to implement and comply with today's banking regulations, especially with the implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Burrus said.

The current low-rate interest environment also has made it difficult for smaller community banks, Burrus said. Although low interest rates can encourage consumer spending, such as purchases of automobiles and homes, it can discourage people from saving and investing long term. For community banks that rely on long- and short-term maturity, low interest rates shrink profit margins.

"There is so much more we have to do as bankers," Burrus said. "We had to get to a certain size to make it all work. Many smaller banks don't have the capital or the community to make it work."

American Heritage, headquartered southwest of Tulsa, merged with two banks in 2012—Osage Federal Bank and Cleveland Bank, both of Oklahoma—and acquired First National Bank in Pawhuska, Okla., in March.

By acquiring more banks, American Heritage can share expenses among the locations by consolidating certain operations, such as compliance, auditing and accounting. They also have strengthened other operational areas of the bank with the acquisitions, such as the formation of loan and data centers.

The mergers also helped American Heritage grow its services. For example, Osage Federal's niche was single-family residential home loans that it sold directly to Freddie Mac.

"It really gave us some skill sets and products we haven't offered before," Burrus said.

The mergers are central to American Heritage's business model, which is to provide community banking services to smaller communities.

"We believe in that banking model," Burrus said. "We're a $1 billion balance sheet, but we're not the large complex big bank in the big city making complex things happen."

But to make it work, American Heritage has to continue to grow. And for Burrus, if community banks don't remain strong, who will provide services to communities with smaller populations?

"What large bank is going to care about a small town's needs?" Burrus said. "Who's going to buy that bond for the public school?"

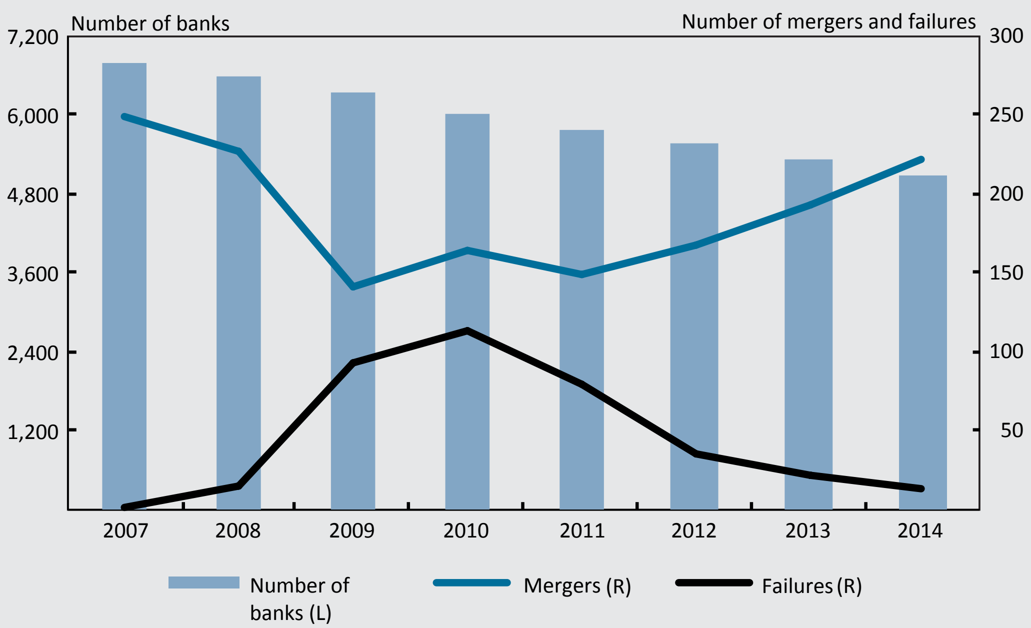
The consumer, the small businessman will find it difficult to live and prosper in rural communities, Burrus said.

"What's going to happen to small town America?" he added.

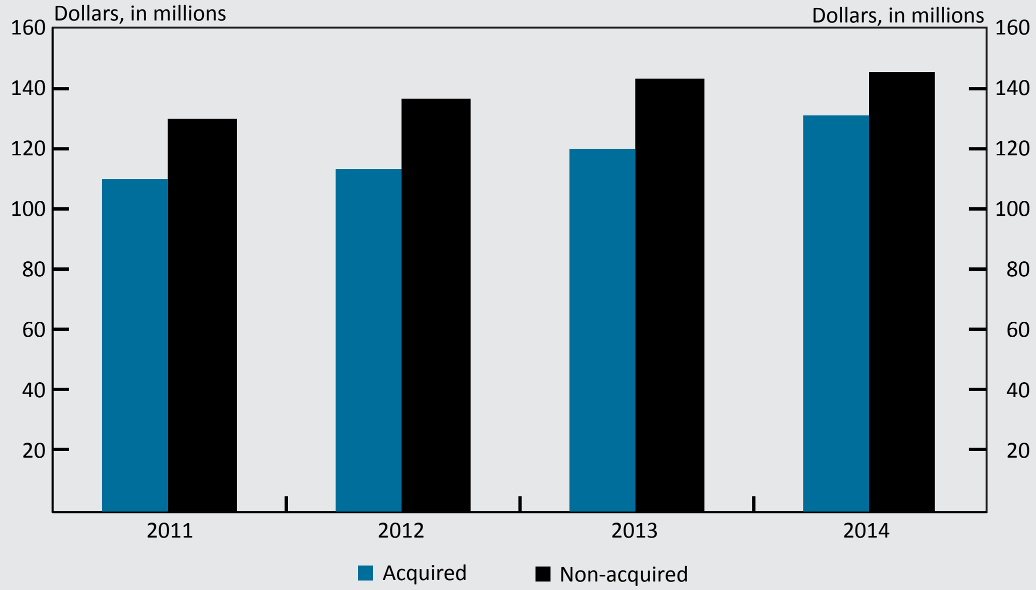
Improving economic conditions help spur mergers

Economists say from 2011 through 2014, voluntary mergers increased each year. Mergers increased from 73 in 2011 to 162 in 2014. Improvement in overall economic and banking

Change in the number of community banks since 2008



Median total assets of acquired and nonacquired banks



conditions since the recession may partially explain the increase in mergers.

The economists say, "Improved economic conditions make potential targets more attractive due to their healthier portfolios and the stronger markets in which they operate. Furthermore, improved economic conditions strengthen potential acquirers, giving them greater ability to acquire new banks."

Generally, a median acquired bank is about 15 percent smaller than its peers. A bank's condition can be measured in many ways, but capital tends to be the first measure analysts examine. In many of the mergers economists examined, losses resulting from the crisis left banks with less capital available to cover unexpected losses, making it more difficult for these banks to make new loans.

"The results suggest that mergers on average result in more efficient banks and a sounder banking system, which should lead to greater access to credit at lower cost, and thus, be beneficial for local communities," the economists explained.

The benefits of mergers, however, can be offset if mergers make local banking markets less competitive and reduce the communities' access to banking services and credit. Although federal banking regulatory agencies monitor mergers and balk on mergers that could result in uncompetitive markets, the economists say more research is needed to determine the entire effect of bank mergers on local communities.

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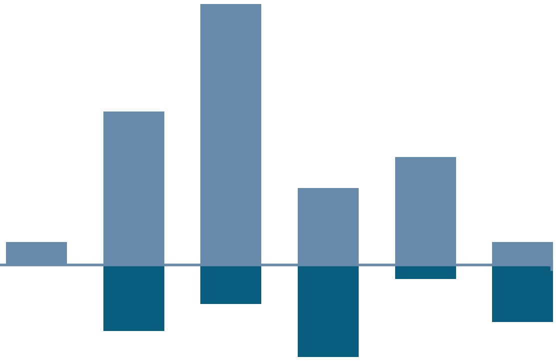
KEVIN WRIGHT, EDITOR

FURTHER RESOURCES

"Bank Consolidation and Merger Activity Following the Crisis"
By Michal Kowalik, Troy Davig, Charles S. Morris, and Kristen Regehr
www.KansasCityFed.org/publications/research/er

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.

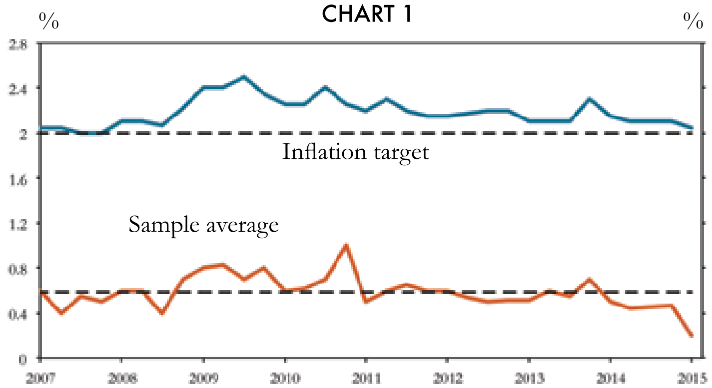
MEASURING THE FUTURE:
ARE LONGER-TERM INFLATION EXPECTATIONS STABLE?



Surveyed expectations of inflation over the past year have been stable and consistent with the Federal Open Market Committee's (FOMC) longer-term inflation objective of 2 percent. Individual participants' longer-term forecasts, however, can vary considerably and are not always aligned with this target.

In its last three statements, the FOMC emphasized the stability of survey-based measures of longer-term inflation expectations. Expectations about future inflation are important for monetary policy decisions and explaining changes in actual inflation. Using data from the Survey of Professional Forecasters, Brent Bundick, an economist, and Craig S. Hakkio, senior vice president and special advisor on economic policy, at the Federal Reserve Bank of Kansas City, examined three different concepts of stability in longer-term inflation expectations. They focused on five-year, five-year forward inflation rate, which measures the average expected inflation rate over a five year period starting five years from today. They measured inflation using the personal consumption expenditure (PCE) price index, which is the FOMC's preferred inflation measure.

CHART 1



When the FOMC announced its 2-percent longer-term inflation objective in in the first quarter of 2012, the median forecast became less volatile and gradually declined over time. Over the past year, the median has held nearly constant. By measuring stability using the survey median, **Chart 1** suggests recent longer-term inflation expectations are relatively stable compared with their eight-year history.

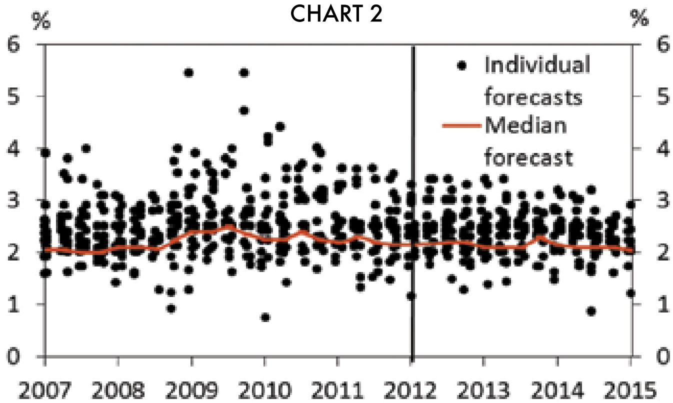
Chart 1 plots the median forecast across survey participants for the last several years. Source: Federal Reserve Bank of Philadelphia

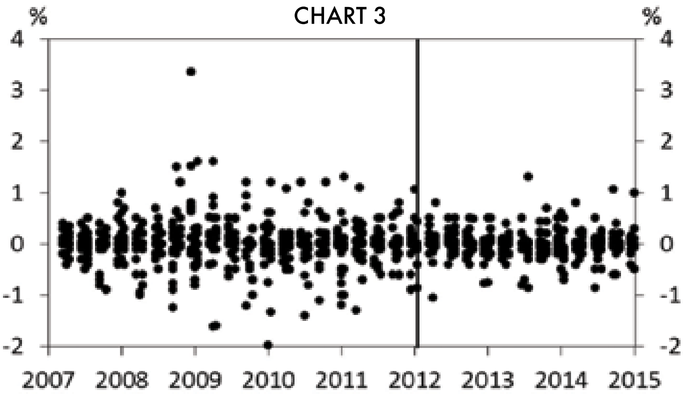
While the median measures the central tendency of forecasts, it excludes substantial information about the expectations of individual forecasters. To incorporate this information, Bundick and Hakkio considered two alternative concepts of stability for longer-term inflation expectations. The first is a measure of dispersion across forecasters and the second evaluates changes in their forecasts.

Chart 2 plots individual forecasts over time and reveals substantial disagreement about longer-term inflation expectations, especially during the financial crisis. Source: Federal Reserve Bank of Philadelphia

Over the last year, forecasts became less dispersed. By measuring stability with the dispersion of individual forecasts, **Chart 2** suggests inflation expectations have been more stable over the last few years.

CHART 2





The third measure of stability reflects change in individual participants' longer-term forecasts. **Chart 3** plots the changes in an individuals' five year forecast relative to their forecast last quarter. The chart suggests that forecasters revise their forecasts over time, with significant revisions during the financial crisis. Individual forecasters, however, have been less prone to adjust their longer-term forecasts over the past year, suggesting some recent stability at the individual level.

Source: Federal Reserve Bank of Kansas City

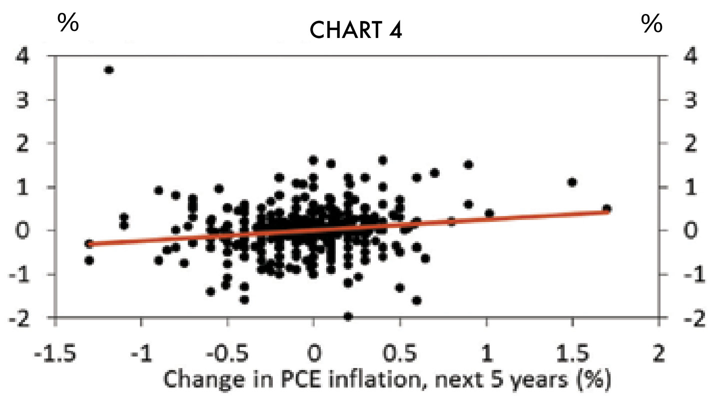
All three concepts of stability suggest that survey-based expectations of longer-term inflation remain steady and centered near the FOMC's 2-percent inflation target. However, some evidence suggests forecasts of individual survey participants are not consistently aligned with the FOMC's 2-percent goal.

First, fewer participants forecast longer-term inflation near 2 percent than Bundick and Hakkio would have expected. From the first quarter of 2012 to the second quarter of 2014, about 30 percent of participants in each survey expected five-year, five-year forward inflation from 1.9 to 2.1 percent. While the fraction rose to more than 40 percent in the last three surveys, the percentage appears somewhat low to reflect an unwavering belief that the FOMC will achieve its longer-run inflation objective.

Second, individual longer-term inflation forecasts display excess sensitivity to changes in the short-run inflation outlook. Shocks in the macroeconomy, such as changes in aggregate demand or oil prices, can cause realized inflation to fluctuate. These shocks, however, should only have a temporary effect on inflation.

The data suggest forecasters often adjust their longer-run forecasts in response to current inflation and adjust in the same direction as their short-term forecast. **Chart 4** shows the change in an individual's forecasts for the five-year, five-year forward expected inflation rate on the vertical axis and the change in their five-year expected forecast on the horizontal axis. **Chart 4** also shows the line that provides the best fit between the two variables. The fitted values are shown in red.

Source: Federal Reserve Bank of Philadelphia



Currently, headline PCE inflation has been running below the 3-percent target. As a result, the first quarter 2015 median survey expects fourth quarter 2015 headline inflation to be 1.1 percent. Although the lower level of headline inflation this year does pose some risk to the stability of longer-term expectations, the median forecast suggests inflation will run at a rate consistent with the 2-percent goal next year (specifically, 1.9 percent in 2016).

3% target

This is an adaptation of the Macro Bulletin by Brent Bundick and Craig S. Hakkio.
For more Macro Bulletins go to KansasCityFed.org

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.

In the bank

Cash Services Departments process millions daily

Some people may think the use of cash is diminishing given the variety of payment options available to consumers today. Millions of dollars, however, flow in and out of the Federal Reserve Bank of Kansas City every day in stacks of ones, twos, fives, 10s, 20s, 50s, 100s and bags of coins.

Cash remains the preferred payment option with consumers in transactions under $25. According the Kansas City Fed's Cash Services, for transactions under $10, cash is used 66 percent of the time, debit 18.4 percent and credit 10.2 percent. For transactions under $25, cash is used 47 percent, debit 27.6 percent and credit 19.9 percent.

Taking all consumer transactions into account, cards remain the preferred method of payment in consumer transactions, used 42 percent of the time. Cash, however, is a close second at 40 percent. Lesser options are payment by check or other methods, such as direct account transfers.

In an average day, a combined total of about $85 million is paid out and more than $73 million is deposited at the Tenth District's Cash Services Departments in Kansas City and Denver. Additionally, shipments of newly printed currency typically arrive each month.

And the Cash Services Department staff handles it all. It's their responsibility to distribute and receive money to and from Federal Reserve Bank customers (banks and credit unions), circulate new coins from the U.S. Mint and new currency from the Bureau of Engraving and Printing, plus detect suspected counterfeit notes.

Above all, the staff follows a process so the money is always accounted for and secure.

1

The Federal Reserve Bank: Cash Services Department
Money comes from the Bureau of Engraving and Printing, and customers (banks and credit unions) send their excess cash to the Kansas City Fed for deposit. Roughly, 2,400 financial institutions in the Tenth District are served by the Federal Reserve Bank, which receives about 185 deposits a day.

2

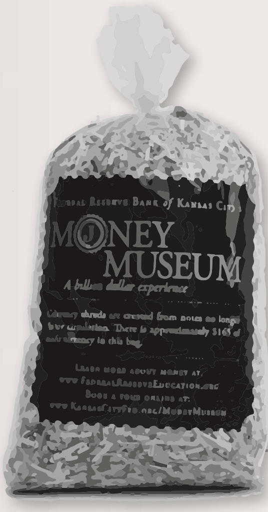
Receiving Unit:
Currency shipments arrive via armored carriers at the dock. The money, sealed in bags, is then delivered to designated rooms where staff accepts the deposits.

3

High-Speed Unit:
Notes are run through high-speed currency machines to count deposits and shred unfit currency. Sensors determine which notes to prepare for payout and which to reject. In the Tenth District, an average of 569,200 notes are counted and sorted per hour.

4

The Vault: Money is then delivered by robot to the vault where it is stored until it's needed for payout.



5

Unfit Money:
Dirty, defaced, worn or torn notes are shredded. Last year, more than 163 million notes worth $3.3 billion were destroyed in the Tenth District.

6

Paying Unit:
Customers place currency and coin orders to replenish their supply. The Tenth District receives on average of 364 orders a day. Armored carriers hired by the Federal Reserve Bank's customers pick up orders and make the deliveries.

DID YOU KNOW…

- Generally you only need to have 51 percent of your note for it to be accepted.
- The average lifespan of a $1 note is 22 months, five years for a $100 note and 25 years for a coin.
- Unfit currency is shredded into pieces smaller than 3/8-inch square.
- If the machine can't destroy a note because it is too dirty or mangled, it must be shredded manually. An "independent witness" from within the Federal Reserve Bank is called to verify the destruction.
- Cash Services employees are required to be certified to detect counterfeit money. The Federal Reserve Bank gives all suspected counterfeit notes to the Secret Service.

Sources: Federal Reserve Bank Tenth District Cash Services Department and the Bureau of Engraving and Printing.

Bypassing Buyer's Remorse

You just purchased that breathtaking ring or wristwatch you've been eyeing in the jewelry store. Or maybe you bought that state-of-the-art computer or the Harley motorcycle you've dreamed of owning. How did your big-ticket purchase make you feel? Elated, then uncomfortable? Excited, until you felt that sinking feeling in the pit of your stomach? It's likely you had a case of buyer's remorse.

Buyer's remorse is described as a sense of regret after having made a purchase. It may stem from the fear of making the wrong choice or guilt from overspending. Whatever the cause, it is an upsetting experience, both physically and emotionally. The anxiety over the purchase can lead to illness or depression. And the financial repercussions may haunt you for years.

Most adults have experienced buyer's remorse. Whether they were rushed, emotional or impulsive in making a buying decision, they have later kicked themselves for poor decision making. If it's fairly easy for adults to fall victim to this situation, what about kids who are starting to refine their decision-making abilities? Research says the cerebral cortex, the area of the brain responsible for decisions, does not fully develop until the early twenties. It's no wonder most kids lack the restraint and good judgment to make wise purchases. Because it's hard for them to delay their gratification, the likelihood of a buyer's remorse situation is high.

How can we help kids make better purchasing decisions to avoid buyer's remorse? Here are some suggestions to keep them from succumbing to thoughtless buying:

• Set a "wait time" rule, which can be a time limit from "sleep on it" to several weeks before buying. Kids may decide they really don't need or want it.

• Ask them to compare prices with at least two other stores that have a similar item in order to get the best deal. Use a smartphone app to get immediate price comparisons.

• Tell them to examine their reasons for making a purchase. Is this item truly what they want or are they buying on a whim? Stress the importance of making intentional purchases that they have thought about, not impulsive buys on the spur of the moment. Use the decision-making grid on P. 24 to help evaluate possible purchases.

• Remind them not to let emotions get in the way. If they are tired or in a bad mood, they may buy items to lift their spirits that are not necessarily needed.

• Teach them to walk away if they feel pressured by a salesperson. They need to remove themselves from the pressure zone to think clearly.

• Share examples of your own buyer's remorse. Stories about the toy that was boring to play with or the bike that was way overpriced may resonant with them as they consider purchases.

• Remind them not to let friends make decisions for them. Just because their best friend has those exact shoes, doesn't mean they need a pair. Tell them to be unique and make different choices.

• Tell them not to feel they must have the latest upgraded version of electronic devices. The upgrades may have additional features, but the previous version in their possession works just fine.

• Teach them to ask about the store's return policy. They should ask the cashier for details and steer clear from stores with strict policies. Even if they don't return their purchase, they can avoid buyer's remorse by knowing they have the ability to do so.

• Ask them to consider buying "shared experience" items instead, like tickets to an amusement park or concert. The time they spend with family or friends will be more meaningful than store bought items.

• Remind them that donating their dollars carries a higher "happiness effect" and rarely results in buyer's remorse.

Should you allow kids to experience buyer's remorse in order to better understand it? If it's a small purchase, it might be a good idea. Once kids feel those negative emotions associated with buyer's remorse, it will be a lesson learned for the future. In any case, an awareness of buyer's remorse should help kids become more informed and thoughtful consumers.

Michele Wulff is a former public school educator of 30 years and a recipient of the national peer award "Excellence in Teaching Economics." As an economic education coordinator with the Kansas City Fed, she offers practical advice on how to educate young people on personal financial matters.

Financial Education Resources

The Kansas City Fed is committed to promoting economic and financial literacy and greater knowledge of the Fed's role by providing resources for teachers, students and the public. Visit our website at **KansasCityFed.org** for more information. The resources below are a few of many available on this subject.

FEDERAL RESERVE RESOURCES

"Financial Fables from the Fed: Shopping Wisely with Olivia Owl"
In this online e-book, Olivia Owl helps Rhoda Roadrunner learn to comparison shop and improve her spending habits to make wiser purchases.
For ages 5-10.
http://www.KansasCityFed.org/education/fables/index.cfm

"Kids and Money: Teaching Children to Manage Their Finances"
This guide shares budgeting and smart shopping activities.
For ages 6-12.

"Great Minds Think: A Kid's Guide to Money"
This booklet gives spending and budgeting tips. For ages 8-12.

ONLINE RESOURCES

"You Are Here"
A Federal Trade Commission website with a virtual mall where kids can learn consumer concepts as they visit local businesses. For ages 10-14.
www.ftc.gov/bcp/edu/microsites/youarehere

FICTION BOOKS

"Pigs Go to Market"
by Amy Axelrod
Mrs. Pig wins a shopping spree at the market. Will she and the piglets make wise shopping choices? For ages 4-7.

NONFICTION BOOKS

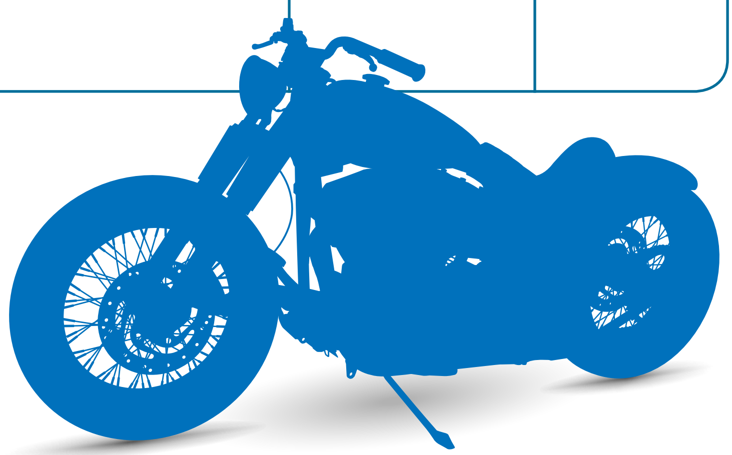
"Smart Money Moves for Kids: A Complete Parent's Guide"
by Dr. Judith Briles
This book helps parents teach the wise use of money to preschoolers through teens. It includes quizzes, games and money-smart activities. For adults.

Decision-Making Grid

Use this grid to avoid buyer's remorse after your purchase! List your alternatives or buying choices down the far left column of the grid. Decide on criteria or ways to judge each alternative, and list them across the top row of the grid. Useful criteria may include: Do you need it? Will you use it often? Is it inexpensive? Once the grid is ready, go across the first alternative row to ask yourself each question. If you answer yes, put a "+" in the box; if it's a no, put a "-" in the box. Count the number of pluses in each row when you're finished. The best item to buy will have the most pluses. (Add another criterion to break a tie.)

What Should I Buy?

Criteria Alternatives	Do you need it?	Will you use it often?	Is it inexpensive?	Total
#1 Item to Buy				
#2 Item to Buy				
#3 Item to Buy				
#4 Item to Buy				



The Federal Reserve Bank of Kansas City's Museums in Kansas City and Denver are free and open to all ages of the public. Reservations are not required. The walk-in experience allows you to see all of the exhibits and use our guided tour options, such as audio and iPad tours. Guided group tours also are available. where guests can purchase T-shirts, commemorative glass wear and much more. A free bag of shredded currency is available for guests.

Kansas City

1 Memorial Drive,
Kansas City, MO 64198
816-881-2683

- Learn about the economy and Fed through interactive exhibits
- See billions of dollars in the region's largest cash vault
- Lift a gold bar over 27 pounds
- Explore President Harry S. Truman's extensive coin collection
- Design currency art projects
- Leave with a bag of shredded currency

Denver

1020 16th Street,
Denver, CO 80202
303-572-2429

- Learn about the economy and Fed through interactive exhibits
- Take a walk through American history by viewing real currency dating back to 1775. Discover the differences between State, Demand and National bank notes. You can even see a $100,000 bill
- Take a peek at what $30,000,000 looks like up close and personal
- Design currency art projects
- Leave with a bag of shredded currency

the MONEY MUSEUM

Museum hours

8:30 a.m. to 4:30 p.m.,
Monday–Friday,
Closed on holidays.

For more information on the museums, directions, parking and group-specific tours, visit **KansasCityFed.org/moneymuseum**, or call the telephone numbers listed under each location.

Student Board of Directors program wraps school year

The Kansas City Fed's Student Board of Directors program, which invites high-achieving high school students to participate in financial education activities, tours of local businesses and sessions with leaders of the Kansas City Fed and local businesses, has wrapped up the 2014-2015 school year.

Student board members were coordinated in five Tenth District cities: Kansas City, Denver, Oklahoma City, Omaha and Albuquerque. Students generally attend majority minority high schools.

Leah Martin, a student at Southeast High School in Oklahoma City, enjoyed the chance to take classes on entrepreneurship and business etiquette.

"I learned not to expect doors to open for me, but that I need to open them for myself," she said. "I feel like the program teaches you small things, but things that you will need to know throughout life."

Lessons about the local economy are tailored to each group. In Oklahoma City, the students learned about the energy economy and how it fuels the regional economy.

"We had a personalized tour of the Devon (Energy) building," said Claire Kvicala, a student board participant from Edmond North High School in Edmond, Okla. "Now I understand how big oil and natural gas is in our economy."

Juan Morales, a student board member from Santa Fe South Charter High School, in Oklahoma City, Okla., said that his experience further heightened his interest in pursuing a business degree—and helped to shape his career plans.

"Being on the student board makes me want to study business even more so I can come to work for the Federal Reserve Bank in the future," he said.


PHOTO BY GARY BARBER

PRESIDENT ESTHER GEORGE speaks with Kansas City Student Board Director Mylan Gray.

FEDERAL RESERVE BANK OF KANSAS CITY STUDENT BOARD OF DIRECTORS 2014 - 15

Kansas City:

Almanek Allums
Sumner Academy
Kansas City, Kan.

Chantel Bernard
Central Academy
Kansas City, Mo.

Koya Couch
Washington High School
Kansas City, Kan.

Alina Crouch
Lincoln College Prep. Academy
Kansas City, Mo.

Rafael Edwin
African Centered
College Prep. Academy
Kansas City, Mo.

Mylan Gray
Sumner Academy
Kansas City, Kan.

Dajaun Hindsman
Lincoln College Prep. Academy
Kansas City, Mo.

David Houston
Washington High School
Kansas City, Kan.

Jusani Jackson
Southwest Early College Campus
Kansas City, Mo.

Wynema Jackson
Southwest Early College Campus
Kansas City, Mo.

Rayfield Lawrence
Washington High School
Kansas City, Kan.

Martha Linares
J C Harmon High School
Kansas City, Kan.

Joseline Martinez
Wyandotte High School
Kansas City, Kan.

Melissa McNearney
Lincoln College Prep. Academy
Kansas City, Mo.

Dayauna Miller
Southwest Early College Campus
Kansas City, Mo.

Phong Nguyen
Lincoln College Prep. Academy
Kansas City, Mo.

Kylah Owens
Washington High School
Kansas City, Kan.

Mary Perez
J C Harmon High School
Kansas City, Kan.

Mollie Ponds
Central Academy
Kansas City, Mo.

Kaytlynn Pulley
Washington High School
Kansas City, Kan.

Andrew Raddant
Lincoln College Prep. Academy
Kansas City, Mo.

Daniel Reyes
Lincoln College Prep. Academy
Kansas City, Mo.

Sadie Rhoads
Paseo Academy
Kansas City, Mo.

Maria De la Torre
East High School
Kansas City, Mo.

Destiny Washington
Southwest Early College Campus
Kansas City, Mo.

Queen Wilkes
Southwest Early College Campus
Kansas City, Mo.

Denver:

Charles Baldwin
East High School
Denver, Colo.

Anthony Fahmy
East High School
Denver, Colo.

Dylan Gatlin
George Washington High School
Denver, Colo.

Arden Gehl
East High School
Denver, Colo.

Rebecca Geist
South High School
Denver, Colo.

Mayra Guerrero
CEC Middle College
Denver, Colo.

Kathleen Linton
South High School
Denver, Colo.

Sebastian McCrimmon
George Washington High School
Denver, Colo.

Maureen McNamara
George Washington High School
Denver, Colo.

Khulan Namjilsuren
George Washington High School
Denver, Colo.

Sogra Naseri
East High School
Denver, Colo.

Gianna Ruland
South High School
Denver, Colo.

Lizzie Torgerson
George Washington High School
Denver, Colo.

Feven Yohannes
George Washington High School
Denver, Colo.

Oklahoma City:

Alyssa Amundsen
Mustang High School
Mustang, Okla.

Kara-Jo Davis
Crooked Oak High School
Oklahoma City, Okla.

Caleb Gutel
Harding Charter Prep
Oklahoma City, Okla.

Katherine Hawes
Edmond North High School
Edmond, Okla.

Claire Kvicala
Edmond North High School
Edmond, Okla.

Leah Martin
Southeast High School
Oklahoma City, Okla.

Juan Morales
Santa Fe South
Charter High School
Oklahoma City, Okla.

Kieshana Oliver
John Marshall High School
Oklahoma City, Okla.

Wesley Renfroe
Western Heights High School
Oklahoma City, Okla.

Ines Robles
Crooked Oak High School
Oklahoma City, Okla.

Sheridan Wiles
Western Heights High School
Oklahoma City, Okla.

Travonna Williams
John Marshall High School
Oklahoma City, Okla.

Tilson Young
Liberty Academy
Shawnee, Okla.

Omaha:

Anahy Aguayo
South High School
Omaha, Neb.

Jordan Aksamit
North High School
Omaha, Neb.

Lisseth Chavez
South High School
Omaha, Neb.

Jeffrey Crate
North High School
Omaha, Neb.

Delfina Diego
South High School
Omaha, Neb.

Alejandra Escobar
South High School
Omaha, Neb.

Claire Marie Franklin
North High School
Omaha, Neb.

Efren Garcia
South High School
Omaha, Neb.

Lizeth Mejia-Narciso
South High School
Omaha, Neb.

Maricruz Mora-Becerra
South High School
Omaha, Neb.

Kia Scott
Central High School
Omaha, Neb.

Michael Thompson
North High School
Omaha, Neb.

Viridiana Valencia-Gonzalez
South High School
Omaha, Neb.

Chris Winchester
Central High School
Omaha, Neb.

Albuquerque:

Ryan Hodge
La Cueva High School
Albuquerque, N.M.

Eric Laurin
La Cueva High School
Albuquerque, N.M.

AJ Pino
Volcano Vista High School
Albuquerque, N.M.

Courtney Shipley
La Cueva High School
Albuquerque, N.M.

Taylor Winings
La Cueva High School
Albuquerque, N.M.

Learn more about the Student Board of Directors program. Visit www.kansascityfed.org/education/foreducators/student-board

U.S. Treasurer Rosie Rios visits Kansas City Fed's Omaha Branch

U.S. Treasurer Rosie Rios visited the Federal Reserve Bank of Kansas City's Omaha Branch during her recent trip to Nebraska to promote the national launch of the Department of the Treasury's new electronic currency reader for the visually impaired.

Rios met with Nathan Kauffman, assistant vice president and Omaha Branch executive, and employees to learn more about the Federal Reserve's interaction with the Treasury and the work of the Kansas City Fed's Branch offices.

Representatives from bank supervision, community development, and educational and public outreach functions spoke with Rios about their roles.

"It was an honor for us to host Treasurer Rios as a guest," Kauffman said. "We always appreciate an opportunity to share knowledge about how our Branch supports the work of the Kansas City Fed and the Federal Reserve System."

Learn more about the Kansas City Fed's Omaha Branch at www.KansasCityFed.org/Omaha

U.S. TREASURER ROSIE RIOS, center, met with Nathan Kauffman, Omaha Branch executive and assistant vice president, right, and staff at the Kansas City Fed's Omaha Branch during her recent trip to Nebraska.

Bank Anniversaries

The following banks in the Tenth Federal Reserve District are celebrating one, five, 10, 20 or more years as Federal Reserve members in July, August and September.

Uinta Bank	Mountain View	Wyo.	95
Wahoo State Bank	Wahoo	Neb.	83
Gunnison Bank and Trust Co.	Gunnison	Colo.	83
Farmers State Bank	Stanberry	Mo.	74
Union State Bank	Clay Center	Kan.	73
Bank of Holyrood	Holyrood	Kan.	72
Farmers Bank of Lincoln	Lincoln	Kan.	72
Security State Bank	Basin	Wyo.	67
Bank of Cushing	Cushing	Okla.	35
My Bank	Belen	N.M.	23
Anadarko Bank and Trust Co.	Anadarko	Okla.	23
Rocky Mountain Bank	Jackson	Wyo.	10
Flatirons Bank	Boulder	Colo.	1
Mountain Valley Bank	Walden	Colo.	1

Kansas City Fed creates advanced data and research center

Researchers from across the country recently gathered at the Kansas City Fed for a unique two-day workshop. The researchers, representing the Federal Reserve System, government, universities and other organizations, discussed one topic: the Current Population Survey (CPS) data set and research that uses those data.

"This is the first workshop that anyone could remember that was centered on people using specific data," said San Cannon, an assistant vice president and economist at the Kansas City Fed and an organizer of the workshop. "The meeting allowed for people to talk about challenges with data and different approaches to using the data."

The CPS is sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS) and is the primary source of U.S. labor force statistics. The CPS data are compelling to researchers because they can be used for multiple fields of economic research, such as labor markets, demographics and education.

Cannon, along with Mark Watson, vice president at the Kansas City Fed, said the workshop is just one piece of an overarching strategy at the Kansas City Fed's new Center for the Advancement of Data and Research in Economics (CADRE).

CADRE was created to support, enhance and advance computationally or data intensive research in economics and will build upon years of Kansas City Fed experience in high-performance computing and data warehousing.

"Our goal is to contribute to economic research as a whole," Cannon said. "We want to reach a better understanding of techniques that are computationally challenging to serve primarily the Kansas City Fed and System Reserve Banks, but researchers at large to the extent that we can."

In addition to making its findings available to the public, the Kansas City Fed will continue to organize CADRE workshops for researchers. The Bank also is interested in other groups' efforts in this area.

For example, interns at Loyola University in Chicago are working on a project to collect and categorize research papers that use the CPS with other data sets and to understand and display how they are being used. The project supports the goals of CADRE.

"We want to understand what goes on in academic and other research communities so we can learn from other people," Cannon said.

The database and other resources, including content-related documentation and training materials and access to high-quality data sets, curated and provided by CADRE will eventually be available to the public.

For more information, visit KansasCityFed.org/research/CADRE.

Mark Watson, left, vice president, and San Cannon, assistant vice president and economist, helped create the Kansas City Fed's new Center for the Advancement of Data and Research in Economics.

"Building my Budget" while creating a work of art

Hundreds of students from across the Tenth District competed this spring in the Federal Reserve Bank of Kansas City's Shred Challenge. The event asks participants to create an artwork using shredded currency that illustrates a financial concept and submit an accompanying essay to explain the connection. The theme of this year's event was "Building my Budget."

"The most remarkable thing about the entries was their creativity," said Erin O'Donnell, a public affairs specialist with the Denver Branch, who organized the event. "They applied the topic of 'Building my Budget' to their own personal financial lives and used the shredded money in different capacities on their art projects."

Economic education is a central component of the Kansas City Fed's community outreach mission. The Bank provides free education and resources to constituents across the Tenth District to help them better understand

personal finance, the importance of financial planning, the Federal Reserve and its functions and the economy. Shred Challenge participants receive this training before working on their art projects and essays.

"The Shred Challenge is an engaging and hands-on way to encourage young people to build their understanding of important financial concepts," said Melissa Jackson, assistant vice president and public information

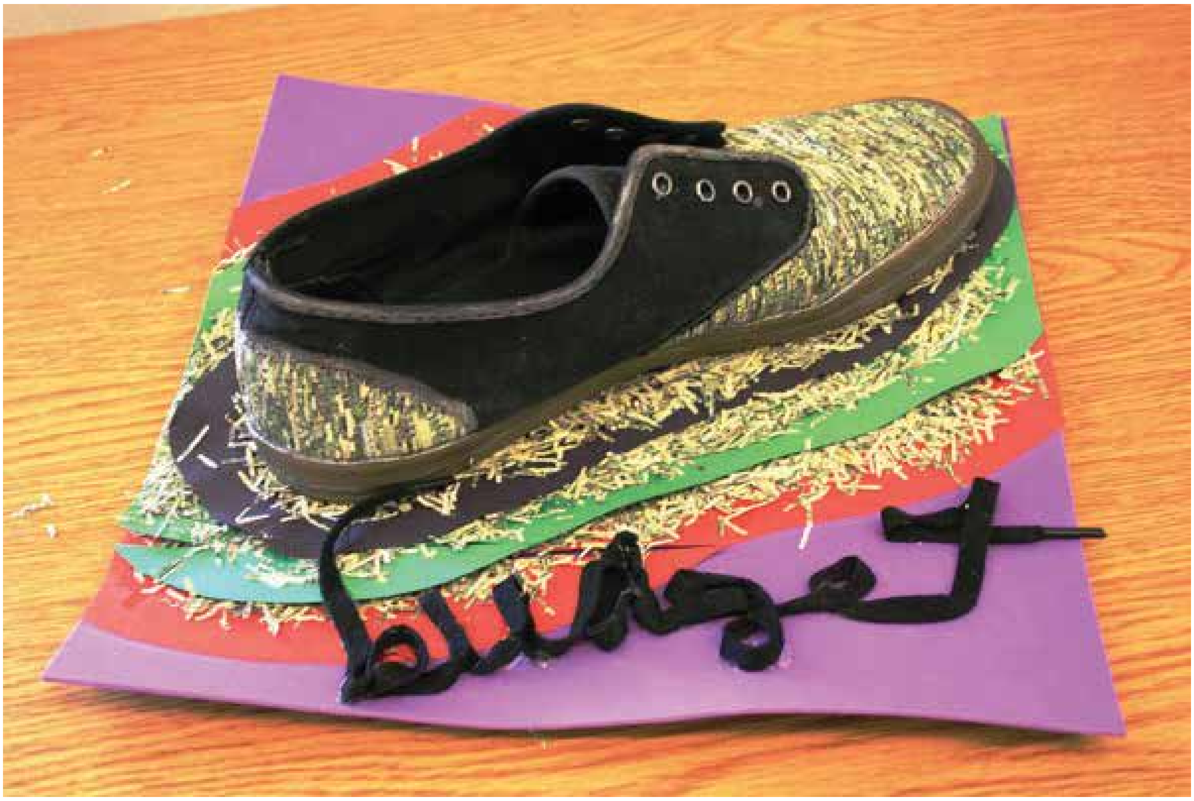
officer. "It's our hope that this event, along with our other financial education programs, will help participants build a foundation of financial savvy that will serve them throughout their lives."

Nine hundred and fifteen students from 22 high schools across the District submitted projects. One winner from each school received prizes from the Kansas City Fed's Vault Store. Winning entries demonstrated strong art design, conveyed an understanding of a financial topic, included high-quality essays and creatively offered perspective on the topic.

Isaac Morris of Valley High School in Albuquerque, N.M., was the overall winner.

The winners' artwork was displayed in the Kansas City Fed's Money Museums in Denver and Kansas City, Mo.

Read more about the competition at: www.KansasCityFed.org/education/foreducators/shred-challenge.cfm



ISSAC MORRIS of Valley High School in Albuquerque, N.M., was the overall winner in the Shred Challenge with his entry "budget." The shoe was constructed from pieces of shredded money.
Pictured on page 30: the multimedia portrait of the Native American, lower left, was created by Abigail Goodin, Oklahoma Christian Academy, Edmond, Okla., and Jenna Papponetti, Knob Noster High School in Knob Noster, Mo., created the rose sculpture.

1st

The following students' work was chosen as the top entries:

Brady High School (Colorado) *Jennie Gonzales*
Burke High School (Nebraska) *Rose McAffrey*
Castleview High School (Colorado) *Luke Arsenault*
Central Academy of Excellence (Missouri) *Imani High*
Cheney High School (Kansas) *Addison Dewey*
Frontier School of Excellence (Missouri) *Victoria Cole*
George Washington High School (Colorado) *Ayana Schaffer*
Knob Noster High School (Missouri) *Jenna Papponetti*
Longmont High School (Colorado) *Destiny Laguna*
Minden High School (Nebraska) *Aurora Fowler*
Natrona County School (Wyoming) *Jordan VanOrsdale*
Northeast High School (Kansas) *Autumn Thoennes*
Northeast High School (Missouri) *Isabel Valadez-Arellanes*
Oklahoma Christian Academy (Oklahoma) *Abigail Goodin*
Omaha South High School (Nebraska) *Guillermo Vidales*
Ridgeway R-V (Missouri) *Caid Selby*
Sheldon High School (Missouri) *Bailee Tripp*
Taos High School (New Mexico) *Steve Hoang*
Valley High School (New Mexico) *Isaac Morris*
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Wichita North High School (Kansas) *Jared Faunce*
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Money Smart Month expands reach

Throughout the year, the Federal Reserve Bank of Kansas City shares its resources and promotes the importance of managing personal finances, understanding credit and other financial topics to consumers of all ages. The Bank's involvement in these efforts becomes a highlight of its public outreach during Financial Literacy Month in April, when the Bank combines forces with other similarly focused organizations for Money Smart Month.

Money Smart Month is a series of events organized by the Kansas City Fed, government agencies, financial service agencies, non profit organizations and other groups that seek to promote financial stability among consumers. Events take place throughout the Tenth District, with the exception of Oklahoma City, which has its events in the fall.

"As the campaign has grown, we have seen more organizations and volunteers asking to be involved," said Gigi Wolf a senior economic education specialist at the Kansas City Fed. "Money Smart Month makes a positive impact, especially to financially underserved communities."

Money Smart Month began in 2008 as a formal campaign and has continued to build momentum throughout the years. This spring, more than 18,000 people attended 1,243 events. The kick-off event on March 28 at the Jack Reardon Convention Center in Kansas City, Kan., featured keynote speaker John Hope Bryant, founder and CEO of Operation HOPE.

As part of Money Smart Month, the Bank coordinates Teach Children to Save, a three-day campaign that sends volunteers into kindergarten, first- second- and third-grade classrooms to share a lesson about money. The lesson is tailored to each grade level and varies from understanding values of coins to identifying opportunity costs. Volunteers from 26 organizations, including the Kansas City Fed, nonprofits, financial organizations, governmental agencies, libraries and educational institutions, shared lessons in 434 classrooms in 129 schools across the Kansas City metro area. Of the 9,186 students served through this program, 50 percent meet the criteria for low-to-moderate income (LMI).


PHOTO BY GARY BARBER

The Kansas City Fed coordinates Teach Children to Save, which is a three-day campaign that sends volunteers into classrooms to share a lesson about money.

Teach Children to Save and Money Smart Month support the Bank's mission of promoting financial stability by providing free resources to the public.

"We want to increase awareness among consumers about financial services, wealth building, and setting and achieving financial goals," Gigi said.

Learn more about the Bank's financial education resources at www.kansascityfed.org/education

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The Federal Reserve System

Congress created the Federal Reserve in 1913 to bring financial stability after a number of banking panics. It is the nation's third central bank. The first, established in 1791, and the second, created in 1816, were each operational for 20 years. In both cases, its charter failed to be renewed and the banks closed.

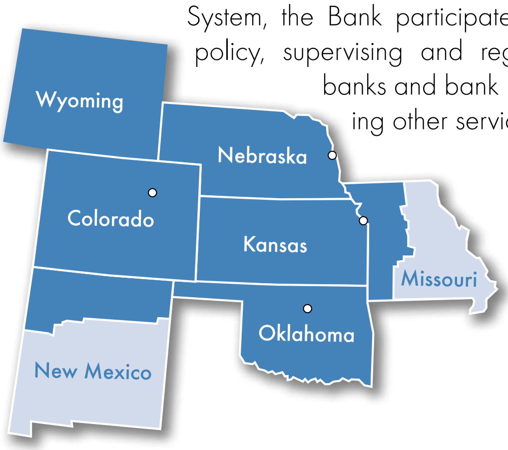
With the Federal Reserve Act, Congress sought to create a central bank the public would be more likely to support by making it "decentralized" with more local control. This new structure was designed to overcome one of the primary weaknesses of the previous central banks: public distrust of an institution that many felt could potentially be under the control of either government or special interests. The new central bank is a network of 12 regional Federal Reserve Banks, located throughout the country and under the leadership of local boards of directors, with oversight from the Board of Governors in Washington, D.C., a government agency.

The Federal Reserve is considered to be independent within government and broadly insulated from political pressures. While members of the Board of Governors are nominated by the president of the United States and confirmed by the Senate, the Federal Reserve's regional structure, including local boards of directors and advisory councils, ensures that views from a broad spectrum of the public nationwide contribute to the central bank's deliberations.

President Woodrow Wilson signed the Federal Reserve Act on Dec. 23, 1913, and the 12 regional Federal Reserve Banks opened on Nov. 16, 1914.

The Federal Reserve Bank of Kansas City

The Federal Reserve Bank of Kansas City and its Branches in Denver, Oklahoma City and Omaha serve the Tenth Federal Reserve District, which encompasses Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. As a part of the Federal Reserve System, the Bank participates in setting national monetary policy, supervising and regulating numerous commercial banks and bank holding companies, and providing other services to depository institutions.



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For a free subscription, please visit
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Tenth District Energy

Domestic energy production plays a large role in the Tenth Federal Reserve District and the nation's economies. The Kansas City Fed's quarterly Tenth District Energy Survey provides information on current activity among energy firms in the Tenth District with results based on total firm activity nationwide. Survey results reveal changes in several indicators of energy activity, including drilling, capital spending and employment. Firms also indicate projections for oil and gas prices.

Review the latest survey results online at
KansasCityFed.org/research/indicatorsdata/energy.