

TEN

Spring 2017

FEDERAL RESERVE BANK OF KANSAS CITY

Inside:

Rising rents in the U.S.

Shipping costs and inflation

Regulatory effects on
loan contracting

INCREASING PARTICIPATION

Workers staying on the job longer

ANNUAL REPORT ISSUE



On The Cover:

TEN

Spring 2017

INCREASING PARTICIPATION

Workers staying on the job longer 6

One of the driving forces behind the increase in the labor force participation rate is older workers remaining on the job. The reasons vary for their extended stay, but their presence is an important element in understanding current labor conditions. On the cover: Jim Kerr has worked as a pharmacist in the Kansas City area for 40 years.

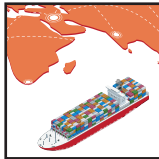
FEATURES



RISING RENTS

Housing affordability in the U.S. 10

Rental housing has become less affordable at the national level due to a variety of economic reasons. The fallout is that many renters' incomes are not keeping pace with rental prices.



SHIP TO SHORE

The relation of ocean freight prices to inflation 14

If shipping costs continue to increase, higher import costs may put additional upward pressure on core inflation, even if typical import price indices remain low, affecting consumers in the long term.



COMMITMENT TO DIVERSITY:

2016 Report to Congress 32

The Office of Minority and Women Inclusion (OMWI), established under the Dodd-Frank Act, continues a long tradition of diversity at the Kansas City Fed.



2016 ANNUAL REPORT 36

Listings of the Federal Reserve Bank of Kansas City's officers, directors, advisory councils, roundtable groups and more, including a look at the Bank's operations.

IN EVERY ISSUE

- 1** **PRESIDENT'S MESSAGE**
- 24** **MAKING A CONNECTION**
- 29** **NOTES**

A monetary policy for long-run economic stability

February marked the 92nd consecutive month of the economic expansion in the United States, which is the third-longest U.S. expansion on record going back to about 1850. Since the end of the financial crisis, the economy has grown annually by about 2 percent each year. Unemployment has declined and labor markets appear to have only modest, if any, remaining slack. Inflation has been running at rates consistent with price stability and near the Federal Open Market Committee's (FOMC) longer-run goal of 2 percent. Of course, there are always some areas of concern in the economy, but as a whole, things look fairly positive.

Optimism has increased during the past few months, as measured in both business and consumer surveys. While consumer spending is expected to continue at a healthy pace, this rise in confidence may not automatically lead to even stronger consumer spending. The evidence suggests that consumer confidence is not always a useful predictor of future consumption growth, especially once other factors such as interest rates or income growth are taken into account. Still, household balance sheets are in much better shape compared to the years immediately following the financial crisis and the labor market has been performing well, so the outlook remains positive for consumer spending.

Looking at labor markets, we're essentially at or near full employment. The unemployment rate now sits at 4.8 percent, just below what I view as its longer-run value of about 5 percent. Labor force participation, which had been trending downwards for most of the expansion, has leveled off and even slightly increased over the past year. This recent rise appears to be due to a decline in labor force exits rather than an increase in labor force entry. In

other words, individuals are not more likely to return to the labor force right now, but workers are staying on the job longer. These factors suggest that there is not a lot of labor force slack, either among the officially unemployed or those out of the labor force who might rejoin.

Of course, there are numerous indicators on the labor market, so trying to judge the amount of slack is not a straightforward task. One approach we use at the Kansas City Fed is a Labor Market Conditions Index, which was developed by my staff. It summarizes a wide array of labor market data into two succinct statistics: the level of labor market activity and the momentum of that activity. The most recent reading for January showed a level of activity that was above the long-term average, and a momentum indicator that was the highest level since the series began in 1992.

Another important indicator of slack in the labor market is wage growth, which has been quite moderate since the financial crisis, though has increased over the past year. Despite the improvement in overall wage growth, there are differences across sectors. Recent research by my staff shows that the increase in wages has been driven by only a few industry segments—namely, the construction, manufacturing and wholesale sectors. Growth in hours worked in these sectors has been moderating, even as wages rise, perhaps suggesting firms are having an increasingly difficult time attracting new workers. On the other hand, wage growth has shown few signs of acceleration in many of



the service sectors, although growth in hours worked has been steadily increasing. This suggests there may have been a modest amount of slack in some service sectors, but as economic growth continues, workers will likely become increasingly scarce. This “bottom up” approach to evaluating the labor market suggests further wage pressure is likely to follow across a broader range of industries.

As labor markets continue to improve and economic activity expands, we could see more inflationary pressure. Currently the FOMC’s preferred measure of inflation, the personal consumption expenditures (PCE) price index, has increased by 1.6 percent over the last 12 months. This measure has risen notably, compared to about 0.6 percent a year ago, as the effects of lower oil prices have waned.

Looking past these oil price effects, the core measure of inflation is up 1.7 percent over the past year.

Other measures of inflation show similar trends. The Consumer Price Index (CPI) is up 2.5 percent over the past year, the Dallas Fed’s trimmed-mean PCE inflation rate over the past year is up 1.9 percent and the Cleveland Fed’s weighted median CPI is up 2.5 percent. All these measures point in the same direction: Inflation remains low, but is rising.

The role of monetary policy rules

The current state of the economy stands in sharp contrast to earlier phases of the recovery. Following the crisis, the unemployment rate was persistently above its longer-run normal level and inflation below the FOMC’s 2 percent

longer-run goal. At the risk of oversimplifying, central banks generally respond with monetary accommodation to support economic activity and achieve their mandated objectives in these conditions. That is, the standard approach is to lower interest rates.

While the policy prescription in such circumstances is generally straightforward, a few complications come into play. The first is that monetary policy operates with lags, which is a point highlighted in the FOMC’s annual “Statement on Longer-Run Goals and Monetary Policy Strategy.” The timing and extent of any lags are imprecisely measured and can vary over time. Importantly, these lags require monetary policy to act in a forward-looking manner. That is, policymakers cannot wait to take action until they see full employment and inflation at 2 percent. Policy needs to be adjusted in advance. Second, following the crisis, policymakers have become far more attuned to the importance of fostering financial stability. While the relationship between monetary policy and financial stability is not entirely clear, events and research strongly suggest that risk-taking often increases in low-rate environments. Indeed, the motivation for unconventional policies such as large-scale asset purchases was aimed at providing additional stimulus at the zero lower bound by encouraging risk-taking, creating wealth effects and boosting asset prices. And third, policy needs to be set with a sense of the risks surrounding the economic outlook. Foreign developments or financial market volatility are examples of issues that might cause policymakers to temporarily adjust course. Judging the scope and impact of such risks is always challenging, but this caution carries certain costs. Postponing rate

adjustments is not unreasonable in the face of near-term risks, but can keep policy stuck in place. The resulting delay can leave a lasting imprint on the stance of monetary policy, especially if adjustments are not made after the risk passes.

Policymakers must deal with such complications. Among the tools available to us are monetary policy rules, commonly known as Taylor rules. These rules provide guidelines for how to calibrate interest rates under most economic conditions. How the FOMC should use such rules has been the focus of some recent public discussion. In fact, the FOMC does consult the guidance coming from monetary policy rules at each of its meetings. Rules come in many flavors, depending on what variables are included, the weights attached to the different variables, and the designated value of the longer-run level of the funds rate. All of these make choosing a single rule difficult, but that’s not to say that they are not immensely useful. They may offer different advice, but when all the advice moves in a particular direction, that is usually an important signal to policymakers.

While a variety of rules exist, the intuition behind them is relatively straightforward. Most rules take into account how far inflation is from the FOMC’s price stability target, as well as how far the labor market is from full employment. The deviation from their longer-run levels is accounted for in the resulting rate prescription. When both numbers are close to their longer-run levels, these rules often prescribe that the federal funds rate should be near or be moving toward its longer-run level. Indeed, most monetary policy rules today are pointing in the same general direction and suggest short-term interest rates should be



President Esther George, above left, participates in a question-and-answer session after giving this speech at the Stanford Institute for Economic Policy Research in Stanford, Calif. George, above right, is pictured with Mylan Gray, who is deputy chair of the Associated Students at Stanford University and a former intern at the Kansas City Fed.

moving higher. Given these signals, it may be surprising that the FOMC has only raised its policy rate target twice since the end of the financial crisis.

The path to the longer-run

While these policy rules are prescribing higher short-term interest rates, the FOMC has determined that the path for raising rates will be a gradual one. Part of the reason for a gradual approach is risk management. Moving too quickly could potentially risk slowing economic activity, which obviously would not be an objective of monetary policy given current growth and inflation rates. A more rapid increase in short-term rates also could pose risks to financial stability after an extended period of near zero rates.

While I support this gradual approach, the current readings for inflation and unemployment relative to the FOMC's mandated objectives argue for more than just one move per year, as has been the case over the previous two years. This pace has left the current stance of policy more accommodative than advocated by most policy rules and the funds rate well below its longer-run level, a discrepancy I see as important to remedy in order to preserve longer-run price stability and sustainable growth.

In considering the path to more normal interest rate settings, some have questioned whether monetary policy is truly stimulative given that unusually low rates have not generated the same kind of growth or inflation experienced in the past. One explanation is that certain features of the economy may have changed, and that these changes are reflected in a measure known as the natural rate of interest. For example, short-term interest rates

adjusted for inflation—that is, real rates—have been negative for many years. When real rates are low, but the economy is not growing rapidly, the implication is that the natural rate of interest is quite low. Although not observable, movements in the natural rate are presumed to occur gradually, suggesting current low levels will persist and result in a lower longer-run federal funds rate than in the past. The implication of a lower natural interest rate would mean that today's monetary policy settings, although low by historical standards, might not be as stimulative as policy rules suggest.

The case for a much lower natural rate of interest seems plausible to me, but it puts a great deal of weight on estimates that are subject to considerable uncertainty.

What would cause the economy to change in such a way? There are likely any number of reasons, but one that seems plausible is that productivity growth has not been as strong as it was in previous decades. Slower productivity growth, which has been an ongoing issue for the economy for some time, means the supply side of the economy also is growing more slowly. As a result, moderate economic growth may be sufficient to absorb slack and could

even cause the economy to outrun its potential. In fact, we see this today in some measures of what is called the output gap, which captures the difference between the level of economic activity and what the economy can produce at full employment. For example, the Federal Reserve Bank of San Francisco produces a measure of the output gap and natural rate. They show that 2 percent growth the past few years has actually been higher than the economy's potential and in fact, the amount of economic activity is currently above its potential level. These circumstances often lead to price pressures and higher inflation.

Pulling the pieces together, then, how should monetary policy respond in a setting with a low natural rate of interest and slow productivity growth, but with the economy growing faster than its potential? Again, we can glean insight from Taylor rules, which still would prescribe a higher federal funds rate in the near term to ensure economic activity does not too far exceed its potential capacity, but that rate might top out at a level below what we have seen in the past. That is, the longer-run level of the funds rate could be lower than in previous decades.

The case for a much lower natural rate of interest seems plausible to me, but it puts a great deal of weight on estimates that are subject to considerable uncertainty. History has shown that deviating from long-run variables can increase risk to desired economic outcomes. My own view is that policy must still adjust from its current settings in order to “promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates” as specified by the Federal Reserve Act. So while I see a gradual approach to raising

rates as appropriate, I see more than one move per year, as has been the case, as needed to achieve the FOMC's objectives.

Conclusion

Economic expansion over the past seven years has brought the labor market and inflation to levels consistent with the FOMC's longer-run objectives. In this environment, policy rules point to higher rates, and there is reason to believe they are fairly signaling. To be sure, the outlook for the economy does not call for tight policy by any means, but a gradual and deliberate move to more normal rates is necessary to limit the risk of creating imbalances and financial stability risks that could surface in undesirable ways.



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

The above text is from remarks George gave Feb. 28, 2017, at Stanford Institute for Economic Policy Research in Stanford, Calif.



INCREASING PARTICIPATION

WORKERS STAYING ON THE JOB LONGER



More than 3 million people entered the labor force last year.

And it would appear as though new or previously discouraged workers are going to work. Appearances, however, can be misleading.

One of the driving forces behind the increase in the labor force participation rate is older workers remaining on the job. The reasons vary for their extended stay, but their presence is an important element in understanding current labor conditions.

Jonathan Willis and Didem Tüzemen, both economists with the Federal Reserve Bank of Kansas City, say changes in the labor force are driven by the combination of people entering and exiting the labor market. Entries consist of people who previously did not have a job and were not looking for work entering the labor force. Exits consist of people previously employed or actively looking for work leaving the labor force.

Willis and Tüzemen say the recent increase in labor force participation, from 62.4 percent in September 2015 to 62.9 percent in September 2016, could have occurred in one of two ways.

“First, the number of people entering the labor force could have accelerated faster than the number of people exiting the labor force,” the two economists explain in their recent research “What is Behind the Recent Increase in Labor Force Participation?”

In the second scenario, “the number of people exiting the labor force could have declined faster than the number of people entering it.”

In essence, people are working longer, and that’s what the economists think is driving the current labor participation rate increase.

Staying on the job

At age 66, Jim Kerr says it’s still great to receive a regular paycheck, but to him, working is more than just money.

“I love what I do,” he said.

Kerr became a pharmacist in the late

THE RISE AND FALL OF PART-TIME EMPLOYMENT

During the recession many firms laid off workers or reduced workers’ hours. As a result, workers reporting they were working part time because they could not find full-time work, whom economists refer to as part time for economic reasons workers (PTER), increased from 3 percent of total employment in October 2007 to 6.5 percent in May 2009.

As the economy strengthened and firms began to hire over the next four years, the percentage of PTER workers in the labor force declined from 5.6 percent of total employment in July 2013 to 3.9 percent in October 2015, and remained stable during 2016.

In his research, Jonathan Willis, an economist with the Federal Reserve Bank of Kansas City, found most PTER workers were more likely to be in low- and middle-skill jobs than high-skill jobs.

Middle-skill jobs, such as manufacturing, started to decline in the United States decades before the recession due to technological advancements and the offshore outsourcing of jobs. That trend continued during the recession with nearly 300,000 middle-skilled jobs lost per month, and an additional 64,000 workers in middle-skilled jobs per month reported they had shifted their status to PTER.

As middle-skill jobs declined, low- and high-skill jobs grew leading up to the recession—a phenomenon called job polarization. Although many middle-skill workers found full-time work in the recovery, decreasing the number of middle-skill PTER workers, there are still 5 million fewer middle-skill jobs today than in December 2007.

At this rate of employment growth, Willis says it would take an additional 13 years for middle-skill jobs to reach pre-recession levels.

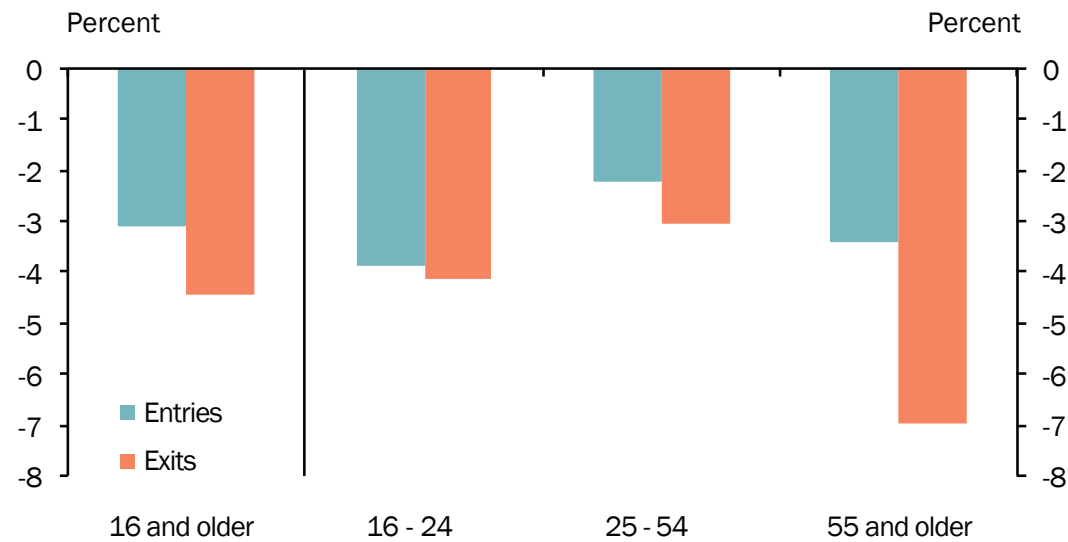
Low- and high-skill workers both experienced full-time job losses and increases in PTER workers during the recession. In the recovery, however, net employment growth for low-skill jobs increased 20,000 jobs per month and PTER workers declined. If the labor recovery continues at this pace, Willis says the number of PTER workers in low-skill jobs will return to pre-recession levels by 2020.

Labor demand has been strongest for high-skill jobs in the recovery. Although PTER employment remains high among these workers, it’s not related to weak labor demand, Willis says, because employment growth has averaged 121,000 jobs per month over the last two years, well above its pre-recession growth rate.

With continued employment growth, the PTER employment share should drop to 3.4 percent by mid-2020. Due to job polarization, Willis says the share of PTER workers in the labor force is unlikely to return to its pre-recession level of 2.9 percent.

CHANGES IN LABOR FORCE ENTRIES AND EXITS BY AGE GROUP

Sept. 2015- Sept. 2016



Source: Current Population Survey and authors' calculations.

1970s, licensed both in Kansas and Missouri. He owned and operated his own pharmacy for 21 years in the Kansas City area until he sold it to local grocery store chain. He made a deal with the company to remain at the pharmacy, where he has been ever since.

"I have to say that helping people is one of the primary reasons for me," he said.

Another reason he keeps working is a desire to pass on his knowledge and sense of community service to the younger generation of pharmacists. Besides his regular customers at the pharmacy, Kerr has worked with nonprofit clinics, medical organizations, church groups and community organizations such as Heart to Heart International, which provides global humanitarian assistance.

Kerr says there are obstacles for older workers to remain relevant in a changing

work force, but he's found ways to use those hindrances to remain in the labor force.

For instance, many older workers might see the rapid pace of technology in the workplace as a hindrance to extending their careers. And in some industries, technology has eliminated many jobs. Kerr says the rapidly changing technological advancements in the drug and healthcare industries have made his work less difficult in some aspects.

"Back when I had the pharmacy, I told myself I'd never get a computer, and three years later I bought one because medical records were going digital."

Today, medical records, drug information and dosages, and other related information Kerr once had to keep track of on paper or by memory are only a few clicks away on a computer network.

"Technology advancements give me an opportunity to keep learning," he said.

What if he runs into a technological barrier?

"I rely on the younger workers, whose generation is more tech savvy than me, to help me learn," he said.

Besides remaining relevant, the cost of living more than likely keeps many older workers on the job, Kerr said.

"Health benefits are a big concern," he said.

As a pharmacist, he knows what it's like to work with Medicare and health insurance providers.

"There are a lot of costs involved," he said.

He gave one example of a customer who pays \$150 a month out of his pocket for one medication. Although that person can afford it, many retirees live on tight budgets, and any increase in medication or medical expenses can have negative effects on their quality of living.

"So when you're faced with those kind of costs sometimes it makes more sense to keep working," he said.

The current workforce

The number of workers exiting the labor force increased rapidly as the Great Recession took hold. In 2007, Willis and Tüzemen say some workers who lost their jobs became discouraged and stopped looking for work, and some discouraged workers who were close to retirement chose to retire early. During the recovery, from 2009 to 2011, many workers began to reenter the labor force, including some discouraged workers who had stopped looking for a job.

During this time, however, exits from the labor force still outpaced entries, contributing to the continued decline in the labor force participation rate. This trend continued into 2014, although the labor force had begun to stabilize.

By 2015, however, entries and exits began to decline among workers in all age

categories—16 and older—and the labor force participation rate began to increase most notably among older workers.

According to Willis and Tüzemen, from September 2015 to September 2016, the declines in entries and exits for workers 16 to 24 were similar to the overall average. For workers age 25 to 54, the decline in exits exceeded the decline in entries. This suggests that people were remaining in their jobs longer, they say.

More pronounced were the number of people staying in their jobs among workers age 55 and older. They experienced a decline of more than 7 percent in exits from the labor force, much less than other age groups.

Tüzemen and Willis say there are several reasons for the increase in the labor force participation rate such as increasing wages, a growing jobs market and better quality jobs. These reasons encourage people to keep looking for work, for workers with a job to stay employed for longer stretches of time, and for older workers to delay retirement decisions.

"In other words, the 'revolving door' of the labor force is slowing down as workers are matched to better, more stable jobs," the economists explained.

T

KEVIN WRIGHT, EDITOR

FURTHER RESOURCES

"What is Behind the Recent Increase in Labor Force Participation?" by Didem Tüzemen and Jonathan Willis

www.KansasCityFed.org/publications/research/mb.

"Stuck in Part-Time Employment"

by Jonathan Willis

www.KansasCityFed.org/publicatoins/research/mb.

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



RISING RENTS

Housing affordability in the U.S.

When rental costs rise faster than the rate of inflation, it can pose a challenge in terms of housing affordability. But when renters' incomes can't keep up with rising rent prices, affordability suffers even more. It's this latter measure—people's ability to afford rising rent prices when their incomes decline, become stagnant or don't increase at the same rate as rent—that is most telling.

"By this measure, rental housing has indeed become less affordable at the national level," Senior Economist Kelly Edmiston of the Kansas City Fed explained in his recent research "Residential Rent Affordability across U.S. Metropolitan Areas."

Median residential rent rose at an annual rate of 2.3 percent nationally from 2010 to 2015. When Edmiston adjusted that figure for inflation, annual median rent grew by 0.6 percent. But as median rent grew, personal income declined at an inflation-adjusted rate of 0.4 percent from 2010 to 2015, widening the gap between income and rent by 1 percent.

Edmiston says, however, macroeconomic outlooks at the national level don't take into account changes in rent affordability within local markets, which can vary greatly, and the western United States is a good example.

Western rents rising

Rent inflation in the West census region was 5.2 percent in November 2016, up 3 percentage points from mid-2012, according to Kansas City Fed Senior Economist Jordan Rappaport and Associate Economist Michael Redmond in their recent research "Consumer

Price Inflation and Rising Rents in the West."

And the extremely high rent increase is occurring disproportionately in four western metropolitan areas: Portland, Seattle, San Francisco-San Jose and Denver.

Rents increased by at least 5.7 percent from 2015 to 2016 in those cities, which also had the highest cumulative rent inflation over the previous four years.

Rappaport and Redmond say several economic factors are driving the high rent inflation. For instance, there has been an increase in highly paid workers moving to those cities, pushing up average household incomes and the demand for housing.

Although the United States is experiencing a shortage in new home construction, it's even more severe in these four cities. Rappaport and Redmond say, "geography for the western United States—ocean and mountains—has significantly constrained new home construction in each of the four metros."

And Denver, Seattle and San Francisco-San Jose have some of the tightest land-use restrictions in the country. Meanwhile, Portland has a geographical urban growth boundary that limits new construction, making it difficult to build new homes and driving up prices.

Although the economists expect rents in the four metro areas to continue to increase for some time, over the long term, however—after evaluating overall economic conditions—they say, "the rising relative cost of living in these metros is likely to dampen housing demand and curb rent inflation."

RENT BY THE NUMBERS

\$20.30

Average national housing wage per hour a worker needed to earn in 2016 to rent a two-bedroom apartment

112

Hours a minimum wage earner (\$7.25 per hour) needs to work per week to afford the national average two-bedroom apartment

5.2 percent

Housing rent inflation in the West census region as of November 2016

2.9 percent

Housing rent inflation in the Northeast, Midwest and South census regions as of November 2016

+7.8 percent

Annual percentage change from 2015 to 2016 for housing rent in Denver

+2.9 percent

Annual percentage change from 2015 to 2016 for housing rent in New York City

Mile-high inflation

Denver is one of the fastest growing cities in the nation and has become one of the most expensive cities to buy or rent a home in the Tenth Federal Reserve District, which comprises Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming.

Bill James, an authority on Denver real estate services, recently published an analysis of apartment markets and trends. His company found that at the end of 2016, more than 23,700 housing units were under construction in metro Denver, of which almost half were in the city and county of Denver.

“Many of the new properties are leasing units at the upper end of the rental rate spectrum, which raises concerns for overbuilding in 2017, especially in that segment of the market,” the report states.

The abundance of upper-end rental properties has overinflated the average rental rate increases for Denver. For example, the Apartment Association of Metro Denver reported that average rental rates have risen more than 53 percent between 2009 and 2016, and as of 2016, the association says the average rental rate for a two-bedroom, two-bath apartment in the Denver metro was \$1,569 per month.

Although the numbers are correct when considering overall averages, James says these figures are not an apple-to-apples comparison of apartment units. The abundance of high-end rental properties gives an imbalanced perception of overall rental inflation and pricing in the metro. Yet, for all the housing construction in the Denver area, more affordable housing is needed throughout the state.

“Unfortunately, we are not keeping up with household growth in the state of Colorado,” said Alison George, director of the Colorado Division of Housing, at a recent event at the Kansas City Fed that explored rent affordability, preservation and inflation.

More than 100,000 people moved to Colorado in 2015, and the government estimates about 100,000 moved to the state in 2016.

There are more than 153,000 households

in the state that spend more than 50 percent of their annual income on housing, George said, and the need for rental housing that better meets personal incomes is growing.

Assessing affordable housing

Renters and their advocates, who typically represent low- to moderate-income households, have expressed concerns about significant increases in affordable rents and associated declines in affordability. Most of the driving forces behind the increases involve what Edmiston describes as the “usual suspects” such as population and income growth; however, some areas can be affected by industry sector growth such as an energy boom in oil- and gas-rich areas. Universities and military bases also can affect rent affordability.

Edmiston says it’s not just low- and moderate-income households affected by rent inflation. In some metropolitan areas, middle-income households also face rapidly increasing rent affordability due to declining incomes.

Why is there a growing concern? The threshold for housing affordability being a cost-burden on a household is almost uniformly defined as 30 percent of gross household income. Edmiston says, for the nation, the 2016 housing wage is \$20.30 per hour. That is, a full-time worker in a single-earner household would need an hourly wage of \$20.30 or more to rent a two-bedroom unit at Fair Market Rent without being a cost-burden on the household. Fair Market Rent is a federal housing standard primarily used to determine rental payment amounts for public housing.

Edmiston determined that a worker earning the U.S. federal minimum wage of \$7.25 hour as of December 2016, and ignoring statutory overtime pay requirements, would need to work 112 hours per week to afford a two-bedroom apartment priced at Fair Market Rent. Even at \$15 per hour, which has been proposed by some advocates as the new minimum federal wage, a worker would need to work 54 hours per week.

So when you consider the Denver metro’s average rental prices, such as \$1,500 a month for a two-bedroom apartment, low- to moderate-income households, and even

middle-income households struggle to stay within the threshold of housing affordability.

The Kansas City Fed’s Community Affairs office has recently conducted programs on rental and purchase of affordable housing to help individuals and communities address recent housing trends.

One program, which Edmiston spoke at in December at the Kansas City Fed’s Denver office, focused on preserving affordable rental housing in the midst of rental inflation. Another event in March, which was in conjunction with the National Development Council, focused on the practices of affordable housing finance. More information about the program is online at www.KansasCityFed.org/community.

Although some areas are affected more than others, Edmiston says with the housing shortage in the United States, rent affordability will continue to be a concern in the long term. Addressing this issue requires not only identifying the areas with troubling affordability trends, but also what makes these areas different from others, he said. And there is no one solution to affordability issues; it will take a combination of financial and policy solutions to address the matter.

T

KEVIN WRIGHT, EDITOR

FURTHER RESOURCES

“Residential Rent Affordability across U.S. Metropolitan Areas” by Kelly D. Edmiston
www.KansasCityFed.org/publications/research/er

“Consumer Price Inflation and Rising Rents in the West” by Jordan Rappaport and Michael Redmond
www.KansasCityFed.org/publications/research/mb

“Preserving Affordable Rental Housing: A Look at Tools and Polices”
www.youtube.com/watch?v=P5uHywe4GkY

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

SHIP to SHORE

THE RELATION OF OCEAN FREIGHT PRICES TO INFLATION

Although international shipping costs are not included in import price indices, importers may pass changes in costs onto consumers in a manner that affects aggregate price growth. Kansas City Fed economists Nicholas Sly and A. Lee Smith and research associates Trenton Herriford and Elizabeth Johnson, evaluated this pass-through and found that a 15 percent increase in shipping costs leads to a 0.10 percentage point increase in core inflation after one year.

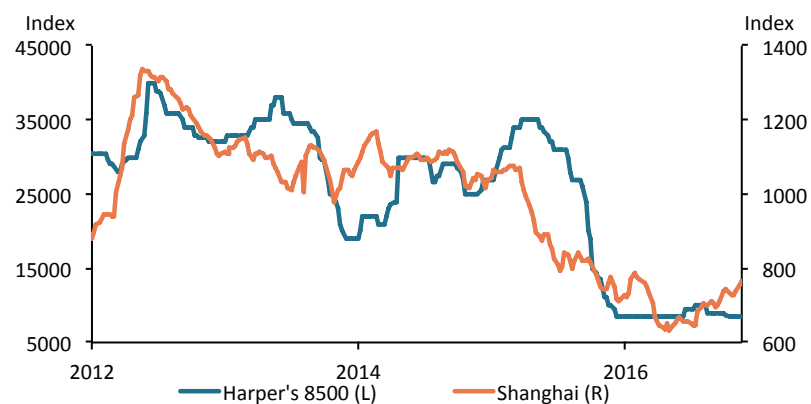


A DELAYED EFFECT

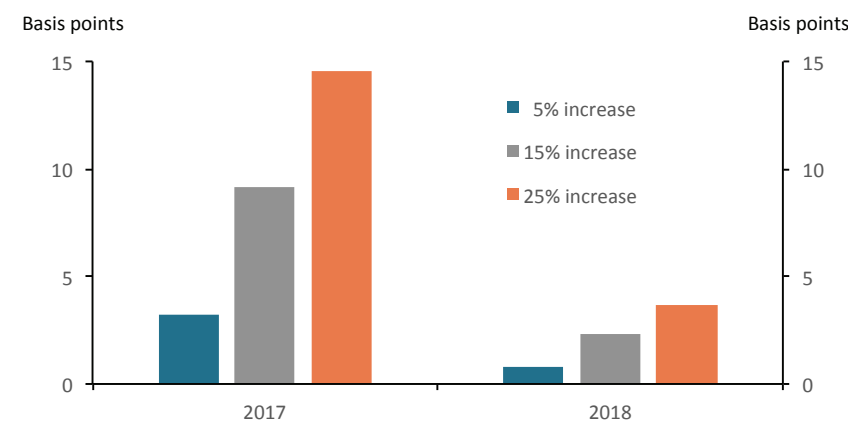
The consequences of an increase in shipping costs today would take several months to reach consumers and core PCE inflation due to the length between when an order is placed and when goods are delivered to the market. Generally, according to the U.S. Department of Commerce, total international shipping costs for importing goods include transit costs from the manufacturer to the foreign port of exit, the port of exit to the U.S. port of entry, and the port of entry to the final destination.

THE FALL AND RISE OF SHIPPING COSTS

Over the past few years, ocean freight costs declined by more than 50 percent after reaching its peak in 2012. The decline reversed in the last few months and shipping prices increased by 15 percent, accelerated by the August bankruptcy of the Hanjin Shipping Co., a large South Korean shipping firm. Hanjin's exit removed overcapacity in the market, which had contributed to cost declines.



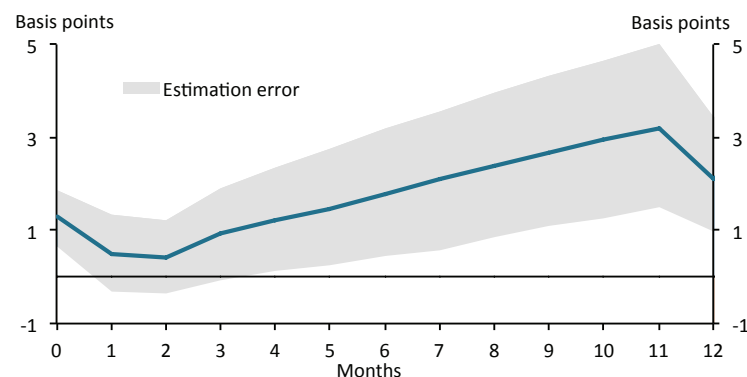
Sources: Shanghai Shipping exchange and Harper Peterson & Company.



Sources: Haver Analytics, Chicago Mercantile Exchange and Harper Peterson & Company

THE CONSEQUENCES OF RISING SHIPPING COSTS

Although most increases in shipping costs have been modest, they are not insubstantial when it comes to the effects the pass-through could have on consumers and core inflation. If the increase in shipping costs continues, merchant prices will likely increase in 2017 and 2018, contributing to additional core inflation. The chart illustrates the effect a 5, 15 and 25 percent increase in shipping costs would have on inflation. For example, a 15 percent increase in freight costs in the third quarter of 2016 would cause core PCE prices to rise by an additional 10 basis points in 2017.



Sources: Haver Analytics, Chicago Mercantile Exchange and Harper Peterson & Company.

HIGHER SHIPPING COST PASS-THROUGH

Even though U.S. import price indices omit information about shipping costs, importers may pass any additional ocean freight costs to consumers through various goods' prices. The consequences of this pass-through may be significant given the total volume of U.S. imports is nearly 12 percent of GDP and most traded goods are delivered by ocean freight. The accompanying chart illustrates the estimated pass-through over a 12-month period of a 5 percent shock in ocean freight costs to U.S. core PCE price inflation year over year.

CONCLUSION

If shipping costs continue to increase, higher import costs may put additional upward pressure on core inflation, even if typical import price indices remain low.

FURTHER RESOURCES

"How Does A Rise in International Shipping Costs Affect U.S. Inflation?" by Trenton Herriford, Elizabeth M. Johnson, Nicholas Sly, and A. Lee Smith
www.KansasCityFed.org/publications/research/mb

BROAD REPRESENTATION, REGIONAL ROOTS

KANSAS CITY FED RELIES ON DIRECTORS FOR INSIGHT

As designed by Congress in 1913, the Federal Reserve System is a representation of public and private institutions. While the Board of Governors in Washington, D.C., is a government agency with broad oversight responsibilities, there are 12 regional Federal Reserve Banks located throughout the United States that are under the direction of local Boards of Directors. In addition to oversight responsibilities for their respective Reserve Banks, the regional Fed directors serve as a critical conduit between their local communities and the nation's central bank, offering insight and counsel on the economy drawn from their own expertise and contacts.

This system of the independent regional Reserve Banks, which also have affiliated Branch offices, are in direct recognition of the value Americans place on limiting influence and ensuring broad representation. Prior to the Federal Reserve, the United States had made two attempts at a central bank, but large areas of the country, especially along the frontier and in the South, felt the institutions were too closely aligned with the power centers of the Northeast, and the institutions were abandoned.

The Tenth Federal Reserve District includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. The Kansas City Fed has three Branch offices, Denver, Oklahoma City and Omaha, in addition to its headquarters.

Here's a closer look at Tenth District directors who began their terms of service in 2017.



GREGORY HOHL
KANSAS CITY DIRECTOR

PHOTO BY BOB GREENSPAN

GREGORY HOHL

For Greg Hohl, banking is a family business.

“I am the fourth generation of Hohl presidents,” he said.

His great-grandfather, John G. Hohl, founded Wahoo State Bank in 1932 during the Great Depression in Wahoo, Neb. Greg Hohl's grandfather Clarence G. Hohl, great-uncle Ray W. Hohl and father Robert J. Hohl have all served as its president.

During its founding year, Wahoo State Bank became a member bank of the Federal Reserve Bank of Kansas City. Now Hohl, as chairman and president of Wahoo, has the opportunity to serve on the Kansas City Fed's Board of Directors.

“The opportunity to sit on the Board as a community banker, to learn from and experience such a highly regarded and respected institution as a board member was very appealing and a high honor,” he said.

As a community banker, Hohl's workday includes a wide range of responsibilities and requires various skills and knowledge, such as customer service, regulatory requirements, accounting, legal, advertising, marketing, lending and managing employees as well as the business side of the bank.

He also manages a large loan portfolio. Given his experience, he appreciates the importance of community banks.

“These banks play a vital role in our nation's financial system and are economic engines to their communities, helping them to stay strong and vibrant,” he said.

As a Fed director, Hohl wants to be effective in representing the voice of small, community banks located primarily in rural communities. Unfortunately, these banks face many challenges in an industry that in many respects favors larger institutions through burdensome, costly regulations, he said.

Besides being a voice for community banks, he hopes to help the Kansas City Fed and the Federal Reserve System successfully implement their mission of maintaining a stable, growing economy both in the Tenth Federal Reserve District and the nation.

“Throughout my tenure on the board I look forward to the unique experience it will provide interacting with the outstanding staff of the Federal Reserve Bank of Kansas City as well as the talented, successful directors who come from all sectors of business and industry,” he said.



TARYN EDWARDS
DENVER DIRECTOR

TARYN EDWARDS

Taryn Edwards can be on an international business call one day and be in the midst of negotiations in that country the next. Edwards serves as the senior vice president of Saunders Construction Company and principal of Saunders' Concessions, a commercial general contractor with an emerging commercial development services division headquartered in Centennial, Colo.

"My work is diverse and challenging within the realm of infrastructure building," she said.

Edwards provides this diverse business perspective to the Federal Reserve System as a director on the Kansas City Fed's Denver Branch Board.

"I hope to increase awareness of and promote industry-led best practices surrounding infrastructure, trade, innovation and obstacles we currently face such as the shortage of skilled labor, the utilization of public-private partnerships and the impact of foreign investment on U.S. infrastructure," she said.

Edwards says more than 40 years ago Saunders' founder instilled an unwavering philosophy of community investment and support, which remains a cornerstone of the company culture.

"Our corporate mission focuses largely on children's health, education, services and programming in addition to stewardship to the communities we have the opportunity to work in and with," she said.

The company's focus on community building and providing stability for clients and communities is similar in concept to the Kansas City Fed's mission of fostering a stable and healthy economy.

"Having had the unique opportunity as a liaison to the Board to observe dynamics of the Federal Reserve System and its interconnectedness with the construction and development industries, I'm driven to delve deeper into the topic as my particular expertise has become a focus on a national platform," she said.

Although Edwards shares her expertise and experiences in her role as a director, working with the Kansas City Fed also is a learning opportunity for her.

"I am excited at the thought of what I will learn from and experience through others on the board and I look forward to having a greater and more comprehensive understanding of the Federal Reserve and banking systems overall," she said.

SUSAN CHAPMAN PLUMB

As a Native American, more specifically a Cherokee, family is an important aspect of Susan Chapman Plumb's culture. Even the bank she works for—Bank of Cherokee County in Hulbert, Okla.—is family owned. She is the youngest of the five primary stockholders.

"I really have the privilege of partnering with individuals who are community minded and have community banking at heart," she said.

In her role as chief operating officer and counsel for the bank, Plumb often finds herself performing multiple duties and tasks, which usually start at 6 a.m. with emails to various employees. Although she enjoys the daily work inside the bank, she says she gets more business done outside the bank.

"I like getting out and being part of the community," she said.

She earned a juris doctorate at the University of Tulsa and practiced law for 10 years before going back into banking.

"Community banking has always been a part of my life," she said.

Her father Gary Chapman, who has been involved in Cherokee banking for 40 years, headed the investment group of prominent Cherokee tribal members who bought Bank

of Cherokee County when it was the smallest state bank in Oklahoma with about \$6 million in assets.

Now the minority-owned bank is a community development financial institution with three office locations and approximately \$102 million in assets.

It's the community-minded, community-owned banking voice Plumb wants to convey as a member of the Kansas City Fed's Oklahoma City Branch Board of Directors. She says it's important that the Federal Reserve understands this perspective, especially with the decline of community banking on the national level.

"It's hard to say there is any one thing that has caused the decline of small community banks in the country," she said.

Plumb thinks it's a combination of regulatory issues, capital constraints and workforce retention in rural communities. Besides being an advocate for minority-owned, community banks, Plumb says being a director has provided her invaluable information about the economy, business, banking and even management from her fellow directors and Fed staff.

"It's a win-win for me," she said. "There are so many people at the Fed who are good at what they do and so knowledgeable."



SUSAN CHAPMAN PLUMB
OKLAHOMA CITY DIRECTOR

PHOTO BY JOSEPH MILLS



KATRINA WASHINGTON
OKLAHOMA CITY DIRECTOR

PHOTO BY KEITH BALL

KATRINA WASHINGTON

Katrina Washington understands how economic conditions can affect businesses. She founded Stratos Realty in 2003, and since then the company has produced more than \$100 million in sales and grown to two locations in Oklahoma County, Okla., and one in Ellicott City, Md.

As a director on the Kansas City Fed's Oklahoma City Branch Board, she can relay her experiences as a small business owner, a licensed real estate practitioner and long-time advocate for housing initiatives to help the Federal Reserve System achieve its mission of maintaining economic stability.

"Dealing with corporate entities and the government in the housing market have given me insight into the larger economy, how fragile it can be, and how vulnerable we all are to missteps by those parties," she said.

She also serves as a director or is a committee member of several local organizations such as the Oklahoma Association of Realtors, Realtor Commercial Alliance, Neighborhood Housing Services, the OKCMAR Foundation and the Oklahoma City Metropolitan Association of

Realtors. This gives her firsthand knowledge of the institutional aspects of the demographic, educational and financial perspectives of her local market, she said.

Sharing her knowledge and educating people about the marketplace and economy is important to Washington.

"I work with customers on a grass roots level in selling and buying homes," she said. "I teach homebuyer education and deal with many people who are either just starting out or lack financial education."

This interaction also allows her to gather information on how regulation either positively or negatively affects the average person's financial stability, which she can relay to the Kansas City Fed as it gathers data and information about current economic conditions.

"I hope to expand my knowledge of the inner workings of the economy on a much broader scale, which will allow me to continue to grow personally and professionally so I can better navigate the future and help clients, customers and community leaders to contribute to a stable environment where all can grow and thrive."

ANNETTE HAMILTON

Annette Hamilton enjoys the variety of industries her company, Ho-Chunk Inc., manages. More importantly, she enjoys the opportunity of giving back to her community.

"Since we are owned by the Winnebago tribe and operate as a for-profit with a social edge, we get the opportunity to give back on a daily basis through our work while staying connected to our culture," she said. "It is really what we work for: to help combat historical poverty and dysfunction with a business approach and lift up the tribe to a thriving economy and a prosperous people."

Hamilton is chief operating officer at Ho-Chunk, which is based in Winnebago, Neb. She oversees and develops strategies for the conglomerate's five divisions and 34 subsidiaries, and mentors executives on business strategies and economic conditions. She also advocates for the company's endeavors, whether on fair governmental policies or better business conditions, in order to fulfill Ho-Chunk's mission to use the Winnebago tribe's economic and legal status to develop and operate successful business enterprises and provide job opportunities for tribal members. In the long-term, these goals will enable the tribe to reach economic self-sufficiency.

As a director on the Kansas City Fed's Omaha Branch Board, she shares her perspective on local business and the economy

and how those assumptions fit into the larger economic picture.

"This type of thought process is exactly our passion at Ho-Chunk Inc., and I definitely wanted to participate," she said.

Her perspective also includes the struggles of creating a successful business environment so businesses such as Ho-Chunk can create a better life for communities in northeast Nebraska.

But her reasons for serving as a board director go beyond economic perspectives. Her uncle used to work for the Federal Reserve Bank of St. Louis.

"As a child, I remember visiting my uncle and overhearing discussions on economic conditions and the role of the central bank with reverence and awe," she said. "It seemed to me this was the place where the problems were discussed and solved, and it was a place I aspired to be."

With her life's work centering on elevating a community from poverty to prosperity through business, she said it is a great honor to serve as a director and remember those times with her uncle.

For more information on the Federal Reserve Bank of Kansas City's directors, visit KansasCityFed.org/aboutus/leadership.



ANNETTE HAMILTON
OMAHA DIRECTOR

PHOTO BY KJ WINGERT



BANK ENFORCEMENT ACTIONS

The effects on loan contracting

There are two opposing hypotheses about the effects of enforcement actions on the cost of bank loans. One hypothesis suggests enforcement actions improve the treatment of borrowers. The other hypothesis suggests enforcement actions worsen the treatment of borrowers. Federal Reserve Bank of Kansas City Economist Raluca Roman recently examined the effects enforcement actions have on loan contracting to determine which hypothesis dominates.

Increase in regulatory actions

Recent research shows that the number of regulatory enforcement actions on banks escalated from 500 to 600 per year before the Great Recession to 906 in 2008, 1,563 in 2009, and 1,795 in 2010, which reflect the need to strengthen financial institutions and stabilize the financial system.



LEAD SANCTIONED BANKS

Syndicated loans

Roman compared terms and costs of 6,825 syndicated loans—large dollar loans involving multiple lenders and issued to sophisticated borrowers—initiated by 39 lead banks to 4,340 borrowers before and after enforcement action announcements—2,485 loans before and 4,340 after. In her analysis, Roman took into account bank, borrower and loan characteristics, and other variables such as loan type, loan purpose, loan risk and pricing structure, and other details that could affect loan costs before and after the enforcement action.

Rate of bank loans

-17%

The analysis showed that a bank's loan spread decreased by approximately 17 percent after an enforcement action. Of the sample loans, which averaged \$472 million, the post-sanction decreases in the loan spread implied an average annual decrease in interest receipts of approximately \$1.5 million per loan. The severity and type of enforcement action also affected the loan spread, which may have led bankers to compensate their borrowers with a larger decrease in loan spread and better loan terms to avoid losing business. Also, enforcement actions issued against bank management may have had a slightly greater effect on loan spreads than actions issued against banks.

Non-price contract terms

Enforcement actions prompted banks to offer their borrowers loans with a longer maturity—3.7 months on average—than before the actions, which Roman says implies that longer maturity may help offset bank reputation and condition problems. Also, the number of covenants in loans decreased by 18.2 percent from pre- to post-sanction loans. Enforcement actions, however, did not affect loan size or the amount a borrower can borrow. Actions also did not affect borrowers' likelihood of pledging collateral for the loan.



Actions' effects on loan structure



Enforcement actions can alter how lenders structure loans. With syndicated loans, the lead lender reduces credit and liquidity risk and complies with various regulations by distributing parts of the loan out to other lenders. Roman's analysis found that after enforcement actions, the number of lenders involved in the loan increased by about one-fifth. Another aspect of the loan structure is that upfront fees and annual fees decreased in the post-enforcement period.

Conclusion

The results, Roman says, are consistent with the hypothesis that enforcement actions create reputational and credibility problems for sanctioned banks, and as a result, banks may have to compensate borrowers with better loan pricing and other favorable terms. This may result in changes to loan contracts that cost banks through reduced income.

Further Resources

"Enforcement Actions and Bank Loan Contracting" by Raluca A. Roman
www.KansasCityFed.org/publications/research/er

MAKING A CONNECTION

IN FOUNDING THE FEDERAL RESERVE MORE THAN A CENTURY AGO, Congress recognized the importance of connecting the nation's central bank to the Main Streets of America. The Federal Reserve Bank of Kansas City carries out this role through its president and its programs and activities throughout the Tenth District, nation and welcoming countries. Here is a glimpse at the recent activities of President Esther L. George and the staff of the Kansas City Fed.



On behalf of the Federal Reserve Bank of Kansas City, President Esther George received a framed copy of a World War I Liberty Bond poster from the Boy Scouts of America Heart of America Council, headquartered in Kansas City, Mo. Heart of America Council's Board Director Jim Hinson, left, and Kendrick Miller, scout executive, presented the poster during a ceremony at the Kansas City Fed's headquarters in January.

George visits with alumni Board of Directors of the Kansas City Fed's Denver Branch. From left, Alison Felix, Denver Branch executive and economist; Mary Ann Hunter, a former Denver Branch Manager; alumni directors Lu Cordova; Kate Paul; and Jo Marie Dancik; President George; and alumni director Barb Mowry.



During a recent trip to Oklahoma, George, right, toured The Pioneer Woman Mercantile in Pawhuska. Esther is pictured with Ree Drummond, also known as The Pioneer Woman, center, and Rose Washington, chair of the Kansas City Fed's Board of Directors.



In February, George, pictured with Will Pryor, an audit senior manager at Grant Thornton, spoke at the Centurions Leadership Program in Kansas City, Mo. Since 1976, Centurions, which is a program of the Greater Kansas City Chamber of Commerce, has been a training ground for future Kansas City leaders.



George visited the Boxyard shopping and entertainment district in Tulsa, Okla., with Rose Washington, right, chair of the Kansas City Fed's Board of Directors, and Casey Stowe, center, developer for the Boxyard.

Building relationships ...



Reception provides networking opportunities

Alison Felix, Denver Branch executive, right, is pictured with Denver Branch Board directors Taryn Edwards, center, and Richard Lewis during a recent reception at the Denver Branch.

Sand Springs business forum, tour and roundtable

Oklahoma City Branch Executive Chad Wilkerson, center left, spoke to the Sand Springs Chamber of Commerce and participated in a business roundtable and tour of a local manufacturing company with Rose Washington, center, right, executive director of the Tulsa Economic Development Corporation and chair of the Federal Reserve Bank of Kansas City Board of Directors.



Networking with local partners

Alison Felix, Denver Branch executive, center, and Ariel Cisneros, community development advisor, right, speak with Belinda Hooks, market president, Mountain Plains Minority Supplier Development Council, during a recent networking reception and business discussion with local business and community partners at the Denver Branch office.

Employees volunteer to help students with financial concepts

Denver office employees such as Rachel Hier pictured above, volunteered to help more than 100 students from M. Scott Carpenter Middle School in Denver learn about personal finance through a hands-on, realistic simulation experience at Junior Achievement's (JA) Finance Park.



Oklahoma City Branch hosts holiday reception

Federal Reserve Bank of Kansas City President Esther George spoke to more than 200 bankers and business leaders in December 2016, including former Oklahoma City Director K. Vasudevan, Bartlesville, Okla., who attended the Holiday Reception at the Oklahoma City office.



Evening at the Fed for educators

The Oklahoma City office hosted an Evening at the Fed in January, which is a professional development event for Oklahoma educators. Attendees heard an economic presentation from Oklahoma City Branch Executive Chad Wilkerson, above, and participated in a nationwide conversation with Federal Reserve Chair Janet Yellen via video conference.

Omaha Fed hears from area labor leaders

Kansas City Fed President Esther George speaks with members who participated in an area labor leaders roundtable discussion organized by Omaha Branch Board of Directors Chair John Bourne, who is an international representative with the International Brotherhood of Electrical Workers. Not pictured, but also in attendance, was Nathan Kauffman, Omaha Branch executive.



Kansas City Fed's Block inducted into Black Achievers Society of Greater Kansas City



Porcia Block of the Federal Reserve Bank of Kansas City, left, is pictured with Kansas City Fed President Esther George and Senior Vice President Kevin Moore.



Session focuses on growing business within communities

Senior Community Development Advisor Dell Gines spoke at the Omaha Startup Collaborative for the Heartland 2050 Series on growing entrepreneurial ecosystems to promote more and stronger minority businesses.



Kauffman shares economic insights

Omaha Branch Executive Nathan Kauffman discussed Nebraska economic conditions at a meeting of the Omaha Downtown Rotary Club.

Porcia Block, an officer with the Federal Reserve Bank of Kansas City, was recently inducted into the Black Achievers Society of Greater Kansas City for her career accomplishments, educational achievements and community impact. Founded by U.S. Rep. Emanuel Cleaver in 1974, the society honors local African American leaders in business and industry. The society has inducted more than 450 members in the past four decades.

"I am humbled by the recognition," Block said. "To the extent that my achievements are inspiring to others and I am able to serve as a role model, I am grateful and feel very blessed."

Block was honored at the 2017 Black Achievers Society dinner in January after being nominated for the award by the Kansas City Fed's senior leadership team in December.

"I am glad to be a part of an organization that has, at its forefront, a mission of supporting young people and providing opportunities for

them to further their education," Block said. "Education has represented a real pathway to success for me, so I am glad to be a part of a group that awards scholarships to deserving young people."

Block joined the Kansas City Fed in 1998 as an assistant examiner trainee after graduating with a degree in finance from Creighton University. In 2004, she left the Fed and worked in various auditing and banking positions, while attending graduate school to earn her MBA from Benedictine College in Atchison, Kan. In 2010, she returned to the Kansas City Fed and served in several management positions. She was promoted to assistant vice president in 2016. Last year, she graduated from the Graduate School of Banking in Boulder, Colo.

To learn more about the Black Achievers Society of Kansas City, visit www.black-achieverskc.com.

Kansas City Fed names 2016 Diversity Change Agent Award recipients



Employees Maurice Roper, left center, and Bridget Gasper, right center, are recipients of the Kansas City Fed's Diversity Change Agent Award. They are pictured with Kansas City Fed President Esther George and First Vice President Kelly Dubbert.

The Federal Reserve Bank of Kansas City recently named employees Bridget Gasper and Maurice Roper as recipients of the Diversity Change Agent Award, an honor for employees who make extraordinary contributions to diversity and teamwork for the Kansas City Fed.

Gasper received the award for her continued involvement on a council of employees who support diversity activities in the Bank. She has been engaged and assisted with multiple diversity-related events.

Roper was honored for his commitment in leading the Kansas City Fed's 2016 Diversity and Inclusion Appreciation Week. Roper spent countless hours coordinating

subcommittees and logistics for the event. He is a member of the Bank's Office of Minority and Women Inclusion diversity recruiting team and regularly assists with events for Inroads, a nonprofit that supports minority inclusion in corporate organizations.

Both Gasper and Roper have worked diligently to further the understanding of the Kansas City Fed's diversity strategy and consistently serve to remind others how exhibiting inclusive behaviors leads to better business outcomes.

To learn more about the Kansas City Fed's diversity and inclusion practices, visit www.KansasCityFed.org/aboutus/KcFedinformation/diversity.

Employees volunteer with Habitat for Humanity

A group of Federal Reserve Bank of Kansas City employees partnered with Habitat for Humanity last November to rebuild a house in Independence, Mo. They installed drywall, scraped paint, caulked windows and cleared debris, among other tasks, in an effort to give back to the community.

"It gave us a chance to let our guard down," Kansas City Fed employee Deena Schneider said. "We were just trying to do something good for others."

The Kansas City Fed supports community involvement through its Community Involvement Program, which actively seeks and provides opportunities for all current and past employees and their families to volunteer in a variety of civic, educational and community service activities.



Kansas City Fed employee Luke Woodward helped Habitat for Humanity rebuild a house last November.

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 April, May and June.

Sundance State Bank	Sundance	Wyo.	86
First State Bank	Ness City	Kan.	83
First Nebraska Bank	Valley	Neb.	83
Bank of Hartington	Hartington	Neb.	81
Bankwest of Kansas	Goodland	Kan.	78
First State Bank of Colorado	Hotchkiss	Colo.	75
First State Bank and Trust Company	Larned	Kan.	75
First State Bank in Temple	Temple	Okla.	74
Citizens-Farmers Bank Cole Camp	Cole Camp	Mo.	72
Bank of Commerce	Rawlins	Wyo.	39
Citizens Bank of Edmond	Edmond	Okla.	36
Bank of Jackson Hole	Jackson	Wyo.	35
Castle Rock Bank	Castle Rock	Colo.	31
Bankers Bank	Oklahoma City	Okla.	31
Bank of Commerce	Chelsea	Okla.	20
Mabrey Bank	Bixby	Okla.	20
Cobiz Bank	Denver	Colo.	10
Impact Bank	Wellington	Kan.	5
Security Bank	Laurel	Neb.	5
First Northern Bank of Wyoming	Buffalo	Wyo.	5
Equity Bank	Andover	Kan.	5
American Nation Bank	Ardmore	Okla.	1



COMMITMENT TO

Diversity and Inclusion

FEDERAL RESERVE BANK OF KANSAS CITY

2016 REPORT TO CONGRESS ON THE

OFFICE OF MINORITY AND WOMEN INCLUSION



Federal Reserve Bank of Kansas City employees are represented on many diversity and inclusion and mentoring groups at the Bank. Among those employees, from left: (first row) Dustyn DeSpain, Jackie Nugent, Haley Burson, Ingrid Wong, Andres Rivera Hurtado; (second row) Avery Adair, Joni Schmitker, Latonya Prather, Chad Parker; (third row) Sadid Carrillo, Pat Schleiger and Ariel Cisneros.

The Federal Reserve Bank of Kansas City's 2016 Office of Minority and Women Inclusion (OMWI) Annual Report highlights the Bank's long-standing commitment to diversity in its people, practices and partnerships.

Formally established by the Dodd-Frank Act of 2010, the office ensures the Bank's business practices remain inclusive and represent the range of backgrounds and experiences that make up the Federal Reserve's Tenth District.

In a short time, OMWI has strengthened and improved the Bank's commitment to diversity and inclusion in all aspects of its operations. The annual report for 2016 highlights and summarizes the many ways the Bank has made these efforts a priority.

While the Bank has a rich tradition and history of diversity and inclusion that predates Dodd-Frank, the Act has enabled leadership to create more formal standards and procedures through OMWI for the following:

- EEO and racial, ethnic and gender diversity of the workforce and senior management;
- Participation of minority-owned and women-owned businesses in the Bank's programs and contracts;
- Fair inclusion in the workforce of contractors;
- Technical assistance for minority-owned and women-owned businesses.

The 2016 report highlights the many successes and challenges the Bank faced in meeting its goal of diversity and inclusion. Perhaps the most

notable success was the bank's selection by the Greater Kansas City Chamber of Commerce as its 2016 Champion of Diversity. The annual award recognizes a regional business that embraces diversity in the workplace, vendor partnerships and the community.

Other successes in 2016 included ongoing efforts to strengthen existing relationships and develop new partnerships with organizations that promote diversity in the community as well as building on unique and innovative financial education programs and partnering with urban and minority school districts.

Among the challenges the Bank faces is an increase in competition in the District for experienced talent with specialized technology-based skills. In meeting that challenge, the Bank has developed a number of partnerships with professional IT organizations and sponsored diversity summits such as Minorities in Technology and Women in Technology.



During Native American Heritage Month, students from Haskell Indian Nations University in Lawrence, Kan., demonstrated and shared their cultural traditions and heritage through dance, music and cultural dress. Bank employees participated in an interactive cultural dance activity.



The Bank's continued diversity and inclusion efforts were recognized in 2016 by the Greater Kansas City Chamber of Commerce, which honored the Bank with its Champion of Diversity award. For more about the award, visit www.kansascityfed.org/aboutus/kcfedinformation/diversity/champion-of-diversity.

PEOPLE

The Federal Reserve Bank of Kansas City has more than 1,750 employees in its headquarters and Branches in Denver, Oklahoma City and Omaha. The economy of the Tenth District represents a wide and diverse range of industries, including agriculture, banking, energy, manufacturing, aerospace, hospitality/tourism and the military.

Within the District, which comprises Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico and western Missouri, 26 percent of residents live in rural areas, more than the national average of 14.4 percent. Minorities in the District represent 30.2 percent of residents compared to 38.6 nationally.

One mechanism for ensuring the Bank's advisory councils and boards of directors reflects its

commitment to diversity and inclusion is the Bank's Strategic Stakeholder Engagement Program (SSEP), started in 2015. SSEP helps build mutually beneficial relationships and interactions with stakeholders—both supporters and critics—who provide the Bank president and staff with insight on the Main Street economy and current and emerging issues.

Of the Bank's 12-member senior leader team, eight are women, representing 66.7 percent of senior leadership—much more than the Kansas City-area average of 26.9 percent. Minorities represent 16.7 percent of senior leaders, again exceeding the Kansas City-area average of 7.1 percent for equivalent positions.

Among the Bank's employees, the minority hiring rate for 2016 was 26.1 percent while the rate for women was 34 percent. Participation in the Bank's mentoring program reached its highest level ever in 2016. More than 450 employees participated, including 25 percent of the minority workforce and 31.2 percent of women. A new program in 2016 was Speed Mentoring, which gave participants an opportunity to interact with senior leaders to share stories on career development and progression.

PRACTICES

Supplier diversity practices help provide the Bank with access to a spectrum of qualified suppliers, benefit the community and provide small and diverse companies access to business opportunities.

Bank staff identified diverse suppliers for contracting opportunities by engaging with local, regional and national organizations through outreach activities and events targeted to businesses owned by minorities and women. Bank staff attended 22 such

events to connect with diverse suppliers.

In 2016, the Bank identified and included diverse suppliers in 77.1 percent of all requests for proposals and awarded 24.7 percent of all sourced contracts to businesses owned by minorities and women. Responses to the Bank's proposals were received from 56.1 percent of minority-owned and women-owned suppliers included in competitive acquisitions, up significantly from 2015.

The Bank also collaborates with other Federal Reserve Banks to develop and promote initiatives that strengthen supplier diversity at a national level. In 2016, the Bank participated in two national supplier diversity conferences hosted by the Women's Business Enterprise National Council and the National Minority Supplier Development Council.

PARTNERSHIPS

Each of the Bank's four offices is dedicated to providing financial education, internships and mentoring opportunities to urban high schools and diverse school districts, youth organizations and community groups across the Tenth District. In 2016, more than 16,000 students attended a financial education program hosted by the Bank.

The Bank's innovative Student Board of Directors program graduated 74 students in 2016 who participated on boards in Kansas City, Albuquerque, Denver, Oklahoma City and Omaha. One indicator of the success of the Student Board program is the hiring in Kansas City of two graduates, the first since the program started in 2011.

Seven Student Board members continued their involvement as paid interns working as activities

directors with the Bank's Summer @ The Fed program. They used the Bank's innovative financial education curriculum to mentor more than 750 young people involved in summer programs at 21 community organizations in the Kansas City area.

And in an effort to reach urban students with a different type of message, the Bank hosted Rock the Fed, with featured the rock band Gooding. The band performed a concert based around financial education for more than 200 high school students. The Bank partnered with the nonprofit Funding the Future, which promotes financial education for students.

For more about the Office of Minority and Women Inclusion and to read the 2016 OMWI report to Congress, visit WWW.KANSASCITYFED.ORG/ABOUTUS/KCFEDINFORMATION/DIVERSITY.



Interns in Public Affairs in Kansas City led the Summer @ The Fed educational sessions. Participants in 2016 were (front row, from left) Christianna Jackson, Kierra Wash and Wasiba Hamad; (back row, from left) Geovanni Alvarado, Alex Troubough, Jerry Huynh and Mylan Gray, assistant program director.

Annual REPORT 2016

FEDERAL RESERVE BANK OF *Kansas City*

As the central bank of the United States, the Federal Reserve has a broad range of responsibilities. Its mission areas are conducting monetary policy, supervising and regulating financial institutions and providing financial services to depository institutions. The Federal Reserve Bank of Kansas City, as one of the 12 regional headquarters, plays a key role in the success of these three areas. Here's a look at the operations of the Kansas City Fed and its Branch offices in Denver, Oklahoma City and Omaha.

Esther L. George is president and chief executive officer of the Kansas City Fed, which employs more than 1,700 people working in various capacities to fulfill the Bank's mission. George also is a member of the Federal Open Market Committee, which determines the direction of monetary policy.

The 2016 audited financial report for the Federal Reserve Bank of Kansas City is available online at KansasCityFed.org.



PHOTO BY: GARY BARBER

Our Work — 2016

FEDERAL RESERVE BANK OF *Kansas City*

Administrative Services

This Division performs a variety of services to maintain efficient and effective internal operations at the Kansas City Fed. Functions include maintaining the Reserve Bank's facilities; providing a safe and secure work environment; developing and implementing human resources strategies to meet the evolving needs of the Fed's workforce and operating environment; developing the Bank's budget and monitoring its expenses; providing accurate financial accounting and reporting; and supporting strategic planning and enterprise risk management. Additionally, the Division houses the Human Resources Technology Center, which provides project management and operational support for the centrally managed Federal Reserve System HR application portfolio; and the Office of Minority and Women Inclusion (OMWI), which is responsible for overseeing the Bank's diversity initiatives as outlined in the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Facilities Management, Law Enforcement, Human Resources, Financial Management, and Enterprise Risk and Strategy are included in the Administrative Services Division.



Andres Rivera Hurtado of the Bank's Administrative Services Division sampled some local cuisine during the annual Hispanic Business Fair. The fair exposes employees to the products and services of local Kansas City Hispanic businesses.

Audit

Audit reports to the Audit Committee of the Board of Directors and provides an independent and objective assessment of the Tenth Federal Reserve District's internal controls, risk management and governance processes to the Board of Directors and senior management.



Economic Research

Economic Research studies and evaluates monetary policy, macroeconomics and other issues of importance to the Kansas City Fed and the Federal Reserve System. Through publications and presentations, staff members communicate their research findings to the Bank's senior management and directors, policymakers, other researchers and the public. Annually, the Division develops and hosts the prestigious Jackson Hole Economic Policy Symposium in Wyoming, where central bankers, economists, policymakers and academics from around the world gather to discuss global economic topics. Within Economic Research, the Center for the Advancement of Data and Research in Economics (CADRE) provides high-performance computing, data warehousing, and data-management services to the Federal Reserve System.



Robert Hampton, assistant vice president in Economic Research, speaks with high school students during the Math X Economics program that is organized by the Kansas City Fed.



Financial Services

Financial Services provides financial institutions with services and support in accessing the payments system and meeting the public's demand for currency and coin. Through Cash Services, Wholesale Operations, Customer Relations and Support departments, and Federal Reserve Consumer Help, the Division receives deposits and distributes currency and coin; supports secure and timely transfers of funds and securities; provides financial institutions customer support and access to payment networks; consults with and sells payments services to financial institutions and manages customer relationships; and provides service to consumers nationwide who have questions or complaints about their financial institution.



Information Technology

The Information Technology Division works to support the efforts of business areas in the Federal Reserve Bank of Kansas City and the Federal Reserve System through innovative information technology solutions. The Division includes the Federal Reserve System's National Service Desk operations, Access Management and Provisioning and Enterprise Password Vault service providers, and SharePoint administration; as well as local IT Client Services, Application Delivery Services and Information Security.

Vaani Ranganathan is a member of the Information Technology Division's ADS-TechEdge team.



Legal

The Legal Division serves as the Kansas City Fed's legal counsel, in support of the policy and business objectives of the Federal Reserve Bank of Kansas City. It provides legal services on complex matters affecting the Bank. The Division also supports senior management and the Bank's Boards of Directors at its head office and three branches, provides guidance on the Bank's Code of Conduct and collaborates on matters with colleagues across the Federal Reserve System.

Todd Mackey, vice president of Payments System Research, spoke during a 2016 payments system event.



Payments System Research

The Payments System Research and Strategies Division provides leadership, analytical support, policy analysis and research to support the Federal Reserve System's mission to promote a U.S. payment system that is efficient, safe and broadly accessible. The Division houses the Financial Services Policy Committee Support Office, which coordinates strategic and business planning for the Federal Reserve's financial services responsibilities. In addition, staff lead the program management office over a strategic initiative to improve the U.S. payment system. The Division's research group produces public-policy oriented academic research, written publications, and presentations on domestic and international payments systems.

Regional, Public and Community Affairs

The Division's primary responsibilities are research and policy influence, resource development, and communications and public understanding. Regional Affairs' economists lead Branch zone programs, track developments in the District's economy and present their findings in collaboration with the Economic Research Division to senior management as part of the Bank's monetary policy deliberations. Regional Affairs economists also organize the annual Agricultural and Energy symposiums. Public Affairs explains the Fed's purpose and functions through publications, money museums, media relations, electronic communication and educational programs. Community Affairs promotes community and economic development for lower-income communities and small businesses through research, resources and programming.



Chantell Garrett, right, a senior stakeholder community advisor, talks with her colleagues, Jeremy Hegle, center, a senior community development advisor, and Daniel Perez, a community affairs research associate.

Retail Payments Technology Services

The Retail Payments Technology Services Division is responsible for providing the technology services supporting the Federal Reserve System's Check and Automated Clearing House services. The Division's mission is to foster the integrity, efficiency and accessibility of U.S. retail payment and settlement systems in support of financial stability and economic growth.



Chris Tamborini, left, a manager in Retail Payments Technology Services Division, goes over data with Brosie Strada, who is vice president in the Division.

Chris Constant, left, goes over technology improvements with Frank Allen. Both work in the Consumer Affairs Department of the Supervision and Risk Management Division.



Supervision and Risk Management

The Division is responsible for supervising bank holding companies, savings and loan holding companies and state-chartered member banks in the Tenth District. The responsibilities include conducting examinations of these institutions to ensure a safe and sound banking system. Staff also examines banks for compliance with consumer laws and regulations and for performance under the Community Reinvestment Act. The Division's applications function reviews and analyzes applications received from banking organizations for transactions requiring approval such as acquisitions, mergers, establishing additional branches and changes in ownership or control. The Division's credit and risk management function extends credit to depository institutions and assists organizations in managing Federal Reserve account balances. The Division also collects data from financial organizations, studies financial industry trends, conducts banking research and hosts seminars and forums for banks throughout the region.

Treasury Services and Technology Support Division

The Treasury Services and Technology Support Division (TSD) provides project management, business analysis, and other leadership and operational services to Reserve Bank and U.S. Treasury business partners. Within the Treasury Services area, the Bank carries out its fiscal agent responsibilities by partnering with the U.S. Treasury to provide program

and leadership support for programs within the payments, debt management and information management business areas. The Technology Support area of TSD provides program/project management and business analysis services to a variety of Bank and System business areas, including Supervision and Regulation, Human Resources, and the Customer Relations and Support Office.

Members of the Management Oversight Department within the Treasury Services and Technology Support Division meet regularly to discuss ongoing projects and goals.



DIRECTORS ROUNDTABLES ADVISORY COUNCILS OFFICERS

Management Committee



(From left) Ms. Ward, Mr. Aleman, Ms. Sellers, Ms. Connor, Ms. Morhaus, Ms. Pennell, Mr. Dubbert, Mr. Moore, Ms. George, Mr. Davig, Ms. Pacheco, Ms. Raley and Ms. Hendricks.

Esther L. George, President and Chief Executive Officer

Kelly J. Dubbert, First Vice President and Chief Operating Officer

Denise I. Connor, Senior Vice President, Retail Payments Technology Services Division

Troy A. Davig, Senior Vice President and Director of Research

Kevin L. Moore, Senior Vice President, Supervision and Risk Management Division

Dawn B. Morhaus, Senior Vice President, Treasury Services and Technology Support Division

Barbara S. Pacheco, Senior Vice President, Payments System Research and Strategies Division

Karen A. Pennell, Senior Vice President, Information Technology and Financial Services Divisions

Diane M. Raley, Senior Vice President and Chief of Staff, Regional, Public and Community Affairs Division

Donna J. Ward, Senior Vice President, Administrative Services Division and

Director of the Office of Minority and Women Inclusion

Veronica M. Sellers, Advisor, General Counsel and Senior Vice President, Legal Division

Josias A. Aleman, Advisor, Senior Vice President and General Auditor

Andrea D. Hendricks, Committee Secretary and Advisor, Assistant Vice President,

Deputy Director of the Office of Minority and Women Inclusion

As the Federal Reserve Bank of Kansas City's senior leadership team, the Management Committee guides the organization's mission, vision, values and objectives.

Directors 2016

FEDERAL RESERVE BANK OF *Kansas City*

Class A

The three Class A directors represent commercial banks that are members of the Federal Reserve System. These directors are bankers who are nominated and elected by member banks within the Tenth Federal Reserve District. The District includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming.

Under the Class A category, a director will be elected by a specific group of member banks classified as either 1, 2 or 3. This classification is based on the total amount of capital and surplus for each commercial bank, with Group 1 banks being the largest. Each group within the class elects one director. For example, Mark Zaback, president and chief executive officer of Jonah Bank of Wyoming in Casper, Wyo., is a Class A director who was elected by, and represents Group 2 member banks.

Class B

The three Class B directors represent the public, but may not be an officer, director or employee of a financial affiliation company. These directors also are elected by member banks under the same categories as Class A directors. For example, Brent A. Stewart Sr., president and chief executive officer of United Way of Greater Kansas City, Kansas City, Mo., is a Class B director elected by Group 1 member banks.

Class C

The three Class C directors also represent the public. These directors, however, are appointed by the Board of Governors of the Federal Reserve System.

Like a Class B director, a Class C director may not be an officer, director or employee of a financial affiliation company. These directors may not own stock in a bank or a bank holding company. For example, Rose Washington, executive director, Tulsa Economic Development Corporation, Tulsa, Okla., is a Class C director. From the Class C directors, the Board of Governors selects one person as chair and another as deputy chair.

Governance of the District; Guardianship of the System

The Board of Directors of a Federal Reserve Bank is filled with a blend of appointed and elected positions using the criteria defined by Congress in the Federal Reserve Act. The nine-member board is divided evenly among three classifications. Directors serve staggered three-year terms.

Serving on the Head Office Board

Federal Reserve Bank of Kansas City Reserve Bank directors meet monthly to oversee the Bank's operations and policies and to confer on economic and banking developments. The directors also provide information on economic conditions within the District as part of the Bank president's preparation for Federal Open Market Committee meetings. Among directors' responsibilities is establishing the Kansas City Fed's discount rate, which is subject to review and determination by the Federal Reserve Board. The directors and their classifications are on page 48.

Serving on the Branch Boards

Denver, Oklahoma City and Omaha Each Branch of the Federal Reserve Bank of Kansas City also has its own seven-member Board of Directors. Four of these directors are appointed by the Federal Reserve Bank of Kansas City Board of Directors and three are appointed by the Board of Governors. Branch directors serve three-year terms and provide their respective Branch executives with insight on regional economic conditions as well as offer advice and counsel. Branch directors are listed on pages 49-51.

Directors oversee the Bank's operations and policies, and confer on economic and banking developments.

COMMITTEE MEMBERSHIP FOR HEAD OFFICE DIRECTORS 2016

AUDIT COMMITTEE

Max Wake, Chair
Rose Washington
Len Rodman
Lilly Marks

BUILDINGS COMMITTEE

Len Rodman, Chair
Paul Thompson
Mark Zaback

COMPENSATION COMMITTEE

Rose Washington, Chair
Jim Farrell
Brent Stewart

Note: Steve Maestas is an ex officio voting member of each standing committee.

Each year directors from the Bank's head office and branches participate in a joint board meeting. Besides the regular board meeting, directors learn about local economies through educational tours. During the 2016 joint board meeting in September, directors and members of the Bank's Management Committee took a tour of the Negro Leagues Baseball Museum and listened to remarks by the museum's Executive Director Bob Kendrick about the economic impact of the league and the museum. The directors' photos on the following pages were taken at the museum.

Board of Directors, Kansas City



(From left) Mr. Thompson, Mr. Wake, Ms. Marks, Mr. Zaback, Mr. Maestas, Ms. Washington, Mr. Farrell, Mr. Stewart and Mr. Rodman.

Steve Maestas, Board Chair, Chief Executive Officer, Maestas Development Group, Albuquerque, New Mexico (Class C)

Rose M. Washington, Board Deputy Chair, Executive Director, Tulsa Economic Development Corporation, Tulsa, Oklahoma (Class C)

Jim Farrell, President and Chief Executive Officer, Farmers National Company, Omaha, Nebraska (Class C)

Brent A. Stewart Sr., President and Chief Executive Officer, United Way of Greater Kansas City, Kansas City, Missouri (Class B, Group 1)

Lilly Marks, Vice President for Health Affairs, University of Colorado and Anschutz Medical Campus, Aurora, Colorado (Class B, Group 2)

Len C. Rodman, Chairman, President and Chief Executive Officer (Retired), Black & Veatch, Overland Park, Kansas (Class B, Group 3)

Paul J. Thompson, President and Chief Executive Officer, Country Club Bank, Kansas City, Missouri (Class A, Group 1)

Mark A. Zaback, President and Chief Executive Officer, Jonah Bank of Wyoming, Casper, Wyoming (Class A, Group 2)

Max T. Wake, President, Jones National Bank & Trust Co., Seward, Nebraska (Class A, Group 3)

Federal Advisory Council Member

Leslie R. Andersen (not pictured), President and Chief Executive Officer, Bank of Bennington, Bennington, Nebraska.

Board of Directors, Denver



(From left) Mr. Johnson, Mr. Burt, Mr. DeFrange, Ms. Kelly, Mr. Lewis, Ms. Winograd and Mr. Wallace.

Margaret M. Kelly, Branch Chair, Chief Executive Officer (Retired), RE/MAX, LLC, Denver, Colorado (Board of Governors appointed)

Gary DeFrange, President and Chief Operating Officer, Winter Park Resort, Winter Park, Colorado (Board of Governors appointed)

Richard L. Lewis, President and Chief Executive Officer, RTL Networks, Inc., Denver, Colorado (Board of Governors appointed)

Ashley J. Burt, President, The Gunnison Bank and Trust Company, Gunnison, Colorado (Kansas City Fed Board appointed)

Edmond Johnson, President and Owner, Premier Manufacturing, Inc., Frederick, Colorado (Kansas City Fed Board appointed)

Jeff Wallace, Chief Executive Officer, Wyoming Bank and Trust, Cheyenne, Wyoming (Kansas City Fed Board appointed)

Katharine W. Winograd, President, Central New Mexico Community College, Albuquerque, New Mexico (Kansas City Fed Board appointed)

Branch directors provide insight on local economic conditions and advise and counsel the Branch executives. Branch directors must satisfy the same eligibility requirements that pertain to head office directors.

Board of Directors, Oklahoma City



(From left) Mr. Hall, Mr. Coffman, Ms. Haskin, Mr. Delaney, Ms. Patel, Mr. Abernathy and Mr. Stussi.

- Peter B. Delaney**, Branch Chair, Chairman and Chief Executive Officer (Retired), OGE Energy Corporation, Oklahoma City, Oklahoma (Board of Governors appointed)
- Clint D. Abernathy**, President, Abernathy Farms, Inc., Altus, Oklahoma (Board of Governors appointed)
- Doug Stussi**, Executive Vice President and Chief Financial Officer, Love's Travel Stops & Country Stores, Oklahoma City, Oklahoma (Board of Governors appointed)
- Michael C. Coffman**, President and Chief Executive Officer, Panhandle Oil & Gas, Inc., Oklahoma City, Oklahoma (Kansas City Fed Board appointed)
- Charles R. Hall**, Chairman and Chief Executive Officer, Exchange Bank and Trust Company, Perry, Oklahoma (Kansas City Fed Board appointed)
- Jane Haskin**, President and Chief Executive Officer, First Bethany Bank and Trust, Bethany, Oklahoma (Kansas City Fed Board appointed)
- Tina Patel**, Chief Financial Officer, Promise Hotels, Inc., Tulsa, Oklahoma (Kansas City Fed Board appointed)

Board of Directors, Omaha



(From left) Mr. Esch, Mr. Krejci, Mr. Bourne, Mr. Henning, Ms. Russel and Mr. Butler.

- John F. Bourne**, Branch Chair, International Representative, International Brotherhood of Electrical Workers (IBEW), Omaha, Nebraska (Board of Governors appointed)
- Eric Butler**, Executive Vice President and Chief Administrative Officer, Union Pacific Railroad, Omaha, Nebraska (Board of Governors appointed)
- Kimberly A. Russel**, President and Chief Executive Officer, Bryan Health, Lincoln, Nebraska, (Board of Governors appointed)
- Brian D. Esch**, President and Chief Executive Officer, McCook National Bank, McCook, Nebraska, (Kansas City Fed Board appointed)
- Thomas J. Henning**, President and Chief Executive Officer, Cash-Wa Distributing Co., Kearney, Nebraska (Kansas City Fed Board appointed)
- Anne Hindery (not pictured)**, Chief Executive Officer, Nonprofit Association of the Midlands, Omaha, Nebraska (Kansas City Fed Board appointed)
- Jeff W. Krejci**, President and Director, Cornerstone Bank, York, Nebraska (Kansas City Fed Board appointed)

Economic Roundtables — 2016

FEDERAL RESERVE BANK OF *Kansas City*

Food and Agriculture Roundtable



(Front row, from left) Dhamu Thamodaran; Ankush Bhandari; Andrew Gottschalk; Mark Byars; Peter Headley; Steve Wellman; Ron Farrell. (Second row, from left) Stephanie Liska; Bob Nolan; Steve Elmore; Dave Englund; Todd Becker; Nick Hatz. (Third row, from left) James Robb; Luke Chandler; Bill Horan; Steve George; Ray Wyse; Neil Dierks; Bill Lapp; Howard Hill. (Fourth row, from left) Nathan Kauffman; Cortney Cowley; Matt Clark; Bill Brooks; Bruce Sherrick; Jim Timmerman.

Participants from ranching, agriculture, biofuels, dairy, financing and other sectors meet annually with Kansas City Fed regional economists to provide information on their industry and participate in discussions about the agricultural economy.

Food and Agriculture Roundtable

Todd Becker

President and Chief Executive Officer
Green Plains Inc.
Omaha, Nebraska

Ankush Bhandari

Vice President
Gavilon, LLC
Omaha, Nebraska

Bill Brooks

Dairy Economist
INTL FCStone
Dearborn, Missouri

Mark Byars

Vice President
Adams Land & Cattle Co.
Broken Bow, Nebraska

Luke Chandler

Deputy Chief Economist
Deere & Company
Moline, Illinois

Matt Clark

Assistant Economist
Federal Reserve Bank of Kansas City,
Omaha Branch
Omaha, Nebraska

Cortney Cowley

Economist
Federal Reserve Bank of Kansas City,
Omaha Branch
Omaha, Nebraska

Neil Dierks

Chief Executive Officer
National Pork Producers Council
Urbandale, Iowa

Steve Elmore

Chief Ag Economist
DuPont Pioneer
Johnston, Iowa

Dave Englund

Senior Vice President of Farm
and Ranch Operations
Farmers National Company
Omaha, Nebraska

Ron Farrell

Partner
Farrell Growth Group
Gladstone, Missouri

Steve George

President and Chief
Executive Officer
Fremont Farms of Iowa, LLP
Malcom, Iowa

Andrew Gottschalk

Senior Vice President
RJ O'Brien & Assoc.
Greenwood Village, Colorado

Nick Hatz

Assistant Vice President
Federal Reserve Bank of Kansas City,
Omaha Branch
Omaha, Nebraska

Peter Headley

Managing Director
MetLife Agricultural Investments
Overland Park, Kansas

Howard Hill

Past President
National Pork Producers Council
Urbandale, Iowa

Bill Horan

Partner
Horan Brothers
Rockwell City, Iowa

Nathan Kauffman

Assistant Vice President and
Branch Executive
Federal Reserve Bank of Kansas City,
Omaha Branch
Omaha, Nebraska

Bill Lapp

President
Advanced Economic Solutions
Omaha, Nebraska

Stephanie Liska

President and Chief Executive Officer
Beck Ag
Wayne, Nebraska

Bob Nolan

Senior Vice President
ConAgra Foods
Naperville, Illinois

James Robb

Director
LMIC
Lakewood, Colorado

Bruce Sherrick

Fruin Professor of Farmland
Economics
TIAA-CREF Center for Farmland
Research
University of Illinois
Urbana, Illinois

Dhamu Thamodaran

Executive Vice President and Chief
Commodity Hedging Officer
Smithfield Foods
Smithfield, Virginia

Jim Timmerman

Partner
Timmerman Land & Cattle Co.
Springfield, Nebraska

Steve Wellman

President
Wellman Farms
Syracuse, Nebraska

Ray Wyse

Managing Partner
SWAT LLC
Omaha, Nebraska

Regional Economic Roundtable



(From left) Mr. Robinson, Mr. Thompson, Mr. J. Mitchell, Mr. Wobbekind and Mr. D. Mitchell.

- Jeremy Hill (not pictured)**, Director, Center for Economic Development and Business Research, Wichita State University, Wichita, Kansas
- David Mitchell**, Assistant Professor, Missouri State University, Springfield, Missouri
- Jeff Mitchell**, Director, Bureau of Business and Economic Research, University of New Mexico, Albuquerque, New Mexico
- Dan Rickman (not pictured)**, Regents Professor of Economics, Oklahoma Gas and Electric Services Chair in Regional Economic Analysis, Oklahoma State University, Stillwater, Oklahoma
- Jim Robinson**, Principal Economist, State of Wyoming, Economic Analysis Division, Laramie, Wyoming
- Eric Thompson**, Associate Professor of Economics, Director of the Bureau of Business Research Economics, University of Nebraska, Lincoln, Nebraska
- Richard L. Wobbekind**, Senior Associate Dean for Academic Programs, Executive Director, Business Research Division, University of Colorado, Boulder, Colorado

Economists from the seven Tenth District states meet annually with Kansas City Fed regional economists to review the states' activities from the past year and offer future insight. Sectors discussed include housing, manufacturing, agriculture, construction, energy, banking, employment, retail and exports.

Advisory Councils

2016

FEDERAL RESERVE BANK OF *Kansas City*

Economic Advisory Council



(From left) Ms. Williams, Mr. Ramirez, Mr. Lackey, Mr. Martin, Mr. Latenser, Mr. Merritt, Ms. Vincent-Collawn, Mr. Solomon, Mr. Neiman and Mr. Collins.

- Michael Collins**, President and Chief Executive Officer, Port KC, Kansas City, Missouri
- Katherine Gold (not pictured)**, President, Goldbug, Inc., Aurora Colorado.
- Ken Lackey**, Chairman of the Board, Nordam, Tulsa, Oklahoma
- John Latenser**, Owner, Neff Packaging Systems, Kansas City, Kansas
- Steve Martin**, President and Chief Executive Officer, Blue Cross Blue Shield, Omaha, Nebraska
- Caleb McCaleb (not pictured)**, Owner and President, McCaleb Homes, Edmond, Oklahoma.
- Taylor Merritt**, Chief Financial Officer, Merritt Equipment Company, Henderson, Colorado
- Jim D. Neiman**, President and Chief Executive Officer, Neiman Enterprises, Inc., Hulett, Wyoming
- Emil Ramirez**, Director, United Steelworkers, District 11, Independence, Missouri
- Dan Solomon**, Chief Risk Officer, Koch Industries, Inc., Wichita, Kansas
- Pat Vincent-Collawn**, Chairman, President and Chief Executive Officer, PNM Resources, Albuquerque, New Mexico
- Bridgette Williams**, Deputy Director, Heavy Constructors Association of Greater Kansas City, Kansas City, Missouri

Members, who represent business and labor from the Tenth District, meet twice a year with Kansas City Fed President Esther George and staff to offer insight on the regional economy.

Community Development Advisory Council



(Front row, from left) Ms. Washington, Ms. Longserre, Ms. Plumb and Ms. Marquez. (Back row, from left) Mr. Santner, Mr. Radley, Mr. McQueen and Mr. Showalter.

Marie Longserre, President and Chief Operating Officer, Santa Fe Business Incubator, Santa Fe, New Mexico

Shelley Marquez, Senior Vice President and Community Development Manager, Wells Fargo Bank,
Denver, Colorado

Clyde McQueen, President and Chief Executive Officer, Full Employment Council, Kansas City, Missouri

Susan Plumb, Executive Vice President and Director, Bank of Cherokee County, Tahlequah, Oklahoma

Steve Radley, President and Chief Executive Officer, NetWork Kansas, Andover, Kansas

John Santner, Midwest Regional Director, NeighborWorks America, Kansas City, Missouri

Craig Showalter, President and Chief Executive Officer, Wyoming Community Foundation, Laramie, Wyoming

Katrina Washington, Broker/Owner of Stratos Realty, Stratos Realty Group LLC, Oklahoma City, Oklahoma

Members, who come from financial institutions, nonprofits and businesses, meet twice a year with Kansas City Fed community development staff to offer insight on economic and community development issues in the region.

Community Depository Institutions Advisory Council



(From left) Ms. Withers, Mr. Coyne, Mr. Burrage, Mr. Schumacher, Ms. Minard, Mr. Heckman, Mr. Burr, Mr. Larson, Ms. Andrich, Mr. Hardwick, and Mr. Chavez.

Lyne Andrich, Executive Vice President and Chief Financial Officer, CoBiz Financial, Denver, Colorado

Deron Burr, President and Chief Executive Officer, People's Bank of Seneca, Seneca, Missouri

David Burrage, President and Chief Executive Officer, FirstBank, Atoka, Oklahoma

Robert Chavez, President and Chief Executive Officer, Sandia Laboratory Federal Credit Union,
Albuquerque, New Mexico

John J. Coyne III, President and Chief Executive Officer, Big Horn Federal Savings Bank, Greybull, Wyoming

Herbert Hardwick, Chairman of the Board, Merit Bank, Overland Park, Kansas

Kyle Heckman, President and Chief Executive Officer, Flatirons Bank, Boulder, Colorado

Kevin Larson, President, CharterWest Bank, West Point, Nebraska

Patricia (Trish) Minard, President and Chief Executive Officer, Southwest National Bank, Wichita, Kansas

Leo Schumacher, Chief Executive Officer, Lincoln Federal Savings Bank, Lincoln, Nebraska

Kim Withers, President and Chief Executive Officer, Meridian Trust Federal Credit Union,
Cheyenne, Wyoming

David Wright (not pictured), President, AMG National Trust Bank, Englewood, Colorado

Members represent banks, thrift institutions and credit unions from around the Tenth Federal Reserve District. They meet twice a year with Kansas City Fed staff to provide perspective on lending issues, the economy and other issues of interest to community depository institutions.

Officers 2016

FEDERAL RESERVE BANK OF *Kansas City*

Kansas City

Esther L. George
President and
Chief Executive Officer

Kelly J. Dubbert
First Vice President and
Chief Operating Officer

Denise I. Connor
Senior Vice President

Troy A. Davig
Senior Vice President
and Director of Research

Kevin L. Moore
Senior Vice President

Dawn B. Morhaus
Senior Vice President

Barbara S. Pacheco
Senior Vice President

Karen A. Pennell
Senior Vice President

Diane M. Raley
Senior Vice President and
Chief of Staff

Veronica R. Sellers
Senior Vice President
and General Counsel

Donna J. Ward
Senior Vice President and
Director of the Office of
Minority and Women Inclusion

Josias A. Aleman
Senior Vice President and
General Auditor

Craig S. Hakkio
Senior Vice President and
Special Advisor on
Economic Policy

Susan E. Zubradt
Senior Vice President

Larry D. Bailey
Vice President

Amy E. Cole
Vice President

Kristi A. Coy
Vice President

William W. Dandridge
Vice President

Tammy N. Edwards
Vice President

Brian C. Faros
Vice President and
Chief Information Officer

Andrew J. Frank
Vice President

Janel K. Frisch
Vice President and
Chief Financial Officer

Richard L. Henry
Vice President

Mark C. Horan
Vice President

Dawn R. Howell
Vice President

Megan L. Hruda
Vice President

Tara L. Humston
Vice President

James H. Hunter
Vice President

George A. Kahn
Vice President and Economist

W. Todd Mackey
Vice President

Renu A. Mehra
Vice President

Charles S. Morris
Vice President and Economist

Todd A. Offenbacher
Vice President

Annette K. Owens
Vice President

Kimberly N. Robbins
Vice President

Linda S. Schroeder
Vice President

Michael R. Steckline
Vice President

Brosie D. Strada
Vice President

Stephanie L. Stratemeier
Vice President

Mark A. Watson
Vice President

Jonathan L. Willis
Vice President and Economist

Luke B. Woodward
Vice President

Kristina J. Young
Vice President and
Board Secretary

John R. Arensberg
Assistant Vice President

Stanley R. Beatty
Assistant Vice President

Kara S. Bemboom
Assistant Vice President
and Assistant Board Secretary

Porcia B. Block
Assistant Vice President

Dan A. Bower
Assistant Vice President

J. Stephen Bradberry
Assistant Vice President

San Cannon
Assistant Vice President
and Economist

Jaime D. Champlin
Assistant Vice President

Kelley D. Courtright
Assistant Vice President

Kelli J. Cox
Assistant Vice President

Ernie W. Craig Jr.
Assistant Vice President

Tanya L. Cvetan
Assistant Vice President

Dennis V. Denney
Assistant Vice President

Nick P. Denning
Assistant Vice President

Sean K. Foley
Assistant Vice President

Thomas J. Foster
Assistant Vice President

Gregory H. Gander
Assistant Vice President

John Gray
Assistant Vice President

Lori D. Haley
Assistant Vice President

Robert L. Hampton
Assistant Vice President

Ryan L. Harwell
Assistant Vice President

Judith H. Hazen
Assistant Vice President

Andrea D. Hendricks
Assistant Vice President and
Deputy Director of the Office of
Minority and Women Inclusion

Jill M. Hicks
Assistant Vice President

Ann L. Hoelting
Assistant Vice President

Melissa L. Jackson
Assistant Vice President and
Public Information Officer

Lowell C. Jones
Assistant Vice President

D. Rick Lay
Assistant Vice President

John T. Lee
Assistant Vice President

Jeffrey E. Legette
Assistant Vice President

Christi A. May-Oder
Assistant Vice President
and Assistant General Auditor

Randall L. Mueller
Assistant Vice President

Jacqueline M. Nugent
Assistant Vice President

Evan A. Polly
Assistant Vice President

Erika Ramirez
Assistant Vice President

Amanda M. Ressler
Assistant Vice President

Stephen R. Sattig
Assistant Vice President

Matthew M. Schlereth
Assistant Vice President

Lindsay D. Schuler
Assistant Vice President

James W. Stuart II
Assistant Vice President

Carissa Swanwick
Assistant Vice President

Leesa G. Thompson
Assistant Vice President

Willem Van Zandweghe
Assistant Vice President and
Economist

James Wilkinson
Assistant Vice President and
Economist

Adam M. Winzenried
Assistant Vice President

Ginger K. Wise
Assistant Vice President

Denver

R. Alison Felix
Vice President, Branch
Executive and Economist

Amber R. Conley
Assistant Vice President

Victoria A. Field
Assistant Vice President

Trina L. Parsley
Assistant Vice President

Richard M. Thorne
Assistant Vice President

Oklahoma City

Chad R. Wilkerson
Vice President, Branch
Executive and Economist

Michael A. Combs Jr.
Assistant Vice President

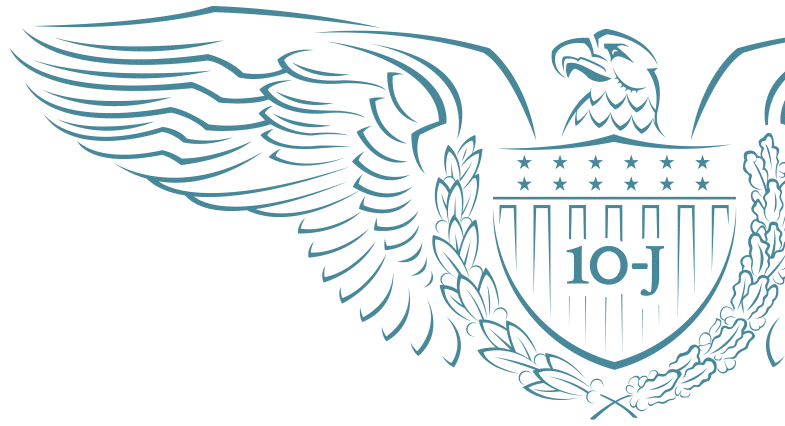
Douglas L. Gray
Assistant Vice President

Robert W. Toler
(Retired Aug. 31, 2016)
Assistant Vice President

Omaha

Nathan S. Kauffman
Assistant Vice President,
Branch Executive and Economist

Nicholas Hatz
Assistant Vice President



COMMITMENT TO

Diversity and Inclusion



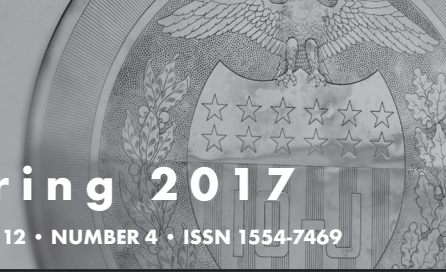
For more about the Office of Minority and Women Inclusion and to read the 2016 OMWI report to Congress, visit WWW.KANSASCITYFED.ORG/ABOUTUS/KCFEDINFORMATION/DIVERSITY.

OMWI



Spring 2017

VOLUME 12 • NUMBER 4 • ISSN 1554-7469



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.

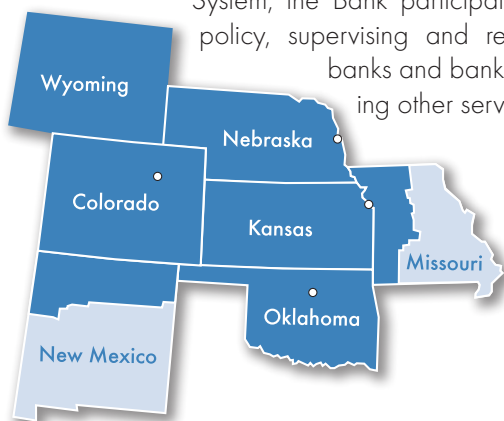
With the Federal Reserve Act, Congress sought to create a central bank the public would be more likely to support by making it “decentralized” with more local control. This new structure was designed to overcome one of the primary weaknesses of the previous central banks: public distrust of an institution 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 Dec. 23, 1913, and the 12 regional Federal Reserve Banks opened 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.



SENIOR VICE PRESIDENT: Diane Raley

VICE PRESIDENT: Krissy Young

ASSISTANT VICE PRESIDENT & PRODUCTION ADVISOR: Lowell Jones

EDITOR: Kevin Wright

ART DIRECTOR: Angela Anderson

MAGAZINE DESIGNER: Gary Barber

CONTRIBUTING WRITERS: Sarah Pope

CONTRIBUTING EDITOR: Rick Babson

RESEARCH CONTRIBUTORS: Kelly Edmiston, Jordan Rappaport, Michael Redmond, Raluca Roman, Nicholas Sly, Andrew Lee Smith, Didem Tüzemen, Jonathan Willis

COVER PHOTO BY: Bob Greenspan

TEN magazine is a quarterly publication of the Federal Reserve Bank of Kansas City focused on the connection between the Bank’s research and the Tenth Federal Reserve District. **TEN** also features articles on the Federal Reserve’s history, structure and operations.

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.

TEN articles may be reprinted if the source is credited and the Public Affairs Department of the Federal Reserve Bank of Kansas City is provided with copies. Permission to photocopy is unrestricted.

For a free subscription, please visit KansasCityFed.org/TEN or call 816-881-2683.



Federal Reserve Bank of Kansas City
1 Memorial Drive
Kansas City, MO 64198-0001

CHANGE SERVICE REQUESTED



2016 financial report

The Federal Reserve Bank of Kansas City's 2016 audited financial report is at KansasCityFed.org. Past financial reports, and officers, directors and advisory councils listings, also are online.
