FEDERAL RESERVE BANK OF ATLANTA FOURTH QUARTER 2013

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2013: Another Year of Modest Growth

Global Economic Growth Falters...Again

The Productivity Paradox: Is Technology Failing or Fueling Growth?

EconSouth

FEDERAL RESERVE BANK OF ATLANTA FOURTH QUARTER 2013

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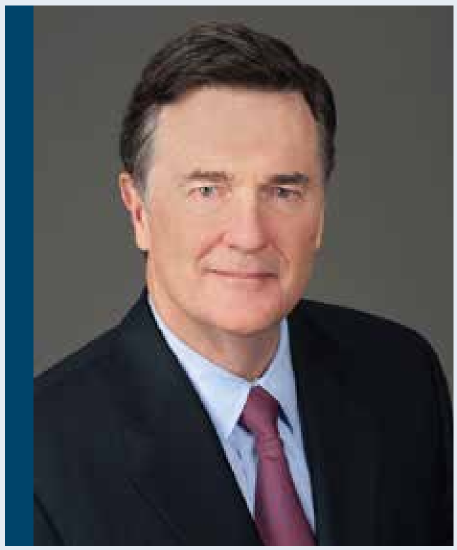
Fed @ Issue

Monetary Policy and the Road Ahead



DENNIS LOCKHART is president and chief executive officer of the Atlanta Fed.

As this issue goes to press, the Federal Open Market Committee (FOMC) has just announced a "tapering" of the Fed's program of asset purchases, or QE (quantitative easing). The Fed's bond purchases, which had been running at $85 billion per month, will be reduced to $75 billion per month beginning in January 2014. In making this move, the FOMC cited "…cumulative progress toward maximum employment and improvement in the outlook for labor market conditions."

Although I can't speak for any Fed official other than myself, I do think that the outlook for the economy justifies the beginning of QE tapering. My baseline outlook calls for an improved economy in 2014—growing a bit faster than it has been. One important driver of GDP growth is consumer spending, and there is reason to hope for strengthening in that sector as real personal income growth and household balance sheets improve. I also expect labor markets to continue their gradual recovery. And I think that inflation will move from its currently low level in the direction of the FOMC's 2 percent target.

But that may not happen. There is a reasonable chance that 2014 will not differ much from 2013. Next year's economic outcomes will be significantly affected by fiscal outcomes, including the ongoing effects of the tax increases in early 2013, the effects of the sequester, any lingering effects of the government shutdown this past fall, and the effects of fiscal policy uncertainty on business investment and consumer spending.

Inflation and employment

Two keys to next year's performance will be inflation and employment. In January 2012, the FOMC established an official inflation target of 2 percent as measured by the personal consumption expenditures, or PCE, price index. While inflation has been reasonably stable, it's averaged about 1 percent this past year, well under the FOMC's longer-term objective. Some of that shortfall has come from falling energy prices. But even if we look through the behavior of energy prices, inflation readings

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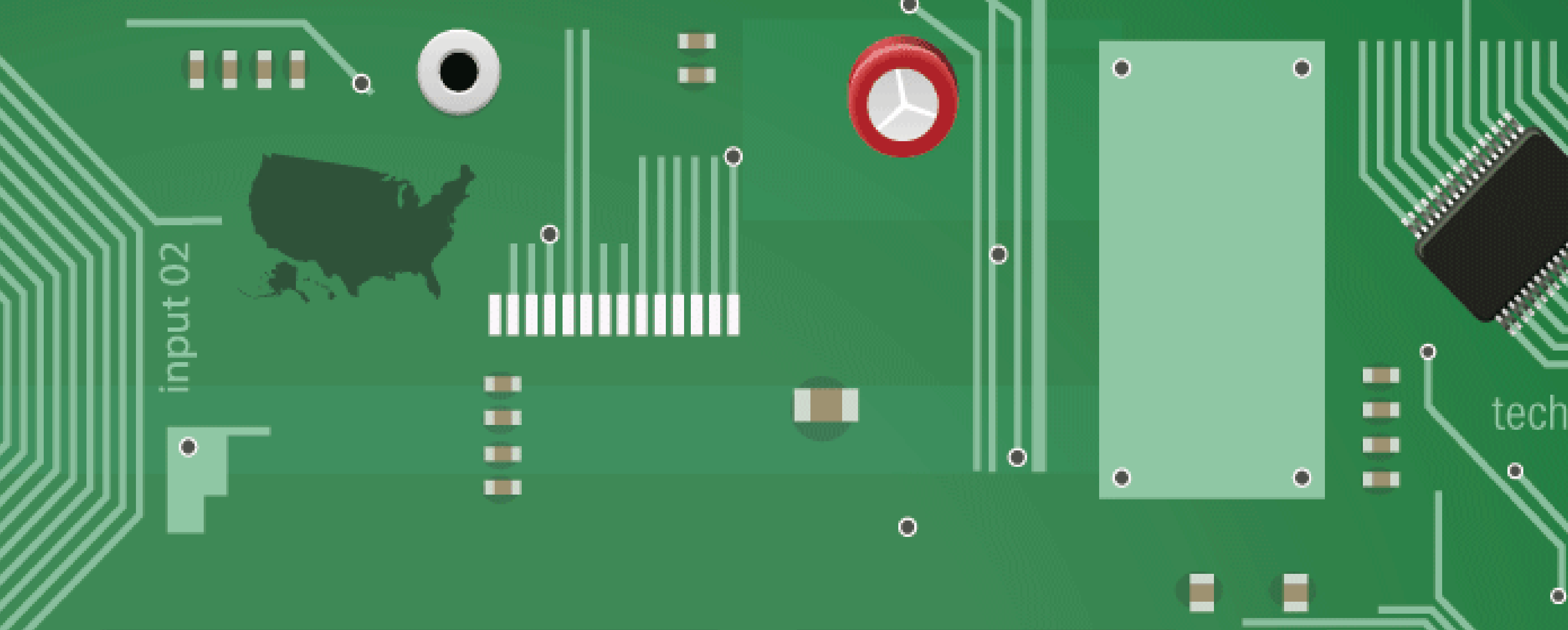
Editor's note: Throughout this issue, Southeast refers to the six states that, in whole or in part, make up the Sixth Federal Reserve District: Alabama, Florida, Georgia, Louisiana, Mississippi, and Tennessee.

Photo p. 25 (bottom right): courtesy of the Library of Congress photographic archives; back cover courtesy of the Federal Reserve Board of Governors (top) and the Library of Congress photographic archives (right)


growth
U.S. ECONOMY
technology
OUTPUT



The Productivity Paradox: Is Technology Failing or Fueling Growth?

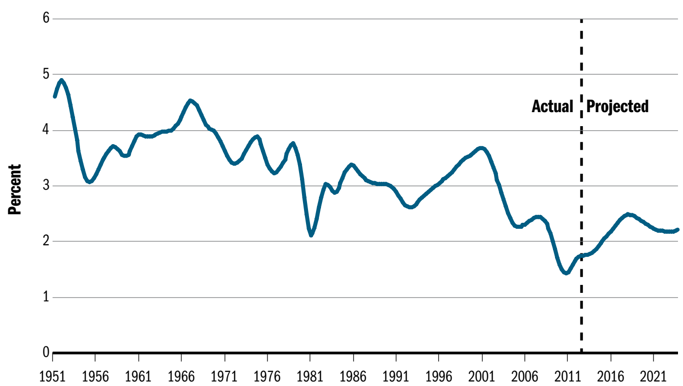
Nobel Prize-winning economist Robert Solow famously said, "You can see the computer age everywhere but in the productivity statistics." Is the economy in technological stagnation? Or will computers take all our jobs?

The U.S. economy has grown slowly since the recession ended in 2009, more slowly than in past recovery periods. The depth of the recession, and the financial crisis that exacerbated it, surely explain this sluggishness—right? Not according to some economists, who think we have a bigger problem on our hands: that the underlying dynamics of the economy are impaired and our ability to innovate new technologies is the root cause of the current stagnation. In other words, they argue, slow growth is the new normal. But other economists take the opposite stance. These economists say that technology is improving so rapidly that machine intelligence and automation will replace much of human labor. And while overall growth will improve, technology is bound to radically reshape our economy, making it more unequal. Which story is correct? Let's look at some evidence found in long-run trends.

Cyclical versus structural trends

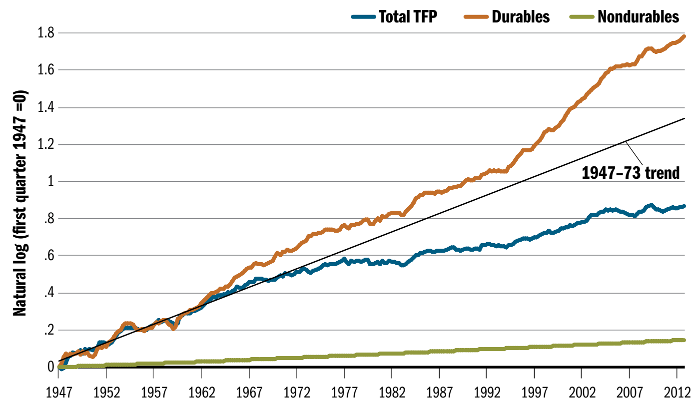
Economists tend to analyze changes in economic growth in two ways: cyclical and structural. Cyclical trends refer to a shorter horizon and pertain to the business cycle—or the nature of the economy to periodically experience expansions and recessions, booms and busts. Structural trends, however,

Chart 1
Potential GDP: Percent Change from Previous Year



Source: U.S. Congressional Budget Office

Chart 2
U.S. Total Factor Productivity (TFP)



Source: John Fernald, "A Quarterly, Utilization-Adjusted Series on Total Factor Productivity," Working Paper 2012-19, Federal Reserve Bank of San Francisco, September 2012

pertain to the underlying dynamics of the economy and are observable only over a longer time period. Such trends include changes in demographics and the diffusion of new technologies, for example. The Federal Reserve, in setting monetary policy, mostly focuses on cyclical trends, but structural changes can dramatically affect how monetary policy should be implemented and how well it can help the economy.

A structural slowdown in economic growth does not mean just a slowing of real gross domestic product (GDP). It also means a slowing of potential GDP, which estimates the amount of real GDP that corresponds to a high rate of use of labor and capital resources. The Congressional Budget Office (CBO) estimates that three factors largely explain the slowing of potential GDP growth in recent years (see chart 1): potential employment, net new investment, and total factor productivity (TFP).

Much of the slowdown in potential GDP is due to changing demographics—specifically, the aging and retirement of the baby boomer generation. The sagging of net investment, which is investment minus depreciation, has also lowered the U.S. economy's growth ceiling. But it's the third factor—productivity—that has the attention of economists examining long-run growth prospects. However you slice the data, it seems the U.S. economy has experienced a slowdown in productivity growth.

Productivity and technology

Productivity growth, in the long run, largely drives economic growth. It can also boost potential employment and spur greater investment. There are two widely cited measures of productivity: labor productivity and total factor productivity.

The first measure is technically defined as the inflation-adjusted output per hour worked. TFP, on the other hand, incorporates multiple factors, including both labor and capital. It is sometimes called multifactor productivity. It's calculated as a residual from total output and the factor inputs. Although we measure TFP indirectly, it is the variable that best captures what economists mean by productivity for the economy as a whole. In fact, it was Robert Solow's pathbreaking research on economic growth that effectively created the concept of TFP. In growth models, this variable is often called "technology." When economists examine structural trends in potential GDP, TFP is their preferred measure of productivity. The CBO, the Federal Reserve, and other policymakers use this measure when projecting long-run economic growth (see chart 2).

Looking at the data on both U.S. labor productivity and TFP shows why some economists are worried. Though labor productivity and TFP are highly cyclical measures, they also exhibit long-term trends—and the growth in both series has been slowing for several decades. This decline is a major reason for the falling potential GDP. John Fernald, an economist with the Federal Reserve Bank of San Francisco, has constructed a utilization-adjusted TFP series for the United States, which shows a downshift in TFP growth in the early 1970s. But the story gets more interesting when we separate TFP into durables and nondurables. Productivity growth in the creation of durable goods has soared in the past several decades but has been stagnant in nondurables.

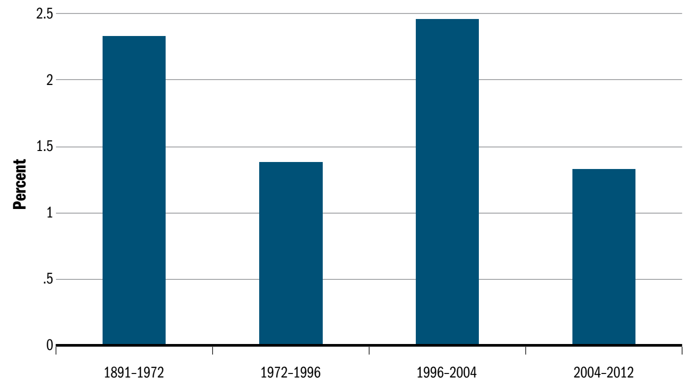
Some economists have used these trends as a launch point into "techno-pessimism."

The good old days

Techno-pessimists argue that technological innovation is nothing like what it used to be. In his provocative 2012 paper, "Is

Chart 3

Average Growth Rates of U.S. Labor Productivity over Selected Intervals, 1891–2012



Source: Robert Gordon, "Is U.S. Economic Growth Over?," National Bureau of Economic Research Working Paper 18315, August 2012, nber.org/papers/w18315

U.S. Economic Growth Over?," macroeconomist Robert Gordon argues that "economic growth may not be a continuous long-run process that lasts forever."

In the paper, Gordon classified U.S. economic history into three industrial revolutions (IR). The first IR (1750–1830) was powered by steam and railroads. The second IR (1870–1900) was sparked by electricity, the internal combustion engine, transportation, communications (telephone and television), running water, and many other innovations. The third IR (1960 to the present) is the computer revolution brought on by microprocessors, the Internet, and mobile phones. Gordon claims that this third IR has been disappointing in terms of productivity. Except for a brief period, from about 1996 to 2004, the computer revolution did not materially boost productivity growth.

Gordon created a chart (see chart 3) to show the decline in U.S. labor productivity—which is different than TFP in only measuring worker efficiency—during different historical periods. This chart shows that the greatest gains in productivity came about with the second IR, though with a time lag. Innovations in transportation, in communications and entertainment, and in the home and workplace all had lasting effects, driving high productivity increases that continued through the post–World War II period.

Gordon outlines six headwinds to today's economic growth: unfavorable demographics (the aging and retirement of the baby boomers), a plateau in educational attainment, rising economic inequality, globalization-driven outsourcing to inexpensive foreign labor, energy price increases and environmental regulations, and, finally, large household and government debt levels. Combining these headwinds, Gordon foresees per capita growth for most Americans falling from the norm of 2 percent to below 1 percent. In his view, we won't be getting any poorer, but we will be growing a lot more slowly because the best technological innovations have already been made.

Some might protest that the remarkable advances in technology that we've seen in recent years—such as smartphones, the testing of driverless cars, and advances in machine learning—would belie the view that our ability to innovate is in a structural slowdown. This seeming confusion between the remarkable advances in technology around us and declining productivity statistics has even been dubbed the "productivity paradox."

Techno-optimism

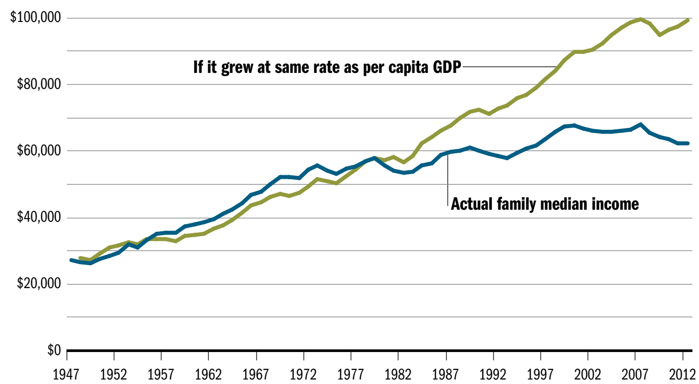
But are we really not innovating? Some say the economy is poised for bursts of innovation in the years to come. In 2011, Erik Brynjolfsson and Andrew McAfee from MIT wrote a provocative book about technology and its economic impact. In *Race Against the Machine: How the Digital Revolution Is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, the authors cover a litany of the latest innovations—like IBM's supercomputer

Watson, which won a $1 million pot on *Jeopardy*—suggesting that innovation is alive and well.

Brynjolfsson and McAfee make use of Gordon's analysis to explain the first two industrial revolutions: it takes time for newly created technologies to mature and develop commercial applications. It took decades from the invention of electricity until its widespread deployment in our infrastructure. Why wouldn't the same be true for semiconductors and the Internet? Brynjolfsson and McAfee think it is too soon to say the computer age has disappointed us.

Brynjolfsson and McAfee believe that the labor market recovery has been weak not because innovation has slowed,

Chart 4
Inflation-Adjusted Family Median Income



Source: Tyler Cowen, *The Great Stagnation*, Penguin Group: London, 2011

but because innovation has developed so fast it has displaced workers. In other words, the link between value creation and job creation—an assumption of classical economic thinking—is more tenuous because the underlying structure of the economy has changed.

Further pushback to the techno-pessimists' story comes from Joel Mokyr, an economic historian at Northwestern. In a recent op-ed at VoxEu.org, Mokyr argued that propositional knowledge (basic science, for example) leads to prescriptive knowledge (like scientific applications), and that more time is needed to let this feedback loop work itself out for the computer age. Mokyr asks, "How would we ever have discovered the structure of DNA without X-ray crystallography?" Science progresses with better tools, which are then used to make even better tools, which then lead to better science. And so the cycle of innovation continues. Mokyr is optimistic that the cycle will continue, as computers and the Internet have provided better access to information than ever before.

A mix of both

Another view of productivity and innovation incorporates ideas of both techno-pessimists and techno-optimists. People who hold this view agree with Gordon's claim that recent decades have seen a technological plateau, but they also argue that future technological advances in machine intelligence will bring about accelerated, if highly unequal, growth. This blended view is best expressed in the recent writings of Tyler Cowen, an economist at George Mason University who writes the popular blog *Marginal Revolution* (marginalrevolution.com).

Regarding recent decades, Cowen is a techno-pessimist, albeit with a slightly different argument than Gordon's. In his 2011 book, *The Great Stagnation*, Cowen argues that land, technology, and education have already been exploited for growth, so later improvements on the margin will have less of an impact. Like Gordon, Cowen singles out the 1880–1940 period as one that produced numerous advances in our standard of living. But since 1973, after these innovations ran their course, median family income growth has slowed significantly (see chart 4). (Median family income growth is Cowen's preferred measure to reflect the stagnation.)

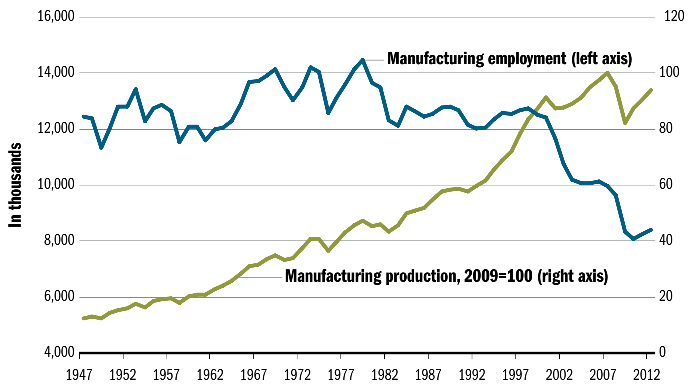
Cowen adds nuance to this story. He points out that because many online products are free, standard economics statistics do not capture them. Thus, according to Cowen, "innovation hasn't ceased, but it has taken new forms and it has come in areas we did not predict very well." But this idea leads to larger questions: Do current economic statistics—created in an age of industrialized production, with clear value-added measures—fully capture how technology is contributing to the economy? And is there a growing disconnect between economic statistics purported to measure our standard of living and our actual well-being?

In fall 2013, Cowen released another book, *Average Is Over: Powering America beyond the Age of the Great*

Stagnation, which extrapolates recent technological trends to paint a highly meritocratic and unequal economic picture. In Cowen's view, machine intelligence—advances in artificial intelligence, better industrial automation, the proliferation of smartphones, and more—will create a class of very well-off workers, with skills complementary to machines. This view is similar to what Brynjolfsson and McAfee express in *Race Against the Machine*. In Cowen's vision of the future, a significant minority of the labor force—he speculates 15 percent—will have a standard of living equivalent to today's million-

Chart 5

Manufacturing: Total Employment and Production



Sources: Federal Reserve Board of Governors, U.S. Bureau of Labor Statistics

aires. The rest will experience stagnant income growth and dire job prospects, given the rise of machine intelligence in displacing workers with incompatible skills. Cowen is not advocating this future, merely putting forth analysis of current trends.

Labor market implications

Considering these competing views on productivity and technology, we come to the most salient economic issue of our time: jobs. The rate of technological innovation obviously has major labor market effects. What is the relationship between new technological advances and the current skill distribution of the labor force?

Skill-biased technical change is the economic theory for how advances in technology can increase worker productivity, given compatible skills, but how they also displace certain workers. Think of the automation improvements in U.S. manufacturing. Total inflation-adjusted manufacturing production has never been higher than it is now, and manufacturing productivity, if anything, increased following World War II. But the total number of persons employed in manufacturing industries fell sharply, even more so as a percentage of the labor force (see chart 5). Driving these trends have been advances in machinery, supply chain management, and automation, among other efficiency improvements.

Cowen and the authors of *Race Against the Machine* foresee skill-biased technical change as accelerating in the future. They see the fruits of this third industrial revolution—information technology—as having just begun to disrupt the labor market. This view is augmented by the recent research of David Autor, an MIT economist, who highlights a slightly different, and perhaps more disturbing, phenomenon: *labor market polarization*. Autor and his coauthors document the rise in demand for both high- and low-skill occupations alongside a decline in demand for middle-skill workers. They then tie technological automation to this erosion of middle-skill occupations. Manufacturing is one big area where these middle-skill jobs exist.

Low-skill jobs, like home health aides, janitors, and fast-food workers, tend to be classified in the domestic nontradable sector. In other words, these jobs are in service industries and the labor cannot be outsourced. At the other end, the high-skill jobs are increasingly defined by computer-compatible skills.

If the techno-optimists are correct about the future, the combination of skill-biased technical change and greater labor market polarization will complicate the already serious state of the U.S. labor market.

But is it mostly cyclical?

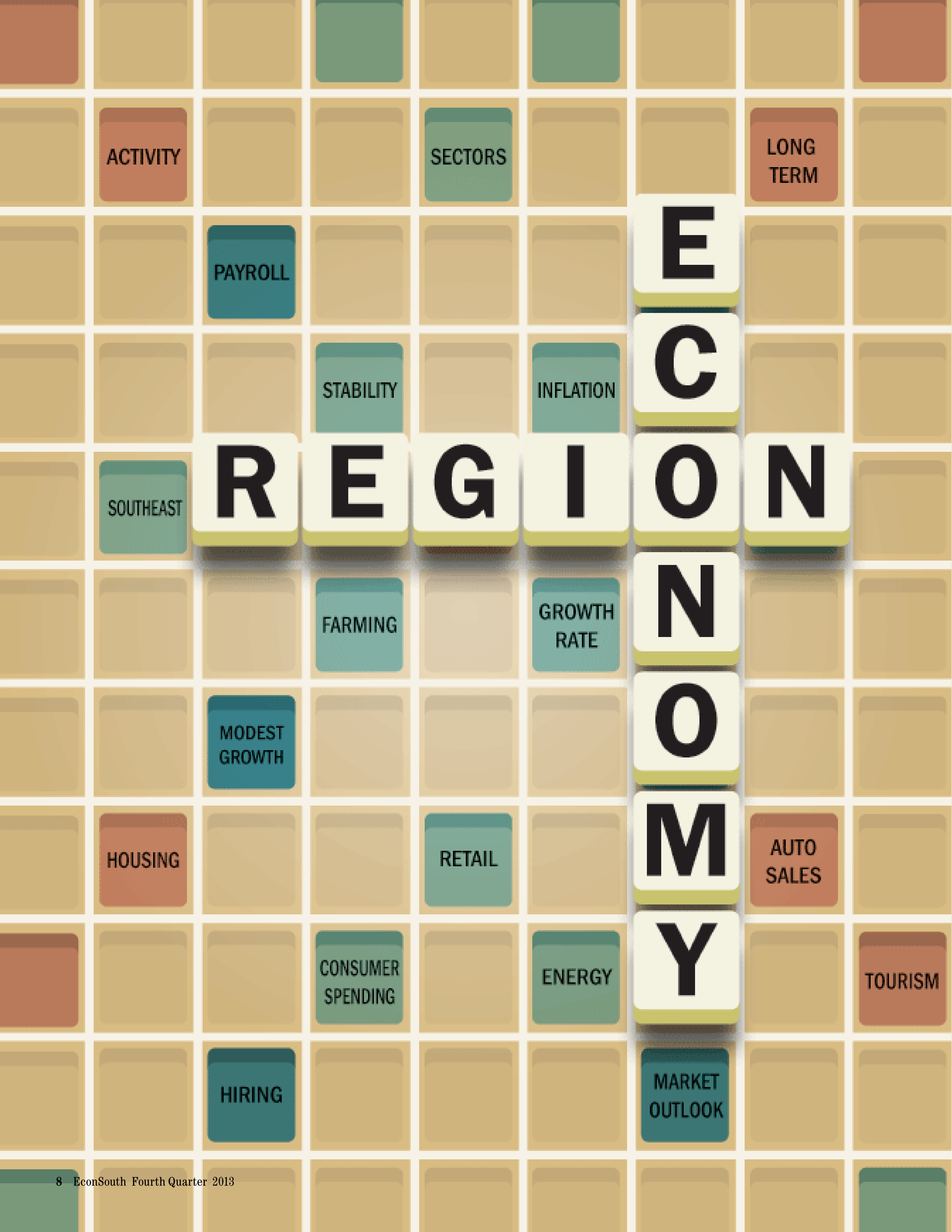
To put all this in perspective: the techno-pessimists and techno-optimists are likely outnumbered by the mainstream view, held by most economists and policymakers. Atlanta Fed President Dennis Lockhart expressed the mainstream view in a 2013 speech titled “Is the U.S. Economy Losing Its Dynamism?”:

> I have assumed we are experiencing a temporary spell of low productivity growth that will correct itself. I am assuming this will happen as demand kicks into higher gear and as businesses expand production somewhat faster than they expand their payrolls.

In other words, the recent low productivity readings and the weak labor market are primarily symptoms of an economy slowly recovering from the greatest recession and financial crisis since the Great Depression. In this view, technological innovation has not plateaued or become permanently depressed, nor are we on the precipice of massive labor-displacing technological revolution.

Economic growth in the long run will be driven by productivity increases, and thus by technology. The debate between techno-pessimists and techno-optimists is not going away, and it could not be more relevant to our future standard of living. ▮

This article was written by Andrew Flowers, a senior economic research analyst in the Atlanta Fed’s research department.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TOURISM
HIRING
MARKET OUTLOOK

Another Year of Modest Growth

2013 was the year when many economists hoped to see the southeastern economy fully emerge from the shadow of the Great Recession, but the region spent much of the year struggling to get its legs back under it. The region made notable economic progress but has a considerable way to go before we can declare a full recovery.

Throughout the Southeast, the economy experienced the same slow, modest growth in 2013 that it did the previous year. Data and reports from the Atlanta Fed's business contacts show that overall economic activity—as well as hiring—continues to be restrained despite demonstrated strength from sectors such as tourism, auto sales, and housing.

Real estate picks up the pace

The southeastern housing market fared well in 2013. In particular, Florida saw some notable improvements after having suffered some of the nation's biggest declines with the bursting of the housing bubble. The year began with significant investor activity continuing to occur in areas such as south Florida. International sales from Latin America gave a lift to the sector. Most transactions were cash sales.

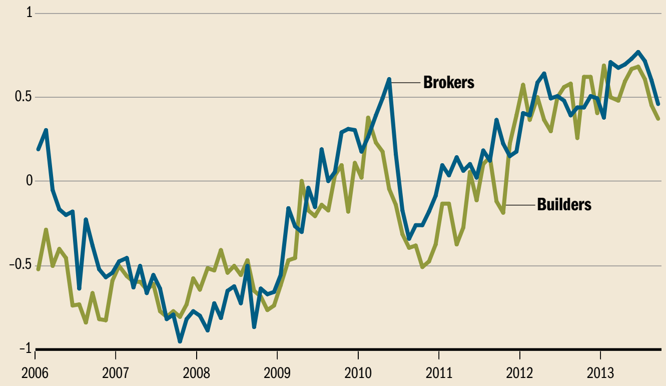
Florida was not the only bright spot, however. All southeastern states enjoyed an expanding real estate sector, with home sales outpacing levels from the year before, home prices continuously appreciating in major markets, and inventories declining. Data from the Atlanta Fed's monthly poll of broker and builder business contacts indicate that home sales remained ahead of the year-earlier level for all of 2013 (see chart 1 on page 10).

Housing contacts also reported that existing home inventories were below the year-earlier level, which restrained sales (see chart 2 on page 10). New home construction was reported as being ahead of the 2012 level but still remained far below activity seen during the boom years.

Atlanta Fed contacts in the housing sector reported that low inventory contributed to home price appreciation during the year (see chart 3 on page 10). In recent months, industry observers saw sales growth slow.

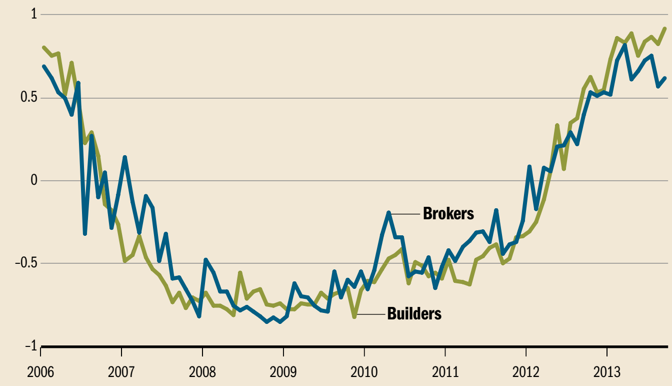
On the commercial real estate side, contacts noted activity was mild for 2013. Demand for space improved at a modest pace toward the end of the summer. Contractors described construc-

Chart 1
September 2013 Southeast Home Sales versus a Year Earlier



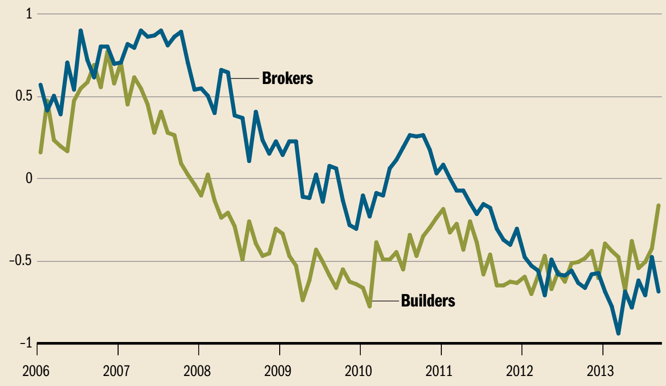
Note: September poll results are based on responses collected October 7–16, 2013. The housing poll's diffusion indexes are calculated as the percentage of total respondents reporting increases minus the percentage reporting declines. Positive values in the index indicate increased activity, and negative values indicate decreased activity.
Source: Atlanta Fed business contact poll

Chart 3
September 2013 Home Prices versus a Year Earlier



Note: September poll results are based on responses collected October 7–16, 2013. The housing poll's diffusion indexes are calculated as the percentage of total respondents reporting increases minus the percentage reporting declines. Positive values in the index indicate increased activity, and negative values indicate decreased activity.
Source: Atlanta Fed business contact poll

Chart 2
September 2013 Southeast Home Inventory versus a Year Earlier



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Source: Atlanta Fed business contact poll

tion activity as flat to slightly up on a year-over-year basis, with apartment development dominating activity for most of the year.

Consumer spending, tourism tell different tales

The retail sector reported mixed results over the course of 2013. Contacts reported that factors such as increased health care costs and fuel prices, the resumption of the full Social Security tax, and unusual weather affected consumption, resulting in volatile sales activity. Going into the end of the year, consumers remain cost-conscious and on the lookout for deals. Most retailers' expectations for the holiday season remain mildly optimistic.

A few relatively bright spots for the region during the past year were in areas as disparate as auto sales and the hospitality industry. The strong auto sales seen in 2012 persisted into 2013 as auto loan rates remained low.

The tourism sector grew at a reasonably fast clip as growth in business and leisure travel offset declines in government travel. Most contacts reported robust growth, citing increases in hotel bookings, revenue per available room, and attendance at conventions and attractions.

Firms also reported having little trouble finding qualified candidates to fill new positions. Consistent with reports from other sectors of the economy, the tourism industry saw a high applicant-to-opening ratio, with applicants often considered overqualified for available positions. Apart from some ongoing problems—for example, finding workers with specialized skill sets or persuading lower-skill workers to relocate to areas with a higher cost of living—filling openings has been reasonably easy. The cruise industry was a notable exception, where lower demand from U.S. and European travelers has prompted industry-wide downsizing.

Overall, the industry was anticipating a strong fourth-quarter 2013 as the winter season kicked off. According to Atlanta Fed industry contacts, the first two quarters of 2014 are showing strong advance bookings in the hotel sector. Despite a generally optimistic outlook for 2014 overall, contacts in the sector sounded a tone of wariness about the impact of fiscal policy uncertainty on business and consumer confidence.

Manufacturing makes progress

Strong auto sales continued to be a boon for the Southeast. Rapidly increasing auto production boosted the regional economy, especially in Tennessee and Alabama, where most of the region's assembly plants are located. The region's auto parts suppliers also expanded at a fast clip.

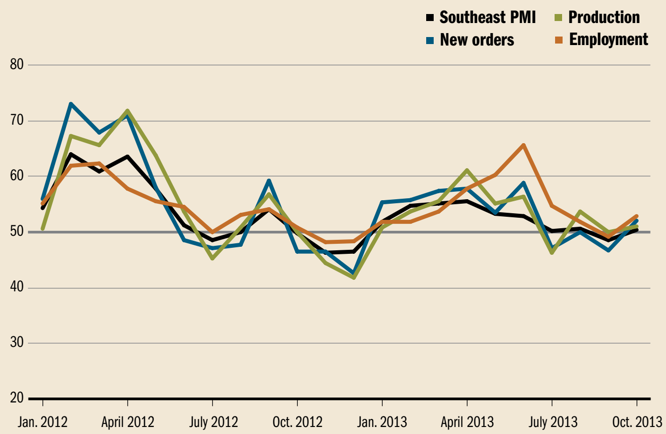
To better understand the region's manufacturing sector, we can look at the Southeastern Purchasing Managers Index (PMI), produced by Kennesaw State University. After expanding for the first eight months of the year, the index suggested that regional manufacturing contracted slightly in September and only mildly bounced back into expanding territory in October.

In the southeastern PMI, a reading above 50 represents expansion in the manufacturing sector. The October reading of 50.4 points represented an increase of 1.9 points from September's reading (see chart 4). Almost every sub-index expanded. For example, production edged up 1 point from September to 51 points, and employment increased 3.8 points to 52.9. The 5.3 point increase in new orders suggests that production may pick up in the near future.

Despite this hint of progress, manufacturers in the region nevertheless noted that they expect production to soften somewhat over the short term.

Chart 4

Southeastern Purchasing Managers Index



Note: A reading above 50 represents an expansion in the regional manufacturing sector; a reading below 50 indicates a contraction. Data are through October 2013.

Source: Kennesaw State University Econometric Center

Capital investment shows softness

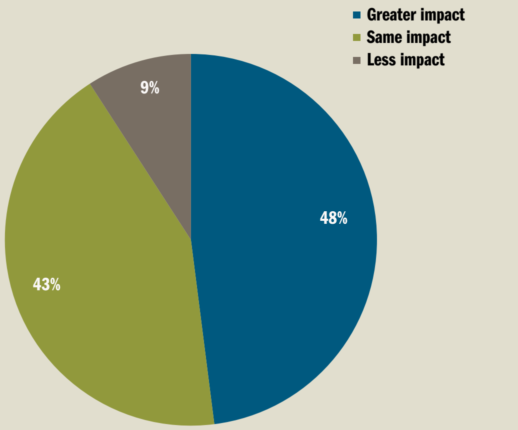
Reports of businesses investing capital to expand were scant for the year. Contacts remained focused on controlling costs and improving profit margins. Those firms in a position to invest were purchasing productivity-enhancing equipment to improve efficiency. The few firms that did report plans to expand indicated that growth was mostly occurring as a result of merger and acquisition activity or other increases in market share, as opposed to organic growth.

Is Uncertainty Restraining the Growth of Small Businesses?

Small businesses are gaining momentum at a relatively slow pace. According to Intuit's Small Business Employment Index, employment at small businesses is still 5 percent off the prerecession level, and employment at firms of all sizes is only 1 percent below its peak. The Atlanta Fed's semiannual survey of southeastern small businesses has also noted this slow return to normal and sheds light on a few obstacles impeding growth.

Chart 1

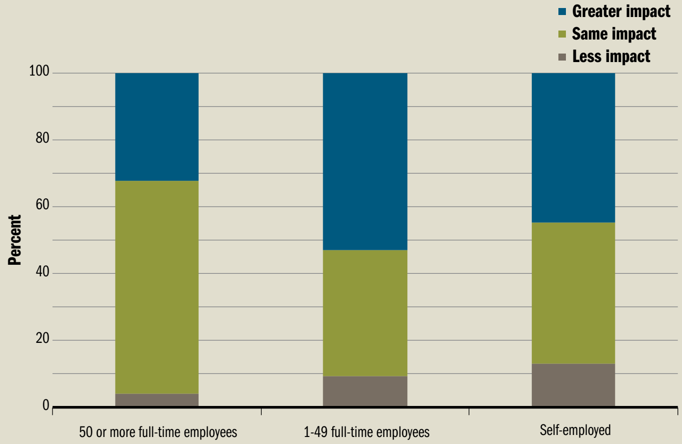
Uncertainty's Impact on Business Decisions versus Six Months Ago



Source: Atlanta Fed's Small Business Survey

Chart 2

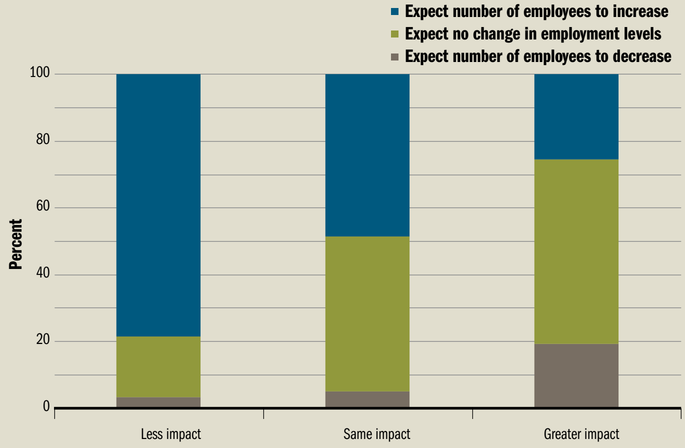
Uncertainty's Impact versus Six Months Ago by Firm Size



Source: Atlanta Fed's Small Business Survey

Chart 3

Uncertainty's Impact on Hiring versus Six Months Ago



Source: Atlanta Fed's Small Business Survey

One key obstacle is uncertainty, a great deal of which was present in 2013. With the uncertain economic outlook, confusion surrounding the Affordable Care Act, concern over rising interest rates, and, more recently, the partial federal government shutdown, uncertainty is having a real impact on the economy. According to some estimates, elevated uncertainty has reduced GDP growth during the past three years by about 12 percent. Small businesses seem to agree. When the Atlanta Fed asked about the level of uncertainty relative to six months ago, only about a tenth of businesses in the October survey said that uncertainty had declined. Further, almost half of businesses indicated that uncertainty was having a greater impact on their ability to make business decisions than it did in April 2013 (see chart 1).

The Atlanta Fed's small business survey includes firms with up to 500 employees, but very small firms tended to be affected the most. Firms with fewer than 50 full-time employees and the self-employed were the most likely to say uncertainty was having a greater impact on their business decisions (see chart 2). Just how much is uncertainty affecting small firms' business decisions? Those experiencing a greater impact were much less likely to anticipate hiring: about a fifth of respondents expect their workforce to decrease, and half say they are holding steady. Mostly, firms that foresee less uncertainty, however, expect their workforce to grow (see chart 3).

If not for elevated uncertainty levels, how much better would small firms have performed? How much more growth would they anticipate? We don't know the answers, but the uncertainty is certainly not helping. ∎

This sidebar was written by Ellyn Terry, an economic policy analysis specialist in the Atlanta Fed's research department.

Transportation speeds up

The transportation sector saw slow growth early in the year followed by slightly higher activity in the second half. Firms indicated that supply chains remain lean and that these conditions will likely become a long-term strategy, potentially squeezing the role of trucking.

Hiring challenges remain in the trucking industry. Diesel mechanics and drivers have been hard to find for various reasons, including the inability of the industry to attract younger workers. Additionally, the industry faces a wave of vacancies over the coming years as a result of pending retirements.

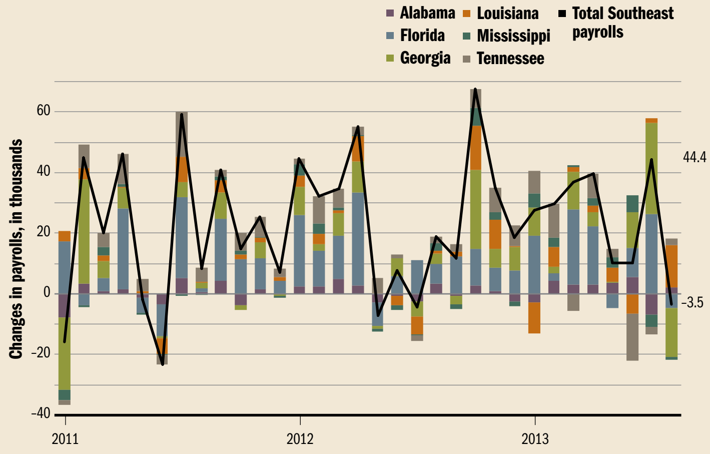
Hours-of-service regulations that went into effect in July 2013 also affected how trucking equipment and overall capacity were used. The rules limit the number of hours spent driving and working, and they also regulate the minimum amount of time drivers must rest between driving shifts. These rules were enacted to prevent accidents resulting from driver fatigue.

The majority of contacts indicated that they have already or will be initiating slight near-term price increases through annual rate adjustments, at a minimum, to cover rising input costs, which include driver wages and health care costs. For the longer term, most anticipate more aggressive pricing as market conditions allow, compensating for increases in equipment and regulatory costs.

Overall, most contacts expect near-term growth to be higher based on recent industry trends and on the peak season for holiday shipping. However, they indicated that frustration with the regulatory environment and fiscal policy uncertainty were beginning to cloud their outlook.

Chart 5

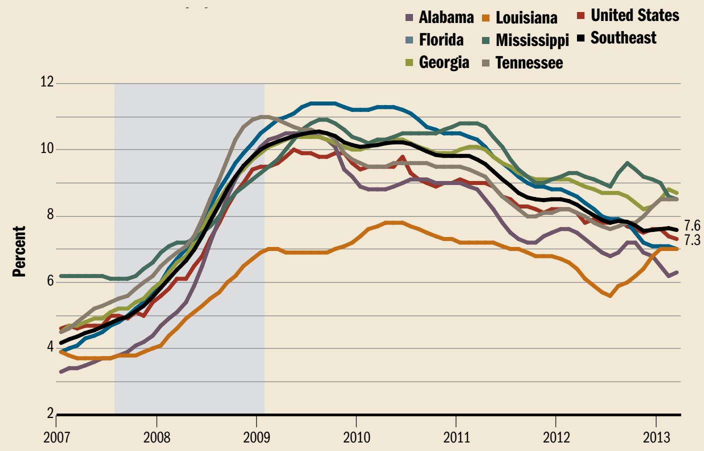
Contributions to Changes in Net Payrolls in the Southeast



Note: Data are seasonally adjusted and go through August 2013. September data are not included because of delays resulting from the partial federal government shutdown.
Source: U.S. Bureau of Labor Statistics

Chart 6

Southeastern Unemployment Rates



Note: Data are through August 2013 and are seasonally adjusted.
Source: U.S. Bureau of Labor Statistics

Employment sector remains stubbornly sluggish

Employment in the Southeast has been slow to recover from the Great Recession, in part because the region was hit harder than the nation overall. The region's dependence on population growth and the booming construction industry made it particularly vulnerable to the bursting of the housing bubble, making its road to recovery longer.

Mixed reports from labor markets, combined with renewed uncertainty, have caused many business leaders to delay decisions about hiring new employees. Atlanta Fed contacts described challenges identifying qualified employees in industries such as energy, information technology, automaking, and construction. Demand for high-skilled workers such as engineers and information technology specialists continued to increase although the supply remained limited. Contacts also noted that shortages of specialized skills among subcontractors played a role in preventing businesses from pursuing new contracts and projects.

Overall, very few companies reported boosting employment levels as a result of organic growth. Some companies cited paying overtime to their existing workers before hiring new employees unless they expected the new hires to generate revenue. Many contacts are slowly adding to payrolls as activity increases. Temporary staffing remains robust, in part reflecting a move among many companies to more permanent use of contingent workers.

ECONSOUTH NOW PODCAST

Mike Chriszt, a vice president in the Atlanta Fed's public affairs department, discusses the southeastern economy in 2013. On frbatlanta.org, select "Podcasts."

Southeastern Banks Continue Healing in 2013

Banking conditions in the Southeast continued to improve during 2013. Most financial institutions were better off than they were at the height of the financial crisis. Deposit levels remained high as customers willingly traded the safety of insured deposits for little to no return. Banks' balance sheets were healthier and returned to more normal levels of liquidity. They had money to lend, but some banks indicated they were still hesitant to make fixed-rate loans for extended lengths of time in anticipation of interest rate increases in the coming years.

Loan demand mixed throughout region

Contacts in urban and suburban areas indicated that loan demand had increased over the previous year, but loan demand in rural areas continued to be weak. Competition for qualified loan customers was intense. Some banks loosened underwriting standards and extended the terms of fixed-rate loans in an effort to attract new loans. In some markets, nonbank entities and groups of wealthy individuals were increasingly involved in lending to small businesses and consumers with less-than-stellar credit. Loan quality stabilized, and banks were reclassifying fewer loans as nonaccrual (which typically means a borrower made no payment on the loan for 90 days or more). Past due and nonaccrual loans as a percent of total loans declined in each of the southeastern states from the second quarter of 2012 to the same period in 2013.

Mortgage rates inched up during the year. Although rates remained near historically low levels, the small increases significantly slowed the refinancing of existing mortgages and put a damper on new home mortgages as well. Consumer loan volume—including second mortgages, auto loans, and even credit cards—was strong in some regions of the Southeast. Some banking contacts indicated demand for commercial real estate loans increased during 2013, particularly for owner-occupied commercial real estate and health care–related businesses. Some bankers reported increases in small business and commercial and industrial lending as well. Regulatory compliance complicated the ability of many community bankers to originate loans, and some institutions exited mortgage origination and consumer lending altogether.

Bank failures continue slowing

The pace of bank failures slowed in 2013. Nationally, fewer than half the number of banks failed than in 2012, according to the Federal Deposit Insurance Corporation. Stresses remained, though, and nine banks in the region failed through November 2013, making the Southeast home to more than one-third of the failures that occurred until then. In 2013, Florida was home to four failures and Georgia saw three. Together, these two states account for almost one-third of all bank failures nationally since the beginning of 2008. De novo bank expansion was nonexistent again in 2013.

The outlook for the banking industry is improving. Most banks' balance sheets are recovering from the crisis. As of June 30, 2013, the number of problem banks in the United States declined for the ninth consecutive quarter. Although many banks have loosened underwriting standards, they are keeping credit standards at higher levels than before the banking crisis began. ∎

This sidebar was written by Pam Frisbee, a senior economic research analyst in the Atlanta Fed's research department.

Not surprisingly, the data indicate that payroll creation varied dramatically for each state within the region during the year (see chart 5 on page 13). What is slightly more surprising, however, is that on average, the Southeast added approximately 24,400 new payrolls each month from January to August. A year ago, the Southeast added 22,700 jobs on average over the same time period, supporting the often-heard theme of slow but modest growth. Significant progress remains before the region attains prerecession employment levels.

The region's aggregate unemployment rate did not change significantly (see chart 6 on page 13). It began 2013 at 7.8 percent and gradually came down to 7.6 percent in April, where it remained. During the same time period in 2012, the unemployment rate started at 8.7 percent and ticked down to 8.3 percent by August.

Input costs, wages, and prices hold firm

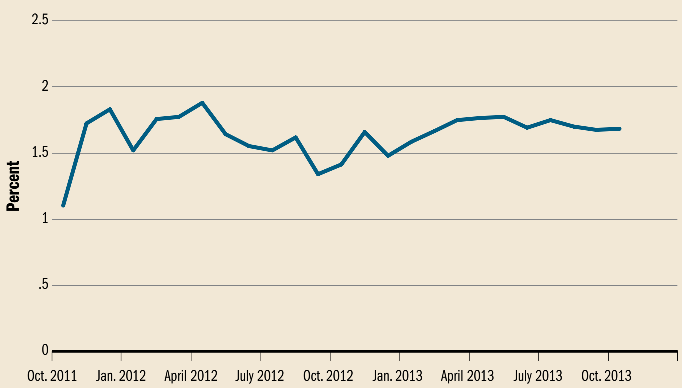
Business contacts reported that most input costs were stable, with cost pressures mostly well contained. However, some industries (such as fast food, grocery stores, and some construction) noted that they were able to pass minimal cost increases on to their customers. Overall, margins remained tight.

Survey data support these anecdotal reports. Results from the Atlanta Fed's survey on business inflation expectations show that increases in unit costs were 1.7 percent in October and remained in the range of 1.4 percent to 1.8 percent (on a year-over-year basis) during the past year (see chart 7 on page 15).

Looking forward, respondents expect that their year-ahead unit costs to rise only 1.9 percent during the next 12 months (see chart 8 on page 15), a reading that remains within the historical range of 1.7 percent to 2.1 percent.

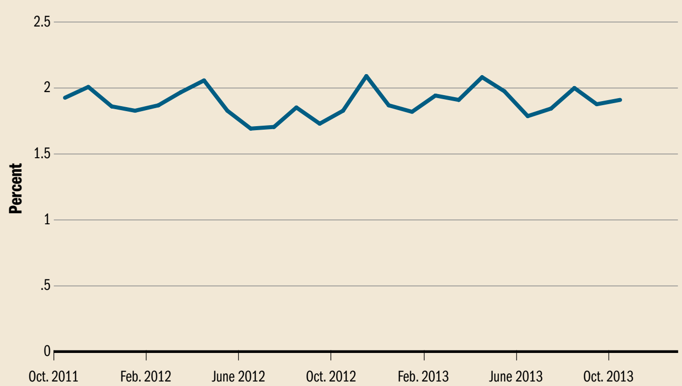
As for wages, reports indicated stable wage increases (mostly in the 2 to 3 percent range) across most industries.

Chart 7
Current Unit Costs versus One Year Earlier



Note: Responses compare unit costs with the same period one year earlier. Data are through October 2013.
Source: Atlanta Fed's Business Inflation Expectations survey

Chart 8
Year-Ahead Unit Cost Expectations



Note: Data are through October 2013.
Source: Atlanta Fed's Business Inflation Expectations survey

However, scattered reports surfaced of upward pressure on wages for certain high-skilled workers.

Energy keeps percolating

For most of 2013, contacts discussed the increase in oil and natural gas production, particularly related to shale resource production, processing, and transportation. Increased use of rail transport helped resolve the transportation bottleneck issues that arose with rising production from shale resources.

Rising production helped keep natural gas prices low. However, Atlanta Fed contacts generally agreed that these prices will eventually rise for two main reasons. First (and probably most important in the near term), once exports of liquefied natural gas begin in 2015, the supply glut in the United States should

Are Institutional Investors Still Flocking to Single-Family Homes in the Southeast?

In the second-quarter 2013 issue of *EconSouth*, the Atlanta Fed profiled institutional investment activity in single-family rental properties. In addition to highlighting the major players behind and the evolution of this relatively new asset class, the article noted that institutional investors are expected to remain active in their pursuit for properties despite strong house price gains. By their own admission, these investors liked buying in the Southeast.

Is southern exposure still attractive?

With a large portion of 2013's home sales now in the rearview mirror, has the situation panned out as investors expected? Did institutional investors continue to build their portfolio of properties, and do they still like buying homes in the Southeast? A quick turn to business contacts and the data can help shed some light.

Data from RealtyTrac suggest the number of homes sold to institutional investors is still on the rise across the nation as well as in certain metropolitan statistical areas (MSA) within the Southeast. Looking at the region's top five MSAs with the highest volume of sales to institutional investors so far in 2013, the Atlanta MSA and the Miami MSA experienced an increase in the number of sales to institutional investors from year-earlier levels, and the Tampa, Orlando, and Jacksonville MSAs experienced a decline.

Instead of focusing solely on the percent change in the number of sales, it is also helpful to consider the change in the share of sales to institutional investors because the share reflects the change in overall sales activity. On a year-over-year basis, the share of home sales to institutional investors increased by 10.3 percent in the Atlanta MSA, 3.4 percent in the Jacksonville MSA, and 1.6 percent in the Miami MSA. The share of homes sold to institutional investors in the Tampa MSA and Orlando MSA declined by 0.9 percent and 1 percent, respectively (see the table).

Consistent with the trends in the data, business contacts in Florida indicated that investor acquisition activity has begun to slow over the past few months. Tony Fridovich of ReMax Paramount Properties in Lakeland, Florida, explained that the prices of desired investment and bank-owned properties in his market have risen to the point where return on investment is not as promising. Cynthia da Silva of Coldwell Banker in Miami noted that although home sales to smaller, individual investors have slowed in recent months, institutional and other large investors in her market have not slowed their pace of buying.

To assess whether institutional investors still like investing in the Southeast, a slightly different look at data provided by RealtyTrac indicates that the monthly Southeast's share of sales to institutional investors has bounced between 25 percent and 35 percent during the past year until September 2013, when the share of sales dropped sharply to 17 percent (see the chart). The recent decline in share has gone on only for two months, so it's too soon to conclude whether this decline is a hiccup or a signal that acquisition activity has moved to another region. ∎

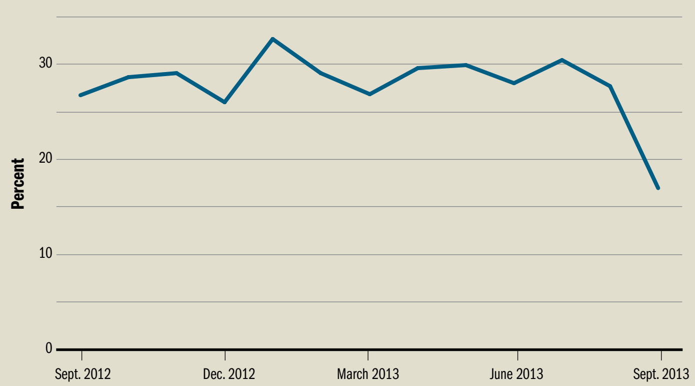
This sidebar was written by Jessica Dill, a senior economic research analyst in the Atlanta Fed's research department.

2013 Home Sales to Institutional Investors

Top Southeast MSAs as of September 2013	Year-over-year percent change in number of sales to institutional investors	Year-over-year percent change in share of sales to institutional investors
Atlanta-Sandy Springs-Marietta, Georgia	39.7	10.3
Miami-Fort Lauderdale, Florida	3.7	1.6
Tampa-St. Petersburg-Clearwater, Florida	–23.8	–0.9
Orlando-Kissimmee, Florida	–36.7	–1.0
Jacksonville, Florida	–67.9	3.4
All southeastern MSAs	–15.9	0.3
United States	32.2	–0.4

Note: Data indicate home sales to institutional buyers through September 2013.
Source: RealtyTrac.com

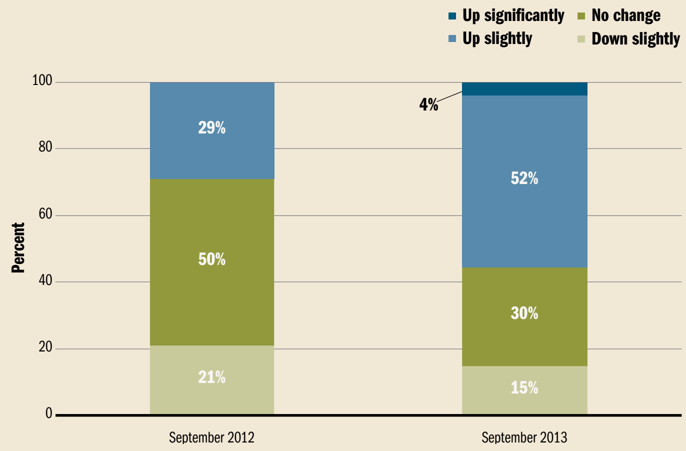
Southeastern Share of Home Sales to Institutional Investors



Source: RealtyTrac.com

Chart 9

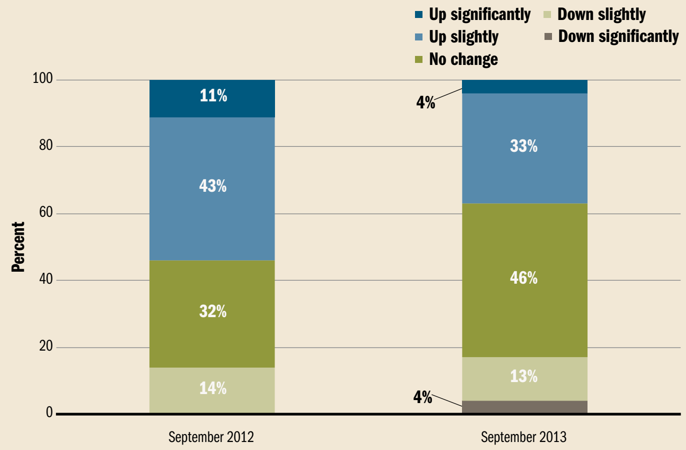
Southeast Builder Home Sales Expectations for the Next Three Months



Note: Percentages may not total 100 as a result of rounding.
Source: Atlanta Fed business contact poll

Chart 10

Southeast Builder Construction Expectations for the Next Three Months



Note: Percentages may not total 100 as a result of rounding.
Source: Atlanta Fed business contact poll

alleviate, aligning U.S. pricing more closely with world prices. Second, the abundance of natural gas is prompting investment in transportation, utilities, and manufacturing technologies. As more projects that consume natural gas come online, higher demand is likely to push up market prices.

Demand for skilled energy workers increased. Contacts noted an age gap in staff with engineering and other specialized skills, apparently tied to the decline in geology and energy-related higher-education curricula following the oil price crash in the 1980s. Although these programs have regained popularity—and the supply of recent graduates with the desired degrees is on the rise—a likely experience gap could be difficult to fill as longer-tenured workers retire.

The outlook among contacts was generally upbeat, but many agreed that issues such as uncertainty surrounding fiscal policy, regulations, and ambiguity in the tax code weighed on their confidence in the outlook. Despite these concerns, contacts unanimously believe that the policy and economic environment in the United States remains more attractive than most other energy-producing regions around the globe.

Agriculture grows well

The region's agriculture sector performed well in 2013. Better rainfall and healthy demand boosted the Southeast's farm sector throughout the year. Cotton, rice, beef, hog, and poultry prices all saw higher year-over-year prices. Soybeans and corn prices trended down, although lower corn prices are good news for protein producers who use corn for feed. Florida citrus growers continued to grapple with citrus greening, a bacterial disease with no known cure. Although growers believe a solution is forthcoming, the problem persisted. Meanwhile, the cost of production was higher than customary levels and, coupled with lower yields, the market experienced higher prices. Lumber prices, which dropped from the first half of 2013, were still well above recession-era prices in the third quarter.

Producers replaced equipment in the timber industry and crop farming, but they also made investments in irrigation equipment and storage. Additionally, some farmers replaced smaller, labor-intensive equipment with larger, more modern equipment.

Longer-term issues were on the minds of several Atlanta Fed contacts. Agriculture continued to change, moving away from small and midsized farms that depended on government subsidies toward a system based around farm consolidation. Young people are getting degrees and want to get into farming; some have interests in local organic farming but others see agri-business changing and want to be a part of the transition.

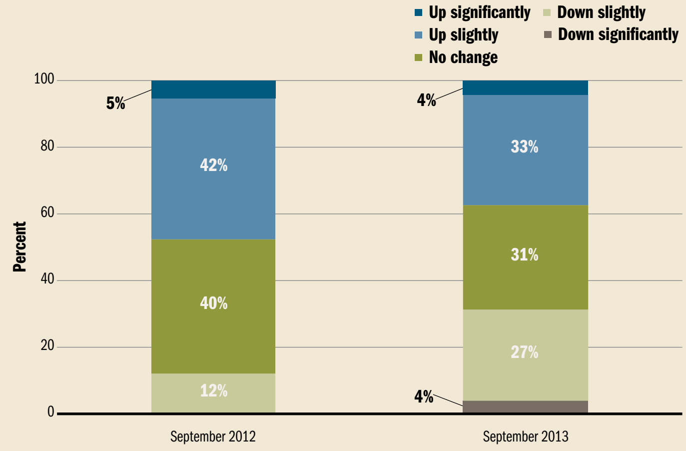
Overall, many regional agriculture exports should increase, including beef, poultry, wood/biomass, grains, cotton, and rice. Contacts hope that China's strong demand for yellow pine saw timber will continue.

Looking ahead to 2014

Nationally, forecasters expect a modest acceleration in real GDP in 2014 from current levels. The same can be said for the region, although a stronger performance in the housing sector may lead to better performance for the region.

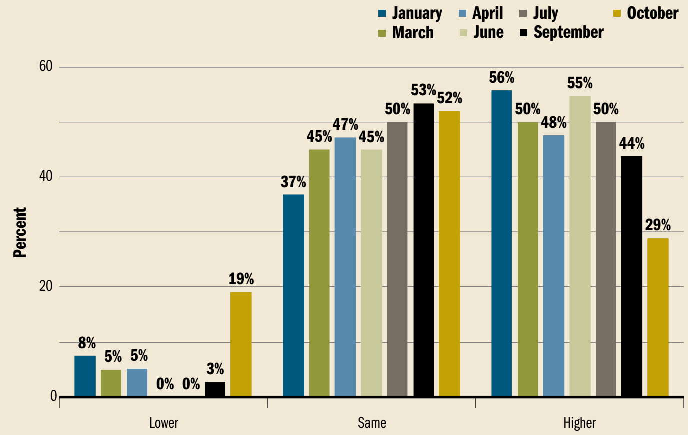
The Atlanta Fed's monthly housing poll in September indicated that the outlook for new home sales growth among builders over the next several months remained positive and was stronger than their year-ago outlook (see chart 9), but the outlook for new home construction has softened a bit from recent reports and was a bit less upbeat than year-earlier responses (see chart 10).

Chart 11
Southeast Broker Home Sales Expectations for the Next Three Months



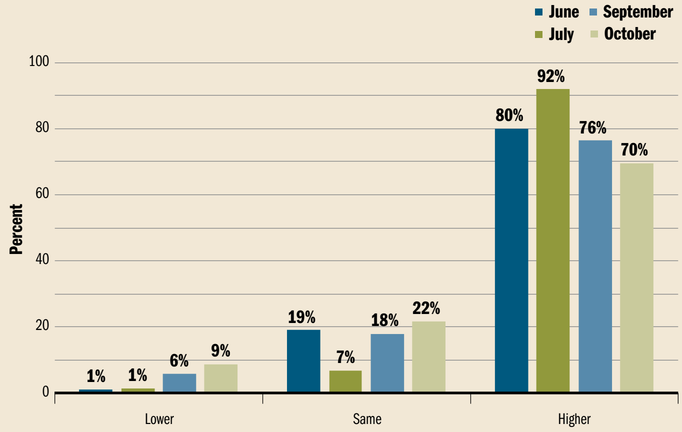
Source: Atlanta Fed business contact poll

Chart 12
Short-Term Outlook for Business Growth



Note: Respondents were asked, "What is your outlook for the rate of growth in your business over the next three to six months compared to current rates?" Percentages may not total 100 as a result of rounding.
Source: Poll of Atlanta Fed directors

Chart 13
Medium-Term Outlook for Business Growth



Note: Respondents were asked, "What is your outlook for the rate of growth in your business over the next two to three years compared to current rates?" Percentages may not total 100 as a result of rounding.
Source: Poll of Atlanta Fed directors

When asked to look ahead over the next 12 months, builder contacts indicated that access to development finance and lot availability posed the most significant risks to their outlook. Interestingly, most contacts considered rising mortgage rates and consumer confidence to be only modest risks.

Southeast brokers' outlook for sales growth remains mostly positive, but their expectations are a bit weaker than a year earlier (see chart 11).

Before every meeting of the Federal Open Market Committee, the boards of directors of the Atlanta Fed and its five branches (44 directors in total) respond to a poll regarding the outlook for their businesses. During the last quarter of 2012, directors and business contacts unexpectedly began to express an increasing optimism that carried into the beginning of 2013.

However, some of that optimism began to wane as spring set in and speculation was widespread that the economy would experience the same sort of spring slowdown seen a year earlier. While a slight pull-back in overall activity was noticeable, it appeared to be mild and short-lived. During the summer months, the outlook among a majority of Atlanta Fed contacts had improved. Then the third quarter began and—much like 2012—contacts started reporting that uncertainty from the effects of the debt ceiling, the partial federal government shutdown, the Affordable Care Act, and the regulatory environment was eroding consumer and business confidence.

Many contacts noted that all of these uncertainties were leading to decision-making paralysis, causing businesses to "sit on their hands" until confidence returns. As a result, slightly more than half of the Atlanta Fed's contacts expect growth to be sustained at current levels, 29 percent expect higher growth, and nearly one of five contacts indicates that growth will be lower in the short term (see chart 12).

Interestingly, however, over the medium term (the next two to three years), a significant majority of directors still anticipate stronger growth, results that have remained fairly consistent since the beginning of the year (see chart 13).

Atlanta Fed contacts generally expect growth in the near term to be slow (with some acceleration in the medium term), improved employment that still lags the pace of sales, and continued stability in input costs but little ability to increase prices. ∎

This article was written by Shalini Patel, an economic policy analysis specialist in the Atlanta Fed's research department.

Fed @ Issue continued from page 1

have been exceptionally soft, and this trend bears careful watching.

Employment is growing at a pretty steady, if unspectacular, pace. The October and November jobs reports were encouraging, and in November, the unemployment rate fell to 7 percent, down from 7.7 percent a year earlier. Monthly job gains over the past three months have averaged a bit over 190,000. In that sense, there has been substantial improvement in labor markets over the past year.

My baseline outlook calls for an improved economy in 2014—growing a bit faster than it has been.

Offsetting the job gains are other factors that are less encouraging. Long-term unemployment is at historically high levels. And the number of people working part time while looking for full-time work remains elevated. There are about 4 million more people unemployed today than before the recession. And there are significant numbers of discouraged workers who are not counted in the labor force who would return if conditions were more encouraging.

Overall, I am fairly confident of the economy's progress, but it's possible that at year-end 2014, inflation will still be too low and employment levels will be well short of the goal. Therefore, monetary policy should remain very accommodative for quite some time. The mix of tools the FOMC uses to provide ongoing monetary stimulus may change, but any changes will not represent a fundamental shift of policy.

Monetary policy

The FOMC is currently using two tools to maintain the desired degree of monetary accommodation—the policy interest rate and bond purchases. Importantly, the FOMC has enhanced its "forward guidance," which indicates how long short-term interest rates will stay close to zero. In the December statement, the Committee indicated that it will likely keep the short-term policy rate low "well past the time" that the unemployment rate falls below 6.5 percent, especially if projected inflation continues to run below the 2 percent longer-run goal.

The FOMC has two tools at its disposal, asset purchases and low policy rates. Asset purchases and forward guidance on interest rates are both designed to put downward pressure on longer-term interest rates. Asset purchases exert downward pressure through the act of buying in specific maturity sectors of the Treasury and mortgage-backed securities market. Forward guidance on the short-term policy rate (the fed funds rate) influences market beliefs about the path of policy, and that too influences longer rates. Lower long-term rates encourage spending on business investment and consumer activity in interest rate–sensitive sectors like autos and housing. Going forward, it may be appropriate to adjust the policy tool mix. That will depend on circumstances and the economic diagnosis of the moment.

I remain cautiously optimistic that growth will pick up next year. This is my baseline outlook. But, at this juncture, I can't fully discount the possibility that the expected economic improvement won't materialize and that we'll see a replay of the weak growth of the past three years. Regardless of what happens, we will need to be ready to adjust the policy tool mix when appropriate. ∎

Global Economic Growth Falters...Again

Many economists believed economic growth would pick up in 2013 after several challenging years. As the year went on, the developed countries made some improvements, but in developing economies, which powered the global economy out of recession, growth flagged. Although global economic growth decelerated for the third consecutive year, the outlook for the world economy in 2014 is cautiously optimistic.

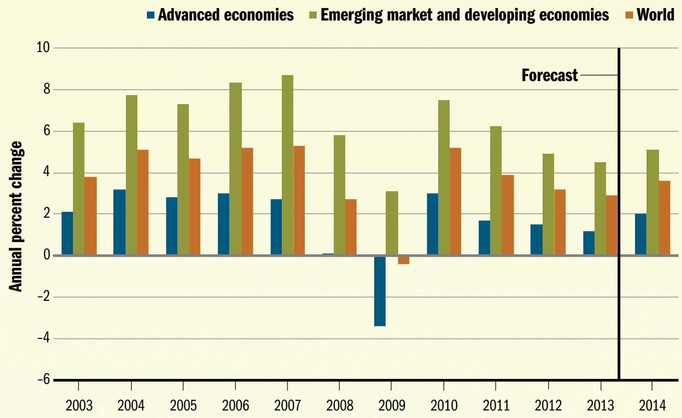
Toward the end of 2013, the world economy again failed to meet the optimistic expectations that prevailed in the beginning of the year. Just as in 2012, forecasters revised down their outlook as the year progressed. Data through the third quarter of 2013 indicate that instead of the hoped-for acceleration, global economic growth is likely to have been slower than in 2012.

Global growth remained subpar while its underlying dynamics shifted. Advanced economies, which were the laggards of the post-2009 recovery, gathered some momentum, and expansion in a number of previously fast-growing developing economies, such as China, India, and Russia, disappointed. Also, certain risks that were looming at the start of the year—such as a potentially ruinous flare-up of the European debt crisis—abated, and a few new risks sprang up. In particular, investors and policymakers worldwide became increasingly concerned about the impact of U.S. monetary policy tightening on developing countries and the broader global economy.

Still, many forecasters, including the International Monetary Fund (IMF), expect global growth to strengthen in 2014, as major advanced economies expand simultaneously for the first time in several years and growth picks up in developing economies (see chart 1 on page 22).

Chart 1

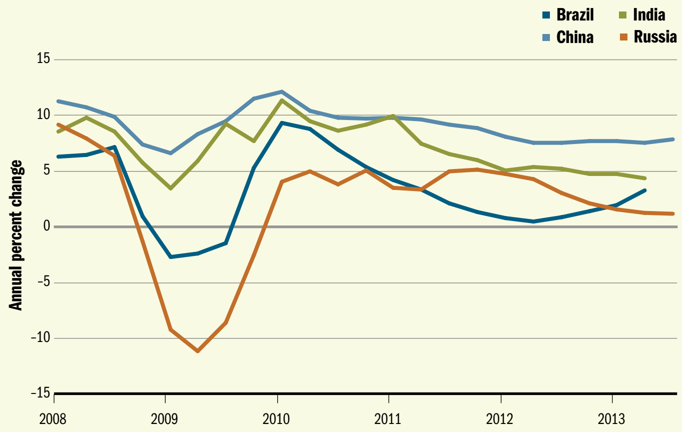
Global Economic Growth



Note: Data are in real GDP terms.
Source: International Monetary Fund, *World Economic Outlook*, October 2013

Chart 2

Economic Growth in Emerging Markets



Note: Data are in real GDP terms.
Sources: National statistical agencies of Brazil, China, India, and Russia

Advanced economies make progress

Among the developed countries, 2013 proved something of a watershed for the economies of the euro zone, Japan, and, in certain respects, the United States.

After six consecutive quarters of contracting, the euro zone returned to growth in the second quarter of 2013, with Germany and France accounting for most of this growth. Even more encouragingly, some of the fiscally troubled European countries (sometimes referred to as "peripheral Europe") began to show signs of economic stabilization. Portugal was a positive surprise in the second quarter—on the heels of 10 consecutive quarters of negative growth, the country's economy grew at the fastest pace in the region.

All the countries in peripheral Europe—Greece, Ireland, Italy, Portugal, and Spain—made progress toward reaching their fiscal targets as they implemented difficult austerity measures and some structural reforms. Investor confidence has been slowly returning to the region. Still, economic recovery in those countries will likely be unimpressive because tight financial conditions continue to restrain economic growth. Moreover, austerity fatigue has been setting in, so the risks of backtracking on fiscal adjustment and structural changes remain acute.

Japan's economic prospects improved notably, as growth strengthened and deflation began to abate in 2013. The improvement was fueled to a large extent by the confidence-boosting policy measures undertaken by the government of Prime Minister Shinzo Abe. His policy agenda, popularly dubbed "Abenomics," consists of three main components—fiscal stimulus, open-ended monetary loosening, and structural reforms. On the monetary side, the Bank of Japan announced in April that it would switch its policy framework from targeting interest rates to targeting the monetary base. As part of the newly implemented Quantitative and Qualitative Monetary Easing program, Japan's central bank committed to doubling the monetary base in two years. Growth in 2014 may moderate as the country faces an increase in its consumption tax—a measure that aims to lighten Japan's heavy public debt burden.

The U.S. economy has not seen a growth turnaround in 2013 similar to Europe's or Japan's, but U.S. investors began to face the challenge of preparing for expected tightening of monetary policy. Over the summer, after Fed Chairman Ben Bernanke discussed in May and June a possible change in the Federal Reserve's course of bond buying, interest rates rose sharply in the United States and other parts of the world, and capital began to flow rapidly out of developing countries.

The investors' retreat from emerging markets in response to higher interest rates in the United States was not unexpected. The speed and the extent of the capital outflows, however, were a surprise to many. Although the Federal Reserve left its bond-buying program unchanged in September and the capital outflows abated, the summer turbulence exposed the vulnerability of some key developing countries to capital flight and shed light on a new important risk to the global economy—the loss of developing economies' economic and financial strength in the face of monetary policy tightening in the United States.

Developing economies' growth slows

It was mostly the developing economies that carried the global economy out of the 2009 recession. Those countries also showed impressive resilience during the depths of the European debt crisis a few years ago. However, a protracted period of very weak postrecession growth in the developed world has taken a toll on expansion of their economies. Domestic demand in many countries held up relatively well, but their overall growth began to decelerate around 2011 (see chart 2 on page 22). Sluggish demand from the developed world for developing economies' exports increasingly dragged on economic growth.

The weak growth in the developed world is not the only factor that negatively affected developing economies in the past few years. Another important reason for their slowdown was China's moderating expansion. Worried about a potential buildup in financial and economic imbalances, Chinese authorities have struggled to rein in credit expansion, in the process putting a brake on the economy. Slower growth in China lessened demand for commodities and raw materials and brought down their prices, thus dampening economic expansion in commodity-exporting countries, many of which are in Latin America.

Domestic policies in emerging markets also played a role in slowing their economic growth. Back in 2010 and 2011, many countries in the developing world were expanding rapidly and began to outgrow their capacity to expand. Capacity constraints, including low unemployment, were pushing up inflation, so central banks stepped in and tightened monetary policy, which also contributed to the recent deceleration.

The latest slowdown in growth and this summer's capital flight and currency depreciations exposed a number of vulnerabilities in some key developing countries—including Brazil, India, Indonesia, Turkey, and South Africa—and heightened the urgency to implement much-needed structural reforms. An implementation by policymakers of effective measures would strengthen the growth potential of these increasingly important players in the global economy.

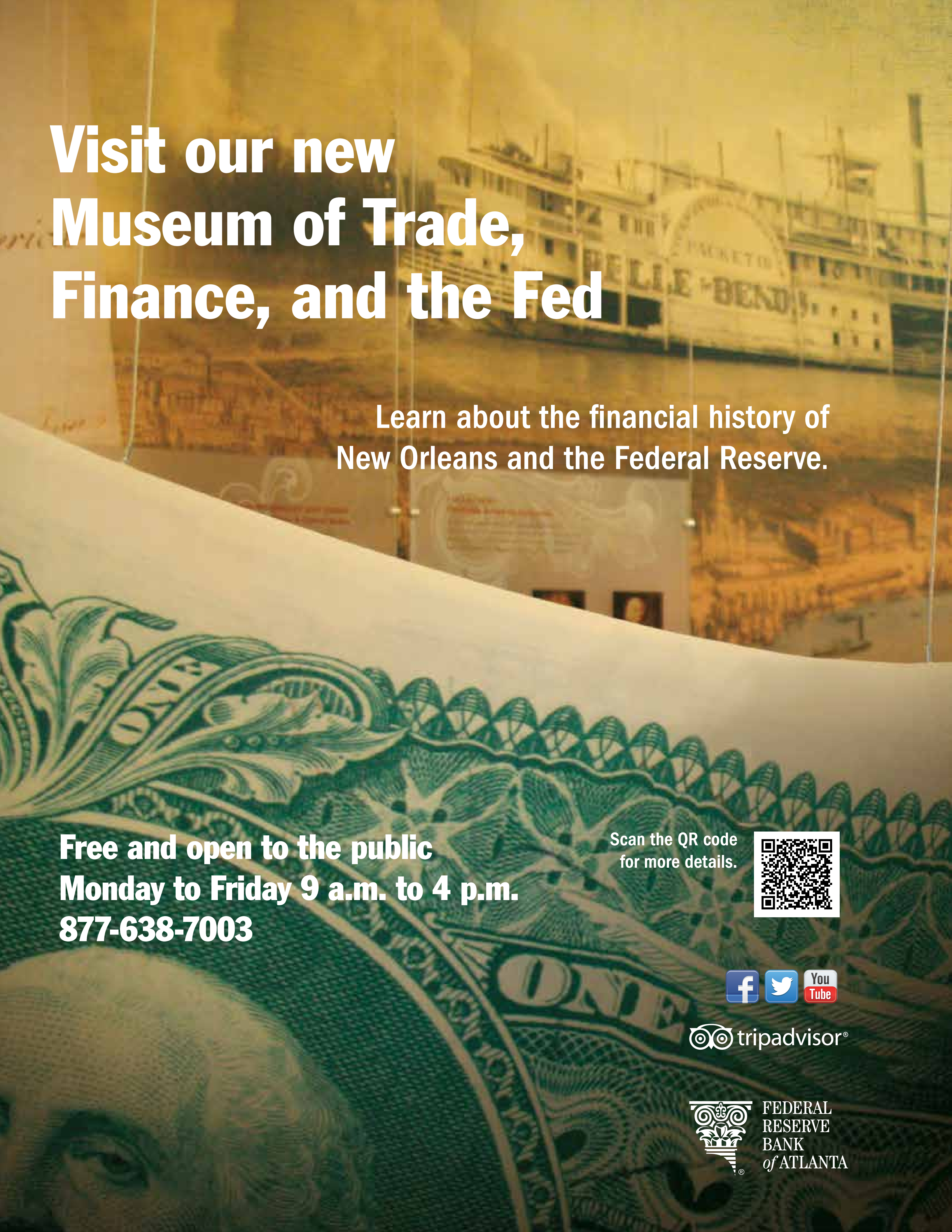
The future outlook

Having taken into account the economic slowdown and financial turbulence in emerging markets, the IMF has revised down its forecast for global growth in 2013 and 2014 several times since the spring. Despite the downward revisions, the IMF still expects global growth to strengthen from 2.9 percent in 2013 to 3.6 percent in 2014. Growth is forecast to increase in both advanced and developing economies. Emerging markets will continue to outpace the developed world and account for most of the global economic growth.

The euro zone's economy should stay on a slow recovery path as the fiscal drag diminishes. Although many peripheral countries remain in belt-tightening mode, austerity measures required to achieve fiscal targets will be less severe. Renewed positive growth in the euro zone is likely to spill over to its major trading partners—the United Kingdom and Eastern and Central Europe. Emerging Asia should reap the benefits of China's continued, albeit slowed, growth, as well as the recent improvements in Japan's economic performance. Growth is also expected to pick up in Latin America. The region's two largest economies—Brazil and Mexico—are likely to expand more rapidly next year. Brazil should benefit from a ramp-up in infrastructure investment and the depreciation of its currency. Mexico's economy should receive a boost from some strengthening in U.S. demand.

Overall, the outlook for the global economy for 2014 is positive, if still highly uncertain. The world will be watching the Federal Reserve closely as the central bank prepares to reduce monetary stimulus. ▮

This article was written by Galina Alexeenko, director of the Regional Economic Information Network at the Atlanta Fed's Nashville Branch.



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FEDERAL RESERVE BANK of ATLANTA

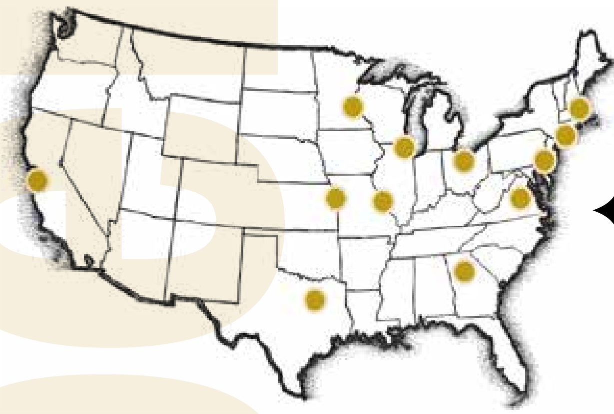
centennial numbers

1917

Year, on June 21, that the Federal Reserve System was authorized to establish branch locations

Source: Federal Reserve Board of Governors

The Atlanta Fed's New Orleans Branch



Reserve Bank locations

37

Number of U.S. cities that formally requested designation as the headquarters of a Federal Reserve Bank

Source: Reserve Bank Organization Committee

1923

Year the Atlanta Fed opened an agency in Havana, Cuba, dedicated to handling cash into and out of the island

Source: Annual report of the Federal Reserve Board of Governors

1938

Year the Atlanta Fed closed its Havana agency

Source: Annual report of the Federal Reserve Board of Governors

1959

Year that Alaska (on January 3) and Hawaii (on August 21) joined the Federal Reserve System

Source: Federal Reserve Board of Governors

20

Duration, in years, of the Federal Reserve's original charter. Congress extended the charter indefinitely in 1928.

Source: Federal Reserve Board of Governors

9,034

Federal Reserve System member banks on December 31, 1927

Source: Annual report of the Federal Reserve Board of Governors

6,341

Federal Reserve System member banks on December 31, 1937

Source: Annual report of the Federal Reserve Board of Governors

East Alabama National Bank, Eufaula, Alabama, May 1935

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For more information about the Federal Reserve's centennial, please visit federalreservehistory.org/.

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In October 1982, the Federal Reserve Board building (at right, under construction in the late 1930s) was named in honor of former Federal Reserve Chairman Marriner Eccles.

now and then