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The Economic Plight of Millennials

How We Pay: Results from the Federal Reserve's Latest Payments Study

Changing Channels: The Evolving Face of Media in the Southeast



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The Economic Plight of Millennials

The millennial generation is entering the labor force with one trait in common: they watched as the Great Recession dramatically reshaped the landscape of employment, housing, and their overall expectations. How profoundly will the economic downturn and its associated effects mark this generation?

How We Pay: Results from the Federal Reserve's Latest Payments Study

Changes in technology have affected not only how people live and work, but also how individuals and businesses pay for goods and services. The Federal Reserve's most recent triennial study of the payments system highlights a number of shifts in this dynamic arena.

Changing Channels: The Evolving Face of Media in the Southeast

New digital devices and enhanced technology have given consumers a feast of content to consume. Although consumers are the clear winners in this new media landscape, regional players in the communications field are scrambling to remain in the game.



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EDITOR'S NOTE: This issue of *EconSouth* contains quick response, or QR, codes. Using an iPhone, Android phone, or other device and a downloaded reader application, you can scan the QR codes embedded throughout the issue. The codes will take you to locations on the Atlanta Fed's website that will provide enhanced information on the subject at hand.

The Might (and Plight) of the Millennials

Like generations before them, the demographic cohort known as the millennials—those born roughly between 1980 and 1995—have shaped a number of social and cultural aspects, including fashion, technology, and politics. One area where they're facing challenges in leaving their mark, however, is the economy. Unemployment among younger people is persistently high, as are the school loans many of them have accumulated. Atlanta Fed economic analyst Mark Carter—himself a millennial—looked at this group's economic challenges, which are daunting in the short term but not without glimmers of better times ahead.

“Having kept a close eye on labor markets over the last few years, I was not so surprised to learn details about what the labor market looks like for millennials, but I was surprised to see that more of them are financing their education using credit, with each student assuming, on average, more debt than those in the past,” he said. “Despite the millennial generation's being the best-educated generation in U.S. history, data show that those holding more student loan debt are less likely to hold mortgage and auto loans.”

Checking in on payments

Just as changing economics and evolving technologies have shaped the millennials, they've also brought changes to how we pay for goods and services. Managing editor Tom Heintjes used the release of the Federal Reserve's fourth triennial payments study as an opportunity to look at the changing composition of the payments system, noting the impact of digitization on payments.

“A pack of checks lasts me a lot longer than it used to, and the Fed's payments study makes it obvious that many people are writing fewer and fewer checks than in years past,” Heintjes said. “Although electronic payment methods are grow-

ing rapidly—and it will be fascinating to watch their trajectories in future payments studies—I suspect that the paper check will continue to occupy a somewhat significant role in payments as data breaches associated with newer payment methods grab occasional headlines.”

The (changing) media is the message

If you're holding this printed magazine in your hands, odds are that you're not of the generation who grew up with the Internet. In his story, staff writer Ed English—a former full-time journalist—explores the changing patterns of media consumption and determines the winners, the losers, and those whose outcomes are not yet clear. In any event, though, he notes that the fragmenting media landscape could come at a worrisome cost.

“While I am a big fan of the technological advances that have enhanced my enjoyment of entertainment media, I see two trends related to journalistic media that cause me concern,” English said. “Network and cable television news have trended toward panel discussion shows and away from reports in the field. On a local level, newspapers have trended toward smaller staffs and smaller papers. While I understand the economics behind both trends, I fear the effect of shrinking the amount of boots-on-the-ground reporters in the field.”

A discussion of changing media consumption patterns provides me with a natural segue to announce that 2014 will see three issues of *EconSouth*, not four. Our next issue will be out in August, and we'll end the year with our customary outlook issue. We value your interest in *EconSouth* and are developing plans to allow the publication to continue our commitment to explore the regional and national economy in innovative and engaging ways. ■

Lynne Anservitz
Editorial Director

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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.

Photos pp. 4-5, 11 courtesy of the Atlanta Braves; map on p. 11 courtesy of Wikimedia Commons; back cover photos by Flip Chalfant (top) and courtesy of the San Francisco Fed (right).



MIKE CHRISZT is vice president in the Atlanta Fed's public affairs department.

A Changing Southern Exposure

I came to the Federal Reserve Bank of Atlanta in 1989. During the past 25 years, I've witnessed quite a few changes in the regional economy. Then, as now, a deep understanding of the economy in the Atlanta Fed's district was important to the formulation of monetary policy.

Developing economic intelligence about the region accelerated with the inception of the Atlanta Fed's Regional Economic Information Network (REIN) in 2008. Through REIN, we reach out to hundreds of contacts who are drawn from large and small businesses from all sectors of the Southeast economy. We also reach out to representatives of the community. This broad range of contacts provides a representative picture of economic conditions across the region.

Changing times, lessons learned

Back in the early 1980s, the Southeast's rapid growth was a key feature of the U.S. economic picture and one that many people wanted to understand better. Over the past three decades, rapid development was spurred on by in-migration to the region, especially to Florida and parts of Georgia and Tennessee.

Whereas the region seemed recession-proof during several downturns, we've been especially hard hit recently and have recovered more slowly than other regions. In-migration slowed with the financial crisis, the Great Recession, and the slow recovery that followed. As a result, the need for new houses, hospitals, shopping malls, and schools also slowed. With the overbuilding that had occurred in construction and the rise in

foreclosures, the construction and related building materials industries declined.

The Southeast's progress out of recession has been hindered by several intertwined forces: tepid employment growth, general economic uncertainty that restrained consumer and business spending, challenging banking condi-

While we may not have regained all the jobs lost during the recession, progress is evident.

tions, and still-weak housing markets in the region's largest states and metropolitan areas.

Stability gradually returns

As 2014 progresses, it's clear the Southeast economy is improving. While we may not have regained all the jobs lost during the recession, progress is evident. For example, employment in the service sector has surpassed its prerecession level. Construction employment still lags, and it is unrealistic to imagine we will—or even should—see the high levels of construction jobs experienced during the housing boom.

Manufacturing employment is making steady gains, but here, too, the region's employment level is lower than it was in 2007. Although employment in manufacturing is on the rise, structural changes in this sector make it unlikely that we'll see a boom in factory-related job growth. The low costs that had been the Southeast's comparative advantage

relative to other sections of the country earlier in the 20th century began to face

Although we currently face an economic challenge that may be among the greatest in our recent history, the resilience of the region has been a constant.

competition in the century's latter years from even lower-cost foreign producers.

Technology has also had a significant impact as capital continues to replace labor. Output levels are rising thanks to productivity gains. New auto plants have arrived in the region, and the boom in energy production throughout the country has benefited the existing energy-related manufacturing base here, especially in Louisiana.

From the vantage point of two-and-a-half decades at the Atlanta Fed, I've seen many such changes to the southeastern economy. Further, I'm confident that many others are on the horizon and will play an important role in the continual transformation that has made the South-

east such a dynamic region. Although we currently face an economic challenge that may be among the greatest in our recent history, the resilience of the region has been a constant. And though I'm not a native Southerner, I've lived here long enough to know that this resilience will serve the region well in tomorrow's economy. ■

What are the risks in retail payment systems?

The Atlanta Fed's Retail Payments Risk Forum (RPRF) identifies, detects, and encourages mitigation of risk in existing and emerging retail payments to contribute to the stability, efficiency, and availability of retail payments systems. RPRF does this all by:

- Researching retail payments products and systems;
- Collaborating with industry participants, regulators, law enforcement, the legal community, and others in the Federal Reserve System; and
- Convening payments providers and parties integral to establishing new products, laws and regulations, policies, and standards that affect and shape retail payments.

Sign up to receive our weekly blog, *Portals and Rails*, which investigates the latest trends in payments risks. In addition, learn more about our events and other publications by visiting frbatlanta.org/rprf/

Cobb County, Georgia Cobb County's Sunbelt Success Story Confronts the Future

It doesn't look like much now, just 60 acres of Georgia pines and vines. But what is coming to this patch of brambles could ignite the Cobb County economy like no single project has since a warplane factory opened during World War II.

At least that's the hope of county leaders and economic developers. The site, near the intersection of interstates 285 and 75, is where the Atlanta Braves major league baseball team will construct a \$672 million stadium that's scheduled to open in 2017. Alongside the ballpark, the Braves plan a mixed-use development to draw residents, shoppers, diners, and office workers year-round.

Excitement is high. Cobb County Commission Chair Tim Lee and other officials predict the county's \$300 million investment will pay off handsomely.

"It will be a catalyst to completely transform an area that's already the economic hub of Cobb County," said Brooks Mathis, senior vice president of economic development at the Cobb Chamber of Commerce.

Not everyone is convinced. Taxpayer groups have protested the county's financial commitment to the project. Media reports say the public tab will amount to more than \$500 million over three decades of paying off interest on bonds and other expenses.

The ballpark complex "is going to change things, certainly, in that part of Cobb County," said Don Sabbarese, an



economist at Kennesaw State University in Cobb. Eighty-one games a year, which will likely draw a combined 2.5 million to 3 million fans, and a major real estate project will undoubtedly generate economic benefits such as hotel stays, sales taxes, and restaurant meals, Sabbarese said.

On the other hand, there will be costs in addition to those already known, including higher public safety, utility, and transportation costs. Whether the benefits ultimately exceed the costs, Sabbarese added, "is very hard to predict."

Another chapter for a quintessential Sunbelt suburb

One thing is certain. No matter how it turns out, the Braves' move 12 miles up I-75 will be the latest chapter in Cobb County's evolution as a countywide version of the quintessential boomtown of the Sunbelt South. Today, according to 2013 U.S. census data, Cobb has 707,000 residents and more than 300,000 jobs, making it a bigger employment center than any Georgia metropolitan area besides Atlanta.

Immediately north-northwest of Fulton County, home of the city of Atlanta, Cobb has gained 100,000 people since 2000 and more than a quarter million since 1990, data from the U.S. Census Bureau show. Cobb County has on average added the population of the city of Charleston, South Carolina, every 10 years since 1970. By 1990, a majority of Cobb Countians were born outside Georgia, according to Thomas A. Scott, a historian at Kennesaw State University. Cobb County—and metro Atlanta gener-



Big changes are on the horizon for Cobb County, which will become home to the Atlanta Braves' new stadium starting in 2017.

Cobb County, Georgia

Population	688,078
Marietta population	56,579
Total housing units	286,490
Median household income	\$65,180
Median home value	\$203,000

Source: U.S. Census Bureau, 2010 Census



ally—grew thanks to the ingredients that built the Sunbelt South: defense spending, the interstate highway system, aggressive industrial development efforts, low business and living costs, and a pleasant climate year round.

Of course, without Atlanta, Cobb County as we know it wouldn't exist, a fact that remains as true now as ever, said Tad Leithead, chairman of the Cumberland Community Improvement District (CID), a self-taxing group of commercial property owners located where the Braves plan to move. In fact, some of the demographic and economic forces that long propelled suburbs like Cobb have dissipated. Consequently, those places may need to rethink their development if they are to continue to grow, according to some observers.

Suburban shopping and office complexes exist because of easy automobile access. In its first 15 years—1988 to 2003—the Cumberland CID focused on making its pocket of Cobb County ever more car-friendly, helping to build roads, access ramps, and parking decks, Leithead pointed out. For the CID, Cobb, and metro Atlanta more broadly, car-driven growth succeeded in many ways. The 5.5-square-mile Cumberland CID today encompasses some 50,000 jobs—including the headquarters of the Home Depot Inc., WellStar Health Services, and Genuine Parts (NAPA)—and the majority of Cobb's management and executive positions, according to the CID. Through the 1980s up until the housing bust and recession, Cobb and metro Atlanta consistently ranked among the nation's

leaders in employment and population growth.

"We grew, but we grew badly; we sprawled," said Leithead, who also is former chairman of a regional planning body, the Atlanta Regional Commission (ARC). "But it worked for 50 years. A lot of people made a lot of money. People did well. But the distances got too great, traffic got too bad. It's like a rubber band that's stretched out: it either has to snap back or break."

That rubber band of Atlanta congestion has eased back lately. Metro area traffic is no longer among the top-five worst in the country, according to the Texas A&M University Traffic Institute, but mainly because of the recession's impact on volume. And the area's congestion remains the nation's seventh worst, according to the institute's most recent ranking.

It is not just traffic that has Cobb at a crossroads. Demographics do not play to the county's traditional strengths: good schools and safe, affordable housing for families. For one, there are fewer families these days. Between 1970 and 2012, the portion of U.S. households that were married couples with children under 18 plummeted from 40 percent to 20 percent, according to the U.S. Census Bureau. (See the related story on page 6.) Meanwhile, in the wake of the Great Reces-

sion, younger adults have shown considerably less interest than older Americans in owning houses and cars and taking on the associated debt, according to research including a 2013 study by economist Richard Fry of the Pew Research Center. Finally, numerous studies have shown that younger adults prefer urban living. In fact, in recent years, that trend has propelled many cities like Atlanta to grow faster than their surrounding suburbs for the first time in many decades, according to the Census Bureau.

"We definitely face that," said Mathis of the county's chamber of commerce said of the demographic currents. Mathis points to himself: he is 31 and lives in Atlanta's thriving urban district of Midtown, not in Cobb County.

On the bright side for Cobb, developers in the county are moving to create more urban-type walkable developments, particularly in the Cumberland area that is only about 10 miles from Atlanta. The Cumberland CID is situated near hiking trails in the Chattahoochee River National Recreation Area, and the CID has launched several projects aimed at making the area more conducive to walking.

"We're lucky in that we're not trying to create this environment so far outside the city," said Mathis.

He has a point. Residential development has radiated so far outside Atlanta that Cobb, especially the closer-in parts of the county like the Cumberland district, are almost considered intown markets,

Continued on page 11

THE ECONOMIC PLIGHT OF MILLENNIALS



A demographic cohort is never monolithic, but the group that recently entered the labor force had one trait in common: they watched as the Great Recession dramatically reshaped the landscape of employment, housing, and, in general, their expectations. How profoundly will the economic downturn and its associated effects mark this generation?

What shapes a generation? Differences among age groups can be the result of life cycle events (people behave the way they do because of where they are in life), period effects (such as wars, economic downturns, and medical or scientific breakthroughs), or cohort effects (effects from events or trends that occur to a generation during their young adult years but whose effects reverberate for years). These are the factors the Pew Research Center uses to explain differences among age groups.

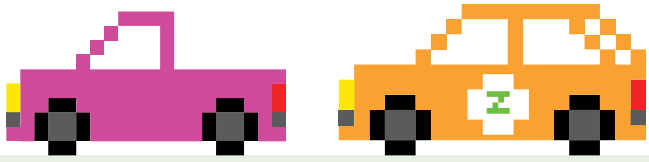
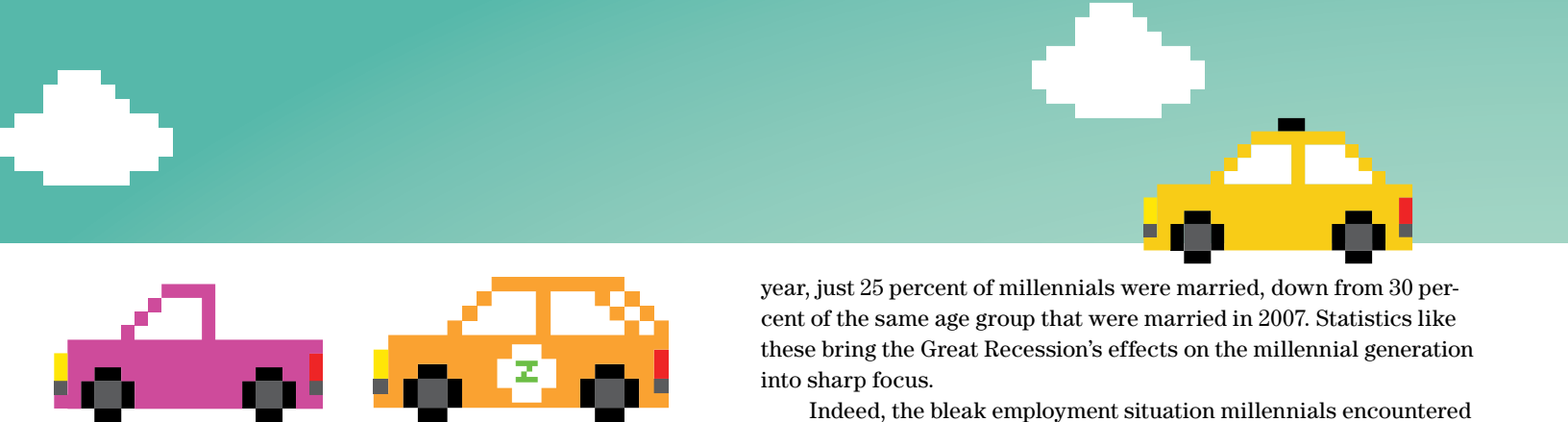
Largely as a result of the Great Recession, the millennial generation—which demographers generally define to include those born after 1980—is marked by each of Pew’s generation-shaping characteristics. Besides sending shockwaves through

the U.S. economy, the Great Recession has reshaped many millennials’ plans and opportunities.

Big decisions deferred

On top of the economic hardships facing the millennials, they show signs of veering from established patterns (see the sidebar on page 8). Whereas the last few preceding generations moved more quickly toward getting married or buying a house, millennials as a group are taking their time on those fronts (for many, out of necessity). In 2012, 36 percent of the nation’s young adults ages 18 to 31 were living in their parents’ home, the largest share in four decades, according to 2013 data from Pew. The same





Millennials' Preferences and Their Effects

As one might expect, millennials exert significant economic sway. The preferences of this cohort have changed along with the changing economic realities. To quote the *Atlantic* magazine, "Since World War II, new cars and suburban houses have powered the economy and propelled economic recoveries. Millennials may have lost interest in both."

Perhaps this loss of interest, though, can be attributed to the tendency of consumers to make increasingly rational decisions in times of elevated economic hardship or uncertainty. The *Atlantic* article goes on to say that the typical new car costs about \$30,000 and sits in a garage or parking lot 23 hours a day. The increased prevalence of Zipcar and similar car-sharing services shows that young consumers are adopting thrifty habits, especially when it's convenient to do so.

Taking note of this trend in car-sharing, Ford Motors has made a notable effort to provide fleet vehicles for Zipcar. The automaker's rationale is that millennials might have no interest in purchasing a car now, but if they do later, they'll be familiar with the brand, increasing the likelihood that today's Zipcar customer will be tomorrow's Ford owner.

In separate reporting on millennials, the *Atlantic* praises millennials for their increased appetites for "smaller houses built in dense, mixed-use neighborhoods," which creates a larger economic multiplier effect while also creating other efficiencies, such as—theoretically, at least—increased funding for school districts. According to the article, "Economists have found that more than half of the variation in output per worker across the U.S. states can be explained by density." ■

year, just 25 percent of millennials were married, down from 30 percent of the same age group that were married in 2007. Statistics like these bring the Great Recession's effects on the millennial generation into sharp focus.

Indeed, the bleak employment situation millennials encountered upon entering the labor force likely hindered household formation rates: they weren't able to rent apartments or furnish and equip their own households in general. Though labor markets today continue their slow rebound from their recession-era lows, the U.S. Bureau of Labor Statistics (BLS) says youth unemployment rates (ages 16–24) remained around 15.5 percent in 2013 and began 2014 at 14.2 percent, roughly twice the rate of overall unemployment. In fact, excluding those under the age of 25, the overall U.S. unemployment rate was only 5.4 percent in January 2014, according to the BLS.

Another statistic from Pew illustrates millennials' straits: in 2012, 63 percent of people ages 18–31 had jobs, down from 70 percent of their same-aged counterparts who had jobs in 2007. Unemployed millennials are much more likely than their employed cohorts to live with their parents.

More skills, more problems?

Even beyond the harsh labor market conditions into which millennials graduated, other distinctive factors have intensified frustrations for this demographic. Millennials view higher education as crucial to enhancing their skills and thus their career prospects, and data strongly support their view: a new Pew survey shows that, on virtually every measure of economic well-being and career attainment (including personal earnings, job satisfaction, and the share employed full-time), young college graduates are outperforming their peers with less education.

However, these skills come with skyrocketing costs even as students under 30 years old are increasingly taking on loans to finance their education. A New York Fed report shows total student loan debt for those under 30 grew from \$144 billion in the first quarter of 2005 to more than \$322 billion in the fourth quarter of 2012. During the same period, the number of people under 30 who borrowed to pay for their education increased from 10.8 million to 15 million.

Overall increased enrollment levels explain, in part at least, the larger number of people borrowing to finance higher education, but student borrowers have taken out much higher amounts: from 2005 to 2012, the average per capita amount of education-related debt that Americans under 30 took on went from about \$13,000 to \$21,000, according to New York Fed data.

In fact, even as every other kind of debt generally decreased throughout the Great Recession, student loan debt was a clear outlier. The total amount of student debt for all age groups went from just shy of \$300 billion in 2004 to just over \$1 trillion by the end of 2012, according to New York Fed data. At no time during that period did student loan balances decrease.

Generally, the Great Recession forced Americans to target and prioritize debts. Credit cards, for instance, received borrowers' pri-



Table 1
Household-Formation Shortfall by Age Group, 2011

Age group	Number of households formed (in millions)	Shortfall (in millions)
18-24	6.0	1.0
25-34	19.6	0.9
35-44	21.3	0.1
45-54	24.5	–
55-64	21.8	0.2
65 and over	25.4	0.5
Total	118.6	2.6

Note: Household formations among the cohort age 45-54 rose by 100,000 in 2011.
 Source: U.S. Census Bureau, Current Population Survey; Atlanta Fed economist Tim Dunne's calculations

many debt-reduction efforts. U.S. credit card debt peaked around the end of 2008 at about \$900 million. By the end of 2012, that balance was comfortably under the \$700 million mark, Fed data show. Auto loan debt also decreased by about \$100 million during the recession. In that same period, students took on about \$150 million more in student loan debt, New York Fed data show.

That New York Fed study shows that the share of 25-year-olds who carry student debt went from 27 percent in 2004 to 43 percent in 2012. Though not in itself necessarily a problem—and in fact could be viewed as young people taking advantage of relatively low-interest financing of a skill-enhancing education—much more troubling is the share of young adults with delinquent balances on their student loan accounts. Of students under 30 who borrowed money to pay for higher education, the share of those accounts that have been delinquent for 90 or more days has doubled from 8 percent in 2004 to 16 percent in 2012. New York Fed data also revealed that hardly anyone ages 25 to 30 who holds a delinquent student loan balance also originates a home loan, one of a number of drags on millennials' particularly low household formation rate.

However, there's a silver lining to the rapidly increasing debt that millennials take on to fund their education. In general, young people with at least a bachelor's degree say that the money was well spent. According to the Pew survey, 72 percent of those ages 25 to 32 with at least a bachelor's degree say that

they have already paid off their college loans. Of the two-thirds of college-educated millennials who borrowed money to pay for their schooling, about 90 percent say their degrees have been worth it—or they expect them to be.

Indeed, because of the rising income disparity between the college-educated and those without degrees, the only thing more expensive than a college education could be not getting one. The Pew Research survey points out a growing and stark difference in wages between college-educated young adults and those without a degree (see the sidebar, "The Case of the Stagnating Wage"). In 2012 dollars, the Pew survey shows millennials with at least a bachelor's degree earn a median income of \$45,500 annually, about \$17,000 more per year than the median \$28,000 income the study associates with those having only a high school degree. In an age when overall median annual earnings have remained relatively flat, millennials have remained mindful that this earnings premium is strongly associated with education.

Millennials and household formation

According to Atlanta Fed economist Timothy Dunne, the rate at which all Americans formed households fell sharply during the Great Recession, as one might expect, given the nature of the downturn. In 2012, Dunne wrote an article for the Cleveland Fed titled "Household Formation and the Great Recession." In it, Dunne showed that the greatest shortfall in household formation during that period occurred with young adults.

Dunne's research, which used Current Population Survey (CPS) data from the U.S. Census Bureau, showed that the total shortfall (relative to historically typical levels) in the number of household formations from 2007 to 2011 was roughly 2.6 million.



The Case of the Stagnating Wage

Millennials make up the best-educated generation in U.S. history, with a little more than a third of those ages 25–32 holding at least a bachelor's degree. By comparison, in 1965, 13 percent of the same age group held degrees. A Pew Research survey on young adults, education, and earnings says that as the share of college graduates has grown, their degrees have also become more valuable: between 1965 and last year, the median annual earnings of college graduates ages 25–32 grew from \$38,833 to \$45,500 in 2012 dollars, a nearly \$7,000 increase.

The combination of more millennials earning degrees and the premium for those degrees increasing might therefore lead you to conclude that they earn considerably more than previous generations of young adults, but overall they don't. The overall median annual earnings of today's millennials (\$35,000) aren't too different from the earnings at comparable ages of the baby boomers (\$34,883) or the generational cohort after them, often referred to as Generation X (\$32,173). ■

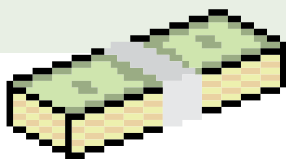


Table 2
Headship Rates for Adults 18 Years and Older

	All age groups	Adults ages 18 to 34
2007	52.0	37.9
2008	51.9	37.4
2009	51.6	36.9
2010	51.2	35.9
2011	51.3	35.8

Note: Data shown are percentages. "Headship" refers to heading a household.
Source: Census Bureau, Current Population Survey; Atlanta Fed economist Tim Dunne's calculations

The largest age group contributing to that shortfall, representing about 1 million fewer household formations than demographers would expect to see, was the 18- to 24-year-old cohort. The second-largest age group contributing to the household-formation shortfall was the 25- to 34-year-old group, which had about 900,000 fewer formations during the Great Recession (see table 1 on page 9). For those two age groups combined, the homeownership rate peaked in 2004 at about 44 percent and plunged to about 37 percent by the end of 2011.

Dunne offers another way to think about the shortfall in household formation: looking at something economists call the "headship rate," which is the probability that a person is the head of a household (see table 2). Of all age groups combined, the headship rate fell from 52 percent in 2007 to 51.3 percent in 2011, a decline of about 0.7 percentage point. For those adults aged 18 to 34, however, the headship rate declined from 37.9 percent to 35.8 percent during the same period, a decline roughly three times the size of the aggregate headship rate. In this period, younger adults faced reduced access to mortgage credit, a weaker overall economy, and increased uncertainty about the housing market.

Finding the silver linings

Although some dark clouds hang over the heads of the millennials, those clouds do reveal some silver linings. The millennials have helped inflate the student debt balloon, but in the process they've become the best-educated cohort in U.S. history. And although median annual wages have largely stagnated, the benefits of a college education are apparent when comparing college-educated millennials with those not possessing a degree.

And when the Atlanta Fed's Dunne looks at young adults' depressed household-formation rates, he believes a strengthening economy will cause millennials to pick up the pace. "Improvements in labor markets should lead to increases in headship rates and an increase in household formation," he said, "and this linkage should hold true for millennials as well." ■

This article was written by Mark Carter, a senior research analyst—and, it should be noted, a millennial—in the Atlanta Fed's research department.





The home of the Braves: Cobb County's plans for the Atlanta Braves ballpark (shown above in blue) involve a mix (shown above in red) of retailing, restaurants, hotels, and parking.

Continued from page 5

said Domonic Purviance, a housing market analyst at the Atlanta Fed.

No longer just a bedroom community

Cobb has matured in many ways. For example, the county has a net inflow of commuters every day, according to the ARC, meaning that more people drive in for work than drive out. Like many suburban counties, Cobb also has grown more diverse ethnically and economically. It is still affluent, to be sure, with a poverty rate of 12 percent compared to 17 percent for all of Georgia, and median household income of \$65,000, 31 percent higher than the state level, according to Census data. But the number of older and less well-off residents has increased sharply, which will place demands on county services that were not a concern for many years.

Cobb also took a hit from the recession. Employment fell by 13 percent, according to the U.S. Bureau of Labor Statistics, about twice the rate of job losses nationally. No class-A office building (top-tier buildings that command the highest rents) has been built in Cobb since 2000.

Cobb's economy still sound

For all its challenges, Cobb County is hardly in dire straits. The county employment base is anchored by several large corporate headquarters. A Lockheed Martin Aeronautics Company plant, which opened during World War II as the Bell Bomber factory, employs nowhere near the 32,000 it had at its peak decades ago. But it remains an economic mainstay with 6,300 people on the payroll. Cobb's housing market has improved after the stinging recession. And all told, nonfarm employment as of mid-2013 had climbed back to within 2 percent of its prerecession peak, according to the most recent data from the BLS.

Cobb's debt rating on general obligation bonds remains among the top 1 percent of counties nationwide, according to the county's website. Fitch Ratings recently cited a "stable economy" and sound public management in explaining its rating. The county's population is highly educated: 44 percent of county residents over 25 have at least a bachelor's degree, compared to just under 30 percent of Americans and Georgians. Culturally, Cobb boasts a highly regarded perform-

ing arts center that is home to the Atlanta Opera and Atlanta Ballet. Now the Braves are heading up the interstate.

Cobb County probably won't again grow as spectacularly as it did in the 1980s and '90s. That's all but inevitable, Sabbarese said. The county faces challenges similar to those faced by most suburbs and by the Atlanta area at large. But Cobb will confront those challenges armed with considerable economic strengths. ■

This article was written by Charles Davidson, a staff writer for EconSouth.



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Organization: Atlanta Fed

Website: frbatlanta.org/research/economists/timothy_dunne.cfm

Other: Before he joined the Atlanta Fed in 2013, Dunne was a vice president at the Cleveland Fed, where he led the research department's Regional Issues Group. Prior to joining the Federal Reserve, he was director of research in the office of the chief economist at the U.S. Census Bureau. Dunne earned his bachelor of arts in economics and history from the College of William and Mary and his doctorate in economics from Pennsylvania State University. His major fields of study are applied industrial economics and labor economics.

“The Modest Economic Recovery Has Played an Important Part in Slowing Household Formation”

An Interview with Tim Dunne of the Atlanta Fed

The economic struggle of the millennial generation (those born since 1980) has been widely discussed in the media, and its behavior is also of great interest to economists. Tim Dunne, an economist in the research department at the Atlanta Fed who specializes in applied industrial economics and labor economics, has written extensively on household formation in the United States. Dunne recently spoke with *EconSouth* to discuss this demographic cohort.

EconSouth: *What kind of rebound in household formation has there been over the last several years?*

Tim Dunne: Unfortunately, the data that are typically used to measure household formation are presenting mixed signals at the moment. Not to be too wonkish here, but the U.S. Census Bureau has several different survey instruments that it uses to estimate the number of households in the United States. The more recent data from the housing and vacancy survey have shown only muted gains, whereas data from the annual supplement of the Census Bureau's Current Population Survey [CPS] indicate a substantial rise. The observed difference in magnitudes—1.3 million versus 2.5 million from 2011 to 2013—is certainly large enough to influence one's assessment of the overall strength of household formation over the period in question.

That caveat in order, I'll focus here on the data from the CPS's annual supplement. The recent data have been pretty solid. Household formation over the last two years has averaged about 1.25 million, close to the numbers seen prior to the Great Recession. The headship rate—the percent of the adult population identifying themselves as

The proportion of young adults living with their parents is almost as high as it was at the end of the recession.

the head of a household—has risen but remains below prerecession levels. The headship rate fell relatively sharply over the Great Recession, accounting for the bulk of the decline in household formation rates. This decline was especially sharp for younger adults, those ages 18 to 34.

ES: *Have millennials participated in the recovery in household formation?*

Dunne: It's a mixed picture. There has been some rise in headship rates for individuals 18 to 34 years old, but the headship rate for this age group remains well below the rate seen prior to the Great Recession. We know that much

of the falloff in household formation was the result of a decline in headship rates for the young adult cohort, many of whom ended up living with their parents. Greg Kaplan at the University of Pennsylvania recently published a paper showing that the option to move back in with parents serves as insurance against labor market risks. Indeed, that is still true in the most recent data, as well. The proportion of young adults living with their parents is almost as high as it was at the end of the recession.

It is clear that the modest economic recovery has played an important part in slowing household formation. Andrew Paciorek of the Federal Reserve Board has a very nice research paper on the cyclical nature of household formation that highlights the strong links between

labor markets and household formation. Paciorek uses a relatively simple econometric model of the headship rate and then projects it forward using the Congressional Budget Office's forecast of the unemployment rate through the end of the decade. The key point of the paper is that improvements in labor markets should lead to increases in headship rates and an increase in household formation—and this linkage should hold true for millennials as well.

However, as Paciorek says in his paper, "although data through 2012 suggest that new housing starts and permits have begun to recover, they remain far below their long-run trends."

ES: *How have headship and household formation rates evolved in southeastern*

states over the course of the recession and recovery?

Dunne: Admittedly, the statistics generated using the CPS data at a regional level are noisy, but the cyclical patterns in headship rates that we see at the national level are present in the Southeast. Headship rates fell sharply during the recession but have made a partial recovery since 2010, supporting a rise in household-formation rates. In short, the region's recovery in household formation is following the broad contours of the national recovery. ■

This interview was conducted by Mark Carter, a senior economic analyst in the Atlanta Fed's research department.

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Regional Update: 2014 Seeing Modest Growth, So Far

Overall, business contacts reported that economic conditions continued to improve modestly across the Southeast for the early part of 2014. Sectors driving the mild improvement include energy, manufacturing, hospitality, and real estate.

Energy, hospitality among growth sectors

According to energy contacts, strong production and higher pipeline capacity continued to bolster activity in the Gulf of Mexico. The unusual winter weather also benefited the sector by increasing the use of utilities such as natural gas.

The Southeast purchasing managers index (PMI), a gauge of regional manufacturing activity, expanded slightly in January. After contracting in December, the index increased 2.2 points in January, to 50.6. A reading above 50 represents an expansion in the regional manufacturing sector, and a reading below 50 indicates a contraction. Early reports from contacts indicated that the weather forced some plants to shut down, but the loss in output was temporary and will be made up in the short run. (See the Business Inflation Expectations survey update on page 18.)

Hospitality contacts said that some areas affected by the weather lost revenue as a result of closures of attractions and restaurants. However, most hotels were not as adversely affected. In fact, some saw an increase from businesses that encouraged their essential staff to stay in hotels close to their workplace.

On another positive note, the U.S. dollar's favorable exchange rate is contributing to an increase in the number of international visitors to the states.

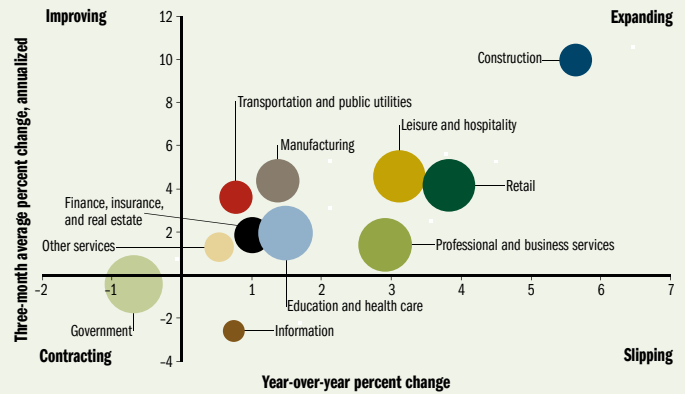
Residential real estate continues to improve for most of the region. According to the Atlanta Fed's February 2014 business contact poll, the majority of builders and brokers said sales were up slightly to significantly compared with a year ago, and home inventory levels had fallen or were unchanged from year-earlier levels. Home prices also continued their ongoing recovery.

Employment holds firm

For the most part, hiring didn't have a notable uptick during the early months of 2014. Businesses continued to experience difficulties filling certain positions with people who had the needed skills and experience, and employers tended toward using overtime and automation before they considered hiring. The modest level of hiring that did occur appeared to be focused on filling revenue-generating positions and mostly in sectors such as construction (see chart 1).

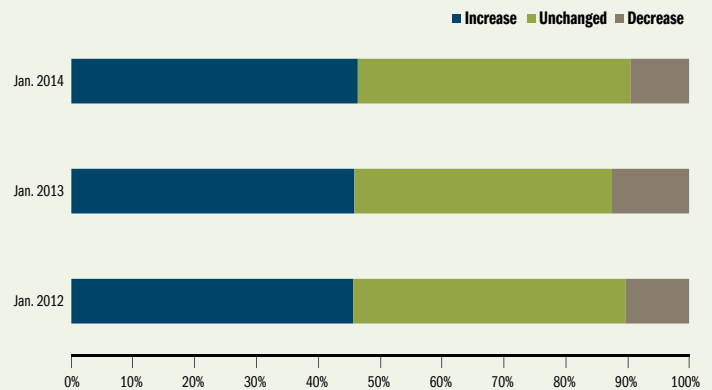
However, to get a better sense of what the hiring intentions were for this year, the Atlanta Fed conducted a survey in early January. Of the 554 survey responses received, 46 percent said they intend to increase employment over the next 12 months and

Chart 1
Southeastern Employment Momentum by Sector



Note: Data are through December 2013, monthly, and seasonally adjusted.
Source: U.S. Bureau of Labor Statistics, Atlanta Fed calculations

Chart 2
Employment Plans: An Historical Perspective

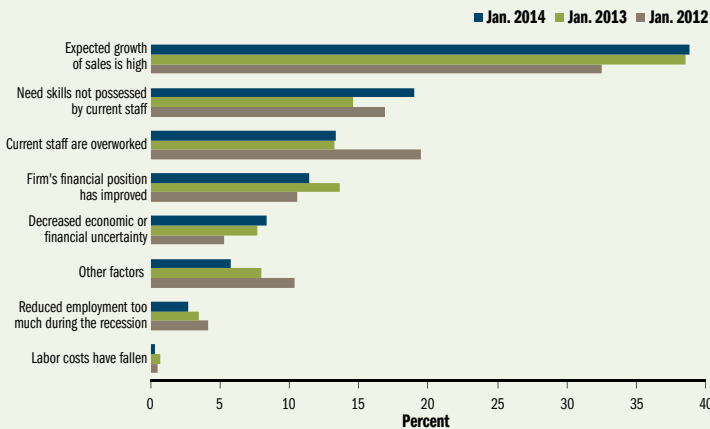


Note: Respondents were asked the question "Do you expect your firm to increase employment, leave employment unchanged, or decrease employment over the next 12 months?" Samples sizes are 421 respondents (January 2012), 670 (January 2013), and 554 (January 2014).
Source: Atlanta Fed business contact poll

44 percent intend to keep employment levels unchanged (see chart 2). Although these results may be seen as generally positive, it's advisable to view them with caution because the previous two years of conducting the same survey showed similar signals, and job growth in the Southeast nevertheless remained slow in both years.

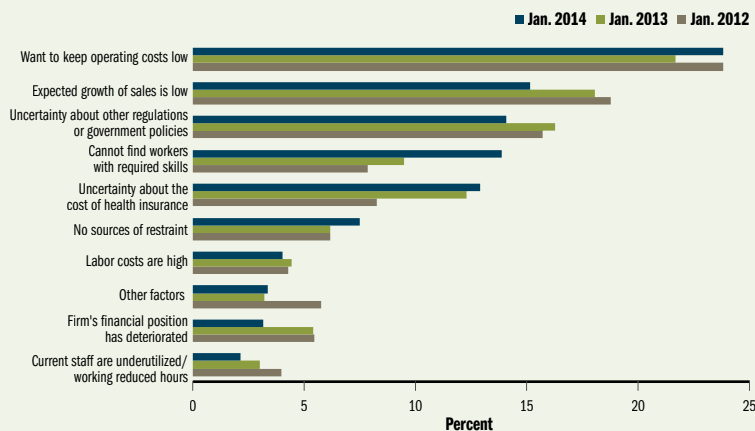
The Atlanta Fed's survey singled out the 46 percent of firms that indicated they planned to increase employment, asking contacts to select the most important factors driving their decision

Chart 3
Factors behind Employers' Plans to Hire



Note: Respondents were asked the question "What are the most important factors behind your plans to increase employment?" Only respondents who plan to increase employment were asked to respond to this question. Participants ranked the three factors in order from 1 (most important) to 3 (third most important).
 Source: Atlanta Fed business contact poll

Chart 4
Factors behind Employers' Plans to Restrain Hiring

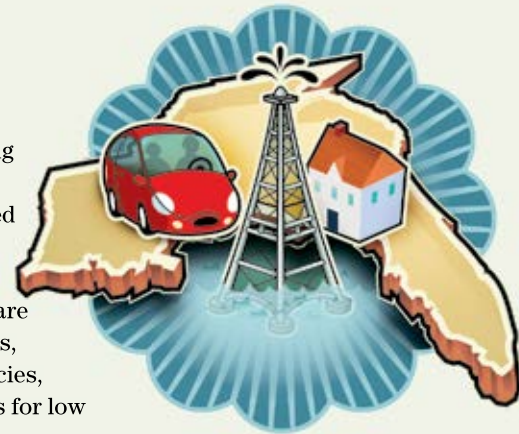


Note: Respondents were asked the question "What are the three most important factors, if any, restraining your hiring plans?" Participants ranked the three factors in order from 1 (most important) to 3 (third most important).
 Source: Atlanta Fed business contact poll

(see chart 3). A majority cited high expectations for sales growth as the most important reason. The second most often cited reason was the firm's need for skills not possessed by existing staff. The third reason was that the firm's current staff were overworked. However, another frequently cited issue was improvement in the firm's financial position.

Conversely, the survey asked all participants to rank (in the same manner as the previous question) the three most important factors restraining hiring activity (see chart 4). Interestingly, in all three categories (first, second, and third most important), a majority selected

the same factor: keeping operating costs low. Other frequently selected reasons were uncertainties related to health care costs, regulations, government policies, and expectations for low sales growth.



Recent data support Atlanta Fed findings of slow but steady gains in regional payroll employment. The latest available data from the U.S. Bureau of Labor Statistics show that district payrolls rose a relatively modest 18,000 in December. The unemployment rate for the district fell 0.3 percentage point in December, to 6.7 percent, mirroring the national trend.

Prices remain largely stable

Similar to 2013, we continued to hear reports of modest and relatively stable input cost pressures. Contacts in the construction industry were a notable exception: the industry has faced significant increases in costs of some materials and labor as this sector's activity improved. In general, our contacts continued to report having little to no pricing power.

The Atlanta Fed's February business inflation expectations (BIE) survey indicated costs were up 1.8 percent from a year ago (see chart 5 on page 16).

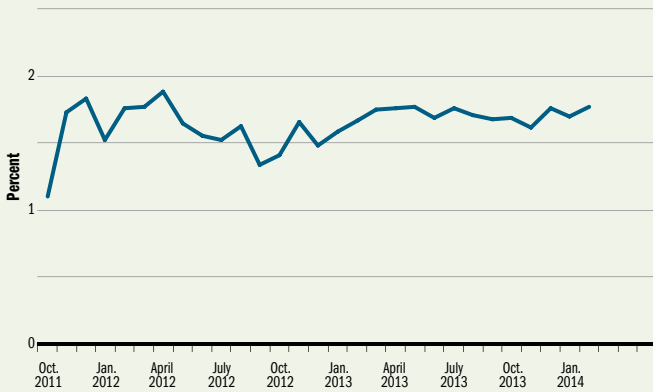
Wage pressures remain largely subdued, with the exception of the energy and construction sectors and a few hard-to-fill jobs.

Region's outlook appears to be on the upswing

Looking forward, almost all of the Atlanta Fed's 44 directors believe that sales growth in their businesses will either be sustained at current levels or will accelerate over the next three to six months—a notable improvement from what they expected in October 2013 (see chart 6 on page 16).

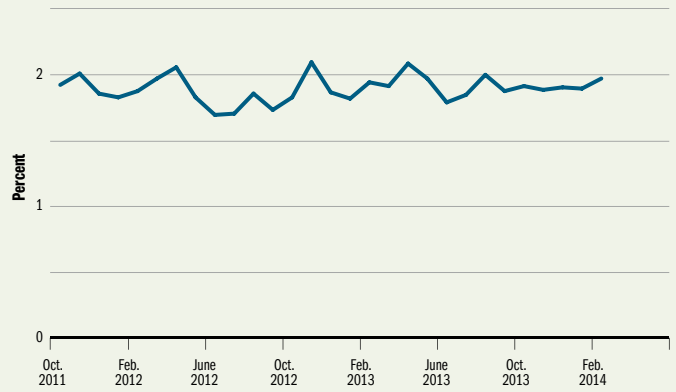
The outlook among regional manufacturers and retailers (including those in the hospitality sector) is also especially optimistic going into the new year. According to the Southeast PMI, manufacturers' optimism rose in January to the highest level since January of last year. The majority of surveyed managers reported expectations of higher production over the next three to six months. Recent inclement weather conditions aside,

Chart 5
Current Unit Costs



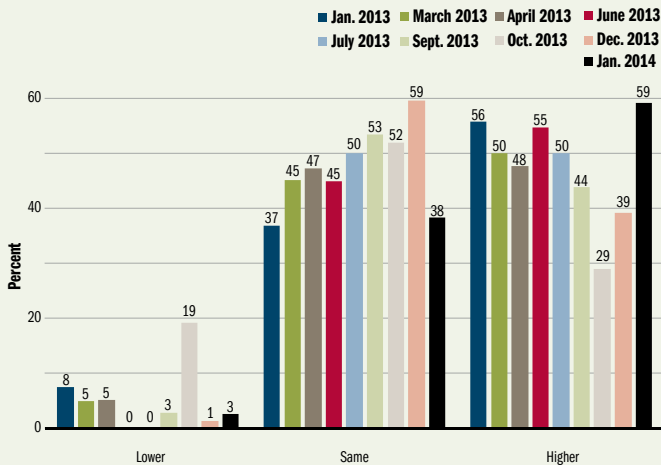
Note: Data compare unit costs to the same time the prior year and are through February 2014.
Source: Atlanta Fed's Business Inflation Expectations (BIE) survey

Chart 7
Year-Ahead Unit Cost Expectations



Note: Survey respondents supplied their cost expectations for the next 12 months. Data are through February 2014.
Source: Atlanta Fed Business Inflation Expectations (BIE) survey

Chart 6
Firms' Outlook for Growth for the Next Three to Six Months



Note: Respondents were asked the question "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 add to 100 due to rounding.
Source: Atlanta Fed directors poll

retailers also have a generally positive outlook for this year. Hoteliers expect slight growth in occupancy rates for the first quarter of 2014 compared with the same period last year, and they expect room rate and revenues per available room to grow more robustly.

BIE survey results show that prices should pick up slightly, to 2 percent over the next 12 months (see chart 7). Inflation expectations have changed little during the past six months.

Overall, the growing sense of optimism among the Atlanta Fed's regional contacts supports what President Dennis Lockhart said in a speech at the start of the year: "Compared to previous Januaries, we are entering this year on a more solid economic footing," and the economy "seems poised to transition to better conditions" in 2014. ■

On the Ground: An Interview with the Atlanta Fed's Regional Executives

What are business contacts telling you about their outlook for 2014?

Tom Cunningham, regional executive at the Atlanta Fed: I keep hearing anecdotes from a variety of sources about pretty decent economic growth, but this rather positive news is usually accompanied by

some expression of skepticism or caution. "Things are looking pretty good for us right now but..." is how the conversations typically start. The in-migration of jobs and people to Georgia is clearly picking up, and existing firms are noticing the increasing economic activity. Yet there is still a reluctance to break ground on

major capital projects when investment in existing facilities is sufficient to meet the marginal increase in demand.

I get a strong sense that there is a large pent-up demand for major capital expenditures, particularly in areas where there has been a material change in economic conditions—say, firms concen-

trated in natural gas–related endeavors—but a real reluctance to be the first firm to make the major investment move. Big projects are inherently scary to start, even if you know the end result of the project is necessarily where the industry is heading.

A big problem is that we've been here before, at the beginning of the last few years, and there have been notable midyear swoons. Nonetheless, 2013 ended up with a pretty decent rate of economic growth despite some sputtering in the summer, and there seems to be an increasing willingness to take the plunge for strategic advantage. Some reports of a resurgence of demand for manufacturing space are quite encouraging, and there is a growing sense that this time around, the acceleration has some traction.

Lesley McClure, regional executive at the Birmingham Branch of the Atlanta Fed: My contacts in Alabama have surprisingly consistent expectations for 2014. What's interesting is that their expectations seem to differ a fair amount from the expectations of other parts of the Atlanta Fed's district. The business leaders in Alabama tell me they expect continued growth in 2014, but the level of growth will be modest. Several expressed surprise regarding the improvement in national gross domestic product in the fourth quarter of 2013—from where they stood, they didn't see anything approaching that level of growth.

Often, contacts will elaborate that the growth they expect will be a result of actions they've taken to improve their businesses—entry into new markets or products, as an example—and they don't think there will be much of an impact as a result of a strengthening economy. Many remain concerned about the lack of significant job growth and worry that without meaningful improvement in jobs, the consumers they serve won't be able to increase their consumption. The positive elements for Alabama continue to be manufacturing and a gradually improving housing market.

Chris Oakley, regional executive at the Jacksonville Branch: Central and North Florida business contacts are reasonably optimistic about activity in 2014. Notably, many believe that headwinds have abated and opportunities appear to be increasing. There tends to be a willingness to take on more risk than we have heard in quite some time, though this feedback is more frequently heard from our larger contacts.

Residential real estate markets in this territory continue to improve, with some areas experiencing low inventory levels not seen since before the recession. Relatedly, lenders report increases in purchase mortgages, but these increases are not enough to offset the declines they are seeing in home refinancing. Automobile loans have been a source of increased activity for most lenders.

Tourism remains strong, and expectations for continued strong visitor counts are up. While most retail contacts reported solid holiday sales, a good deal of caution remains.

Consumers are very cost-conscious, and a new era of price transparency appears to be contributing to a ceiling on increases. Perhaps a stagnant employment market is contributing to this feeling. Most employers are not indicating significant job growth, although those individuals with special skills such as engineering and accounting are in demand in most markets. In a nutshell, continued slow improvement seems to describe most perceptions.

Karen Gilmore, regional executive at the Miami Branch: The South Florida business community is generally optimistic as we settle into 2014. One of my colleagues and I recently participated in the annual economic summit hosted by the Greater Miami Chamber of Commerce, which was widely attended by business leaders in South Florida, to discuss the business environment. Our takeaway from the summit and from one-on-one discussions is that the business community is optimistic about the general business environment

and about the prospects for their individual businesses for 2014.

The most significant issue being expressed by many business leaders in South Florida is the difficulty in hiring skilled trade workers and professional-level employees. The mix of available workers in the market and the jobs available are not in sync.

Contacts in the community banking area are reporting increased loan activity and a marked reduction in problem loan issues, so they are generally optimistic about business opportunities going forward. Most community bankers balance their positive outlook with concern about new regulatory requirements under the Dodd-Frank Act. They overwhelmingly express the concern that compliance requirements will weigh negatively on community banks and affect their business models.

Lee Jones, regional executive at the Nashville Branch: My business contacts in middle and east Tennessee are generally optimistic about their companies' prospects. Last year was a good year for most contacts, and the fact that the economy continued to grow even in the face of fiscal and other uncertainties has boosted business confidence and the outlook for 2014. To many, the recovery now seems more sustainable and more certain.

Middle Tennessee has done particularly well in the past few years. The Nashville metro area's economy has been growing rapidly, to a large degree because of the significant presence of the auto industry as well as the vibrant tourism and health care sectors. Economic expansion has generated strong job growth in the area, which in turn has supported a robust recovery in the local housing market.

Perhaps not surprisingly, many of the manufacturers and construction-related companies I've recently talked to across the state are especially upbeat about 2014. Retailers are also expecting a good year. They are hopeful that jobs growth

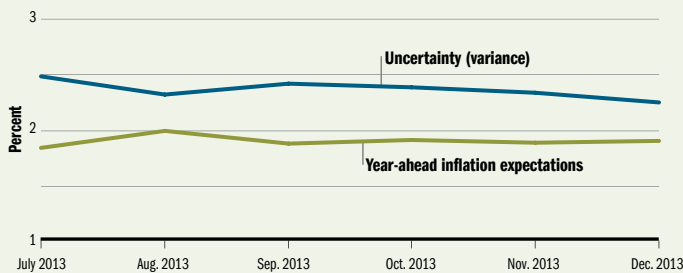
Continued on page 19

Business Inflation Expectations Survey

Year-ahead inflation expectations increased somewhat to 2.0 percent in August, before declining to 1.9 percent in September. Expectations remained at this level through January 2014 (see chart 1). Long-term inflation expectations (per year, over the next five to 10 years) increased slightly in January to 3.0 percent but have since declined, fluctuating in the range of 2.7 percent to 2.8 percent over the last several months (see chart 2). Firms' sales levels and profit margins were virtually unchanged over the last two quarters of 2013 (see chart 3), and year-over-year unit costs remained stable in the range of 1.6 percent to 1.8 percent (see chart 4).

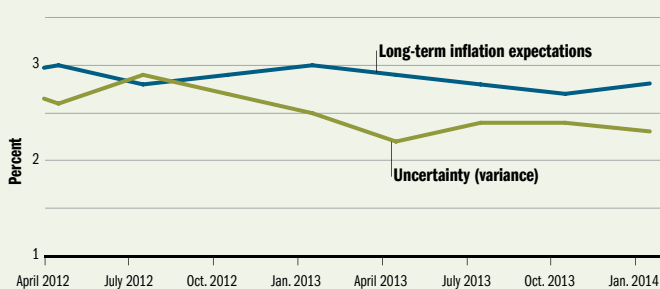
From the June to September readings, the difference between firms' current unit sales levels and what they consider normal sales levels (the "sales gap") increased for businesses of all sizes, with small firms (fewer than 100 employees) reporting the largest sales gap (down 7.4 percent). In December, sales gaps of small and large firms (500 or more employees) continued to grow (down 8.6 percent and 3.8 percent, respectively), while midsize firms (from 100 to 499 employees) noted a significant narrowing of their sales gap (from 6.6 percent down to 2.2 percent down; see chart 5). ■

Chart 1
Year-Ahead Inflation Expectations and Uncertainty



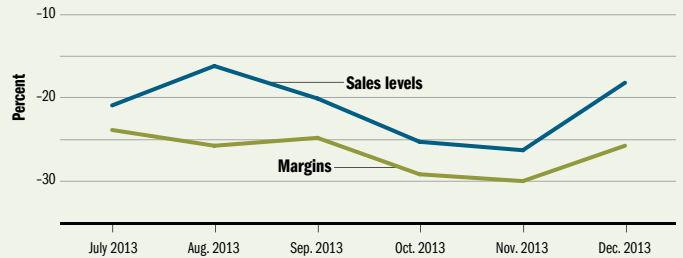
Source: Atlanta Fed Business Inflation Expectations (BIE) survey

Chart 2
Long-Term Inflation Expectations and Uncertainty



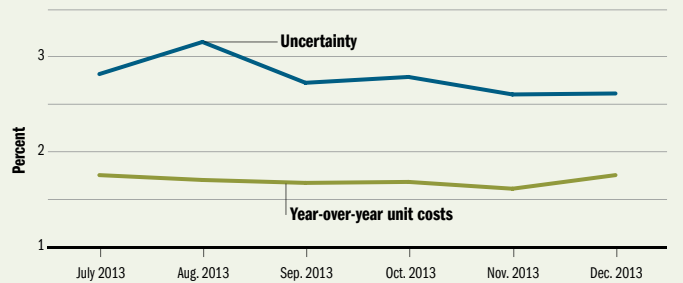
Source: Atlanta Fed Business Inflation Expectations (BIE) Survey

Chart 3
Sales Levels and Margins



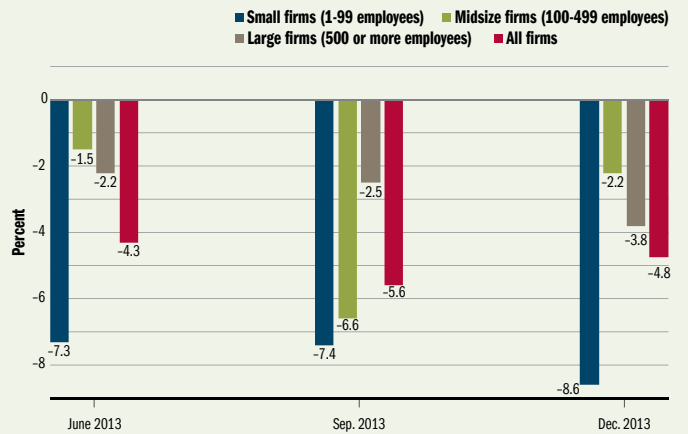
Note: A reading in the diffusion index greater than zero indicates better-than-normal activity.
Source: Atlanta Fed Business Inflation Expectations (BIE) survey

Chart 4
Year-Over-Year Unit Costs



Source: Atlanta Fed Business Inflation Expectations (BIE) Survey

Chart 5
Firms' Unit Sales Levels



Note: Respondents described their unit sales levels at that time versus normal unit sales levels.
Source: Atlanta Fed Business Inflation Expectations survey

Data Corner: A Look at Regional Manufacturing

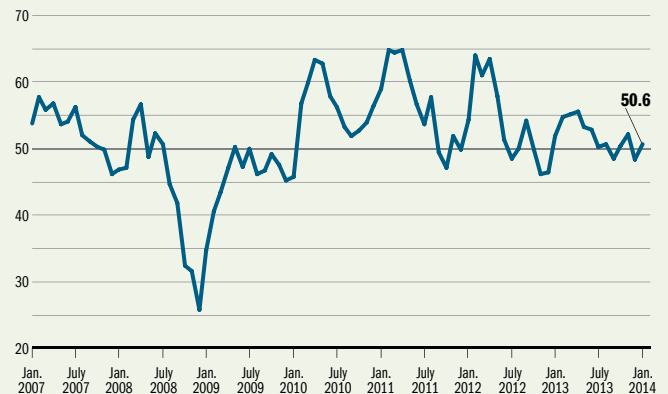
Manufacturing growth in the Southeast was moderate but steady in 2013. The average overall purchasing managers index (PMI) reading for the year was 52.0 points, down slightly from 2012's average of 53.9 points. The PMI survey indicated expansion in 10 of 12 months during 2013, and January's reading of 50.6 suggests that the steady pace of growth will continue into the first quarter of 2014 (see the chart).

The Atlanta Fed uses the Southeast PMI, produced by the Econometric Center at Kennesaw State University, to track regional manufacturing activity. A reading on the index above 50 represents an expansion in the manufacturing sector, and a reading below 50 indicates a contraction. The survey provides an analysis of manufacturing conditions for the region in Alabama, Georgia, Florida, Louisiana, Mississippi, and Tennessee. Representatives from various manufacturing companies are surveyed regarding trends and activities in new orders, production, employment, supplier delivery time, and finished goods.

In 2013, the national PMI—produced by the Institute of Supply Management (ISM)—was a bit stronger than the Southeast PMI. (The Southeast PMI is not a subset of the national ISM index.) The national ISM index averaged 53.9 points in 2013, but it lost some momentum from December 2013 to January 2014, when it dropped 5.2 percentage points month over month. Many analysts attributed the decline to unseasonably severe winter weather rather than to a significant slowdown in manufacturing activity.

An encouraging sign in recent Southeast PMI surveys occurred when purchasing managers were asked about their produc-

Southeast Purchasing Managers Index



Note: A reading above 50 indicates an expansion in the region's manufacturing sector. A reading below 50 indicates a contraction. Data are through January 2014.

Source: Kennesaw State University Econometric Center

tion expectations over the next three to six months. Although this question is not a component of the overall PMI, it does provide a glimpse into the industry concerning activity levels in the months ahead. Optimism among purchasing managers had been on the rise in late 2013. When asked in December for their production expectations for the next three to six months, 53 percent expected higher production. In January, the optimism trend increased again, with 62 percent expecting higher production going forward. ■

Continued from page 17

and rising home values and wealth will encourage consumers to boost spending.

Still, despite the notable improvement in outlook, many companies remain fairly risk-averse, especially when it comes to hiring and investing. Businesses, for example, are choosing to modernize and expand efficiency at existing facilities such as plants and malls versus building new ones.

Overall, although business optimism has clearly risen, not many of my contacts believe that growth is poised for a takeoff in 2014. As one of my branch directors noted in our January meeting, most of his business contacts had a good 2013, and they expect to have a good or slightly better 2014.

Adrienne Slack, regional executive at the New Orleans Branch: Our regional contacts are optimistic about consistent and steady growth expectations in the near and medium term, which is an improvement over late last year. All contacts anticipate 2014 growth to be as strong as or stronger than 2013, with some industries such as energy and petrochemical construction continuing to see robust demand increases.

Outside of energy, contacts across the Gulf Coast are experiencing an increase in tourism-related business including hotel occupancy, casino traffic, and retail. Further, contacts in our Alabama and Florida beach communities are reporting strong residential and some

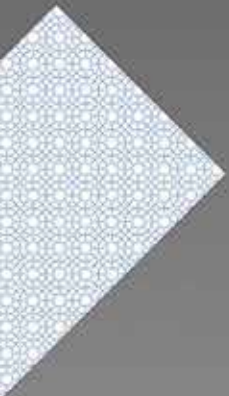
commercial real estate activity, including sales of existing properties and new construction.

Additionally, many businesses are investing capital in projects. Office and hotel construction projects that were on the white board through the financial downturn are now coming to fruition. As evidence of the construction confidence upswing, we noted a change in investment strategy by construction contractors. As medium- to longer-term projects become confirmed, construction companies are reporting a shift to purchasing rather than leasing industrial construction equipment. ■

HOW WE PAY

**RESULTS FROM THE FEDERAL
RESERVE'S LATEST PAYMENTS STUDY**





Changes in technology have affected not only how people live and work, but also how individuals and businesses pay for goods and services. The Federal Reserve's most recent triennial study of the payments system highlights a number of shifts in this dynamic arena.

Many factors influence trends in noncash payments, including technological and financial innovations, changes in consumer and business financial behavior, the business cycle, regulatory developments, and population growth. The Federal Reserve's previous payments studies—the first was conducted in 2000—revealed a number of notable trends, such as the rise in the use of debit and prepaid cards and the decline in the use of checks. The Fed recently completed its fifth triennial payments study, which showed continued changes in how businesses and consumers make payments (see chart 1 on page 22).

Taking a snapshot from three angles

The Federal Reserve Payments Study consisted of three research efforts designed to capture the current volume and composition of noncash payments in the United States:

- **The Depository and Financial Institutions Payments Survey** collected the number and value of noncash payments, cash withdrawals, and deposits that posted to customer accounts, and unauthorized transactions (most likely related to third-party fraud) that took place during March 2013. A total of 1,182 depository institutions provided data for the survey.
- **The Networks, Processors, and Issuers Payments Surveys** estimated the number and value of electronic

payments in the United States for 2012. As of December 2013, a total of 196 organizations provided data, including 92 of the largest payment organizations that process automated clearinghouse (ACH), credit card, debit card, and prepaid card transactions. (Automated clearinghouse refers to a network for financial transactions that is used for a wide range of payments, including direct deposits of payments such as Social Security and direct debits of recurring payments.)

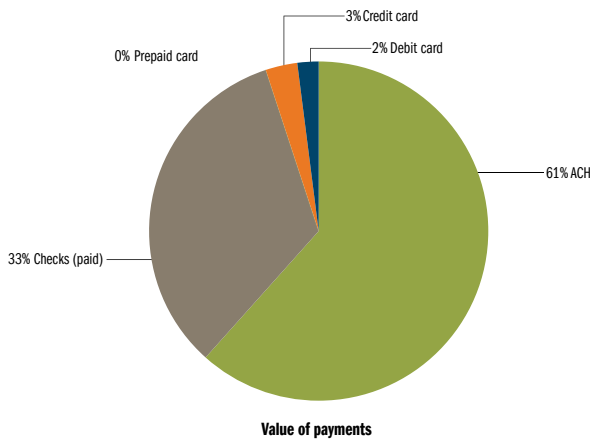
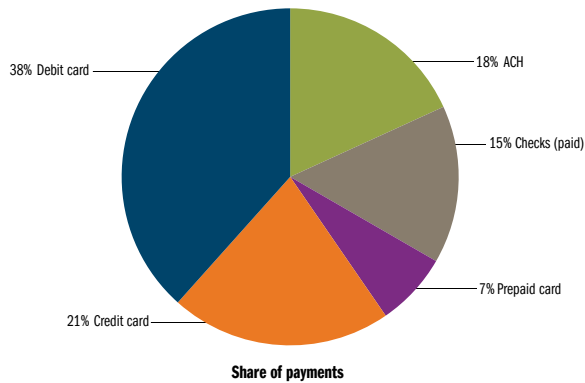
- **The Check Sample Survey** estimated the distribution of checks by counterparty and purpose for 2012. The study's data were based on a random sample of checks collected by 11 of the largest U.S. banks.

Cards hold a strengthening hand in payments

The study found that cards significantly increased their share of total noncash payments, from 43 percent in 2003 to 67 percent in 2012. The use of ACH grew more modestly, increasing from a share of 11 percent in 2003 to 18 percent in 2012. Checks represented nearly half (46 percent) of all noncash payments in 2003, but only 15 percent in 2012 (see chart 2 on page 22).

The payments study broke down card payments into two broad categories: general-purpose and private-label cards. Credit card payments (including both general purpose and private

Chart 1
Distribution of Noncash Payments in 2012



Source: 2013 Federal Reserve payments study

label)—which declined slightly from 2006 to 2009—returned to growth from 2009 to 2012. The number of credit card transactions grew at an annual rate of 7.6 percent, rising from 21 billion in 2009 to 26.2 billion in 2012.

The number of debit card payments exceeded the number of credit card payments for the first time around 2004. By 2012, the number of debit card payments had reached 47 billion—much higher than the 26.2 billion credit card payments in the same year.

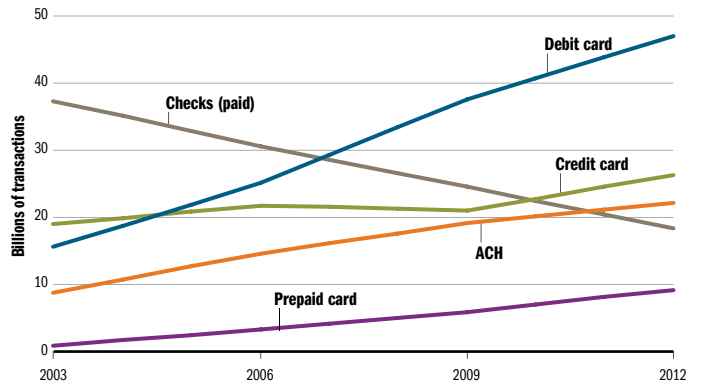
Although prepaid cards are a type of debit card, they also represent a dis-

ECONSOUTH NOW PODCAST

Geoffrey Gerdes, senior economist at the Board of Governors of the Federal Reserve, discusses the Fed's payments study. On frbatlanta.org, select "Podcast."



Chart 2
Trends in Noncash Payments by Number and Type of Transaction



Source: 2013 Federal Reserve payments study

tinct category of noncash payments that the payments study considered separately. Compared with credit, debit, ACH, and check, prepaid card payments (including both general purpose and private label) increased at the fastest rate from 2009 to 2012 (15.8 percent annually), reaching a total of 9.2 billion transactions in 2012. The number of prepaid card payments increased 3.3 billion from 2009 to 2012, a higher growth rate than previous studies reported.

In 2012, card and ACH payments made up 85 percent of all noncash payments by number and 67 percent of total value, with check payments making up the remainder. The number of general-purpose credit card transactions rose at an annual rate of 6.8 percent per year from 2009 to 2012, compared with 1 percent annually from 2006 to 2009. The value of these payments went up 9.3 percent per year from 2009 to 2012. By number, business general-purpose credit card payments grew from 2.3 billion in 2009 to 3.4 billion in 2012, an increase of more than one billion payments.

By number, general-purpose debit card payments grew by about 9.4 billion, or 7.7 percent per year, from 2009 to 2012—the largest total growth by number among all types of payment. The estimated number of PIN debit card transactions accounted for 36 percent of all general-purpose debit card transactions, similar to estimates in previous studies. The number of business general-purpose debit card transactions grew more quickly than consumer transactions from 2009 to 2012 (8.6 percent compared with 7.7 percent per year, respectively).

ACH expands its footprint

The number of ACH transactions grew at an annual rate of 5.1 percent from 2009 to 2012 (slower than the long-term growth of

Number and Growth of Noncash Payments

	2003	2006	2009	2012	Compound annual growth rate	
					2003-12	2009-12
Total (billions)	81.4	95.2	108.1	122.8	4.7%	4.4%
General-purpose card	30.8	44.3	58.4	73.8	10.2%	8.1%
Credit card	15.2	19.0	19.5	23.8	5.1%	6.8%
Debit card	15.6	25.0	37.5	47.0	13.0%	7.7%
Prepaid card	0.0	0.3	1.3	3.1	—	33.5%
Private-label card	4.6	5.8	6.1	8.5	7.1%	11.6%
Credit card	3.8	2.7	1.5	2.4	-4.8%	17.1%
Prepaid card	0.8	3.0	4.6	6.1	24.9%	9.7%
ACH	8.8	14.6	19.1	22.1	10.9%	5.1%
Checks (paid)	37.3	30.5	24.5	18.3	-7.6%	-9.2%

Source: 2013 Federal Reserve payments study

10.9 percent per year from 2003 to 2012), resulting in 22.1 billion payments in 2012 (see the table).

These estimates from the payments study reflect an ongoing deceleration in growth in the number of ACH payments but mask some underlying trends. For example, the number of business payments to consumers and consumer online payments using ACH increased much faster than the overall number of ACH payments.

During most of the 2000s, conversion of checks to ACH drove the growth in ACH payments. As check writing continued to decline, the number of checks that could be converted declined as well, offsetting some of the gains associated with other ACH activity. A substantial portion of checks were, like cards, also being written at the point of sale. At the same time, however, checks were also being used for larger-value consumer bill payment and payroll transactions as well as high-value business-to-business payments.

The check is down but not out

In 2003, Congress passed the Check Clearing for the 21st Century Act (commonly called Check 21), which facilitated the development of widespread electronic check processing and clearing. Check 21 has played a role in the rapid evolution of the U.S. payments system. Over the past 10 years, paper check payments,

which before Check 21 typically required physical processing and transporting, have been replaced by more efficient electronic processes and alternative payment methods.

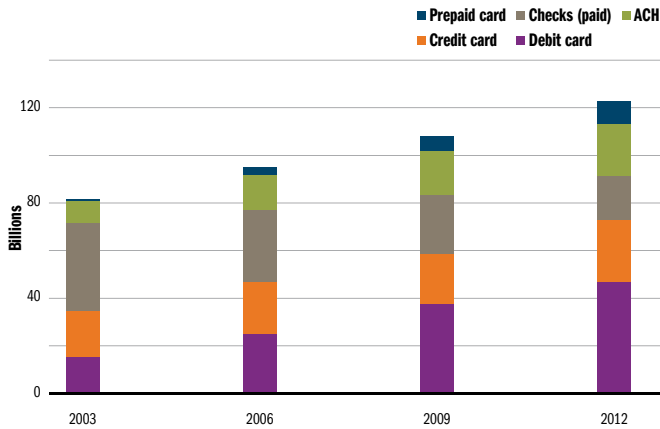
In 2000, checks dominated noncash payments options. By 2003, the decline of checks was apparent. By 2006, two-thirds of all noncash payments were electronic. In 2009, checks fell to second place in terms of noncash payment value, behind electronic

Many factors influence trends in noncash payments, including technological and financial innovations, changes in consumer and business financial behavior, the business cycle, regulatory developments, and population growth.

payments. An estimated 18.3 billion checks were paid in 2012, with a value of \$26 trillion (see chart 3 on page 24).

The number of checks paid from 2009 to 2012 declined annually by 9.2 percent, while the value of checks paid declined 6.3 percent per year during the same period. As a result, the

Chart 3
Noncash Payment Transactions by Payment Type



Source: 2013 Federal Reserve payments study

average value per check paid increased from \$1,291 in 2009 to \$1,420 in 2012. Billers and merchants converted some consumer checks to ACH transactions, so the estimated number of checks paid differed from the estimated number of checks written. The share of checks written that were converted to ACH increased from 12 percent by number in 2009 to 13 percent in 2012. Further, the number of checks being deposited as images (including checks deposited by consumers using a mobile device) shows a notable increase: 17 percent in 2012, up from 13 percent in 2009.

However, checks' diminishing share of the payments pie shouldn't mask their significance in the payments system, as they are declining from a dominant position. The value of checks

Checks' diminishing share of the payments pie shouldn't mask their significance in the payments system, as they are declining from a dominant position.

still represents one of the largest values in payment types, almost 44 percent. In a 2009 essay published by the Cleveland Fed titled "The Check Is Dead! Long Live the Check! A Check 21 Update," authors Paul W. Bauer and Geoffrey R. Gerdes anticipate that the decline of checks will flatten out in the future. "Looking ahead, while payment innovations will continue to whittle away at check's overall share in total payments, check volume will

Highlights from the 2013 Study

- Total number of noncash payments: 122.8 billion, up 4.4 percent from 2009 to 2012
- Total growth in the value of noncash payments: \$72.2 trillion in 2009 to just under \$79 trillion in 2012
- Total number of checks: 18.3 billion, fewer than half the number a decade earlier (37.3 billion)
- Share of checks being deposited as images, with 17 percent being deposited as an image at the bank of first deposit versus 13 percent in the 2010 payments study
- Credit card payments' annual growth rate: 7.6 percent, a payment type that registered a decline in the 2010 study
- Debit card payments growth: 7.7 percent

Note: All data are for 2012.
Source: 2013 Federal Reserve payments study

likely stabilize, with billions of checks being written well into the future," they wrote.

Fostering future efficiencies

The goal of the payments study is to enhance understanding of the complex and always-changing payments system throughout the financial services industry and with the public. Most organizations base their infrastructure investments on trends in the marketplace as well as what they are directly observing. For those organizations, the Fed's payments study provides important information that can help guide future decisions about investments in payments system hardware, software, and personnel. Supplying information that helps improve this sort of decision making furthers one of the Fed's main policy goals: fostering an effective, efficient payments system. ■

This article was written by Tom Heintjes, managing editor of EconSouth.

HOW MANY JOBS DOES IT TAKE TO LOWER THE UNEMPLOYMENT RATE?

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Human Capital Compendium: What is the Federal Reserve saying about human capital and employment? This repository provides access to research published on topics related to employment, unemployment, and workforce development.

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**CHANGING CHANNELS:
CHANGING CHANNELS:
THE EVOLVING FACE OF
MEDIA IN THE SOUTHEAST**



New digital devices and enhanced technology have given consumers a buffet of content to consume. Although consumers are the clear winners in this new media landscape, regional players in the communications field are scrambling to remain in the game.

There's never been a time when consumers have had so many choices for media content. And as the number of choices has gone up, so have consumers' appetites. Technology is at the core of this increased gorging on information. Instead of waiting for a once-a-day update from a newspaper or evening news broadcast, consumers can instantly access the latest Web reports from journalists or bloggers around the world. Instead of making a trip to the library to conduct research, students can instantly search online volumes of data much larger than what their local library once housed in print. Instead of making a trip to a video or music store, consumers can make instant purchases and immediately enjoy watching a movie or listening to a new music release.

But as consumers feast on all this content, the economic repercussions are sometimes swift and surprising. Consider Blockbuster, a national video chain that gobbled up regional video and music retailers like Atlanta-based Turtle's Records & Tapes to build an empire that peaked in 2004 with 9,000 stores and 60,000 employees. However, Blockbuster was slow to react to competitors and the rise of videostreaming, and by 2010 it filed for bankruptcy. Now all that remains in the United States are 50 franchise-owned stores.

While consumers are the obvious winners in this new media environment, its fluid landscape has resulted in tremendous uncertainty for those whose livelihoods are linked to communication, from journalists to retailers to advertisers to educators and students.

What's catching consumers' eyes and ears?

The average U.S. consumer spends 60 hours a week consuming content across an array of devices, according to the *U.S. Digital Consumer Report* published by Nielsen in February 2014. The study also notes that Americans now own four digital devices (such as smartphones and tablets) on average, and a majority of U.S. households also own high-definition televisions.

Television feeds a good bit of that consumption. Nielsen's television ratings include four Southeast markets, and each



shows the average consumer spending nearly 20 percent of the day watching programming (see table 1).

Radio, which has maintained a large audience, took a major revenue hit during the recent recession and is still recovering. Overall U.S. industry revenue for 2012 was \$16.5 billion, which is only 90 percent of what it was in 2008 (\$18.3 billion), according to figures from the Pew Research Center. What is disappointing for the radio industry is that 2012 should have shown a spike for political advertising in a presidential election year. However, the \$16.5 billion figure was only a 1.4 percent increase over 2011 (\$16.2 billion).

Still, consumers are listening to the radio more than two-and-a-half hours daily, notes the *Nielsen State of the Media: Audio Today 2014* report. Overall, Nielsen shows 242 million (92 percent) of Americans 12 and older listening each week to at least one of more than 16,000 radio stations nationwide, featuring 50 different formats. In the Southeast, recent Nielsen numbers show a slightly negative but reasonably steady trend (see table 2).

The big change in radio is the growth of the Sirius/XM satellite subscriber base, which jumped 27 percent between 2009 (18.8 million) and 2012 (23.9 million), according to Nielsen.

Extra, extra, don't read all about it

The one piece of legacy media that doesn't seem to be keeping pace as well as television and radio is, of course, newspapers. Even with Americans increasingly pulling digital content, newspapers have not fared well. With the exception of Birmingham's, online readership

Table 1
Daily Television Consumption in Four Southeast Markets

City	Live TV hours/minutes	DVR hours/minutes	Streaming hours/minutes	Total hours/minutes
Atlanta	4:39	0:38	0:06	5:23
Miami	3:59	0:24	0:04	4:27
Orlando	4:43	0:51	0:09	5:43
Tampa	5:02	0:34	0:07	5:41

Source: Nielsen U.S. *Digital Consumer Report*

Table 2
Urban Radio Markets in the Southeast

Market	Percentage of estimated listeners age 12 and older		
	Fall 2011	Fall 2012	Fall 2013
Atlanta	94.6	93.7	91.7
Jacksonville	90.3	92.3	91.8
Miami	94.3	94.5	92.8
Birmingham	93.1	92.3	92.7
New Orleans	93.9	93.1	91.9
Nashville	93.6	92.1	92.3

Source: Nielsen *State of the Media: Audio Today 2014* report

Table 3
Decline of Southeastern Newspapers

Publication	Print Circulation Change 2007-13		Online Viewership Change 2007-13	
	Number	Percent	Number	Percent
<i>Atlanta Journal-Constitution</i>	-576,956	-27.5%	-38,779	-3.6%
<i>Birmingham News</i>	-51,756	-8.3%	186,364	93.7%
<i>Florida Times-Union</i> (Jacksonville)	-152,630	-21.6%	18,287	7.2%
<i>Miami Herald/El Nuevo Herald</i>	-446,919	-29.8%	108,433	28.1%
<i>Tennessean</i> (Nashville)	-186,330	-20.5%	106,687	49.2%

Source: Association of Business Information and Media Companies

of metro newspapers has fallen short of offsetting the decreasing demand for their print product, according to the Association of Business Information and Media Companies (see table 3).

In reaction to falling readership, the *Times-Picayune* in New Orleans and three metro newspapers owned by Advance Publishing in Alabama reduced their publishing schedule from daily to only three times a week.

As for the magazine industry, overall it held its own despite a continued downturn by newsmagazines. According to the Alliance for Audited Media, the total average circulation for the 386 U.S. consumer magazines reporting comparable paid and verified circulation was down 1.7 percent, with paid subscriptions down 1.2 percent and single-copy sales off 11.1 percent. However, Samir Husni, director of the Magazine Innovation Center at the University of Mississippi, attributes the industry's stability to the performance of niche magazines.

The biggest change for the newsmagazine genre is the decline in sales of single-issue copies.

While single-issue sales for the entire magazine industry fell by 8.2 percent in 2012, sales for newsmagazines declined almost twice that much (16 percent), with sales of *Time* magazine dropping 27 percent, according to the Alliance of Audited Media.

No publication better reflects the hard times encountered by newsmagazines than *Newsweek*. After merging with the Daily Beast website in 2010, *Newsweek* ceased publishing a print issue for 14 months. Under new owners (IBT Media), *Newsweek* returned to print in March. However, the 70,000 copies printed for the first issue are a far cry from two decades ago, when *Newsweek's* circulation peaked at 3.3 million.

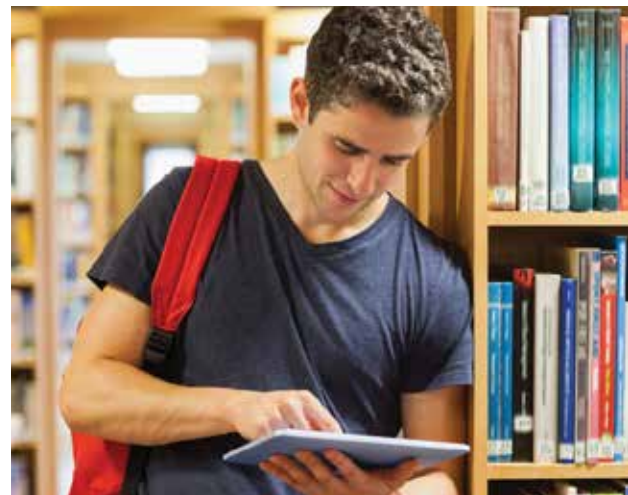
What do these trends mean?

Advertisers are dogged in trying to maximize the exposure of their products or services to consumers. Recent trends show television and the Internet as the big winners. According to Nielsen's most recent *Global AdView Pulse* report, which covers the first three quarters of 2013, television has 57.6 percent of the media industry's revenue while still showing growth of 4.2 percent year over year. Meanwhile, digital advertising may have only 4.3 percent of the industry's total spending, but it easily has the highest growth rate at 26.6 percent year over year (see chart 1 on page 30).

While newspapers still pull 18.9 percent of advertising dollars, their performance (down 2 percent) in the first three quarters of 2013 continues a long, steady decline. Data from Martin Langeveld at Nieman Journalism Lab show newspapers attracted 37 percent of the nation's advertising spending in 1949 and accounted for a larger share of ad revenue than television until the early 1990s. A significant loss for newspapers was the migration of classified ad revenue to services such as Monster.com, CareerBuilder.com, Craigslist.org, and other online entities. And the magazine industry has seen ad pages decline for six consecutive years, according to the Alliance for Audited Media.

What does this mean for the workforce?

One of the most visible shifts in the communications labor force has been at newspapers, where the Pew Research Center noted that cutbacks in 2012 put the industry down 30 percent since 2000 and below 40,000 full-time professionals for



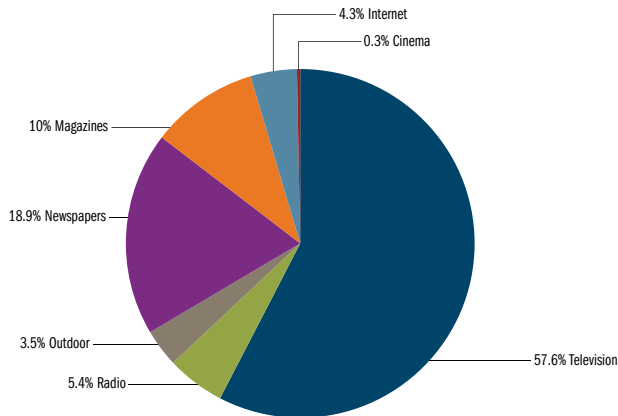
Millennials: Out with the Old, in with the New (Media)

This issue of *EconSouth* examines the economic challenges facing millennials—those ages 18 to 31—and explores changing media-consumption patterns among the general population. But how do millennials' lifestyle choices affect the way they consume media?

It's apparent that millennials—like a vast percentage of the general population—are never without their cellphones, which provide not only phone service but Internet access, music, e-mail, and a host of apps for everything from restaurant choices to local retailer discounts.

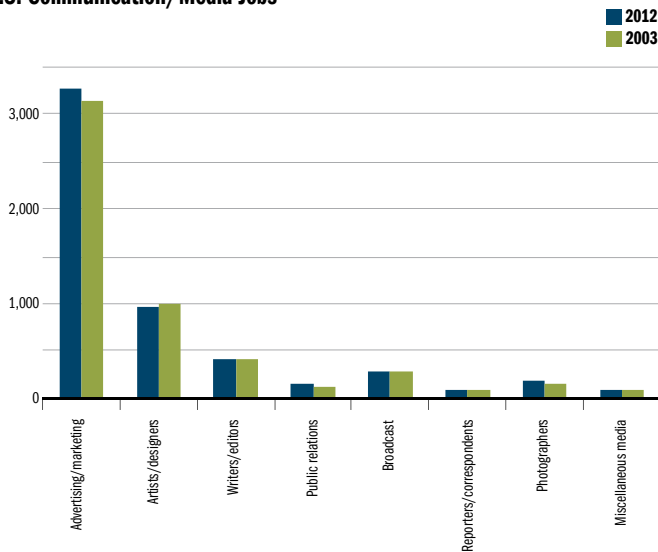
A 2012 Pew Research study found that millennials as an audience have far less interest in traditional news than do earlier generations. Whereas baby boomers spend 77 minutes a day watching, reading, or otherwise consuming news, the study notes, millennials spend only 46 minutes. And another Pew survey of more than 1,000 technology stakeholders and critics notes that by the year 2020, new technologies will give media consumers—especially tech-savvy ones such as millennials—the “ability to search effectively for information online and to discern the quality and veracity” of information they find. ■

Chart 1
Media Industry Revenue



Note: Data reflect the first three quarters of 2012.
Source: Nielsen Global AdView Pulse report

Chart 2
U.S. Communication/Media Jobs



Note: Data indicate thousands of jobs.
Sources: U.S. Bureau of Labor Statistics and author's calculations

the first time since 1978. Newspapers in the Southeast are consistent with national trends:

- *Times-Picayune* in New Orleans announced in June 2012 that it would lay off 201 employees (32 percent of all staff) that September.
- Nashville's *Tennessean* reduced its staff by 16 in August 2013, leaving the publication with fewer than 170 employees.

Media Revenue Growth Rate

Television	4.2%
Radio	-0.9%
Outdoor	5.0%
Newspapers	-2.0%
Magazines	-1.9%
Internet	26.6%
Cinema	-5.9%

Note: Data reflect revenue in the first three quarters of 2013 over the same period in 2012.
Source: Nielsen Global AdView Pulse report

- *Miami Herald/El Nuevo Herald* eliminated 13 jobs and decided not to fill 20 open positions in October 2013. Four years earlier, 24 positions were eliminated.
- *Atlanta Journal-Constitution* cut its photography staff in half in October 2013, to five employees. Between 2006 and 2009, the Atlanta paper eliminated more than half of a onetime 500-member staff.
- *Florida Times-Union* laid off 9.5 percent of its staff in 2011 after having terminated 6 percent of staff in 2010.
- *Birmingham News/Press-Register (Mobile)/Huntsville Times* eliminated 400 positions in the three newspapers in June 2012.

A major question is whether the losses of legacy media jobs have been offset somewhat by jobs created by new media.

"I think the job picture is very muddy," said Ann Hollifield, head of the telecommunications department and the Thomas C. Dowden Professor of Media Research at the University of Georgia. "It's true that if you look at jobs in the legacy media, we have seen a large decline in staffs of traditional news organizations. At the same time, of course, we've seen an explosion of media through other kinds of outlets, many of which have jobs attached to those.

"We do know that one of the real problems that has occurred, particularly in news, is that a lot of the senior, highest-paid, most experienced people have been laid off in favor of younger, cheaper labor. That's a problem."

According to figures from the U.S. Bureau of Labor Statistics, the number of workers nationwide who have jobs identified with communication activity has actually increased slightly in the last decade, from 5.3 million in 2003 to 5.5 million in 2012 (see chart 2).

Where are the job gains?

With job numbers sagging in legacy media, Hollifield points to two sources of growth: social media jobs within traditional companies and media start-ups.

"From an economic perspective, social media is in large part being driven by professional communicators who are working for companies that feed social media," Hollifield said. "There is a lot of chatter, but there is also an awful lot of structured communication going on through social media that's being driven by professionals. Companies aren't just leaving social media to take its own turn without their participation when it concerns

their company or their brand. That's a whole new type of job that's emerging in media that didn't use to exist."

Start-ups like BuzzFeed and Business Insider are the other part of the job creation equation.

"There are lots and lots of those around, but let's be realistic," Hollifield said, noting that a majority of start-ups fail within five years. "There are lots of media entrepreneurs and they are certainly producing jobs in the short term. But how many of them continue in the long term?"

A major question is whether the losses of legacy media jobs have been offset somewhat by jobs created by new media.

"As the dust settles from the wave of start-ups, it will remove a certain amount of competition from the marketplace. What does that mean for traditional media companies in terms of regaining some of their economic strength and being able to move forward in different ways? I don't think the industry will ever be as we knew it. I don't necessarily think that's a bad thing. But exactly where is it going to wind up? I wouldn't want to be held to my prediction five years from now," said Hollifield.

Future communicators?

Even though the job market may be uncertain and some schools, such as Emory University and the University of Colorado, are discontinuing journalism programs, there does not yet seem to be a shortage of new communicators wanting to enter the field. The recent hiring of communications graduates is trending slightly positively, according to the 2012 Annual Survey of Journalism and Mass Communication Graduates produced by the University of Georgia's James M. Cox Jr. Center for International Mass Com-

munication Training and Research. The report, in its 27th year, surveyed communications graduates from 82 communications schools across the country. In 2012, 56 percent of communications school graduates surveyed found full-time jobs and another 17.9 percent landed part-time work. This was the third straight year of incremental improvement over a low point in 2009, when only 46.2 percent found full-time employment and another 20.8 percent got part-time work. Still, the 2012 figure is far below the numbers in 2000, when 71.1 percent found full-time jobs while another 8.8 percent took part-time work.

Economic implications of new media

Regardless of their shape, the media play an important role for "all other economic processes," Hollifield contends. She said, "It is not a minor matter for our society when you talk about the breakdown of legacy media in terms of their ability not only to hold government accountable and keep government transparent, and therefore help reduce government corruption. Studies show that the media are directly related to the level of government corruption in countries around the world. And that the level of government corruption is directly related to the economic strength and development potential of countries. But on top of that, you also have the simple fact that an enormous part of the American media is actually business-to-business media, and they're feeding economic information to businesses that use it to make business decisions. We need a vibrant media." ■

This article was written by Ed English, a staff writer for EconSouth.

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47

Number, in billions, of debit card payments in the United States in 2012

Source: 2013 Federal Reserve payments study, as cited in *EconSouth's* article, "How We Pay"



45.5

Percentage of the population of Sumter County, Florida, that was 65 or older in 2011, which led all U.S. counties in this age group

Source: U.S. Census Bureau

2,505

Average area, in square feet, of a single-family home completed in 2012, compared with 1,660 in 1973

Source: U.S. Department of Agriculture

42,747

Number of occupied U.S. housing units heated by solar energy in 2012

Source: U.S. Census Bureau, American Community Survey



36

Percent of U.S. adults ages 18 to 31 living in their parents' home in 2012, the largest share in four decades

Source: Pew Research Center, as cited in *EconSouth's* article, "The Economic Plight of Millennials"

2.4

Number, in millions, of occupied U.S. housing units heated by wood in 2012, representing 2.1 percent of all homes

Source: U.S. Census Bureau, American Community Survey



32

Percent decline in coal consumption in the U.S. manufacturing sector from 2002 to 2010

Source: U.S. Energy Information Administration

60

Hours per week U.S. consumers spend consuming media via electronic devices

Source: *U.S. Digital Consumer Report*, as cited in *EconSouth's* article, "Changing Channels"



25.7

Time, in minutes, spent by U.S. workers age 16 and older getting to work in 2012, up from 25.5 minutes in 2011 and 25.3 minutes in 2010

Source: U.S. Census Bureau, American Community Survey

closing



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Technology has brought immeasurable transformation to nearly every aspect of daily life, and the payments system is no exception. Today, the Atlanta Fed's automated clearinghouse processors (above) move payments digitally, while payments technology was a more labor-intensive process in the 1940s, as shown by San Francisco Fed employees (right).

now and then