

Georgia Economic 2015 Outlook

The University of Georgia
TERRY COLLEGE OF BUSINESS
Selig Center for Economic Growth



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F O R E W O R D



The deep recession may be over, but Georgia's economic recovery remains unsteady. Georgia's recovery will be assisted by an improved housing market, new state economic development legislation, and the resumed immigration of talent. The main trouble spots continue to be financial markets, government restructuring, and federal fiscal austerity. The details of Georgia's 2015 prospects—including our assessment of vulnerabilities—are presented in this volume. The *Georgia Economic Outlook 2015* is a product of the Terry College's Selig Center for Economic Growth. This publication accompanies eight economic outlook conferences presented around Georgia in December 2014 through February 2015.

The Selig Center's director, Jeff Humphreys, prepared the national and state forecasts, and wrote many of the individual sector analyses. Research analyst Beata Kochut wrote the life sciences and government sections; and data analyst Stephen Kuzniak contributed the services, hospitality, and utilities sections. The University of Georgia's Department of Agricultural and Applied Economics and the Center for Agribusiness and Economic Development contributed the agriculture section. The thirty-second edition of this prize-winning publication was edited by Lorena Akioka, who has guided the *Outlook* since its first edition.

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Benjamin C. Ayers
Dean

Our national economic forecast indicates that the recovery will be sustained. The 2.8 percent rate of 2015 GDP growth will be higher than last year's 2 percent, but below the 3.1 percent average of the last 50 years. The U.S. is well positioned for faster growth courtesy of extensive restructuring of the private sector, including the cleanup of the financial sector, deleveraging by consumers, and a more favorable balance of supply and demand for residential and commercial properties. Also, most state and local governments have adjusted their spending and staffing to reflect their ability to generate revenue.

The U.S. economy also will be slightly less vulnerable to economic shocks and/or policy mistakes. The three main risks to economic growth are mistakes in U.S. fiscal or monetary policy, oil price shocks due to supply interruptions, and financial panics, potentially originating in the EU. The probability of recession is 25 percent, which is smaller than the 30 percent recession probability estimated at this time last year.

In 2015, private final domestic demand and gross private domestic investment rather than federal fiscal stimulus, net exports, or changes in private inventories will be the drivers of U.S. GDP growth. Indeed, for the fifth-straight year, federal fiscal policy will be restrictive, albeit slightly less so than in 2014. The Federal Reserve's very stimulative monetary policy stance will shift to slightly restrictive when it begins to raise short-term policy interest rates in mid 2015 or later. Meanwhile, the federal government has yet to effectively address its massive structural budget problems, which is what is needed to move the national economy from sub-par to above average.

One reason GDP growth will be higher in 2015 is that consumers will spend more vigorously. Real consumer spending will rise by 2.8 percent in 2015 compared to 2.3 percent in 2014. Spending on nondurable

goods and services will be a primary driver, as will investment spending on new home construction.

Compared to U.S. GDP growth, the GDP growth of our major currency trading partners will strengthen only slightly in 2015, which implies that the pace of export growth will grow more slowly than the pace of import growth. One problem is that the EU's banking and sovereign wealth problems are still far from being resolved. While the situation in the EU is unlikely to cause a major financial panic in 2015, its growth prospects do not look good.

Spending on commercial real estate will be neutral—or slightly positive—in terms its contribution to GDP growth, with spending on buildings related to manufacturing and communications posting the largest year-over-year percentage gains. Due to weaker than expected growth of end markets, spending on inventories is expected to subtract slightly from GDP growth. Because most state and local governments have adjusted their spending and staffing to reflect available resources, their spending will contribute to GDP growth, but the fiscal drag from the federal government will have the opposite effect.

The expectation that economic growth will be sustained depends on several positive developments. First, sales of both new and existing homes as well as spending on new home construction will increase. Second, credit markets will continue to thaw. Third, new jobs—and slightly higher wages—will be created in the private sector, which will boost consumers' inflation-adjusted buying power. Fourth, businesses' spending for new equipment and software will continue to expand. Fifth, crude oil and gasoline prices should remain at roughly the same levels as last year. Finally, limited inflation should reassure the bond markets and the Federal Reserve. If most of these expectations are realized and major federal fiscal policy mistakes or external shocks (e.g., major oil supply

interruptions) are avoided, then the U.S. economy will continue to grow.

There will be some headwinds, too. Declines in federal government spending will subtract slightly from GDP growth. Uncertainty remains extreme in many critical federal government policy areas, including the budget, the tax code, health care, regulation, and major reforms to popular entitlement programs. Government efforts to re-regulate certain industries, or to protect at risk economic sectors, will have the unintended consequence of reducing U.S. job growth. The EU's main structural problem has not been resolved, and its policy with respect to its sovereign debt problems is not inspiring confidence. Turmoil in the Middle East and North Africa increases the risk-premium embedded in crude oil prices.

Housing

Housing will be a strong tailwind for GDP growth primarily due to cyclical factors, but also because of favorable demographics. In 2015, the number of single-family home starts for new construction will increase by about 30 percent (or just under 1 million units). Existing home prices will continue to rise at a modest 4 percent. In most markets, home price appreciation therefore will continue to bolster the psyche of the consumer, households' net worth, and homeowners' ability to spend.

Both the single- and multi-unit residential construction sectors will contribute to growth. This broad-based upturn in housing activity will add 0.5 percent to GDP in 2015. That's significantly more than the 0.3 and 0.1 percent contributed in 2013 and 2014, respectively. Looking ahead, the performance of the housing market will depend primarily on the performance of the labor market, mortgage rates, and credit conditions. Employment and personal income growth are expected in 2015. Those new jobs, and bigger paychecks—plus appreciating home values—will give more people the wherewithal and the confidence to buy homes, ensuring the housing market's recovery.

Mortgage rates will remain a

bargain, but will rise by about 50 basis points in 2015. Home mortgages also should be somewhat easier to obtain, however. Credit conditions will ease due to improving home values in most markets and slowly improving macroeconomic conditions. Despite overall improvement, credit will remain extremely tight for riskier loans. Credit lines and money to builders will still be somewhat scarce, restricting the supply of newly built homes. Also, low appraised values will stymie conventional lending as well as housing turnover.

Despite recent home price gains, many households owe more on their mortgages than their homes are worth, which limits the availability of financing, especially for those with lower credit scores. Plus, many more homeowners are in near negative equity situations. These households will not be able to absorb the transactions costs involved in selling their homes, make a significant down payment, or qualify for a new mortgage.

A potentially powerful demand side support for homebuilding is the rebound in the rate of household formation. Job growth will be the key to unlocking the pent-up demand for housing that built up as young adults opted to stay a home a bit longer. Moreover, improving job prospects will partially reverse the recent surge in college enrollment and might also slow the rate at which student loan debt is piling up. Indeed, record-breaking student loan debt is one reason why young adults delay moving out on their own.

Nonresidential Construction

Although slightly higher interest rates are a headwind, spending for new nonresidential construction will increase modestly in 2015, continuing the weak up cycle that began in 2013. Credit conditions will ease for those looking to build commercial space, but will remain very tight in markets with high vacancy rates. Employment and population growth gradually will generate gains in net occupancy, however. Foreign investors will continue to take advantage of a buyer's market for U.S. real estate. There will be some negative trends: less spending on power

plants; and fairly weak public spending on nonresidential construction due to lagging revenue collections.

Office and retail vacancy rates will remain high, but demand for new office space will increase the most in markets heavy with the high technology and energy industries. Retail construction will continue to be limited by too much existing space as well as online competition, but pockets of new retail development will appear in the most desirable locations. Industrial development will continue to benefit from rising levels of industrial production and capacity utilization, with new development focused on locations with logistical advantages.

Less positively, spending for publicly funded structures will remain close to recessionary lows in many places. The primary problem is that weak real estate markets have led to downward adjustments in assessed property values. Typically these adjustments lag movements in market prices by several years; and property tax bases are just beginning to respond to the upturn in home prices.

Consumer Spending

Consumers' inflation-adjusted contribution to GDP growth will be positive, and larger in 2015 than it was in 2014. Steady, but moderate, job creation coupled with a limited amount of wage and salary growth will help to repair household balance sheets. Some additional loosening of still tighter than normal credit conditions also will support consumer spending, which will be about 2.8 percent.

Improving household finances is one reason why consumer spending will continue to grow. Going into the recession, household finances were in terrible shape. The household debt service ratio (debt payments divided by after-tax income) stood at an all-time high of nearly 14 percent. Add in other financial obligations, such as car lease payments, rent, homeowner's insurance, and property tax payments, and the financial obligation ratio reached almost 19 percent, an all-time high.

In 2015, homes prices will continue to rise, albeit much more

gradually. Credit conditions will continue to loosen. Equity prices also will climb, but further gains will come much more slowly than in recent years.

The savings rate will hold steady at 5.1 percent, so a higher savings rate will not be a headwind in 2015. But, over the long term, many people will need a savings rate of 7 or 8 percent in order to be comfortable in retirement. In short, a rising savings rate will be a secular headwind for consumer spending that will intensify through the end of the decade.

The protracted period of household deleveraging has been painful, but necessary. One concern is that continued volatility in the financial markets may cause jittery consumers to push up the household savings rate very sharply in 2015, which would precipitate a recession. Fortunately, that is not the most likely scenario.

One factor behind deleveraging was the unprecedented cycle of

wealth destruction that erased 19 percent or \$13.3 trillion of households' net worth. On an inflation-adjusted basis, full recovery of the wealth that was lost did not occur until the third quarter of 2013. As of mid-2014, households' inflation-adjusted net worth was 7 percent above its pre-recession peak. On a nominal basis, households' net worth exceeded its pre-recession peak by 20 percent.

The large wealth losses that accompanied the recent recession not only crippled consumer spending but also dramatically reduced the amount of funds available to launch, or expand, small businesses. Personal wealth—not the credit markets—is the primary source of funding for new small businesses. Demographic trends, more business regulations, and the failure of many small community banks also are behind the extremely low levels of new business formation prevailing in the recession's wake.

At this juncture, job creation—and the income growth that accompanies it—is absolutely vital to the outlook for both consumer spending and the overall economy. The forecast anticipates that the nation's job machine will remain in second gear in 2015, however. Job growth therefore will be adequate to boost U.S. GDP growth from 2 percent to 2.8 percent, but inadequate to raise the rate of GDP growth above its long-term average of 3.1 percent. Growth in both the number of jobs and the number of hours worked per job are two factors that will support this income growth. The proportion of high paying jobs created also is likely to rise slightly.

In 2015, spending for durable goods will increase faster than spending for nondurable goods and services. Among durables, outlays for cars, computers, and sporting goods will increase very rapidly. Spending on nondurables such as pharmaceuticals and other medical products will

UNITED STATES BASELINE FORECAST 2014-2015

United States	2010	2011	2012	2013	2014	2015
Gross Domestic Product, Bil. of 2009\$	14,783.8	15,020.6	15,369.2	15,710.3	16,024.5	16,473.2
Percent change	2.5	1.6	2.3	2.2	2.0	2.8
Nonfarm Employment (Mil.)	130.3	131.8	134.1	136.4	138.8	141.3
Percent change	-0.7	1.2	1.7	1.7	1.8	1.8
Personal Income, Bil. of 2009\$	12,227.2	12,676.1	13,093.9	13,327.1	13,549.4	13,894.4
Percent change	1.2	3.7	3.3	1.8	1.7	2.5
Personal Income, Bil. of \$	12,429.3	13,202.0	13,887.7	14,290.4	14,804.9	15,500.7
Percent change	2.8	6.2	5.2	2.9	3.6	4.7
Civilian Unemployment Rate (%)	9.6	8.9	8.1	7.4	6.3	6.0
CPI-U, Ann. % Chg.	1.6	3.2	2.1	1.5	2.0	2.2

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, September 2014.

rise briskly, but spending for food, clothing, and shoes will rise moderately. Among services, spending on vehicle leasing will increase the fastest. Providers of health care, food services, and insurance will see above average growth in spending. In contrast, consumers' outlays for utilities will grow relatively slowly.

Labor Markets

On an annual average basis, total nonfarm employment will increase by 1.8 percent in 2015, which is the same as the 1.8 percent gain estimated for 2014. Courtesy of the upturn in housing, job growth will be very broadly based. Companies will hire as domestic demand for goods and services expands. Global demand for American exports also will expand. Meanwhile, venture capital—which fuels job creation—will be more available. Also, the rate of job losses in the private sector will be quite low. In short, net job creation will be strong enough to slowly reduce the elevated unemployment rate, which will drop from 6.3 percent to 6 percent on an annual average basis.

Once the unemployment rate moves below 6 percent, the buyer's market for workers will become a seller's market. That probably will occur late in 2015 or early in 2016. Unit labor costs will rise about 2 percent, which is about two-thirds the increase estimated for 2014. Output per hour and compensation per hour will rise by about 1.5 percent and 3 percent, respectively. Wages will rise by 2 percent and benefits by 3 percent. Health insurance costs will be the primary force behind benefit cost increases. One implication of the slow growth of wages and unit labor costs is that the Federal Reserve can afford to wait until the second half of 2015 before it begins to raise short-term interest rates.

Although net hiring will expand, several factors will limit the gains. First, as discussed previously, below-average GDP growth limits the impetus to hire. Second, the U.S. economy has exhibited extreme volatility, which will make employers reluctant to hire more fulltime workers. Third, the outsourcing of American jobs to

developing countries will continue to spread from blue-collar occupations to white-collar occupations. Fourth, uncertainties regarding federal fiscal, tax, and regulatory policies will restrain hiring. Fifth, the federal government will be downsizing its workforces permanently. Sixth, the Federal Reserve will begin to tighten monetary policy. Finally, some of the new jobs that businesses will need to create will not match the skill sets of the unemployed.

In the coming year, construction companies will post the fastest rate of employment growth. Professional and business services will see the second fastest rate of job growth, followed by natural resources and mining, and transportation and warehousing. Education, health services, leisure and hospitality, and wholesale trade also will see solid employment gains. The federal government and utilities are the only major sectors expected to lose jobs.

U.S. manufacturers will continue to hire, primarily due to cyclical factors such as growing demand for durable goods rather than long-term structural shifts in competitiveness. Nonetheless, because the economies of EU and Japan have performed poorly, manufacturers who want, or need, to locate in developed economies increasingly will opt for locations in North America.

Durable goods manufacturing subsectors with the best immediate prospects for job growth include wood products, machinery, non-metallic mineral products, furniture, and fabricated metal products. In contrast, manufacturers of nondurable goods will be cutting their workforces modestly. Among nondurables subsectors, only food, chemicals, and plastics/rubber manufacturers will see positive job growth. Jobs will be lost in the textile, apparel, paper, and printing industries.

Corporate Profits

Already high after-tax corporate profits should eke out single-digit percentage gains in 2015. Excellent expense management, low debt burdens, and more broad-based growth in demand for goods and services will be the primary factors support-

ing profit growth. Financing also should be somewhat easier to obtain, but more expensive. Nonetheless, continued easing of lending conditions improves prospects for profits earned by smaller companies. The upturn in the housing market will be the primary factor contributing to profit growth. Productivity growth is likely to be stronger in 2015 than it was in 2014, which is a panacea for profits as well as the overall economy.

On the negative side, the year-over-year comparisons will be extremely tough to beat. Businesses' pricing power is not expected to firm significantly. Finally, it's important to recognize that financial institutions' profit margins will be sensitive to problems stemming from Europe's sovereign debt crisis as well as higher long-term interest rates. Indeed, the slow expansion of foreign GDP will limit sales prospects for many export-oriented companies. But corporate profits generated from international operations in emerging markets will grow faster in 2015 than in 2014.

Business Spending

Due to slightly faster growth in both corporate profits and end markets, the year-over-year percentage increases in business spending for equipment will be larger in 2015 than in 2014. Spending will grow almost three times faster than GDP, reflecting the need to replace equipment, to improve productivity, and to become less labor intensive. Strong cash flows and easier (but more expensive) credit will drive this spending.

It helps that corporate discipline with respect to capital outlays has been excellent. Also, lending standards will continue to ease in 2015. Plus, many companies have adequate cash flows relative to the amount of money they need for investment, lessening the impact of lingering credit constraints or higher interest rates. But after-tax corporate profits will grow more slowly in 2015, partially because profits are already at high levels relative to the overall size of the economy.

Business spending for communications equipment will post the largest year-over-year percentage

gains. Substantially higher spending also is expected for industrial equipment as well as computers and peripherals. Spending for transportation equipment will increase only slightly.

Slightly below average levels of capacity utilization will be a mild head wind for business spending for equipment and software. In mid-2014, capacity utilization for industries producing crude products was 87 percent, which is above its long-run average and therefore should spur capacity additions. For goods at the finished stage, capacity utilization was 77.6 percent, a rate that's also above its long-run average. In contrast, capacity utilization for goods at the primary and semi-finished stages of production was only 77.4 percent, a rate 3.4 percentage points below its long-run average.

International Trade

In 2015, both real exports and imports are expected to grow almost twice as fast as U.S. GDP, reflecting the ongoing globalization of input and product markets. Since imports will rise faster than exports, the trade gap will widen. One reason why imports will grow strongly in 2015 will be faster growth of domestic consumer spending, which implies faster growth of imports of finished goods as well as more outbound American tourists.

In 2015, U.S. export growth will be broadly based, and growth will be faster in emerging-market or commodity-based economies than in developed economies. Increases are expected for all of the major categories of goods and services. Export growth will be fastest for vehicles and parts and industrial materials and supplies, and slowest for foods, feeds, and beverages. Emerging-market countries in particular are expected to spend more on equipment and infrastructure. Industrial materials, foods, consumer goods, and inbound tourism will see more moderate gains.

In 2015, we expect slight additional U.S. dollar appreciation, but that will not hurt exports too much because the dollar's value is still quite low, and some additional apprecia-

tion will not make exports tank. The current account deficit will equal about 2 percent of GDP, which is 0.6 percent lower than estimated for 2014.

Inflation

If oil prices remain relatively steady, consumer price inflation will increase by 2.2 percent, which is close to the Federal Reserve's target. Of course, inflation will be even lower if energy prices tumble, or if a recession occurs. Higher housing prices and rents and higher medical prices will drive the increase. There are no signs that inflation will soon be a problem, and the usual drivers of inflation will not be much more intense in 2015 than in 2014.

Once economic growth gains momentum, the Federal Reserve will rescind some of its rate cuts. As long as rates are not kept too low for too long, the risk of stagflation is very low. Our forecast expects the Fed to keep rates on hold until mid-2015, and increase them only slightly thereafter.

It does not appear that the employment situation has improved to the point where labor market conditions will support accelerating inflation. Heightened competition for jobs from both domestic and foreign workers also will help to keep the lid on wages and benefits by dampening workers' expectations even as consumer prices rise. In the 2015 economy, workers do not realistically expect employers to raise their wages to fully offset higher consumer prices.

The outlook for inflation beyond 2015 is considerably less sanguine, however. Because inflation is a monetary phenomenon, the magnitude of recent monetary stimulus increases the risk of inflation. Also, the federal debt has skyrocketed in absolute terms as well as in terms of its percentage of GDP. That creates pressure to monetize the debt. Over the next decade, inflation may exceed the 3 percent averaged over the last 30 years. Also, despite the lack of a good substitute, the U.S. dollar could gradually lose some of its status as a reserve currency or safe haven. Of course, the mushrooming

federal debt does not have to produce more inflation; it may instead simply force U.S. interest rates higher to attract the needed capital. Either way, oversized budget deficits can't be sustained without doing significant damage to the U.S. economy and its prospects for growth.

Crude Oil Markets

Without additional significant supply interruptions or additional price premiums due to increased political tensions, it is unlikely that oil prices will move too much in 2015. Prices will range between \$90 and \$115 per barrel, but because prices are so volatile it would not be too surprising if oil were to trade outside of this band. Also, this forecast is predicated upon a slight acceleration in the modest pace of global economic growth, no major disruptions in the supply of crude or refined products, and bringing new energy infrastructure on line.

In 2015, moderate growth of the global economy will allow capacity to expand enough to prevent oil supplies from tightening. Domestically, oil production is booming in the Bakken formation in North Dakota, and much higher output is also expected from Texas and several other states. Oil imports' percentage of GDP therefore will decline significantly. Also, steady, high prices will gradually lead to improvements in energy efficiency, but those are long-run rather than short-run determinants of demand. ♦

The Georgia Outlook

Georgia's economy will continue to recover from the recession at a moderate pace. The risk of another recession will be lower in 2015 (25 percent) than in 2014, because the massive restructuring of Georgia's private sector is complete. The primary risks likely to trigger a new recession are mistakes in fiscal and/or monetary policies, oil price shocks, and contagion of financial panics originating overseas. The risk of recession is the same for Georgia as for the nation.

Our baseline forecast calls for Georgia's inflation-adjusted GDP to increase by 3.2 percent, which exceeds the 2.3 percent growth estimated for 2014. The state's 2015 GDP growth rate will be 0.4 percent higher than the 2.8 percent rate estimated for U.S. GDP. The positive differential reflects (1) projects in the economic development pipeline, (2) strategic shifts in the state's economic development strategy, (3) leverage from the housing recovery, and (4) slightly more supportive demographic forces. The state's nominal personal income will grow by 5.4 percent, which is higher than the 4.7 percent gain expected for the nation. Georgia's nonfarm employment will rise by 2.3 percent in 2015, which exceeds the 1.8 percent gain estimated for the US. The main headwind facing Georgia in 2015 is federal fiscal austerity, especially cuts in federal defense spending. Another weak headwind will be a gradual shift in the stance of monetary policy from accommodative to restrictive.

Fortunately, Georgia's employment will grow by 2.3 percent in 2015. If that happens, Georgia will replace all the jobs lost to the recession by mid-2015, or about one year after the U.S. does so.

The lack of new business formation is one underappreciated reason why Georgia's job recovery has been slow. Business formation requires cash, and the typical entrepreneur often obtains the funds needed to start, or expand a business by bor-

rowing, using the home as collateral. That's been a problem for Georgia's entrepreneurs because home price depreciation was much more intense here than it was nationally, and because Georgia led the nation in bank failures. The good news is that Georgia's home prices are up about 27 percent (as of mid-2014) from their lowest point. But the lag between the market value of people's homes and their appraised values will continue to restrain lending.

Georgia's unemployment rate will average 6.7 percent, or about 0.6 percent lower than the 7.3 percent estimated for 2014. Private sector job growth will be very balanced. The fastest job growth will occur in construction, followed by professional and business services, and mining and logging. Education and health services will see above-average gains. Below-average job growth is expected for leisure and hospitality and manufacturing. Positive, but slow job growth is projected for financial activities and information. In contrast, job losses will continue in the government sector, which is the only major economic sector expected to lose jobs in 2015.

Services

The forecast indicates that all Georgia's major categories of service-related businesses will expand, with the broader base of growth reflecting the upturn in housing markets, growing demand for information and high technology services, and more competitive economic development incentives. Improving economic conditions and improving demographic trends will help Georgia's beleaguered financial institutions, but the compliance costs of re-regulations and less mortgage refinancing will be headwinds.

Recent project announcements have brought, or will soon bring, substantial job gains at headquarters operations of companies such as Beaulier International Group, Dasan Machineries, Halyard Health, Bainbridge Manufacturing, Arab

Shipping Company, Aalto Scientific, Air Watch, Porsche, Carter's Incorporated, and Mitsubishi Electric. IT companies also have announced major projects, including Ernst & Young, CBS Corporation, and Infosys. Healthcare IT is an emerging industry that promises to create thousands of high-paying jobs over the next decade. Companies that handle transactions processing, cyber security, and development of software and mobile apps also will see job growth.

Services businesses that provide necessities should do well. The outlook for health services is excellent. After all, the number of chronically ill people continues to balloon regardless of the ups and downs of the business cycle or the uncertainties created by healthcare reforms.

Upturns in residential and non-residential development will spur demand for architects and engineers. Georgia's strong transportation and logistics infrastructure coupled with cyclical increases in economic activity will spur job growth in the logistics and distribution industry. The faster pace of economic growth also will bring relief to many consulting firms, but tight government budgets will limit the gains for firms with many public-sector clients.

Manufacturing

In 2015, Georgia will see substantial increases in advanced manufacturing activity and employment. Cyclical economic recovery, low domestic natural gas prices, rising production costs in China and elsewhere are some of the factors behind the expected increases. Concerns about product quality and management of the risks associated with increasingly complex supply chains also make domestic manufacturing more attractive. Additional factors that will help Georgia lure manufacturers include a superior transportation, logistics, and distribution infrastructure, low costs of doing business, a favorable tax structure, and very competitive economic development incentives.

Manufacturers' contribution to Georgia's GDP will zoom in 2015, but the incoming employment data imply that manufacturing jobs are not coming back quickly. The state added an estimated 5,700 jobs in 2014, and may add only 6,500 jobs in 2015. In terms of factory jobs, a manufacturing renaissance in Georgia is unlikely, but the sector's output is growing much faster than its employment.

To become a state where manufacturing activity and jobs truly concentrates, Georgia must develop a better educated, more highly skilled, and more productive workforce that can use the newest technologies; and become a more fertile ground for developing and adopting productivity-enhancing technologies. The construction of the Georgia BioScience Training Center, which will support training for Baxter International's new facility, is a good example of providing much needed skills to Georgia's workers while simultaneously incentivizing life sciences companies.

Private-Sector Restructuring

The recession hit Georgia so hard because the state relies on real estate development and homebuilding and closely allied industries such as building materials manufacturing and real estate financing. Not enough of Georgia's economic growth was based on educating its own people, innovation, courting emerging high-tech industries, and promoting the growth of in-state capital markets.

The financial crisis and the real estate bust damaged Georgia's financial sector severely. For example, the peak-to-trough drop in statewide employment in financial activities was 12 percent compared to a drop of 9.6 percent for the U.S. The outsized job losses in financial activities reflected overexposure to construction, land development, and commercial real estate loans, which led to an all-time high in bank failures. Our forecast now indicates that financial activities will see a 1.6 percent job growth in 2015.

Georgia also suffered from restructuring in areas unrelated to the bursting of the property bubble.

One-third of Georgia's information jobs are gone, but the industry overall will expand modestly in 2015. The gains reflect surging demand for newer wireless services and high-volume data applications; Atlanta's deep and broad pools of IT-savvy workers; and media jobs in film and television that reflect generous economic development incentives.

Public-Sector Restructuring

The last remaining large imbalance—government spending—is hard to miss. Of the three levels of government, state government has made the most progress adjusting its spending and staffing to reflect available revenue. Its biggest remaining challenge for is uncertainty about federal funding for mandated programs such as Medicaid. Pension liabilities and retiree health care costs are not too far behind. Local governments will struggle with cuts in federal and state funding; pension liabilities; and retiree health care costs. But, on top of those challenges, some local governments haven't fully reconciled their reduced ability to generate revenue with their spending and staffing levels. That's mostly because local governments are extremely dependent on property taxes for revenue, and assessed property values always lag market values.

Going forward, the damage to Georgia's economy will depend on what lawmakers decide to cut. If the cuts continue to focus on defense spending, it will be tough on the communities that are economically tied to large military bases. In contrast, Georgia would only take an average or below average hit if federal restructuring were to shift from the federal agency budgets towards the specific entitlement programs that are the root causes of the budget problems, but that's unlikely to happen in 2015.

Federal Reserve Policy

Federal Reserve actions to increase short-term policy interest rates will be a slightly stronger headwind for Georgia than for the nation as a whole. The shift in Federal Reserve policy from an accommodative to a restrictive stance will create more

economic drag in Georgia than in many other states because Georgians carry more debt and save less.

Housing Recovery

Home building and real estate development will be extremely important to Georgia's economy. The number of single-family home starts for new construction will increase by 20 percent as the housing market responds to a more favorable balance of supply and demand. New jobs, slightly bigger paychecks, and appreciating home values will give more people the money and the confidence to buy homes. That will sustain the housing market's recovery.

It's no surprise that the recent rebound in home prices is helping credit conditions to ease. But low appraised values will continue to restrain conventional lending as well as housing turnover. Another restraint is that many of Georgia's homeowners with mortgages still owe more on their mortgages than their homes are worth, and that severely limits the availability of financing. In addition, many mortgage holders can't absorb the transactions costs involved in selling their homes, much less make a down payment, so they are stuck.

In 2015, existing single-family home prices in Georgia will rise 6 percent, with less expensive homes appreciating the fastest because these are far from full price recovery. But it also reflects investors' interest in buying inexpensive homes to use as rentals. In contrast, price appreciation for luxury homes will depend mostly on the trade-up market, which is still not functioning normally.

One additional negative is that the image of housing as an investment has been damaged and will not be repaired quickly. Yet another problem is that more federal regulation will keep credit tighter and more expensive.

Economic Development

Due to cost, logistics, and tax advantages, Georgia is very competitive with other states when it comes to landing economic development projects that will provide a tailwind to economic growth. Examples of these projects include Baxter Inter-

national's new facility that will add 1,500 biotechnology jobs; GM's IT-innovation center in Roswell that will bring 1,000 high-tech jobs; Caterpillar's new facility that brings 1,400 jobs in the Athens area; and Ernst & Young's new global IT center in Alpharetta with 400 high-tech jobs. In addition, Georgia continues to attract automobile parts suppliers: Inalfa Roof Systems will add 100 new jobs to the 300 that it had already announced at its manufacturing plant in Cherokee County.

Specialization in activities where Georgia has comparative advantage bodes well for sustained success of the companies that received incentives, thereby enhancing the prospect for long-term economic growth. Logistics, transportation, distribution, warehousing, IT, transactions processing, floor coverings, headquarters operations, and professional and business services are good examples of industries where Georgia competes effectively.

Demographics

Demographic forces are a third factor behind Georgia's improving economic performance. Due to job growth and the housing recovery, geographic mobility will increase in 2015, and this will propel net domestic and international migration to Georgia. Domestic net migration will rise to about 15,000 people in 2015 and 20,000 in 2016. Nonetheless, Georgia's higher rate of population growth will become even more dependent on net international migration of about 30,000 people in 2015. Population growth also will benefit from a slight increase in number of births.

Retirees

The financial crisis and the bursting of bubbles in the nation's property markets abruptly choked off the inflow of retirees to Georgia (and elsewhere). For primarily economic reasons, people stopped moving. The Selig Center estimates that 68 percent of the decrease in the nation's overall mobility rate was due

to economic conditions and only 32 percent was due to continuing long-term trends.

As economic conditions improve and housing markets normalize, retirees who stayed put will opt to move to places better suited to a more relaxed lifestyle. Georgia will be in a good position to attract them. Moreover, new census projections show that from 2015 to 2030, the U.S. population over 65 will grow by 53 percent compared to only 3 percent for the population 18 to 64 years. So barring a major pandemic, economic catastrophe, or a dramatic increase in traditional retirement age, prospects are excellent for retiree-based economic development.

Prospects for Selected MSAs Atlanta

A revival of population growth and the housing recovery will strongly underpin Atlanta's ongoing economic recovery. A high concentration of college-educated workers will continue to attract technology companies in life sciences, R&D, IT, pro-

GEORGIA'S BASELINE FORECAST, 2014-2015

Georgia	2010	2011	2012	2013	2014	2015
Real Gross Domestic Product, Bil of 2009\$	407.0	410.8	416.9	424.6	434.4	448.3
Percent change	0.7	0.9	1.5	1.8	2.3	3.2
Nonfarm Employment (thousands)	3,861.2	3,901.4	3,854.9	4,033.4	4,113.3	4,209.6
Percent change	-1.0	1.0	1.4	2.0	2.0	2.3
Personal Income, Bil of \$	333.64	356.8	371.5	381.5	396.7	418.2
Percent change	1.0	7.0	4.1	2.7	4.0	5.4
Housing Permits, Total	17,265	18,493	24,350	35,600	37,392	44,978
Percent change	-5.3	7.1	31.7	46.2	5.0	20.3
Unemployment Rate (percent)	10.2	9.9	9.0	8.2	7.3	6.7

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, September 2014.

fessional and business services, and advanced manufacturing. Compared to other large metropolitan areas with strong links to global markets, the costs of living and doing business in the Atlanta MSA are low. The pool of talent also is extensive for occupations that do not require college degrees. Businesses also are attracted by Atlanta's vast multi-modal transportation and distribution system.

On an annual average basis, the 28-county Atlanta MSA will add 69,100 jobs in 2015, a year-over-year increase of 2.8 percent. Atlanta therefore will account for 72 percent of the state's net job growth. The area's high concentration of service producing industries, IT companies, distribution companies, universities, health care providers, life sciences companies, and headquarters operations will keep the job picture bright.

Major improvements at Hartsfield-Jackson International Airport bode well for Atlanta's growth, especially the completion of the new

international terminal. The airport makes the Atlanta area an ideal location for corporate headquarters or facilities that produce highly perishable biomedical products. Airport improvements also will help Atlanta's popularity as a business and tourist destination.

In this new era of federal fiscal austerity, one major plus is that the metro area is not too dependent on federal jobs. Only 4 percent of the Atlanta area's nonfarm earnings come from federal employment versus 7.7 percent for the state as a whole. Atlanta is not the home of a major military base. State and local government accounts for only 8.9 percent of earnings in metro Atlanta versus 11.4 percent for the state, so public restructuring will be less problematic.

Albany

On an annual average basis, the Albany area will see employment rise by 1 percent, or by about 600

jobs. High numbers of government jobs make Albany vulnerable to government restructuring, however. Another problem is that the area's population and labor force have been declining and will continue to decline in 2015. Also, compared to the Georgia average, Albany has relatively fewer people between ages 25 to 49, typically the most productive working years.

Because Albany is a small MSA, the good or bad actions by one major company probably will determine the area's actual economic performance. One economic stabilizer is that much of the area's manufacturing base, including Miller Brewing, Proctor and Gamble, Tara Foods, and Mars Chocolate North America, is geared towards basic consumer staples, which people continue to buy no matter what.

As economic conditions improve, Albany will capitalize on its assets, including a low cost of doing business, an excellent telecommuni-

GEORGIA'S DOMESTIC PRODUCT, 2005-2016 (millions of dollars)

Year	Current \$	Constant (2009) \$	Percentage Change from Previous Year	
			Current \$	Constant (2009) \$
2005	376,048	413,995	6.6	3.9
2006	393,840	421,307	4.7	1.8
2007	409,935	426,965	4.1	1.3
2008	408,682	417,376	-0.3	-2.2
2009	404,045	404,045	-1.1	-3.2
2010	410,902	406,992	1.7	0.7
2011	421,564	410,811	2.6	0.9
2012	438,324	416,927	4.0	1.5
2013	454,532	424,606	3.7	1.8
2014	471,804	434,372	3.8	2.3
2015	495,394	448,272	5.0	3.2
2016	519,669	461,720	4.9	3.0

Source: Data for 2005-2013 were obtained from the Bureau of Economic Analysis, U.S. Department of Commerce. Data for 2014-2016 are from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (September 2014).

cations infrastructure and a reputation as a good place to live and raise a family. Its economy also is moving away from traditional manufacturing and government towards becoming a regional health care and transportation hub. Albany will continue to fare well in its traditional role as a support center for agriculture, too.

Athens

In 2015, employment in Athens will increase by 1.9 percent or 1,700 jobs, which exceeds the gains estimated for 2014. Athens will benefit not only from Caterpillar's new plant but also from Athens' role as a medical center for northeast Georgia. The establishment of a medical school campus at UGA in partnership with Georgia Regents University will encourage further development of the clinical healthcare and biomedical industries. The university's new Col-

lege of Engineering not only contributes directly to the region's growth, but also helps recruit high tech companies and venture capital.

Its outsized government sector, which will remain under severe pressure due to continuing budget difficulties, could be a drawback. State and local government jobs account for about 29 percent of the area's nonfarm earnings compared to only 11 percent of the state's nonfarm earnings. In fact, Athens is six times more dependent on state government jobs than the state as a whole.

Due to the development of competing hubs elsewhere in Northeast Georgia as well as the growing share of retail dollars that is spent online, Athens' role as a major regional hub for shopping has been declining for many years. Another concern is that its information, financial activities, and professional and business ser-

vices industries are undersized, and this could limit the impetus to the region's overall growth from these industries. The information industry in particular is shrinking relative to the overall size of Athens' economy.

Augusta

In 2015, Augusta's employment will increase by 2.1 percent, or 4,600 jobs. Strong performance of Augusta's services-producing industries, notably health care and private education are positives for the area's economy. The metropolitan area also will benefit from the construction of two nuclear power plants at Plant Vogtle.

Fort Gordon has grown dramatically in recent years and adds substantially to the area's supply of skilled workers. Moreover, the relocation of the Army's Cyber Command to Fort Gordon will directly

NEW RESIDENTIAL BUILDING UNITS AUTHORIZED FOR GEORGIA, 2005-2016

Year	Total New Residential	Percent Change from Previous Period	New Single-Unit Residential	Percent Change from Previous Period	New Multi-Unit Residential	Percent Change from Previous Period
2005	109,336	0.9	94,467	7.7	14,869	-27.9
2006	104,200	-4.7	86,106	-8.9	18,094	21.7
2007	73,165	-29.8	55,210	-35.9	17,955	-0.8
2008	35,368	-51.7	24,879	-54.9	10,489	-41.6
2009	18,228	-48.5	14,674	-41.0	3,554	-66.1
2010	17,265	-5.3	14,779	0.7	2,486	-30.1
2011	18,493	7.1	13,817	-6.5	4,676	88.1
2012	24,350	31.7	17,297	25.2	7,053	50.8
2013	35,600	46.2	23,900	38.2	11,700	65.9
2014	37,392	5.0	26,218	9.7	11,174	-4.5
2015	44,978	20.3	31,357	19.6	13,620	21.9
2016*	50,251	11.7	35,528	13.3	14,724	8.1

*Indicates forecasted value.

Source: Data for 2005-2014 were obtained from the Construction Statistics Division, Bureau of the Census. Values forecast for 2015-2016 are from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (September 2014).

create about 700 jobs. Still, the base makes Augusta's economy somewhat vulnerable to future cuts in defense spending, especially since federal jobs account for about 16 percent of the Augusta area's nonfarm earnings compared to only 8 percent for the state. Although Augusta's undersized information and financial activities industries spared the region from the restructuring that has plagued these sectors, it also may limit opportunities for renewed growth in those industries in 2015.

Columbus

On an annual average basis, employment will rise by 1.1 percent, or by 1,500 new jobs, which is a slight improvement over 2014. The regional economy derives a larger than average share of economic activity from three industries: financial activities, government, and leisure and hospitality. The Columbus MSA's regional economy is extremely dependent on financial activities, and we expect it to become even more so in the future. Hence, improving conditions for financial activities is a good sign.

The economy also depends on government spending, mainly due to Fort Benning, but this is expected to change. The restructuring of the federal government sector therefore constitutes a major headwind for this MSA. Courtesy of Fort Benning and a long list of attractions, the regional economy gets a relatively large economic boost from the hospitality and leisure industry, too, and this will continue to be true.

The housing bust was not too severe in Columbus, but the housing recovery is not too strong. Nonetheless, more stable home values over the course of the business cycle did less damage to households' wealth and confidence, which should help in terms of new business formation and consumer spending. Lackluster short-term expectations for the region's housing recovery reflects expectations that the robust population growth that accompanied Fort Benning's expansion will slow dramatically over the next several years as defense spending winds down.

Macon

On an annual average basis, Macon's total employment will rise by 1.3 percent, or by 1,300 jobs, twice as many new jobs than last year. Macon's economy will benefit from its focus on transportation and logistics, financial activities, higher education, healthcare, and professional and business services. It also helps that the MSA is no longer overly dependent on manufacturing.

Macon's role as a regional retail trade center will expand in 2015. Its central location makes the area a good place to host statewide meetings or conventions, but the region has yet to fully develop this advantage. Nonetheless, the hospitality industry will be a positive force for growth.

Its strategic location at the intersection of I-75 and I-16, two railroad lines, and a good airport add to the MSA's attractiveness. Macon's also a remote bedroom community for the southern portion of the Atlanta MSA, so Atlanta's relatively strong economic recovery will help Macon, too.

Savannah

In 2015, Savannah's employment will rise by 2.5 percent, or 4,000 jobs. The urban area's multiple personality: that of a major tourist attraction, an aerospace manufacturing center, an extraordinarily successful deep water port, and a regional hub for health services are major reasons for continuing success. Although the housing bubble hit the metro area hard, it was not very exposed to the restructuring of either the information or the financial activities industries.

Savannah's long-term growth prospects are among the best in the nation. Its unique ambiance and transportation infrastructure make it an attractive place in which to live and work. Visitors are drawn to the thriving historic district, and waterfront developments. Retirees will continue to be an important force powering and diversifying the region's economic development, though the area will benefit from the

fact that its population is increasing for all age groups. Gulfstream Aerospace also is a very powerful driver of the local economy, providing thousands of excellent jobs. Tourism and convention business will continue to boom, too. ❖

GEORGIA'S BASELINE EMPLOYMENT FORECAST, 2014-2015

Georgia	2010	2011	2012	2013	2014	2015
Nonfarm Employment¹	3,861.2	3,901.4	3,954.9	4,033.4	4,113.3	4,209.6
Total Private	3,161.8	3,214.0	3,269.1	3,351.6	3,441.2	3,538.1
Goods Producing	504.0	505.5	504.7	512.2	526.0	545.1
Mining and Logging	9.2	9.0	8.6	8.9	9.2	9.6
Construction	149.7	145.9	141.5	146.2	153.9	166.1
Manufacturing	345.0	350.6	354.6	357.2	362.9	369.4
Services Providing	3,357.2	3,395.9	3,450.2	3,521.1	3,587.3	3,664.4
Trade, Trans., Utilities	810.2	822.0	833.5	845.6	865.9	885.8
Information	99.8	98.6	100.3	102.1	103.1	104.3
Financial Activities	218.3	223.2	226.6	230.3	233.3	237.0
Professional and Business Services	526.4	544.5	561.7	586.6	608.3	638.1
Education and Health Services	475.5	484.7	495.3	508.7	518.4	531.3
Leisure and Hospitality	374.2	381.9	394.0	411.8	430.3	439.8
Other Services	153.6	153.6	153.1	154.3	155.8	156.6
Government	699.3	687.4	685.8	681.7	672.2	671.5
Percent Change						
Nonfarm Employment	-1.0	1.0	1.4	2.0	2.0	2.3
Total Private	-1.0	1.7	1.7	2.5	2.7	2.8
Goods Producing	-5.5	0.3	-0.2	1.5	2.7	3.6
Mining and Logging	-2.1	-2.2	-4.4	3.5	3.0	4.3
Construction	-9.7	-2.5	-3.0	3.3	5.3	7.9
Manufacturing	-3.6	1.6	1.1	0.7	1.6	1.8
Services Providing	-0.3	1.2	1.6	2.1	1.9	2.1
Trade, Trans., Utilities	-1.1	1.5	1.4	1.5	2.4	2.3
Information	-4.6	-1.2	1.7	1.8	1.0	1.1
Financial Activities	2.3	2.2	1.5	1.6	1.3	1.6
Professional and Business Services	2.9	3.4	3.2	4.4	3.7	4.9
Education and Health Services	2.4	1.9	2.2	2.7	1.9	2.5
Leisure and Hospitality	-1.4	2.1	3.2	4.5	4.5	2.2
Other Services	-1.9	0.0	-0.3	0.8	1.0	0.5
Government	-1.3	-1.7	-0.2	-0.6	-1.4	-0.1

¹Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2014.

**BASELINE EMPLOYMENT FORECAST FOR
GEORGIA'S METROPOLITAN AREAS, 2014-2015**

Metro Area	2010	2011	2012	2013	2014	2015
Nonfarm Employment¹						
Albany	61.3	61.1	61.0	61.1	61.1	61.7
Athens	86.5	86.7	87.7	88.9	90.4	92.1
Atlanta	2,270.5	2,306.0	2,349.9	2,411.0	2,468.9	2,538.0
Augusta	212.7	214.3	213.9	216.3	218.4	223.0
Brunswick	40.5	40.0	40.5	40.5	39.9	40.4
Columbus	117.9	119.4	120.0	120.2	121.3	122.8
Dalton	65.9	65.4	63.3	63.4	64.1	65.6
Gainesville	71.5	73.1	74.8	75.4	77.1	79.4
Hinesville-Ft. Stewart	19.7	20.0	19.7	19.6	19.8	20.0
Macon	95.5	96.6	98.1	99.3	99.9	101.2
Rome	38.7	38.3	38.8	38.8	39.7	40.3
Savannah	151.9	153.3	157.0	158.4	161.9	165.9
Valdosta	52.8	52.7	53.8	54.1	54.9	55.8
Warner Robins	59.3	59.7	59.6	59.1	57.8	58.2
Percent Change						
Albany	-1.4	-0.3	-0.2	0.2	0.0	1.0
Athens	-1.1	0.2	1.2	1.4	1.6	1.9
Atlanta	-0.9	1.6	1.9	2.6	2.4	2.8
Augusta	0.6	0.8	-0.2	1.1	1.0	2.1
Brunswick	-4.7	-1.2	1.3	0.0	-1.4	1.1
Columbus	0.0	1.3	0.5	0.2	0.9	1.2
Dalton	-0.8	-0.8	-3.2	0.2	1.1	2.3
Gainesville	-0.1	2.2	2.3	0.8	2.3	2.9
Hinesville-Ft. Stewart	2.1	1.5	-1.5	-0.7	1.2	1.0
Macon	-0.9	1.2	1.6	1.2	0.6	1.3
Rome	-1.3	-1.0	1.3	0.1	2.1	1.7
Savannah	0.1	0.9	2.4	0.9	2.2	2.5
Valdosta	-2.6	-0.2	2.1	0.6	1.5	1.6
Warner Robins	0.9	0.7	-0.2	-0.8	-2.2	0.6

¹Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2014.

Housing will contribute substantially more to GDP growth in the coming year.

Georgia's housing market conditions will improve due to a more favorable balance of demand and supply. Increases in demand for housing will be due primarily to the improving performance of the labor market. The baseline forecast for 2015 calls for the pace of job growth to be steady, but it will be reinforced by larger gains in real wages. The new jobs and bigger inflation-adjusted paychecks will give more Georgians the confidence and the wherewithal to buy homes, ensuring that the current upturn in housing markets is sustained. Mortgage rates will remain very low from an historical perspective, albeit significantly higher than in 2012-2014. Couple the predicted improvements in labor market conditions with investors' interest in single-family homes for use as rentals and overall demand growth should be enough to sustain recovery in homebuilding as well as renovation and repair activity.

Supplies of new homes will still be constrained by years of underbuilding. Also, there are fewer existing homes for sale, partly because 18 percent of Georgia's homeowners are underwater on their mortgages and are unlikely to put their homes on the market at current prices. Another 4.7 percent of homeowners are in near negative equity. Consequently, the percentage gains in permits authorized to build new homes will be substantial, but new construction activity levels will still be very depressed. Also, home price appreciation will exceed both its long-term trend rate of growth and the rate of overall consumer price inflation, but it will be lower in 2015 than it was in 2014.

Despite the rebound in both home prices and mortgage rates, single-family homes will still be affordable in 2015. Moreover, rents will be rising faster than both home prices and inflation, which will prod people to buy instead of rent. Still, many people will continue to delay purchasing a home due to their lack of confidence in the economy, a desire for labor market mobility, doubts about the future direction of home prices, tight and/or damaged credit, high levels of student loan debt, and negative equity in their current homes.

Home Prices

Home price appreciation will continue as Georgia's job growth becomes much more entrenched, mortgage defaults abate, credit is more widely available, and appraised values more accurately reflect actual market values. One concern, however, is that an unusually large percentage of recent home sales in the Atlanta market were cash sales,

Sector Summary

Direction: large increase
Performance: better than most

suggesting that investors are playing an outsized role in the recovery of Atlanta's housing market. As home prices and interest rates rise, home sales to investors almost certainly will moderate. The shrinking number of short sales and other distressed sales will cause cash sales to investors to moderate and prompt investors to concentrate on non-distressed sales. Investors' interest in the Atlanta market is a positive factor, but sustaining the recovery will require trade-up buyers and first-time buyers to become more active.

Divided into low, middle, and upper home price tiers, the S&P Case-Schiller index for the Atlanta MSA shows that home prices for all segments rose by about the same percentage during the boom. But performance varied significantly during the bust and the recovery.

As of mid-2014, the home price index for middle tier homes was 44 percent above its lowest value, 18 percent below its peak value, but 9 percent above where it stood at the turn of the millennium. Upper tier homes were 27 percent above its lowest value, 9 percent below its peak value, but 18 percent above where it stood in 2000. Our forecast expects existing home prices for all market segments to continue to rise in 2015, with prices for lower tier homes rising faster than prices for middle and upper tier homes.

In the first quarter of 2014, 75 percent of homes in the Atlanta MSA were affordable for median family income households compared to 66 percent for the U.S. as a whole. Georgia's large homebuilding industry, a seemingly inexhaustible supply of land suitable for new residential development, plus relatively few restrictions imposed by local governments on new home construction provide additional reasons why home prices never got too far out of line with household income levels or replacement costs.

Although there was not a speculative home price bubble in Georgia, the selling prices of existing homes still fell drastically as buying activity plunged and inventories of unsold and bankrupt homes accumulated. The Federal Housing Finance Agency's purchase-only home price index for Georgia shows home prices in the first quarter of 2012 were down by about 28 percent from their peak in the second quarter of 2007. That's significantly worse than the 21 percent drop experienced by the nation as a whole, but is far less than the collapses experienced in many Sunbelt states where speculators bailed. One factor that limited home price depreciation was Georgia's 86 percent plunge in the number of single-family home building permits. That precipitous drop cut sharply into statewide employment as well as state GDP, but helped to prevent an even worse collapse in Georgia's home prices.

Home price stability proved elusive in Georgia until 2012 due to a huge inventory of distressed and

vacant homes. Shadow inventory (homes that normally would be for sale but are not due to very poor market conditions) was a huge problem, especially in foreclosure-ridden neighborhoods. According to recent data, the number of foreclosures has dropped very sharply in Georgia with foreclosure inventory accounting for only 1 percent of the housing stock in mid-2014, which was below the national average of 1.7 percent. At this point, serious delinquencies only account for 4.3 percent of Georgia's housing stock, which is about the same as estimated for the nation.

Demographic Forces

Demographic trends constitute a powerful set of demand-side drivers that are poised to stimulate Georgia's housing industry. In 2015, we expect the state's total population will grow 1.1 percent, slightly better than the 0.8 percent forecast for the U.S. More jobs and slightly bigger paychecks will raise the rate of household formation, which remains quite depressed.

Household formation is the most important demographic driver of housing demand. The long, severe recession and the jobless recovery forced many people to delay moving out on their own, caused others to move back in with family or friends, reduced domestic migration, and kept some foreign immigrants away. Net migration to Georgia actually turned negative in 2013—an extremely rare event for a Sunbelt state. But now the net inflow of people to Georgia is poised to triple.

The state is well positioned to attract retirees in much greater numbers than ever before. Although we are on the cusp of a huge surge in retiree-based economic development, that source of demand has been stymied by retirees' inability to sell their current homes so that they can relocate.

Older Georgians will continue to be a mainstay in the housing market. A large proportion of them own their homes, and have built up substantial equity and have relatively stable sources of income, making this part of the market less sensitive

to extreme fluctuations in economic conditions, mortgage rates, and lending standards. Although older homeowners now absorb only a small percentage of the market, the fact that they are living longer and have more financial resources certainly will create a major impact.

Negative Forces

In 2015, mortgage rates and home prices both will be above their recent historic lows. The combination of the mortgage industry's stricter lending standards, more pervasive federal regulations, and still difficult appraisals will limit the housing sector's recovery. Many people will have to wait a little longer to accumulate a larger down payment or settle for a less expensive home. Still, the biggest negative impacts of Dodd-Frank and qualified mortgage regulations will not be felt for some time.

In the short-term, the tougher loan standards—which have reduced the amount of credit available for home purchases—will not affect wealthier borrowers too much. But the dramatic re-assessment of risk has made it exceedingly difficult for homebuyers to obtain sub-prime, Alt-A (a category between prime and sub prime), and mortgages with loan amounts that exceed the level that government-sponsored agencies will insure. Lingering concerns about where home prices are headed also will keep homeowners cautious about putting more money into housing, whether for a home purchase or for expensive remodeling projects.

Home Renovation and Repairs

Spending on home renovations and repairs closely tracks overall activity in both the nation's and Georgia's housing market. Although the recession in remodeling activity was milder than the slump in new home construction, remodelers should remain cautious. Home prices have not fully recovered, which will limit cash-back refinancing of home mortgages. Historically, cash-back refinancing has been a major source of funds for home improvements. Also, low appraisals will limit the

availability of financing for large projects such as room additions or whole house remodeling.

In Georgia, remodeling firms can count on retirees to spend more on home improvements. Aging-in-place remodeling projects will be an increasingly important source of growth, reflecting baby boomers' planning for the future, living with older parents, the onset of age-related disabilities, and retirees' inability to sell their current homes on acceptable terms. According to the AARP, 89 percent of people over 50 would like to stay in their homes for the foreseeable future.

Nonresidential Construction

Credit conditions are gradually loosening for those in nonresidential construction, but will remain a headwind for markets with high vacancy rates, such as Atlanta. Nonetheless, employment and population growth gradually will generate gains in net occupancy. Vacancy rates will remain high, but should improve due to fewer new spaces and less sublease space coming onto the market.

In many jurisdictions, spending for publicly funded buildings will decrease. The primary problem is that the property bust led to downward adjustments in assessed property values. Typically, these adjustments lag movements in market prices by a year or more. Thus, property tax bases will still not support revenue collections too much. Nonetheless, in some areas, heady population growth will provide an easy justification for higher construction outlays by local governments, and this is especially true for school construction.

Overall spending for new office construction will increase in 2015, but nearly one out of every five offices in the Atlanta metropolitan area is vacant. Given investors' increased aversion to risk, the high vacancy rate will be a significant barrier to new development in 2015. The Decatur and Midtown sub-markets will have the lowest vacancy rates, however.

Given the paucity of new space, Atlanta's continuing job growth will lead to an increase in net occupancy in 2015. Overall asking rents for of-

fice space are likely to rise about 1 percent in 2015, but the gains will be stronger for premium space in high-demand markets. Net absorption of vacant office space will occur, but it will be quite limited. The slightly stronger U.S. dollar means that foreign investors will be slightly less keen to take advantage of a buyer's market for American real estate. But investors definitely will focus on international gateway markets like Atlanta that have relatively good prospects.

There are many reasons to be circumspect about the immediate outlook for new office development. Overall job growth is still moderate and that's especially true for Georgia's financial services sector, which is a large consumer of office space. Pre-leasing will be essential in obtaining financing for new projects. The number of newly announced office developments therefore will increase modestly in 2015.

More positively, compared to many major metropolitan areas office rents in Atlanta continue to be a bargain. That's obviously a big problem for property owners, but a good opportunity for the state to aggressively recruit new businesses to the Atlanta area.

Because the manufacturing sector has been outperforming the overall economy, the situation in Atlanta's industrial property market is much better. The area has landed a number of large economic development projects that will require large amounts of build-to-suit space. Vacancy rates have declined dramatically, rents will continue to firm, and demand for new industrial space will rise. The industrial properties with the best prospects are in warehouse and distribution facilities that are positioned to take advantage of Georgia's growing role as a major distribution and logistics center. The superb performance of Georgia's ports eventually will ensure healthy demand for warehouse and distribution space in Savannah, Macon, and Atlanta, and other areas with high port dependence. ♦

**In the coming year,
industrial production
will increase only slightly
faster than GDP.**

Surging production of lumber and wood products will be mainly due to the cyclical recovery of the nation's housing market, supply constraints related to the mountain pine beetle in Canada, and slightly higher exports. At this phase of the current economic cycle, housing activity will grow much faster than the overall economy, benefitting the lumber and wood products industry. The overall increase in demand for lumber and wood products will be very large, growing four to five times faster than either U.S. or state GDP.

Wood pellet manufacturing, bio-fuels, and cogeneration also are emerging sources of demand for timber and wood fiber. Exports of wood pellets to the European Union are expected to grow despite ongoing economic and political turmoil, because power companies and private consumers in the EU increasingly will rely on wood pellets to generate either electricity or heat.

In 2015, international developments will provide only limited support to Georgia's lumber and wood products industry. That's partially because timberland producers in western states will be the primary beneficiaries of expanded exports to Asia. Also, Chinese demand is expected to soften due to overbuilding. Nonetheless, global demand for U.S. lumber and wood products will not grow too quickly in 2015. Restraints on demand include weak economic growth in the European Union, slower economic growth and overbuilding in China, and some additional strengthening of the exchange rate for the U.S. dollar with respect to our major currency trading partners.

Georgia's lumber and wood products industry stands to gain from the mountain pine beetle epi-

demical that is plaguing Canada and threatens forests in the American intermountain west. This negative supply shock will play out over the next decade and will tend to keep lumber and wood product prices high.

Georgia's forestry industry does face some long-term challenges. First, forest and paper companies' recent divestiture of large tracts of timberland diminishes the industry's prospects for growth. Second, the lumber and wood products industry ultimately will face steeper competition from foreign producers. Latin America will export higher quality lumber and more finished wood products. China is poised to produce more OSB panels as well as other high-value added wood products. Meanwhile, Russia has the resource base capable of exporting far more wood products, especially to Europe and Asia.

Sector Summary

Direction: moderate increase
Performance: average

Paper and Pulp

In 2015, support for paper and pulp prices will come primarily from the expansion of U.S. GDP, but production will not grow as fast as GDP; and producers' profit margins probably will decline. The best prospects are for producers of converted paper products such as paperboard containers, but limiting factors include outsourcing and more import competition.

The worst prospects are for producers of newsprint. The strengthening of the U.S. dollar will persist through 2015, which will discourage pulp and paper exports and encourage imports into the American market. New paper mills in China and other developing countries will be a major force powering the recovery of global pulp markets, but will create more competition for U.S. paper mills. The supply of wood chips and wood fiber waste from the production of lumber for the construction

industry will increase, reflecting recovery of the nation's housing industry. That extra supply will restrain increases in pulp prices. The recent closing of many less efficient paper mills located in the Southeast will restrain growth in the regional demand for market pulp, while helping to support paper prices.

Despite improving short-term market conditions, the steep reductions in demand for some types of paper reflect more than just cyclical forces. Increasingly, various forms of digital communication and digital recordkeeping are substituting for printed materials. The recession also accelerated the long-term decline of direct mail, catalogs, magazines, and newspapers. Also, new paper mills built in many developing countries will increase competition for domestic manufacturers of paper products.

Furniture

Furniture sales are poised to grow substantially faster than GDP in 2015. Higher turnover of existing homes, the upturn in new home sales, more home renovations, and home price appreciation are noteworthy positives for demand for furniture. Household mobility and household formation also will begin to recover from their recessionary lows. But limited prospects for substantial gains in disposable personal income, and an abundant supply of good used furniture will temper the industry's recovery.

The outlook is less encouraging for sales of office furniture. Businesses' spending for furniture will increase more slowly than GDP in 2015, and the restrained outlays reflect their smaller workforces, excess surplus furniture that accumulated as people were laid off, and too much office space. The federal government will spend significantly less for office furniture, too.

With overall demand recovering, competition from overseas furniture manufacturers remains the perennial problem that keeps production costs higher than furniture prices. Furniture imports—especially inexpensive ready-to-assemble pieces—will usurp market share from domestic furniture manufacturers. Also, the

strengthening of the dollar will hurt them as well.

Manufacturing Equipment

Businesses' spending for capital equipment will be one of the forces that will contribute more to state and national GDP growth in 2015 than in 2014. The rate of growth in spending for manufacturing equipment will be significantly stronger, reflecting replacement needs deferred during the recession as well as growth of markets for final products. Less uncertainty about the economy and federal fiscal and regulatory policies also will encourage businesses' spending for equipment.

Equipment producers will benefit from cyclical increases in demand in 2015. Also, capacity utilization in manufacturing as a whole will approach levels consistent with higher demand, which will increase because spending had been cut so much that it was difficult to maintain, much less expand, the capital stock. Although tight credit could potentially limit some businesses' ability to buy more equipment, many companies will have the means to do so thanks to good internal cash flows and pristine corporate balance sheets. Slightly lower raw materials prices may lessen cost pressures on the industry, but would also decrease demand from industries that produce basic commodities.

Low short- and long-term interest rates will help manufacturing equipment sales. Continued easing of credit conditions will enhance the positive impact. Exports to developing nations will increase much faster than exports to developed countries, partly due to the economic malaise afflicting much of the developed world. The increasing value of the dollar will be a weak headwind for exports of manufacturing equipment in 2015, however.

Cars

The \$1.2 billion Kia assembly plant employs about 2,800 workers, and the multiplier effects of those jobs are unusually large. Each job at the Kia plant supports 4.5 jobs outside the plant. Thus far, major suppliers have announced jobs at

sites in Georgia that are well above the estimates promised at the time of the initial announcement. Of course, the Kia jobs only replaced about half of the jobs that were lost at the Ford and GM plants combined.

Nationally, the forecast calls for unit sales of both new and used cars to rise, and automakers' bottom lines will continue to improve. Larger gains in households' disposable income, more confidence, better credit conditions, and the aging vehicle fleet will be powerful drivers of car sales. The average light vehicle is over 11 years old, suggesting that there is considerable pent-up demand for new cars.

Higher sales will help manufactures of original equipment. Also, manufacturers of replacement parts will enjoy stronger markets in 2015. While it is true that makers of replacement parts lost some sales because vehicles were scrapped, we think there will be more demand for replacement parts for the growing number of older cars still on the road. Tire manufacturers also will benefit from an expected increase in the number of miles driven as well as consumers' desire for high-performance and other specialty tires.

Rising transportation costs and political pressures will encourage foreign manufacturers to invest more in U.S. production facilities and to buy automotive parts from U.S. manufacturers. More foreign companies now have assembly plants in neighboring states in the Southeast, fostering growth of auto parts manufacturers in Georgia.

Aerospace

Although the short-term prospects for the aerospace industry are excellent, eventually the high—and rising—debt-to-GDP ratios in the U.S. and other developed economies will be formidable headwinds for aerospace manufacturers. Sovereign debt problems in developed economies make both the medium- and long-term expectations for the industry far less sanguine than they appeared to be a few years ago. Projected budget deficits will force the U.S. government to drastically cut, or scrap, many major DOD

weapons projects. Meanwhile, manufacturers will continue to work their way through the backlog of government orders that remains on their books.

On the positive side, manufacturers stand to gain from airlines' pressing need to update their fleets with more fuel efficient, quieter, and more productive planes. The early retirement of less fuel-efficient airplanes will reduce the life cycle of aircraft currently in use, which has negative implications for manufacturers that also provide maintenance and repair services. A second powerful tailwind for U.S. manufacturers of civilian aircraft is the rapid growth in air travel throughout Asia, India, and the Middle East, but new competitors in Russia and China will carve out huge slices of these rapidly growing markets. Despite these new competitors, sales of American-built planes to emerging nations will grow robustly.

The demand for private aircraft is exceptionally strong, reflecting the high value of executive time, schedule flexibility, security advantages, and the increasing need for business travel to places not served by the major carriers. Even more important, the number of people who are wealthy enough to buy, maintain, and operate private planes is rising.

Food Products

Accounting for about one fourth of Georgia's manufacturing GSP, food product manufacturing is the state's largest manufacturing industry, and is slated to expand in output and employment. The demand for food products will grow moderately in 2015, and sales growth will come from population gains and the development of niche products with higher value-added margins. Food processing is highly competitive, faces very demanding consumers, and must adjust to volatile commodity prices. Consequently, firms will have limited flexibility in pricing and the industry's already thin profit margins probably will not widen. Indeed, agricultural commodity prices may exert additional pressure on food processors' margins. Another problem is that major labels have lost

market share to private labels, which are far less profitable

Because of slower growth in food consumption and intense competition, food processors are dividing mass commodity markets into narrow segments. Product innovations are important drivers of sales in this intensely competitive industry. Specialized products recognize consumers' increased health consciousness, greater ethnic diversity, and the growing acceptance of foods from other cultures. Demand natural and organic foods will continue to grow strongly, propelled by an aging population that is better informed about good eating habits.

Apparel and Textiles

Georgia's apparel manufacturing industry will continue to contract as open world trade and cheaper foreign labor give a tremendous price advantage to imported clothing. Global competition will ensure that the domestic industry's sales and profit margins remain tight. Apparel prices almost certainly will not keep pace with inflation. The bottom line is that Georgia's apparel manufacturing sector will continue to decline slowly.

The number of apparel jobs lost will be smaller than in recent years because the industry isn't as big as it used to be. There is no doubt that Georgia has long since lost its comparative advantage because employee compensation in this labor-intensive industry is just too high compared to what it is in developing nations. Some apparel manufacturers operating in niches that are suited to automation will survive for a while longer, but even these companies will find it very difficult to compete with the more modern facilities overseas. One positive development is that production of the high-quality niche apparel products generally requires more highly skilled workers, which implies that average wages in this shrinking industry will be increasing rather than decreasing.

In 2015, Georgia's carpet industry will continue to benefit from increases in housing activity, more home renovations, and appreciating home values. Also, automobile sales

will continue to rise. Nonresidential usage also will increase, reflecting both renovation activity and new construction. Carpet exports will expand due to growth in developing markets. Productivity gains and innovation in terms of product development also will help Georgia's textile and carpet manufacturers survive. Nonetheless, as the plants become much less labor intensive, total employment in this industry will not grow nearly as fast as total sales.

Due to cyclical factors as well as the repeal of the state's sales tax on energy used in manufacturing, Calhoun-based Engineered Floors announced that it would invest over \$450 million in two plants in northwest Georgia, creating about 2,400 direct jobs. In addition, Shaw Industries also announced plans to build a new plant to produce modular carpet tiles, creating about 500 jobs; and Mohawk Industries conversion of two of its existing plants will add about 420 new jobs.

The long-term outlook for Georgia's carpet manufacturing is better than that for the apparel sector, but the industry's prospects are by no means rosy. By investing heavily in plant and equipment, Georgia's carpet manufacturers have become world-class competitors, but state-of-the-art facilities increasingly will be built overseas. Eventually, many foreign manufacturers will be on a more equal footing with those operating in Georgia. Also, competition from wood, tile, and laminate floor products will intensify, and this especially true for sales to commercial customers.

Chemicals and Pharmaceuticals

Demand for many chemical products will increase in typical cyclical fashion, with the best prospects occurring in medicines, pharmaceuticals, paints, and agricultural chemicals. Despite this, chemical production gradually will relocate to from the U.S. to developing countries, where the costs of complying with environmental and security regulations aren't as high. Also, because many of the chemical industry's largest customers already have moved to

the developing world, production is very likely to follow.

Favorable demographics and cost effectiveness enhance prospects for pharmaceutical and medical supply firms. Sales will expand relatively rapidly, but profit margins probably will narrow, because sales of generic drugs will expand much faster than sales of name brands. Pressures from the federal government and other large buyers to hold down prices also will intensify. The pharmaceuticals industry is not particularly cyclical, and did not get hurt as much by the slump in GDP and employment as did many other industries. In 2015, domestic demand is expected to grow steadily. In addition, the industry continues to benefit from its new focus on marketing its products directly to the consumer. A number of new niche drugs in the development pipeline, better research and development techniques, faster FDA approval of new drugs, and the 1994 GATT agreement, which effectively extended the patent life of many drugs, favor the industry's long run prospects. The industry will benefit from the aging of the population and the rising incidences of diseases related to aging and sedentary lifestyles. Moreover, the opportunity to sell generic equivalents of major drugs to consumers in emerging nations is enormous, but the competition will be intense.❖

This sector will grow faster than Georgia's overall economy.

More consumer spending, increases in industrial production, and larger shipments via Georgia's ports will cause total statewide cargo volumes to outpace state and U.S. GDP growth in 2015. Industrial production's expansion will gain impetus from the continuing recovery of construction, which is one of the most transportation-intensive sectors of the economy. Manufacturing activity will upshift, too, providing another tailwind.

Carriers' profit margins will widen slightly, but will remain quite low relative to other industries due to intense competition. Despite increased production in the U.S., oil prices are expected to rise in 2015, but fuel surcharges should help to mitigate any major oil price shock.

Although the freight recession is over, economic growth will not be exuberant. Simmering fiscal/debt problems in the European Union, modest growth in many emerging markets, and an appreciating U.S. dollar suggest that the foreign sector is not strong enough to support major gains in American exports. Traffic growth therefore will have to come from within the U.S. Bigger shipments of many durable goods, such as capital equipment, cars, and building materials are expected to drive demand for transportation. Shipments of most nondurables also will climb slowly. Meanwhile, shipments of textiles and printed materials probably will decline slightly. Rate competition will be less intense, reflecting higher freight volumes as well as the lagged impacts of capacity reductions that occurred during the recession. Less positively, the need to restock inventories will diminish slightly.

Truckers

Growth in truck freight coupled with recent fleet reductions means

tighter capacity, which implies slightly less intense competition for loads within in the trucking industry itself. But internal competition will still be very strong. Moreover, the long-term trends towards high fuel prices as well as fuel price volatility mean that long-haul truckers will face increasing competition from the railroads. Short-haul truckers will not be overly impacted by competition from the railroads, however. In general, trucking firms will be able to raise rates enough to offset higher costs, but their pricing power will not be strong enough to widen net margins dramatically.

Capacity reductions stemming from recent bankruptcies and volatile fuel prices—which squeezed truckers' profit margins—will help to shore up net margins, but this favor-

Sector Summary

Direction: moderate increase
Performance: average

able development will be partially offset by the ongoing consolidation of retailing. Also, looser credit implies that more carriers will add new trucks.

Meanwhile, several factors will push trucking companies to get bigger. First, more outsourcing of products from overseas favors carriers that can manage domestic and global distribution. Second, large retailers often prefer to deal with select trucking firms that offer the broadest range of services. Third, large trucking companies can achieve economies of scale in distribution, especially when it comes to managing global supply chains. Fourth, larger companies probably will find it easier to hire drivers. Complex regulations, escalating operating costs, and high fuel prices will prompt more private companies to disband their fleets in favor of full-service leasing and contracting with trucking firms for dedicated operations.

In the wake of new fuel emissions standards, new equipment costs have risen substantially, but

credit will be more available in 2015 than in recent years. So, even though the upfront costs are high, substantial long-term savings will prompt more upgrades to newer, more fuel-efficient trucks. Meanwhile, high insurance costs and high deductibles are an ongoing problem, especially for firms that transport hazardous materials.

Volatile fuel prices are the biggest wild card in the forecast. Due to political instability in major oil-producing countries and increases in global demand for petroleum products, pressures on fuel costs will mount in 2015. Going forward, the increased usage (and more timely imposition) of fuel surcharges will better shield margins from swings in diesel prices, but the long-term trend towards higher fuel prices is not good for the trucking industry's profitability because it undermines the competition with railroads.

Railroads

Georgia's rail network is the largest in the Southeast, and most rail service is provided by either Norfolk-Southern or CSX. Despite the limited prospects for fast-paced GDP growth, business conditions favor the railroads. Demand growth will exceed capacity growth, but the 2015 growth rate will be similar to last year's, and will push rates up. Growth in rail traffic that exceeds growth in GDP combined with modestly higher rates and recent cost cuts suggests that overall profits will increase. Margins also will continue to benefit from significant improvements in productivity stemming from recent capital investments.

The success of Georgia's ports will be a big plus for railroads. Indeed, eastern railroads will benefit from changes in international shipping patterns that are bringing more traffic to Atlantic coast ports. In addition, once the renovated Panama Canal opens, East Coast ports that are ready to service the bigger ships should see major increases in container traffic, which will benefit railroads and truckers.

In 2015, intermodal shipping of consumer goods, construction materials, and light industrial prod-

ucts will grow, and there also will be increased shipments of industrial and communications equipment. Also, railroads should not have any problem passing fuel costs onto shippers, since rail is an extremely fuel-efficient transportation mode. Increased highway congestion also favors the railroads. More concerns about air quality cut both ways, however. Railroads are very fuel efficient, but coal shipments to utilities are a major source of their revenue.

Shipments of consumer goods and agricultural products, processed food, electrical equipment, and machinery will rise moderately. Shipments of building materials will continue to climb.

Coal is the rail industry's largest source of shipments and a major contributor to its profits. But new restrictions on carbon emissions and low natural gas prices will encourage utilities to depend less on coal to generate electricity. Consequently, coal's contribution to the rail industry's total revenues and profits is likely to diminish as electric utilities switch to generating technologies with smaller carbon footprints. Nonetheless, positive GDP growth may encourage electric utilities to use slightly more coal in 2015. In some parts of the country, crude oil shipments are becoming a major source of revenue growth for the railroads, but this will not be a factor in Georgia.

Airlines

Domestic air travel will rise in the coming year. More business activity, higher corporate profits, and higher disposable personal income will be the primary drivers behind the increasing demand. Higher demand coupled with better control of capacity—in part due to recent mergers—will help improve razor-thin profit margins, but this forecast assumes that fuel costs rise only moderately. A small rise in the value of the dollar is not good for foreign visitors, but will encourage U.S. residents to travel abroad. Demand for airfreight will grow faster than GDP, reflecting the increasing number of shipments of time-sensitive products.

Despite recent mergers, competition within the airline industry will limit pricing power, curbing ticket prices even when costs rise. Also, airlines trained their customers to be very price sensitive. In 2015, ticket prices are expected to rise only slightly faster than costs, which will benefit net margins.

Airlines' security costs, debt service costs, and federal tax burdens will continue to rise. In recent years, fuel costs have risen very dramatically and also have been especially volatile. Higher oil prices remain a perennial threat to airlines' profitability. Another major problem is that the tax bite is expanding rapidly. According to the Airlines for America, government-imposed taxes and fees accounted for 21 percent of the typical \$300 domestic ticket last year; that figure will rise to 26 percent in 2015.

For most airlines, labor and fuel are the largest components of costs. In the short term, there is not much (beyond hedging) that the industry can do to control fuel costs, but replacing older planes with more energy-efficient ones is helping the industry to adjust.

On a more optimistic note, the industry's domestic capacity will be fairly tight, which suggests that their pricing power in the domestic market will climb. Airlines should be able to maintain very high domestic load factors in 2015. But the key to boosting the industry's long-term profitability will be to prevent capacity from growing faster than demand. Historically, airlines have not done a good job of limiting capacity expansion when profits rise, and there is little to suggest that this problem has been resolved.

Ports

Georgia's deep water ports will outperform its peers by tapping directly into the growth that is taking place overseas, by diversifying the services that call on the ports, and by taking market shares from other U.S. ports. Georgia's ports support over 350,000 full- and part-time jobs, or one about one job out of twelve in the state.

The superb performance of Georgia's ports relative to other economic sectors and other U.S. ports reflects strong comparative advantages that allow them to expand their share of regional and national waterborne cargo traffic. These advantages are the result of a series of strategic expansions over many years. For example, refrigerated exports of poultry and other foods recently increased substantially, reflecting strategic investments by cold storage operators such as Nordic.

The Port of Savannah is the largest container facility in the nation and is the only single-container facility on the East Coast with two on-terminal intermodal container transfer facilities. It is the fourth busiest U.S. container port and the second busiest for the export of American goods by tonnage. The Port of Brunswick is the second busiest port in the U.S. for shipping new cars.

Once the Panama Canal's expansion is complete, the utilization of super post-Panamax vessels will increase dramatically, forcing shippers to move their largest operations to ports that can accommodate them. So deepening the harbor is not just about generating larger impacts in the future, it's also a matter of ensuring that existing economic benefits do not decline. ❖

Energy will continue to be an excellent value for residential and commercial customers.

Diverging from previous trends, Georgia may see overall energy costs decline, led by lower prices in crude oil and consistency within electricity production and natural gas prices. The construction and expansion of Plant Vogtle, Georgia's newest nuclear energy facility, has drawn new concerns over budget overruns, however, and will be monitored closely by both legislators and consumers in 2015. Electric utilities costs are expected to continue rise slowly, which may prompt additional minor rate increases; but despite the higher price, electricity usage in homes and businesses will remain steady. Increased competition from low natural gas prices will be a competing factor.

Georgia's electric utility industry, as a whole, remains reasonably well positioned. The state's population will continue to grow faster than the national average, providing a solid source of demand growth. Its operating costs are relatively low, and the long-term outlook for the regional economy calls for growth that is expected to exceed the nation. But, despite these advantages, several concerns are still relevant: volatility in the energy markets, escalating costs, and political and fiscal issues associated with development of the nuclear reactor expansions are significant. Furthermore, because Georgia still utilizes large amounts of coal, environmental legislation continues to be a concern that may impact the cost of energy.

Oil prices are expected to be less expensive in 2015, and natural gas prices are expected to remain consistent, but energy prices are notoriously volatile. Thus, the push to electricity rates stemming from higher fuel

prices cannot be fully discounted. Coal prices should continue to be relatively steady as well; however, utilities will face higher maintenance and insurance costs and will continue to spend money to meet future carbon-emission standards. Long-term interest rates are still low but will continue to rise slowly in 2015, maintaining its benefit in this capital-intensive industry. In coming years, exceptionally heavy planned infrastructure investments and rising pension costs are expected to further increase the cost of utilities.

Natural Gas

Prices have remained steady compared to the major fluctuations experienced during the recession. The consistency of prices and domestic production are powerful tailwinds for growing near-term consumer and commercial adoption.

Sector Summary

Direction: small increase
Performance: worse than most

Intense competition in the industrial sector and environmental and climate concerns will continue to drive demand as many users consider switching to natural gas. The cost competitiveness of natural gas relative to other fuels has also contributed to steady demand increases. Production increased again in 2014 and, although stocks retreated, it will continue to meet increased demand in 2015.

Nuclear and Alternative Energy

Plant Vogtle's \$10 billion capital investment in Georgia to produce two new units at the existing nuclear power plant is inching forward and the new reactors are now projected to open in 2017 and 2018. Cost overruns have reached \$1.5 billion and many are concerned about where current and future funding will come from if costs continue to

balloon. Over 5,000 people have been employed during construction and 800 permanent jobs are expected when the plant begins operation.

When ready, the plant will help to provide the expected 27 percent increase in demand for electricity in the Southeast by 2030. The cost of the new plant is being phased-in and a supplemental charge to customers is expected to continue through 2018. Georgia Power's proportionate share of the estimated in-service cost is expected to be about \$6.7 billion but could grow if costs expand further over budget.

Georgia Power is in the midst of retiring 2,000MW of fossil-fuel production and is expected to continue decreasing its reliance on coal. Solar power advocates in the state received a major boost as Georgia Power's new planning strategy included a 500MW solar allocation that is now expected to exceed 900MW by 2016. Competitive bidding has cut the price of solar purchases to record lows of approximately 6.5 cents per kilowatt-hour. Low interest rates and the dropping cost of solar cells show potential as a small but growing part of Georgia's energy sector, but policy issues and import tariffs may restrict access to cheap solar panels made overseas. Cheaper borrowing and federal incentives are pushing down the cost of residential alternative energy, and as a sunny state, Georgia has a large potential for solar harvestings.

In addition, every major automaker has announced or released an electric vehicle and many more are expected to do so. Georgia shared the spotlight in 2014 by topping all other states in rate of electric vehicle adoption. Due to generous tax credits for fully electric vehicles and mass market availability, adoption has risen dramatically, especially in metro Atlanta. Public electric charging stations have seen skyrocketing installation rates over the last five years and thousands more are expected to come online across the U.S. The potential increased demand for electricity that comes with electric vehicle ownership may further boost Georgia's electricity production industry. ♦

This industry will contribute to Georgia's economic growth in the coming year.

The industry's shift from a persistent headwind into a tailwind is one reason why Georgia's economy is poised to outperform the national economy again in 2015. Consumers' demand for smart phones and tablets combined with business's growing desire for mobile- and cloud computing will be among the primary drivers. There is considerable potential for equipment upgrades. There is still some pent-up demand for premium cable packages, but specialty streaming video and niche satellite services will take market share from cable operators. Netflix and YouTube account for almost half of all peak-period Internet traffic in North America. Demand for fixed broadband access and prepaid phones also will increase, but at a more moderate pace than recently experienced. For these reasons, spending on information services will grow much faster than state GDP in 2015.

As broadband and network capacities become much more fully utilized, the need to invest more will increase significantly. Fortunately, information providers will find that financing will remain very affordable and somewhat easier to obtain. Nonetheless, interest rates probably hit their lows in the past two years. Meanwhile, competition between the various telecom subsectors will intensify and spectrum will remain scarce.

Georgia's data processing firms as well as hosting and related service providers also were hit very hard by the information industry's recession, and the lackluster recovery prompted ISPs and closely allied companies to cut jobs. The jobs losses ended in 2011; job stability gave way to job

growth in 2013-2014, and now the outlook calls for sustained job growth in 2015.

Because the usage of smart phones, tablets, and other wireless devices is soaring, Georgia's wireless carriers were hiring even as the rest of the information industry was cutting back. Thus, as of mid-2014, employment in the state's wireless telecom subsector was up about 27 percent from where it was before the recession. Wireless carriers will be hiring in 2015, and their pace of hiring will accelerate.

Telecommunications

Advances in internet protocol technology, overlapping networks, the rollout of 4G technologies, cloud computing, and regulatory changes have blurred the lines between providers of Internet, phone, and TV services. Integrated telecom provid-

Sector Summary

Direction: small increase
Performance: worse than most

ers will find success in bundling landline, video, and broadband Internet services to their customers. Now, wireless broadband phone/tablet services have been added to the mix. Convergence also means that pressures to merge with or acquire competitors will intensify.

Telecommunications is a debt-heavy industry. In 2015, companies will expand and upgrade their networks and service offerings, incurring additional debt. Interest rates will rise above recent historic lows, but will be very affordable. Although lending conditions are tighter than normal for this stage of the business cycle, credit will be easier to obtain in 2015 than it was in 2014.

In 2015, households and businesses will allocate larger shares of their budgets to telecommunications services, but industry-wide revenue gains will not come as easily as they did a few years ago. Also, voice-generated revenue is likely to decline

very sharply, offsetting some of the growth in data traffic. Demand for high-speed mobile broadband connections will continue to be robust, however.

An extremely disruptive challenge to both wired and wireless phone services is the rapidly improving quality and reliability of making calls via the Internet (VoIP). The build-out of 4G technology and the growing use of smart phones and tablets are combining to dramatically boost demand for mobile VoIP. The major drawback of VoIP, however, is that service interruptions are somewhat more likely, which limits use in emergency situations. Some businesses also are concerned about security, privacy, and giving up the redundancy of separate voice and data networks.

Internet-ready mobile phones now give users web access anytime and anywhere. Companies that develop and/or use smart applications that pack relevant information into small packages will prosper. Increasingly, the provision of video and data services will account for wireless providers' revenue growth. Mobile money (or near field communications payments) via cellphone is poised to make significant contributions to revenue growth, although the rollout is proceeding more slowly than anticipated.

Cable and Satellite TV

The industry's outlook reflects renewed growth in the number of Georgia's households, customers' increasing willingness to pay more to upgrade connections, increases in advertising outlays, and faster growth in the demand for an expanding array of new digital products and other optional services. A declining number of cable TV subscribers and the proliferation of online and wireless video distribution will be major headwinds for cable television providers, however. In 2015, demand for broadband Internet connections will more than offset the slight decline in demand for cable television. Top- and bottom-line growth therefore should be very positive, but profit margins may not change very much.

In Georgia, the increased penetration by satellite delivery systems and the proliferation of other mobile devices will cut the demand for basic cable TV services, and subscriber losses will accelerate. People will be more inclined to purchase highly profitable premium services, however. Cable companies and phone companies already compete to provide Internet access, and increasingly are vying for traditional TV and phone services.

The format war between 4G wireless technologies has been resolved in favor of Long-Term Evolution (LTE), which means that the rollout of 4G technologies will accelerate quickly. Since VoIP calls on 4G networks are identical to other types of data transmission, the build-out of 4G networks will dramatically reverse the current pricing structure: historically, the industry has charged more for voice calls than for data transmission.

Internet Services

The Internet economy will expand in 2015, as easier and faster access will help to keep people online longer and encourage them to spend more. But not all the news is good. Spam, more destructive viruses, and fraud are major deterrents that reduce productivity and impede e-commerce. Cyber-crime is still soaring, and it reduces the appeal of using the Net for the transfer of personal or highly sensitive information, which is vital to the growth of most of the higher valued Internet applications.

Despite many challenges, rapid growth in the demand for bandwidth to support a growing array of audio and video services is anticipated. One problem, however, is whether the Internet's backbone will withstand the upsurge in traffic. Congestion on the Net leads to deterioration in the quality of service, and ensures that issues related to net neutrality will remain in the spotlight. Ultimately, some form of usage-based pricing will be implemented for broadband access. Tiered data packages will allow providers to increase revenue per subscriber, a timely development

now that the number of subscribers is growing relatively slowly.

Printing

Due primarily to competition from digital media, Georgia's printing and publishing industry will remain in secular decline, but due to cyclical factors, the rate of decline probably will slow down in 2015. Cyclical increases in commercial advertising will be a tailwind, but more of it will be digital rather than printed. Slowly rising levels of office-based employment and a limited uptick in new business formation will increase demand for printed materials, however.

The more widespread use of electronic publishing will ensure that the printing industry's revenues will grow much more slowly than Georgia's GDP. Also, high quality machines suitable for small printing jobs will reduce organizations' economic incentive to outsource small runs. Productivity gains stemming from new technologies will lead to job losses in the state's printing industry. The printing industry also is characterized by overcapacity, which will cause margin compression. In short, total profits for many printers will decline.

Growth in hiring in many businesses and professional occupations will help to stabilize demand for technical, scientific, business, and training publications. Higher spending on adult/technical education will add to demand for printed publications. Foreign demand for English language products also will rise. Also, printers can expect modest increases in domestic demand for books in Spanish.

Electronic publishing will continue to displace printed reports, magazines, newspapers, and books. The accelerated move towards electronic banking will continue to decimate demand for printed checks. The popularity and quality of desktop publishing and higher quality photocopiers also reduce opportunities for commercial printers. ❖

Economic conditions favor top-line growth, but compliance costs of re-regulation will hurt.

The Federal Reserve will raise short-term policy interest rates in the second half of 2015, reversing its unprecedented easing policies. Market forces will push up long-term interest rates. From late 2014 to late 2015, the yield curve between the 2-year note and the 10-year note will steepen by about 25 basis points.

The combination of higher demand for most types of loans and wider net interest margins is vital to achieving bottom-line growth. It will be needed in order to offset several unfavorable developments: fewer reserve releases; a dearth of mortgage refinancing; and possible losses in banks' bond portfolios should interest rates rise significantly faster than currently expected.

Although the yield curve will still be quite depressed, it will be slightly more favorable. More positively, deposit growth should remain strong due to uncertainty about economic growth, high stock market valuations, and poor federal fiscal and tax policies. Deposits probably will continue to migrate from smaller banks to larger commercial banks or to larger credit unions.

Large banks also are better in deploying the mobile-banking features that younger customers want. Managing the risks associated with these new technologies will be challenging, however. Insuring data security will be essential to financial institutions' success.

Loan growth will strengthen in 2015, as consumers are apt to seek more loans to purchase durable goods, such as cars. Financial institutions also will benefit significantly from the upswing in residential real estate, declining mortgage default rates, and modest home price ap-

preciation. The use of home equity loans therefore is poised to increase, but the gains will be relatively small in 2015. Indeed, overall usage of home equity lines will remain quite depressed from a historical perspective. High levels of corporate profits and slightly more opportunities to boost earnings derived from mergers and acquisitions and IPOs also will sustain the recovery of the banking industry, and large banks will profit the most from these trends.

An improving housing market and more new mortgage origination will have the greatest beneficial impacts on community banks, however. Due to more rigorous lending standards and depreciated real estate values, new home loans originated in 2011-2015 will generally prove to be very good loans. Higher consumer spending for durables also should

Sector Summary

Direction: moderate increase
Performance: average

ensure growth of non-revolving loans to households.

Georgia's financial institutions in particular will benefit from improving demographic trends—including above-average population growth and household formation—because the in-flow of new residents increases the demand for banking services, props up asset prices, and encourages new business formation. In 2015, Georgia's rate of population growth will still be low compared to pre-recession rates, but it will be much higher than in 2007-2011. Also, household formation rates will rise due to (1) improvements in Georgia's labor market and (2) improvements in the nation's housing markets; (3) more in-migration from other states; and (4) a resurgence of retiree migration to the Sunbelt.

With a savings rate of 4 percent in 2015, the growth of customers' deposits will favor financial institutions' bottom lines. Deposit growth provides banks with their cheapest

funds. The lingering effects of the housing recession, the stock market's recent volatility, and a general understanding that interest rates will be on a gradual upswing make it very likely that people will continue to look for safe places to park their increasing savings. But, due to new regulations, the fees earned on these burgeoning deposit accounts have declined. Also, credit unions—which often have lower fees—will continue to take market share from banks.

When the Federal Reserve begins to raise short-term policy interest rates in the second half of 2015, the rates financial institutions pay depositors on CDs will increase. That will reinforce growth of the deposit base. Since deposits will increase, banks will be less dependent on expensive sources of loanable funds, such as wholesale markets or sales of equities. Also, relatively slow growth in loans will limit the need for these costly funds, but competition among banks for the lowest risk loans will be keen, which will trim margins on loans with the least amount of risk.

Due primarily to demographic trends, the long-term prospects for deposit growth also are excellent. The U.S. households' savings rate will rise from 3.5 percent in 2014 to 6 percent by 2020. Aging baby boomers will gravitate towards safer and more liquid assets. Also, immigrants are expected to accumulate more wealth and to remit less of their gross incomes to relatives living abroad.

In Georgia, the quality of personal, corporate, and business loans outstanding will improve. The proportion of non-current loans has declined for four straight years and is now below the national average. One reason we will see growth in corporate and business loans is that Georgia has landed major new economic development projects across many capital-intensive industries. A second reason to expect loan growth is that capacity utilization has nearly recovered to levels that provide stimulus to investment in plants and equipment. That is good for commercial and industrial lending.

After hitting a soft patch in 2014, corporate profits are expected

to rise in 2015, encouraging more companies to act on their plans to expand or invest. Export markets will be a positive factor when it comes to commercial and industrial lending. Approval of the Savannah Harbor deepening gives Georgia's logistics, transportation, and distribution firms the confidence to expand operations, generating demand for loans.

Improvements in housing market conditions will help to mitigate further damage to banks saddled with large concentrations of loans made during the boom to homebuilders or real estate developers. Indeed, housing markets have already improved enough to sharply limit bank failures.

Conditions in nonresidential real estate markets also have improved, but many areas still have too much underutilized or vacant retail and office space. Banks' willingness to make new loans—and the quality of their old loans—therefore will continue to be troubled by the glut of nonresidential real estate. Many of Georgia's banks were very exposed to the recession in commercial real estate markets because most short-term lending to businesses was secured by real estate. In 2015, banks will become less reluctant to make these loans now that commercial real estate prices are recovering.

A major problem for financial institutions is re-regulation. For example, the Wall Street Reform and Consumer Protection Act created new regulators, extended regulations into new areas, provided new consumer/investor protections, and gave regulators new abilities to define firms that create systemic risk. These new regulations increase costs for firms providing financial services, which will come primarily at the expense of net margins. Higher capital reserves and more oversight decrease the money that banks can lend and raise compliance costs, respectively. The new capital requirements are intended to make the banking system safer, but fail to address several primary causes of the financial crisis: financial institutions' tendency to use of pro-cyclical loan to value ratios, the moral hazard of deposit insurance and the FDIC, and the

pro-cyclical policies of Fannie Mae and Freddie Mac. Hence, the new regulations may do very little to actually prevent future financial crises.

For several years the Federal Reserve has strived to keep long- and short-term interest rates close to historically low levels. Consequently, the yield curve has been very flat. Net margin compression pushed many banks to purchase more assets with longer maturities, which means that they have taken on credit risks that could come back to haunt their balance sheets, if long-term interest rates rise substantially. Fortunately, it is likely that interest rates will increase modestly, with yields on the 10-year note rising to about 3.5 percent at the end of 2015.

Stockbrokers and Financial Planners

The short-term prospects for financial planners and stockbrokers calls for revenues to rise faster than GDP, reflecting growth in disposable personal income, increased employment, a probable uptick in the savings rate, and the recent wealth gains realized by many wealthy individuals. The long-run forecast for brokers is good, but not exuberant, because two major market reversals since 2000 damaged people's opinion of equities as an investment. In addition, more people are entering retirement, and that argues for asset allocations that favor bonds rather than stocks.

As concerns about the viability of Social Security and other pensions mount, people will take more responsibility for their own retirement incomes, and their growing investments will increase revenues derived from asset management and commissions. The relentless movement towards retirement plans based on defined contributions rather than defined benefits gives long-term support to the stock market. In the future, increases in the average retirement age also should help financial planners and stockbrokers.

Assuming that the financial markets and the overall economy continue to heal, the outlook for equities is slightly positive, which implies that trading activity probably will neither rise nor fall significantly.

Most companies will experience slightly higher profits in 2015 than in 2014, which should support equity markets. Since current stock valuations are a bit on the high side, a great many stocks probably will be range bound in 2015. Nonetheless, GDP growth should push up the broad market indices by about 4 percent.

On the negative side, the dollar's high value relative to many developed economies' currencies might discourage foreign investors from purchasing U.S. equities. Also, growing recognition that the American real estate market is in a sustainable recovery may prompt some investors to put more of their money into real estate, which could temper gains for other asset classes, including equities.

Insurance

Despite record underwriting capacity, sustained and broadly-based growth in the demand for insurance products means that firm market conditions will allow insurers to increase premiums. Barring major catastrophic events, property and casualty insurers are very likely to earn record levels of underwriting profits on personal lines. Overall demand for homeowners and car insurance will increase significantly. Insurance premiums will increase moderately.

In 2015, there will be an increase in demand for property and casualty insurance. The current up cycle for housing is boosting the number of new homeowners' and title insurance policies written, and moderately higher home prices in 2015 will lead to increases in insured amounts. Also, the number of homeowners who are unable to make their mortgage payments will diminish, so claim rates on home insurance policies will decline.

As conditions improve, people will spend more for expensive durable goods, such as cars, which will increase demand for property insurance. The need to increase auto insurance liability limits also will add to this demand.

Demand for commercial lines of insurance purchased by businesses will increase, too. The leaders will be workers' compensation and liability.

Nonetheless, intense competition among insurers will prevent premiums from rising very much for most commercial lines. The recent plunge in the prices paid for commercial properties, and very limited new office, hotel, retail, and industrial development are among the factors that will stymie premium increases and demand growth.

In the wake of the recession, jobs losses continued to cut demand for life insurance and related products. For a couple years, policy lapse rose and participation in employee benefit plans declined. Policy loans also increased. These adverse trends have turned for the better now, and further improvement is expected in 2015. Cost reductions also are possible for insurers, which could boost profits. The opportunities to cut costs mainly involve reducing distribution costs, which are especially high for companies with agency networks. The overall impact means modest profit growth in the coming year.

Over time, the combination of longer life expectancies, later first marriages, fewer children, less household debt, and lower home ownership rates will tend to reduce the need for traditional life insurance, but there also are some positive developments. Longer life expectancies imply lower mortality rates which potentially can increase insurers' or re-insurers' profit margins on term life insurance, especially on existing policies that were sold when life expectancies were shorter. Also, the baby boomlet should stimulate demand for traditional life insurance policies. Meanwhile, the demand for retirement-oriented products should benefit from longer life expectancies and less generous employer-paid pensions.

Annuities are the primary source of the industry's premiums, but low interest rates have restricted growth of this product. Nonetheless, decreases in the death rate make annuities more valuable. People are increasingly worried about outliving their assets, and this concern will spur the purchase of annuities and other investment-oriented products. Annuity sales also will benefit from a trend towards retiring at an older av-

erage age. As persons of all ages take more responsibility for their retirement planning, companies that provide financial planning and investment services will do well. Life insurers therefore are expected to provide a broader array of financial services, and are especially likely to emphasize financial planning for retirement rather than income protection.

Residential Real Estate Firms

More sales of new and existing single-family homes will boost commissions earned by Georgia's residential real estate brokerages. In addition, these firms will benefit from more active multi-unit housing markets. Some easing of tight credit standards, slightly more confidence in real estate as an investment, appreciating home prices, and the gradually strengthening job market are among the factors that will bolster recovery for residential real estate firms. Georgia's real estate industry also is well positioned to benefit from the retirement of the baby boomers—a strong demographic trend that is virtually locked in until approximately 2028.

Because the residential real estate industry overexpanded during the property bubble, competitive pressures are especially intense. Therefore, even as the volume of transactions increases, staffing levels will not increase too much, but average hours worked will rise significantly. Meanwhile, commercial real estate markets will become much more active in 2015. ❖

Retailers at the high and low ends will fare better than those aimed at the mid-market.

Retailers will see top-line growth and widening margins, now that nominal retail sales have rebounded. In 2015, the bricks-and-mortar merchants with the best prospects include wireless stores, off-price luxury stores, discounters, drug stores, and a variety of specialized groceries. The most popular malls will do very well, but noncompetitive ones will see more vacant storefronts. The retailers with the worst prospects are primarily those who face the most intense digital competition, including bookstores, video stores, shipping/postal stores, and stationery stores. Unionized grocery, office supply, and mid-priced department stores also will struggle in 2015.

Sales growth will be sustained by increases in overall employment, which will give more people the confidence and the money to spend more for retail goods. Due primarily to a healthier labor market, the rate of disposable personal income growth will be 5 percent higher in 2015, and that will bolster retail sales. The upturn in the housing market will be a second major force powering retail sales growth, especially sales of home goods.

But some headwinds still exist. Traditional retailers will see some restraint in spending, reflecting, in part, the lagged effects of very heavy job losses. The unemployment rate will remain high by historical standards, especially for those without many skills. In addition, the labor force participation rate will remain extremely depressed.

Because many people are less well off than they were before the recession, saving more of their paychecks to rebuild their wealth

will take priority over spending. Even though credit conditions are tighter than normal, credit will become more available to credit-worthy households, slowly lowering one barrier to retail sales growth. People also will be carrying considerably less debt than they did before the recession. But more deleveraging and ultimately a significantly higher savings rate are needed in the household sector, and neither of these factors is a good sign for mid-market retailers.

Aside from improving labor markets, the most important development underpinning retail sales growth is that the much heralded and much delayed upturn in housing. In almost all markets, home price depreciation has given way to home price appreciation, which is critical due to the very strong correlation between housing wealth and retail sales.

Sector Summary

Direction: moderate increase
Performance: average

Our forecast anticipates continued recovery in terms of housing activity, which will raise demand for furniture and other home furnishings.

Another plus will be continued modest increases in the number of tourists and business travelers, who will boost the prospects for stores located near major tourist attractions, convention centers, or clusters of hotels along major interstates.

The growing number of students will help retailers operating in Georgia's college towns, although many students will continue to spend frugally. Cutbacks in the HOPE scholarship program, concerns about massive student loan debt, and worries about job prospects after graduation will underscore this frugality.

In 2015, the combination of sales growth and shoppers' recent move towards retailers' private labels should lessen the pressure on net margins. Margins also will benefit from a slight shift away from basic

items towards discretionary products with higher margins. Renegotiated rents also will add to many retailers' net margins. Intense competition among surviving retailers will keep things tight, however.

Although liquidity has improved, many retailers—including those with high cash balances—will remain cautious about capital expenditures. Moderately higher sales volumes coupled with stiff competition (and some recent high-profile retail bankruptcies) encourages restructuring, but there is a vast amount of vacant space in most of Georgia's retail markets. There is also a plethora of outdated retail space in many places, much of which should be demolished or converted to other uses. Also, capital still will not be readily available to finance retail projects.

Spending to expand online distribution channels and supply chains instead of spending on actual stores will be a top priority for many online retailers, who compete to provide the best and fastest delivery. Next-day delivery would remove one of the main advantages that actual stores have over online retailers. The upshot is that outlays for retail stores or shopping centers will stay at or near cyclical lows in 2015.

The Bricks

Georgia's large regional malls, outlets, and mixed-use centers will continue to do better than many smaller malls, older neighborhood shopping centers, and isolated stores. Neighborhood and strip malls that focus on food or service providers will fare better than others, however. Some urban shopping districts will do very well, but many will see below-average sales growth. Small chains, independent specialty stores, and direct mail will remain an important part of the retail scene, but will claim a smaller share of total sales.

By focusing primarily on price, many types of discount stores and other value-oriented retailers will continue to prosper. In 2015, discounters' share of total retail sales will rise, but even they will face more competition from online retailers.

Walmart

As the world's largest retailer and Georgia's largest employer, Walmart will experience average gains in year-over-year sales in 2015, which will maintain the company's already dominant share of total retail sales. The fact that Walmart is now the nation's largest grocer validates both the super-center format and the concept of neighborhood stores. The company's extraordinary success across a broad spectrum of retail categories stems from its tremendous operating efficiencies, which are passed onto consumers in the form of low prices. The heavy economic burdens borne by consumers suggest that price alone is the deciding factor for many families, and that's an imperative that boosts Walmart's popularity.

Online Retailers

Research shows that most consumers who shop online are very satisfied in doing so, and encourage others to try it. Upper and upper-middle income consumers currently account for a bulk of online sales; and that demographic base shielded online merchants from the full fury of the recession and ensured above-average growth during the recovery. Most shoppers go online to save both money and time, two of the imperatives that are shaping the future of retailing in general. Websites also are becoming more functional, especially for mobile customers. Online shopping allows people to avoid the crowds and the traffic, to shop 24/7 from anywhere, and save gas. Finally, online shopping is an extremely accessible alternative for those who can't get to actual stores.

But there are potential problems: online competition is intense, which leads to margin compression. Shipping costs are a significant barrier to online sales, and are the main reason why online shoppers kill a transaction. More e-tailers now offer standard free shipping to create a competitive advantage, but this practice thins profit margins. Meanwhile, online merchants must contend with customers' concerns about

secure access and methods of payment, returning merchandise, spam, and post-purchase services. Large, established retailers, with name recognition and a store in nearly every large community, have been very successful at easing such concerns. It also seems that the recent loss of the online tax advantage will not damage sales much. ❖

Services-related business activity will continue to boost the state's economy.

Nearly all of the major services industries will grow in 2015, with only a few categories stagnating or declining. Businesses that provide necessities, such as health-care services, will continue to see revenue growth. In addition, many of the services-related industrial sectors are difficult to outsource, so they experience consistent domestic demand as the economy grows. Repair and maintenance services are expected to stay busy in the coming year as consumers continue to monitor discretionary spending. Luxury goods and services should see slight increases as people adapt to economic changes.

Staffing Services

Despite better corporate balance sheets, staffing services continue to thrive because many firms will opt to remain flexible and responsive to changing economic conditions. Temp agencies performed well throughout the recession and will continue to grow slowly as the economy recovers. The state's high unemployment rate will help the staffing industry in two ways. First, workers will be more willing to accept temporary positions, since permanent jobs may be scarce. Second, there continue to be many suitable temporary workers available now.

This industry will benefit from its increased focus on professional and technical workers, whose prospects were less affected by the recession. Also, after several years of disappointing raises, widespread corporate restructuring, cutbacks in healthcare benefits, and conversion of defined-benefit pension plans to defined-contribution pension plans, workers will be more open to considering temporary jobs. Employee

turnover may increase as the overall business climate thaws, creating more opportunities that may drive demand for professional staffing services and corporate recruiters.

Staffing and temp agencies will see continued growth in niche markets including medical and technical staffing. In 2015, there also should be more opportunities to provide staff to export-oriented companies, including those involved in logistics and distribution. Even prospects for firms that specialize in clerical, light industrial, and financial services may see slight improvements in the coming year.

Long term, firms that specialize in providing temporary or contingent workers will do well because companies depend on temporary workers to fill in for absent staff, to buffer cyclical shifts in business activity, and to meet predictable seasonal swings in demand. The increased use of do-

Sector Summary

Direction: large increase
Performance: above average

mestic outsourcing is an important factor behind the growing number of skilled workers who work on temporary assignments, even though the jobs may last for a year or more.

Legal Services

Law firms can expect slow and steady demand for their services in 2015. Law firms that provide services to businesses will benefit from minor increases in the number of business startups, expansions, and mergers and acquisitions. Businesses also typically devote more resources to litigation when corporate profits are on the upswing. Firms that did well during the recession on work related to company restructuring, insolvency, bankruptcy, and intellectual property may see a slower pace as the deep recession ends. In addition, the demand for paralegals, legal assistants, and clerks are expected to outpace the growth for full-time lawyers.

Larger firms will find the best opportunities in metropolitan Atlanta, but independent lawyers probably will fare best in rapidly growing communities. National firms will continue to expand their presence in Atlanta, too. The growth of Georgia's population of wealthy retirees will benefit lawyers who specialize in estate planning.

Looking beyond 2015, new laws and the increasing complexity of existing ones (particularly tax codes and health care) will continue to generate business for law firms. Long-term demand also will increase due to more litigation of intellectual property, patent law, energy, employee benefits, consumer safety, and environmental concerns.

Potential problems for the industry include political pressures to contain litigation costs, including constraints on the right to sue, caps on judgments, and more costly penalties for frivolous lawsuits. Additionally, underemployment for new law graduates combined with increases in tuition is putting more pressure on law schools. Another trend that will limit future business opportunities for legal firms is the expansion of many corporations' in-house legal departments. Finally, non-lawyers will continue to invade the traditional turf, and this is especially true of online legal services.

Health Care

Georgia's health care industry continues its expansion and will remain one of the best performing sectors in 2015. Last year, the federal Affordable Care Act introduced health insurance marketplaces for individuals who are ineligible for employee-based coverage and have pre-existing conditions. Over 300,000 people signed up for qualifying health plans through Georgia's health insurance exchange. Slight increases to government revenues should help Medicaid funding but the pressure will continue rise with cost. Still, Georgia's population growth, Medicare's prescription drug insurance plan, more use of health services, better management of operating expenses, and the increasing market power of health care provid-

ers will boost the industry's bottom line.

Hospitals' outpatient care facilities and specialty care centers will continue to experience solid growth in demand, and in-patient care facilities will see moderately higher demand. Large hospitals that provide general care for a wide range of health problems will face increased competition from physician-owned specialty hospitals, however. Freestanding diagnostic and imaging centers also will continue to capture market share from traditional hospitals.

Despite a better economy, challenges still exist because it is harder to collect funds from self-pay and uninsured patients than it is from insured patients. Many of the new plans being offered have very high deductibles that covered patients may not be able to afford. As labor market conditions improve, more Georgians will be eligible for employer-provided health insurance plans, but cost-saving measures are forcing employers to reduce health insurance coverage or to dramatically increase deductibles and co-payments. Four additional factors that will limit access to employer-provided health insurance are: many new jobs will be in smaller firms that are less likely to maintain generous medical benefits; employers' reliance on temporary workers, who often do not get health insurance; employers who switch to high-deductible insurance plans; and large companies that trim their retirees' medical benefits.

Another problem is that collecting payments from patients with medical insurance is becoming more difficult as insurance plans become more complex. Patients' higher co-payments, deductibles, and out-of-network treatments also tend to leave more bills unpaid. The increased flexibility of medical spending accounts as well as the introduction of health savings accounts that roll over unused funds should help to reduce collection problems slightly.

Positive long-term factors include a growth in older and wealthier consumers who will spend more of their money on health care; medical advances that save and/or prolong

life, creating demand for additional services; more need for rehabilitative services; and consumers' emphasis on superior care. Negative long-term trends include consumers who must bear the brunt of their own medical costs, and increased government control of the nation's healthcare delivery system. Also, as employer-provided insurance becomes less available and more expensive, and as the population ages, federal and state governments will be forced to bear more of these costs.

Childcare

The outlook for childcare firms remains consistent and positive. As the economy begins to generate new jobs, more parents will need this help, so providers should be able to charge enough to cover costs. The trend towards delayed child bearing in order to establish careers and incomes will help the industry, especially those centers that offer premium care. The industry will be helped by tax credits for earned income and dependent care, and from some tax-exempt employer-provided daycare benefits. Changes in welfare laws, which encouraged unmarried mothers to seek work, also will help.

Educational Services

In Georgia, above-average population growth will increase demand for educational services, because people need marketable skills to survive in a competitive labor market. Marginally higher government revenue collections should slow the spending decreases in publicly funded education; however, competition at the highest level will increase the demand for private schools, tutors, and test-prep services. As employment prospects increase, the opportunity cost of obtaining additional education may weaken, although employer-sponsored education and training potentially could help to offset the decreases. Higher education will continue to seek other revenue sources such as tuition increases and private donations as government funding slows. International students will continue to fill demand in graduate programs; however, potential immigration reform could have a sig-

nificant impact in coming years.

Long-term trends are favorable, since current and future jobs will require significant investment in higher education. K-12 demand will escalate, but schools will face the challenges of teaching more students while coping with dwindling budgets. In addition, Georgia's extremely low SAT scores will spur demand for supplemental educational services, and distance learning online also will thrive. ♦

Sustained economic growth will strengthen the industries that comprise this sector.

The demand for hotels continues to climb, even though there are fewer new properties, so occupancy rates will be high. The relatively tight market also means that room rates will be more expensive in 2015. The luxury segment has grown faster than other segments but will slow as the main driver in average daily rates growth. Facilities utilization should see a slight uptick but telecommunication services will continue to be challenged by those who bring connected mobile devices with them. Even so, revenue per available room is expected to rise along with the gradual improvement in the overall market, business travel, and fewer new hotels in the pipeline.

The lodging industry's overall revenues will roughly match gains in overall bookings with revenues from rooms growing at a similar rate to food and beverage operations. Revenues from spas, special interest packages, and other premium add-ons may see a slight increase, but revenues from telecommunications services and video on demand will continue to drop as more business travelers no longer rely on hotels for connectivity. While still a niche product in Georgia, new entrants into the market such as Airbnb, which utilizes the Web to make it easier for people to rent out unoccupied rooms in their homes, are a disruptive challenge to the established lodging industry.

Spending on luxury hotel rooms will continue to rise slowly throughout 2015. Upscale properties will benefit from slight upticks in meeting and convention activity. The slight expansion of convention travel should also help as more travelers bring companions with

them, and these travelers also spend money on food, beverages, and spas. The prospects remain the strong for mid-priced properties that attract corporate travelers and vacationers who choose nearby attractions. Less spending for travel by government employees dim some of these prospects, however.

Although the overall economy is recovering, there are still a few headwinds and downside risks for the lodging industry. Hotel property taxes, insurance costs, and security costs are expected to slowly rise; however, interest rates should remain low and stable through 2015. Hiring and maintaining staff will be a bit more challenging as unemployment continues to decline and employees seek other opportunities.

Sector Summary

Direction: moderate increase
Performance: average

Business Travel

Business travel will improve slightly as corporate profits continue to grow. Companies will continue to invest in teleconferencing technology, although key personnel will have funds available for travel when necessary. Travel to attend conventions in particular will see an increase due to improving business conditions. Corporate outlays for revenue-generating travel to meet clients will continue to rise.

Atlanta still maintains its position as an efficient and affordable city in which to conduct business or attend major events. Construction for Georgia State University's and Georgia Tech's new housing and research space has further expanded downtown's footprint. The College Football Hall of Fame and the National Center for Civil and Human Rights both opened 2014 and contribute to the appeal of Atlanta as a cultural and entertainment destination.

The region's hospitality industry is extremely sensitive to changes in

corporate profits and sales. Corporate profits and sales will continue increase slightly in 2015, but gains in sales will remain modest across a broad range of industries, with a few business categories experiencing declining sales or no growth. A reprieve in fuel prices should help the budget conscious, but travel will continue to be tight for many state and local governments and nonprofit organizations. The overall impact of these considerations is that even as GDP expands in 2015, the gains will be a smaller boost to spending on business travel than has been true in the past.

Leisure Travel

Vacation travel will continue to increase slowly. As employment rises and discretionary incomes stabilize, vacation and leisure travel will keep pace with overall economic activity.

The Atlanta airport's new international terminal should allow for more efficient travel and help the airport maintain its status as the world's busiest. Driven by the weak dollar and a growing global economy, the prospects for U.S.-bound international travel continue to be good, but long waits for visas, strict entry requirements, and fewer employment-related trips will remain barriers to faster growth. Based on the number of nonresident arrivals, Atlanta will remain one of the largest ports of entry, especially in the South.

Restaurants

The outlook for the restaurant industry is optimistic. Expenditures for restaurant meals will increase slightly, but rising food costs will continue to squeeze profits. Although some commodity prices have retreated from historic highs, many products, especially meats, will be expensive. The restaurant industry will continue to slowly add new jobs as the economy stabilizes and overall employment continues to rise. The price volatility and rising cost of food will impact margins, however, as restaurants strive to keep some less expensive items on their menus to attract cost-sensitive customers.

According to the National Restaurant Association, the hottest menu items continue to be locally sourced produce, meat, and seafood. Hyper-local (i.e., from restaurants' own gardens), farm- and estate-branded ingredients and nontraditional cuts of meat round out upcoming trends. Gluten-free/food allergy-conscious items, and smaller portions are also becoming more popular.

Inexpensive quick-casual restaurants and fine dining will do slightly better than mid-priced restaurants and fast food outlets; however, higher priced inputs will still challenge all consumers. Thawing conditions for business travel and corporate expense accounts will boost higher priced restaurants in 2015. Menu adjustments that emphasize freshly prepared gourmet sandwiches, salads, and soups will help fast food restaurants partially recoup recent losses in market share to quick-casual restaurants, but many consumers still associate fast food restaurants with less healthy options. Grocery stores, especially in metro areas, will continue to offer a wider selection of freshly prepared foods on premises, directly competing with quick-service restaurants. Hotel restaurants, bars and caterers, and commercial cafeterias' business will see small increases in patronage. ❖

The forecast calls for moderate growth, so state and local governments' budgets should stabilize.

Government employment—federal, state, and local—accounts for 17 percent of Georgia's jobs. With one out of every six employees in the state working for the government, and with most Georgians using government services, the trends affecting this sector are being closely watched.

Government services are paid for by a variety of federal, state, and local taxes and fees, thus the level of overall economic activity dictates the levels of government funding and the quality and availability of government services. With Georgia's economy forecasted to grow at a rate of 3.2 percent, and with incomes rising by 5.4 percent in 2015, funding of the state and local governments should improve accordingly, as the increased number of jobs results in higher incomes and more taxable sales.

Although state revenues recovered from the recession, they remain below pre-recession levels on a per capita basis. Revenue growth is expected to support state government activities in 2015 at levels similar to the previous year, with no new budget cuts required. The state is expected to meet mandatory growth requirements for education and health care, but the effects of several years of budget cuts will continue to be felt.

Individual income and sales taxes together comprise almost 75 percent of state revenues, with individual income taxes contributing 45 percent, and sales taxes 29 percent). With the improving economy, Georgia's income tax revenue has been rising steadily since 2009, but

sales and use tax revenues climbed at a much slower rate. With slightly better employment prospects across the state forecasted for 2015, both income and sales revenues should also climb, especially in Atlanta, Gainesville, and Savannah, where employment gains surpass the state average.

Georgia's local governments and school districts are affected by the condition of state and federal finances, but depend on property taxes as a major source of their revenue. The existing home values across the state are on the mend, but remain well below the pre-recession peak. In 2014, the mid-year statewide purchase-only house price index stood at the 2008 level. The time lag in property value assessment, and local governments' ability to raise millage rates muted some of the effects of recession-associated declines in property values. Areas affected

Sector Summary

Direction: small decrease
Performance: worse than all others

by especially high foreclosure rates are likely to see more of a long-term impact, however.

School districts are especially sensitive to changes in property values, since local revenues provide, on average, 41 percent of their funding. For school districts located in areas affected by high foreclosure rates and declining incomes during the recession and its aftermath, the incline in the statewide or even metro-wide house price index may not translate into much improvement of their financial situation. The uptick in new residential construction activity across the state, led by counties within the Atlanta, Augusta, and Savannah MSAs, will expand the property tax base in some of the areas most affected by shrinking property tax digests, however.

The number of government jobs has fallen every year since 2009, with some of the steepest percentage

decreases taking place in 2014, with an estimated 9,500 jobs expected to be cut. The downward trend will continue in 2015, but employment losses will taper off to just 0.1 percent. In 2014, the deepest job cuts were made by federal government (2.4 percent, most of them military-related), followed by state and local governments (1.3 percent and 1 percent, respectively).

According to the most recent data available, earnings from government jobs contributed 12.7 percent to personal income in Georgia (federal government totaling 4.5 percent, state and local government 8.2 percent). In addition, government transfer receipts, including retirement, Social Security, disability insurance, Medicare, Medicaid, unemployment insurance, food stamps, military medical insurance, and veterans' benefits, comprised 17.5 percent of personal income, and are the fastest growing element of personal income in Georgia. While income derived from earnings and investments increased by 46 percent and 66 percent, respectively, between 2000 and 2013, income derived from transfer receipts increased by 159 percent.

The portion of state income contributed by government transfer receipts remains at elevated levels despite the improving economy. Of the three largest elements of government's payments to individuals, income maintenance benefits were the fastest growing in the last decade, followed by retirement and medical benefits. With slow income gains, and an aging population, the increase in transfer payments is expected to continue, and further strain government finances at all levels.❖

In general, the life sciences industry has fared better than Georgia's overall economy.

Georgia's life sciences industry, comprised of a large medical devices and supplies manufacturing sector, strong diagnostics, and increasingly visible biopharmaceutical and biotechnology industries, benefits from the presence of large and successful research institutions that anchor the industry in Atlanta, Athens, and Augusta. The life sciences industry also includes a thriving health IT industry, diagnostics, and agricultural biotech.

As a whole, Georgia's life sciences industry grew jobs at a rate below the state average in 2013, with the combined workforce expanding by 1.6 percent. Preliminary data show pharmaceutical manufacturing, medical and diagnostic labs, and blood and organ banks increased their workforces, while some declines occurred in biotechnology and life sciences equipment and supplies manufacturing. With several important life sciences company expansions and new business locations announced in 2013 and 2014, the pace of growth of this industry in Georgia is likely to accelerate in the coming years.

Life sciences industries will see additional expenses resulting from the Affordable Care Act, but most of these expenses will be offset by increased demand produced by the expanded number of people covered by health insurance. Even though the final impact of the expanded consumer base is uncertain, most analysts expect a positive long-term balance, with effects providing a positive impetus to the industry after 2014. In addition, the aging populations, both in the U.S. and elsewhere, will certainly boost the demand for pharmaceuticals, medical devices, and diagnostic testing. Individual

consumers, health insurance companies, and governments will closely watch the dollars spent on these products, however; thus putting a squeeze on prices.

Although the manufacturers of brand name drugs will be exposed to the effects of patent expirations through 2015, most experts agree that the revenue losses related to the patent cliff peaked three years ago. In the coming years, the losses may be mitigated by the complexity involved in producing generic versions of biologic drugs, and, therefore, fewer generic competitors hitting the market. The increasing number of new products introduced to the market in the future will also help the bottom line.

The combined effects of patent expirations and price pressures

Sector Summary

Direction: large increase
Performance: better than most

will make it imperative for major drug manufacturers to increase the number of new products entering the market. This should improve the long-term prospects for smaller drug discovery firms. With over 80 percent of prescription drug purchases in the United States going to generics, the long-term prospects for this part of the pharmaceutical sector are promising.

Pharmaceutical patent expirations and the search for new pharmaceutical products create opportunities for biotechnology firms, an increasingly important partner in product discovery for the pharmaceutical industry. The acquisitions of smaller biotechnology firms by larger companies may result in stagnant employment in the biotechnology industry nationwide, however, even as their revenues increase.

Although promising new technologies and products assure positive prospects for the biotechnology industry in Georgia, funding is an issue. After several years of strong per-

formance, these firms face difficulties in raising venture capital, which fell from close to \$40 million in 2007 to almost nothing in 2011. Since then, investments trickled in with \$13 million raised in the first quarter of 2014. Funding from the National Institute of Health, another important source of funding for biotechnology companies and research institutes has also declined in recent years with the federal government budget cuts.

As a whole, Georgia's relatively large and growing medical devices and supplies manufacturing industry weathered the recession with more jobs in 2013 than in pre-recession 2007. This innovation-driven industry has good prospects for growth, with new products to meet an increased demand from the aging population here and abroad, and the increased pool of patients covered by health insurance. The new excise tax and the possibility of additional regulation in the medical devices sector may present challenges to the companies' revenues, however. Nonetheless, several medical devices manufacturers decided to open new facilities or expand the existing ones in Georgia recently, creating new jobs to be filled soon.

The trend towards more efficient delivery of health care favors growth in the medical and diagnostic laboratories sector, but, at the same time, emphasis on cost savings may produce the opposite effect. Adding to the uncertainty, the industry is also facing rapid technological and regulatory changes.

Unlike pharmaceutical and medical devices manufacturing, medical laboratories are less sensitive to globalization, and tend to cluster in areas with large and growing populations. The recent advances in telemedicine will open new opportunities for these firms. ❖

The growth potential of Georgia's farm industry is tempered by economic uncertainties and the weather.

Total poultry production is expected to increase in 2015. In the red meat sector, however, total production is expected to be down. The trend towards lower farm milk prices that began in the last quarter of 2014 will continue into 2015.

Overall price prospects for 2015 are expected to be lower for corn, soybeans, and wheat, and slightly better for peanuts. Georgia's cotton acreage is expected to remain about the same or decrease slightly. Prices for the 2015 crop, however, are not very promising. Vegetable prices are expected to increase in the coming year.

The green industry is in for more of the same if spending cuts are implemented and consumers' disposable income drops. The timber industry is poised for growth as the demand for timber is expected to outpace supply.

Poultry and Eggs

World economic growth is forecast to accelerate next year, rising from 2.7 percent in 2014 to 3.1 percent in 2015, while global trade is set to expand at a higher rate of 5.5 percent in 2015. However, the growth in global trade may not help the poultry industry as poultry exports are forecast to decrease by \$100 million to \$6.1 billion on less robust poultry meat and egg export volumes. This decrease can be attributed, in part, to the Russian ban on U.S. agricultural products, which totaled 46.8 million pounds in 2014.

On the bright side, continued growth of the domestic economy will boost broiler demand. One factor affecting the demand for poultry is

lower beef production. The decrease in beef production and corresponding higher beef prices will cause consumers to increase their demand for broilers. Integrators are responding to declines in feed costs, relatively strong prices and continued growth in the domestic economy, and are increasing broiler production. Broiler producers are expected to increase bird numbers more rapidly than previously forecast for 2015 as returns are expected to be more favorable. Lower feed prices are expected to increase the average weights at slaughter, adding to higher production. Broiler production in 2015 is forecast at 39.3 billion pounds, 2.5 percent higher than in 2014. Thus, the increase in broiler production will be a combination of more birds and higher slaughter weights.

Total egg production—table and hatching eggs—is forecast at 8.2 billion dozen in 2015, up 1.4 percent from 2014. Table egg production is

Sector Summary

Direction: moderate increase
Performance: better than some

expected to increase by 1.3 percent over 2014 production to 7.07 billion dozen, and is expected to remain stable throughout 2015. If this forecast holds true, this would be the seventh consecutive year that table egg production has expanded. In response to high egg prices in 2014, there is an incentive to expand production in 2015 in anticipation of continued high prices. Hatching egg production also is expected to increase by 3 percent over 2014 to 1.1 billion dozen, largely based on the forecast for an expansion in broiler meat production into 2015.

Beef and Pork

Weaned calf and feeder cattle prices in Georgia and the U.S. set records in 2014. As of August 2014, year-to-date auction market prices for 500- to 600-pound steers averaged above \$200 per hundredweight (CWT), with 700- to 800-pound

steers averaging nearly \$168 per CWT. However, there were times during the year when 500- to 600-pound calves were fetching more than \$250 per CWT and 700- to 800-pound calves brought more than \$225 per CWT. Converting these prices to a value-per-head basis amounts to \$1,250 to \$1,800 for weaned calves and feeder cattle, depending on the marketed weight.

Looking forward to 2015, feeder cattle and beef supplies are expected to decline. These lower supplies, combined with cheap corn, will result in continued strong calf and feeder cattle prices.

Beef production is expected to be down almost 3 percent in 2015, following a 5.5 percent decline in 2014. Even though all beef cattle prices have been historically high in 2014, herd expansion is not yet underway. The net effect will be continued strong beef and cattle prices, with substantial profitability for cow-calf producers in Georgia not only in 2015, but also likely for 2016 and 2017.

Pork producers had a good year, with record hog and pork cutout prices combined with cheap corn. According to the Iowa State University Extension, returns for farrow-finish producers averaged more than \$70 per head through July. These profits occurred even though pork production continued to suffer as a result of the porcine epidemic diarrhea (PED) virus that has ravaged the industry.

Pork production in 2014 was down about 2 percent. This trend will continue into 2015, as pork production declines another 2 percent. The result will be continued favorable hog prices hovering around \$100 per CWT on a carcass-weight basis. These prices, combined with cheap corn and declining soybean meal prices, will provide positive profits to hog producers in 2015.

Dairy

Georgia's dairy industry continues to recover, thanks to improving producer profitability. Based on preliminary reports, milk production may have grown by as much as 7 percent in 2014 in response to record

high U.S. milk prices. The state is currently home to 235 dairy farms, which collectively produced about 1.7 billion pounds of milk valued at an estimated \$452 million in 2014, making the dairy industry the state's ninth most important in terms of total farm gate value. The turnaround is attributable to expansion of existing farms and the use of more intensive production practices in the wake of a series of sequential record high milk prices occurring between 2007 and 2014.

Farm milk prices are highly volatile and are driven by both national and international supply and demand conditions. The drought-induced high feed prices of 2012 and 2013 moderated in 2014 and will continue to do so in 2015, improving the feed-cost situation for dairy farmers. 2014 witnessed new record high milk prices driven by strong domestic demand and declining stocks of manufactured products, such as cheese and butter, coupled with an equally strong export demand and U.S. prices that were very competitive in the world market. The record high prices of 2014 set the stage for increased milk production in 2015, as producers began to implement more intensive feeding practices, lower culling rates and to add additional replacement cows to their herds. Consequently, domestic milk production will continue to increase well into 2015. The result will be a reversal in the decline of dairy product stocks and downward pressure on U.S. farm milk prices, which may be expected to decline by about 12 percent to 14 percent, or by roughly \$2.50 to \$3.50 per 100 pounds, according to U.S. Department of Agriculture estimates.

The trend towards increased milk production and lower farm milk prices that began in the last quarter of 2014 will continue into 2015. Georgia producers are likely to see a \$4 to \$5 per hundredweight decrease from 2014 price levels during 2015. For producers realizing an average mailbox milk price of around \$27 per hundredweight during 2014, this would translate into an expected price range of between \$22 and \$23 per hundredweight for 2015.

Cotton

Georgia farmers planted 1.45 million acres of cotton in 2014—up 5.8 percent from 2013. However, the state's cotton acreage could be down slightly in 2015.

Cotton prices declined about 20 percent from early May to mid-September 2014. This decline was due primarily to much-improved U.S. crop conditions for 2014 as compared to the previous three years. Prices are now below the cost of production for most growers.

Unfortunately, current forward prices for 2015 production are also not very promising. This could lead to the conclusion that Georgia and U.S. cotton acreage could be down in 2015, but that may not be the case. For Georgia farmers and for farmers in some other parts of the Cotton Belt, there are few viable alternatives to cotton. Prices for all major row crops, not just cotton, are down from previous years. Planting decisions for 2015 will not be easy.

The outlook for 2015 will be shaped by several factors: decline in crop conditions late in the growing season could lead to the U.S. crop being smaller than expected; because of low prices, U.S. and world acreage and production could decline in 2015; and world cotton demand, after a 14 percent decline from 2009 to 2011, has increased for three consecutive years.

Prices for 2015 cotton may improve from current levels as we move into the production year. U.S. acreage is likely to decline due to competition from corn and soybeans in areas where those crops have an agronomic and economic advantage when cotton prices are low. Georgia acreage may stay relatively stable or decline slightly, losing some acreage to peanuts and less to soybeans, but perhaps gaining acreage from corn.

Peanuts and Grains

A reduction of the peanut surplus—a result of the 2012 bumper crop—is still working through the peanut market. Just under a million tons of peanuts were carried over into the 2014-2015 marketing year. In 2014, peanut acreage increased in the U.S. and Georgia by 26 percent

and 38 percent respectively, to 1.3 million acres in the U.S. and 595,000 acres in Georgia. The increase in acreage reflects partly on the relative prices of corn, cotton and soybeans as compared to peanuts as well as a return to a normal rotation of peanuts on farms that shifted towards more corn in 2013.

The passage of the 2014 Farm Bill and crop insurance's projected price of \$536 per ton may have also influenced some farmers to increase peanut acreage by looking at the safety net in the midst of lower prices. The 2014 crop has been a challenge due to high production costs and drought conditions in south Georgia. Irrigated peanuts were watered heavily, hot temperatures led to more disease and insect pressure and damage was abnormally high. Crop conditions fell through August and into September. Some dryland fields of peanuts will not be harvested, and low quality is going to be a concern.

The 2014 crop year looks to be similar to the 2011 crop, when Georgia experienced a higher percentage of low-grade peanuts and averaged 3,625 pounds per acre. The U.S. Department of Agriculture projects Georgia's 2014 average yield at 4,000 pounds per acre and the U.S. average yield at 3,800 pounds per acre. If these yields are realized, 2014 peanut production will average 2.5 million tons. The size of the 2014 peanut crop could be smaller than projected, leading to a firmer price outlook for 2015 than originally expected. The carry-over stocks would basically stay level, providing at least a five-month supply. A three-month supply is needed to ensure shelling at full capacity until new crop peanuts are harvested. The market shouldn't be worried about the quantity of peanuts, but the quality of the 2014 crop is a concern. Prices will improve for shelled peanuts, but have resistance around 50 cents per pound. Prices to farmers will likely remain stable and be similar to early 2014 prices, when \$425-per-ton contracts were offered. Corn and cotton prices are not expected to pull peanut prices up in 2015, but could pull them down.

Corn, soybeans and wheat are in a bear market, as far as prices are concerned. Corn led the charge up in prices and is now leading the way down to pre-2008 levels. The average U.S. corn yield is projected to be a record 172 bushels per acre. Total production is estimated to reach a record 14.4 billion bushels. Planted acres were down 3.8 million acres to 91.6 million, but a 13-bushel increase in yield more than offset the acreage reduction. Ethanol and use of byproducts is projected flat at 5.1 billion bushels. Feed and residual use is expected to rise 3 percent to 5.325 billion bushels, and food use is expected to rise 2 percent to 1.4 billion bushels. Exports are retreating with larger world supply, falling to 1.7 billion bushels. Prices received by farmers will average between \$3.20 and \$3.80 per bushel. Georgia planted 380,000 acres of corn and averaged 167 bushels per acre. Georgia prices will likely range between \$3.50 and \$4 per bushel in 2015.

Georgia soybean acreage increased to 280,000 acres, in spite of wheat acres falling. Soybean prices remained firmer than corn and cotton until August, when the bottom fell out due to a record U.S. crop projection. U.S. soybean production in 2014 will exceed 4 billion bushels, a new record—the average yield estimated at 46.6 bushels per acre on 84.8 million planted acres. Prices are expected to average around \$10 per bushel. The 2014 average yield for Georgia soybeans is estimated to be 39 bushels per acre, one bushel less than 2013 record.

U.S. wheat yields were down in 2014 to 43.9 bushels per acre on 56.5 million planted acres in the U.S. Total production was down 100 million bushels to 2 billion bushels. However, stocks are building as feed use and exports are down, with the trend expected to continue. Georgia wheat acres fell from 420,000 to 300,000 in 2014. The average yield for Georgia fell by five bushels to 55 bushels per acre. The expectation for 2015 is for fewer acres of wheat to be planted in Georgia due to lower prices and dry weather.

Fruits and Vegetables

The U.S. fruits and nuts industry (excluding melons) contributes about \$18 billion in farm cash receipts annually. Although the United States is the largest pecan-producing country in the world, and Georgia still enjoys its premier producing-state status, pecans still account for 15 percent of all U.S.-imported tree nuts. Other producing countries include Australia, Brazil, Israel, Mexico, Peru and South Africa. However, Mexican pecans dominate the U.S. import market.

For the past two decades, U.S. import and demand for tree nuts significantly increased, especially for non-traditional tropical crops such as cashew nuts and Brazil nuts. According to report by the U.S. Department of Agriculture's Economic Research Service, cashew nuts alone contributed approximately 50 percent of total tree nuts import supplies to the United States, compared to 6 percent for Brazil nuts. Surprisingly, Bolivia is the leading U.S. exporter of Brazil nuts, followed by Brazil. The United States produces lots of watermelons; major producing states include Florida, Georgia, California and Texas. Although these four states are responsible for roughly 65 percent of the country's total production, the U.S. is ranked fifth in the world after China, Turkey, Iran, and Brazil. Despite the huge production and value of \$520.8 million, the U.S. is still the largest importer of watermelon, followed by China (the number one-ranking producing country) and other countries like Germany, Canada, and Poland.

Historically, cantaloupe dominated the U.S. import market share for decades. But that has now changed as both cantaloupe and watermelon contribute equal market shares of 40 percent. The major suppliers of U.S. melons are, as expected, Mexico first, followed by Guatemala, Honduras, Costa Rica, and Nicaragua. On the other hand, the U.S. is ranked third in watermelon and fourth in cantaloupe export. The United States exports its melons to Canada, Mexico and Japan.

More than a decade ago, Georgia's vegetable industry farm receipts

stood at slightly above \$500,000. Today, that figure has doubled. Reasons for this rapid increase in farm receipts are numerous: the introduction of improved planting materials with better fruit-set and disease-resistant cultivars, the introduction of precision agriculture, improved water use and spray programs, the use of plasti-culture and various mulches for both summer- and winter-season crops, the introduction of shed and high-tunnel production systems, the development and implementation of methyl bromide replacement alternatives and new management strategies for tomato spotted wilt virus are a few classic examples of why overall vegetable average yields are steadily on the rise.

Despite the forecasted decrease in most 2015 agricultural export values for crops such as oilseeds and products, grain and feed, corn and wheat, cotton, poultry and dairy products, this could explain why the export forecasts for horticultural crops are up by 8.5 percent, or \$2.9 billion. In 2011, the per-capita consumption for selected vegetables, such as onion, tomato, pepper, cucumber, sweet corn, carrots, snap beans and cabbage, all of which are grown in Georgia, was 384.3 pounds compared to 409.8 pounds (including melon), which happens to be one of the top commercial crops in Georgia. With the current 0.7 percent growth of 317 million in the U.S. population, increase in per-capita use and increased public awareness of healthy living and healthy feeding, all economic indicators point to a continuous increase in vegetable consumption in 2015.

Honey

The 2014 honey crop for the Piedmont region, along with north and south Georgia, was above average for most crops. Longer-than-average nectar flows resulted in record amounts in certain parts of the state. However, location determined whether or not flows were above or below average. In central and northern areas, spring crop estimates ranged 15 to 20 percent above normal yield. Sourwood was the only exception, with just average to slightly

above average flows. Pure sourwood, untainted with sumac or other floral sources, was difficult to find. The extended nectar flow contaminated most crops of sourwood, so prices for pure sourwood are up 50 cents per pound. Higher-than-normal yields of gallberry, cotton and wildflower were harvested from southern regions of Georgia, with honey prices increasing 10 to 15 cents per pound.

Yields of tupelo honey, on the other hand, were extremely low. Rainy weather was to blame. During the weeks when the tupelo trees were in bloom, the rain set in and kept the bees inside the hives instead of working the blooms. Because of supply and demand, prices for tupelo honey increased over a \$1 per pound.

Colony failure has not been as pronounced in 2014 as in previous years. Weather patterns were closer to the norm, allowing bees to forage consecutive days in a row. Supplemental feeding is only being reported in colonies in which too much honey was removed. Yet, without this feed, colonies would definitely starve, so feeding is highly encouraged.

The demand for pollination services looks somewhat promising for the upcoming 2015 season. Once again, truckloads of bees from Georgia will be heading west by mid-January as fees for almond contracts will be at least equal to last year. However, if severe drought conditions continue in California, the demand for pollinators may be greatly reduced, which may cause prices for pollination contracts to decrease.

Timber

Forestry contributes about \$30 billion annually to Georgia's GDP. If Georgia were a country, it would rank seventh in the world in forest products production. The base of this vibrant economic sector is Georgia's 24 million acres of forestland, about 70 percent of which are privately owned.

Post recession, there has been a rebound in production for pulp, solid wood, engineered wood and biomass for energy to supply domestic and foreign markets. Roughly a third of all exports from Georgia ports are forest products.

As the nation's and Georgia's housing market has slowly rebounded, so has forest products demand. Optimism abounds in the forest sector for continued economic recovery. Two large Canadian sawmill companies have purchased eight sawmills in Georgia in the last 18 months. Prices for raw forest products on the stump are rising.

The emergence of a recent tremendous demand for energy wood by European utilities has given rise to a flourishing trade in wood pellets for export to Europe. The largest wood pellet plant in the U.S. is in Georgia, and its pellets are shipped through Savannah. With several major European utilities increasing their generating capacity—such as Drax in London, the demand for woody biomass is expected to sharply rise. Since this is a competitor for pulpwood, landowners should see increased price competition to their benefit.

Georgia is shipping some raw logs in containers to China. While the Pacific Northwest is better located for this market, the U.S. South, with its huge privately owned resource base, will see increasing opportunities with the soon to be completed widening of the Panama Canal.

Farmland

In 2014, the national and state farm economies will experience relatively slower growth in their asset, debt, and equity balances. On the asset side, national farmland values registered an annual growth rate of only 8.1 percent in 2014, after experiencing an almost 10 percent growth last year. Georgia farmland values remained at their 2013 level of \$3,300 per acre. U.S. cropland values grew by only 7.6 percent in 2014 and could not duplicate the 2012 and 2013 growth rates of 12.4 percent and 13.7 percent, respectively. For Georgia crop farms, irrigated cropland values grew by 9.9 percent—the highest growth rate since 2006—but this feat was offset by the declining trend in non-irrigated cropland values that persisted in 2014, with a 3.9 percent decrease over the 2013 level.