Georgia Economic Ottook



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THE 2013 GEORGIA ECONOMIC OUTLOOK (ISSN 0884-1179) represents the personal views of the research team and not necessarily those of The University of Georgia or the Terry College of Business.

For more information on the Selig Center, visit our website at www.selig.uga.edu

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F O R E W O R D



The deep recession may be over, but Georgia's economic recovery still is very weak. The main trouble spots continue to be financial markets and government restructuring, and jittery consumers are being very cautious. The details of Georgia's 2013 prospects—including our assessment of vulnerabilities—are presented in this volume.

The *Georgia Economic Outlook 2013* is a product of the Terry College's Selig Center for Economic Growth. This publication accompanies eight economic outlook conferences presented around Georgia in November 2012 through January 2013. General arrangements for each conference are made by the Terry College's Office of Corporate Relations.

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 thirtieth edition of this prizewinning publication was edited by Lorena Akioka, who has guided the *Outlook* since its first edition.

We gratefully acknowledge the economic data provided by IHS Global Insight, and the ongoing support of the Selig family. We also acknowledge the support of the many statewide and local sponsors of the economic outlook conferences.

> Robert T. Sumichrast, Dean Simon S. Selig, Jr. Chair for Economic Growth

The National Outlook

he Terry College's 2013 baseline U.S. economic forecast indicates that the economic recovery that began in the second half of 2009 will be sustained, but the rate of 2013 GDP growth (1.8 percent) will be very low. This means the economic recovery will be extremely vulnerable to economic shocks and/or policy mistakes. It also reflects the expectation of tighter federal fiscal policy, reduced spending by many state and local governments, the lagged effects of the housing bust, disciplined spending by consumers, and turmoil in the European Union. Furthermore, it appears that there will be very little momentum exiting from 2012.

Uncertainty about the sustainability of the U.S. economic expansion—and the anxiety that accompanies it—will not decline in 2013, and the odds of another recession are still elevated. The risk of recession is 40 percent, which is the same as we estimated at this time last year.

In 2013, private final domestic demand rather than fiscal stimulus or net exports will be the primary driver of U.S. GDP growth. Indeed, the government sector will subtract from GDP growth. Since fiscal policy will be quite restrictive, the Federal Reserve will need to be unusually supportive of growth in private demand by maintaining a monetary policy stance that is very simulative, i.e., characterized by near zero short-term policy interest rates into 2015.

In order to reduce the stresses associated with widespread domestic deleveraging as well as the contraction of bank reserves stemming from sales of U.S. based assets by the EU, the Federal Reserve will strive to keep inflation-adjusted interest rates negative and inflation expectations positive (but not too high). One side effect of massive quantitative easing is that yields on many types of financial assets have been and will remain quite low. The Federal Reserve has

done a good job of keeping both deflation and another recession at bay, but the marginal benefits of each additional round of quantitative easing has diminished. That's partially because much of the new money created simply gets held as cash (or near-cash equivalents) and does not get put to work in the economy. Meanwhile, the federal government has yet to effectively address its massive structural budget problems, which is a prerequisite to moving from a sub-par growth trajectory to one that is above average.

A fundamental reason why GDP growth will be subdued is because cautious consumers will restrain spending. Moreover, many households will still be deleveraging, and will be especially reluctant to take on risk. Deleveraging means that money that people might have spent on goods and services will go to paying down debt instead. Housing will make a positive contribution to GDP growth, however. GDP growth of our major trading partners will be slow in 2013, which will limit exports growth while the pace of imports growth will be moderate. Spending on new office space and factories will be a neutral factor in terms of real GDP growth; and spending on inventories is expected to subtract slightly from it.

Despite ample liquidity, the U.S. banking system is not completely fixed. We will continue to feel the aftershocks of the financial panic that seized up the credit markets in September 2008. Europe's banking and sovereign wealth problems are still far from resolved, and could precipitate a full-blown financial crisis that would spread quickly to U.S. financial markets. The historical correlation between these two is extremely high, implying that a significant deepening of the EU's ongoing recession will push us into recession. Meanwhile, due to disappointing revenue collections and depleted reserves, many state and local governments will reduce spending in 2013, creating substantial fiscal drag.

The labor market is recovering much more slowly than production, so—barring another recession—it will be 2015 before the U.S. replaces the 8.8 million jobs lost. Of course, that's a heroic assumption given that the year-over-year pace of GDP growth is likely to remain below—or only slightly above—2 percent.

As was the case in 2010-12, the expectation that economic growth will be sustained depends on several positive developments. First, credit markets must continue to thaw. Second, new jobs (and slightly higher wages) must be created in the private sector, which will boost consumers' inflation-adjusted buying power. Third, businesses' spending for new equipment and software will continue to expand solidly, motivated by a need to expand capacity rather than to improve efficiency. Next, crude oil and gasoline prices should remain at roughly the same as in mid-2012. In addition, sales of both new and existing homes as well as spending on new home construction will increase. Finally, limited inflation should reassure the bond markets and the Federal Reserve. If most of these expectations are realized and major policy mistakes (e.g., the fiscal cliff) and external shocks (e.g., major oil supply interruptions) are avoided, then the U.S. economy will experience sustained, but slow-paced expansion.

But powerful headwinds still exist: uncertainty is extreme in many critical federal government policy areas, including the budget, the tax code, and regulation. These uncertainties undermine confidence. Spending by many state and local governments will continue to drop, although the severity of the declines will diminish. The EU is in recession and its policy regarding its sovereign debt problems is not inspiring confidence anywhere. Efforts by the federal government to re-regulate certain industries, or to protect atrisk economic sectors, will have the unintended consequence of reducing U.S. job growth. Consumers will exercise restraint due to deleveraging, the lagged effects of massive wealth losses, volatility in the financial markets, and heightened uncertainty.

Housing

The prolonged free fall in single-family homebuilding is over. In 2013, the number of single-family home starts for new construction will increase by about 15 percent. Nonetheless, the underlying demand for housing remains quite weak despite record low mortgage rates and drastically reduced home prices.

As we predicted, existing home prices stabilized in 2012, but the huge inventory of unsold homes will limit home price appreciation for several years. Shadow inventory will be a huge problem, especially in foreclosure-ridden markets. Still, existing home prices will rise by about 3 percent in 2013.

Both the single- and multi-unit residential construction subsectors will contribute to GDP growth. This broadly based upturn in housing activity will add 0.3 percent to U.S. GDP, only slightly more than the 0.2 percent estimated for 2012. In the near future, the performance of the housing market will depend primarily on the performance of the labor market. Modest employment and personal income growth are expected in 2013, factors that should bolster consumer confidence.

Mortgage rates will remain very attractive into 2015. Home mortgages also should be somewhat easier to obtain. Credit conditions will ease due to the stabilization of home values in most markets as well as to slowly improving macroeconomic conditions. But credit will remain extremely tight for many borrowers. Many people 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.

A potentially powerful demand side support for homebuilding, however, will be the rebound in the rate of household formation, which was quite depressed in the past few years. But this uptrend will not gain traction quickly. Job growth is the key to unlocking the pent-up demand for housing that accrued while young adults opted to live with their parents

a bit longer. Moreover, better job prospects would partially reverse the recent surge in college enrollment and might also slow the rate at which student loan debt is piling up.

One important reason why housing activity will improve is that recent substantial house price declines have made homes much more affordable. Indeed, it is very likely that these price declines were way overdone in many markets. Potential buyers increasingly will recognize that the lower home prices and record low mortgage rates that prevailed since the homebuvers' tax credit expired are actually worth much more than the tax credits. Higher rents also will encourage renters to become homeowners, but that will not happen until they overcome their fears about additional home price depreciation.

Nonresidential Construction

Private spending for new nonresidential construction will increase in 2013, marking the beginning of a new up cycle. But because a large amount of debt will mature in 2013, credit conditions will remain tight for those looking to build office buildings and stores. This constitutes a primary headwind, especially for markets with high vacancy rates. Employment and population growth gradually will generate gains in net occupancy, however. A weak dollar relative to many foreign currencies also should stimulate foreign investors' interest in U.S. office buildings

Less positively, spending for public funded buildings will decrease in many cities. The primary problems are that the recession has diminished collections from sales and use taxes while weak real estate markets have led to downward—or at least slowed upward—adjustments in assessed property values. Typically these adjustments lag movements in market prices by a year or more; thus, for a couple more years, property tax bases will not support revenue collections very much.

Consumer Spending

Our forecast expects that consumers' inflation-adjusted contribution to GDP growth will be positive,

but slightly smaller in 2013 than it was in 2012. Consumers' tightfisted attitudes reflect many factors, including the lagged impact of a broadbased deterioration in household finances, heavy job losses, the housing recession, capital losses in equities and real estate, the credit crunch, high debt levels, and limited household savings. Also, even if the fiscal cliff is avoided, uncertainties regarding federal fiscal and tax policies will diminish the push to GDP growth from consumer spending.

In 2013, modest job creation coupled with a limited amount of wage and salary growth will help to slowly repair household balance sheets. The drag on consumer spending from still tight credit conditions and recent declines in households' net worth will be limiting factors, however. The gain in inflation-adjusted consumer spending therefore will be about 1.9 percent, which is low from a historical perspective, but is about the same as the 2 percent gain estimated for 2012.

One factor behind the lackluster forecast for consumer spending is the decline in households' net worth that began in the fourth quarter of 2007. The unprecedented cycle of wealth destruction continued through the first quarter of 2009, erasing \$16.2 trillion, or 24 percent, of households' nominal net worth—a loss in net worth that exceeded the total personal income of all U.S. households in 2012.

By mid-2012, households had recovered \$11.1 trillion, or about 69 percent of their losses. Still, full recovery of the wealth that has been lost is not expected until 2015. The large wealth losses that accompanied the recession not only crippled consumer spending but also dramatically reduced the amount of funds available to launch, or expand, small businesses.

One reason why consumer spending will continue to grow slowly is that households were ill prepared for the inevitable rainy day. Going into the recession, consumers were heavily indebted and very short on savings. In fact, the household savings rate was the lowest since the Great Depression. Essentially, people

opted to boost current spending by extracting more and more wealth from their homes. Consequently, the ratio of outstanding mortgage debt to disposable personal income peaked at 106 percent.

As households shift their priorities from spending to savings, the savings rate has risen from its cyclical trough of only 1.3 percent in the third quarter of 2005 to about 4.3 percent in 2012. It will stay at about 4.3 percent in 2013, but for many that level of savings will not be high enough to maintain current living standards in retirement. The household savings rate therefore needs to gradually rise to 7 or 8 percent by 2020. It probably will not rise to the 9 percent average that prevailed from 1961-1990, however. In short, the savings rate is a secular headwind for consumer spending that will gradually intensify through the end of the decade, but it is a headwind that is not expected to intensify in 2013.

The protracted period of deleveraging has been painful, but necessary. Statistics show that deleveraging is well advanced, but it is far from complete. One concern is that continued volatility in the financial markets may cause jittery consumers to push up the household savings rate very sharply in late 2012 or in 2013, which would precipitate a recession. Fortunately, that is not the most likely scenario.

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 stuck in first gear in 2013, however. Job growth will be adequate to sustain the current pace of GDP growth, but inadequate to raise it to its long-term average of 2.6 percent. With recent losses in household wealth and a greater focus on savings, increases in inflation-adjusted disposable personal income must account for virtually the entire projected rise in consumer spending. The upturn in both the number of jobs and the number of hours worked per job are two factors we count on to support this income growth.

In 2013, consumers' inflationadjusted spending for goods will increase much faster than spending for services, with spending for durable goods growing more than twice as fast as spending for nondurables. Among durables, outlays for computers and for used vehicles and recreational goods will increase sharply. Spending on nondurables such as food, pharmaceuticals, and other medical products will rise moderately, but spending for clothing and shoes will rise only slightly. Among services, spending on vehicle leasing will increase the fastest. Providers of public transportation, recreational services, and financial services will see above average growth in spending. In contrast, consumers' outlays for restaurant meals and utilities will grow relatively slowly.

Labor Markets

On an annual average basis, total nonfarm employment will increase by 1.3 percent in 2013. Companies will hire as domestic demand for goods and services expands, but progress will be limited because domestic demand will increase slowly. Meanwhile, global demand for U.S. exports also will expand very slowly. But venture capital—which fuels job creation—will be more available than it was before.

Courtesy of the upturn in housing, job growth will be slightly more broadly based, however. Wages will rise by about 2 percent and benefits by about 3 percent. Still, net job creation will be too weak to substantially shrink the elevated unemployment rate, which will drop from 8.4 percent to 8.2 percent on an annual average basis

Although net hiring will expand, several factors will severely limit the gains. First, as discussed previously, slow GDP growth limits the impetus to hire. Second, the U.S. economy has been extremely volatile, especially in the financial and commodity markets, which will make employers hesitant to add new permanent workers. Third, the outsourcing of U.S. jobs to developing countries will continue to spread from blue-collar occupations in manufacturing to white-collar ones in high tech and

services. Fourth, uncertainties regarding federal fiscal, tax, and regulatory policies will restrain hiring. Fifth, federal, state, and local governments will cut their workforces, and much of the restructuring will be permanent. Finally, many of the new jobs that businesses will need to create will not match the skills of the unemployed.

In the coming year, other professional and business services companies will post the fastest rate of employment growth. Transportation and warehousing will see the second fastest rate of job growth. Education, health services, construction, and the arts, entertainment, recreation, subsectors will see solid employment gains. Government, utilities, and mining jobs will be on the decline, however. Meanwhile, U.S. manufacturing will continue to hire, largely due to the growing demand for durable goods. Durable goods manufacturing subsectors with the best immediate prospects for job growth include wood products, primary metals, fabricated metal products, transportation equipment, computers and electronic products, and machinerv. In contrast, manufacturers of nondurables will be trimming their workforces. Only food manufacturers will see positive job growth.

Corporate Profits

After-tax corporate profits are already very high, but should eke out a few more gains in 2013. Excellent expense management, low debt burdens, and more broadly based growth in demand for goods and services will be the primary factors supporting profit growth. Financing also should be somewhat easier to obtain, which improves prospects for profits earned by smaller companies. The upturn in the housing market will be the primary factor contributing to the profit growth for many homerelated industries. Growth in spending for business equipment bodes well for profits earned by technology companies. The slow expansion of foreign GDP-especially the recession in the EU—will severely limit sales of many export-oriented companies, however. Corporate profits generated from international operations in emerging markets will grow more slowly in 2013 than in 2012. Profits earned from international operations in developed markets will decline.

On the negative side, the yearover-year comparisons will be extremely tough to beat. Businesses' pricing power is not expected to firm significantly. Productivity growth is likely to be much weaker, which is one reason why unit-labor costs are expected to rise modestly. Finally, it's important to recognize that financial institutions' profit margins will be sensitive to problems stemming from Europe's sovereign debt crisis.

Business Spending

Due to slower growth in both corporate profits and end markets, the year-over-year percentage increases in business spending for equipment and software will be smaller in 2013 than in 2012. Such spending will still grow much faster than GDP, reflecting the need to replace equipment, to improve productivity, and to become less labor intensive. Strong cash flows rather than credit will fuel this spending. The main drag on business spending will be the economic situation in the FII

It helps that corporate discipline with respect to capital outlays over the course of the 2001-2012 was excellent. For many companies cash flows will be adequate relative to the amount of funds they need for investment, lessening the impact of lingering credit constraints. Even though after-tax corporate profits will grow much more slowly in 2013 than in 2012, profits already are quite high. Spending for computers and peripherals will post the largest year-overyear percentage gains. Substantially higher spending also is expected for industrial and communication equipment. As was the case in 2011-12, spending for transportation equipment-with the notable exception of aircraft—will increase substantially in 2013.

Capacity utilization will be a slight headwind for business spending for equipment and software. Of course, much of the excess capacity is either in the wrong location or in the wrong industry. Capacity utilization varies dramatically by industry. In mid-2012, capacity utilization for industries producing crude products was 87.9 percent, which is above its long-run average and therefore should spur capacity additions. For goods at the finished stage, capacity utilization was 78.5 percent, 1.3 percent above its long-run average. In contrast, capacity utilization for goods at the primary and semifinished stages of production was 76.6 percent, or 4.5 percent below its long-run average.

International Trade

In 2013, both real exports and imports are expected to grow about twice as fast as GDP, reflecting the ongoing globalization of input and product markets. Since exports will rise only slightly faster than imports. the trade gap will not narrow much. Hence, net exports will be an essentially neutral factor in terms of its contribution to GDP growth. The main obstacle to faster U.S. export growth will be the economic and political turmoil in the Eurozone, but China and many other emerging market countries also will grow more slowly than in recent years. Two more reasons why imports will not grow strongly in 2013 will be the slow growth of domestic consumer spending and the slow pace of inventory accumulation. These developments imply more moderate growth in imports of raw materials and/or finished goods.

U.S. export growth will be broadly based, and increasingly growth will be in emerging-market or commodity-based economies rather than in developed economies. With the exception of food and beverages, increases are expected for all of the major categories of goods and services. Exports of goods will grow much faster than exports of services, however. Growth will be fastest for capital goods. Emerging-market countries in particular are expected to spend heavily on equipment and infrastructure. Industrial materials, consumer goods, and tourism will see more moderate gains. Exports of food will decline slightly, however. It should be noted that the broad-based quality of U.S. export growth reduces the chances that it will stall in 2013.

We do not expect U.S. dollar depreciation to boost U.S. exports very much in 2013, because the dollar's value is already quite low, and slight additional depreciation will not make exports soar. The additional depreciation will be against emerging-market or commodity-based currencies rather than against major currencies, and the dollar will remain strong against the euro.

Inflation

If oil prices remain relatively steady, consumer price inflation will increase by 1.5 percent in 2013, compared to 2 percent in 2012. Of course, inflation will be even lower should energy prices tumble, or should the economy experience a back-to-back recession. There are no signs that inflation is or will soon be a problem, and its usual drivers will not be more intense in 2013 than in 2012.

Once U.S. economic growth builds up some steam, the Federal Reserve will rescind some of its rate cuts. As long as the Fed does not keep rates too low for too long, the risk of stagflation remains very low. We project that the Federal Reserve will keep rates on hold into 2015. Based on the forecast of lackluster GDP growth and a sluggish global economy, the Federal Reserve will begin increasing short-term policy interest rates in the second quarter of 2015.

Heightened competition for jobs from both domestic and foreign workers also will help to keep the lid on U.S. wages and benefits by lowering workers' expectations even as consumer prices rise. In the 2013 economy, workers do not realistically expect their employers to raise their wages to fully offset higher prices.

The outlook for inflation beyond 2014 is considerably less sanguine, however. The magnitude of recent fiscal and monetary stimuli increases the risk of inflation. The federal debt has skyrocketed in absolute terms as well as in terms of its percentage of GDP, and that will create pressure to monetize the debt. 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. China and others with large foreign currency holdings may choose to gradually diversify their portfolios away from U.S. dollar assets. Of course, the mushrooming federal debt does not have to produce more inflation; it may simply force interest rates higher to attract the needed capital instead. Either way, outsized budget deficits cannot be sustained for more than a few years without doing significant damage to the U.S. economy and its prospects for growth.

Crude Oil Markets

If there are no significant supply interruptions, it is unlikely that oil prices will go much higher or lower

UNITED STATES BASELINE FORECAST 2012-2013

United States	2008	2009	2010	2011	2012	2013	
Gross Domestic Product, Bil. of 2005\$ Percent change	13,161.9 -0.3	12,757.9 -3.1	13,063.0 2.4	13,299.1 1.8	13,578.4 2.1	13,822.8 1.8	
Nonfarm Employment (Mil.) Percent change	136.8 -0.6	130.8 -4.4	129.9 -0.7	131.4 1.1	133.1 1.3	134.8 1.3	
Personal Income, Bil. of 2005\$ Percent change	11,437.4 1.3	10,886.8 -4.8	11,092.1 1.9	11,378.2 2.6	11,601.8 2.0	11,819.0 1.9	
Personal Income, Bil. of \$ Percent change	12,460.2 4.6	11,867.0 -4.8	12,321.9 3.8	12,947.3 5.1	13,439.3 3.8	13,896.2 3.4	
Civilian Unemployment Rate (%)	5.8	9.3	9.6	8.9	8.4	8.2	
CPI-U, Ann. % Chg.	3.8	-0.4	1.6	3.2	2.0	1.5	

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2012.

in 2013. Prices will range between \$80 and \$110 per barrel, but because prices are so volatile it would not be too surprising if oil were to trade outside of this wide band. Also, this forecast is predicated upon a slight moderation in the already modest pace of global economic growth, no major disruptions in the supply of crude or refined products, and bringing new energy infrastructure online.

In 2013, slow growth of the global economy will allow capacity to expand sufficiently to prevent oil supplies from tightening. Domestically, oil production is booming in the Bakken formation in North Dakota, and substantially higher output is expected over the next few years. Oil imports therefore will decline significantly as a percent of GDP. Also, energy's high prices will gradually lead to improvements in efficiency, but those are long-run rather than short-run determinants of demand. •

The Georgia Outlook

eorgia's economy will continue to recover from the Great Recession, but the pace of growth will be modest. The risk of anoth-

er recession will be elevated—40 percent. Since the primary risks likely to trigger a new recession are external to the state rather than internal, the risk of recession in 2013 is no higher in Georgia than it is for the nation as a whole. That contrasts with the situation in 2010-12, when there was a heightened risk of recession in Georgia due to an overdependence on housing, real estate development and closely related industries. Fortunately, the housing downturn is over and the next up cycle has begun.

The Terry College's 2013 baseline forecast calls for Georgia's inflation-adjusted GDP to increase by 2.1 percent, which is close to the 2 percent increase estimated for 2012. Georgia's GDP growth rate in 2013 will be slightly higher than the 1.8 percent rate estimated for the nation's GDP, however. The slight edge reflects strengthening of the housing market, improving prospects for the financial services industry, and a shift in the state's economic development strategy. The state's nominal personal income will grow by 3.6 percent in 2013, which is slightly higher than the 3.4 percent gain expected for the U.S. Georgia's nonfarm employment will rise by 1.4 percent, which is about the same as the 1.3 percent gain expected for the nation.

As of mid-2012, Georgia had replaced only 115,000—or 34 percent—of the 341,000 jobs lost to the recession. The nation had replaced 46 percent of the jobs that it lost. In Georgia, the peak-to-trough percentage decline in nonagricultural employment was 8.2 percent compared to 6.4 percent for the U.S. In 2013, we expect 53,000 jobs will be added, which will exceed the 37,000 jobs added in 2012. But, at the 2013 pace of job creation, full recovery of the jobs Georgia lost to the recession will not occur before mid-2016.

The state's unemployment rate for 2013 will average 9 percent, or about 0.4 percentage points lower than the 9.4 percent rate estimated for 2012. Due primarily to the upturn in housing activity, job growth will be much better balanced in 2013 than in 2010-12. Job growth also will accelerate slightly—from 1 percent in 2012 to 1.4 percent in 2013.

The fastest job growth will occur in professional and business services, followed by leisure and hospitality, and manufacturing. Education and health services will see average gains. Also, Georgia's information industry will be hiring for the first time in over a decade. Another new development is that after plunging by 38 percent, construction employment will begin to recover courtesy of the new up cycle in residential construction. Positive (but slow) job growth is projected for financial activities. In contrast, job losses will continue in the government sector, which is the only major economic sector expected to lose jobs in 2013.

The main reason why Georgia got hit harder than the nation by the recession—and underperformed during the early portion of the recovery-was the state's heavy dependence on real estate development and homebuilding as well as closely allied industries such as building materials manufacturing. Prior to the housing bust, Georgia—like many other Sunbelt states—had become very dependent on the in-migration of new residents and new businesses to beget vet another round of new development that was based in part on servicing the previous round of new development. Not enough of Georgia's economic growth was based on innovation, educating its own people, courting emerging hightech industries, and promoting the growth of in-state capital markets. The financial crisis and the bursting of the housing bubble stopped the inflows of people and businesses abruptly, and precipitated a large and painful restructuring of Georgia's economy.

The financial crisis and the real estate bust also did more damage to Georgia's financial activities sector than to the nation's financial sector. For example, by mid-2012, statewide employment in financial activities was 11 percent below its cyclical peak level compared to a drop of only 7 percent for the U.S. The outsized job losses in financial activities reflected overexposure to construction, land development, and commercial real estate loans, which made Georgia the nation's leader in the number of failed banks. With restructuring largely completed, this sector now is poised for slight job gains in 2013.

Georgia also suffered from restructuring in areas unrelated to the bursting of the property bubble. For example, the state's information industry-which is heavily concentrated in Atlanta—began restructuring and losing jobs back in 2001 when the technology bubble burst. Now, one-third of Georgia's information jobs are gone. Although the wired telecommunications subsectors will remain in secular decline, employment in Georgia's overall information industry will expand modestly in 2013. The much anticipated and much delayed turnaround reflects surging demand for innovative wireless services as well as high-volume data applications.

In general, it appears that the massive private sector restructuring of Georgia's economy has run its course. In 2013, Georgia's economy will perform slightly better than the U.S. economy, but the differential in the rates of GDP growth will be small—30 basis points, or 0.3 percent.

The last remaining large imbalance is hard to miss: government spending. Much restructuring lies ahead for the public sector, and government employment will decline for the remainder of the decade. This constitutes the strongest remaining domestic headwind for Georgia's economy. Still, the devil will be in the

details. Georgia could get hit very hard if the federal spending cuts are skewed towards domestic military bases.

Georgia's nominal personal income will expand by 3.6 percent in 2013, which is slower growth than estimated for 2012, but inflation will be lower too. Personal income growth therefore will exceed the rate of inflation by 2.1 percent in 2013, which is about the same as the 2 percent gain estimated for 2012. So consumers should have enough income to sustain economic growth, but not enough to significantly accelerate the rate of growth or further boost savings.

Many of the positive forces underlying the forecast for the continuing recoveries of both the Georgia and U.S. economies are the same. Spending for equipment and software will continue to increase, but at a slower rate. The global economy will continue to expand, but at a slower pace. Housing activity will be on the increase (from a very depressed base). Home price

appreciation will replace home price depreciation, transforming what has been a major headwind into a weak tailwind. Oil prices will be flat or will trend slightly higher, but will remain volatile. But, even if a recession is avoided, there will be some very powerful negatives. Government spending and employment will drop sharply, and the nastiest declines at the federal level have vet to occur. Still tight credit standards plus lingering uncertainty in the financial markets will restrain growth in business spending as well as sales of consumer items typically bought on credit. The continuing tumult in the EU will foster uncertainty and diminish confidence. Uncertainty regarding the federal fiscal policy, federal taxes, the costs of health care reform, and new federal regulations will continue to weigh on job growth in Georgia and the nation.

Sources of Strength

Due to both job growth and the beginning of a new up cycle in housing, our forecast expects population growth to be a significantly stronger driver of the state's GDP in 2013 than it was in 2012, but it will be much less powerful than in prior decades. General recognition of heightened prospects for cuts in federal entitlement programs for retirees, smaller private sector pensions, and still depressed home prices will force more retirees to stay where they already live rather than to relocate. Experienced workers who are homeowners also will be less mobile than they were in recent decades. In contrast, young adults will be more mobile than ever before.

In 2013, Georgia's population will grow at a pace that exceeds the national average—1.3 percent for Georgia versus 0.9 percent for the U.S., or a difference of 0.4 percent. The higher rate of population growth reflects a rise in net migration to the state to about 61,000 people in 2013, up from only 29,000 in 2009. Nonetheless, prior to the recession, Georgia's annual rate of population growth was about a full percentage point above the national average,

GEORGIA'S BASELINE FORECAST, 2012-2013

Georgia	2008	2009	2010	2011	2012	2013	
Real Gross State Product, Bil of 2005\$ Percent change	373.9 -1.0	350.6 -6.2	359.6 2.6	365.8 1.7	373.1 2.0	381.0 2.1	
Nonfarm Employment (thousands) Percent change	4,102.2 -1.0	3,880.9 -5.4	3,842.7 -1.0	3,880.0 1.0	3,917.4 1.0	3,970.5 1.4	
Personal Income, Bil of \$ Percent change	340.8 3.1	327.6 -3.9	337.5 3.0	354.4 5.0	368.2 3.9	381.4 3.6	
Housing Permits, Total Percent change	35,368 -51.7	18,228 -48.5	17,265 -5.3	18,493 7.1	23,800 28.7	28,400 19.3	
Unemployment Rate (percent)	6.3	9.8	10.2	9.8	9.4	9.0	

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2012.

which translates into about 150,000 newcomers each year.

Many of the large relocation and expansion projects announced by the Georgia Department of Economic Development last year will provide a tailwind to Georgia's economic growth in 2013. Examples include Caterpillar's plans to create 1,400 jobs in the Athens area, Baxter International's plans to create 1,500 jobs near Covington, State Farm Insurance's plans to create 500 jobs near Perimeter Mall, and Academy Sports plans to create 250 jobs in Jeffersonville. Also, the state has yet to feel the full economic impact of some projects announced in previous years.

Due to cost, logistics, and tax advantages, Georgia remains very competitive when it comes to landing many types of major economic development projects, and this advantage began to bear more fruit, thanks in part to several strategic shifts in economic development strategy, including the creation of a \$100 million

deal-closing fund. Of course, Georgia must also make sure that its statutory incentives remain competitive and help to keep the state on the short list of favorable locations.

Despite legislative changes that make it more likely that Georgia can do what it takes to close the deal, too few businesses will have enough confidence in the economic situation in 2013 to pull the trigger on expansion or relocation plans. Growth therefore will depend primarily on the expansion of existing industries or new business formation rather than corporate relocations.

Barring an extended port strike, Georgia's deepwater ports will continue to outperform their peers by tapping directly into the growth that is taking place overseas, by diversifying the services that call on Georgia's ports, and by taking market shares from other U.S. ports. The Port of Savannah is the nation's fastest growing container port and already moves over 8 percent of U.S. cargo and 18

percent of East Coast cargo. But this port needs to be deepened to accommodate the much larger vessels that shippers will use once the Panama Canal expansion is finished.

There is another set of important economic drivers that Georgia must address. The Milken Institute ranks Georgia 34 among the states in terms of its science and technology capabilities. This is crucial because R&D based industries, such as biotechnology and nanotechnology will be major drivers of global economic growth. R&D as a share of Georgia's GDP is less than half the national average. R&D and innovation take money; ergo, Georgia desperately needs to develop its venture capital markets. The state sees only \$1.07 in venture capital per \$1,000 in state GDP—to be on par with the nation Georgia would need to nearly double that amount. About 85 percent of the venture capital investment in Georgia companies comes from venture firms headquartered elsewhere, and that's

BASELINE FORECAST GEORGIA'S GROSS STATE PRODUCT, 2002-2013 (billions of dollars)

			Percentage Change from Previous Year			
Year	Current \$	Constant (2005) \$	Current \$	Constant (2005) \$		
2002	314.0	337.7	3.0	1.1		
2003	324.8	343.7	3.5	1.7		
2004	342.9	352.5	5.5	2.7		
2005	363.2	363.2	5.9	3.0		
2006	380.5	369.2	4.8	1.7		
2007	399.6	377.5	5.0	2.2		
2008	404.3	373.9	1.2	-1.0		
2009	391.5	350.6	-3.2	-6.2		
2010	403.2	359.6	3.0	2.6		
2011	418.9	365.8	3.9	1.7		
2012	434.4	373.1	3.7	2.0		
2013	450.9	380.9	3.8	2.1		

Source: Data for 2002-2011 were obtained from the U.S. Department of Commerce. Data for 2012-2013 were obtained from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (October 2012).

a problem because the personal connections that enable a company to grow are often made where the money is found.

Georgia does well when it comes to entrepreneurial activity. But to do well in the future, Georgia needs an adequate supply of venture capital to fuel the growth of our successful startups. All too often, Georgia creates high technology companies that leave just as they are on the verge of achieving commercial success. When that happens, Georgia misses out of the big payoff in terms of jobs generated by our entrepreneurial talent.

Services Producing Industries

The forecast indicates that all Georgia's major categories of services-related businesses will expand in 2013, with the broader base of

growth reflecting the upturn in housing markets and growing demand for wireless services. Services businesses that either lower costs or provide necessities, such as health services, will do better than those that provide luxuries or are easily deferred.

Some business categories, such as educational services, will benefit from strong secular trends that will be reinforced by the cyclical upswing of Georgia's economy. Recent and continuing increases in spending for new equipment and software will underpin higher demand for computer services for businesses. Because more people will continue to repair rather than replace durable goods, repair services are expected remain busy. The economic recovery will bring relief to many consulting firms, but disappointing revenue collections by state and local governments will limit

the gains for firms with many publicsector clients.

In general, budgetary problems will lessen demand for business services that are purchased by government, but those very same financial pressures will create opportunities for agile companies able to take advantage of outsourcing, or privatization, of activities that are traditionally performed by governments. Also, a significant reduction in both the range and the quantity of services provided by state and local governments should create new opportunities for businesses that provide similar services.

Goods Producing Industries

The state will add 7,600 goods producing jobs in 2013: manufacturing employment will rise by 1.6 percent, or 6,000 jobs; and construc-

BASELINE FORECAST NEW RESIDENTIAL BUILDING UNITS AUTHORIZED FOR GEORGIA, 2000-2013

	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
2000	91,820	2.5	68,852	-3.7	22,968	27.2
2001	93,059	1.3	71,531	3.9	21,528	-6.3
2002	97,523	4.8	75,529	5.6	21,994	2.2
2003	96,704	-0.8	80,683	6.8	16,021	-27.2
2004	108,356	12.0	87,731	8.7	20,625	28.7
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	23,800	28.7	15,900	15.1	7,900	68.9
2013*	28,400	19.3	18,900	18.9	9,500	20.3

^{*}Indicates forecasted value.

Source: Data for 2000-2011 were obtained from the Construction Statistics Division, Bureau of the Census. Values forecast for 2012-2013 were obtained from the Selig Center for Economic Growth, Terry College of Business, University of Georgia (October 2012).

tion employment will rise by 1.1 percent, or 1,600 jobs. The job gains in construction will stem primarily from residential construction, as the number of single-family home permits authorized for new construction should increase by 19 percent in 2013. Similar gains are expected for the multi-unit residential subsector. Homebuilding therefore will contribute to Georgia's economic growth.

Existing home values should rise modestly in 2013, but not all of the destructive macroeconomic effects of the housing recession will cease immediately. Recent home price depreciation will continue to weigh heavily on consumers' psyches and on their ability to spend. Consequently, the upturn in the state's housing market will not be a very powerful driver of Georgia's economic recovery, but at least housing will push the economy forward rather than backward.

Conditions in the nonresidential construction industry will improve slightly. In many places, spending for public-funded structures will decrease. Despite low interest rates, the political climate will discourage many state and local governments from taking on additional debt to fund construction projects. The bottom line is that nonresidential construction technically will no longer be in recession in 2013, but it will not contribute much to the state's GDP growth.

In Georgia, industrial production will advance by about 2.5 percent, and manufacturing employment will rise by 1.7 percent. Production of durable goods will advance more quickly than production of nondurable goods. Due to lean staffing levels, job growth also will occur in a significant number of manufacturing subsectors. The best prospects for increases in production include computer and electronic products, transportation equipment, and industrial machinery. In contrast, decreases in production are expected for apparel and printing.

Prospects for Selected MSAs

Atlanta The revival of the housing market will reinforce Atlanta's ongoing economic recovery. On an annual average basis, the 28-county Atlanta MSA will add 37,400 jobs, a year-over-year increase of 1.6 percent, and therefore will account for 70 percent of the state's net job growth. The area's high concentration of services producing industries, distribution companies, and universities, health care providers, and life sciences companies will keep Atlanta's job machine primed. Also, several of the projects recently announced by the Georgia Department of Economic Development are in this metro area.

One plus for Atlanta is that it is not overly dependent on federal jobs. Only 4 percent of the Atlanta's area's nonfarm earnings come from federal employment versus 7.7 percent for the state as a whole. 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 somewhat less problematic for Atlanta's growth than for growth elsewhere in Georgia or for the nation as a whole.

The lagged effects of the massive restructuring of homebuilding and allied industries will restrain Atlanta's overall growth, however. The area was especially hard hit by the collapse of the housing bubble, and its adverse effects will linger for many years.

Albany On an annual average basis, the 2013 forecast indicates that the Albany area will see employment drop by 0.7 percent, or by about 400 jobs. A high proportion of government jobs makes the area vulnerable to the bursting of the government spending bubble. Indeed, Albany lost government jobs in both 2011 and 2012. Nonetheless, because Albany is a small MSA, the actions for the better or for the worse 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 is geared towards basic consumer staples, which households continue to buy whether or not the economy is expanding. Miller Brewing and Proctor and Gamble are good examples.

As economic conditions continue to improve, Albany will capitalize on its assets, including a low cost of doing business, an excellent telecommunications infrastructure, a reputation as a good place to live and raise a family, and a low crime rate. The area has potential as a center for back office operations and telemarketing, but more intense foreign competition for such jobs probably will limit actual gains.

Albany will benefit from its role as a regional retail-wholesale distribution center and from spillover from Florida, but this sector's contribution to growth will be limited in 2013. Albany's increasing role as a regional center for health care and education also weighs strongly in its favor, but both of these segments are currently fraught with uncertainty due to budget and policy concerns at all levels of government.

Athens Average annual employment in Athens will increase by 1.2 percent, or about 1,000 jobs. Athens will benefit from several factors: (1) Caterpillar will build a new factory in the Athens MSA that will employ about 1,400 workers when it is fully operational. Production could begin by late 2013. (2) Athens' outsized health care sector is poised for growth. The establishment of a medical school campus at UGA in partnership with Georgia Health Sciences University will encourage further development of the clinical health care industry. (3) Expansion of UGA's engineering program will enhance entrepreneurial development and help recruit high tech companies and venture capital. (4) Ethicon Inc., a subsidiary of Johnson & Johnson, will expand its operations in Athens.

On a less positive note, Athens could be held back by its outsized government sector, which will remain under severe pressure due to continuing budget difficulties. State and local government jobs account for 29.3 percent of the area's nonfarm earnings compared to only 11.4 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 and that is no longer an advantage.

Augusta On an annual average basis, Augusta will enjoy a slight 0.4 percent increase in jobs in 2013. Strong performance of the metro area's services producing industries, notably health care and private education will be a positive for the local economy. The area also will benefit from the construction of two nuclear power plants that are under construction at Plant Vogtle.

Augusta is a center for telecommunications services, including telemarketing and reservations. The Georgia Medical Authority will use the expertise available at Georgia Health Sciences University—the nation's nineteenth largest medical school—to establish Augusta as a center for the rapidly growing life sciences industry. Meanwhile, Fort Gordon has grown dramatically in recent years and also adds substantially to the area's supply of welltrained, skilled workers. The area's undersized information and financial activities industries spared the region from the restructuring that has plagued these sectors. Nonetheless, Augusta's economy is vulnerable to cuts in federal spending, especially defense spending. Federal civilian and military jobs account for 15.8 percent of the area's nonfarm earnings compared to only 7.7 percent of the state's nonfarm earnings.

Columbus The immediate prospects for this MSA are good, but the big push to growth from recent expansions at Fort Benning, Kia, and NCR will be winding down. Also, the bursting of the federal spending bubble could impact defense spending at the base, and the regional economy is still adjusting to the loss of the temporary jobs associated with the incoming Armor School and the base's big expansion. More positively, defense contractors gradually will move to the Columbus region to be near their major customers. Also, Kia's network of local suppliers continues to grow.

On an annual average basis, employment will rise by 1.4 percent in 2013, or 1,700 new jobs, which is a significant improvement over the 1,000 jobs added in 2012. Also, the housing bust was not too severe in Columbus, so less damage was inflicted on households' wealth, which is a good sign for new business formation as well as consumer spending. Finally, improving conditions for financial activities and the information industry—from which the MSA derives a larger than normal share of economic activity—are good for the regional economy.

Macon With an extremely well balanced economic structure, the area is an excellent bellweather for the overall performance of both the state and national economies. On an annual average basis, Macon's total employment will rise by 1.4 percent in 2013, or by 1,400 jobs, which is in line with the percentage gain expected for the state as a whole.

No longer very dependent on manufacturing, Macon's economy will benefit from its focus on transportation and logistics, higher education, and health care. Macon's role as a regional retail trade center will be an advantage, too. Its central location makes the area a good place to host statewide meetings or conventions, so the hospitality industry will be a positive force for growth in 2013. Job losses will continue in government, however.

Savannah On an annual average basis, Savannah's employment will rise by 0.4 percent in 2013. The city's dual personality—that of a major tourist attraction and an extraordinarily successful deepwater port—is the secret to Savannah's continuing success. Although the metro area was hammered by the housing bubble, it was not very exposed to the restructuring of the information or the financial activities industries.

Savannah's long-term growth prospects are among the best in the nation, because its unique ambiance and transportation infrastructure make it an attractive place in which to live and do business. Retirees will continue to be an important force powering and diversifying the region's economic development, but the Savannah area will benefit from the fact that its population is increasing in all age groups. �

GEORGIA'S BASELINE EMPLOYMENT FORECAST, 2012-2013

Georgia	2008	2009	2010	2011	2012	2013
Nonfarm Employment ¹	4,102.2	3,880.9	3,842.7	3,880.0	3,917.4	3,970.5
Goods Producing	623.6	533.2	504.0	504.6	504.7	512.3
Mining and Logging	10.4	9.4	9.2	9.0	8.9	8.9
Construction	204.1	165.8	149.7	145.5	141.4	143.0
Manufacturing	409.1	358.0	345.0	350.2	354.4	360.4
Services Providing	3,478.6	3,347.7	3,338.7	3,375.4	3,412.7	3,458.2
Trade, Trans., Utilities	873.9	819.0	810.7	821.0	831.7	845.0
Information	109.0	104.6	99.8	97.3	95.8	97.5
Financial Activities	224.3	211.7	206.4	208.8	207.8	209.6
Professional and Business Services	556.7	511.4	526.4	547.1	569.0	589.5
Education and Health Services	469.3	476.6	488.5	499.0	509.5	516.1
Leisure and Hospitality	393.9	379.6	374.2	379.6	384.2	391.8
Other Services	160.9	156.6	153.6	153.4	152.9	154.8
Government	690.7	688.4	679.1	669.2	661.8	653.9
Percent Change						
Nonfarm Employment	-1.0	-5.4	-1.0	1.0	1.0	1.4
Goods Producing	-6.2	-14.5	-5.5	0.1	0.0	1.5
Mining and Logging	-12.6	-9.6	-2.1	-2.2	-1.5	0.4
Construction	-7.7	-18.8	-9.7	-2.8	-2.8	1.1
Manufacturing	-5.2	-12.5	-3.6	1.5	1.2	1.7
Services Providing	-0.1	-3.8	-0.3	1.1	1.1	1.3
Trade, Trans., Utilities	-1.5	-6.3	-1.0	1.3	1.3	1.6
Information	-2.2	-4.0	-4.6	-2.5	-1.5	1.7
Financial Activities	-3.0	-5.6	-2.5	1.2	-0.5	0.9
Professional and Business Services	-1.2	-8.1	2.9	3.9	4.0	3.6
Education and Health Services	2.3	1.6	2.5	2.1	2.1	1.3
Leisure and Hospitality	-0.6	-3.6	-1.4	1.4	1.2	2.0
Other Services	0.2	-2.7	-1.9	-0.1	-0.3	1.2
Government	2.7	-0.3	-1.4	-1.5	-1.1	-1.2

¹Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2012.

BASELINE EMPLOYMENT FORECAST FOR GEORGIA'S METROPOLITAN AREAS, 2012-2013

Metro Area	2008	2009	2010	2011	2012	2013
Nonfarm Employmen	t ¹					
Albany	64.2	61.9	60.9	59.8	59.1	58.7
Athens	89.3	85.0	83.9	83.7	85.0	86.0
Atlanta	2,429.4	2,293.9	2,274.0	2,302.9	2,337.4	2,374.8
Augusta	214.7	208.1	209.3	209.9	205.5	206.3
Brunswick	45.3	42.5	40.5	39.6	39.1	40.0
Columbus	121.4	117.6	117.6	118.9	119.9	121.5
Dalton	73.6	66.4	65.9	65.1	60.5	62.2
Gainesville	77.8	71.6	71.5	74.3	80.3	82.2
Hinesville-Ft. Stewart	19.3	19.3	19.7	19.9	19.8	19.7
Macon	101.6	96.4	95.5	95.8	97.7	99.1
Rome	41.4	39.2	38.7	37.7	36.8	36.9
Savannah	159.0	150.8	150.8	151.0	151.3	151.9
Valdosta	56.5	53.6	52.2	51.7	51.8	52.0
Warner Robins	58.6	58.8	59.3	59.0	58.1	57.7
Percent Change						
Albany	-0.8	-3.6	-1.6	-1.8	-1.2	-0.7
Athens	1.7	-4.8	-1.3	-0.2	1.5	1.2
Atlanta	-1.1	-5.6	-0.9	1.3	1.5	1.6
Augusta	-0.2	-3.1	0.6	0.3	-2.1	0.4
Brunswick	-0.2	-6.2	-4.7	-2.2	-1.3	2.3
Columbus	-0.1	-3.1	0.0	1.1	0.8	1.4
Dalton	-5.8	-9.8	-0.8	-1.2	-7.0	2.7
Gainesville	0.6	-8.0	-0.1	3.9	8.1	2.4
Hinesville-Ft. Stewart	6.0	0.0	2.1	1.0	-0.5	-0.5
Macon	0.7	-5.1	-0.9	0.3	2.0	1.4
Rome	-1.4	-5.3	-1.3	-2.6	-2.3	0.3
Savannah	-1.3	-5.2	0.0	0.1	0.2	0.4
Valdosta	0.2	-5.1	-2.6	-1.0	0.2	0.3
Warner Robins	0.3	0.3	0.9	-0.5	-1.5	-0.7

¹Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, October 2012.

Construction activity will contribute significantly to GDP growth in the coming year.

n Georgia, the double-dip recession in single-family homebuilding, which began in the second quarter of 2006, lasted for nearly six years. The decline in multi-family construction, which began in the first quarter of 2005, also lasted for six years. Both troughs represent the lowest activity levels seen in Georgia's homebuilding industry in modern economic times. In terms of activity, the federal intervention prolonged the bottoming out process, but it likely prevented an even steeper drop in existing single-family home prices.

Now that the economic distortions created by the tax credits have fully dissipated, the performance of Georgia's housing market will depend primarily on the performance of the labor market. Our baseline forecast calls for about 1 percent job growth as well as slight gains in the number of hours worked per iob—but very limited gains in compensation per hour worked. Couple these predicted improvements in labor market conditions with investors' heightened interest in purchasing single-family homes for rental purposes and demand should be sufficient to sustain recovery in singlefamily homebuilding, multi-family homebuilding, renovation and repair activity, and home price appreciation. The percentage gains in permits authorized will be substantial, but overall activity levels will still be very depressed. Home price appreciation also will be very modest.

Slightly more jobs and slightly bigger paychecks will be critical factors in raising the rate of household formation, which fell very sharply during the recession and remains quite depressed. In Georgia, household formation typically is the most important demographic driver of housing demand. In the immediate wake of the recession, it dropped to its lowest levels since the 1940s. The housing bust has locked many into their current homes, and that delays moves to Sunbelt states like Georgia that traditionally benefit from—and have come to depend economically upon—large net inflows of domestic migrants seeking warm weather, low costs of living, and jobs.

Single-family homes will be extremely affordable in 2013 and rents will rise much faster than home prices. That will encourage people to buy a house rather than rent an apartment, but we expect many people to delay purchasing a home due to their lack of confidence in the economy, their doubts regarding the prospects for home price appreciation, tight and/or damaged credit, and negative equity in their current homes. The buyers' market therefore will continue through 2013, keeping the window of opportunity wide open for those who initially hesitate to become

Sector Summary

Direction: large increase Performance: better than most

homeowners. Mortgage rates will be at their most attractive levels too.

In most markets, home price depreciation has run its course, but not all of the destructive macroeconomic effects of the housing recession have ceased. The substantial home price depreciation—and wealth destruction—that occurred from 2007 through early 2012 will continue to weigh very heavily on consumers' psyches and on their ability to spend. Consequently, housing activity will not push Georgia's overall economy forward to the degree that it normally does at this stage of the business cycle, but at least housing will be add to rather than subtract from state GDP-growth.

The nonresidential construction industry's recession also ended in 2012. But a meaningful recovery will

not begin immediately because the pipeline of private-financed projects in development is empty and the number of new speculative projects in advanced stages of planning is almost zero. Private-sector nonresidential construction is likely to remain very weak throughout all of 2013, while construction spending by the government is expected to decline for several years.

Home Prices

Despite the fact that Georgia completely missed the price bubble, home prices here declined much more than those for the nation as a whole. In fact, based on income levels and demographic factors, the home price declines in Georgia were overdone. That implies that home prices have some potential to appreciate.

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 helped to ensure that home prices never really got too far out of line with household income levels or replacement costs. Consequently, selling prices of existing single-family homes initially did not fall too drastically even as buying activity plunged and inventories of unsold and bankrupt homes accumulated.

But the elevated number of foreclosures and other short sales cast a pall. Existing home prices declined the most in the outlying suburbs and in neighborhoods where mortgage foreclosures—and often mortgage fraud—were ubiquitous. Initially, many forecloses were attributed to lax lending standards or innovative mortgage products. But over the last couple of years, foreclosures often were the result of job losses (or other forms of economic stress).

Although the recession ended in mid-2009, home price stability proved elusive because a huge inventory of unsold and vacant homes kept downward pressure on home prices. Shadow inventory—bankowned homes that normally would be on the market but are not due to very poor market conditions—is a

huge problem, especially in foreclosure-ridden neighborhoods.

Positive Forces

In 2013, statewide employment and personal income growth is predicted, but the pace of growth will continue to be very slow. Indeed, housing affordability will be at its cyclical best in 2012-13, courtesy of historically low mortgage rates and substantial home price declines. Of course, this assumes that job growth continues at a relatively steady pace, the credit crisis settles down, and that mortgage rates do not back up too much.

Demographic trends constitute a potentially powerful set of demand-side drivers that could provide ongoing stimulus to Georgia's housing industry. The critical factor will be a rebound in the rate of household formation, which declined to levels not experienced since World War II. Georgia also is well positioned to attract retirees in much greater numbers than before, so housing markets in areas of the state that appeal to retirees will be the primary beneficiary of this particular demographic trend.

Good potential for retiree migration is partly a reflection of the basic fact that baby boomers are reaching retirement age in huge numbers. Many of the elderly 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

Mortgage rates will still be a tremendous bargain from an historical perspective, but the combination of the mortgage industry's stricter lending standards and difficult appraisals will limit the housing sector's recovery. The tougher loan standards probably will not affect prime borrowers with high household incomes too much, and will have a limited ad-

verse impact on loans that can be resold to Fannie Mae or Freddie Mac. 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 Fannie Mae or Freddie Mac will insure.

Substantial home price declines have improved affordability in many markets, but those recent price declines will continue to affect homebuvers' confidence. Also, recent home price declines may prompt some buyers to sit on the sidelines waiting for prices to drop even more. Home prices probably will not fall further, but the expectation that they might will temper the housing sector's recovery. Concerns about where home prices are headed also will keep homeowners cautious about putting more money into their homes, especially for expensive, discretionary projects.

The large declines in home prices are largely responsible for more than two out of every five Georgians with mortgages owing more on their homes than their homes are worth, and thus are stuck where they are. This pervasive lack of mobility will limit the vigor of the housing recovery for many years. Especially worrisome is that much of the negative equity is concentrated in the low priced or starter home segment of the market.

Renovations and Repairs

Spending on home renovations and repairs appears to be closely tracking overall activity in both the nation's and Georgia's housing market. Although remodelers will benefit from the overall recovery, they should remain cautious. Depreciated home prices and much less cashback refinancing of home mortgages are strong headwinds for the industry because cash-back refinancing historically has been a major source of funds for home-improvement projects. Also, low appraisals will limit the availability of financing for large projects such as room additions or a total remodeling.

Employment growth as well as

increases in the number of hours worked per job will give people both the confidence and the means to spend more on home improvement projects. In Georgia, remodeling firms can count on retirees to spend more on home improvements. Agingin-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 persons 50 and older would like to remain in their homes for the foreseeable future.

Nonresidential Construction

Private spending for new nonresidential construction will increase in 2013, marking the beginning of a new up cycle, but credit conditions will remain tight. This constitutes a primary headwind, especially for markets such as Atlanta with high vacancy rates. Employment and population growth gradually will generate gains in net occupancy. Vacancy rates will remain elevated, but should improve due to fewer deliveries of space and less sublease space coming onto the market. Tenants will have the upper hand in lease negotiations, but to a slightly lesser degree than they did in 2009-2012.

In many jurisdictions, spending for public funded structures will decrease. The primary problems are that the recession has diminished collections from sales and use taxes while weak real estate markets have led to downward—or at least slowed upward—adjustments in assessed property values. Typically these adjustments lag movements in market prices by a year or more. Thus, compared to the last several years, property tax bases will not be very supportive of revenue collections. 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. The challenge is to find the funds to finance such projects on terms that are agreeable.

Overall spending for new office construction will increase in 2013, but that's mostly because spending on new speculative projects has dwindled to nearly nothing. The office vacancy rate in the Atlanta metropolitan area is about 23 percent, one of the highest in the nation. Given investors' increased aversion to risk, the high vacancy rate will be a significant barrier to new development.

There are many reasons to be circumspect regarding the immediate outlook for new office development. Overall job growth is quite weak and entirely absent in Georgia's financial services sector, which is a large consumer of office space. Real estate investors will be very discriminating in their risk taking, which does not favor new office development projects, especially in markets saddled with sky-high vacancy rates. Pre-leasing will become essential in obtaining financing for new projects. The number of newly announced office developments therefore will be minimal in 2013.

More positively, compared to many major metropolitan areas, of-fice rents in Atlanta are a bargain and will remain so for some time. Although this is a big problem for the owners, it represents a good opportunity for the state to aggressively recruit new businesses to the Atlanta region.

Because the manufacturing sector has been outperforming the overall economy, the situation in Atlanta's industrial property market is much better than that of the office market. 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. �

Manufacturing

Led by transportation equipment, and lumber and wood products, industrial production will increase far faster than state GDP.

roduction of lumber and wood products is poised to substantially outperform the overall economy in 2013, due to the unleashing of the much-delayed cyclical recovery of the housing market. The overall increase in demand for lumber and wood products therefore will be very large, growing four to five times faster than either the national or state GDP. Demand for pallets and crates will closely track the growth of overall economic activity, with usage for domestic shipments growing at about the same pace as use for international trade related shipments. Wood pellet manufacturing, bio-fuels, and cogeneration are emerging sources of demand for timber and wood fiber. Indeed, the recovery of nonresidential construction will help to ensure that demand for overall lumber and wood products continues to advance at an aboveaverage pace through at least 2016.

International developments will provide some additional support to Georgia's lumber and wood products industry. Further depreciation of value of the dollar will boost exports of lumber and wood products and limit imports. Moreover, Russia has generally become a less dependable and much more expensive supply source for logs for China and other Asian nations, where demand is growing strongly.

Forest and paper companies' recent divestiture of large tracts of Georgia's timberland diminishes the industry's prospects for long-term growth, however. Also, the

lumber and wood products industry eventually 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 that is capable of export much larger quantities of lumber and wood products, especially to Europe and Asia.

Until recently, China had dramatically increased its use of use Russian logs to fuel the growth of its wood processing industry. This combination will constitute a formidable competitor for the U.S. lumber, wood processing, and furniture manufacturing industries. But the day or reckoning will be postponed as long as the dollar's value remains depressed and as long as Russia re-

Sector Summary

Direction: moderate increase Performance: average

mains an extremely difficult place in which to do business.

Paper and Pulp

In 2013, support for paper and pulp prices will come from the expansion of GDP. Also, the low value of the U.S. dollar will restrict pulp and paper imports into the American market and will stimulate exports. 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 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 (e.g., coated and uncoated freesheet) reflect more than just cyclical forces. Increasingly, various forms of electronic communication are substituting for printed materials. The recession also accelerated the long-term secular decline of direct mail, catalogs, magazines, and newspapers. Plus, new paper mills built in many developing countries will increase the level of import competition for domestic manufacturers of paper products. In 2013, prices will be high enough to stop further capacity reductions, but probably will not stimulate significant new investment.

Furniture

Furniture sales to households are poised to grow twice as fast as GDP in the coming year. Higher turnover of existing homes, the upturn in new home sales, and home price appreciation are noteworthy positives for households' demand for furniture, but slow recovery of jobs, 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 commercial and institutional furniture, with overall spending by businesses and governments for furniture holding steady at 2012 levels. Budget challenges will mandate pullbacks in spending for office and institutional furniture by many state and local governments. Even school districts with rising enrollments will be cutting back, courtesy of less support by state governments as well as the lagged impact that depreciated home values will have on local property tax collections.

With overall demand recovering, the perennial problem facing domestic furniture manufacturers is foreign competition. The low value of the dollar will help somewhat, but the dollar's value against some key Asian currencies is not expected to change enough to make much of a difference.

Manufacturing Equipment

Businesses' spending for capital equipment will be one of the forces that we expect to contribute to

state and national GDP growth, but the rate of growth in spending will be slower in 2013. High levels of uncertainty regarding both the economic situation and federal fiscal and regulatory polices also will keep a lid on businesses' spending for capital equipment.

Equipment producers will benefit from cyclical increases in demand, spending had been cut to levels that are too low to maintain, much less expand, the capital stock. Although tight credit could potentially limit some businesses' ability to purchase more manufacturing equipment, many companies will have the means to expand their orders for manufacturing equipment due to good internal cash flows and pristine corporate balance sheets. Slightly higher raw materials prices may increase cost pressures on machinery and manufacturing equipment industry, but would also increase demand from industries that produce basic commodities. The net effect should be positive for producers of manufacturing equipment.

Low short- and long-term interest rates bode well for manufacturing equipment sales. Continued easing of tighter than normal credit conditions will enhance the positive impact of low borrowing costs on demand for manufacturing equipment. The low value of the U.S. dollar will help to increase exports of manufacturing equipment. Exports to developing nations will increase much faster than exports to the developed countries. The anticipated bottoming of nonresidential construction in 2013 implies that sales of construction machinery will trend lower, however.

Cars

Nationally, the forecast calls for unit sales of both new and used cars to rise, and the biggest gains will be for light trucks. Automakers' bottom lines therefore will continue to improve. Businesses and consumers will be in the market for new vehicles, but most state and local governments will not

Higher auto sales will help manufactures of original equipment, though manufacturers of replacement parts also will enjoy stronger markets. In addition, tire manufacturers will benefit from an expected increase in the number of miles driven, which declined during the recession, as well as consumers' increased interest of high-performance and other specialty tires.

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

Aircraft

Although the short-term prospects for this industry are excellent, eventually the high—and rising debt-to-GDP ratios in the U.S. and many developed economies will be formidable headwinds. On the plus side, manufacturers of civilian aircraft stand to gain the most from airlines' pressing need to update their fleets with more fuel efficient, quieter, and more productive aircraft. A second powerful tailwind for U.S. aircraft manufacturers will be 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 U.S.-built aircraft to emerging nations will grow very strongly.

On the negative side, projected budget deficits of unprecedented proportions will force the U.S. government to significantly scale back, 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.

Before the recession, the demand for private aircraft had been exceptionally strong, reflecting the high value of executive time, increased flexibility, security advantages, and the increasing need for corporate travel to airports not served by the big carriers. Now, increased concerns about environmental stew-

ardship, and public outrage over corporate leaders' usage of private planes, the outlook calls for subdued growth in demand for business aircraft.

Food Products

Accounting for about one fourth of Georgia's manufacturing GSP, food products manufacturing is the state's largest manufacturing industry. The demand for food products will grow at a moderate pace in 2013. 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 change.

Sales growth will come from population gains and the development of niche products with higher value-added margins. Since many consumers have stopped eating out, more of their budgets is being spent on groceries.

Product innovations are important drivers of sales in this intensely competitive industry. Specialized products recognize consumers' increased health consciousness, greater ethnic diversity, and acceptance of foods from other cultures. Demand for healthy foods will continue to grow strongly, propelled by an aging population that is better informed about good eating habits. Sales of natural and organic foods are likely to grow faster than sales of traditional foods.

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 many imported clothing items, and the domestic industry's sales and profit margins will be squeezed. Apparel prices almost certainly will not keep pace with inflation.

But the number of apparel and textile jobs lost will be smaller than in recent years because the industry itself is smaller. Some manufacturers operating in niches that are suited to automation will survive for a while longer, but even these companies will find it increasingly difficult to compete as better facilities are built overseas. Some high-end manufacturers may survive based on their proximity to or knowledge of their customers, but such efforts ultimately will preserve only a very small fraction of Georgia's once plus-sized apparel industry.

Georgia's carpet and textile industry will begin to benefit from increases in housing activity and home renovations. Also, automobile sales will be rising, but spending will continue to decline for non-residential construction. The long-term outlook for this industry is better than that for the apparel sector, but the industry's prospects are by no means sanguine. Eventually, many foreign manufacturers will be on a more equal footing with those operating in Georgia. Productivity gains also will help Georgia's textile and carpet manufacturers survive, but as the plants become much less labor intensive, total employment in this industry will decline.

Printing

Georgia's printing industry is in secular decline, but the rate of decline will slow down in 2013. Cyclical increases in commercial advertising will be a tailwind for the industry, but political advertising will decline. Depressed levels of office-based employment and limited new business formation will continue to curb demand for printed materials. The more widespread use of electronic publishing will ensure that the industry's revenues will grow more slowly than GDP.

Electronic publishing will continue to displace printed reports, magazines, newspapers, and books. Online banking will continue to decimate demand for printed checks and account statements. The popularity and quality of desktop publishing and higher quality photocopiers also reduce opportunities for commercial printers.

Rising levels of educational attainment should help the printing industry, but a big problem is that

people lack the leisure time to devote to reading. Retirees, however, are likely to become an even more important market for printed materials. Diversification—including storing data, digital printing, and printing short runs on demand—will help printers meet some of these challenges.

Chemicals and Pharmaceuticals

Demand for many chemical products will increase in typical cyclical fashion. The main opportunities for chemical manufacturing will be: higher use in residential construction, the growth of the industrial sector of the economy; and higher sales for consumer use. The best prospects are for medicines, pharmaceuticals, paints, and agricultural chemicals.

Because the costs of complying with environmental and security regulations are relatively high in the U.S., chemical production is relocating overseas, where many of its largest industrial customers already have moved. Indeed, it probably will not be very long before the research and development jobs migrate to overseas locations. The bottom line is that as the global economy recovers and the credit markets thaw, the migration of chemical manufacturing jobs to developing nations will accelerate.

Favorable demographics and cost effectiveness enhance prospects for pharmaceutical and medical supply firms. Sales will expand relatively rapidly, but profit margins probably will narrow, partially because sales of generic drugs will expand faster than sales of branded products. Pressures from large buyers and the federal government to hold down prices also are expected to 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 2013, domestic demand is expected to grow steadily and export markets will benefit from a weak U.S. dollar. 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 effects of the Patient Protection and Affordable Care Act, however, are yet to be felt. ❖



Transportation

This sector will grow slightly faster than the overall economy.

ncreases in industrial production and slightly more spending by consumers will cause total cargo volumes to grow moderately in 2013. Containerized cargo shipments via Georgia's ports will be a primary force contributing to the growth of Georgia's transportation sector, and will insure that overall cargo volumes grow faster than state GDP. One reason why industrial production will continue to expand is that residential construction will be recovering from its extremely depressed level, and that's a significant tailwind to growth in cargo volumes because construction is one of the most transportationintensive sectors of the economy. Carriers' profit margins will widen slightly, but will remain quite low relative to other industries due to intense competition within and between the transportation industry's subsectors.

Although the freight recession is over, economic growth has not been—and will not be—exuberant. Barring an oil price shock, the biggest challenges to carriers will be slow growth of domestic consumer spending as well as the turmoil in the European Union. Also, the need to restock inventories in 2013 will not increase too much.

Bigger shipments of many durable goods, especially capital equipment, and coal are expected to drive demand. In contrast, shipments of many nondurable goods will increase more slowly in 2013 than in 2012, reflecting slower growth of materials-based manufacturing industries. Meanwhile, shipments of textiles, apparel, and printed materials probably will decline

slightly. Rate competition will become less intense, reflecting higher freight volumes as well as recent capacity reductions.

Trucking

Growth in truck freight coupled with recent fleet reductions means tighter capacity, which implies somewhat less intense competition for loads within in the trucking industry itself. But internal competition will still be strong. Moreover, high and volatile fuel costs mean that longhaul truckers will face more competition from the railroads, which are much more fuel-efficient. 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 more than offset higher costs, but

Sector Summary

Direction: moderate increase Performance: average

their pricing power will not be strong enough to make a drmatic difference in net margins.

Capacity reductions stemming from recent bankruptcies and volatile fuel prices will help to shore up truckers' net margins, but this favorable development will be partially offset by the ongoing consolidation of retailing. Tight credit implies that not many carriers will add new trucks, but there are a lot of idle trucks that could be brought back into service relatively inexpensively and quickly.

Due to high unemployment rates, there is no shortage of drivers, so pressures to raise trucker's wages and benefits therefore will not increase very much. Some trucking firms will offer incentives to bring back drivers whom they took off the road during the recession, however. The industry has essentially adjusted to federal regulations that restricted

the number of hours drivers can drive, but further restrictions on driving hours would further reduce both the industry's competitiveness and its profitability.

Meanwhile, several factors will push trucking companies to get bigger. First, more outsourcing of products from overseas, especially China, favors carriers that can manage distribution both domestically and globally. 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. Finally, larger companies probably will find it easier to hire drivers than will smaller companies.

In the wake of new fuel emissions standards, new equipment costs have risen. Meanwhile, high insurance costs and high deductibles constitute an ongoing problem, especially for firms that transport hazardous materials. Volatile fuel prices are the biggest wild card in the forecast, but barring more political instability in major oil producing countries—or other catastrophes—pressures on fuel costs will not intensify too much in 2013. Going forward, the increased usage—and more timely imposition-of fuel surcharges will better shield margins from swings in diesel prices, but the trend towards higher fuel prices will hurt profitability because it undermines truckers' ability to compete with the railroads.

Railroads

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Despite the limited prospects for fast-paced GDP growth, business conditions favor the railroads. Demand growth will exceed capacity growth, but the 2013 growth rate will be similar to last year's. Barring substantially higher fuel prices, these growth dynamics will tend to push rates up only very slightly. Slow growth in rail traffic combined with modestly higher rates and recent cost cuts suggest that overall profits will increase in 2013. Margins also will benefit from improvements in productivity stemming from recent

capital investments. Higher, or more volatile, oil prices would favor this energy-efficient mode of transportation, at least when it comes to competing for shipments of bulky or containerized cargo.

The success of Georgia's ports will be a big plus for Georgia's 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 wider, deeper Panama Canal opens, East Coast ports that are ready to service the bigger ships should see substantial increases in container traffic, which will benefit both the railroads as well as truckers. Also, railroads should not have any problem passing fuel costs onto shippers, since rail is an extremely fuel-efficient transportation mode.

Shipments of agricultural products, processed food, electrical equipment, machinery, and coal will increase slightly. Shipments of consumer goods also will rise moderately in 2013. The outlook anticipates that shipments of building materials will be on the upswing from very depressed levels.

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 become less dependent 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 will encourage electric utilities to use more coal in 2013.

Airlines

The rebound of domestic passenger travel and air cargo markets will continue in 2013, however spending on air travel will continue to account for a smaller proportion of the economy than it did before 9/11. One main reason is that the nominal fare paid per mile has not increased very much even as the prices of most other goods and services rose significantly.

Vigorous competition within the airline industry will continue to limit pricing power, holding down ticket prices even when costs rise. The competition among the airlines also has trained customers to be more price-sensitive. Meanwhile, airlines' fuel costs, security costs, debt service costs, and federal tax burdens continue to rise. According to the Air Transport Association, taxes and fees imposed by government accounted for 20 percent of the typical \$300 domestic ticket in 2012, leaving less revenue for carriers.

The major carriers are reinventing their business plans—which have depended on time-sensitive travelers as the main profit center rather than price-sensitive travelers—while drastically lowering their costs. Barring government intervention, major carriers that are unable to lower costs to more closely match those of the low-fare carriers are unlikely to survive the restructuring. Hence, market share will continue to shift towards low-cost carriers. Airlines' revenues from special fees will continue to grow much faster than revenues from passenger tickets or air cargo operations.

For most airlines, labor and fuel are the largest components of costs. Since 9/11, 160,000 air transportation jobs have been cut nationwide. That amounts to a drop of 26 percent in employment. Despite air carriers' restructuring, only 1,500 air transportation jobs have been lost in Georgia, which amounts to a drop of only 4 percent. In fact, the number of jobs in Georgia's air transportation sector increased slightly during the recession. The substantially smaller percentage decline here in Georgia reflects the fundamental strength of the customer base in Atlanta as well as the region's excellent air transportation infrastructure. In the shortterm, there is not much—beyond hedging—that the industry can do to control fuel costs, but replacing older plans with more energy-efficient planes will help the industry accommodate higher fuel costs.

But, on average, too many airlines still do not make a profit despite high passenger loads. Essentially, low fares are filling up the planes, but at a price that does not generate a normal rate of return on capital invested. Nonetheless, higher load factors and ancillary revenue streams will increase profitability in 2013. The key to maintain, or boosting, the industry's long-term profitability will be to prevent capacity from growing faster than demand.

Ports

Georgia's ports provided an excellent cushion against the recession, and have fully recovered from it. Our forecast expects that the state's ports to outperform its peers by tapping directly into the growth that is taking place overseas, by diversifying the services that call on Georgia's ports, and by taking market shares from other U.S. ports. In fact, the Port of Savannah is the nation's fourth busiest and fastest growing container facility.

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 comparative advantages are the result of a series of strategic expansions over many years. For example, the Port of Savannah is the only single container facility on the U.S. East Coast with two on-terminal intermodal container transfer facilities.

Georgia's ports create substantial economic impacts. They support over 350,000 full- and part-time jobs, and ports' operations help to preserve Georgia's manufacturing base and foster growth of the state's massive logistics, distribution, warehousing, and agricultural industries. It should be emphasized that a failure to deepen the Port of Savannah to 48-feet will jeopardize many of these port-dependent and port-related jobs.

Once the Panama Canal's expansion is complete, the utilization of super post-Panamax vessels will increase dramatically, forcing shippers to move their largest and most economic-impact rich operations

to ports that can accommodate the larger ships. The bottom line is that deepening the harbor is not only essential to growth, but is also essential to retaining shippers who already use Georgia's ports. �

Public Utilities

Energy prices are expected in increase steadily in 2013; however, electricity still provides an excellent value for energy use.

lectric utilities costs are expected to continue slowly rising, which will prompt additional minor rate increases; but despite the higher price for power, electricity usage in residential and commercial markets will remain steady against competition from natural gas.

Georgia's electric utility industry, as a whole, is reasonably well positioned. The state's population will continue to grow faster than the national average, providing a solid source of demand in both residential and commercial markets. But, despite these advantages, several concerns are still relevant and significant: volatility in the energy markets, escalating costs, and political and fiscal issues associated with expansions of nuclear reactor plants. Furthermore, because the fuel mix in Georgia is heavily tilted towards coal, environmental legislation is an ongoing concern that may impact the cost of energy.

Sales to residential customers will roughly track increases in household formation, but an overall push towards household energy efficiency suggests that the incremental push to electricity sales per newly formed household will continue to wane. Though the housing recession is primarily over, construction ddemand is weak and the median square footage of new homes is getting smaller. The extremely low price of natural gas will make for stronger competition in the residential market and a few

years of steady prices have eased some of the concerns about gyrations in the natural gas market. Overall, however, residential electricity will remain a good value in the state compared with the nation as a whole.

Oil prices are expected to decline slightly and natural gas prices are expected to move only slightly higher, 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; however, utilities will face higher maintenance and insurance costs and will continue to spend money to meet potential new carbon-emission standards. Longterm interest rates will remain low in 2013, emerging as a benefit in this capital-intensive industry. In coming years, exceptionally heavy planned infrastructure investments and rising

Sector Summary

Direction: slight increase Performance: average

pension costs are expected to further increase the cost of utilities.

Following last year's modest rise in demand for power, 2013 will continue to show slightly higher demand for energy. Moreover, electric utilities will be busy with the construction of the new nuclear facility in east Georgia, which means that significant rate increases can be expected as the fluctuating capital cost of building this new mega-plant is recovered.

Natural Gas

Natural gas has experienced steep declines in price and is well positioned to gain significant market share if prices continue to remain competitive. Prices are expected to rise but remain low in 2013. Intense competition in the industrial sector and potential impending legislation related to environmental and climate protection will continue to drive demand as many users consider

switching to natural gas. The cost competiveness of natural gas relative to other fuels has also contributed to steady demand increases. Residential and commercial markets also are expected to show large year-over-year gains in 2013, but that will be partially driven by the previous year's milder winter.

Domestic production has seen a dramatic increase in the last few years and the harvesting of shale gas continues to supplement overall production. Thus, natural gas is poised to continue gaining market share and has the potential to be the go-to source for domestic energy for years to come.

Nuclear and Alternative Energy

Plant Vogtle's \$14 billion expansion gained its final permits and construction is well underway as 2,200 workers build the first new nuclear power plant in the United States in nearly 30 years. Plant Vogtle will be gaining two additional units near its Waynesboro location. The plant will be utilized to help provide the expected 27 percent increase in demand by 2030 for electricity throughout the Southeast. The cost of the new plant is being phased-in over seven years and a supplemental charge has been added to users' current electric bills to help cover it. Georgia Power's proportionate share of the estimated in-service cost is expected to be approximately \$6.1 billion. Still, alternatives to coalbased power facilities continues to be a hot topic among politicians and the public, given what is expected to be a new federal climate and energy bill.

News of Japan's Fukushima reactor accident has subsided but local fears still remain about the inherent dangers of nuclear power plants. Critics are also concerned over the cost estimates and the expectation of budget overruns, especially considering additional safety measures and the historical overruns of nuclear plant construction. Potential tightening of state and federal budgets may also produce more fiscal scrutiny of large-scale energy facility projects.

Low interest rates and the falling cost of solar cells globally show

potential as a small but growing presence in Georgia's energy sector. However, policy issues and import tariffs may restrict access to cheap solar panels made in other countries. Cheaper borrowing and federal incentives are making alternative energy sources for homes more economically viable, however. As environmental and government regulators push for cleaner sources of energy, Georgia's sunny climate engenders a large potential for solar harvestings. In addition, every major automaker has announced or released an electric vehicle and many more producers are expected to join the trend of alternative fuel vehicles especially if oil and gasoline prices remain high. �

Information

Demand for information services will expand, but employment will shrink.

n 2013, purchases of highvolume data applications and many innovative wireless services will continue to grow strongly. Demand for smart phones, broadband, pre-paid phones, tablets, e-readers and cloud computing will be among the information industry's primary drivers. In addition, there is still some pent-up demand for equipment upgrades and premium cable packages. Spending on information services therefore will grow much faster than state GDP in 2013. As broadband and network capacities become much more fully utilized, the need to invest more will intensify significantly. Meanwhile, competition between the various telecom subsectors will be intense.

Despite the ongoing commoditization of many telecom services, growing demand and penetration of innovative wireless services should allow industry-wide staffing levels to stabilize for the first time in over a decade. Employment will continue to grow in the wireless subsector, but it will decline in the wired subsector as customers substitute wireless services for wired services. Georgia may never recover all of the 49,400 information jobs that were lost during the decade-long job purge, however.

Because the usage of cell phones, tablets, and other wireless devices is soaring, Georgia's wireless carriers were hiring even as the rest of the information industry—and the overall economy—was cutting back. Thus, as of mid-2012, employment in the state's wireless telecommunications subsector was up about 20 percent from the level prevailing before the information industry's recession began. In part, this reflects higher penetration of wireless technologies into new areas such as ve-

hicular telematics, smart device communications, smart utility networks, and healthcare.

Telecommunications

Advances in Internet protocol technology, overlapping networks, the roll-out of 4G technologies, cloud computing, and regulatory changes are rapidly blurring the lines between providers of Internet, phone, and TV services. Convergence of previously separated communications industries has transformed many voice, video, and data services into pure commodities, which has brought more intense price competition.

Integrated telecom providers will continue to find success in delivering bundled services to subscribers, especially since wireless phone/tablet services are in the mix. Convergence also means that pressures to merge

Sector Summary

Direction: small decrease Performance: average

with or acquire competitors will intensify. The continued healing of global financial markets, could allow more of those deals to proceed.

Telecommunications is a debt heavy industry. In 2013, companies will expand and upgrade their networks and service offerings, incurring additional debt. Interest rates will remain close to historically low levels, but in the wake of the financial crisis, lending conditions are still tighter than normal for this stage of the business cycle. In late 2014 interest rate hikes by the Federal Reserve will cause financing costs to weigh more heavily on the bottom lines of telecom firms.

In 2013, households and businesses will allocate larger shares of their total outlays to telecommunications services, but industry-wide revenue gains will not come as easily as they did a few years ago, primarily because penetration rates for many telecommunications services are al-

ready very high. Much of the growth in the residential market will be due to strictly personal uses such as interactive video services. But, as the labor market gradually recovers, rising numbers and proportions of workers who telecommute will create growth opportunities for telecom companies that provide residences with secure broadband access to the Internet for work-related uses at home such as video-conferencing.

It should be noted that the basic cell phone market is nearly mature. But basic cell phone penetration can still go higher among lower-income households, seniors, children, and Hispanics. Pre-paid cell plans will be an effective way to promote basic cell phone usage to several of these underserved niches. Family plans coupled with location verification services that allow parents to locate their children should boost penetration of pre-paid handsets among 5-12 year olds.

A huge—and very disruptive challenge to both wired and wireless phone services is the improving quality and reliability of making calls via the Internet. As the volume of these calls grows, it is curbing the prices charged for traditional voice calls. The major drawback of VoIP is that service interruptions are somewhat more likely, which limits usage for emergency situations or to monitor security systems. Some businesses also are concerned about security. privacy, and giving up the redundancy of separate voice and data networks. Nonetheless, many of these barriers are diminishing.

Internet-ready mobile phones now give users web access whenever they wish. Cell phone technology can pinpoint a caller's location precisely, and customized information, advertisements, and emergency aid to a specific person in an exact location. Companies that develop and/ or use smart apps 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—near field communications payments via phone—is poised to make significant contributions to revenue growth.

Cable and Satellite TV

The industry's outlook reflects renewed growth in the number of households, an increase in advertising outlays, and faster growth in the demand for an expanding array of new digital products and other optional services. Declining demand for basic cable television services and the proliferation of online video distribution will be major headwinds, however.

More positively, a slight improvement in labor market conditions and more bundling of services should cause subscriber churn rates to fall. Plus, rising household incomes and a decreasing number of economically stressed households will prompt some households that recently disconnected premium services to reconnect. Profit margins are typically higher on premium cable and satellite TV services than on basic TV services, but providers will have to spend more on both marketing and infrastructure. Top-line and bottom-line growth therefore should be very strong, but profit margins may not change very much.

In Georgia, the increased penetration by satellite delivery systems and the proliferation of alternative online delivery vehicles that are easily accessed via virtually all of the newer televisions will cause the demand for basic cable television services to decline, and subscriber losses will accelerate. Lower demand for basic cable services and more competition from direct broadcast satellite, Internet television, and the phone companies will stymie increases in cable rates. Still, growth in satellite subscriptions and online video delivery will substantially outpace growth in cable TV subscriptions, eroding cable's subscriber base and its market share.

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 in 2013. LTE will give wireless phone providers the ability to offer Internet access that matches the speed and capacity of cable modems. Since VoIP calls on

4G networks are identical to other types of data transmission, the build out of 4G networks will dramatically shift the current pricing structure, which charges more for voice calls than data transmission.

Internet Services

The Internet economy will expand in 2013, but statistically it is becoming increasingly difficult to post immense year-over-year percentage gains as the online community gets larger. Nonetheless, easier and faster access will help to keep people online longer and encourage them to spend more. Not all the news is good, however. Spam, viruses, online pornography, and fraud are major deterrents to the Internet economy, reducing productivity and impeding e-commerce. Cyber-crime is still soaring, and it reduces the appeal of using the Web for the transfer of personal or highly sensitive information, which is vital to the growth of most of the higher valued Internet applications.

Despite the many challenges, rapid growth in the demand for bandwidth to support a growing array of audio and video services is anticipated in 2013. Internet broadcasting's appeal to advertisers is poised to boom, especially now that largescreen monitors are very affordable. Another boost to Web usage is due to the increasing use of handheld wireless devices on WI FI networks. One problem, however, is the whether or not the Internet's backbone will become overwhelmed by the upsurge in traffic. •

Market conditions will continue to improve, but low yields and higher regulatory costs will compress net margins.

oth long- and short-term interest rates are at historically low levels and the vield curve is very flat. Net interest margin compression therefore will push banks to purchase a greater proportion of assets with longer maturities, which means that many banks will take on credit risks that could come back to haunt their balance sheets-and their mark-to-market value—should long-term interest rates rise substantially. Long-term interest rates are expected to rise only slightly in 2013, however; and the Federal Reserve is not expected to raise short-term policy interest rates until late in 2014. So net interest margins are poised to widen slightly, which will provide some support for banks' profits.

Although the yield curve will be very depressed, deposit growth will remain strong due to continuing high levels of uncertainty regarding economic growth and federal government policies. Deposits will grow faster at small community banks and credit unions than at larger banks or at savings and loans. Meanwhile, loan growth—which has been sorely lacking—will improve in 2013, but continued uncertainty regarding the durability of the expansion means the gains in loans to both businesses and consumers will be very slow.

Financial institutions also will begin to benefit from the next up cycle for residential real estate, declining mortgage default rates, modest home price appreciation, higher spending for consumer durable goods, high levels of corporate profits, and slightly more opportunities to boost earnings derived from mergers and acquisitions and IPOs.

Gradual improvement in the housing market and slightly more new mortgage origination will have the greatest beneficial impacts on community banks. Due to more rigorous lending standards and depreciated real estate values, new loans originated in 2013 will generally prove to be very good loans. Slightly higher consumer spending for durables also should ensure growth of non-revolving loans to households.

Georgia's financial institutions will benefit from slowly improving demographic trends because the inflow of new residents increases the demand for banking services, props up asset prices, and encourages new business formation. But, in 2013, the rate of population growth will still be low relative to the rates prevailing

Sector Summary

Direction: moderate decrease Performance: average

prior to the recession. Also, house-hold formation rates, which declined very sharply over the last few years, will slowly rise as Georgia's labor market improves.

The recent growth of customers' deposits favors financial institutions' bottom lines, and banks will be slightly less dependent on more 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 could trim margins on loans with the least amount of risk.

When the Federal Reserve begins to raise short-term policy interest rates late in 2014, the rates financial institutions pay depositors on CDs will be increasing at an even faster rate. That will reinforce growth of the deposit base while simultaneously expanding net interest margins.

In 2013, the quality of corporate and business loans outstanding will improve. Capacity utilization is slowly rising towards levels that typically provide stimulus to investment in plant and equipment. As businesses' confidence in the economy slowly improves, the demand for loans should rise as companies dust off some of their plans to expand or otherwise invest. Banks' willingness to make new loans—and the quality of their old loans—will continue to be adversely affected by the glut of commercial real estate, however.

The Wall Street Reform and Consumer Protection Act will increase costs for firms providing financial services, which will come primarily at the expense of net margins. Unfortunately, they do not 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, which will reduce the efficiency and competitiveness of U.S.-based financial institutions will do very little to prevent future financial crises from developing.

Stockbrokers

Assuming that the financial markets and the overall economy continue to heal, the outlook for equities is positive for 2013, which is good news for stockbrokers. Trading activity should pick up, but it will remain depressed compared to previous economic recoveries. Most companies will experience steady profits rather than substantially higher profits, but because current stock valuations are still low, many stocks should trade moderately higher in 2013.

The Federal Reserve will not raise short-term interest rates until late in 2014. So, interest costs will not erode net earnings for debt-heavy companies in 2013, which improves the short-term prospects for stock price appreciation. Also, hard-ship withdrawals from households' 401(k)-type assets will diminish in 2013.

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 U.S. real estate market bottomed in 2012 and is recovering may cause investors to put more of their money into real estate, which could hurt other asset classes, including equities.

The long-run forecast for brokers is good, but certainly not exuberant, because a decade of low or negative returns has done lasting damage to people's opinion of equities as an investment. Plus, more people are entering retirement, which argues for asset allocations that give heavier weights to bonds rather than stocks. Increases in longevity, as well as concerns about the viability of Social Security and other pensions favor stockbrokers and financial planners.

Insurance

Record underwriting capacity coupled with modest growth in the demand for insurance products means that market conditions will remain soft, so we predict that insurance premiums will increase only slightly. Still, overall demand for personal lines of insurance will increase.

In 2013, there will be an increase in households' demand for property and casualty insurance, with automobile insurance—especially for light trucks—leading homeowner's insurance. Although the next up cycle for housing has begun, it will be too anemic to substantially boost the number of new polices written. Home prices are expected to rise moderately in 2013, but the lagged impacts of the severe correction in home prices will continue to limit increases in insured amounts and could lead to further reductions in insured amounts in many local markets. Also, the proportion of households that are unable to make their mortgage payments will still be quite high. Consequently, claim rates on home insurance policies will be elevated.

The forecast calls for more spending by households for high-

priced durable goods, such as cars, which will cause demand to grow for property insurance. The need to increase automobile insurance liability limits also will add to the demand for auto insurance.

As the economic recovery broadens, demand for commercial lines of insurance purchased by businesses will climb. The leaders will be worker's compensation and liability. Nonetheless, intense competition among insurers will prevent premiums from rising 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 demand growth. Also, a cautious approach to spending for new equipment and facilities will temper demand growth for property insurance.

In Georgia, jobs losses have substantially decreased demand for life insurance and related products. Policy lapse rose and participation in employee benefit plans declined. In the coming year, however, improved fundamentals on the demand side will result in rate increases, especially for those with the worst possible risks.

Over time, the combination of longer life expectancies, later first marriages, fewer children, lower levels of household debt, and lower homeownership 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. Also, the baby boomlet should stimulate demand for traditional life insurance policies.

These days, annuities are the primary source of the industry's premiums because people are increasingly worried about outliving their assets in retirement. Annuity sales also will benefit from a trend towards retiring at an older average age. As people of all ages take more responsibility for their retirement planning, companies that provide financial planning and investment services will benefit.

Real Estate Firms

Increases in sales of new and existing single-family homes are expected to boost commissions earned by Georgia's residential real estate brokerage firms. In addition, these firms will see more active multi-unit housing markets. But tight credit standards, less confidence in real estate as an investment, already depressed home prices, and the still weak job market will be among the factors that will stymie recovery for real estate firms.

In 2013, the market for retirement housing should be somewhat less vulnerable to tight credit standards, and stands to benefit from higher numbers of incoming retirees. But the inability to sell their current homes will continue to delay many retirees' home purchases in Georgia.

Foreign real estate buyers from developing countries will be a growing force in U.S. property markets, taking advantage of their strong currencies and depressed U.S. property prices. Similarly, sovereign wealth funds will become more active in American real estate markets, focusing their attention on commercial and industrial real estate markets with solid long-term growth prospects, affordable prices, and low to moderate vacancy rates.

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. Meanwhile, commercial real estate markets will become more active in 2013, but the next up cycle for commercial real estate will be very slow to develop. �

Retailers will see steady top-line growth, but margins will narrow.

n 2013, retail sales growth will be sustained by gradual improvements in the labor market. Small increases in the number of jobs—and the number of hours worked per job—will give more people the confidence, and the wherewithal, to spend slightly more for retail items.

Despite this, the rate of disposable personal income growth will be the same in 2013 as it was in 2012—about 3 percent in nominal terms—partially due to expected declines in transfer payments. In the wake of the recession, transfer payments have become an unusually large source of personal income for Georgians, and the current level of transfer payments—especially for social assistance—cannot be sustained. Steady growth in disposable personal income implies steady retail sales growth. Thus, by mid-2013, inflation-adjusted retail sales still will not have surpassed their pre-recession peak. Due in part to the drawn-out recovery of retail sales, retail bankruptcies and store closings will continue as shoppers focus more intently on value-priced formats and e-commerce.

Traditional retailers will continue to see considerable restraint in households' spending, reflecting, in part, sluggish job growth in 2010-2013. Many consumers will still be deleveraging: the savings rate will range from 3 to 4 percent. Many people are substantially less well off, so saving more out of current income will take priority over spending. Consequently, retailers will continue to muddle through the most subdued recovery in consumer spending since World War II.

The bounce back of the stock market helped many (mostly upper middle-class and high-income) households to recoup some of their recent losses, which provides a slight

tail wind to retail sales. Even though credit conditions are still much tighter than normal, credit is gradually become more available to creditworthy households, slowly lowering one barrier to retail sales growth. Households also will be carrying considerably less debt than before. A lower ratio of financial obligations to disposable personal income will support retail sales growth, but more deleveraging and ultimately a significantly higher savings rate—5 to 6 percent—are needed in the household sector. Neither of these developments are good signs for retailers.

Another important development underpinning retail sales growth is that the much heralded and much delayed up cycle for housing began in the first half of 2012. Home price depreciation appears to have run its course. Although our forecast

Sector Summary

Direction: moderate increase Performance: average

anticipates only limited recovery in terms of housing activity and home prices, simply achieving stability puts a floor under demand for homerelated retail goods. Indeed, stores selling furniture, home furnishings, and building materials posted large percentage gains in the first half of 2012.

Another favorable development for retailing will be continued modest increases in the number of tourists and business travelers. This boosts the prospects for retailers located near major tourist attractions, convention centers, or clusters of hotels.

In 2013, the combination of sales growth plus shoppers' recent move towards retailers' private label brands should lessen the pressure on retailers' net margins. Margins also may benefit from a slight shift away from basic products towards discretionary products where margins are higher. Renegotiated rents also will add to many retailers' net margins. Intense competition among surviving

retailers—especially online retailers—will keep the pressure on, however.

Although liquidity has improved, many retailers will remain cautious about capital expenditures. Moderately higher sales volumes coupled with stiff competition (and some recent high-profile retail bankruptcies) often encourages restructuring, but there is a vast abundance of vacant, high-quality space in most of Georgia's retail markets. Plus, capital still will not be readily available to finance retail projects. Also, it is likely that growing online distribution channels (or conserving cash) rather than spending on traditional stores will remain the priority for many retailers. The upshot of these considerations is that outlays for retail construction will remain at or near cyclical lows in 2013.

Three themes will dominate the restructuring that does take place. First, large retailers will gain at the expense of smaller ones. Second, discount retailers will gain market share at the expense of mid-price and luxury retailers. Third, online retailing will experience relatively rapid growth. The bottom line: supercenters and e-tailers will gain market share at the expense of grocery stores, traditional department stores, luxury retailers, and mom-and-pop operations.

The Bricks

Georgia's regional malls, lifestyle centers, or mixed-use centers will continue to outperform smaller malls, older neighborhood shopping centers, and isolated stores. A few 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. Mom-and-pop stores are not expected to make a comeback as places where Americans shop on a daily basis, but there is a trend that favors small shops that are conveniently located in pedestrian districts.

By focusing primarily on price, many types of discount stores and other value-oriented retailers will continue to prosper at the expense of other retailers. In 2013, discounters' share of total retail sales will rise, but discounters will face more competition from online retailing. Nonetheless, discount stores will benefit as upper-middle and middle-income shoppers continue to pinch pennies.

Walmart

Walmart is Georgia's largest employer, and the company will experience above-average gains in year-over-year sales in 2013. Consequently, the company's already dominant share of total retail sales will expand. The fact that Walmart is now the nation's largest grocer validates the super-center format. 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 everyday low prices. The heavy economic burdens borne by consumers suggest that price alone remains the deciding factor for many families now, and that's an imperative that strongly favors Walmart.

Click and Mortar Retailers

Upper- and upper-middle income consumers currently account for a disproportionate percentage of online sales. That demographic base shielded online retailers from the full fury of the recession and will ensure 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 more functional, especially for mobile customers.

But there are potential problems: intense online competition leads to margin compression. Although free shipping is a competitive advantage, this practice thins profit

GEORGIA'S RETAIL SALES IN 2013: BETTER OR NOT?

Positives

Steady job growth
After-tax income growth
Rising consumer expectations
Rising U.S. equity markets
Population growth
Slight rise in home sales
More college students
Low interest rates

Negatives

Impacts of heavy job losses Unprecedented wealth losses More personal savings Dysfunctional housing market High unemployment rate High energy costs Tight credit conditions margins. Meanwhile, online retailers must contend with customers' concerns about secure access and methods of payment, returning merchandise, spam e-mail, and post-purchase services. Large, established retailers, with name recognition and a store in nearly every large community, have been very successful at easing these concerns, however. Currently, sales tax laws provide some online retailers with a substantial pricing advantage over traditional stores, but these e-tailers should prepare for the day when this pricing advantage ends. Losing this tax advantage may not do too much damage to online sales, however, as only one in ten customers says that sales tax is an important factor in an online purchase. ❖

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

A

lmost all of the major services industries will expand in 2013, with only a few categories stagnating or declining. In general, businesses

that provide necessities, such as healthcare services, will continue to experience revenue growth. Repair and maintenance services also are expected to remain busy in the coming year as consumers and businesses continue to monitor discretionary spending. Low government revenues will continue to suppress demand for some business services, however.

Staffing Services

Even as corporate balance sheets improve, staffing services will continue to do well in 2013 because many firms will opt to remain flexible and responsive to changing economic conditions. Temp agencies have actually performed well throughout the recession and will continue to show slow growth as the economy slowly 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 positions. The flexibility of temporary positions also offers workers opportunities to move

and adjust as the recovery continues. One factor that will challenge staffing agencies is that employee turnover is expected to be quite low, simply because most jobholders are still reluctant to give up that security.

Staffing and temp agencies will see continued growth in niche markets including medical and technical staffing. In 2013, there also should be more opportunities to provide staff to export-oriented companies, including those involved in logistics and distribution. But prospects for firms that specialize in clerical, light industrial, and financial services staffing will not improve.

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: moderate increase Performance: 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

Lawvers and law firms should see slow but steady demand for their services throughout 2013. Law firms that provide services to businesses will benefit from 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. But there are some legal specialties that do well in a sluggish recovery. For example, legal work related to company restructuring, insolvency, bankruptcy, and intellectual property will continue to be in demand.

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 moderately and adjust to the needs of corporate clientele. The growth of Georgia's population of wealthy retirees will benefit lawyers who specialize in planning estates and drafting wills.

Looking beyond 2013, 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 because of growth in litigation of intellectual property, patent law, energy, employee benefits, consumer safety, and environmental concerns.

Long-term 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. 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 turf once held by the legal services industry, and this is especially likely in the provision of online legal services.

Health Care

Georgia's health care industry will remain one of the better performing sectors in 2013. Reduced government revenues will continue to restrain outlays and put pressure on Medicaid. Still, Georgia's population growth, stable funding for Medicare, Medicare's prescription drug insurance plan, more use of health services, better management of operating expenses, and the increasing market power of health care providers will help 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.

Independent imaging and diagnostic centers also will continue to capture market share from traditional hospitals.

Although a recovery is underway, the recession will continue to challenge the industry as it is harder to collect funds from self-pay and uninsured patients than it is from insured ones. Once labor market conditions improve, an increasing number of Georgians will be eligible for employer-provided health insurance plans, but the uncertain business environment may force more employers to reduce health insurance coverage or to dramatically increase deductibles and co-payments. Four additional factors remain that will limit access to employer-provided health insurance. Many of the jobs created in 2013 will be in smaller firms and self employment that are less likely to have generous medical benefits; employers will resort to temporary workers, who often do not receive health insurance; many employers will move towards high deductible health insurance plans; and some large companies may trim medical benefits for their retirees.

Another problem is that collecting amounts due from patients with medical insurance is becoming more difficult as patients' insurance plans become increasingly varied and 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.

The federal Affordable Care Act signed in 2010 will continue to impact Georgia's health care providers in the coming year. Political uncertainty remains a headwind in the medical sector and businesses await the final legislative impacts. Support for seniors, coverage expansions, increased access to care, and stronger consumer protections are benefits advertised by the bill. Critics surmise that funding for the bill will burden the already strained federal and state budgets. Various aspects of the approximately \$900 million bill

will be gradually phased in over the next three years. Expanded coverage means potentially many more new insured customers but payment rates and actual revenues may be a point of contention among health care providers.

Positive long-term factors include a growth in older and wealthier consumers who will spend a larger proportion of their incomes 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 health care 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 assume responsibility for more of these costs.

Childcare

The outlook for childcare firms will remain consistent and strong. As the economy begins to generate new jobs, more parents will rely on childcare providers to care for their children, therefore providers should be able to raise rates enough to cover cost increases. The trend towards delaved childbearing in order to establish careers and incomes will help the industry, especially for centers that offer premium care. The industry will continue to benefit from 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 continue to increase demand for educational services, because people still need marketable skills to survive in a competitive labor market. Weak government revenue collections will trim the supply or quality of public education, thereby boosting demand for private educational services. Poor employ-

ment prospects will decrease the opportunity cost of obtaining additional education, which tends to enlarge enrollment; however, lower spending for employer-sponsored education and training will counter this trend.

Higher education will continue to develop alternate revenue sources—such as increasing tuition and private donations—as government funding slows. International students will continue to fill demand in graduate programs; however, potential immigration reform could have a significant impact in the coming years.

Long-term trends are favorable, since current and future jobs will require significant investment in higher education. K-12 demand will continue to grow but will face the challenges of doing more with fewer dollars. In addition, Georgia's extremely low SAT scores will spur demand for supplemental educational services. Distance learning over the Internet continues to boom and could be a driving force in educational efficiency as the workforce demands ever more highly skilled workers. ❖

Hospitality

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

he 2013 forecast calls for lodging demand to continue its modest rise from 2012's levels. The delivery of new hotel rooms has declined sharply and probably will not see any major increases in 2013. Limited supply growth in the face of slightly higher overall demand should absorb excess room supply, raising overall occupancy rates. The slightly tighter market will exert mild upward pressure on room rates in the coming year. Depressed utilization and changing preferences for many hotel services will continue to constrain revenue per available room, so curtailing operating expenses will be important to profit generation.

The lodging industry's overall revenues will roughly match gains in overall bookings with revenues from rooms recovering more slowly than revenues from food and beverage operations. In the new and renovated properties segment, upscale and mid-priced hotels find it easier to get financing as they typically have fewer outlays and lower costs than full service hotels. High-end hotels in great locations will continue to do well as travelers still seek exclusive or customized experiences; however, the price tag will continue to be a prevailing issue. Revenues from spas, special interest packages, and other premium add-ons may see a slight increase, but revenues from telecom services and video on demand will continue to decline as more and more business travelers no longer rely on hotels for connectivity.

Spending for high-end lodging will continue to rise slowly throughout 2013. Upscale properties will benefit from slight upticks in meeting and convention activity. The slight expansion of convention travel should also help as travelers are beginning to bring family members or friends with them. These accompanying visitors also spend money on food and beverages, and entertainment, thus generating additional revenue. The prospects remain the best for mid-priced properties that attract corporate travelers and vacationers who choose nearby attractions. Declining expenditures for travel by employees of state and local governments dims some of these prospects, however.

Although the overall economy will be 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

Sector Summary

Direction: moderate increase Performance: average

remain low and stable through 2013. Hiring and maintaining staff should be easy due to the high unemployment rate and lower turnover rates. Also, higher prices and fuel costs could potentially slow travel if other options are available.

Business Travel

Business travel will see slight improvement as corporate profits continue to increase; however, overall spending growth for travel will remain fragile. Technology has reduced the need to travel and cost containment policies remain tight in many corporations. Travel to attend conventions in particular will see a light increase due to improving business conditions. Corporate outlays for revenue-generating travel that can be clearly linked to business development such as meeting with new or existing clients will continue to rise.

Atlanta still maintains its position as an efficient and affordable city in which to conduct business or hold major events. Several downtown development initiatives should further increase this attractiveness. Updated space in the America's Mart, upgrades at Hartsfield-Jackson International Airport, and the addition of the College Football Hall of Fame will all contribute to the appeal of Atlanta as a business and entertainment destination.

Because Atlanta caters primarily to the business traveler, the region's hospitality industry is extremely sensitive to changes in corporate profits and sales. These will continue to increase slightly in 2013, but gains in sales will remain modest across a broad range of industries, with some major business categories experiencing declining sales or no growth. Increases in fuel costs will translate into increased costs for both air and ground travel. Travel budgets continue to remain tight for many state governments, local governments and nonprofit organizations, too. The overall impact of these considerations is that even as GDP expands in 2013, the gains will provide a smaller boost to business travel spending than has been true in the past.

Leisure Travel

As the economy continues to recover, leisure travel will continue to increase slowly but steadily. The Atlanta airport has opened its new multi-billion dollar international terminal that should allow for more efficient travel and help Atlanta retain its capacity for incoming and outgoing flights. Atlanta already is one of the nation's major destinations for cultural travelers and the continual push to integrate the local attractions downtown should help. Also, as business travel expands, meeting and convention planners increasingly will select future sites based on cultural and historical appeal.

Driven by the weak dollar and a growing global economy, the prospects for U.S.-bound international travel continue to be good. Atlanta's international flight hub status helps encourage incoming international travel, but long waits for visas, strict entry requirements, and fewer business trips will remain barriers to

faster paced growth. Nonetheless, based on the number of international arrivals, Atlanta will remain one of the largest ports of entry in the South.

Restaurants

The outlook for the restaurant industry is mildly optimistic. Supporting factors include employment growth, more business activity, and more travel and tourism. Expenditures for restaurant meals will increase slightly but rising food costs will squeeze profits as restaurants try to maintain reasonably priced menu items for cost-sensitive consumers.

According to the National Restaurant Association, the hottest menu items continue to be focused in organic, sustainable, and eco-friendly categories. Locally sourced produce, meat, and seafood will continue to very popular. Hyper-local sources (i.e., on-site gardens, in-house butchering), farm and estate branded ingredients, and nontraditional cuts of meat round out upcoming trends. Gluten-free and food allergy-conscious items, smaller portions, nutritionally balanced menu items for children, and healthy adult entrees are also becoming more popular. Locally produced micro-distilled artisan spirits and unique cocktails are very trendy, too.

Fast food and inexpensive quick-casual restaurants will continue to slightly outperform both mid-priced restaurants and expensive full-service restaurants; but higher priced inputs will challenge value priced items. Slow growth in business travel and tight corporate expense accounts will be a drag for higher priced restaurants in 2013 but should be slightly better than last year. Menus that emphasize freshly prepared gourmet sandwiches, salads, and soups will help fast food restaurants partially recoup recent losses in market share to quickcasual restaurants. Grocery stores, especially in metro areas, will continue to expand offerings to a wider selection of freshly prepared foods on premises, directly competing with quick-service restaurants. Hotel restaurants, bars and caterers, and

commercial cafeterias will see small increases in patronage.

Rising food costs and near record high commodity prices will be the greatest challenge restaurants face in 2013. Finding and maintaining qualified and motivated employees will be relatively easy, but many restaurants still face issues of higher labor costs of the many entry-level workers they employ. Profit margins will be squeezed but slow growth in the overall economy will continue to benefit restaurants and the entire hospitality industry.

The sluggish economy has heightened the need for government resources more than ever.

he most recent Census of Governments reports that there are 1,439 local governments operating in Georgia, including county and municipal governments, special purpose districts (such as hospitals, public housing, utilities, and transit authorities), and school districts. In 2011, local governments together with state and federal government provided 17.3 percent of jobs and 14.1 percent of Georgia's GDP. In addition, 17.5 percent of personal income in the state is provided by government transfer payments. With all that in mind, the 2013 trends affecting this sector are being closely watched.

More than a decade of fast population growth, followed by the recession and a prolonged period of economic sluggishness, increased demand for services and resources offered by state and local governments. Until the onset of the recession in 2008, the heightened demand for services and protection was met by hiring more personnel. Despite a population increase that was more than double the U.S. average, Georgia's state and local government expenditures increased, on a per capita basis, at roughly the same rate (85.9 percent) as in the U.S. as a whole.

Lower economic activity, stubbornly high unemployment, and collapsed property values brought about by the recession further increased the demand for government services. At the same time, falling revenues brought sharp limits to what governments could deliver. With the onset of recession, state and local government expenditures in Georgia dropped by 1.6 percent, and amounted, per capita, to just 82.2 percent of the U.S. average. Per capita direct general expenditures by

state and local government in Georgia ranked 43 among states in 2008, but only 49 in 2009.

While the slowly improving economy should generate more revenues for state and local governments, the uncertainty and budgetary pressure will last into 2013 and beyond. The pressure on local government finances will be most pronounced in localities where assessed real estate values still exceed market values. Market values stabilized in 2012 but will rise only slightly in 2013.

More cuts to state budgets are expected in fiscal years 2013 and 2014. With the state's 2011 per capita tax collections second lowest in the country, only a rapid economic expansion and increase in incomes and sales can make up for the revenues shortfall. With only moderate growth expected in 2013, and no changes in the state's tax system, state budget recovery will also be sluggish.

Sector Summary

Direction: large decrease Performance: much worse than others

Since some of the state's and local governments' revenue shortfall was relieved by increased federal government spending, the uncertainty as to the final shape of federal spending cuts affects governments at all levels—federal through local. It affects government workers and retirees, as well as those who depend on other government programs.

Federal government payments to Georgia's state and local governments increased by 3.3 percent between 2008 and 2010, compared to the 2.5 percent average for the nation, while total federal expenditures in Georgia jumped by 24.6 percent. Per capita federal government expenditures in Georgia ranked 42 in the nation in 2008, but jumped to rank 33 in 2010. The largest jump—72.6 percent—was reported in salaries paid to federal employees in the state. A 27 percent increase

was reported in the group including Medicare benefits, earned income tax credit and unemployment insurance (21 percent of federal expenditures in Georgia).

Money paid in both civilian and military salaries constitutes a much larger portion of federal government expenditures in Georgia than in the U.S. on average (18.8 percent in Georgia compared to 10.5 percent in the U.S.). In fact, Georgia reports the fifth largest dollar amount in the country paid in salaries to federal employees, and, therefore, is vulnerable to any federal employment cuts. Money spent per capita on federal retirement, especially military retirement, and veteran's benefits in Georgia also exceed the U.S. average, as does the per capita expenditure for excess earned income tax credits.

Government services provide 14.1 percent of the state's GDP, and exceed the national average of 12.6 percent. The government's direct impact differs across the state, and ranges from 76 percent and 50 percent of GDP in Hinesville and Warner Robins, respectively, to 33 percent in Columbus, and over 24 percent in Valdosta, Athens, Brunswick, and Augusta. Albany and Savannah derive about 20 percent of their GDP from government. Rome, Macon, Gainesville, Atlanta, and Dalton, on the other hand, are at or below the U.S. average, with 12.9 percent or less of their GDP coming from government activities.

Not surprisingly, metro areas with large military installations saw the largest 2008-2010 increase in the dollar value of government-originated GDP: Hinesville, Columbus, Warner Robins, Valdosta, and Albany saw an increase ranging from 11.6 percent (Hinesville) to 7.5 percent (Albany), much higher than the U.S. metro area average of 5.6 percent.

While the state's GDP captures the impact of income derived from government employment, local incomes are also supplemented through government transfer payments, such as retirement, disability, medical benefits, income maintenance, unemployment, veteran's, and education benefits. In the current budget environment, some of these

payments will be subject to intense scrutiny.

Given Georgia's low unemployment and relatively young population, transfer payments historically were a relatively small portion of income. In 2011, however, the portion of income derived from transfer payments in Georgia and the United States as a whole drew closer together: 17.5 percent in Georgia compared to 18 percent in the U.S.

Many of Georgia's metropolitan areas depend more on government transfer payments than the national, or even state average, however. Among the state's metropolitan areas, the portion of income derived from government transfer payments ranges between 22.5 percent and 26.5 percent in Augusta, Dalton, Brunswick, Valdosta, Macon, Rome, and Albany, to 20 percent in Hinesville and Columbus, and between 17.9 percent and 18.9 percent in Warner Robins, Savannah, Athens, and Gainesville. Atlanta derived only 13.7 percent of income from government transfer payments, and therefore is less vulnerable to cuts in federal programs.

Budgetary pressure already has resulted in the shrinking number of government jobs in Georgia. In 2011, state, local, and federal government together provided 669,200 jobs, down from 679,100 in 2010. In June 2012, preliminary data showed that government employment dropped to 662,200 workers. In all, the January-to-June average government employment dropped by 667 jobs (0.1 percent) between 20011 and 2012.

Despite the shrinking number of government jobs, their share and importance within Georgia's economy is increasing. Although historically the portion of jobs provided by governments in Georgia was smaller than in the U.S. as a whole, by 2012 federal, state, and local governments provided 17.2 percent of total employment in the state, which slightly exceeds the U.S. average of 16.8 percent. Local governments provide 61.1 percent of these jobs, followed by the state government at 23.3 percent, and 15.6 percent provided by federal government.

The Selig Center predicts that 2013 will be another year of declining employment in the government sector as a whole. State government employment is likely to drop, and local governments—the largest part of government employment in Georgia—are also likely to see more of their jobs evaporate. Federal government employment in Georgia will also be affected by the budgetary challenges, and will shrink in the coming years, although the extent and final shape of federal budget cuts are uncertain. Hinesville, Warner Robins, Columbus, Valdosta, Athens, Brunswick, and Augusta will be most vulnerable to government (especially federal government) employment and spending cuts, while Albany, Rome, and Macon are exposed to funding cuts in social programs. �

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

s a whole, Georgia's life sciences industry weathered the recession and the sluggish recovery that followed with a 2007-2011 job increase

of 1.8 percent, driven primarily by employment gains in two relatively large sectors: surgical instruments manufacturing and medical laboratories.

Although the industry as whole gained employees, some vital sectors suffered significant losses: most notably, pharmaceutical manufacturing (12.9 percent), and biotechnology (10 percent). At the same time, the state lost 7 percent of jobs overall.

The job losses in pharmaceutical manufacturing were the heaviest in 2011, while biotechnology was hit hard in 2010 and continued to lose jobs through 2011. Nationwide, production in the pharmaceutical sector shrank in 2012 compared to 2011, but is expected to edge up in 2013. In Georgia, the long-term prospects for pharmaceutical manufacturing improve with the announced opening of Baxter International's new manufacturing plant.

The challenges to the pharmaceutical industry are expected to continue through 2013, with patent expirations and the initial cost associated with the phasing in of healthcare reform. Declining research and development productivity will continue to be an issue for both pharmaceutical and biotechnology firms.

On the positive side, while patent expirations cut into the sales of blockbuster prescription pharmaceuticals, they create opportunities for companies that manufacture generic drugs. Also, the new healthcare law will bring additional expenses for pharmaceutical firms (such as

increased fees and the cost of rebates for prescription drugs), but the expanded number of customers covered by health insurance should help to offset these costs. Even though the final impact of the expanded customer base is uncertain, most analysts expect a positive long-term balance, with effects providing a positive impetus to the industry after 2014.

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. Although also affected by both the costs and opportunities resulting from the Affordable Care Act, the biotechnology sector scored a major victory, since

Sector Summary

Direction: large increase Performance: better than most

the legislation protects new biotechnology drugs for 12 years.

Although promising new technologies and products assure positive long-term prospects for the biotechnology industry, in Georgia, biotechnology employment has contracted as the industry has matured.

Funding is an issue, too. After several years of strong performance, biotechnology firms in Georgia face difficulties in raising venture capital, which fell from over \$40 million in 2008, to \$15 million in 2009, \$11.5 million in 2010, and \$0.3 million in 2011. Since a large part of capital raised in previous years fueled early-stage development, Georgia's biotechnology companies face a difficult transition, since expansion capital in biotech is notoriously difficult to obtain.

Georgia's surgical and medical instruments, appliances and supplies manufacturing industries weathered the recession with more jobs in 2011 than in pre-recession 2007. Annual

wages in the largest medical devices manufacturing sectors climbed in 2011 compared to 2010. The cuts in medical spending by consumers and governments both here and abroad do present potential challenges to this industry, however. In addition, medical devices firms will be affected by the new excise tax mandated by the Affordable Care Act. Long term, the aging population and the increased pool of patients covered by health insurance should help to steady the boat.

Medical and diagnostic laboratories had a good year in 2011, with jobs added, and higher average annual pay compared to 2010. The trends toward more efficient delivery of health care favor growth in this sector, but at the same time, emphasis on cost savings may produce the opposite effect. Like other sectors involved in health care, diagnostics and testing is likely to benefit from the increased number of patients with health insurance coverage. Adding to the uncertainty, the industry is also facing fast paced technological changes and possible changes in the regulatory environment.

Since innovation is widely considered the key to success in the global economy, industries dependent on cutting edge technologies often require, and receive, government backing. But in today's turbulent economic and political environment, the extent of this support is uncertain. New technologies often invite much scrutiny, and are subject to strict regulations. The combination of these factors contributes to a climate of uncertainty which continues to plague businesses in the life sciences fields. ❖

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

eorgia's animal industry performance will be mixed in 2013. Poultry production will be lower but prices are expected to increase by 3 to 4 percent. The export market for poultry will be down slightly. Beef production is expected to be down by as much as 5 percent due to the rising cost of feed and the drought in the Midwest. The decrease in supply will result in an increase in prices in 2013. The trend towards higher farm milk prices that began in the last guarter of 2012 will continue into 2013. Georgia producers are likely to see a \$2 to \$3 per hundredweight increase over 2012 price levels for at least the first half of the year, followed by more moderate increases during the second half.

Cotton prices will benefit from strong prices for competing crops such as soybeans and corn. Prices will also be supported by a weaker U.S. dollar compared to other currencies. In contrast, any improvement in prices will be tempered by large supplies from China and elsewhere and by weak demand growth.

The price prospects for 2013 are expected start out high and then decline as production is increased for corn, soybeans, and wheat. Peanut prices will bottom out during the winter or spring as long as acreage is cut back enough to keep stocks from growing in 2013.

The produce industry forecast is mixed. The prices of fruits and nuts are expected to be higher in 2013. The decrease in the supply of peaches has led to an increase in prices. Increased export markets and

domestic consumption continue to put upward pressure on blueberry prices. Vegetable production has risen, and so have imports, especially from China. The result of increased supply is a forecasted lower price in 2013 for many vegetables.

The green industry plant materials showing increases in sales more than the average for the industry include: food crops grown under cover, greenhouse grown bedding plants and potted flowering plants, container grown nursery stock, and sod. The supply of these products is expected to increase in 2013.

Despite nationally rising farmland prices, Georgia has seen its farmland prices fall. This is expected to continue into 2013. Land rents in Georgia have increased and are expected to remain strong in the coming year. In addition, an increase in the demand for non-real estate loans has been created by the farms' need

Sector Summary

Direction: moderate increase Performance: better than some

to finance their working capital and equipment purchases. The latter is possibly a reflection of some farms' move to mechanize most, if not all, of their farm operations to lessen their dependence on seasonal farm labor.

Poultry

Georgia's poultry and egg industry will experience a decrease in production in 2013 with prices expected to increase 3 to 4 percent. Delayed placements are still possible in 2013, impacting the supply of broiler meat. The drought in the Midwest has resulted in increased corn and soybean prices, which has caused increased feed costs. Because sharply higher prices are expected for corn and soybeans, poultry meat and egg production is expected to be down. The broiler meat production forecast was lowered in 2013 by 600 million pounds to 36.5 billion

pounds. Broiler meat exports are expected to decrease slightly in 2013 from 3.3 million metric tons in 2012 to 3.1 million metric tons in 2013.

The estimates for egg production in 2013 was lowered to 7.5 billion dozen, down 1.3 percent or 100 million dozen from the previous estimate.

Dairy

After more than a decade of declining dairy farm numbers and milk production, Georgia's dairy industry began to show some recovery in 2009, a trend that strengthened in 2012 and is expected to continue into 2013. The state is currently home to 256 dairy farms, which are collectively expected to produce about 1.57 billion pounds of milk in 2012 and a similar amount in 2013, making the dairy industry the state's eighth most important commodity in terms of total farm gate value. The turnaround is attributable to expansion of existing farms in the wake of record-high milk prices during 2007 and 2008, and the establishment of several large grazing dairies in the east-central part of the state.

Farm milk prices are highly volatile and are driven by both national and international supply and demand conditions. The impact of widespread drought throughout much of the Midwest in 2012 will continue to affect the dairy industry through substantial price increases for feed grains and forage well into the coming year. Continued high feed prices through at least the first half of 2013 will lead to less intensive feeding practices and increased culling of older, less productive cows. The result will be a smaller U.S. dairy herd, lower milk production per cow and thus higher farm-level prices. Producer margins will remain tight for those producers that purchase feed rather than grow it on the farm, however.

Georgia's milk producers are likely to see a \$2 to \$3 per hundredweight increase over 2012 price levels for at least the first half of the year, followed by more moderate increases during the second half. For producers having reached an average mailbox milk price of \$20 to \$21

per hundredweight during 2012, this would translate into an expected price range of between \$22 and \$24 per hundredweight for 2013.

Red Meat

Due to rising costs and shrinking herds, total red meat production is expected to be down between 4 and 5 percent at 47.84 billion pounds. Increasing grain prices shrank margins for pork and beef cattle producers in 2012, and this situation will continue into 2013. Pork producers should see higher prices too, but the higher costs of corn and sovbean meal will make economic profits doubtful. It is unlikely that Georgia cow-calf producers will see the record prices that they saw in 2012, but prices will still be favorable.

Cotton

Cotton producers not contracting pricing prior to planting for the 2012 crop subsequently saw a 17 percent downtrend in prices during the spring and summer months and into harvest time. Depending on earlier marketing decisions and remaining price prospects, the average price received for the 2012 crop will likely be around 80 cents per pound. Producers should benefit from slightly better average prices for the 2013 crop.

Cotton prices will benefit from strong prices for competing crops such as soybeans and corn. Prices will also be supported by a weaker U.S. dollar compared to other currencies. In contrast, large supplies—primarily from China—and weak demand growth will temper any price improvements.

Stocks are expected to further increase leading into the 2013 crop year. Approximately 45 percent of the world stockpile is held by China alone. Having very low supply in 2010, China increased imports to build stocks during 2011 and 2012. While this was beneficial to prices (by boosting demand) in the short-term, this buildup of stocks will now hang over the market for 2013.

U.S. cotton acreage declined 16 percent in 2012. Georgia acreage

was down 19 percent due, in part, to a shift in acreage to peanuts. U.S. acreage probably will decline further in 2013 due to continued high prices and competitive net returns from other crops. Georgia acreage, however, could remain stable or even increase depending on peanut price/ contract opportunities. Prices for the 2013 cotton crop will have to be competitive with alternative crops to compete for acreage, but with high stocks and still weak demand, prices may not need to be overly aggressive. Producers can expect prices to likely range mostly between 80 and 90 cents.

Peanuts

Peanut production will set a record when harvest is done in 2012. Georgia is the main driver in the U.S. due to a near doubling of planted acreage and a record yield estimate, however, every state in the peanut belt increased planted acres in 2012. Most of the peanut-producing counties experienced good to excellent conditions, and for the first time since 2009, dry land yields will rival irrigated yields. Georgia increased planted acreage by 55 percent to 735,000 acres, while the U.S. increased by 43 percent to 1.63 million acres in 2012. The state average vield is estimated to reach a record 3,900 pounds per acre, an impressive jump from a 3,536 three-year average. The U.S. average peanut yield is also expected to set a record at 3,712 pounds per acre, breaking the 2008 record of 3,426 pounds per acre.

The combination of large acreage and record yields will lead to record production of 3 million tons, relieving any concerns about ending stock supplies for the 2012/13 marketing year. Focus in the peanut industry will shift from holding back demand to growing the demand in the domestic market for peanut products and increasing exports. Ending stocks are projected to grow from a very tight 500,000 tons to a historically large surplus in one year. The carryover of 2012 peanuts into the 2013/14 marketing year could be more than 1 million tons.

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Farmer stock prices are projected to drop from \$1,000 per ton at the end of 2011 to \$355 per ton at the end of 2012. The drop in price will negatively affect net farm income. The record 2012 crop will be costly for many growers due to disease and insect pressure, high seed prices, and higher irrigation costs. Prices to farmers will start out low in 2013, between \$380 and \$450 per ton unless cotton rallies at planting. It will be difficult for peanuts to compete at current corn and soybean futures prices for 2013.

Grains and Soybeans

Corn planted in Georgia dropped 10,000 acres to 335,000 in 2012, but harvested acres increased to 285,000 acres due to a better grower season. Georgia set a record vield at 185 bushels per acre, the fourth consecutive new record vield. The average state yield will far surpass the U.S. average yield, which was pegged at 123 bushels per acre in September. This is the second consecutive year that Georgia has exceeded the U.S average yield. Total corn production in Georgia will exceed 50 million bushels for the third time in 20 years.

Corn futures prices rallied from \$5 in June to over \$8 in September, peaking at \$8.49. Prices are expected to remain strong going into 2013, as the pipeline needs to be refilled. A record acreage was planted in 2012 at 96 million acres. In order to keep acreage in corn, the 2013 futures price of corn will trade in the \$6 to \$7 range. Eight-dollar corn has reduced corn consumption projections from 13 billion bushels to 11.25 billion bushels total use for the 2012/13 marketing year. The largest drop in use will be from ethanol followed by feed, then exports. The short corn crop will encourage more corn acres in Georgia for 2013 with high prices relative to cotton and peanuts.

The soybean supply and demand situation is just as tight if not tighter than corn, prompting a climb in U.S. soybean acreage of 1 million acres for a total of 74.6 million acres. Georgia followed the trend, going

from a recent low of 135,000 acres to 190,000 acres in 2012. The average yield for Georgia is expected to rebound over last year to 31 bushels per acre, which is above average. Conversely, the U.S. average yield is estimated at 35.3 bushels per acre, down from last year by 6.2 bushels. Ending stocks for soybeans are projected to drop to 115 million bushels or 4.3 percent of total use. This leaves no room for error as South America is coming off a drought in 2011. As a result, demand has been rationed by high prices (\$17 per bushel and higher). Georgia is not a major player in soybean production but has processing and export infrastructure in place that needs a local supply. Prices in the range of \$11 to \$13 per bushel for 2013 will encourage more acres of soybeans to be planted in Georgia. Exports to China will need to continue to support soybean price prospects. South America will impact U.S. exports with an expected decline once their winter harvest begins.

Wheat prices have risen in the U.S. and Georgia even though the supply and demand balance looks somewhat bearish. Global production problems along with concern with winter plantings for the 2013 crop are supportive to wheat prices. Georgia harvested 200,000 acres in 2012, same as 2011, but the average state yield dropped from 55 bushels to 44 bushels per acre. The U.S. winter wheat yield improved from 46.2 bushels to 48 bushels per acre in 2012. Thus, supply is up for 2013. Total use is projected to increase in feed and export categories for wheat. The high price of corn, global production problems, and a weakening U.S. dollar forecast help to increase total wheat consumption. As a result, ending stocks are projected to tighten slightly to 700 million bushels leading to a price projection of \$7 to \$8 per bushel.

Fruits

Due to favorable weather conditions, Georgia peach growers began harvesting their crops earlier this year compared to last year. Peach production was slightly reduced this

year compared to 2011; however, the quality, fruit size, and overall cosmetic appearance were excellent. Other peach-producing states such as California and South Carolina also experienced good quality fruits and decreased production. The combined shortages from these three major producing states and excellent marketable quality translated to better prices obtained by growers. Overall, the Consumer Price Index (CPI) for fresh fruit gained 24 points partly due to the decreased production of most fruits and nuts this year.

Blueberries growers from south Georgia received \$13-18 fob price per flat of 12 six-ounce cups with lids in June this year compared to \$11-\$13 in the same time period last year. Because of the early market window (late March), Florida blueberries sometimes get superior prices compared to Georgia. Also, an increase in acreage and yields in Florida may create competition for Georgia.

Domestically, per capita consumption of blueberries has increased three-folds to 1.3 pounds, which is good news for the industry. Due to this increase, half of our blueberries are consumed domestically while the rest is sold to foreign markets such as Chile, Canada, and Argentina. In 2011 blueberries export value reached a peak of \$376 million, while the export volume was 78.5 million. Canada, which used to be our top importer since 2000, lost its position to Chile in 2007. For the past three years, about 60 percent of the U.S. blueberries were exported to Chile.

The demand for organic fresh fruits and vegetables is constantly on the rise. Out of almost \$200 million of selected organic horticultural produce exported in 2011, a total of 8.4 percent were organic blueberries, reflecting 17 percent total share. Other crops that contributed to the total export value were strawberries, apples, grapes, cherries, lemons, oranges and coffee, some of which are not grown in Georgia. The major export destinations for U.S. organic produce are Australia, Mexico, Japan, New Zealand, and Canada.

Pecan growers in the major producing states have been having problems with drought, which is expected to have an impact in the current production season, even though it has been an "on year." Despite the drought, prices have been skyrocketing. In January 2012, grower prices ranged from \$1.50 to \$5.20 per pound, whereas it was \$1.40-\$3.60 last year. This price hike can be partially blamed on the increase in export volume, which has created a natural shortage domestically, thus maintaining the strong price. The price of pecans is expected to stay strong for a long time, because it will be a while before the gap between supply and demand can be narrowed.

Vegetables

The U.S. vegetable harvested area, which includes fresh vegetables, melons, potatoes, dry beans, mushrooms, dry peas, lentils, vegetable seeds, and sweet potatoes, increased from 5.7 million acres in 2011 to 6.5 million acres in 2012. Despite the 13.1 percent increase in harvested area, total crop value decreased from \$10.88 billion to \$9.85 billion in the same time period, thus equivalent to a 9.4 percent decrease in value. During this same time period, imported vegetable increased by 4.5 percent, while export slightly increased by 1.5 percent. Per capita use of vegetables increased by 1.8 percent, i.e., from 385 pounds in 2011 to an estimated 392 pounds in 2012. This means that Americans will consume more vegetables in 2012 compared to 2011.

Low prices for almost all the available vegetables has been attributed to the excellent growing conditions across North America's vegetable growing regions. In the first quarter, prices for some vegetables had dropped by about 50 percent compared to 2011. Tomatoes, which are among Georgia's top ten commercial vegetables, and lettuce suffered about a 60 percent drop in price compared to last year. In the first quarter of 2011, sweet corn sold for 52 cents compared to 34 cents in 2012 while bulb onions sold for 39 cents compared to 12 cents in the same period.

Even in the third quarter, prices were higher in 2011 than in 2012 for most vegetables. Overall, vegetable export was down by 10 percent compared to last year. Although sweet bulb onions from Georgia and Texas experienced favorable growing weather conditions, downv mildew problems in some areas had an impact on yield and size, thus partially blamed for the 26 percent decrease in export from last year. Although imported vegetables from Mexico, Canada, and Peru also decreased, China actually experienced a 13 percent increase in its vegetable export to the U.S. Of course, one of the problems in this industry concerns migrant labor and the unsolved immigration issues currently entangled in Georgia's courts.

Green Industry

Georgia's green industry experienced a shift in 2012. The categories of plant materials showing sales increases above the industry average include: food crops grown under cover, greenhouse grown bedding plants and potted flowering plants, container grown nursery stock, and sod. Those categories with lower than average changes in sales include: propagative materials, field grown flowering and shade trees, cut Christmas trees, cut flowers, cut cultivated greens, and dried bulbs. The single largest expense reported by Georgia's horticultural specialty operations is total hired labor expense; other major categories of expenses are for propagation, seeds, cuttings and transplants, with fuel and energy at about the same as total container expense and other production expenses.

In general, consumers will find an ample supply in 2013 to meet the pent-up demand stemming from the drought and 2012's hot and humid spring and summer. Ample supply also means fair (but not necessarily cheap) prices.

Financial Conditions of U.S. and Georgia Farms

Based on the USDA National Agricultural Statistics Service's recent report on trends in farmland values and cash rents across the county, average farmland value increased by 10.9 percent from its 2011 value of \$2,390 per acre to \$2,650 in 2012. National average values for cropland and pasture also increased in 2012 by 14.5 percent and 4.6 percent, respectively, over their 2011 levels. In contrast, Georgia's average farmland value declined by 7.9 percent from \$3,800 per acre in 2011 to \$3,500 in 2012. During the same period, average cropland and pasture values in Georgia also declined by 4.8 percent and 16 percent, respectively.

The cash rental market in Georgia, however, experienced more favorable conditions. The latest 12-month growth rates in average cash rents for cropland and pasture in Georgia—13.29 percent and 4.35 percent, respectively—exceeded national growth rates for these farmland categories. The deviation between trends in farmland and agricultural use values can be explained by non-farm influences. Realized gains in cash rental rates in Georgia are indicative of favorable returns on agricultural activities in the state. However, farmland valuation depends on factors other than agricultural use considerations, such as the prevailing demand for real estate investments and prevailing credit market conditions, among others.

Developments in the lending industry have been promising. A recent survey conducted by the Federal Reserve Bank of Atlanta among the region's senior loan officers indicates that banks are now experiencing a stronger demand for all types of loans. A few have already started to ease lending standards for loans to businesses, while the rest decide to maintain, instead of tighten, their lending stance. Across the country, the farm sector's real estate debt decreased slightly (0.6 percent) as non-real estate increased by 7.2 per-

cent in 2012 over their 2011 levels. Such increasing demand for non-real estate loans is created by the farms' need to finance their working capital and equipment purchases. The latter is possibly a reflection of some farms' move to mechanize most, if not all, of their farm operations to lessen their dependence on seasonal farm labor. This trend is expected to continue through 2013. �

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