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Introduction

The second half of 2023 was filled with activity that impacted the Florence-Muscle Shoals MSA impact region and the state as a whole. A number of legislative changes were debated and enacted in late 2023 and early 2024. In September 2023, Alabama reduced the state sales tax on groceries from the full state rate of 4% to 3%, leaving only three remaining states that tax grocery items at a full state sales tax rate. This legislation also included a provision to further reduce the state sales tax on groceries to 2% once Education Trust Fund revenues attain certain targets. A reduction in the state sales tax on groceries, even by 1%, has a myriad of impacts on residents, businesses, and state tax collections. While this type of tax reform is generally focused on reducing the tax burden for certain income groups, reducing the sales tax on groceries may result in improved economic efficiency. Forecasts suggest that reducing these taxes may increase real gross state product, employment, and the desire of others to move to Alabama as the economy expands. If these events were to occur, we would expect an increase in state tax revenue. Education has also been on the legislative agenda with the so-called “School Choice” bill. This edition of the update also discusses the relationship between education and economic development as well as the educational attainment differentials between the Florence-Muscle Shoals MSA and the rest of Alabama.

Inflation continued to ease in most categories during the second half of 2023. Overall inflation for the East South Central (ESC) region, as defined by the Bureau of Labor Statistics (BLS), averaged 4.1% for the second half of the year, down from 5.2% during the first half of the year. This brings overall average inflation to 4.6% for 2023. In a change from recent editions of this update, most categories experienced similar cooling trends between July and December 2023. However, inflation remained high in the Housing category, measured at 8.6% for 2023. Food and Beverage inflation of 6.0% was the second highest of all other categories with Food Away from home (6.6%) dominating the general Food and Beverage Category, and Food at Home inflation totaling 5.9% for 2023. Hopefully, the current inflation trend holds; however, early estimates for inflation in January and February 2024 cast some doubt about the trend holding. With inflation cooling, changes in total employee compensation, as measured by the Employment Compensation Index (ECI) also slowed during the second half of 2023. The ECI increase of 4.66% during 2023, coupled with lower inflation during the second half of the year, resulted in an increased standard of living for ESC residents as the total changes in wages began to catch up with total inflation changes over the last 2 years. Total compensation changes still lag behind total inflation, but the gap has narrowed since the previous version of this update.

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State Sales Tax on Groceries

Effective September 1, 2023, Alabama reduced the state sales tax on Food at Home (groceries) from the state maximum rate of 4% to 3%. Act 2023-554 also provides for the sales tax on groceries to be reduced to 2% in September 2024 or later when certain requirements are met relating to growth in Education Trust Fund tax revenues. While this change does not impact local (county and city) sales tax rates for groceries, this represents an important change in the Alabama tax system. Alabama is currently one of only 12 states that impose taxes on groceries at the state level. Grocery taxes range from a low of 0.125% in Arkansas to a high of 7% in Mississippi. Other states that currently tax groceries include Hawaii, Idaho, Illinois, Kansas, Missouri, Oklahoma, South Dakota, Tennessee, and Utah. By 2025, the list of states levying sales tax on groceries will be reduced to 10 as Oklahoma grocery taxes will be eliminated by August 2024, and Kansas will follow suit during 2025. Other states also have plans to further reduce or eliminate grocery taxes but currently do not have legislation in place. Sales taxes are generally known to be regressive, placing a substantial burden on lower-income households. As such, much of the legislation around the United States targeting the removal of grocery sales taxes is focused on reducing the regressivity of total state taxes. The case is no different in Alabama as the Alabama tax system is one of the 10 most regressive state tax systems in the United States. In addition to the question of regressivity, such changes may also have positive economic benefits.

Research by Foster and Malone (2018)¹ investigates the issue surrounding the economic impact of taxing groceries in Alabama. They discuss the well-known idea that taxes in general have an impact on various economic decisions and some taxes change the behavior of economic agents more than others. They also suggest that various aspects of the Alabama tax system (i.e. relatively high sales tax rates, relatively low-income tax rates, the lowest property taxes in the nation, and taxing groceries at the full sales tax rate) may combine to impose a significant burden on the Alabama economy and that altering some components may improve how the economy functions. Should such an improvement exist, the evidence would be revealed as an increase in gross state product, employment, and income as the economy begins to function more efficiently. As the economy expands, state tax revenues would increase without any other changes to the current tax system. Specifically, Foster and Malone investigate several revenue-neutral options related to exempting groceries from taxation. These tax reform plans are revenue-neutral in that the tax revenue that is lost by exempting groceries from sales taxes is replaced by increasing the relatively low Alabama personal income or property tax rate.

Utilizing a computable general equilibrium forecasting model, Foster and Malone estimate the economic impact of this tax reform over a ten-year time horizon. The results indicate that replacing the entire state-level 4% sales tax on groceries with either an increase in the income tax or the property tax, has positive benefits for the Alabama economy. Given that the state-level property tax in Alabama is so low, even relative to the state personal income tax rate, replacing the sales tax on groceries with the property tax yields slightly larger efficiency gains. In the initial year after the tax reform, the forecasting model estimates that Alabama's Real Gross State Product (RGSP) would increase by more than \$1.3 billion, increasing

¹ For a complete discussion of this issue, see Foster, M.F. and Malone, K.D. (2018). Tax Reform in Alabama: The Case of Taxing Groceries. *The Southern Business and Economic Journal*. 41(1). p.39-63.

employment by more than 24,000 jobs. Furthermore, this economic expansion is expected to draw an additional 10,000+ residents to the state. This economic expansion would naturally result in increased tax revenue for the state, even though the tax reform itself is designed to be revenue neutral. Although the majority of benefits associated with this tax reform occur in Year 1, these benefits persist and continue to increase over the 10-year time horizon.

In practice, such a revenue-neutral reform could prove difficult as increasing the current state income and/or property tax rate would require a constitutional amendment. It should be noted that revenue neutrality is not required and was not part of Act 2023-554. Leaving other state tax rates unchanged could result in even greater benefits to RGSP and employment relative to those estimated by Foster and Malone. It will take time for these changes to work their way through the economy; however, if the forecasting models are correct, Alabama should experience an increase in economic activity and state tax revenue in a fashion similar to the increase in federal income tax revenue that occurred following federal income tax reform in 2017.

Inflation by Major Category: July through December 2023

We open this section of the report by examining annual inflation within the East South Central (ESC), region as defined by the Bureau of Labor Statistics (BLS), by category and comparing inflation during the first and second halves of 2023. As discussed above, prices for “All Items” increased by 4.6% during 2023, which is more than double the Fed’s customary inflation target of 2%. Additionally, we find that inflation exceeded this target in 9 of 12 major categories. Inflation in the Housing category leads the way at 8.6% annually while Fuels and Utilities and Food Away from Home categories increased by 6.7% and 6.6% respectively. Food at Home represents a major expense for many families across the region and inflation in this category is measured at 5.9% during 2023. Inflation in this category is just slightly under three times the Fed’s 2% target. Inflation in the Apparel and Education and Communication categories, measured at 3.4%, represents the lowest inflation level for 2023 among the 9 categories that exceeded target inflation. When considering the three remaining categories, Medical Care and Transportation prices declined slightly, by 1.1% and 1.5% respectively, while Motor Fuel prices declined more significantly, reducing by 12.1% during 2023. Annual inflation estimates for all major categories can be found in the table below.

Comparing the first and second half of 2023 we can gain some insight into the current trajectory of inflation. The table indicates that inflation for “All Items” in the ESC decreased from 5.2% in the first half of 2023 to 4.1% in the second half, certainly a positive sign given the persistence of inflation over the last two years. Inflation by category is more consistent during the second half of 2023 with 10 of 12 categories displaying lower inflation during this period. Transportation and Motor Fuel are the two categories that break with the other 10 categories. Transportation prices decreased by 3.1% during the first half of 2023 and remained steady over the second half with inflation measured at 0.0%. Motor Fuel prices declined during both periods; however, prices declined by 15.9% during the first half and slowed to a decrease of only 8.0% during the second half. Medical Care experienced a slight increase of 0.1% in inflation during the first half and a decrease of 2.2% during the second half of 2023. This is the only other category to experience a decrease in prices during the second half of the year. Inflation in the Housing category decreased slightly from 9.3% to 7.9% while Food at Home prices cooled more

quickly, declining from 9.2% to 2.7% during the second half. Cooling inflation in these categories, along with Food Away from Home inflation declining from 8.3% to 5.0%, represents a positive impact for households in the region. Exact changes for all categories can be found below.

2023 Semi-Annual and Annual CPI by Category
All Urban Consumers: East South Central (12 Month % Change)

Major Category	1st Half 2023	2nd Half 2023	Annual
All Items	5.2	4.1	4.6
Apparel	4.4	2.4	3.4
Education and Communication	4.5	2.2	3.4
Food and Beverage	8.8	3.5	6.0
Housing	9.3	7.9	8.6
Household Furnishings and Ops	6.2	2.6	4.3
Fuels and Utilities	9.7	3.7	6.7
Medical Care	0.1	-2.2	-1.1
Recreation	4.7	4.3	4.5
Transportation	-3.1	0.0	-1.5
Food Away from Home	8.3	5.0	6.6
Food At Home	9.2	2.7	5.9
Motor Fuel	-15.9	-8.0	-12.1

Source: BLS

The remainder of this section provides details regarding inflation by category from July through December 2023. The table below indicates that inflation again varied on a month-to-month basis as measured on a 12-month percent change basis. Inflation for “All Items” varied from 3.6% in July to a high of 4.6% during September, then declining during October and November and ending the year at 3.7% during December. Medical Care costs declined by varying amounts from July through December; the only category displaying consistent price decreases. The only other categories to experience price reductions are Household Furnishings and Operations (-0.2% in December), Transportation (-5.1% in July), and Motor Fuel (-21.9% in July, -1.9% in August, -7.4% in October, -11.9% in November and -5.5% in December). With the 5.1% decline during July in the Transportation category, coupled with modest inflation in the remaining months, yield the 0.0% second half 2023 figure described above. Housing inflation remained mostly steady between July and November before dropping to 6.4% in December. Except for a slight uptick in inflation in the Food at Home category during August, prices in this category were below 2% during October and November and below 1% during December. While these reductions in the inflation rate are positive, it is important to remember that prices in December 2023 are significantly higher than in January 2020. As such, the estimates provided in the table below are generally not indicative of prices returning to previous levels, but rather a reduction in the current rate of inflation.

**2023 Monthly CPI by Category All Urban Consumers: East South Central
(12 Month % Change)**

Major Category	July	August	September	October	November	December
All Items	3.6	4.5	4.6	4.2	4.0	3.7
Apparel	4.2	2.0	0.8	3.1	2.4	1.8
Education and Communication	3.1	3.0	2.4	2.4	1.4	0.9
Food and Beverage	5.0	5.2	3.4	2.8	2.7	1.9
Housing	8.6	7.6	8.3	8.3	8.1	6.4
Household Furnishings and Ops	1.3	0.4	3.0	3.0	3.0	4.6
Fuels and Utilities	6.6	4.1	3.5	4.4	4.3	-0.2
Medical Care	-1.7	-2.3	-3.2	-2.8	-2.1	-1.1
Recreation	2.9	4.3	4.0	5.1	4.9	4.8
Transportation	-5.1	0.7	2.3	0.1	0.1	2.7
Food Away from Home	6.2	5.2	4.6	4.6	4.9	4.8
Food At Home	4.2	5.3	2.8	1.8	1.7	0.6
Motor Fuel	-21.9	-1.9	3.8	-7.4	-11.9	-5.5

Source: BLS

Quarterly Employment Compensation Index Data

Following up on the discussion of changes in total employee compensation that began in the previous edition, this edition tracks these changes between April and the end of December 2023. We again utilize the Employment Compensation Index (ECI) to track changes in total hourly compensation for private industries within the ESC subregion. Examination of the table below reveals that total compensation continued to increase over the last three quarters of 2023. As noted above, general inflation slowed during the second half of 2023 and the ECI indicates that increases in compensation also slowed during this period. Given that inflation was higher during the first half of 2023, the ECI indicates that total compensation increased by 1.64% during 2023Q1 and slowed to 1.16% during 2023Q2. As shown in the Inflation by Category table above, inflation slowed in many categories during the second half of 2023 and the ECI increased by only 0.95% during 2023Q3 and then 0.82% during 2023Q4. This brings the total change in compensation for the ESC region to 4.66% during 2023.

The table below also shows annual changes in the ECI between 2020 and 2023. The 4.66% change experienced is the second-largest annual total compensation increase in the table and is even slightly larger than the change experienced in 2022. This brings the change in total compensation since 2020 to 17.03%. As discussed in the previous edition of this update, wages have grown slower than inflation since 2020. Recall that, as of June 2023, inflation had increased by 19.76% since January 2020 while the ECI had only increased by 13.65% in the ESC region. With only slight additional monthly inflation present between July and December 2023, “All Items” inflation since 2020 now totals 19.86%. Given that the ECI has now increased by more than 17% since January 2020, the standard of living for Florence-Muscle Shoals MSA residents has increased since July 2023. However, their standard of living is still lower today

than in January 2020. Unless total compensation begins to increase again at a faster rate than the second half of 2023, early estimates of inflation during January and February 2024 indicate that standards of living may again be falling by the middle of 2024.

Employment Compensation Index: East South Central 2020 - 2023 (Percent Change)		
Total Compensation		
2020	Annual	1.40
2021	Annual	5.97
2022	Annual	4.60
2023	Q1	1.64
	Q2	1.16
	Q3	0.95
	Q4	0.82
	Annual	4.66
Total since 2020		17.03

Source: BLS

Education and the Economy

Similar to the grocery tax legislation discussed previously, education is another area of economic importance that has been legislatively active recently. While the so-called “school choice” bill has been widely debated and the effect remains to be seen, evidence exists regarding the relationship between private school enrollment and public school performance. A research article by Couch, Shughart, and Williams (1993)² concludes that after controlling for various factors (poverty, total spending per public school student, and educational attainment of parents), educational achievement, as measured by a standardized algebra exam, in North Carolina public schools increases as the percentage of students enrolled in private schools increases in a given county. This is just one example, among many suggesting competition creates value in education, just as it does in numerous other economic sectors. As far as I am aware, this question has not been studied specifically in Alabama. As such, current legislation potentially provides a natural experiment to study the impact of private school enrollments both within the local MSA and around the state.

In addition to potential educational achievement benefits, it is generally recognized that a well-educated workforce is vital to economic growth and development. For example, a firm seeking a new location to expand operations cannot enter a region if the existing workforce does not have enough workers with the skills necessary to fulfill employment demands. Additionally, an existing firm can only expand within a region if the available workforce has the necessary skills, or they will be required to recruit individuals from outside the region. Although the option of recruiting workers is a little easier in the remote jobs economy of today, recruiting from outside the region may prove costly, impeding expansion plans. Educational attainment rates

² To read the full study, see Couch, J.F., Shughart II, W.F. and Williams, A. L. (1993). Private School Enrollment and Public School Performance. *Public Choice*. 76(4). p 301-312.

also impact economic growth and development within a region as wages and unemployment rates vary by education level. The remainder of this edition of the economic update examines educational attainment rates across Alabama's various MSA regions and considers the impact of education on annual wages and unemployment rates.

Educational Attainment by Alabama MSA Region

The table below contains educational attainment data for each of Alabama's 12 Metropolitan Statistical Areas (MSAs) as well as the MSA average for each category. Auburn-Opelika and Huntsville have the highest high school attainment rate, measured at 91.9% and 91.6% respectively. At the opposite end of the spectrum, Dothan has the lowest High School attainment rate at 83.9%. The Florence-Muscle Shoals MSA falls below the statewide MSA average at 86%. Mobile, Tuscaloosa, Decatur, Anniston-Oxford, and Gadsden MSAs also fall below the statewide average High School attainment rate. Aggregating educational attainment for associate degrees and above, the Florence-Muscle Shoals MSA is significantly behind other MSA regions with a total of only 28.3% of residents, aged 25 and older, holding one type of these degrees. This value represents the second lowest educational attainment of all MSA regions, where our region is currently tied with Anniston-Oxford and just ahead of Gadsden at 26.6%. Comparatively, Auburn-Opelika again has the highest attainment percentage of any MSA at 50.9% while Huntsville has the second highest at 49.2%. Educational attainment in these two regions, which also happen to be highly successful economic regions in the state, is more than 70% higher than our local region. Such a low attainment rate for our MSA certainly makes it more difficult to attract employers with specific skill and degree requirements.

2019 Educational Attainment Rates by Alabama MSA (Population Age 25+)

MSA	High School	Associates	Bachelors	Graduate/ Professional
Birmingham	89.9	9	19.8	12.6
Huntsville	91.6	9.1	24.9	15.2
Mobile	87.5	8.2	14.7	8
Montgomery	89.2	9	18.9	12.2
Tuscaloosa	87.3	7.5	17.2	11
Daphne-Fair Hope-Foley	90.4	10.1	20.5	11.7
Auburn-Opelika	91.9	9.5	21	20.4
Decatur	85.1	7.8	13.7	7.3
Dothan	83.9	10.1	12.9	7.2
Florence-Muscle Shoals	86	8	12.5	7.8
Anniston-Oxford	84.6	9	11.5	7.8
Gadsden	84.2	9.3	10.5	6.8
MSA Average: Alabama	87.6	8.9	16.5	10.7

Source: University of Nebraska Omaha; Educational Attainment Data for Metro Areas

Wage Premium and Unemployment Rate by Educational Attainment

Employer recruiting concerns notwithstanding, low educational attainment rates have a direct impact on employment and earnings within the region, given that various levels of educational attainment receive an earnings differential and experience different levels of unemployment rates. As shown in the table below, according to the BLS, median usual annual earnings range from \$35,464 for an individual with less than a high school diploma to \$108,316 for a person with a doctoral degree. Calculating annual earnings differentials, relative to the earnings of a person with a high school diploma, the table indicates that a person with an associate degree earns around \$8,000 more than a high school graduate, while the earnings differential of a person with a bachelor's degree is more than \$30,000. Annual earnings differentials continue to increase up to the doctoral degree category. It should be noted that these median earnings estimates are for the U.S. average and not specific to the Florence-Muscle Shoals MSA. We can, however, utilize these estimates for example purposes.

How then do educational attainment rates directly impact residents and the economy in general? As shown in the table, unemployment rates vary by degree type with residents who hold a graduate degree of some type experiencing an unemployment rate of less than 2%. On the other hand, residents with a high school degree or less face an unemployment rate of 4% and above. Low unemployment rates are typically associated with tight labor markets and a generally shorter duration of unemployment. On the other hand, labor market conditions relax, and the duration of unemployment tends to increase as the unemployment rate rises. Earnings differentials also directly impact the local economy. As earnings are spent within the region, additional jobs and income are created. For example, what if the number of residents with a bachelor's degree increases by 100? Based on the annual earnings differential of \$30,108, this would inject \$3.01 million of new income into the region. Assuming these individuals spend their entire annual earnings differential, spending multipliers available from the BLS, indicate that this level of spending generates an additional \$1.27 million in spending and an additional \$1.12 million in earnings, supporting approximately 30 jobs in the region. This economic expansion combined with residents with additional skills sends a positive signal to businesses looking to expand as well as individuals looking for a new place to live.

Annual Earnings, Differential and Unemployment Rate by Educational Attainment (2022)

Educational Attainment	Median Usual Annual Earnings	Annual Earnings Differential*	Unemployment Rate
Doctoral Degree	\$108,316.00	\$63,960.00	1.0
Professional Degree	\$108,160.00	\$63,804.00	1.4
Master's Degree	\$86,372.00	\$42,016.00	1.9
Bachelor's Degree	\$74,464.00	\$30,108.00	2.2
Associate Degree	\$52,260.00	\$7,904.00	2.7
Some College, No Degree	\$48,620.00	\$4,264.00	3.5
High School Diploma	\$44,356.00	\$0.00	4.0
Less Than a High School Diploma	\$35,464.00	-\$8,892.00	5.5

* Wage differential calculated relative to the annual earnings of a worker with a high school diploma.

Source: BLS, Table 5.1 Unemployment Rates and Earnings by Educational Attainment, 2022, and UNA; Data are for persons aged 25 and over. Earnings are for full-time wage and salary workers.

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