

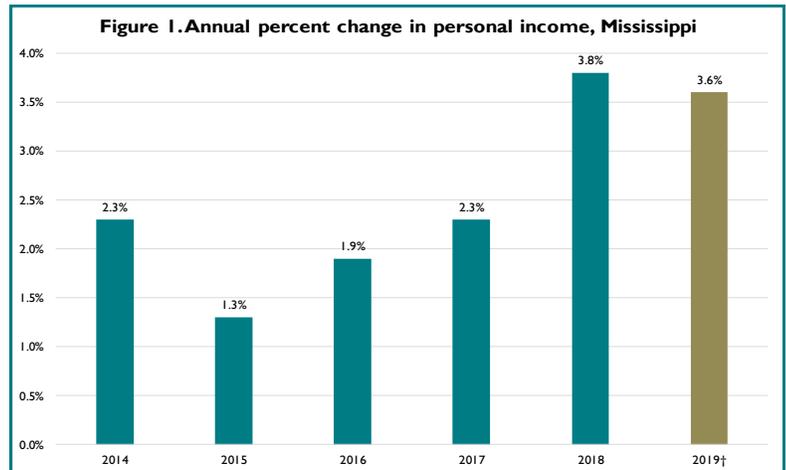


## FORECASTS FOR U.S., MISSISSIPPI PERSONAL INCOME IMPROVE

The latest URC forecast projects real gross domestic product (GDP) for Mississippi grew 1.4 percent in 2018. This estimate is 0.1 percentage point lower than the forecast of the previous quarter. The slight reduction in the forecast reflects the downward adjustment by the U.S. Bureau of Economic Analysis (BEA) to its most recent estimate of the change in U.S. real GDP in the fourth quarter of 2018. As seen in Table 1 on page 3, URC estimates the Mississippi economy will grow by 1.4 percent in 2019 as well, which represents an improvement of 0.2 percentage point from the forecast of the previous quarter. The forecasts of the change in real GDP for Mississippi in 2020 and 2021 are both lower by 0.1 percentage point to increases of 1.1 percent and 1.2 percent, respectively. If the 2018 forecast is realized, it would mark the largest annual increase in Mississippi real GDP since 2008, the last year the state's economy grew by at least 1.0 percent.

U.S. real GDP is expected to grow 2.3 percent in 2019 as seen in the fourth section of Table 1 on page 3. This forecast represents a reduction of 0.2 percentage point from the forecast of the previous quarter. The U.S. economy is projected to expand by 2.1 percent in 2020, which reflects a slight increase of 0.1 percentage point from the forecast of the previous quarter. In 2021 U.S. real GDP is anticipated to increase 1.9 percent, which represents a gain of 0.4 percentage point from the previous quarter's forecast. If these forecasts are realized, growth in the U.S. economy from 2019 to 2021 will be the smallest since the 2011 to 2013 period, when real GDP grew by an average of 1.9 percent per year.

Figure 1 above indicates personal income in Mississippi is projected to increase 3.6 percent in 2019, which represents an increase of 0.7 percentage point from the forecast of the previous quarter. Figure 2 also indicates BEA reported personal income in Mississippi grew 3.8 percent in 2018, the largest annual increase since 2011. However,



†Projected. Sources: U.S. Bureau of Economic Analysis and URC

these estimates of personal income have not been adjusted for inflation. The rate of inflation in 2018 was 2.2 percent, the highest annual rate since 2011. As seen in the third section of Table 3, URC projects personal income in the state will grow 3.5 percent in 2020, which reflects a decrease of 0.1 percentage point from the forecast of the previous quarter. Personal income is forecast to increase 3.8 percent in 2021, a value that is higher by 0.1 percentage point from the forecast of the previous quarter. All of the forecasts for annual personal income growth in Mississippi from 2019 to 2021 are lower than the forecasts for growth in U.S. personal income for the same period. U.S. personal income is anticipated to increase 4.2 percent in 2019, a decrease of 0.3 percentage point from the 4.5 percent growth rate reached in 2018, which was the largest annual increase since 2015. However, this rate is 0.6 percentage point higher than the forecast for Mississippi personal income growth in 2019. Similarly, U.S. personal income is expected to grow 4.6 percent in 2020 and 4.5 percent in 2021. These projected rates exceed the forecasts for personal income growth for Mississippi by 1.1 percentage point and 0.7 percentage point, respectively, for the same period.

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## MISSISSIPPI ECONOMIC OUTLOOK

## SHORT-TERM FORECASTS

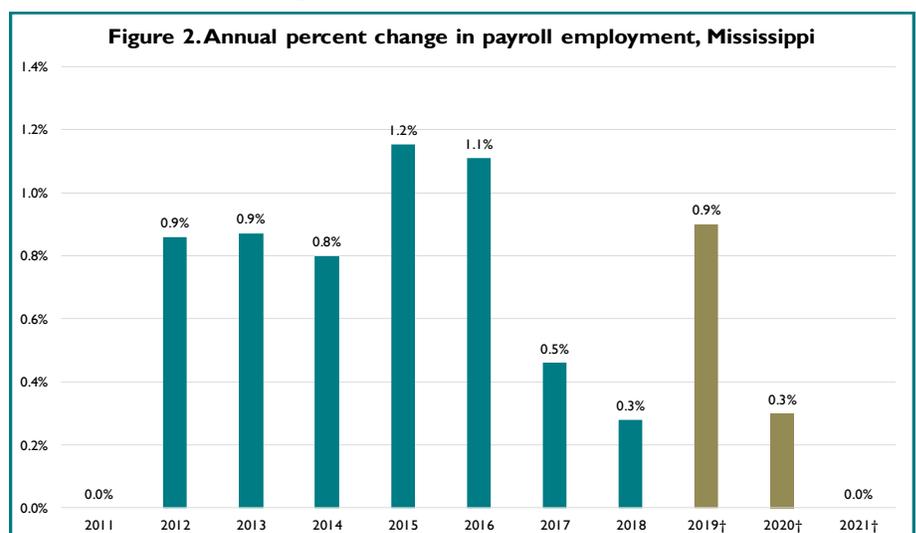
The first section of Table I indicates the largest expected increase in output among all sectors in the state in 2019 is the 5.7 percent growth forecast for the Information sector. The next largest increase in output is the 2.5 percent increase expected in Wholesale and Retail Trade. The largest decrease in output among all sectors is forecast for Leisure and Hospitality, which is projected to contract by 0.9 percent in 2019. Other sectors in the state forecast to contract slightly in 2019 include Construction, Other Services, and Government. A similar pattern is projected for 2020, as again the largest increase in real GDP among all sectors is forecast for Information at 4.7 percent. The next largest increase in output of 2.9 percent is expected in Health Care and Social Assistance. The sector with the largest decrease in output forecast for 2020 is Leisure and Hospitality, which is expected to contract 1.1 percent. Output in Construction and Government is projected to contract in 2020 as well. In 2021 Information is once again expected to experience the largest increase in output among all sectors of 4.8 percent. Output in Health Care and Social Assistance is forecast to expand by 2.8 percent, the next largest increase among all sectors in the state. The largest decrease in output among all sectors in 2021 is forecast for Natural Resources and Mining, which is expected to decline by 0.5 percent. Real GDP for Leisure and Hospitality and Government is expected to decline slightly in 2021 as well; these are also the two sectors in the state's economy projected to contract in output each year from 2019 to 2021.

Figure 2 depicts the annual percent change in payroll employment in Mississippi since 2011 and includes projections for 2019, 2020, and 2021. Notably, the Bureau of Labor Statistics (BLS) reports employment in the state grew 0.3 percent in 2018, the smallest annual increase since 2011. The annual benchmark revisions completed by BLS in March reduced the agency's previously reported employment estimates for Mississippi for 2018 by 11,800 jobs. URC forecasts employment in the state will grow 0.9 percent in 2019, which if realized will result in the largest growth since 2016. The largest increase in employment among all sectors in 2019 is expected in Transportation and Utilities, which is forecast to grow 2.8 percent. Professional and Business Services closely follows with a projected increase in employment of 2.4 percent in 2019. The largest decrease in employment among all sectors

in Mississippi forecast for 2019 is the 1.8 percent decline expected in Construction. Employment in Information is also projected to decrease by more than 1.5 percent, while employment in Natural Resources and Mining and Finance, Insurance, and Real Estate is expected to decline in 2019 as well.

Employment growth in the state is forecast to slow to an increase of 0.3 percent in 2020. The largest increase among all sectors is the 1.1 percent growth projected for Finance, Insurance, and Real Estate. Health Care and Social Assistance and Professional and Business Services closely follow with increases of 1.0 percent and 0.9 percent, respectively. The largest decrease in employment is forecast for Manufacturing and Information, as employment in both sectors is expected to contract by 0.7 percent in 2020. The Leisure and Hospitality and Educational Services sectors are also forecast to decline slightly in employment in 2020.

Employment in Mississippi is projected to remain unchanged in 2021, which last occurred in 2011. The largest increases in employment among all sectors in the state forecast for 2021 are in Construction and Health Care and Social Assistance; both sectors are expected to experience employment growth of 1.4 percent. Employment in Professional and Business Services is expected to grow 1.2 percent. The largest decrease in employment among all sectors is forecast for Manufacturing, as employment in the sector is expected to fall 1.7 percent. Other sectors projected to decline in employment in 2021 include Wholesale and Retail Trade, Educational Services, and Government. Employment in Natural Resources and Mining and Transportation and Utilities is forecast to remain unchanged.



†Projected. Sources: U.S. Bureau of Labor Statistics and URC.

TABLE I. BASELINE MISSISSIPPI AND U.S. FORECASTS

Variable	2018 <sup>†</sup> Percent		Annual Forecasts			Annualized Quarterly Forecasts							
	Value	Change	2019	2020	2021	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4
<b>Mississippi Forecast</b>													
Gross State Product (projected)													
In current dollars	113,532	3.8	3.5	3.6	3.8	3.6	2.7	3.2	3.7	3.6	3.5	3.6	3.6
In millions of 2009 dollars	101,563	1.4	1.4	1.1	1.2	1.7	0.4	1.0	1.3	1.2	1.1	1.0	1.2
Natural Resources and Mining	3,861	11.0	0.3	0.7	-0.5	3.0	-0.8	-0.1	2.4	2.0	-0.1	-1.2	-0.9
Contract Construction	3,329	-0.4	-0.3	-0.3	0.6	-0.2	1.8	-2.4	-1.1	0.1	0.2	0.1	-0.5
Manufacturing	16,400	2.9	0.9	0.9	1.0	-1.3	0.5	1.8	0.8	0.8	0.9	0.7	1.2
Durable Goods	9,327	2.8	1.7	1.7	1.5	0.3	0.7	2.7	1.6	1.8	1.7	1.4	1.7
Nondurable Goods	6,998	3.1	0.9	-0.1	0.5	1.1	0.2	0.7	-0.3	-0.5	-0.3	-0.2	0.6
Transportation and Utilities	6,391	1.6	1.1	0.4	0.5	2.4	-0.6	0.1	0.9	0.4	0.5	0.6	0.4
Wholesale and Retail Trade	14,917	2.7	2.5	2.0	2.0	3.4	1.6	2.0	2.0	2.1	1.9	1.9	2.0
Information	2,774	2.4	5.7	4.7	4.8	4.8	1.2	5.1	7.1	2.9	5.2	5.0	4.4
Finance, Insurance, and Real Estate	14,270	0.1	2.0	1.4	1.4	3.5	1.2	0.9	1.4	1.5	1.5	1.5	1.4
Professional and Business Services	7,524	2.4	2.3	2.1	2.2	2.7	-0.1	1.1	2.9	2.2	2.3	2.0	2.4
Health Care and Social Assistance	8,278	2.7	2.4	2.9	2.8	2.3	2.2	3.6	2.5	3.1	2.8	2.3	2.9
Leisure and Hospitality	4,215	-1.1	-0.9	-1.1	-0.2	-3.6	-5.0	-1.4	-0.1	-1.4	-1.1	-0.4	0.0
Educational Services	770	-1.6	0.2	2.6	1.9	-0.7	4.1	1.1	3.6	2.9	2.2	1.9	1.3
Other Services	2,153	-0.5	-0.3	0.1	0.1	-0.2	0.4	0.4	0.2	0.0	0.2	0.2	0.0
Government	16,786	-0.9	-0.5	-0.4	-0.3	-0.9	-0.8	-0.6	-0.2	-0.3	-0.4	-0.3	-0.5
Payroll Employment (thousands)													
Residents <sup>†</sup>	1,215	0.0	-0.2	0.4	0.1	-0.3	-0.3	0.0	0.3	0.7	0.7	0.3	0.0
Payroll <sup>†</sup>	1,155	0.3	0.9	0.3	0.0	0.7	0.3	0.3	0.3	0.3	0.7	-0.7	0.0
Natural Resources and Mining	7	-1.2	-0.6	0.4	0.0	2.3	-4.7	1.2	1.2	1.8	0.0	-0.6	-0.6
Contract Construction	44	0.4	-1.8	0.2	1.4	-0.3	0.9	-1.0	-0.4	0.2	0.6	0.8	0.8
Manufacturing	145	0.4	1.7	-0.7	-1.7	2.2	1.4	0.3	0.5	-0.3	-2.2	-2.7	-2.2
Durable Goods	95	0.0	1.5	-0.6	-2.0	2.2	1.3	0.7	1.2	-0.2	-2.3	-2.8	-2.7
Nondurable Goods	49	1.1	2.0	-1.1	-1.1	2.3	1.0	-0.6	-0.3	-1.1	-1.8	-2.0	-1.8
Transportation and Utilities	59	3.6	2.8	0.0	0.0	2.1	2.8	0.0	-0.3	-0.3	-0.2	0.2	0.1
Wholesale and Retail Trade	173	-1.1	0.2	0.1	-0.8	0.5	0.9	1.2	0.5	-0.5	0.0	0.0	-0.5
Information	11	-5.0	-1.5	-0.7	0.3	-1.1	-1.1	-1.1	-1.5	-0.7	-0.7	0.7	-1.1
Finance, Insurance, and Real Estate	44	0.7	-0.1	1.1	0.8	0.0	0.2	1.1	1.4	1.2	1.0	1.1	1.1
Professional and Business Services	110	1.7	2.4	0.9	1.2	0.4	-0.4	0.7	1.1	0.7	1.1	1.1	1.4
Health Care and Social Assistance	133	0.8	1.8	1.0	1.4	2.1	2.4	1.5	0.9	0.3	0.9	1.2	1.5
Leisure and Hospitality	135	0.4	0.4	-0.3	0.3	-0.9	-2.0	-0.9	0.0	-0.3	-0.3	0.3	0.3
Educational Services	12	0.8	0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.3	-0.3
Other Services	41	1.7	1.4	0.3	0.1	1.7	0.9	0.6	0.3	0.2	0.2	0.1	0.2
Government	241	-0.5	0.4	0.6	-0.2	0.0	0.2	0.0	0.2	1.0	4.4	-3.4	-1.1
Unemployment Rate (%) <sup>†‡</sup>	4.8	-0.4	4.9	4.8	4.9	4.8	4.9	4.9	4.8	4.8	4.8	4.8	4.8
Personal Income (millions of current \$)													
Wages and Salaries	49,721	2.8	3.4	3.0	3.1	3.0	2.5	2.9	3.2	3.1	3.1	2.7	2.8
Other Labor Income	12,079	2.1	3.0	2.7	2.7	2.6	2.3	2.5	2.7	2.7	2.8	2.5	2.5
Proprietors' Income	8,650	17.0	7.0	5.0	5.8	3.9	2.8	3.9	4.9	5.8	4.0	5.9	5.8
Farm Proprietors	1,437	172.2	23.0	1.4	0.6	5.3	-0.5	-0.2	1.1	4.3	0.7	0.2	0.2
Non-farm Proprietors	7,213	5.1	3.8	5.8	7.0	3.7	3.6	4.9	5.7	6.2	4.7	7.1	7.0
Property Income	18,672	3.5	2.7	3.4	3.3	2.1	2.3	2.7	3.3	3.8	3.5	3.3	3.1
Transfer Payments	29,388	2.6	3.4	4.0	4.7	2.9	3.1	3.4	3.7	4.0	3.4	5.2	4.9
Less: Social Security Payments	8,573	3.3	3.4	3.1	3.1	3.7	2.3	2.7	3.0	4.1	2.9	2.5	2.7
Plus: Residence Adjustment	3,532	5.2	4.9	5.2	5.1	5.2	4.7	5.5	5.1	5.1	5.3	4.6	4.9
Equals: Total Personal Income	113,469	3.8	3.6	3.5	3.8	2.9	2.7	3.1	3.5	3.6	3.4	3.7	3.7
Less: Individual IRS Collections	7,047	-0.2	3.4	2.7	2.7	0.3	2.8	3.3	3.7	0.4	3.6	3.0	3.2
Less: Individual State and Local Taxes	2,166	3.3	-0.9	3.7	3.8	3.6	3.2	3.7	3.9	3.7	3.8	3.4	3.6
Equals: Disposable Personal Income	104,255	4.1	3.7	3.5	3.8	3.1	2.7	3.1	3.5	3.8	3.4	3.8	3.7
Per Capita Personal Income (thousands of \$)	37,994	3.9	3.6	3.4	3.6	2.9	2.7	3.1	3.4	3.5	3.3	3.6	3.4
Population (thousands)	2,986	-0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3
<b>U.S. Forecast</b>													
Gross Domestic Product (billions of current \$)	20,494	5.2	4.3	4.4	4.4	3.4	3.9	4.3	4.3	4.5	4.5	4.4	4.3
Gross Domestic Product (billions of 2009 \$)	18,566	2.9	2.3	2.1	1.9	1.9	1.7	2.2	2.1	2.2	2.2	2.0	2.0
GDP Deflator (Nominal GDP ÷ Real GDP × 100)	110	2.2	2.0	2.3	2.4	1.8	2.2	2.1	2.1	2.5	2.1	2.4	2.4
Total Employment, Residents (millions) <sup>†</sup>	156	1.6	1.2	1.0	0.4	0.5	1.5	1.0	0.8	1.0	1.5	0.0	0.3
Total Payroll Employment (millions) <sup>†</sup>	149	1.7	1.5	1.0	0.5	1.6	1.3	1.3	0.8	1.1	1.3	0.3	0.3
Unemployment Rate (%) <sup>†‡</sup>	3.9	-10.6	3.6	3.6	3.8	3.8	3.6	3.5	3.5	3.5	3.6	3.6	3.6
Personal Income (billions of current \$)	17,582	4.5	4.2	4.6	4.5	3.5	3.7	4.3	4.6	4.9	4.6	4.3	4.3
Per Capita Personal Income (thousands of \$)	54	3.7	3.6	3.8	3.8	2.9	2.9	3.6	3.6	4.3	3.5	4.2	3.5
Consumer Price Index (1982-84 = 100)	251.0	2.4	2.0	2.0	2.3	0.0	4.7	1.6	3.1	1.5	1.5	1.5	1.5
Prime Rate (%) <sup>‡</sup>	4.9	19.5	5.5	5.8	5.8	5.5	5.5	5.5	5.6	5.8	5.8	5.8	5.8

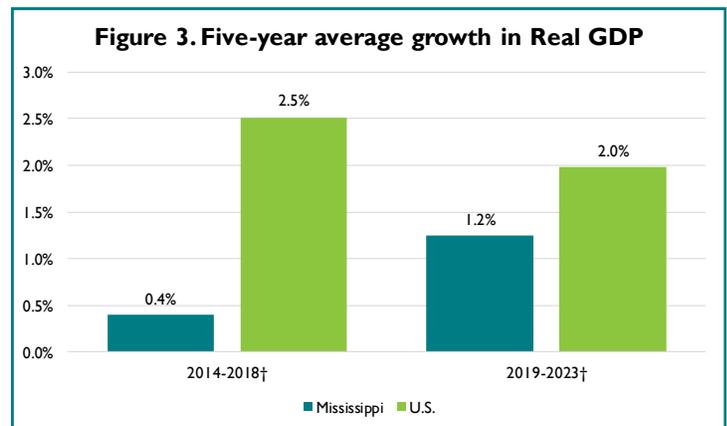
<sup>†</sup>Seasonally-adjusted. <sup>‡</sup>Projected rates. Sources: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis (levels), and URC (forecasts).

## MISSISSIPPI ECONOMIC OUTLOOK

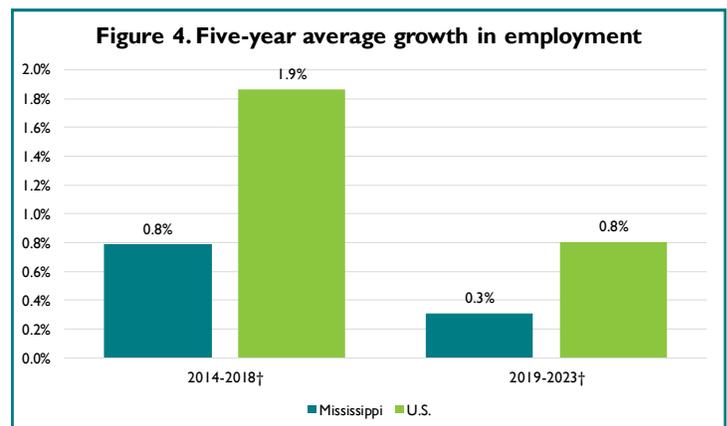
### FIVE-YEAR FORECASTS

As Figures 3 and 4 indicate the long-term forecasts for real GDP and employment for the U.S. have improved slightly, while the five-year forecasts for Mississippi have fallen slightly from the previous quarter. U.S. real GDP is expected to grow an average of 2.0 percent annually from 2019 to 2023. This projection represents an increase of 0.2 percentage point from the forecast of the previous quarter. However, if realized it will mark a decrease of 0.5 percentage point per year compared to the previous five years. Real GDP for Mississippi is expected to grow an average of 1.2 percent annually from 2019 to 2023. If realized, this forecast represents an increase of 0.8 percentage point per year compared to the 2014 to 2018 period.

In Figure 4 U.S. employment is projected to grow an average of 0.8 percent per year from 2019 to 2023, which represents an increase of 0.1 percent from the forecast of the previous quarter. Nevertheless, if realized this forecast would mark a decrease in employment growth of 1.1 percentage point annually compared to the previous five years. Employment in Mississippi is anticipated to increase an average of 0.3 percent per year from 2019 to 2023. After the recent revisions by BLS, if realized this rate represents less than half of the average annual growth experienced from 2014 to 2018, a decrease of 0.5 percentage point per year.



†Projected. Sources: Bureau of Economic Analysis; URC



†Projected. Sources: Bureau of Labor Statistics; URC

### ALTERNATIVE FORECASTS

IHS Markit estimates the probability of a recession beginning in the first quarter of 2020 at 30 percent in its most recent pessimistic scenario, up from 25 percent in the forecast of the previous quarter. Under this scenario a recession occurs for three quarters. A crisis of confidence becomes widespread under this scenario and investors become much less willing to tolerate risk. Both total factor productivity and business fixed investment grow more slowly under this scenario. Average annual growth in U.S. real GDP over the next five years is considerably less under the pessimistic scenario compared to the baseline forecast. Average annual growth in U.S. real GDP is slightly over 0.8 percentage point less per year compared to the baseline. The national recession under this pessimistic scenario impacts the Mississippi economy substantially less compared to the U.S. economy. Real GDP for Mississippi increases by an average of 1.0 percent per year, the same as in the forecast of the previous quarter and 0.2 percentage point less per year compared to the baseline forecast.

The probability of realizing the latest optimistic scenario according to IHS Markit is 10 percent, down from 15 percent in the forecast of the previous quarter. As in its previous optimistic scenarios, U.S. real GDP expands more due to improvements in productivity. Furthermore, lower unemployment under this scenario keeps inflation in check. Compared to the baseline forecast from 2019 to 2023 the U.S. economy grows an average of over 0.6 percentage point more per year. Much like the downside risk of the pessimistic scenario is less for Mississippi's economy compared to the U.S., the state benefits less from the optimistic scenario than the nation. The Mississippi economy only performs marginally better under the optimistic scenario, as real GDP is an average of 0.3 percentage point more per year.