



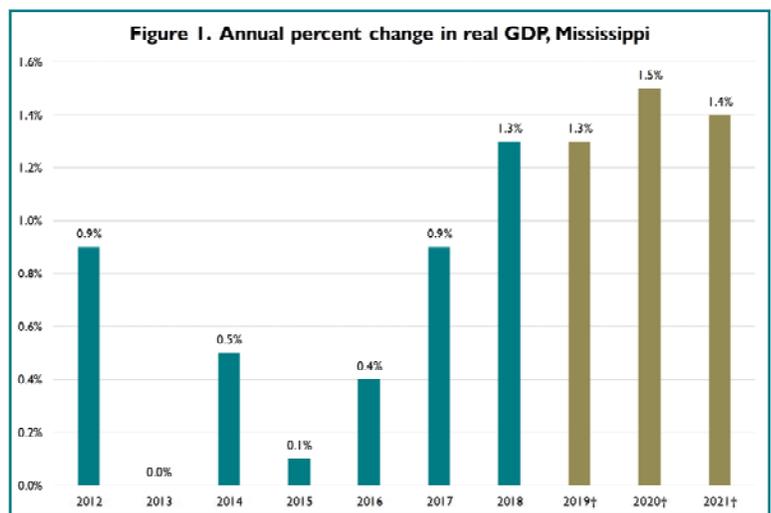
FORECASTS FOR U.S., MISSISSIPPI REAL GDP IMPROVE

The latest URC forecast projects real gross domestic product (GDP) for Mississippi expanded 1.3 percent in 2019, which represents a slight improvement of 0.1 percentage point from the forecast of the previous quarter. This projection, if realized, would also equal the growth of the state's economy in 2018 according to the most recent estimate of the U.S. Bureau of Economic Analysis (BEA). However, as noted in the Fall 2019 issue of *Mississippi Economic Outlook* this forecast does not reflect the negative impacts of floods in the south Delta and elsewhere in the state in 2019. Preliminary estimates indicate losses to the state economy from damages caused by these floods totaled \$250 million to \$300 million. Therefore, based on these preliminary estimates flood damages could reduce the URC forecast of a 1.3 percent change in real GDP in 2019 by as much as 0.3 percentage point. As seen in Figure 1 below, URC forecasts the Mississippi economy will grow 1.5 percent in 2020 and 1.4 percent in 2021. These projections represent increases of 0.5 percentage point and 0.2 percentage point, respectively, from the forecasts of the previous quarter. In 2022 real GDP in the state is expected to increase 1.3 percent. If these forecasts are realized Mississippi's economy will expand for nine consecutive years, which last occurred in the 1992 to 2000 period. In addition, real GDP for the state would expand by at least 1.0 percent annually for five consecutive years, which last occurred from 2004 to 2008.

As seen in the fourth section of Table 1 on page 3, the latest URC forecast indicates U.S. real GDP expanded 2.3 percent in 2019. This estimate is unchanged from the forecast of the previous quarter. In both 2020 and 2021 the U.S. economy is projected to grow 2.1 percent and these estimates for both years represent slight increases of 0.1 percentage point from the forecasts of the previous quarter. URC anticipates the U.S. economy will slow to a growth rate of 1.7 percent in 2022, which if realized

would mark the smallest annual increase in U.S. real GDP since 2016.

As seen in Figure 2 on page 2 the latest URC forecast projects personal income in Mississippi rose 3.8 percent in 2019, an estimate unchanged from the forecast of the previous quarter. In 2020 personal income is expected to grow 3.0 percent, which represents a decrease of 0.4 percentage point from the forecast of the previous quarter. Personal income in the state is projected to increase 3.8 percent in 2021, which reflects a slight increase of 0.1 percentage point from the forecast of the previous quarter. As seen in the third section of Table 1 on page 3, URC forecasts personal income in Mississippi will increase 4.1 percent in 2022, which if realized would mark the largest annual growth in personal income in the state since 2011. Moreover, if the forecasts in Table 1 are realized, along with the increase in 2018 of 3.9 percent, Mississippi will experience annual growth in personal income of at least 3.0 percent for five consecutive years. Personal income in the state last grew 3.0 percent or more a year for five consecutive years from 2004 to 2008, when the average annual increase was 6.1 percent.



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

To download the current issue of *Mississippi Economic Outlook* as well as other URC publications, please visit:
www.mississippi.edu/urc/publications.asp

Follow the University Research Center on Twitter:

@MississippiURC 

MISSISSIPPI ECONOMIC OUTLOOK

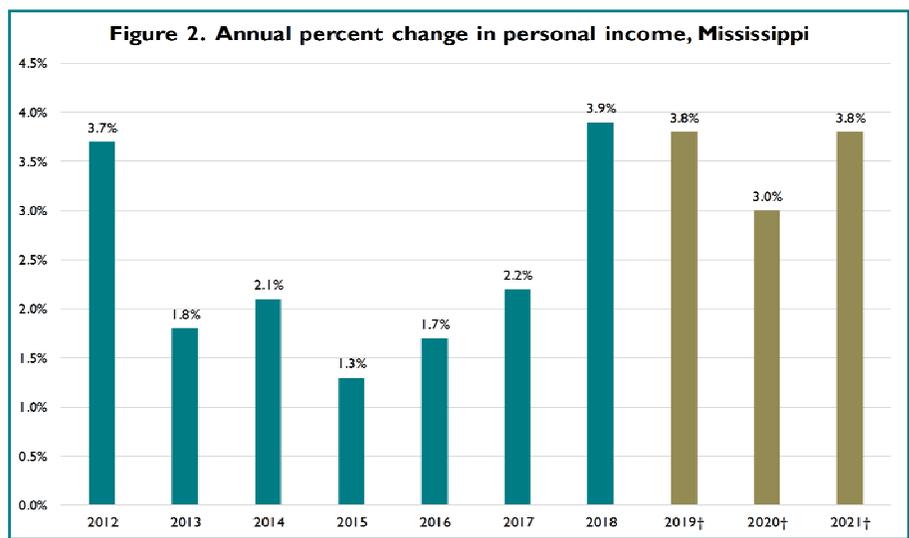
SHORT-TERM FORECASTS

Despite a projected increase in Mississippi real GDP of 1.3 percent in 2019, growth across sectors is expected to be relatively uneven as seen in the first section of Table 1. The Natural Resources and Mining sector is forecast to grow 12.6 percent in 2019, the most among all sectors. This sector can experience volatile year-to-year growth. The next largest increase is the expected 3.0 percent growth in the Information sector. Several sectors are forecast to contract in 2019 and the largest decrease of 2.2 percent is projected for the Construction industry. Other sectors forecast to contract include Manufacturing, Leisure and Hospitality, and Educational Services.

In 2020 forecasted changes in output across sectors are less disparate. Natural Resources and Mining is projected to experience the largest growth among all sectors of 3.3 percent, followed by the 2.9 percent increase forecast for the Information sector. The Construction sector is again expected to experience the largest decrease in output among all sectors of -0.4 percent. However, only two other sectors are forecast to contract in output in 2020, Transportation and Utilities and Leisure and Hospitality. Both sectors are expected to decrease by 0.2 percent.

The change in output across sectors in Mississippi is expected to be similar in 2021 and 2022. In 2021 the largest increase in output is forecast for the Information sector, which is expected to expand by 3.8 percent. The next largest increase in output is projected for the Professional and Business Services sector, which is forecast to grow 3.3 percent. The largest decrease in output among all sectors in 2021 is forecast for Natural Resources and Mining, which is anticipated to decline 0.9 percent. The only other sectors in the state projected to contract in output are Leisure and Hospitality and Other Services. Both sectors are forecast to decrease 0.4 percent.

The largest increase in output among all sectors in the state in 2022 is again forecast for the Information sector, which is again expected to expand 3.8 percent. Professional and Business Services is also expected to experience the second-largest increase in output of 2.2 percent. The only sector forecast to contract in output in 2022 is Other Services, which is again project to decrease 0.4 percent. Notably, output in Government, the largest sector in Mississippi in terms of GDP, is forecast to expand each year from 2019 to 2022.



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

As the second section of Table 1 on page 3 indicates payroll employment in Mississippi is forecast to increase 1.0 percent in 2019. If realized this growth would be the largest since 2016 when employment increased 1.1 percent. The largest growth in employment among all sectors in 2019 is forecast for Leisure and Hospitality, which is expected to increase 3.5 percent. Transportation and Utilities is expected to experience the next largest increase in employment of 2.2 percent. The largest decline in employment among all sectors is forecast for Educational Services, which is expected to decrease 2.3 percent.

In 2020 employment in Mississippi is projected to grow 0.5 percent. The largest increase among all sectors is expected in Health Care and Social Assistance, which is forecast to grow 1.5 percent, closely followed by employment in Finance, Insurance, and Real Estate, which is forecast to increase 1.4 percent. The largest decrease in employment in 2020 is again projected for Educational Services, which is expected to fall 2.5 percent, closely followed by Natural Resources and Mining, which is anticipated to decrease 2.2 percent.

Payroll employment in the state is forecast to remain unchanged in 2021. The largest increase among all sectors is expected in Professional and Business Services, which is projected to rise 2.8 percent. The largest decrease among all sectors is the 1.9 percent decline forecast for Manufacturing. The change in employment forecast for 2022 is an increase of 0.2 percent. Professional and Business Services employment is projected to increase 1.4 percent, again the most among all sectors. The largest decrease in employment among all sectors in 2022 is the 1.3 percent decline forecast for Information.

TABLE I. BASELINE MISSISSIPPI AND U.S. FORECASTS

Variable	2019 [†] Percent		Annual Forecasts			Annualized Quarterly Forecasts							
	Value	Change	2020	2021	2022	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
Mississippi Forecast													
Gross State Product (projected)													
In current dollars	118,824	3.5	3.6	3.8	3.8	3.7	3.0	3.4	3.6	3.9	3.8	3.7	3.8
In millions of 2012 dollars	104,203	1.3	1.5	1.4	1.3	2.0	0.9	1.3	1.3	1.6	1.4	1.2	1.3
Natural Resources and Mining	4,877	12.6	3.3	-0.9	1.4	1.8	1.6	-1.9	0.7	-0.6	-2.4	-0.2	0.0
Contract Construction	3,259	-2.2	-0.4	0.6	0.8	-1.8	-0.5	0.9	1.0	-0.1	1.1	0.6	0.6
Manufacturing	16,843	-0.4	1.8	1.8	1.8	1.9	1.8	1.3	1.7	1.8	1.9	1.5	2.0
Durable Goods	9,267	-0.1	1.6	2.3	2.7	1.7	1.6	1.5	1.7	2.4	2.5	2.1	3.0
Nondurable Goods	7,544	-0.8	2.3	1.1	0.8	3.1	2.0	1.3	1.3	1.3	1.3	0.7	1.0
Transportation and Utilities	6,648	0.5	-0.2	0.6	0.3	-0.1	1.2	0.4	1.2	0.9	0.8	0.4	0.1
Wholesale and Retail Trade	14,917	2.7	2.4	2.0	1.6	1.8	1.7	2.0	2.3	2.1	2.4	1.7	1.6
Information	2,563	3.0	2.9	3.8	3.8	1.4	3.4	1.7	3.4	2.4	5.1	3.9	4.6
Finance, Insurance, and Real Estate	14,935	2.0	1.0	1.4	1.1	1.4	1.2	0.7	1.1	1.6	1.7	1.2	1.3
Professional and Business Services	7,769	2.4	2.7	3.3	2.2	0.4	1.5	2.2	4.2	4.0	3.5	2.8	2.5
Health Care and Social Assistance	8,518	2.0	2.1	2.0	1.7	3.1	1.2	3.3	2.1	2.0	1.8	1.6	1.9
Leisure and Hospitality	4,297	-0.8	-0.2	-0.4	0.1	0.1	-3.5	1.7	-0.9	0.0	-1.0	1.2	-1.4
Educational Services	778	-0.8	0.5	0.7	1.3	-0.6	1.2	1.0	0.8	0.3	0.9	-0.1	1.3
Other Services	2,260	0.0	0.3	-0.4	-0.4	0.2	0.0	0.2	0.0	-0.5	-0.4	-0.9	-0.4
Government	16,910	0.3	0.1	0.4	0.3	-0.3	-1.2	1.6	-1.1	1.0	0.2	0.4	0.4
Payroll Employment (thousands)													
Residents [†]	1,212	-0.2	1.0	0.5	0.4	1.3	0.7	1.0	0.7	0.0	0.3	0.7	1.0
Payroll [†]	1,167	1.0	0.5	0.0	0.2	0.0	0.3	1.0	-0.7	0.0	0.0	0.0	0.3
Natural Resources and Mining	7	-2.0	-2.2	-0.6	1.2	0.6	-3.6	-4.8	-1.2	-1.2	-1.2	0.0	1.2
Contract Construction	43	-0.4	0.9	0.5	1.0	-0.2	-0.5	0.0	0.0	-0.1	0.9	0.6	1.3
Manufacturing	147	1.2	-0.6	-1.9	-0.5	1.4	0.3	-1.9	-3.0	-2.2	-1.9	-1.9	-0.6
Durable Goods	96	0.7	-0.6	-1.8	-0.5	0.0	0.8	-1.3	-3.3	-2.1	-1.7	-2.4	-0.5
Nondurable Goods	51	2.1	-0.4	-1.6	-0.7	4.2	-0.7	-2.6	-3.0	-1.8	-2.0	-0.4	-1.0
Transportation and Utilities	60	2.2	0.6	-0.3	-0.7	-1.1	1.4	-0.6	-0.1	-0.3	-0.2	-0.1	-0.6
Wholesale and Retail Trade	174	0.6	0.6	-0.5	-0.9	2.1	-0.5	-0.7	-0.2	-0.5	-0.5	-0.2	-1.1
Information	11	-0.5	-0.4	-0.4	-1.3	-0.7	0.7	0.0	-0.7	-0.7	0.7	-0.4	-0.4
Finance, Insurance, and Real Estate	45	1.7	1.4	0.1	-0.2	-0.3	1.3	-0.3	0.3	0.0	0.2	-0.3	0.6
Professional and Business Services	111	0.9	0.2	2.8	1.4	-4.0	-0.4	1.5	4.0	2.9	3.2	2.1	1.8
Health Care and Social Assistance	135	1.3	1.5	1.2	0.8	0.9	1.5	1.8	0.9	0.6	1.5	1.5	0.6
Leisure and Hospitality	140	3.5	0.1	-0.1	0.7	0.9	-0.6	0.9	-1.1	2.0	-1.7	0.0	0.6
Educational Services	12	-2.3	-2.5	-1.0	-0.7	-9.8	2.4	-1.7	-0.7	-1.7	0.3	-2.4	0.3
Other Services	41	0.0	0.8	-0.8	-0.6	2.9	0.5	-1.1	-1.5	-1.0	-0.7	-0.8	-0.8
Government	242	0.4	0.7	0.0	0.4	0.3	0.3	4.4	-3.4	-0.7	0.7	0.3	0.0
Unemployment Rate (%) ^{††}	5.1	0.4	5.2	5.1	5.2	5.5	5.4	5.2	5.1	5.1	5.1	5.1	5.1
Personal Income (millions of current \$)													
Wages and Salaries	51,274	2.9	3.0	3.4	3.8	2.7	2.9	3.6	3.0	3.5	3.1	3.6	3.3
Other Labor Income	12,623	2.8	3.0	3.2	3.5	2.8	3.0	3.2	2.8	2.9	3.6	3.1	3.2
Proprietors' Income	8,740	6.8	0.1	4.0	6.6	-0.6	-13.1	-7.5	3.2	5.6	3.6	5.1	4.5
Farm Proprietors	1,330	30.1	-22.1	8.1	26.8	-18.4	-97.5	-88.9	41.0	-7.4	5.6	22.0	16.0
Non-farm Proprietors	7,411	3.5	3.9	3.9	3.4	3.4	4.1	1.4	5.2	5.1	3.7	3.6	2.5
Property Income	18,931	2.0	1.8	3.0	3.4	1.2	2.4	1.6	2.5	2.5	3.3	3.7	3.2
Transfer Payments	30,953	5.7	4.2	4.5	4.5	3.0	4.5	3.5	4.2	4.0	5.5	4.3	4.0
Less: Social Security Payments	8,796	3.0	2.9	3.3	3.6	2.9	4.0	2.7	2.5	2.4	4.6	2.7	3.7
Plus: Residence Adjustment	3,613	5.8	4.6	4.8	4.4	5.2	4.8	4.7	4.3	5.2	4.8	4.8	4.4
Equals: Total Personal Income	117,336	3.8	3.0	3.8	4.1	2.3	2.1	2.8	3.2	3.4	4.4	3.8	3.8
Less: Individual IRS Collections	7,393	4.2	2.5	3.3	3.8	3.0	0.3	2.9	3.3	3.6	2.0	4.2	4.0
Less: Individual State and Local Taxes	2,208	4.9	1.2	4.1	4.5	2.8	1.8	3.3	3.6	3.9	4.1	4.4	4.3
Equals: Disposable Personal Income	107,735	3.8	3.0	3.8	4.1	2.2	2.1	2.7	3.3	3.4	4.5	3.8	3.7
Per Capita Personal Income (thousands of \$)	39,430	4.0	3.1	3.8	4.0	2.3	2.2	2.8	3.2	3.4	4.2	3.8	3.8
Population (thousands)	2,976	-0.2	-0.1	0.0	0.1	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0
U.S. Forecast													
Gross Domestic Product (billions of current \$)	21,430	4.1	4.1	4.5	4.3	3.6	3.7	4.4	4.6	4.4	4.5	4.2	4.3
Gross Domestic Product (billions of 2012 \$)	19,069	2.3	2.1	2.1	1.7	1.8	1.7	2.4	2.5	2.2	2.1	1.8	1.8
GDP Deflator (Nominal GDP ÷ Real GDP × 100)	112	1.8	2.0	2.4	2.6	1.8	1.8	2.1	2.1	2.1	2.4	2.4	2.7
Total Employment, Residents (millions) [†]	158	1.1	1.3	0.8	0.4	2.0	1.0	1.5	0.3	0.5	1.0	0.7	0.5
Total Payroll Employment (millions) [†]	151	1.5	1.3	0.7	0.5	1.6	1.3	1.6	0.3	0.8	0.8	0.8	0.8
Unemployment Rate (%) ^{††}	3.7	-5.7	3.5	3.5	3.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Personal Income (billions of current \$)	18,630	4.6	3.9	4.4	4.5	3.7	3.9	3.6	4.0	4.2	4.8	4.4	4.4
Per Capita Personal Income (thousands of \$)	56	3.7	3.2	3.8	3.6	2.8	2.8	3.5	2.8	3.4	4.1	4.0	3.3
Consumer Price Index (1982-84 = 100)	256.0	2.0	1.6	1.9	2.6	3.1	1.6	1.5	1.5	0.0	1.5	3.1	3.0
Prime Rate (%) [†]	5.3	7.8	4.8	4.9	5.3	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.0

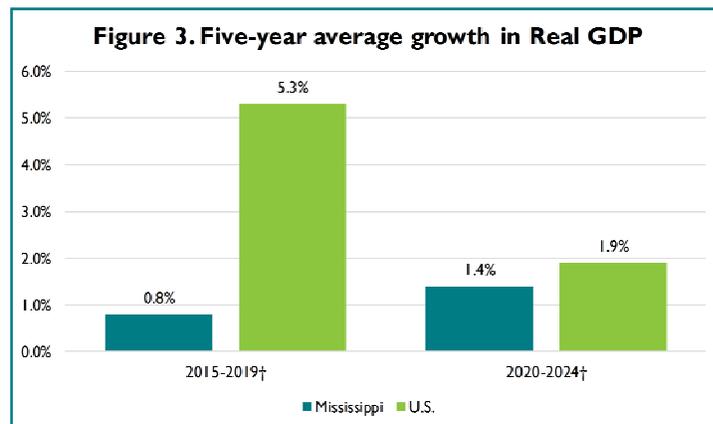
[†]Seasonally-adjusted. ^{††}Projected rates. Sources: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis (levels), and URC (forecasts).

MISSISSIPPI ECONOMIC OUTLOOK

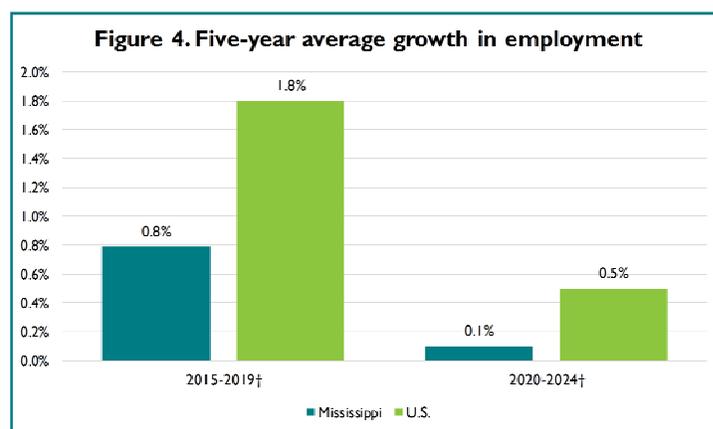
FIVE-YEAR FORECASTS

Real GDP for Mississippi is forecast to grow an average of 1.4 percent per year from 2020 to 2024 as seen in Figure 3. If realized this average rate of growth represents an increase of 0.6 percentage point per year from the average annual increase in real GDP of 0.8 percent for the state from 2015 to 2019. In contrast, U.S. real GDP is forecast to grow an average of 1.9 percent annually from 2020 to 2024, which represents less than half the average annual increase of 5.3 percent from the previous five years.

Figure 4 indicates employment in Mississippi is expected to increase an average of 0.1 percent per year from 2020 to 2024. This nearly flat rate of growth is in contrast to the previous five-year period of 2015 to 2019 when average annual employment growth was 0.8 percent. Similarly, U.S. employment is forecast to grow an average of 0.5 percent per year from 2020 to 2024. If realized, this rate of growth represents a decrease of 1.3 percentage point from the average annual growth in U.S. employment of 1.8 percent from 2015 to 2019. The forecasts of lower rates of employment growth for both the U.S. and Mississippi reflect how both economies were likely near full employment in the previous five-year period as well as a slowing of national and state economies expected to begin in 2022.



†Projected. Sources: Bureau of Economic Analysis; URC



†Projected. Sources: Bureau of Labor Statistics; URC

ALTERNATIVE FORECASTS

In its most recent pessimistic alternative scenario the firm IHS Markit estimates the probability of a recession in 2020 at 25 percent. This probability represents a decrease of 10 percentage points from the pessimistic forecast of the previous quarter. A recession begins in the fourth quarter of 2020 under this scenario and continues through the first and second quarters of 2021. Business fixed investment declines in 2020 and 2021 in this scenario before bouncing back in 2022. Inflation begins to move lower under this scenario due to a decrease in demand and a weaker housing market helps push the U.S. economy into recession. U.S. real GDP grows at an average annual rate of only 0.2 percent in 2020 and 2021 under this scenario. The average annual growth in U.S. real GDP over the next five years is almost a full percentage point lower under this scenario compared to the baseline forecast. The impacts to the Mississippi economy of the national recession under this pessimistic scenario are relatively modest. Real GDP for the state expands at an average rate 0.2 percentage point less per year from 2020 to 2024 compared to the baseline forecast.

Like the alternative forecast of the previous quarter IHS Markit places the probability of its latest optimistic scenario at 10 percent. As in its previous optimistic forecasts improvements in productivity drive real GDP growth under this scenario. The unemployment rate moves even lower in 2021 under the optimistic scenario but does not lead to greater inflation; in fact, the average annual rate of inflation is slightly less than under the baseline forecast. The U.S. economy grows an average of more than 0.9 percentage point more per year over the next five years under this scenario compared to the baseline forecast. Mississippi's economy only marginally improves under the optimistic scenario. Real GDP for the state increases by an average of 0.2 percentage point more per year over the next five years compared to the baseline forecast.