# MISSISSIPPI ECONOMIC OUTLOOK

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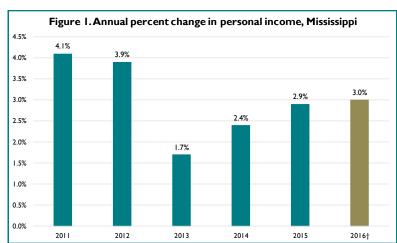
## FORECAST FOR 2016 MODERATES

RC estimates real gross domestic product (GDP) in Mississippi will increase 1.7 percent in 2016. Compared to the projection in the Winter issue of Mississippi Economic Outlook, this forecast is lower by 0.5 percentage point. The reduction in expected growth primarily results from downgrades to the forecast for the change in U.S. real GDP for 2016. IHS Economics believes consumer spending—the primary driver of the U.S. economy—grew at a slower rate in the first quarter than previously anticipated due to a mild winter, which resulted in less spending on clothing and energy. As in the forecast of the previous quarter, real GDP in Mississippi is expected to grow at an annual rate of 2.2 percent for 2017 and an annual rate of 2.1 percent for 2018.

The U.S. Bureau of Economic Analysis (BEA), in its final estimate of the change in U.S. real GDP in the fourth quarter of 2015, reported growth of 1.4 percent. This estimate marked an increase from its previous estimate of 1.0 percent growth. Nevertheless, BEA's estimate of the change in real U.S. GDP for all of 2015 remained a gain of 2.4 percent, the same rate of growth as in 2014. The forecast of U.S. real GDP growth for 2016 now stands at 2.1 percent, a reduction of 0.6 percentage point from the Winter issue of Mississippi Economic Outlook. In addition to the anticipated decline in consumer spending discussed above, real business investment likely fell in the first quarter of 2016 due to the declines in the energy industry. The U.S. manufacturing sector continues to struggle, impaired in part from the downturn in the oil industry, but in recent months the industry has exhibited signs of recovery. As firms continue to clear inventories that accumulated in 2015 and consumer spending rebounds, prospects for growth should improve in the second half of 2016. The forecasts of annual growth in U.S. real GDP for 2017 and 2018 are 2.8 percent and 2.7 percent, respectively. The former represents a slight increase from the previous forecast while the latter is slightly lower than the prior estimate.

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

URC's latest forecast of total current personal income growth in Mississippi for 2016 stands at 3.0 percent, a decrease of 0.5 percentage point from the forecast of the previous quarter. As with real GDP, the reduction in this projection is driven in large part by the performance of the economy in the first quarter below the levels of previous expectations. Figure I below depicts the annual increase in personal income in Mississippi in each of the last five years. The 2.9 percent increase in personal income in 2015 marked the largest increase in the annual rate since 2012 and the second consecutive year the rate increased. Thus, if realized the 2016 projection would equal a similar gain in income as occurred in 2015. The forecasts of the change in personal income in Mississippi for 2017 and 2018 improve considerably from 2016, reaching 4.3 percent and 4.4 percent, respectively. Both estimates reflect slight reductions from the previous forecasts. Similarly, U.S. personal income is expected to increase 3.9 percent in 2016, a decrease from the previous estimate of a 4.2 percent gain. The 2017 forecast for U.S. personal income equals an increase of 4.9 percent, while for 2018 a 5.1 percent increase is projected. Estimates for both years represent reductions of 0.3 percentage point from previous expectations.



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

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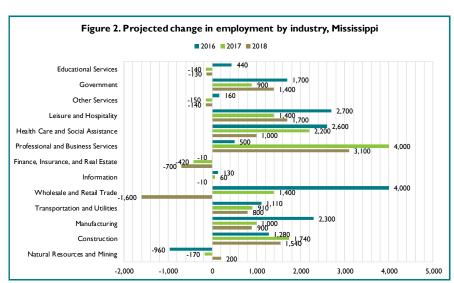
### SHORT-TERM FORECASTS

ccording to the most recent URC forecast, only one industry in Mississippi is expected to contract in 2016. As seen in the first section of Table I on page 3, real output from Natural Resources and Mining is forecast to decrease by 2.9 percent. This estimate reflects the downturn in the energy sector that was not captured in the 2015 data. All other industries are expected to increase the real value of their output in 2016 over 2015. The largest percentage increase in real GDP for 2016 is forecast for the Information sector, which is expected to rise 4.7 percent. Notably, Government—which comprises the largest portion of state real GDP—is projected to increase slightly following the decline ex-

pected in 2015. No industries in Mississippi are forecast to contract in 2017 or 2018. The largest percentage increase in real GDP expected in 2017 is in the Professional and Business Services sector, which is forecast to rise by 4.5 percent. In 2018, Information again is projected to grow by the largest percentage among all industries at 4.2 percent. The Natural Resources and Mining sector is forecast to increase 0.2 percent in 2017 and 0.1 percent in 2018.

Payroll employment in Mississippi for 2016 is expected to increase 1.4 percent, as seen in the second section of Table 1. This forecast represents an upward revision of 0.4 percent from the previous quarter. If realized, the 1.4 percent increase in annual employment would represent the largest annual percentage gain since 1999. In fact, the 2015 increase in annual employment of 1.2 percent marked only the second gain of 1.0 percent or more in Mississippi since 1999. The forecast for the annual change in employment for 2017 equals 1.1 percent, a slight increase from the forecast of the previous quarter. Employment in 2018 is projected to increase 0.7 percent, a decrease of 0.3 percentage point from the previous quarter's forecast.

The sector in Mississippi with the largest increase in employment forecast for 2016 is Educational Services, which is expected to increase 3.6 percent. This industry makes up a relatively small proportion of total employment in the state, however. The only sector forecast to decline in employment in 2016 is Natural Resources and Mining, which is expected to fall 11.9 percent. If realized, this decrease would mark the second consecutive year with a double-digit decline in employment for the industry. It,



Source: URC

too, is a relatively small industry in the state in terms of total employment. In 2017, Professional and Business Services employment is expected to increase by 3.8 percent, the largest among all industries. The largest percentage decline in employment among all sectors in the state forecast for 2017 is again Natural Resources and Mining, but the decline is 2.4 percent, considerably smaller than in 2016. Employment in Educational Services and Finance, Insurance, and Real Estate are both forecast to decrease at least 1.0 percent in 2017 and employment in Other Services is also expected to decline. Construction is expected to experience the largest increase in employment among all industries in Mississippi in 2018, rising 3.1 percent. Natural Resources and Mining employment is forecast to return to growth with an increase of 2.9 percent. The largest percentage decrease in employment in 2018 is forecast for the Finance, Insurance, and Real Estate sector, which is expected to decline 1.6 percent. Employment in Educational Services is forecast to decline 1.0 percent, and Wholesale and Retail Trade, Information, and Other Services are expected to experience declines in employment in 2018 as well. Figure 2 above depicts the forecasted annual change in the number of jobs by industry in Mississippi for 2016, 2017, and 2018.

As noted previously, personal income in Mississippi, listed in the third section of Table I, is forecast to increase 3.0 percent in 2016, 4.3 percent in 2017, and 4.4 percent in 2018. Notably, Farm Proprietors' income is forecast to decline in 2016 and 2017 before increasing by a relatively small amount in 2018. These forecasts reflect the general weakness in the U.S. agricultural sector that began in 2015.

TABLE I. BASELINE MISSISSIPPI AND U.S. FORECASTS

	2015 <sup>‡</sup> Percent		Annual Forecasts			Annualized Quarterly Forecasts							
Variable	Value (	Change	2016	2017	2018 2	2015Q4 2	016Q1 2	2016Q2 2	016Q3 2	016Q4 20	017Q1 2	2017Q2 2	017Q3
Mississippi Forecast													
Gross State Product (projected)													
In current dollars	107,174	2.3	3.2	4.1	4.2	2.1	3.4	3.8	4.2	3.8	4.5	4.5	3.6
In millions of 2009 dollars	95,596	1.0	1.7	2.2	2.1	0.6	2.1	1.9	2.1	2.0	2.6	2.3	1.8
Natural Resources and Mining	4,835	23.8	-2.9	0.2	0.1	-6.6	-2.0	-1.8	1.7	-0.9	1.5	0.6	1.7
Contract Construction	4,414	-6.7	1.5	2.4	3.2	0.8	1.2	1.3	1.7	2.0	2.9	4.9	2.0
Manufacturing	13,892 7,972	0.1 -1.6	1.5	2.6 3.3	3.0 4.1	0.8	1.6	1.3	2.7	2.5	3.4 4.6	2.9 4.1	2.7 3.8
Durable Goods Nondurable Goods	5,907	-1.6 2.2	1.8	1.8	1.4	0.4 1.8	1.8	1.0	3.0 2.4	3.1 1.8	2.1	1.2	1.2
Transportation and Utilities	6,213	0.5	2.7	2.4	2.4	2.0	2.5	2.2	2.6	2.2	2.6	2.4	2.7
Wholesale and Retail Trade	12,569	1.1	3.0	2.6	2.3	2.5	3.6	2.6	2.8	2.5	2.2	2.4	1.9
Information	2,294	1.2	4.7	3.9	4.2	6.7	3.2	6.2	2.8	6.1	2.1	1.3	4.5
Finance, Insurance, and Real Estate	13,869	0.2	2.9	2.2	1.8	2.8	3.5	3.2	2.1	1.4	2.5	1.9	1.6
Professional and Business Services	6,979	2.8	3.6	4.5	3.9	2.7	3.8	3.9	4.5	4.6	4.8	4.3	3.7
Health Care and Social Assistance	7,255	2.2	3.2	3.2	2.8	1.9	3.6	3.2	2.9	3.9	3.0	2.4	2.6
Leisure and Hospitality	4,168	-2.3	1.1	1.9	1.8	-0.1	1.7	2.1	2.0	0.6	2.9	3.6	-0. I
Educational Services	647	-6.9	0.3	1.6	1.9	-0.1	0.9	0.4	1.3	2.1	2.4	1.5	1.9
Other Services	2,154	-2.4	0.2	0.4	0.1	0.9	0.9	0.7	0.4	0.2	0.2	0.4	0.2
Government	16,040	-0.8	0.1	0.4	0.6	-0.3	0.3	-0.2	0.3	0.4	1.0	0.5	0.5
Payroll Employment (thousands)	. 0,0 10	0.0			0.0				<b></b>				3.3
Residents†	1,188	3.3	2.6	1.1	0.7	4.3	1.0	2.0	0.7	1.3	0.7	1.3	0.6
Payroll†	1,134	1.2	1.4	1.1	0.7	0.7	1.0	1.4	1.4	1.0	1.0	0.7	0.8
Natural Resources and Mining	1,134	-12.3	-11.9	-2.4	2.9	-5.3	-13.4	-17.2	-3.5	0.6	3.5	2.3	2.9
Contract Construction	46	-12.3 -5.8	2.8	3.7	3.1	0.3	4.2	3.5	-3.5 3.5	3.6	3.7	3.8	3.0
Manufacturing	142	-3.6 1.6	1.6	0.7	0.6	3.1	-1.1	-0.3	1.7	0.8	0.8	0.6	0.6
Durable Goods	95	1.0	1.5	1.0	1.1	3.9	-1.1	-0.3	2.3	1.1	1.1	1.2	1.4
Nondurable Goods	47	2.6	1.8	0.0	-0.1	1.2	-0.3	-0.7	0.7	0.2	-0.2	-0.5	-0.2
Transportation and Utilities	52	3.6	2.1	1.7	1.5	1.6	0.4	0.6	2.2	1.9	2.1	1.8	1.5
Wholesale and Retail Trade	173	1.6	2.3	0.8	-0.9	3.2	2.5 2.1	2.3	1.6 0.6	0.7	-0.2	0.0 -7.3	-0.7
Information		1.8	1.0		-0.1	1.5		4.1		6.7	-6.0		1.5
Finance, Insurance, and Real Estate	44	0.4	0.0	-1.0	-1.6	-0.5	1.1	1.0	-1.0	-1.3	-1.7	-1.9	-1.3
Professional and Business Services	105	3.1	0.5	3.8	2.8	-6.4	1.9	2.7	3.4	4.9	4.5	3.7	2.6
Health Care and Social Assistance	126	1.9	2.1	1.7	0.8	5.1	2.8	2.2	2.2	1.9	1.8	0.0	0.9
Leisure and Hospitality	129	2.3	2.1	1.1	1.3	0.9	1.5	1.5	0.3	1.2	0.9	1.5	0.6
Educational Services	12	4.4	3.6	-1.1	-1.0	-6.3	0.6	-1.3	-0.6	-1.9	-0.3	-2.6	-0.6
Other Services	40	2.0	0.4	-0.4	-0.4	-3.8 0.2	0.8	0.3	-1.8	0.9	-2.2	0.5	-2.3
Government	244	0.0		0.4	0.6		0.2		0.2	0.3	0.6	0.5	0.3
Unemployment Rate (%)†‡	6.5	-0.9	6.6	6.3	6.3	6.7	6.7	6.6	6.5	6.4	6.3	6.3	6.3
Personal Income (millions of current \$)													
Wages and Salaries	46,352	2.0	3.7	4.3	4.1	2.6	4.0	3.7	4.0	4.9	4.1	4.4	3.7
Other Labor Income	11,140	1.8	3.1	3.7	3.5	2.9	2.7	3.4	3.4	4.3	4.0	3.3	3.4
Proprietors' Income	10,167	0.8	0.1	4.8	4.8	-3.7	1.8	3.7	6.4	4.8	4.7	4.5	4.4
Farm Proprietors	1,568	-10.2	-27.7	-5.9	0.1	-61.9	-25.4	-13.9	20.7	-22.2	-1.5	-12.3	20.1
Non-farm Proprietors	8,599	3.1	5.0	5.9	5.4	5.4	4.8	5.6	6.4	5.9	6.1	5.8	4.2
Property Income Transfer Payments	15,738 27,576	3.4 4.6	1.7 3.1	3.5 4.1	5.4 4.7	2.6 3.4	-1.0 3.9	0.6 3.2	2.4 3.7	5.3 4.7	4.2 4.5	4.4 3.9	5.1 3.5
						3.5							4.5
Less: Social Security Payments	7,854	1.3	3.3	4.2	4.2		3.1	3.3	3.3	5.4	5.1	2.5	
Plus: Residence Adjustment Equals: Total Personal Income	2,956	5.8 2.9	5.6 3.0	5.7 4.3	5.2 4.4	4.9 2.3	5.4 3.1	5.6 3.3	5.7 4.0	6.1 4.8	5.7 4.3	4.9 4.4	5.1 4.7
Less: Individual IRS Collections	106,075 6,941				3.2	5.2	4.3	3.7				3.9	
Less: Individual IRS Collections  Less: Individual State and Local Taxes		7.9 4.8	4. I 3. I	4.4 4.1	4.5	4.0	2.4	1.8	4.0	5.8 4.6	4.1	4.2	3.1 4.6
	2,160 96,974		2.9	4.3	4.5	2.0	3.0		3.6	4.8	5.6 4.4	4.4	4.9
Equals: Disposable Personal Income Per Capita Personal Income (thousands of \$)	35.450	2.5 2.9	2.9	4.1	4.1	2.3	3.0	3.4 3.2	4.1 3.9	4.8	4.0	4.4	4.9
Population (thousands)	2,992	0.0	0.1	0.2	0.3	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.3
U.S. Forecast	2,772	0.0	0.1	0.2	0.5	0.0	0.1	V.1	0.1	0.5	0.5	0.5	0.5
Gross Domestic Product (billions of current \$)	17,947	3.5	3.6	4.8	4.8	2.7	4.1	4.4	5.3	4.4	5.2	4.8	4.3
Gross Domestic Product (billions of 2009 \$)	16,349	2.4	2.1	2.8	2.7	1.2	2.6	2.6	2.9	2.8	3.1	2.6	2.5
GDP Deflator (Nominal GDP ÷ Real GDP × 100)	110	1.0	1.5	2.0	2.0	1.5	1.4	1.8	2.5	1.4	2.1	2.1	1.8
Total Employment, Residents (millions)†	149	1.7	2.0	1.4	1.1	4.0	1.3	1.6	1.6	1.6	1.3	1.3	1.0
Total Payroll Employment (millions)†	142	2.1	1.9	1.4	1.0	1.7	2.0	1.7	1.7	1.4	1.4	1.1	0.8
Unemployment Rate (%)†‡	5.3	-14.4	4.8	4.7	4.7	4.9	4.9	4.8	4.8	4.7	4.7	4.7	4.7
Personal Income (billions of current \$)	15,340	4.4	3.9	4.9	5.1	3.8	3.4	3.8	4.7	5.4	5.1	4.7	4.8
Per Capita Personal Income (thousands of \$)	48	3.7	2.9	4.1	4.1	3.3	2.5	2.5	4.1	4.8	4.0	3.9	3.9
Consumer Price Index (1982-84 = 100)	237.0	0.0	0.8	2.5	2.4	0.0	0.0	3.4	3.3	0.0	3.3	3.3	1.6
Prime Rate (%)‡	3.3	0.3	3.6	4.4	5.4	3.5	3.5	3.8	3.8	4.0	4.3	4.5	4.8

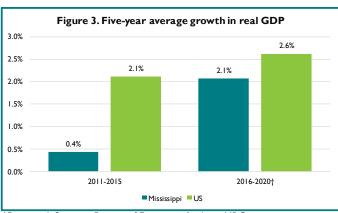
†Seasonally-adjusted. ‡Projected rates. Sources: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis (levels), and URC (forecasts).

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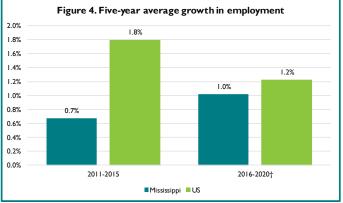
#### FIVE-YEAR FORECASTS

Similar to the short-term forecasts, the projections for the average five-year growth of real GDP in Mississippi and the U.S. are slightly lower than in the first quarter. As seen in Figure 3, the average five-year growth in real GDP in Mississippi is forecast at 2.1 percent, 0.1 percentage point lower than in the previous quarter. The average five-year growth in in U.S. real GDP is forecast at 2.6 percent, which is a reduction of 0.2 percentage point from the previous quarter. These lower average annual forecasts result from the reductions to the forecasts for real GDP growth in 2016. However, as Figure 3 indicates, both U.S. and Mississippi forecasts for 2016-20 represent considerable improvement over the growth from 2011-2015.

Figure 4 indicates the forecasts for average five-year growth in employment in both the U.S. and Mississippi are little changed from the previous quarter. The one difference is the average five-year growth in U.S. employment is projected at 1.2 percent, which is 0.1 percentage point lower than the forecast of the previous quarter. The forecast for average annual employment growth in Mississippi from 2016-2020 remains at 1.0 percent, which if realized would represent an improvement of 0.3 percentage point over 2011-15. The U.S. forecast for 2016-20, in contrast, would represent a 0.6 percentage point reduction compared to 2011-15.



†Projected. Sources: Bureau of Economic Analysis; URC



†Projected. Sources: Bureau of Labor Statistics; URC

## ALTERNATIVE FORECASTS

The alternatives to the baseline forecasts in terms of real GDP, based on scenarios outlined by IHS Economics, are similar to the previous quarter. The probability of recession under the pessimistic scenario remains at 20 percent and a downturn would last six months beginning sometime in the second half of 2016. Such a situation would result from continued weakening of the global economy and a slump in U.S. financial markets. Under this pessimistic scenario the Mississippi economy is hit hardest in 2017, as the rate of real GDP growth from the baseline forecast is reduced by more than half to 0.6 percent. Growth in the U.S. economy also reaches its lowest rate in 2017 under the pessimistic scenario, as the annual increase in real GDP is projected at 0.1 percent. The forecast for U.S. real GDP growth in 2016 falls to 0.8 percent, 1.3 percentage point below the baseline forecast. Employment growth in Mississippi slows relatively more than real GDP growth under the pessimistic scenario, increasing by only 0.3 percent in both 2017 and 2018. The impact on U.S. employment growth is greater than in Mississippi under the pessimistic scenario as U.S. employment increases by 1.4 percent in 2016, decreases by 0.4 percent in 2017, and increases by 0.2 percent in 2018.

Under the optimistic scenario, to which IHS Economics assigns a 15 percent probability, the global economy performs above expectations and U.S. productivity improves. Real GDP in Mississippi grows slightly more under the optimistic scenario compared to the baseline; 2016 growth remains the same while growth rates for 2017 and 2018 are both higher by 0.2 percentage point. The U.S. economy performs considerably better compared to the baseline forecast under the optimistic scenario. Real GDP growth in 2016 reaches 2.7 percent compared to the 2.1 percent baseline forecast, while growth in 2017 and 2018 attains rates of 3.7 percent and 3.2 percent, respectively. As with real GDP, the forecasts for employment growth in Mississippi improve slightly under the optimistic scenario. The growth rate forecast for 2016 is 0.2 percentage point higher than the baseline, while the forecasts for employment growth in 2017 and 2018 are both 0.1 percentage point higher than in the baseline forecast. U.S. employment growth under the optimistic scenario improves 0.1 percentage point compared to the baseline forecast in 2016, by 0.6 percentage point in 2017, and by 0.4 percentage point in 2018.