MISSISSIPPI ECONOMIC OUTLOOK

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NEAR-TERM GROWTH FORECAST IMPROVES

ississippi's economy is projected to grow 1.9 percent in 2017 according to the latest URC forecast. This estimate represents an improvement of 0.4 percentage point compared to the forecast of the previous quarter. The estimates of real GDP growth in Mississippi for the first three guarters of 2016 by the U.S. Bureau of Economic Analysis (BEA) are reflected in this forecast; third quarter real GDP growth marked an improvement over the first and second quarters. While the latest forecast of a 1.9 percent change in real GDP in Mississippi in 2017 represents an improvement from the previous quarter, it also reflects a considerable decline from the estimate of 2.6 percent growth for 2016. BEA will release its official estimate of real GDP growth for 2016 for Mississippi and all states in May. In 2018 real GDP in Mississippi is expected to maintain the growth rate of 1.9 percent. The 2018 forecast of real GDP has been the same for three consecutive quarters.

According to BEA the U.S. economy grew 1.6 percent in 2016; thus, the forecast of 2.4 percent growth in 2017 represents an increase of 0.8 percentage point. This latest forecast for growth in the U.S. economy was revised up by 0.1 percentage point from the previous quarter. The forecast of U.S. real GDP growth for 2018 improves

Figure 1. Annual percent change in personal income, Mississippi 4.5% 3.9% 4.0% 3.5% 3.2% 3.0% 3.0% 2.5% 2.5% 2.0% 1.8% 1.4% 1.5% 1.0% 0.5% 0.0% 2013 2014 2017†

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

To download the current issue of Mississippi Economic Outlook, please visit: www.mississippi.edu/urc/publications.asp slightly to 2.6 percent. IHS Markit anticipates an increase in consumer spending as well as stronger growth in real nonresidential fixed investment later in the year. However, much of the expected increases in spending are based on higher consumer and business confidence. In turn, this improved sentiment is based on anticipated regulatory and tax reform becoming effective sometime in 2018.

The projection for payroll employment growth in Mississippi in 2017 of 0.5 percent as discussed on page 2 marks an improvement from the forecast of the previous quarter. However, if realized this rate of job growth represents a 0.5 percentage point decline from the 2016 rate. Employment growth in both 2018 and 2019 is projected to improve to 0.9 percent.

As seen in Figure I and in Table I on page 3 personal income in Mississippi is projected to grow 3.0 percent in 2017, a slight decrease from the 3.2 percent growth experienced in 2016. This estimate represents a decline of 0.3 percentage point from the forecast of the previous quarter. However, the forecasts of 4.4 and 4.6 percent growth in personal income in 2018 and 2019, respectively, remain the same as in the previous quarter. Annual personal income growth in Mississippi last surpassed 4.0 percent in

2011. The forecasts of personal income growth for the U.S. from 2017-2019 exceed those of Mississippi in each year. U.S. personal income growth is expected to reach 5.1 percent in 2018 and 5.4 percent in 2019. If realized the 2019 forecast of 5.4 percent personal income growth would result in the largest increase since 2011, when U.S. personal income grew 6.2 percent. Unlike in previous years, some of the growth in personal income reflects higher rates of inflation. As seen in the last section of Table 1, the average annual increase in the Consumer Price Index (CPI) is expected to exceed 2.0 percent each year from 2017 to 2019. The CPI last increased by 2.0 percent or more annually in 2012.

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SHORT-TERM FORECASTS

The first section of Table I on page 3 indicates URC estimates most sectors of Mississippi's economy expanded in 2016, with the largest growth in percentage terms by far in Natural Resources and Mining. This sector's growth results primarily from the agriculture industry, which can experience relatively large changes in output both year-to-year and within year. In fact, without the growth in this sector, overall real GDP growth for the state in 2016 would fall to 1.5 percent. The two sectors URC believes contracted in 2016, Information and Finance, Insurance, and Real Estate, are the same as in the estimates of the previous quarter. URC projects no sectors in the state will contract in 2017 despite a forecast of a 0.7 percentage point decline in

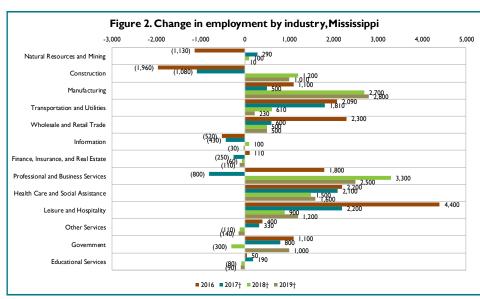
growth in the overall economy compared to 2016. In terms of sectors, the largest percentage growth in output forecast for 2017 is in Information at 3.8 percent, followed by the 3.4 percent increase projected for the Transportation and Utilities sector. For 2018, URC anticipates the Natural Resources and Mining sector will contract slightly while output in Other Services will not change. The largest growth forecast for 2018 is in the Information sector at 4.2 percent, followed by the 3.9 percent growth expected in Professional and Business Services. No sectors in Mississippi are forecasted to contract in 2019, with output in Other Services unchanged. The Manufacturing and Professional

and Business Services sectors are expected to experience the largest rates of growth, both at 3.3 percent, closely followed by the Information sector at 3.2 percent.

As previously mentioned, in the second section of Table I URC forecasts payroll employment in Mississippi will increase 0.5 percent in 2017. If realized, this rate would equal half the growth rate of 2016 and mark the smallest job growth since 2011, when total payroll employment did not change. In 2018 employment in the state is expected to increase by 0.9 percent, a slight improvement from the forecast of the previous quarter. Employment is also projected to increase 0.9 percent in 2019, a slightly lower rate than in the forecast of the previous quarter.

Figure 2 depicts the URC forecasts for the change in employment by industry in Mississippi for 2017, 2018, and 2019. The largest growth in employment for 2017 is ex-

pected in Leisure and Hospitality and Health Care and Social Assistance, as these sectors are forecasted to add 2,200 and 2,100 jobs, respectively. Notably, the Natural Resources and Mining sector is expected to add jobs in 2017 after decreasing in employment in 2015 and 2016. The largest declines in employment by sector for 2017 are forecast for Construction and Professional and Business Services, which are expected to lose 1,080 and 800 jobs, respectively. Significantly, the Construction sector in Mississippi lost jobs in seven of the last eight years; total employment in the sector in 2016 was almost 27.0 percent smaller than in 2008. In 2018, URC projects Professional and Business Services will add 3,300 jobs, the most of any sector. Manufacturing is forecast to follow with an



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

increase of 2,700 jobs. Employment in Construction is expected to increase by 1,200 jobs in 2018, which is notable given the declines experienced in the sector as mentioned above. While four sectors are projected to decline in employment in 2018, the same number as in 2017, the decreases forecasted for 2018 are expected to be considerably smaller. The largest decline in employment is forecast for the Government sector, which is expected to lose 300 jobs. Manufacturing is projected to experience the largest increase in employment in 2019 among all sectors in the state, adding 2,800 jobs. Employment in Professional and Business Services is forecasted to rise by 2,500 jobs. Declines in employment by sector in 2019 are expected to be minimal, as Other Services and Finance, Insurance, and Real Estate are forecasted to lose 140 and 110 jobs, respectively. The Finance, Insurance, and Real Estate sector is expected to lose jobs each year from 2017 to 2019.

TABLE I. BASELINE MISSISSIPPI AND U.S. FORECASTS

	2016 Percent		Annual Forecasts			Annualized Quarterly Forecasts							
Variable	Value C	hange	2017	2018	2019	2017Q1 2	017Q2 2	017Q3 2	017Q4 2	018Q1 20	18Q2 2	018Q3 2	018Q4
Variable Value Change 2017 2018 2019 2017Q1 2017Q2 2017Q3 2017Q4 2018Q1 2018Q2 2018Q Mississippi Forecast Process Pr													
Gross State Product (projected)													
In current dollars	109,679	3.6	4.2	4.2	4.0	3.8	4.5	4.5	4.1	4.3	4.1	4.0	3.6
In millions of 2009 dollars	96,710	2.6	1.9	1.9	1.8	0.8	2.4	2.1	1.7	2.0	1.8	1.7	1.7
Natural Resources and Mining	4,339	26.2	2.5	-0.3	0.2	-1.1	2.5	2.9	-0.7	-2.1	-0.8	0.2	-0.6
Contract Construction	4,238	4.9	2.0	2.5	2.0	3.0	2.1	2.9	2.3	2.7	2.0	3.3	1.9
Manufacturing	14,443	3.0	2.3	3.2	3.3	1.4	4.0	2.4	2.7	3.4	3.6	2.9	3.4
Durable Goods	8,341	4.1	3.5	4.5	4.3	2.5	5.4	3.5	3.7	4.8	5.1	3.9	4.1
Nondurable Goods	6,090	1.6	0.9	1.7	2.0	0.2	2.1	1.0	1.3	1.9	1.7	1.5	2.6
Transportation and Utilities	6,067	1.9	3.4	1.7	1.3	0.6	1.7	2.3	1.7	1.6	1.7	1.4	1.3
Wholesale and Retail Trade	13,261	1.1 -0.2	2.3 3.8	2.2 4.2	2.2 3.2	1.9 2.6	2.5 4.2	2.3	2.0 2.8	2.3 4.8	1.9 4.1	2.1	1.8 3.5
Information	2,310							6.4				2.6	
Finance, Insurance, and Real Estate	13,814	-1.0 3.3	2.0 3.0	1.9 3.9	1.5 3.3	1.3 0.5	2.5	2.2 4.0	2.0	1.9	1.5 3.9	1.5	1.6 2.9
Professional and Business Services	7,229 7,426	2.2	2.8	2.6	2.5	3.3	3.5 3.1	2.0	4.0 2.6	4.1 3.1	2.2	3.6 2.3	3.0
Health Care and Social Assistance Leisure and Hospitality	4,052	0.6	1.2	0.9	0.6	0.4	1.9	1.6	0.1	0.5	1.3	1.7	-0.6
						1.3	2.3					1.7	
Educational Services	646	0.3	1.2	1.9	1.7			2.1	1.6	2.2	1.8		1.9
Other Services	2,216	0.6	0.1	0.0	0.0	-0.7	0.2	-0.2	0.2	0.0	-0.2	-0.2	-0.2
Government	16,512	2.1	0.3	0.1	0.2	-0.5	0.7	0.0	0.0	0.2	0.1	0.0	0.2
Payroll Employment (thousands)													
Residents†	1,207	1.5	1.2	0.7	0.7	4.0	-0.7	0.0	0.3	1.6	0.7	1.0	0.3
Payroll†	1,146	1.1	0.5	0.9	0.9	0.7	1.0	0.7	1.0	0.7	1.0	0.7	0.7
Natural Resources and Mining	7	-14.1	4.2	1.4	0.1	7.1	13.9	6.1	1.1	0.0	-1.6	-0.6	0.0
Contract Construction	44	-4.3	-2.5	2.8	2.3	-1.6	3.0	2.2	2.8	2.9	2.7	2.9	2.5
Manufacturing	143	0.8	0.3	1.9	1.9	0.6	1.4	1.7	1.4	2.2	2.5	1.4	1.9
Durable Goods	95	0.1	-0.1	2.6	2.4	-0.9	1.5	2.2	2.1	3.1	3.7	2.1	2.1
Nondurable Goods	48	2.4	1.2	0.5	1.3	3.7	1.2	1.0	0.0	0.7	0.2	0.2	1.3
Transportation and Utilities	55	4.0	3.3	1.1	0.4	1.8	-0.4	1.4	1.6	1.1	1.4	0.6	0.4
Wholesale and Retail Trade	175	1.3	0.3	0.3	0.3	2.1	0.5	0.7	0.0	0.5	0.0	0.2	0.5
Information	12	-4.1	-3.5	0.9	-0.3	-6.1	1.0	2.4	0.7	2.4	0.3	-2.0	-0.7
Finance, Insurance, and Real Estate	44	0.3	-0.6	-0.1	-0.3	2.3	0.0	0.0	0.1	-0.2	-0.4	-0.3	-0.1
Professional and Business Services	108	1.7	-0.7	3.1	2.3	-2.3	1.9	3.0	3.4	3.7	3.3	2.6	1.4
Health Care and Social Assistance	128	1.7	1.6	1.1	1.2	3.1	1.2	0.9	1.2	1.2	0.9	1.2	1.2
Leisure and Hospitality	134	3.4	1.6	0.7	0.9	-2.9	1.8	1.2	0.3	0.6	0.6	0.9	0.6
Educational Services	12	0.4	1.6	-0.7	-0.8	3.7	-1.0	0.0	-1.0	-0.7	-0.7	-0.3	-0.7
Other Services	40	1.0	0.8	-0.3	-0.3	2.4	-0.2	-0.2	-0.2	-0.3	-0.4	0.0	-0.6
Government	245	0.5	0.3	-0.1	0.4	0.8	0.0	-0.5	-0.5	0.0	0.2	-0.2	0.3
Unemployment Rate (%)†‡	5.9	-0.5	5.7	5.7	5.6	5.5	5.7	5.9	5.9	5.9	5.8	5.7	5.6
Personal Income (millions of current \$)													
Wages and Salaries	47,975	3.3	3.3	4.1	4.4	3.6	3.9	4.1	3.8	4.6	3.7	4.3	3.8
Other Labor Income	11,507	3.6	2.4	3.0	3.4	3.4	2.7	2.7	2.9	3.4	2.9	3.1	2.9
Proprietors' Income	9,066	5.6	-0.2	5.4	5.4	-9.9	7.5	5.1	5.3	5.5	5.1	4.6	5.4
Farm Proprietors	1,123	29.4	-43.3	-6.2	2.2	-148.9	11.5	-17.6	26.0	-40.I	8.9	-11.9	14.6
Non-farm Proprietors	7,944	3.0	5.6	6.3	5.9	6.0	6.8	6.8	5.6	6.5	5.7	5.9	5.9
Property Income	15,891	1.4	3.1	4.5	5.3	2.7	3.8	3.9	4.3	4.5	3.9	5.2	5.9
Transfer Payments	28,175	3.1	3.5	4.2	4.7	3.7	3.5	3.0	3.4	5.7	4.0	3.7	4.0
Less: Social Security Payments	8,180	3.1	3.4	4.2	4.5	7.7	2.3	2.6	3.4	5.2	5.9	2.0	5.2
Plus: Residence Adjustment	2,968	3.9	5.9	5.7	5.5	5.7	5.5	5.1	5.6	5.9	5.7	5.5	5.3
Equals: Total Personal Income	107,403	3.2	3.0	4.4	4.6	2.2	4.2	3.9	3.8	4.8	4.0	4.4	4.9
Less: Individual IRS Collections	6,776	1.0	3.8	1.8	5.1	5.2	4.2	4.6	4.0	-5.3	5.2	2.3	5.4
Less: Individual State and Local Taxes	2,170	1.3	3.0	6.8	5.9	2.4	4.2	4.3	4.3	13.9	4.3	4.2	4.2
Equals: Disposable Personal Income	98,456	3.4	3.0	4.5	4.6	1.9	4.2	3.9	3.8	5.4	4.0	4.4	5.1
Per Capita Personal Income (thousands of \$)	35.930	3.2	3.0	4.2	4.4	2.2	4.1	3.8	3.8	4.7	3.7	4.3	4.6
Population (thousands)	2,989	0.0	0.0	0.2	0.2	0.0	0.1	0.1	0.0	0.1	0.3	0.1	0.3
U.S. Forecast	10.540	2.0	4.7	ГΛ	4.5	11	F 2	47	4.0	F 1	4.0	1.1	
Gross Domestic Product (billions of current \$)	18,569	2.9	4.7	5.0	4.5	4.6	5.3	4.7	4.9	5.1	4.9	4.6	4.4
Gross Domestic Product (billions of 2009 \$)	16,662	1.6	2.4	2.6	2.3	1.7 3.2	3.1	2.4	2.5	2.7	2.7	2.5 2.1	2.4 2.1
GDP Deflator (Nominal GDP ÷ Real GDP × 100) Total Employment, Residents (millions)†	112 151	1.4 1.7	0.9	2.3 1.6	2.1 1.3	0.0	2.1 1.1	2.1	2.4	2.4 1.8	2.1 1.6	1.5	1.3
	144	1.7	1.6	1.6	1.1	1.7	1.1	1.8	1.6 1.1	1.6	1.6	1.5	1.3
LOTAL PAYROLL EMPLOYMENT (millions)+			4.5	4.2	4.0	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0
Total Payroll Employment (millions)†	1 U					7./	7.0	7.3	7.7	7.3	7.4	7.1	
Unemployment Rate (%)†‡	4.9	-7.8 3.6											5.2
Unemployment Rate (%)†‡ Personal Income (billions of current \$)	16,012	3.6	4.5	5.1	5.4	3.9	5.0	4.8	4.7	5.4	5.0	5.0	5.3 4.5
Unemployment Rate (%)†‡													5.3 4.5 3.2

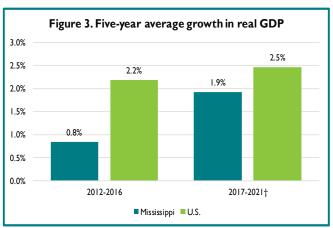
†Seasonally-adjusted. ‡Projected rates. Sources: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis (levels), and URC (forecasts).

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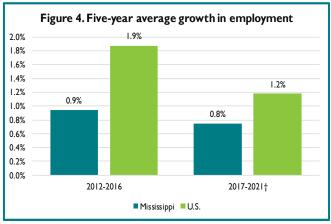
FIVE-YEAR FORECASTS

s seen in Figure 3, the forecasts for average annual growth in real GDP in Mississippi and the U.S. have improved slightly from the previous quarter. Average annual growth in real GDP for Mississippi is projected at 1.9 percent, up 0.1 percentage point from the previous forecast. This growth rate, if realized, represents an almost threefold increase over the average annual rate of the previous five years. Similarly, the average five-year forecast for U.S. real GDP growth is 2.5 percent, an increase of 0.1 percentage point from the estimate of the previous quarter. If realized, this forecast represents an increase of 0.3 percentage point over the average annual growth rate of the U.S. economy from 2012-2016.

The forecasts for average annual employment growth in Mississippi and the U.S. changed similarly from the previous quarter. Employment growth for Mississippi is projected at 0.8 percent per year from 2017 to 2021, an increase of 0.1 percentage point from the forecast of the previous quarter. This average growth rate for the state is similar to the rate of the previous five years of 0.9 percent. U.S. employment is expected to grow 1.2 percent annually over the next five years, also an increase of 0.1 percentage point from the forecast of the previous quarter. If realized this average growth rate represents a decrease of 0.7 percentage point from the previous five years.



†Projected. Sources: Bureau of Economic Analysis; URC



†Projected. Sources: Bureau of Labor Statistics; URC

ALTERNATIVE FORECASTS

HS Markit assigns a probability of 20 percent to its pessimistic alternative to the baseline forecast. Under the pessimistic scenario, a recession in the second and third quarters of 2018 results primarily from a deterioration of trade relations with China and Mexico. While likely not reaching an all-out trade war, these conditions damage business confidence and cause a decline in business investment and capital spending. Consumer confidence is also hit hard by a downturn in the stock market under this scenario. Mississippi's economy, however, is only minimally impacted in terms of real GDP from a recession in 2018. The average rate of growth over the next five years is only 0.1 percentage point lower than the baseline forecast. The state's economy likely faces relatively little exposure to the markets affected by the falloff in U.S. trade relations. U.S. real GDP growth compared to the baseline, however, decreases considerably under the pessimistic scenario. The average annual rate of U.S. real GDP growth is over 0.6 percentage point lower under the pessimistic scenario and includes a contraction in the U.S. economy of 0.6 percent in 2018. The average annual increase in employment from 2017 to 2021 in Mississippi under the pessimistic scenario is 0.5 percent, compared to 0.8 percent under the baseline scenario. U.S. employment grows 0.5 percentage point less per year under the pessimistic scenario, including declines in total employment in 2018 and 2019.

Under the optimistic scenario to which IHS Markit also assigns a probability of 20 percent, a reduction in both regulations and corporate taxes leads to an increase in business investment as well as gains in productivity. Consumer and business confidence both rise under this scenario as inflation remains tame. In terms of real GDP Mississippi's economy improves by 0.3 percentage point per year under the optimistic scenario. U.S. real GDP growth improves considerably more under this optimistic scenario, rising by almost 0.8 percentage point annually over the next five years. In Mississippi employment growth is essentially the same under the optimistic scenario compared to the baseline forecast for 2017 to 2021. U.S. employment growth is higher on average by more than 0.4 percentage point per year under the optimistic scenario compared to the baseline forecast.