Mississippi Economic Review and Outlook
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Dear Readers,

Now we know: the landing after the 1990s boom is not a soft one. Investment in information technologies and computers, it turns out, is not recession-proof. Despite the dramatic change in its composition, investment remains prone to cyclical swings. While the odds are good that there won't be an outright recession in the U.S., the slowdown has been such a change that it feels like one. The articles on the national and state economic outlooks explore the reasons for the downturn, and why the recovery, both here and nationally, will be a gradual one.

Pete Walley, Director of Long Range Economic Development Planning, looks at where the Mississippi labor force stands in relation to the rest of the country, and why an increased emphasis on skills and training is vital to the future of our state.

Most workers in the state do not earn enough to support a family of three, according to the basic needs budget I have calculated for this *Review*. A related article explores some of the reasons why wages are lower here than elsewhere and what can be done to raise them.

To subscribe to this *Review*, which is published twice yearly, please fill out the form included in this issue. National projections are based on the forecast of DRI-WEFA. As always, the views expressed in the *Review* are those of the authors and do not necessarily represent the official position of the Center for Policy Research and Planning or the Mississippi Institutions of Higher Learning. Letters to the editor are welcome.

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In This Issue

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NATIONAL ECONOMIC OUTLOOK

***Stock market uncertainty continues to spook investors and adversely impact both consumer and business confidence. Consumers, nonetheless, are doing their part to keep the economy rolling–but are increasing their outstanding debt in the process.**

***Business investment dropped sharply in the first quarter (Q1), with even information processing equipment and software taking a hit. On the positive side, some rebuilding of inventories began in Q2 and is expected to keep the fall in investment below 5% this quarter.**

***Export markets are weak. U.S. exports are only expected to increase 2% in 2001, after an 11% increase last year. Slowing economies in the rest of the world, along with a strong dollar, explain the change.**

***Gross domestic product and payroll employment grew slowly in Q1; and industrial production actually dropped, pushing down productivity. Housing starts and light vehicle sales, however, showed solid increases.**

***Inflation moderated overall, but the core rate of inflation (which excludes energy and food) rose slightly to the 2.5-3.0% range. Energy prices, which remain significantly above their 1999 levels, have contributed to the upward pressure on the core rate.**

***The Federal Reserve began reducing interest rates to stimulate spending in January, and remains poised to continue this policy, as long as inflation stays low.**

What a difference two quarters make! While the U.S. economy is fundamentally the same economy it was six months ago, it surely looks and feels different. The cloud of gloom overhanging the stock market may be the most visible sign of these newly-troubled times. Luckily, no other numbers have dropped as far and fast as equity prices. Also on the bright side, consumers continue to spend, with even vehicle sales and housing starts doing well in the first quarter. And, since investor reaction to economic news drives the stock market, as the numbers turn up, so will stock prices and investor confidence.

The numbers, in fact, are not bad for a near-recession. They show a period of adjustment-- an interval with one lane of the road closed as some repairs are made.

The boom begun in 1992 has ended--complicated by high energy prices, a shake-up in information technology (IT) companies, and high levels of debt in the household and business sectors. From 1992 to 2000, gross domestic product (GDP) climbed at an average annual rate of 4.4%, but in the last three quarters, this average has slipped below 2.0%. In response, since January, the Federal Reserve has lowered interest rates aggressively to stimulate business and consumer spending, but it is unclear whether or not this impetus will be sufficient to boost U.S. growth rates above 2.0% by the third quarter (Q3). Based on the history of recessions and near-recessions since 1960, however, the recovery is expected to be well underway by Q4.

The trends dominating the economy so far this year are reflected in the data shown in Table 1. The growth rate of GDP, after reaching a startling 5.5% in Q2, dropped precipitously

Table 1. **SELECTED QUARTERLY NATIONAL ECONOMIC INDICATORS**
Percentage Change, SAAR, Current Dollars Unless Otherwise Indicated

	2000 I	2000 II	2000 III	2000 IV	2001 I	2001 II^{p}

Gross Domestic Product (1996$)	4.7	5.5	2.2	1.0	1.3	1.1
Index of Industrial Production	6.5	7.7	3.5	-0.6	-5.1	0.3
Manufacturing, % Capacity Utilized	81.3	81.9	81.7	80.3	78.3	77.0
Establishment Employment	2.6	2.8	0.2	0.7	1.2	0.3
Index of Productivity	2.1	6.2	2.7	2.4	-0.1	1.0
Business Loans	11.4	12.4	8.1	4.5	10.0	0.1
Consumer Credit Outstanding	10.2	9.4	8.2	11.0	7.7	6.2
Personal Disposable Income	5.4	5.7	4.4	2.6	5.2	5.3
Index of Hourly Compensation	4.1	5.6	6.2	6.4	5.9	3.9
Standard & Poors 500 Equity Price Index	13.3	8.0	7.8	-29.9	-26.3	52.8
Consumer Expenditures	10.9	5.1	6.2	4.7	6.3	4.0
Index of Consumer Sentiment (University of Michigan)	4.6	-1.2	-1.2	-3.3	-11.2	3.7
Light Vehicle Sales, Millions, SAAR	18.2	17.2	17.4	16.2	17.1	16.0
Housing Starts, Millions, SAAR	1.73	1.60	1.53	1.56	1.64	1.54
Gross Private Domestic Investment	5.0	20.2	1.7	-4.2	-12.0	-2.3
Before-Tax Corporate Profits	23.0	9.5	1.1	-21.6	4.3	8.9
Current Account Balance (Billions $)	-$407	-$421	-$452	-$461	-$479	-$422
Refiners Acquisition cost Oil, (Average Per Barrel)	$27.11	$26.85	$29.61	$29.27	$25.33	$22.47

SAAR - seasonally averaged annual rate, based on quarter-to-quarter growth rates.

[p]Second quarter data are projections.

SOURCE: WEFA Group, May 2001.

in Q3 and Q4, and only recovered somewhat in Q1 to a 1.3% rate. The sluggish GDP growth is linked to falling industrial production, as private domestic investment sags and exports slacken. Consumer spending, while still growing, has also slowed, adversely affected by an increase in personal disposable income of only 2.6% in Q4. Rising energy prices absorbed much of the modest increase that quarter. An 11% jump in consumer credit enabled consumer expenditures to grow at a rate close to 5.0%.

The 29.9% decrease in equity prices in Q4, as measured by the Standard and Poor 500 Index, contributed to a malaise that sent consumer confidence plunging 11.2% in Q1 of the new year. A 21.6% drop in corporate profits, also in Q4, was followed the next quarter by a only a modest 4.3% increase.

Somewhat offsetting the bad news, housing starts rose in both Q4 and the following quarter. Also, light vehicle sales, which had dropped in Q4, almost hit the 2000 average rate of 17.2 million units in Q1. Since business investment, housing and consumer durables are the first expenditures affected by a downturn, these increases are a very positive sign. So far, employment has also managed to grow every quarter, and is even expected to rise in Q2 despite registering a drop of 223,000 jobs in April.

Lagging demand since the fall has reduced industrial output, and as a result, in the first quarter output per worker actually fell for the first time since 1995. Since declines in output typically precede declines in employment, some loss of productivity is usual during a downturn.

Productivity growth was critical to the longevity of the post-1991 boom. High increases in productivity enabled strong increases in output and wages over the past eight years, while at the same time holding down prices. A return to positive growth in productivity is projected for this quarter.

Consumers Doing Their Share

Consumers have been doing their part to keep the economy rolling. As Table 1 shows, the 4.0% increase in spending projected for the second quarter is the lowest in over a year, and to finance even this modest increase, consumers will find it necessary to raise their outstanding credit by 6.2%. During most of the 1990s boom, consumers financed much of their expenditures through borrowing, and only in 1997 and 1998 did disposable income grow more rapidly than consumer credit outstanding. In Q4 of 2000, however, the debt-service burden of households--the amount of personal disposable income that is needed to service outstanding debt--was at its highest level since 1986. Delinquency rates on consumer loans increased throughout 2000. Increasing financial instability in the household sector is the end result of these trends, which may well drag down consumer spending if the economic recovery is not swift.

Gains in the financial worth of households have backed up the increased indebtedness of consumers until recently, but in 2000, net financial worth of households dropped 10%. Consumers are evidently expecting to recoup their losses on the stock and securities markets, given that consumer credit continues to grow more rapidly than income, at an estimated 6.2% rate versus a 5.3% rate in income growth. In dollars, disposable income is expected to increase by about $330 billion to $7.3 trillion this year, while consumer credit will grow $94 billion to $1.6 trillion. Consumer indebtedness, then, bears watching.

Investment

Gross private domestic investment fell 12% in Q1, with a 6.4% drop in expenditures on information processing equipment and software, surprising most analysts, who had been expecting at least some positive growth. Continuing weakness in investment expenditures is forecast for the rest of the year, with the only bright spot being investment in residential structures. The Federal Reserve remains poised to continue reducing interest rates as needed, as long as inflation remains in check. Table 1 shows the downward turn in gross investment, and the projected weakening in light vehicle sales and housing starts as households become more financially conservative.

While gross private domestic investment, at approximately $1.8 trillion is not as large a component of aggregate demand as the $7.1 trillion of consumer expenditures, it plays a particularly critical role in determining the course of an economic cycle because of its greater volatibility. Most of investment is fixed investment in equipment and structures, geared towards expanding productive capacity. When demand is stable or slowing, businesses have little incentive to expand capacity, and so expenditures on fixed investments drop, as we are seeing now. The

Table 2. **U.S. ECONOMIC FORECAST 2001-2003**

	2001	**2002**	**2003**
Gross Domestic Product (Percent Change)	4.2	4.4	4.9
Real Gross Domestic Product (Percent Change)	1.8	2.6	3.4
Price Level (Percent Change)	2.4	2.1	2.3
Real Gross Priv Domestic Investment (Percent Change)	-2.9	1.7	4.4
Total Establishment Employment (Percent Change)	0.7	0.8	1.0
Manufacturing	-2.5	-0.4	0.6
Services	1.8	1.3	1.1
Construction	4.4	2.4	1.4

Trade	0.4	0.8	1.3
Finance, Insurance, Real Estate	1.1	0.3	0.4
Transportation, Communication, Utilities	1.9	0.7	0.6
Government	0.2	0.7	0.8
Unemployment Rate	4.7	5.2	5.0
Personal Income (Percent Change)	5.0	4.8	5.0
Consumer Price Level (Percent Change)	3.2	2.6	2.8
Prime Rate	7.4	6.8	7.7

SOURCE: WEFA Group, May 2001.

other component of gross investment is change in inventories. Typically, inventories are drawn down during a cyclical downturn, and when they hit critically low levels, businesses react by building up their stocks. According to some observers, this turnaround in inventories began in Q2 and will be a positive force in Q3. When fixed investment turns up, the recovery will be underway, since the even larger components of aggregate demand, consumer and government expenditures, are not expected to drop.

The largest single category of investment is currently information processing equipment, accounting for $700 billion of the $1.8 trillion in gross private domestic investment. The productivity-enhancing qualities of information technology (IT) technologies were thought to make these investments more recession-proof than they have proven to be. Nonetheless, it is expected that IT investments will do better than more traditional kinds of machinery during this slowdown, given the high returns relative to their low costs, and this will moderate the cycle now unfolding. Table 2 gives the WEFA forecast, which is for a 1.7% increase in investment in 2002, after a drop this year of about 2.9%.

Inflation

Consumer prices, as measured by the consumer price index, increased 3.4% in 2000, and the core index, which excludes food and energy prices, increased 2.4%. In the first three months of 2001, the rate of inflation gradually lessened, and overall a slightly lower increase in the consumer price level is forecast for this year than in 2000. A further drop, to 2.6% in 2002, is predicted by WEFA. See Table 2.

There has been a clear increase in the CPI core rate of inflation. Over the 1997 to 1999 period, this rate declined from 2.4% to 2.1%. It rose to 2.4% again in 2000, and this year may hit 3.0%. Part of this increase is due to the spreading effects of the rise in energy costs, which are discussed below. But also contributing is an increase in the cost of medical care, which rose 5.6% in Q1 and is expected to continue to rise at a 5% rate in both 2001 and 2002. The cost of housing has also been rising at a similar pace, but new construction and falling incomes are expected to relieve demand pressures in this area, and drop the rate of price increase from 5.1% this year to 4.0% the next.

Prices paid by producers are also expected to rise less rapidly this year than last, due to lower increases in the cost of fuels and intermediate materials, including chemicals, pulp, paper and lumber. The cost of capital equipment is showing little increase, with prices actually decreasing for some capital goods such as computers. A 3.4% increase in producer prices is expected this year, dropping to a 1.2% increase in 2002.

The Cost of Energy

Higher energy prices forced up production costs and the overall price level in the U.S. last year. Our non-OPEC trading partners were also hit hard. In some months, much of the growth in consumer disposable income here was absorbed by higher fuel costs. Since the winter, however, petroleum prices in the U.S. have fallen substantially for

distributors, and now are at about the same levels as a year ago. However, the biggest jump in prices had already taken place by March of 2000. In March of 1999, Refiners' Acquisition Cost (RAC) of crude petroleum was $12.30 per barrel, but by March of 2000 it was $28.41. This year it was back to $24.60 in March, after hitting a high of $31.10 in September.

Prices at the pump, which averaged an unrealistically low $1.05 in U.S. cities in 1998, rose to $1.17 in 1999 and $1.51 in 2000 for unleaded regular gasoline. Prices in March of 2001 were down to $1.45, but have been rising. Environmental protection policies for reformulated gasoline are applicable this spring and summer, contributing to the increase.

As the year progresses, new non-OPEC supplies will put pressure on OPEC (the Organization of Petroleum Exporting Countries, whose major producers are Saudi Arabia, Iraq and Venezuela). New or growing sources of oil include deepwater Africa, the CPC pipeline from the Caspian Sea, and increased production from Mexico.

The price of natural gas, which rose even more rapidly than that of petroleum during this past year, has not returned to previous levels, but instead remains almost twice as expensive as a year ago.

Overall, consumers suffered an increase in gasoline prices at the pump of over 28% last year, and producers, a 50.0% increase in the cost of refined petroleum. Although the second half of 2001 may see some fall in energy prices, for the year as a whole prices are expected to be up by about 8% for both consumers and producers. Rising energy prices, then, will continue to squeeze the purchasing power of consumers as well as the operating budgets of businesses.

U.S. Export Markets

The slowing growth rate of the U.S. economy has meant a reduced U.S. demand for imports. In February, imports fell while exports rose, with the result that the U.S. current account deficit finally showed some improvement before worsening again in March. With the growth rate of GDP here expected to be only 1.8% for the year, the rest of the world is outpacing

Table 3. **ALTERNATIVE SCENARIOS AND PROBABILITIES IN NATIONAL ECONOMIC FORECAST**

	Rate of Growth of Real GDP			**Probability**
	2001	**2002**	**2003**	
Baseline	1.8	2.6	3.4	45%
Low Growth	1.3	1.3	2.9	35%
High Growth	2.4	3.7	3.8	10%
Recession[1]	0.9	0.3	2.3	10%

[1]Includes two consecutive quarters of negative growth.

SOURCE: WEFA Group, May 2001.

us, and further reduction in the current account deficit is predicted for the remainder of the year. The shaky stock market and slowing growth in the U.S., however, has negatively impacted other countries, and the WEFA Group has dropped its forecast for the 2001 growth rate of GDP in the rest of the world from 3.2% in November to 2.2% in May, as slowing imports by the U.S and a weakening in world equity prices hit Europe and other key regions.

The Organization for Economic Cooperation and Development (OECD) in its May Economic Outlook is predicting a 2% growth rate this year for its member countries (Japan, the Euro area of Europe, the European Union and the United States), with a higher rate of close to 3% in 2002. Interest rate reductions, increased government spending,

and lower oil prices are behind the upswing in the forecast. Also, it is expected that the higher productivity growth seen in the U.S. in the past few years will soon be matched in several European countries, which have also invested heavily in the new information technologies.

Alternative Forecast Scenarios

The detailed baseline WEFA forecast for the national economy was given in Table 2. This baseline forecast, which has an associated 45% probability, shows the nation just barely skirting a recession with a 1.8% growth rate in 2001. Under this scenario, the economy bottoms out in Q2 of this year and a slow recovery begins, with Q3 showing a 1.3% average annual rate of growth and Q4 a 2.0% rate. By Q2 of 2002, however, growth rates are back above 3.0%, with the growth rate for the year being 2.6% on a year-over-year basis. A 3.4% growth rate, in line with the long-term potential, is predicted for 2003.

There is the possibility that good news on several fronts could push up the pace of recovery. Table 3 presents this and other alternative forecasts. With a probability of 10%, growth rates could be as high as 3.7% by 2002. This higher growth alternative could materialize if strong sales of vehicles and home continue, and investment in high-tech goods recovers. A stock market rebound would be part of this scenario, pushing up consumer confidence and stimulating industrial production. Higher-than-expected growth abroad could also have a positive impact. A continuation of productivity growth at a 2.5% rate would make a growth rate above 3.0% more likely as well.

The lower growth alternative, currently assigned a 35% probability by WEFA, would be the result of a continuing decline in consumer confidence that translates into lower sales of vehicles, housing and durables. Any increases in energy prices resulting from turmoil in the Middle East or OPEC decisions would further slow recovery, and could mean one or two quarters of negative growth in 2001. Continuing doldrums in the stock market, and a reluctance to invest in new high-tech products on the part of business are part of this low-growth picture.

The recession scenario, with a 10% probability, would result from the same factors listed under the low-growth alternative, except that the reactions of consumers and businesses to the slowdown are more extreme. Businesses lay off more workers, consumers cut back more on spending and delays on big-ticket purchases are longer. Banks could aggravate the slowdown by further restricting lending, despite the falling interest rates. And developments abroad could mean a sharper slowdown in the rest of the world and a slower growth of U.S. exports.

SOURCES

Economic Policy Institute, “GDP Picture”, 4/27/01, available at www.epinet.org.

Federal Reserve Bank of Dallas, “Bank Competition in the New Economy”, available at www.dallasfed.org.

Organization for Economic Cooperation and Development, “OECD Economic Outlook No. 69", May 2001, at www.oecd.org/eco.

DRI-WEFA, “U.S. Economic Outlook 2001-2006", May 2001.

MISSISSIPPI ECONOMIC OUTLOOK

*** Nonagricultural employment in the state over the last nine months has generally been lower than during the same month of the prior year. The unemployment rate in the first quarter (Q1) of 2001 stood at 5.2%, however, lower than last year's 5.7% average, but it is expected to rise. A return to employment growth rates of over 1.0% awaits the U.S. economic recovery.**

***Over 17,000 manufacturing jobs were lost between January 2000 and March 2001, with 3,000 of these jobs in transportation equipment (largely marine transport) and 2,200 in apparel.**

***Economic indicators this year, from tax revenues to gaming revenues, show numbers that are almost identical with those of 2000, indicating a stationary economy.**

***Consumer and business confidence turned up somewhat in the latest numbers, following a period of decline. The index of leading indicators, however, shows that near-zero growth rates may continue for a while.**

***The 2001-2006 outlook is for moderate growth of output and employment, more in line with long-term capacity, with only a modest increase in consumer prices. Productivity growth in the state has been lagging that of the U.S., and this trend is expected to continue.**

It began here, in the central states. The national economic slowdown, which is now affecting the entire nation, and the rest of the world as well, began in the central manufacturing states in mid-2000, and Mississippi was one of the first states hit. The spread of the downturn has had the effect of deepening and prolonging the problems afflicting the state. Manufacturing, transportation, tourism and those services sold out of state are among the critical industries which have been impacted.

By the second quarter of 2000, the end of the gaming boom had combined with rising energy prices and higher interest rates to put the brakes on the state's economy. The resulting slowdown anticipated the nationwide downturn by a few months. Since then, economic indicators have remained flat or declined. The **coincident indicator index**, which tracks employment and retail sales, stood at 107.2 in March 2000, and dropped slowly over the course of the year to stand at 106.0 this March. The **index of leading economic indicators**, which combines data on employment, unemployment claims, building permits and the length of the workweek, fell more dramatically over the period, from 101.2 to 98.3. This index is designed to reveal future trends, and the drop indicates a likelihood of a continuing economic activity.

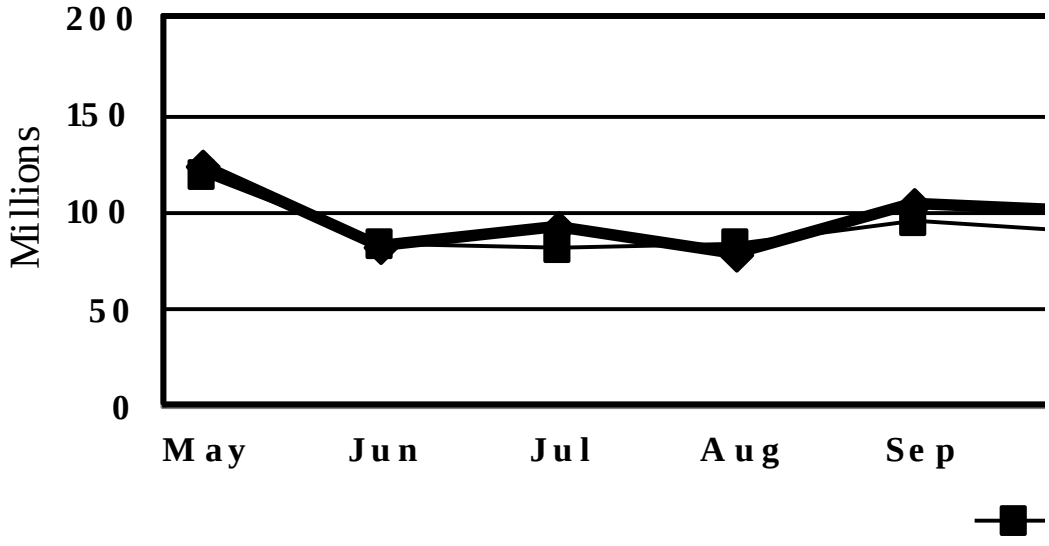
Not surprisingly, consumers have been adversely affected by the trends reflected in these indexes, as well as by the declining stock market, with the result that **consumer confidence** has dropped sharply from an all-time high in January of 2000 to its lowest level since 1994 in January of this year. There was a solid rebound in April, however, with the index returning from 87 to 105. Business has reacted in a more restrained fashion to economic developments over the past year. The **business confidence index**, after falling gradually throughout 2000, managed to rally somewhat in January 2001. However, the index remains below 50, and any number below 50

indicates that a contraction in the economy is anticipated.

Figure 1 provides some specifics. The graphs show that the numbers for this year are very similar to those of 2000 across a wide range of variables from tax revenues to gaming revenues, indicating a stationary economy. The most notable exception is the final graph, which shows that employment for the past year has been lower than that the year earlier. This is the most telling of the graphs, since employment is a strong indicator of both business and consumer activity. It is difficult for households, businesses and the government to maintain accustomed levels of income and expenditures when employment falls over a period of months. Retail sales, tax revenues, investments and plans to build are all hit hard by declining employment.

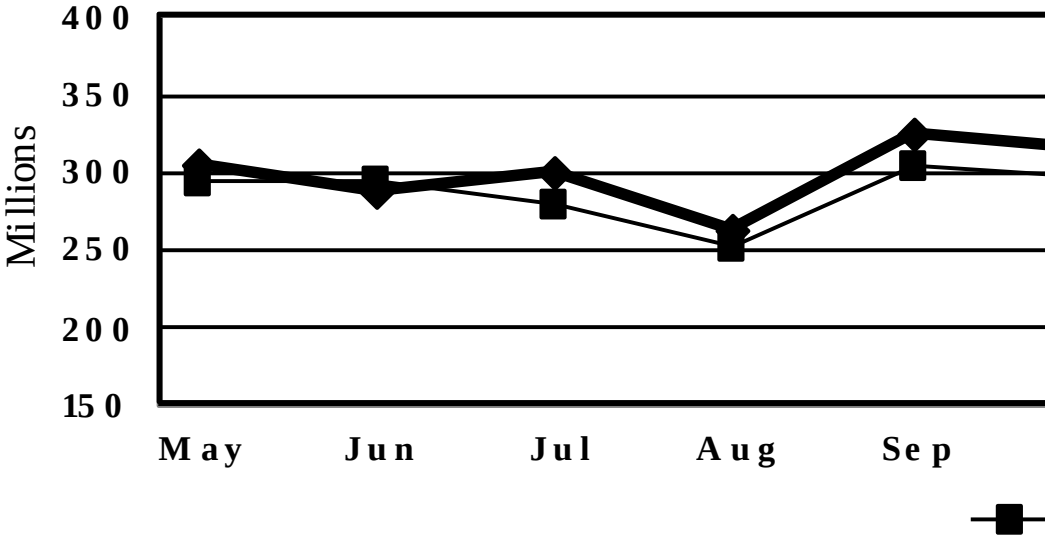
The slow growth of **tax revenues**, as shown in Figures 1a and 1b, reflects the stagnant economy,

Figure 1a. Individua



SOURCE: MS Tax Commission, May 2001

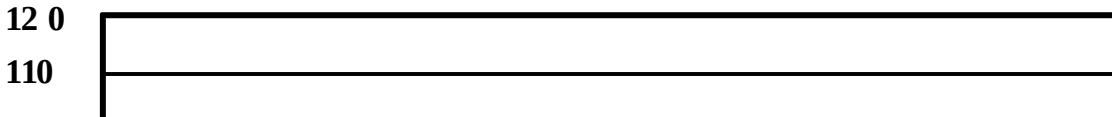
Figure 1b. Ge



SOURCE: MS Tax Commission, May 2001

Figure 1c. Ma

Figure 1e. Value of B



and resulted in cuts to the state's FY2001 budget. Total tax commission collections going to the general fund are running only one percent higher in FY2001 than last year, based on year-to-date figures through May.

Overview of Employment Trends

Wage and salary employment in Mississippi grew only 0.4% in 2000, while in the U.S. as a whole, the growth rate was 2.0%. The unemployment rate was 5.7% in 2000, and will likely increase this year to 5.8%, which is still well below the 7.4% average of the early 1990s. Manufacturing employment fell 4.1% here, compared to a 0.5% drop in the U.S. Construction employment in the state remained stable, while it rose 4.5% in the U.S. In general, total employment in the state has been falling gradually since Q2 of 2000, while nationally the quarterly numbers continue to slowly climb.

The difference in trends can be explained by the composition of the economy in the state versus in the nation. Production of both goods and services in Mississippi is less oriented to the "new" economy that has been propelling much of the nation's growth than is true of the typical state. Also, here, as in the South generally, manufacturing accounts for a larger share of employment, so that the impact of the slowdown in manufacturing is greater.

Much of the strength of the U.S. economy since 1994 lies in the growing computerization of production, and the increased use of the new information technologies (IT). In 2000, investments in information processing grew 26%, and in 1999, 23% with double-digit growth rates throughout the past decade. These and related investments in the "new" economy have resulted in a jump in output per worker. Productivity grew 4.3% in 2000, compared to an average annual growth rate of 1.6% over the 1989-94 period, and this average annual rate is expected to remain at about 2.4% over the coming decade. While Mississippi's productivity grew more rapidly in the 1990s than in the previous decade, the average growth in output per worker was 1.5% over the 1990-2000 period– well below that of the nation as a whole.

With most workers in Mississippi having a high school degree or less and having middle-or-low skill jobs paying $23,800 or less annually (1999), it is not surprising that growth rates slowed here in advance of the rest of the nation. The proportion of workers in the IT sector in the state is about half that of the nation as a whole, according to a 1999 study (see Zandi 1999): 6% versus 11%. Mississippi is at the bottom of the nation in the percentage of households with a computer (37%) and with access to the internet (26%). The state also ranks at the bottom in national tests of proficiency in mathematics and reading, and in the Armed Forces Qualification Tests (State Fact Finder 2001). See the article in this *Review*, "Mississippi's Labor Force: The Crossroads Ahead".

Not surprisingly, then, the production of goods and services in Mississippi is less "new

Table 1 . **MISSISSIPPI EMPLOYMENT BY SECTOR**

	First Quarter 2001	**First Quarter 2000**	**Percent Change**
ESTABLISHMENT-BASED EMPLOYMENT	1147.1	1147.6	-0.7
Mining	4.8	4.3	11.6
Construction	51.6	51.9	-6.0
Total Manufacturing	222.6	237.0	-6.1
Durable Goods Mfg.	137.6	149.2	-7.8
Lumber & Wood	22.4	25.0	-10.4
Furniture & Fixtures	28.9	31.0	-6.8
Stone, Clay & Glass	6.2	6.2	0.0
Metal Products	16.7	17.9	-6.7
Industrial Machinery	18.5	19.5	-5.1

Electronic Equipment	19.9	22.1	-10.0
Transportation Equipment	20.2	22.4	-9.8
Instruments & Related	1.6	1.5	6.7
Nondurable Goods Mfg.	84.9	87.8	-3.3
Food & Kindred Products	29.7	29.3	1.4
Textile Mill Products	4.2	4.5	-6.7
Apparel	13.7	15.6	-12.2
Paper & Allied	8.2	8.2	0.0
Printing & Publishing	8.2	7.8	5.1
Chemical & Allied	7.2	7.6	-5.3
Petroleum & Coal	2.0	2.4	-16.7
Rubber & Plastics	11.6	12.2	-4.9
Service Producing Industries	861.1	851.5	1.1
Transportation & Utilities	56.0	56.0	0.0
Transportation	33.0	33.8	-2.4
Communications	12.8	12.2	4.9
Wholesale Trade	45.3	46.8	-3.2
Retail Trade	209.5	206.7	1.4
Finance, Ins., Real Est.	41.8	42.9	-2.6
Banks & Credit Institutions	22.4	21.7	3.2
Insurance	10.6	12.5	-15.2
Services	270.2	267.5	1.0
Hotels & Lodging	36.3	34.9	4.0
Amusement, incl. Movie	23.7	22.3	6.3
Health Services	77.1	75.0	2.8
Total Government	238.3	231.6	2.9
Federal Government	25.7	26.3	-2.3
State Government	65.4	61.3	6.7
State Education	26.1	22.8	14.5
Local Government	147.2	144.0	2.2

SOURCE: Mississippi Employment Security Commission, April 2001. Preliminary figures.

NOTE: These employment figures differ significantly from the employment figures of the U.S. Bureau of Economic Analysis (BEA), which are reported in Appendix B in this *Review* and upon which the Center's economic forecast is based. The differences are due to the fact that the state Employment Security Commission's reports establishment employment on the basis of employer reports on employees covered by unemployment insurance. The BEA, however, adjusts these figures down to the county level on the basis of tax compliance information available only at the national level. It also includes the self-employed, private household employment and agriculture.

economy" than in the rest of the country. "New" economy goods are generally understood to include computers, communication equipment, electronic components and new IT equipment, at least. "New" economy services involve servicing or use of new technologies equipment, whether in the health sector, communications or elsewhere. The June 2000 *Review* compares the state's service sector to that of the rest of the nation, and finds a relative concentration in lower-skill services, with lesser or no use of IT.

These differences help to account not only for the early downturn, but also for the slower growth of productivity in the state than in the nation over the past five years (see 12/00 *Review*). The percentage change in employment in manufacturing, services, and finance/insurance/real estate between 1999 and 2000 in Mississippi versus the U.S. follows. Notice the slower growth in the state.

	Manufacturing	Services	Finance/Insur/RealEst
MS.	-4.1	1.4	-0.5
U.S.	-0.5	3.5	0.6

Manufacturing Employment 2001

Manufacturing employment has been declining monthly in Mississippi since May 2000, (see Figure 1c), and this trend is forecast to continue for the rest of the year, linked to the overall decline now occurring in the U.S. Over 17,000 manufacturing jobs have been lost since January, 2000, with 3,000 of those jobs in transportation equipment (largely marine transport here) and 2,200 in apparel. The length of the average workweek has fallen from 41.2 to 39.5 hours (March 2000 versus March 2001).

The drop in **durables** employment here, which was 4.1% in 2000, has been even sharper in the first three months of 2001. Nondurables employment, while continuing to fall in 2001, has not been hit as hard as durables. Table 1 provides the figures on Mississippi employment during the first quarter of this year, compared to Q1 of 2000.

As discussed above, the strongest manufacturing industries lately have been those connected to new technologies. This helps to explain the 6.7% increase in instruments employment in the state. The drop in electronic equipment, on the other hand, is linked to the national drop in several sub-categories of this industry: production of TV and radio equipment and of major electrical equipment are on a downward trend. National production of communication equipment, however, also part of the electronic equipment industry, continues to show strong growth. Electronic components, whose growth rate has averaged an astonishing 53% annually since 1995, faltered in Q1, but is forecast to rebound and grow in the lower-double-digits again this year.

Among **nondurable** industries, printing and publishing, closely linked to IT, enjoyed a 5.1% increase in employment in Q1 of this year compared to Q1 of last year, although paper and allied remained unchanged. Food and kindred products showed modest growth. Except for these industries, however, nondurables employment dropped, with the greatest job loss in apparel--continuing a nine-year trend that began even before NAFTA (the North American Free Trade Agreement) went into effect in 1994. Appendix B Tables 12 and 13 provide historical detail on trends in the industries in the state's manufacturing sector.

Table 2. **ECONOMIC FORECAST FOR 2001-2004**

	2001	**2002**	**2003**	**2004**
Mississippi				
Gross State Product (Percentage Change)	3.5	3.8	4.3	4.4
Real Gross State Product (Percentage Change)	1.3	2.0	2.3	2.7
Price Level (Percentage Change)	2.1	1.8	2.0	1.7

Establishment Employment (Percentage Change)	0.3	0.8	1.2	1.3
Unemployment Rate	5.8	5.9	5.7	5.6
Personal Income (Percentage Change)	4.3	4.5	4.6	4.5
Consumer Price Level (Percent Change)	3.0	2.5	2.5	2.6
United States				
Gross Domestic Product (Percentage Change)	3.5	4.4	4.9	4.4
Real Gross Domestic (Percentage Change)	1.8	2.9	3.5	3.2
Price Level (Percentage Change)	1.7	1.5	1.4	1.2
Establishment Employment (Percentage Change)	0.6	0.8	0.9	1.3
Unemployment Rate	4.7	5.2	5.1	5.1
Personal Income (Percentage Change)	4.2	4.5	4.9	4.9
Consumer Price Level (Percentage Change)	3.1	2.5	2.7	2.6

SOURCE: Center for Policy Research and Planning, Mississippi Institutions of Higher Learning.
WEFA Group, May 2001.

Recovery in Mississippi manufacturing will await the national upturn, which is expected to be underway by Q3.

Employment in Other Sectors 2001

Goods-producing industries have been responsible for the overall decline in employment in the state since last May. While manufacturing jobs continue to be lost, the number of **construction** jobs, while down 6% in comparison to Q1 of 2000, appears to be stabilizing at about 52,000. Some improvement over the course of the year is likely, given current low interest rates and the increase reported in building permits issued. The number of persons employed in **mining** has been increasing as energy prices rise, with 12% more employed in Q1 of 2001 than last Q1.

Service-producing industries, as shown in Table 1, grew 1.1% in Q1 of 2001 versus Q1 of 2000, and it is expected that this growth rate will improve during the second half of the year. Transportation, tourism and business services are among the service-producing industries that will trend upward as the national economy begins to improve. Wholesale trade, and to a lesser extent retail trade, will also respond to an improved business outlook and the rebuilding of inventories that is already beginning.

Among the industries whose employment level was notably higher in Q1 of 2001 than a year ago are communications, hotels and lodging, amusements, health services and government. The trends within the quarter, however, have not been upward in all cases. State government employment, in particular, is unlikely to remain at current levels, given state budget cuts which have resulted in hiring freezes in many agencies. Nationally, communications, transportation, finance, health and educational services are forecast to grow at 1.1% to 2.7% and this is expected to be the case in Mississippi as well.

Other Trends Behind the Forecast

The boom of the second half of the 1990s in the U.S. was unsustainable. High growth rates of employment had tightened labor markets, and excess capacity was increasing for several products and services. A drop-off towards a longer-term "natural" growth rate was inevitable. The only question was: how soft will the landing be? While it had appeared that a gradual deceleration could be engineered nationally, high energy prices, the bearish stock market and other factors combined to result in a rather abrupt transition. There has been sufficient strength in consumer and business demand, however, to prevent a slide into outright recession.

The state forecast presented in Table 2 is based on the analysis of national trends given in the previous article, as well as on the trends within the state discussed above. In brief, lower interest rates, relatively stable energy prices,

positive productivity trends, a lowering of inventory levels and a steadying of the stock market will mean that, by the fourth quarter, the U.S. economy returns to a growth rate of 2.0% and rising. Until then, demand will remain subdued in comparison to 2000. Low inventory levels will give some boost to manufacturing output before then, but not enough to raise employment. Investment and purchases of big-ticket items will also remain on hold, and tourist plans will be more modest.

Regional Variation

Of nine regions in the country, only three central regions had employment growth of 1% or less between June 2000 and January 2001, according to WEFA. The reliance of these states on manufacturing, which lost 300,000 workers over that period, is the main factor explaining this lagging growth, though the relative weakness of these regions in information technology (IT) is also a contributing factor.

The Georgia State Economic Forecasting Center, in its April 2001 report, estimates that the Southeast region (including Mississippi and twelve other states) enjoyed an increase of 2.5% in gross regional product (GRP) in 2000, and predicts a growth rate of 2.1% in 2001, , recovering to 3.0% in 2002 as manufacturing rebounds. These April predictions, which are based on their leading index indicators, would place the Southeast somewhat ahead of the rest of the nation.

The Center sees Mississippi lagging the rest of the region, with a growth of GSP of under 1%--a rate below the 1.3% predicted by this *Review*. By 2002, the Georgia State Center sees a return to a 3.0% growth rate for the region as a whole, but with Mississippi still below a 1% growth rate. Their predictions, however, did not use data available only after January, which show some improvement.

Short-Term Forecast

Given this scenario, it is not surprising that the growth rate of **gross state product** (GSP) is forecast to be under 2% again this year, and is not expected to rise above 2.5% until 2004. There is good news on the **inflation** front, however. As labor markets soften and energy prices stabilize, we will see a drop from the 3.0% increase in consumer prices this year to a more moderate 2.5% in 2002 and 2003.

The 0.3% growth in **establishment employment** forecast for this year is the slowest growth rate seen since the recession year of 1991, when employment grew only 0.1%. That year the service sector managed to expand 3%, and even manufacturing employment did not drop. This year, though, manufacturing employment will likely fall as it did last year, as both domestic and export demand remain slow. The increases in business-related services and in tourism/gaming will be hard-pressed to match those of last year, so that services as a whole will not match the 1991 growth rate. However, growth in retail trade will push up the numbers.

By the end of this year, the recovering U.S. economy will begin to strengthen the state's manufacturing and service sector, with the upturn spreading to consumers and other business sectors. Though employment will grow only a modest 0.8% in 2002, matching the growth rate for the U.S., by 2003 employment will grow 1.2% and unemployment rates will begin to drop.

Trends in **personal income**, shown in Table 2, largely reflect those in employment and business profitability. With a slightly declining demand for labor during the first part of the year, there is little pressure on wages, even if wage rates do increase enough to match inflation. The total increase in wages and salaries will likely mirror the 4.1% increase of 2000. Income of nonfarm proprietors and income from interest, rent and profits will be lower than in 2000, but that of farm proprietors should improve and transfer payments will rise. Overall, total personal income will again grow only about 4.4% this year. In 2002, the 4.5% increase in personal income projected matches the national rate of increase, as proprietors' income improves but wage and salary disbursements continue to grow only slowly. By 2003, personal income is getting back on track, although income from dividends and interest is just slowly recovering.

Forecast for 2001-2006

The dramatic slowdown of the U.S. economy stands out in Figure 2, which shows five-year trends in both Mississippi and the U.S. From 1995 to 2000, the average annual growth rate of output in the U.S. was 4.7%, but over the next five years WEFA forecasts that this rate will drop to 3.2% as the country gradually pulls out of a

near-recession this year. The change in Mississippi's growth rate is much less, going from 2.9% to 2.7%. From 1995 to 2000, the growth rate of gross state product averaged 2.9%, with the 1.9% growth rate last year being the slowest since the 1.4% rate of 1996. The only years that the state achieved a 4% growth rate since 1990 were 1992 through 1994. The 1.2% increase in employment expected over the coming five years will bring an increase in output of about 2.7%, based on trends in output per worker in this states.

Figure 3 shows that over the 2001-2006 period, the growth rate of employment in the state will match that of the U.S. at about 1.2%. The long-term rate of employment growth in the U.S. is limited by the growth of its labor force, which has been about 1.2%. The 2.4% growth of U.S. employment over the past few years was made possible by falling unemployment rates, more workers working two jobs, and rising labor force participation rates: trends that are ending as employment opportunities wane. The 1.1% increase in U.S. employment, then reflects a return to basic long-run trends, with an unemployment rate that hovers around 5.1%.

The 1.2% increase in Mississippi's employment allows for some drop in the unemployment rate after a peak next year of 5.9%, as well as a rather steady increase in employment as the state's economy gets back on track. In 1991 and 1992, the last recovery period after a recession, Mississippi's growth rate exceeded that of the U.S. Why? The products and services the state produces tend to be more basic, mainstream items, as opposed to cutting-edge products. While newer products ride high on an upswing, they often do not do as well as the basics during a downturn. Consumer durables and nondurables (e.g. furniture and food products) and intermediate materials (e.g. chemicals) will be among the first industries benefiting from the coming turnaround. Mississippi will follow U.S. trends in these industries.

It is also worth pointing out the discrepancy between the growth rate of gross national product and the growth rate of gross state product. Although employment growth rates are similar for Mississippi and the U.S., the growth of output is clearly higher for the U.S. This reflects a higher increase in worker productivity in the U.S. than in the state. The smaller proportion of high-wage, high-productivity jobs in the state's service sector is one problem, but also the relatively slower growth of information technologies-related employment in Mississippi, as discussed above, is another. Slower **productivity** growth in Mississippi means that the national increase in output will exceed that of the state by over 0.5% annually. This is a rough estimate, since productivity increases are notoriously difficult to predict. For further discussion of productivity trends, see the December 2000 issue of this *Review*. The relationship between productivity growth and wage growth suggests that Mississippi's income may grow slower than that of the nation.

Figure 4 shows growth rates by sector in Mississippi. The sectors expected to have the highest employment growth rate over the 2001-2006 period are services, trade and construction. Construction employment will rebound from its current drop, as lower interest rates and the U.S. economic recovery bring projects that have been deferred back on line. Services and wholesale/ retail trade will also benefit from the cyclical upswing in consumer and business demand that will arrive by 2002.

There are two sectors besides services and trade employing 19% or more of workers: government and manufacturing. Both are expected to enjoy positive, if modest growth. An improving world economy, an end to the initial phase-in of NAFTA, and continued investments in new technologies will enable a positive growth of employment in manufacturing employment. The growth of government employment, at an average annual rate of 1.1%, will be considerably slower than the 1.9% of the 1995-2000 period, in line with the slower growth of tax revenues.

Written by Marianne Hill, with input from members of the Center for Policy Research and Planning.

References

CQ's State Fact Finder 2001, Congressional Quarterly Press, Washington, D.C.

Center for Policy Research and Planning, *Mississippi Business*, monthly newsletter on the Mississippi economy published by the Mississippi Institutions of Higher Learning.

Economic Forecasting Center, Southeast State Indicators, Georgia State University, July 2000.

Federal Reserve Board of Atlanta, "State of the States", *EconSouth*, Third Quarter 2000.

U.S. Economic Outlook 2001-2006, Eddystone, PA: WEFA Inc., April and May 2001.

Zandi, M. "Information Economy", *Regional Financial Review*, West Chester, PA: RFA, September 1999.

STATE INCOME DISTRIBUTION IMPROVES FOLLOWING A WORSENING IN THE 1980s

The income gap between the top 20% and the bottom 20% widened in both the U.S. and in Mississippi over the twenty-year period between 1978 and 1998. However, during the 1990s, this gap closed slightly in the state, although it continued to increase nationally. Figures 1 and 2 give the growth rates of income for each quintile of the population over the 1988-98 period and over the longer 1978-98 period. Three-year averages were used in calculating these graphs. As can be seen, the incomes of the richest 20% grew much more rapidly than those of any other group over the longer period.

In 1998, the top 20% of families in the state received 47% of personal income, while the bottom 20% got 5%. These numbers placed Mississippi 15th in the nation in income inequality, when this inequality is measured by the ratio of income of the top fifth to that of the bottom fifth (with 1st place being most unequal). These figures are based on income after tax and include transfer payments from the government.[1]

There are several reasons for the widening gap since the 1980s. Incomes of those in the top quintiles have benefited from widening pay gaps between those with college degrees and those with a high school diploma or less. The stock market boom disproportionately helped those in the top quintile, as did the growing gap in incomes between the typical worker and top corporate officers.

There have also been factors at work boosting the incomes of families in the bottom quintile, especially in the 1990s. The hourly wage rate of workers in the bottom quintile of wages rose 5.6% nationally between 1989 and 1999, due both to a rising minimum wage and increased job opportunities, a growth rate somewhat above that for wages in the top quintile. The unemployment rate also dropped significantly. Nationally, however, these positive factors were not enough to reverse the trend toward increased inequality. But in Mississippi, the growth in wages of the bottom quintile was a strong 20.4% and income inequality fell over the course of the 1990s.

Footnote

[1]Although wages and salaries make up the majority (52%) of personal income, transfer payments are also significant, accounting for 19% of personal income in Mississippi. [Property income (from interest, rent and dividends) accounts for another 17%.] Transfer payments are largely payments from government to individuals under such programs as social security and Medicare, and can be significant in reducing income inequality. These payments transfer some income from the top quintiles to the lower ones. For the U.S. as a whole, over 1% of the 4.2% of total income received by the bottom quintile was from net transfers; in other words, at least one-quarter of the income of the poorest quintile came from social security, Medicare, Medicaid, food stamps and other government programs. Without transfer payments (including social security), 21% of the U.S. population would have been below the poverty line in 1997; with transfer payments the poverty rate was 13%. However, the growth rate of transfer payments was slightly lower in the 1990s than in the 1980s, and so these transfers do not account for the improvement seen in the 1990s.

SOURCES: Information is available on income distribution from the U.S. Census at www.census.gov and from the Economic Policy Institute at www.epinet.org/datazone. Data on the growth of CEO pay and that of workers is at www.aflcio.org/paywatch. The *U.S. Statistical Abstract 1999* provides more statistics, and an in-depth analysis can be found in Mishel et al., *The State of Working America* 2000/2001, Economic Policy Institute, Cornell University Press, 2000.

HIGHLIGHTS FROM RECENT NEWS ON MISSISSIPPI'S ECONOMY

See the website of the Mississippi Development Authority, www.mississippi.org, for more information about recent economic developments in the state, or contact Sherry Vance, Director of Public Information, at 359-3041.

New Businesses and Expanded Facilities

The Mississippi Development Authority announced capital investment in new and expanded facilities at $1.5 billion

for the first quarter of 2001. Of this amount, $90.8 million was in manufacturing facilities. The same period in 2000 saw only $323 million in investments, with $91.7 million in manufacturing.

LS Power-Pike Energy, L.L.C, announced the largest single non-manufacturing expenditure. They estimate spending $600 million on a new electric power generation and distribution center in Pike County, which will create 40 new jobs. Clarksdale Public Utilities will spend $130 million expanding its electric power generation, transmission, and distribution center in Clarksdale.

The Mississippi State Port at Gulfport announced a $160 million expansion to its existing structure for marine cargo handling, and the Port of Pascagoula a $30 million investment. Other large non-manufacturing investments include a Navy Small Craft Training School at the Stennis Space Center, $25 million, and a privately-operated juvenile correctional facility in Leake County, the Walnut Grove Youth Correctional Facility, $29 million. The casinos continued to announce expansions to their facilities. Among the larger of these are an expansion of Casino Magic in Bay St. Louis estimated at $39 million and a $45 million project at the Palace Casino Resort in Biloxi.

Only eight new manufacturing facilities were announced during this period. MG Industries will invest the largest amount, $33 million, to manufacture air separation units in Harrison County.

In the News

Several Mississippi-based companies will do work in preparation for the $930 million Nissan auto plant, which is currently under construction in Madison County. Aberdeen-based Eutaw Construction Company received a contract for clearing and grubbing, erosion control, demolition, and construction of storm drainage pipe. Eutaw will also construct one-third of the building pad for the plant. The remaining two-thirds of the building pad will be constructed by Hill Brothers Construction Company, of Faulkner and T.L. Walker Construction Company, of Columbia, two of the largest earth-moving companies in Mississippi. CivilTech, a minority-owned business based in Jackson, will oversee the design and construction of the water and wastewater system to be constructed by Canton Municipal Utilities. Production of the first vehicle at the auto plant is scheduled to begin in the summer of 2003.

Ground-breaking ceremonies for expansions to the Tunica County Airport were held Tuesday, January 23. The expansions are needed due to the increased travel needs in the area, spurred by the growth of the gaming industry there. This will allow Tunica to offer air fare in their vacation packages. Tunica is currently the number three gaming location in the U.S. Tunica County also plans to begin construction this spring of a 168-acre Tunica River Front Park, featuring a marina, visitors center and nature trails. The first phase of construction is the marina and visitors center, plus the road system and parking areas.

Halter Marine, Inc. won a $500 million contract to build and design patrol crafts for the Egyptian Navy. Lockheed Martin, America's largest defense contractor, will partner with Halter Marine for this program. Construction is expected to begin in Mississippi in the second quarter of 2001.

Dallas-based oil and gas company Denbury Resources Inc. has acquired nearly 100 percent working interest in two fields in Southwest Mississippi, the West Mallalieu and Olive fields. Initial development of the West Mallalieu Field is scheduled to begin later this year, with a total of approximately $30 million projected to be invested by Denbury. Denbury is the largest oil and natural gas operator in Mississippi, and also holds key acreage in Louisiana and offshore in the Gulf of Mexico.

Legislation recently passed authorizes a $40 million state bond issue for the purchase and rebuilding of a 68-mile rail line from Hattiesburg to the Port of Gulfport. The funds will allow the state to purchase and reconstruct the 68-mile Kansas City Southern rail line from Hattiesburg to Gulfport, creating a direct north-south rail line from

Jackson, the capital city, through Hattiesburg to the Port in Gulfport. Upgrading the outdated track was needed in order to handle a higher volume and heavier loads in rail containers moving at greater speeds.

Mississippi in the Nation

The Stennis Commercial Remote Sensing program (CRSP) launched a government/industry partnership in January with the potential to benefit more than 100,000 of the nation's farmers. The partnership, among NASA, USDA and four national associations representing cotton, corn, soybean and wheat growers, is designed to develop remote sensing information products for farmers that will increase efficiency in commodity production. NASA's lead Center for Commercial Remote Sensing Application Development is housed at Stennis. Information about the Center and the Mississippi Space Commerce Initiative is available at www.spacecommerce.com and at a new website launched this May, www.crsp.ssc.nasa.gov.

Mississippi was 3rd in the nation in 1999 in originated rail tons of lumber or wood products. Other top commodities originated by Mississippi railroads in 1999 include chemicals (2.9 million tons) and pulp and paper (2.6 million tons). Mississippi also ranked 12th in the United States in the number of freight railroads (22) operating within the state, 29th in the total number of rail miles (2,602), and 28th in rail traffic (109.5 million tons carried) within the state. Mississippi's freight railroads contributed $176 million directly to the state economy in 1999 through wages and retirement benefits to current and former railroad workers in the state.

The Mississippi Film Office won two top awards at the Locations 2001 Global Expo in Los Angeles, California, sponsored by the Association of Film Commissioners International (AFCI). Over 300 domestic and international film commissions and production service providers from more than 30 countries attended this expo, scouting locations for their next productions. "We are extremely proud to have been awarded second grand prize in the booth competition," said Associate Manager Nina Parikh. "We are also extremely proud to have received the first place award for Campaign Advertising Unique Locations and the first place award for Campaign Advertising Famous Daughters & Sons," said Ward Emling, Director of the Mississippi Film Office, who also currently serves as President of the AFCI.

*****_Expansion Management_ Magazine ranked Mississippi as number one in the United States for having the lowest employment cost index. They consider wage and salary, unemployment insurance, and workers' compensation costs by state. Last year Mississippi was tied for eighth place with Tennessee and Kansas.

*****The March 2001 issue of _Site Selection_ magazine ranked several Mississippi cities on their list of the "Top 100 U.S. Small Towns for Corporate Facilities." Tupelo ranked 8th in the United States. Other Mississippi cities to make the list: Booneville, 46th, Columbus 57th, Corinth and Meridian, tied for 75th, and Hattiesburg and Vicksburg, tied for 83rd. In addition, the Community Development Foundation of Tupelo placed as one of the "Top Ten Economic Development Groups in the Nation."

*****The Mississippi Division of Tourism reported that 31.9 million people visited Mississippi in 1999. Of the total, 10.5 million came for one day; 10.3 million were business travelers, and 11.1 million spent an average of 2.6 nights each. Of the 11.1 million overnight visitors, 78.4 percent were from out-of-state. The average travel party size was 2.8. Expenditures averaged $92 per person, per day, $3 more than the U.S. average.

"The most popular reason to visit Mississippi was a getaway weekend. Previously, visiting friends and relatives held this spot. During 1999, overnight leisure visitors increased by 11.1 percent," said Darienne Wilson, Director, Tourism Development.

MISSISSIPPI'S WORKFORCE: THE CROSSROADS AHEAD

Pete Walley

Den Knecht, Vice President of Human Resources for Ingalls Ship Building Company in Pascagoula, and President of the Public Education Forum opened the April 23, 2001 Governor's Conference on Enhancing Mississippi's Educated Workforce. This paper contains some of the remarks and facts that he presented to the conference participants for their use in making recommendations to upgrade the state's workforce.

Challenges facing Mississippi's Workforce

Are we in the "Information Age", the "Computer Age" or a "New Services Economy?" Whichever label or labels you prefer, the nature of work being done today is different than it was 50 or even 25 years ago. And the skills demanded of workers are greater.

Mississippians now live in a rapidly changing society where people must constantly learn and re-learn in order to fulfill obligations at work and at home, and in order to obtain increasingly challenging (and rewarding) work opportunities. Those citizens that are most likely to obtain exciting and important positions in this new work environment tend to be scientifically literate, able to solve complex and ever-changing problems, creative, committed to self-education, motivated, and determined and interested in using technological skills in many aspects of life. This requires a strong foundation in critical thinking skills. Mississippians must begin to place a higher value on education and training, especially life-long learning for skills and education.

Facts of Mississippi's Economy and Workforce

In 1999, Mississippi has some 2.77 million people, of which 1.77 million citizens are working age: 16 - 64. Chart 1 (see appendix)is a graphic picture of Mississippi's population and the various age groups within our population.

While the state has some 1.77 million people in the working age group, only about 1.3 million of us work or seek work. We have approximately 476,000 people who could be in the workforce but, for various reasons, choose not to work or seek work. Some are in school, some are homemakers, some just do not want to work, but a great many are unskilled and unable to find a job. A conservative estimate is that, as many as 200,000 people could work or may even want to work, but for a variety of reasons cannot participate in the workforce. Some lack skills, some lack transportation, some need day care to help with children, some have physical problems and some have two or more of these kinds of barriers. If we want more of our citizens to participate in the workforce, then we must address these types of problems in addition to the problems of upgrading those workers participating in the workforce.

Each state's workforce is categorized by sectors or grouping of similar business or places of employment. Chart 2 presents Mississippi's workforce employment percentages by sector while chart 3 presents the percentage of workforce wages and salaries generated by the same sectors.

Can the state's workforce and economic development systems develop strategies that will increase both jobs and wages and salaries in those sectors of Mississippi's economy so that our workers have better and higher paying jobs?

Labor Force Participation Rate Low

Mississippi has one of the lowest labor force participation rates of any state in the nation. Some of the reasons for citizens not working were just mentioned above, but something else is affecting the ability of our citizens to work. Chart 4 compares our state's labor force participation rate with that of the US average.

Mississippi was making some headway and beginning to close the gap with the US until 1994, then we reversed and have not recovered from the downward slide since then. One possible is that our weakest workers have dropped out of the workforce as their long time places of employment have laid off workers or relocated abroad. Or perhaps more workers are becoming discouraged by the skill requirements of available jobs, thus opting out of the labor force. We must begin a serious effort to understand why workers drop out and how to get them back into a productive job.

Per Capita Income Facts

A long-time goal of Mississippi has been to move out of last place in per capita income rankings among the states. Chart 5 compares Mississippi with the US average per capita income. In modern times, Mississippi has remained last of all the states in this measure of economic growth and indication of the general standard of living.

The state's per capita income of $20,688 in 1999 was not evenly distributed over the state's families, but per capita income is a universal measure of the economic capacity of an area. For Mississippi's per capita income to improve, we must have higher paying jobs, and that means that we must have better prepared workers with greater skills.

The next three charts (6-8) compare the average hourly earnings for various parts of our state's economy. These are included to give comparisons between the U.S. average and our state's for each of the sectors. Note that Mississippi workers get less than 80% of the annual wage that the average U.S. worker earns for the same types of jobs.

The following tables are meant to point out some facts that will give us clues to help us adjust our education and workforce development system so that we can upgrade the capabilities of our state's workforce.

Workforce Characteristics

Mississippi has the greatest number of women and African Americans as a percentage of our population. Workers from these populations face barriers and obstacles that differ from those of the perceived traditional worker. For example, our state has the highest percentage of families with children headed by a single parent. Most of these single parents are women. If we want those heads of households to be productive workers, then we must address childcare issues at the workplace.

Mississippi has an unacceptable high school graduation rate. A fourth of our high school students are dropping out without obtaining a high school diploma. These are not the kind of workers that industry wants and they are not the kind of workers that will be able to compete in the global economy. In addition, there is growing evidence that a greater mastery of basic math and reading skills, as measured by scores on tests administered in high school, translates into higher wages. Students can become more competitive workers and receive higher paying wages by completing high school coursework that stresses math and reading skills.

A college degree is valued not only for the learning it represents, but also for the access to higher paying jobs that it often provides. While a high percentage of Mississippi high school graduates initially enroll in post-secondary educational opportunities, a little less than one half actually complete higher education degrees.

While the consistent statewide message of "go to college" supports the idea that more education will improve an individual's paycheck, we must send a more comprehensive message to our state's students and parents about career choices and skill training opportunities. If only 75% of our high school students graduate and only 50% of our college enrolled students complete degrees, what happens to the educational dropouts who go out into the workforce each year? Are they prepared to participate in a productive way in the workforce? We must market to our population the importance of career choices and skill and education opportunities, and continuous learning.

In 1996, the share of total US employment in industries that were intensive users of information technology was 41%, according to the *Economic Report of the President, 2000* (p. 131), and that share is projected to rise to 44% by 2006, as forecast by the US Bureau of Labor Statistics. In 1997, half of workers in all jobs used a computer as part of the work. Mississippi cannot ignore these trends.

Foreign Direct Investment

The last chart compares the foreign direct investment for several southern states over the 1990-1997 time period. Businesses in one part of the world have the capital, information and ability to operate and sell their product in other parts of the world. Chrysler is owned by Daimler-Benz; Nokia, a Finnish company, has the largest share of world cellular phone sales, much to the dismay of Motorola, and so on. If we want our part of those jobs created by multinational firms, then we must get our part of those firms' foreign direct investment. FDI in Mississippi is the lowest of all southern states, and has declined in the decade of the 90s. It is obvious to me that given the competitive incentives our state offers to attract such investments to Mississippi, we must improve our workforce capability to increase the foreign direct investments in our state.

Conclusion

As the information age (or however you want to characterize this new work environment) matures and the realities of the global economy affect local economies, our state's leaders and policy makers will have to make some key strategic decisions about whether all our citizens have the opportunity to work for a better living in coming years. Some of these decisions and policy changes are yet to be known or understood very well. But it is clear that we must begin a serious effort to revise our education and workforce development systems and upgrade the capabilities of our workers if we want to maintain or increase our standard of living.

Workforce challenges facing our citizens as the state enters the 21st century will require a comprehensive and coordinated approach. Our governments, state and local, must partner with both local and multinational business to ensure the development of the human capital needed for competition in an aggressive global economy.

In Summary:

1. Mississippi is at an important crossroads due to the combination of market liberalization and technological advancement. The response to these changes is urgent and vital to the state's future.

2. Workforce development must focus on ensuring new and advanced workforce skills and knowledge.

3. The need for excellent education and training institutions for students of all ages is taken for granted. However, the workforce development infrastructure must be realigned and strengthened to ensure that all components complement each other in developing the workforce needed.

4. Workforce development choices require suppliers and employers of human capital to join together in partnerships (teachers, administrators, government officials, business leaders, community members, and parents) to develop improved educational plans and maximize use of scarce resources.

5. Business-education-agency partnerships in our state can be engines of change and should be encouraged.

While the magnitude and complexity of the challenges for workforce development are great, it is critically important that all parties work together to make the changes that will ensure our state is a great place to live and work.

Evolutionist Charles Darwin is quoted as saying that "It is not the strongest of the species that survive nor the most intelligent, but the ones most responsive to change."

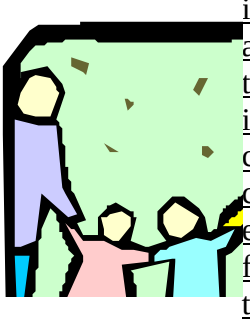
The choice for change is ours to make. How will we respond and when will we start?

SOURCES: U.S. Bureau of Labor Statistics, U.S. Bureau of Economic Analysis, U.S. Bureau of Census, U.S. Department of Commerce, Survey of Current Business, U.S. Department of Labor, Employment and Earnings Survey, *C.Q's State Fact Finder, 2001,* Table 1314, *Statistical Abstract of US, 1999*, Mississippi Department of Education, Mississippi Institutions of Higher Learning.

WHAT IS A BASIC NEEDS BUDGET FOR A FAMILY IN MISSISSIPPI?

Marianne Hill

Mississippi's average annual wage in 2000 was an estimated $24,660. While this is substantially above the poverty line for a family of three, which was $13,900 that year, the state's average wage is not sufficient to meet the basic needs of a family of three. The basic needs budget presented below draws on the methodologies followed in the studies cited - most notably the *Vermont Job Gap* study. A website which provides links to several of these studies is www.livingwagecampaign.org.



Economic self-sufficiency requires independence from publicly provided income and housing assistance, and adequate income to provide for basic needs. Basic needs include necessary expenses for food, housing, child care, transportation, health care, clothing, and household and personal expenses. Some life insurance and savings for emergencies would also be needed. Using this definition, with details provided below, $28,140 is the estimated basic needs budget for a Mississippi family of two parents and two children, with one parent working. It is $26,676 for a family with one parent and two children. These budgets are based on the assumption that each family has an employer-assisted health plan.

The accompanying table breaks down the basic household expenditures of these two families. Very conservative assumptions were used, as detailed below, except that the two-parent family was assumed to have two cars. The single parent was assumed to have one child in a licensed child care center and the other in licensed child care after school and in the summer. The numbers show that to meet its basic needs, a family with two children requires more than one wage-earner, or else the single wage earner must earn more than the state median. Policies aimed at improving the earning ability of the workforce and the quality of jobs created in the state, then, deserve the priority that they receive in policy discussions.

Notes on the Basic Needs Budgets

The basic needs budgets in the accompanying table were calculated for a one-parent, two-child family as described below, and were adjusted for a two-parent family using modified ratios from the Memphis and Vermont studies cited.

1. Food--The Food Stamp Program (FY2001) allots at most $341 per monthly for a household of three. The basic needs budgets for Memphis, rural Kentucky, Vermont and elsewhere all were close to $360 in 2000 dollars for a family with an adult and two children. The CPI was used in adjusting prices over time.

2. Rent--The Fair Market Rent (FMR) for existing housing in Mississippi for a two-bedroom rental unit in most rural counties was $368 per month according to HUD. However, in urban areas except Hattiesburg, this would

BASIC MONTHLY EXPENDITURES OF TYPICAL MISSISSIPPI HOUSEHOLDS, 2000 (Employer-Assisted Health Plan)		
EXPENDITURE CATEGORY	TWO PARENTS AND TWO CHILDREN, One Parent Working Annual Income $28,140 Pre-Tax	ONE PARENT AND TWO CHILDREN Annual Income $26,676 Pre-Tax
FOOD	$499	$360
RENT OR MORTGAGE	$368	$368
UTILITIES	$165	$150
HEALTH CARE	$259	$225
TRANSPORTATION	$400 (two cars)	$215
APPAREL	$85	$65
PENSION, SAVINGS, INSURANCE	$25	$17
ENTERTAINMENT, GIFTS, CHARITY, EDUCATION	$60	$49
HOUSEHOLD, FURNISHINGS, EQUIPMENT AND CHILDCARE EXPENSES (Childcare)	$225 ($25)	$627 ($450)
NET TAXES (EXCLUDING SALES TAX)	$259	$147
TOTAL	$2,345	$2,223
SOURCES: U.S. Department of Labor, *Consumer Expenditure Survey*, 1994-95, adjusted for inflation; U.S. HUD Fair Market Rents for Existing Housing, Mississippi FY 2001; "Estimating a Basic Needs Budget for Indiana Families" at www.ladders4success.org; "What is a Living Wage for Memphis?", University of Memphis; *Vermont Job Study*, Peace and Justice Center; "It's Not Just the Numbers, University of Kentucky Rural Development Program. See *Notes*.		

not be sufficient even for a unit with no bedroom. The FMR for a one-bedroom unit in Jackson was $455 and in Biloxi-Gulfport-Pascagoula was $470.

3. Utilities--According to the Consumer Expenditure Survey, consumers in the South with incomes between $5,000 and $10,000 spent $133 per month on utilities in 1994-95, and after adjustment for inflation from 1995 to 2000, this translates into $150 per month in 2000-- a conservative estimate.

4. Health Care--Based on the health costs of a state employee with two dependents in Mississippi, $215 per month would be typical of a year without any serious illnesses or injuries or orthodontic services, with $120 per month going towards the cost of insurance for two children in 2000. The 1994-95 Consumer Expenditure Survey reports that the typical Southern household of 2.5 persons spent slightly more on health care than did Northeast households of the same size, due to higher insurance and drug expenditures. That expenditure was $179 monthly in 2000 dollars, or $215 for three persons, of which $105 per month was on health insurance. The Vermont Job Gap Study looked at a plan for an adult with two children, as did the Memphis study. The Vermont study estimated monthly insurance costs to be about $105 when assisted by employers, but they assumed a $2000 deductible per family in employer-assisted health plans which pushed up total health care expenditures on insurance, co-payments,

deductibles and out-of-pocket expenses to $285 per month in that state. The Memphis living wage study estimated insurance costs alone at $274 per month.

5. Transportation--In the Indiana study, transportation costs were $205 per month; in the Memphis study, $162; in the Vermont study, $263; in rural Kentucky, $197 (all figures adjusted to 2000 dollars). According to the 1998-99 Consumer Expenditure Survey, average monthly expenditures on transportation in the South were $562, and using the 1994-95 CES data for the South and adjusting for inflation, for persons earning between $10,900 and $16,250, the average was $294.

6. Apparel--CES unadjusted data for 1994-95 show that households of 2.5 persons earning between $10,000 and $15,000 spent $62 per month on apparel and apparel-related services.
So $55 per month is a low estimate of monthly needs.

7. Renter's and/or life insurance, savings--The $17 could buy either some life or some renter's insurance or be used for savings. The 1998-99 CES shows $35 as the Southern average in this category.

8. The 1998-99 CES lists the Southern average for expenditures on entertainment as $131, $46 on reading and education, $75 on gifts, and $94 on contributions. An expenditure of $40 in this category is clearly basic needs only; $150 is the average spent in this category in 1994-95 by those in the $10,000-15,000 income group.

9. Household, furnishings, equipment and childcare--The average expenditure in the South by those in the $10,000-15,000 income group on household supplies, furnishings and equipment, personal care and miscellaneous in 1994-95 was $156 in 1995 dollars or $177 in 2000 dollars.

Childcare for one four-year old at a childcare center in Mississippi was $264 monthly in 1997, according to the Mississippi Department of Human Services, or $287 in 2000 dollars. Care for a six-year-old, who attends school, is about $120 during the school year ($140 per month in Jackson Public Schools). These assumptions result in an estimate of $450 monthly. The Memphis study estimated child care costs of $423 monthly (but the six-year-old was not in an after-school program) , the Kentucky study between $470 and $365 depending on the county, the Indiana study $506, and the Vermont study $606.

10. Net Taxes--In order to have $24,900 to spend, our family of three must earn $26,700. Using the basic IRS tax return form 1040, with a deduction for head of household, exemptions for three persons, a child care credit and a child tax credit, the federal income tax due on our family's $26,700 in 2000 would be zero (since the family spent more than $4,800 on childcare). The family is eligible for an earned income tax credit of $932. The family will owe state income and property taxes of about 2.8% of income in Mississippi, (Center for Budget and Policy Priorities and Citizens for Tax Justice, 1996) and payroll taxes for Social Security and Medicare of 7.3% of earnings. These taxes total $2697, and minus the EIC of $932, equal $1765 or $147 monthly.

CLOSING THE WAGE GAP: WHAT WILL IT TAKE?

Marianne Hill

In 1997, average annual pay in the state was $22,800, which was 75% of the U.S. average of $30,300, according to the U.S. Bureau of Labor Statistics. Mississippi could greatly narrow this wage gap through a process that would involve four changes:

1--increased levels of education and training;
2--increased pay within the same educational level;
3--increased demand for higher levels of skill and education; and
4--a shift towards higher-skill occupations.

These are closely intertwined issues of supply and demand. Let's look at each of these in turn.

1. Increased levels of education and training.

Education makes a difference. Persons with a college degree, on average, earn $9 more per hour on average than persons with a high school diploma. In Mississippi, the gap is over $7 per hour. This gap has been growing: as recently as 1979, a college graduate with a four-year degree typically earned about 40% more per hour than a high school graduate, but by 1999, that percentage has risen to 75%. Figure 1 illustrates the widening wage gap.

Higher educational levels in Mississippi could cut the wage gap in half--or even eliminate it all together. Mississippi could eliminate about half the wage gap with the rest of the country if the percentage of the state's workforce at each level of post-secondary education increased to match that of the U.S. (This assumes that pay at each educational level would stay the same or increase--which in turn requires an increased demand for higher skills. This is addressed in section 2.) Figure 2 shows the increases that would be needed: overall, 58% of workers in the U.S. have at least some college, while here the number is 47%.

As Table 1 shows, the estimated state average wage of $11.89 per hour equals only 85% of the national average.[1] More persons in Mississippi are at the lower educational levels, which pulls down the overall average. An increase in the percentage of persons with a four-year college degree or higher would have a large impact on wage rates. The numbers in Table 1 are based on 1990 Census data updated with 1999 wage and employment statistics.

Table 2 compares educational levels in the state and the U.S. in 1990 and 1999. It shows that progress has been great in reducing the percentage of workers without a high school diploma, but that less progress has been made in increasing the percentage of workers with a college degree.

Of course, changes in industrial composition and occupations would take place as educational levels rose, and these changes would also affect wages.

2. Increased wages within a given level of education and training.

Mississippi's wages are generally lower than national wages for persons with the same level of education. Table 1 shows that the wage here equals from 87% to 99.8% of the U.S. average wage for the same educational level in general, with the percentage highest (99.8%) for those without a high school diploma. Increasing wages within a given level of education involves both adjusting the content of education to meet employer needs and increasing employer demand for higher levels of skills and education. Below, we consider these changes in more detail.

Level 1–no high school diploma. The average wage for an employed person without a high school degree is $9 nationally, and is almost that much in Mississippi. The wage gap for this group is not as much a problem as are low and falling wages, and high unemployment. The real wage (the average wage adjusted for inflation) has been falling for persons who have not completed high school, and jobs are harder to find: the unemployment rate is over twice as high as for the average worker. In addition to efforts to reduce the percentage of the workforce without a high school education, efforts are also needed to ensure that students achieve functional literacy by the time of entry into high school. This would improve the quality of high school education. It would also increase the employability of all adults, since basic literacy skills are increasingly required of everyone seeking a job. Unfortunately, an estimated 30% of Mississippi's adult population is classified as functionally illiterate by the National Institute for Literacy, the second highest rate in the U.S.

Level 2–high school diploma. Eighty percent of those with jobs in Mississippi now have a high school education, but not all of these graduates are competitive with the rest of the country in information age jobs. Nationally, over half of jobs that do not require a college degree do require the ability to use computers (51%), do arithmetic (65%), read or write paragraphs (61%) or deal with customers (70%). Only 8% of jobs available to non-college graduates required none of these skills. However, Mississippi ranks at the bottom in national tests of proficiency in mathematics and reading, and in the Armed Forces Qualification Tests. Illiteracy levels here are the second highest in the U.S., and some of our high school graduates have scored below mastery level in at least one section of the required functional literacy examination.

Nationwide, the American Management Association found that 36% of applicants for vacant jobs in medium and large-size businesses lacked the necessary math and reading skills, and the percentage of job applicants here lacking such skills is undoubtedly similar, if not higher. Continued improvement in the state's basic elementary and high school education is needed.

Levels 3 and above: some college, college and advanced degree. The wage gap with the rest of the country is just as high for those in this educational group as it is for those with less education. For specific occupations and industries, it is higher. This wage gap shows a relative lack of demand for higher-skill workers that is reflective of the state's stage of development. Consider, for example, some "new age" industries. Mississippi pays an annual average of $32,700 in information services versus a $42,200 average for the U.S; in finance & insurance, the gap is $29,300 versus $45,700; and in professional, scientific & technical services, $30,500 versus $43,200.

A part of these pay gaps is due to the fact that the services provided within these industries here differ from those provided elsewhere in the country. For example, the state is relatively weak in the provision of international financial and consulting services.

A smaller percentage of service sector jobs in the state are in the industries mentioned above; instead, more are in the lower-paying hotels/lodging and amusements/gaming industries. See *Mississippi Economic Review and Outlook, June 2000*.

In general, despite the lower percentage of workers with college degrees here, the wages paid these relatively mobile workers remain below the U.S. average.

An increase in private sector demand for persons with post-secondary education would push up the wages of these workers. An increase in the relative size of the private sector could also have a positive effect. The private sector on average pays a higher

wage for a college degree than the public sector. However, Mississippi's private sector is relatively smaller than is true of the country as a whole. Twenty-two percent of the state's workforce is employed by the government, while nationally the figure is 16%.

At this point, growth of the private sector is linked to increased competitiveness, and so to an increasingly skilled workforce. This leads to consideration of the third change linked to an increase in wages.

3--Increased demand for higher levels of skill and education.

Nationally, a shift towards more skill-intensive service sector jobs has been transforming the U.S. workforce. These jobs range from jobs servicing the manufacturing sector through product design, software development, market research and customer support to jobs meeting the health needs of our older population. Most jobs, and over 90% of new jobs, are in the services-producing industries; and wage growth has been faster in services than in the goods-producing sector since 1990. Mississippi lags the nation in the percentage of the workforce employed in these high-growth, higher-paying service industries. A shift towards higher-skill industries and occupations in the state is occurring, however, and policies that facilitate this shift will have a positive impact on wages and on the economic growth of the state.

Within goods-producing industries, firms have the choice of building profits on low-cost, low-skill labor or on higher-skill, higher-productivity workers. The former choice remains the traditional one in the South, according to observers such as the Southern Growth Policies Board, and this is the case here as well. A shift towards new technologies, new products and new markets would increase the return from hiring more skilled workers. With such a shift, private sector demand for skilled workers in Mississippi would grow.

4--A shift towards higher-skill occupations.

A shift towards higher-skill, "new age" industries involves a shift towards higher-skill occupations by both men and women, blacks and whites. Data show that 30% of U.S. workers are in executive, managerial and professional occupations, while in Mississippi the figure is 24%. Between 1980 and 1990, the percentages of black men and of black women in the workforce in professional occupations actually decreased--a fact which shows that continuing progress in this area cannot be taken for granted. Increased acceptance of women and blacks in nontraditional occupations would boost efficiency and productivity, and so lead to greater profitability and higher wages. Increased support for workers in lower-paying jobs who are seeking training and education, through the provision of subsidies for evening classes and child care, can also improve skills and help boost wages.

Most workers in Mississippi (62%) are black (30%) or female (47%), two groups that historically have tended to be concentrated in certain traditional (and often lower-paying) occupations, such as sales clerks. Glass ceilings or discriminatory practices that keep these workers from rising through the ranks to higher positions have an adverse impact on the overall efficiency of the economy. Consider that one of the great strengths of the market has been its role in reducing the importance of caste, class, ethnic group and gender in the occupations open to an individual. A dynamic growth pattern based on this social mobility has been the result. However, efforts to open up opportunities continue to be needed.

Table 1. **AVERAGE HOURLY WAGE BY HIGHEST LEVEL OF EDUCATION, 1989**
(In 1999 Dollars)

	Mississippi (1)	U.S. (2)	Ratio (1)/(2)
Less than high school	9.71	9.73	.998
High school graduate	10.68	11.86	.901
Some college	11.58	13.32	.869
College	16.83	18.68	.901
Advanced degree	21.89	24.08	.909
Weighted average	**11.89**	**13.99**	**.850**

Note: Between 1989 and 1999, there was a 34.4% increase in the consumer price level.

SOURCE: The estimates are based on U.S. census data for workers age 18-64 but exclude workers earning more than $100 per hour or less than $.50 per hour. Mississippi data drawn from the PUMS dataset of the 1990 Census. U.S. data from Mishel et al., *State of Working America* 2000/2001, Cornell University Press, 2001. Mississippi data include income from some categories of the self-employed, whereas U.S. data do not.

1990 Census data provide evidence that gender and race do matter to many employers. These data show that the concentration of women and blacks into certain jobs is greater in Mississippi than it is for either the South or for the U.S. as a whole. While in the U.S. 32% of white men or black men would have to change occupations for each group to have the same percentage in each occupation, in the South the figure was 36% and in Mississippi 38%. Similarly, for white men and white women to have the same occupational distribution in the U.S., 57% of white men or women would have to change jobs, but 62% in the state.

If it is granted that discrimination or remnants of discrimination exist, it follows that steps taken to provide more opportunities for advancement to persons in traditional female- and black-occupations would enhance productivity and boost wages. Training opportunities, for example, are less frequently available to those in lower-paying occupations, and ladders for advancement may be nonexistent. Improving the access of women and blacks to nontraditional, higher-paying occupations needs to be part of the program to improve the state's labor market. The February 1996 issue of this *Review* provides more details.

Recent trends do not show a significant closing of the wage gap.

Over the 1990-95 period, the wage gap and the gap in per capita incomes with the rest of the country closed. However, this was not the case over the 1995-2000 period. From 1995 to 2000, the state's average annual wage grew 3.9%, compared with 4.8% for the nation. Mississippi's per capita income, that is, total personal income divided by the total population, grew at an average rate of 5.1% over the 1995-2000 period, buoyed by rising employment, higher stock prices and strong returns to proprietorships. For the U.S., the growth rate averaged a higher 5.6%.

Table 2. **HIGHEST EDUCATIONAL ATTAINMENT OF THE LABOR FORCE MISSISSIPPI AND THE U.S., 1990 AND 1999**

	Mississippi	U.S.

	1990	1999	1990	1999
Less than high school	25.1	17.8	13.7	10.8
High school graduate	29.1	35.5	36.9	32.3
Some college	29.2	25.9	26.0	29.6
College and above	16.6	20.8	23.5	28.7
College	11.2	14.9	15.6	19.6
Advanced degree	5.4	5.9	7.9	9.1

SOURCE: 1999 estimates based on U.S. Bureau of Labor Statistics, *Current Population Survey*, March 1999, for Mississippi and, for U.S., the outgoing rotation group file of that year, as cited in Mishel et al. was also used. The error for Mississippi is on the order of plus or minus 2 percent for the percentage completing high school or attaining a college degree. 1990 figures are from the 1990 U.S. Census.

Some concluding considerations.

In general, Mississippi will reduce the wage gap by taking steps to raise productivity, foster industrial innovation, and increase worker occupational options. This involves increasing investment in education and worker training; increasing research capacity; improving educational programs, child care options and health care programs; improved production and management techniques; increasing worker access to education; and continued strengthening of government-business-university partnerships.

Programs that support workers who are seeking training and education, such as the provision of subsidies for evening classes and child care, can improve skills and help boost wages. Community colleges and universities can improve outreach to these workers, and put in place programs geared to meeting the need for life-long education. Greater participation by businesses and universities in statewide and nationwide networks disseminating information and supporting efforts to upgrade production and management techniques can be encouraged by conferences, awards, and outreach programs.

A move towards more effective evaluation of programs in the public sector from the Department of Education through the Department of Human Services could also make a difference. Such evaluations would enable an answer to the basic question: how effective has this program been in improving the quality of life for Mississippians today, and how does it improve the outlook for tomorrow?

Footnote

[1]Figures on average hourly wages are drawn from the household survey conducted by the U.S. Census Bureau. Figures on average annual pay are based on establishment data from the U.S. Bureau of Labor Statistics (BLS). These BLS data would count a worker holding two fulltime jobs as two workers, or two workers each working 20 hours a week at the same job for the same firm as one worker, for example.

SOURCES

Council of Economic Advisors to the President, *Economic Report of the President 2000*, Government Printing Office, 2/2000, p. 131-2.

CQ's State Fact Finder 2001, Congressional Quarterly Press, Washington, D.C.

Huckabee, M. "A Conversation on the Future of the South", *Southern Growth*, Vol. 1 No. 1, 2001. A publication of Southern Growth Policies Board. See www.southern.org.

Mishel et al., *The State of Working America 2000/2001*, Economic Policy Institute, Cornell University Press, 2000.

U.S. Department of Commerce, *U.S. Statistical Abstract 1999*.