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War worries fade as SARS, global concerns loom

Quarterly Economic Forecast

The national economy is likely to resume a gradual recovery now that the conflict with Iraq has entered the peacekeeping stage. The Arizona economy already has begun the healing process, judging by the employment numbers. The war proceeded about as well as could be expected from an economic standpoint, although one would be hard pressed to come to that conclusion after listening to most Wall Street economists. Many analysts connected with investment firms believed the economy would take off like a helium balloon once it was untied from the effects of the Iraq conflict. However, the underlying problems with the economy continued to exist while everyone's attention was focused on Iraq. Previous forecast articles have stated the best the economy could manage is a gradual recovery — and so far, that is exactly what is happening.

The bad economic news is there are new causes for concern in the aftermath of the Iraq crisis. The global economy is battered as the United States came out of recession with prospects for Germany, France and many of our trading partners that are decidedly anemic. The ability of the major economies to work together to stabilize the situation has been damaged by the diplomatic fallout surrounding disagreements about Iraq. It will take time, perhaps years, to heal the rifts caused by differences over the handling of Iraq … and if the international investment community decides that there is not enough cooperation to keep a lid on the situation, it could trigger a global recession. Jeffrey Garten, in a recent *Business Week* article, maintains that the proximate cause of the 1987 stock market crash was a loss of confidence in ability of the major industrial nations to cooperate on the economy. The timing of remarks by the Reagan administration does suggest that confidence played a role. Unfortunately, it is impossible to predict whether or when such a shift in the current capital markets will take place.

SARS could lead to a global economic slowdown, particularly if China fails to bring the epidemic under control in a reasonable amount of time or if it spreads further. The SARS crisis shows both the strengths and the weaknesses of the modern global economy. On the plus side, scientists cooperating across international boundaries have used DNA analysis to learn an unprecedented amount of information about the pathogen in a short time. In fact, they appear on the verge of finding treatments based solely on their knowledge of the genetic makeup. However, because of rapid international travel, the disease spread undetected in the initial days of the outbreak. The potential for an impact on the global economy is greater, given the huge manufacturing industry in China and other Asian countries. The amount of manufacturing coupled with the rise of just-in-time inventory practices means that even relatively short disruptions to the global supply chain can have significant impacts. Firms increasing inventories to buffer any supply disruptions will muddy the demand picture.

The Federal Reserve seems content to leave interest rates unchanged. Chairman Alan Greenspan recently argued against the need for further fiscal stimulus. This stance may have been influenced by details of the Bush tax cut plan, in which much of the stimulus would occur in 2004 or later. The potential for further tax cuts to worsen the deficit in later years is another reason to view the cuts with some degree of caution.

Ironically, one of the justifications for tax cuts is the perceived need to offset the fiscal drag caused by reductions in spending and revenue enhancements being enacted by state governments. Tax cuts may have salutary benefits outside of the stimulus provided to the economy, but the most direct and rapid way to counteract reductions in state fiscal activity would be a direct transfer of funds from the federal government to the states.

In any case, in order to put together a forecast, assumptions must be made about the impact of all the above factors. The forecasts in the table assume that a package of tax cuts and help to the states representing about half of President Bush's original plan will pass. It is also assumed that more of the benefit will be front-loaded than in

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the original Bush plan. Another assumption is that SARS will have a significant impact on Chinese GDP, but the crisis will not spread to new countries and any interruption to global supply chains will be less severe than the recent West Coast dock strikes. It is difficult to know how to treat the possibility of the breakdown in international relations impacting the global economy. Given the impossibility of forecasting such an event, the economic forecast assumes no meltdown of investor confidence. The biggest risks to the forecast are the possibility of an investor crisis or a new outbreak of SARS.

Arizona

The Arizona economy continues to be a mixed bag, but the end of the Iraq conflict should be a positive influence. The best news for the economy comes on the employment front, while the worst news could well be the potential impact of SARS.

Benchmark revisions to the employment numbers show a significantly better picture than preliminary data suggested. Employment started recovering during the third quarter of last year, and instead of an outright decline in total employment for 2002, employment was flat. Interestingly the improvement was more pronounced

TABLE 1
2003 AND 2004 ECONOMIC FORECASTS: UNITED STATES

	Actual 1999	*Actual 2000*	*Actual 2001*	*Actual 2002*	*Forecast 2003*	*Forecast 2004*
Gross Domestic Product						
Billions of 1996 Dollars	8,858.9	9,191.4	9,214.6	9,440.2	9,685.6	10,024.6
Percent Change	4.1	3.8	0.3	2.4	2.6	3.5
Industrial Production (Percent Change)	4.3	4.7	(3.6)	(0.7)	2.1	4.3
Net Exports (Billions of 1996 Dollars)	(320.5)	(398.8)	(415.9)	(487.4)	(530.0)	(541.0)
Housing Starts						
Number in Thousands	1,666.5	1,592.3	1,636.7	1,728.6	1,626.6	1,605.5
Percent Change*	3.1	(4.5)	2.8	5.6	(5.9)	(1.3)
Unemployment Rate (Percent)	4.2	4.0	4.8	5.8	5.9	5.6
Consumer Price Index (Percent Change)	2.2	3.4	2.8	1.6	2.1	2.4
Three-Month Treasury Bill Rate (Percent)	4.6	5.8	3.4	1.6	1.5	3.0
10-Year Treasury Note Rate (Percent)	5.6	6.0	5.0	4.6	4.4	5.3

*Calculated prior to rounding

TABLE 2
2003 AND 2004 ECONOMIC FORECASTS: ARIZONA

	Actual 1999	*Actual 2000*	*Actual 2001*	*Actual 2002*	*Forecast 2003*	*Forecast 2004*
Personal Income						
Millions of Current Dollars	120,264	131,046	137,331	142,868	150,440	159,466
Percent Change	6.5	9.0	4.8	4.0	5.3	6.0
Retail Sales						
Millions of Current Dollars	40,769	43,940	44,833	45,425	47,151	49,744
Percent Change	10.0	7.8	2.0	1.3	3.8	5.5
Unemployment Rate (Percent)	4.4	4.0	4.7	6.2	4.9	4.5
Wage and Salary Employment						
Number in Thousands	2,163.1	2,242.7	2,265.0	2,264.9	2,314.6	2,390.4
Percent Change	4.3	3.7	1.0	(0.0)	2.2	3.3
Population						
Number in Thousands	5,017	5,169	5,321	5,468	5,605	5,734
Percent Change	3.1	3.0	2.9	2.8	2.5	2.3
Single-Family Units Permitted						
Number	51,764	48,846	50,930	55,649	52,310	49,695
Percent Change	1.5	(5.6)	4.3	9.3	(6.0)	(5.0)
Multifamily Units Permitted *						
Number	12,067	10,920	10,414	8,830	8,344	7,927
Percent Change	(8.7)	(9.5)	(4.6)	(15.2)	(5.5)	(5.0)

* Apartment complexes of three or more units

Source (Tables 1 and 2): Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

in Arizona than in most other states. The state's flat performance was good enough to rank ninth in the nation for 2002. In fact, Arizona has been in the top 10 every year since 1993. Unfortunately, all of the improvement has come on the service-providing side — the goods-producing part of the economy continues to struggle.

The war in Iraq appears to have had a lot to do with the lack of improvement in the goods-related sectors of our economy. The manufacturing picture has been particularly discouraging. Semiconductor billings were up for nine straight months before falling for three months. March billings were up everywhere except the Americas, which could be an encouraging sign. It seems likely that if there had been 12 or more "up" months, the prospects for renewed hiring would have been much brighter. The jump in March is difficult to interpret, and the April numbers could be outright misleading if they are up as a result of inventory stockpiling related to SARS fears. Arizona has very close ties with China and the other Asian countries hit by SARS. Motorola has shut down its headquarters in China because of SARS, and production is affected at many companies because of workers being quarantined at home. The economic hit suffered by these companies is sure to delay renewed hiring.

The picture is further muddied by the recent switch in employment data from SIC (Standard Industrial Classification) coding to NAICS (North American Industry Classification System). On the positive side, this change will provide much more information about the fast-growing service sector and the high-tech sectors of the economy. The down side is that except for the total nonfarm employment series, there will be no history prior to 1990. The classification systems are different enough that even in categories like manufacturing and construction, where the differences are relatively slight, it is inadvisable to use SIC and NAICS data together.

TABLE 3
2003 AND 2004 ECONOMIC FORECASTS: MARICOPA COUNTY

	Actual 1999	*Actual 2000*	*Actual 2001*	*Actual 2002*	*Forecast 2003*	*Forecast 2004*
Retail Sales						
Millions of Current Dollars	27,825	30,167	30,605	30,690	31,948	33,865
Percent Change	10.4	8.4	1.5	0.3	4.1	6.0
Unemployment Rate (Percent)	3.0	2.7	3.9	5.3	4.5	3.8
Wage and Salary Employment						
Number in Thousands	1,487.0	1,541.0	1,559.5	1,552.3	1,586.5	1,646.7
Percent Change	4.8	3.6	1.2	(0.5)	2.2	3.8
Population						
Number in Thousands	2,995	3,097	3,194	3,289	3,375	3,466
Percent Change	3.6	3.4	3.1	3.0	2.6	2.7
Single-Family Units Permitted						
Number in Thousands	35,430	33,107	33,428	35,360	31,470	28,323
Percent Change	(0.5)	(6.6)	1.0	5.8	(11.0)	(10.0)
Multifamily Units Permitted *						
Number in Thousands	9,524	9,490	8,964	7,268	6,905	7,319
Percent Change	(9.5)	(0.4)	(5.5)	(18.9)	(5.0)	6.0

* Apartment complexes of three or more units

TABLE 4
ARIZONA EMPLOYMENT FORECASTS: 2003 and 2004
(In Thousands)

	Actual 1999	*Percent Change*	*Actual 2000*	*Percent Change*	*Actual 2001*	*Percent Change*	*Actual 2002*	*Percent Change*	*Forecast 2003*	*Percent Change*	*Forecast 2004*	*Percent Change*
Manufacturing	207.5	(1.4)	209.9	1.2	201.7	(3.9)	183.9	(8.8)	184.8	0.5	188.5	2.0
MNR*	11.1	(14.0)	9.8	(11.7)	9.5	(3.1)	8.9	(6.3)	8.8	(1.0)	8.5	(3.0)
Construction	160.8	7.6	168.1	4.5	173.6	3.3	172.3	(0.7)	167.1	(3.0)	158.8	(5.0)
TWU**	73.6	4.8	74.3	1.0	76.6	3.1	75.8	(1.0)	75.4	(0.5)	76.2	1.0
Information	47.1	8.3	54.4	15.5	53.9	(0.9)	51.5	(4.5)	50.7	(1.5)	51.2	1.0
Trade	350.2	3.7	363.5	3.8	364.0	0.1	366.4	0.7	378.1	3.2	395.9	4.7
Financial Activities	147.5	3.9	151.0	2.4	153.4	1.6	153.9	0.3	158.5	3.0	164.9	4.0
Services	811.1	5.8	845.0	4.2	854.6	1.1	863.9	1.1	902.8	4.5	954.2	5.7
Government	354.1	3.7	366.7	3.6	377.8	3.0	388.3	2.8	388.3	0.0	392.2	1.0
Total Wage and Salary Employment	**2,163.1**	**4.3**	**2,242.7**	**3.7**	**2,265.0**	**1.0**	**2,264.9**	**(0.0)**	**2,314.6**	**2.2**	**2,390.4**	**3.3**
Unemployment Rate	4.4%		4.0%		4.7%		6.2%		4.9%		4.5%	

*Mining and Natural Resources **Transportation, Warehousing and Utilities

Source (Tables 3 and 4): Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

This change has impacted the detailed employment forecasts in Table 4. The biggest change is the addition of the information category, which encompasses publishing and telecommunications. The other categories were at least represented in the past, although their exact makeup has changed. Services could have been broken down into professional and business services, education and health services, leisure and hospitality, and other services. Analysts are not yet familiar enough with the new data to forecast at that disaggregated level for publication, although to do so eventually remains a goal because of the importance of services to the local economy. Durable goods manufacturing is now split into fabricated metals, computers and electronic products, and aerospace products and parts.

The other major data issue relates to the preliminary estimates of personal income growth in 2002. The annual estimate is 4.0 percent, but the quarterly growth rates are 3.7, 3.9, 3.4 and 5.1. Without the last quarter surge, personal income growth would have been even more anemic. Wage and salary disbursements grew at 3.7 percent in the fourth quarter, while farm income grew at double-digit rates, suggesting that the 5.1 percent number is somewhat misleading in terms of economic activity.

Overall, the forecast has not changed much at the local level because it has not changed at the national level. Arizona is likely to be more sensitive to the impact of SARS on our high-tech industry. The positive note is that services employment began to recover much sooner than expected, and population growth has held up well despite the slowdown in job growth.

— Tracy Clark
Associate Director
Bank One Economic Outlook Center

Bank One Arizona Leading Index slips in March

The Bank One Arizona Index of Leading Economic Indicators declined in March to 118.4 — 0.3 percent below February's 118.7 index reading and 2.0 percent above the March 2002 number of 116.1 (1987 = 100).

The inflation-adjusted value of Maricopa County residential building permits, delivery times, sensitive materials prices, the inflation-adjusted value of the M2 money supply and materials inventories were negative. Hours worked in manufacturing, production and new orders were positive. Employment from the Business Conditions survey was neutral. Hours worked in manufacturing was estimated because of delays associated with the switchover from SIC code to NAICS code accounting in the employment numbers.

Arizona's service economy started to recover in the third quarter of last year, and all indications are that the trend will continue. The reason is twofold: Population growth appears to have remained at a relatively high level (services employment growth is closely tied with population growth), and the business services sector, which was responsible for the drop during the recession, is faring better. However, the economy overall will not return to robust health until the goods-producing side has worked through its problems as well.

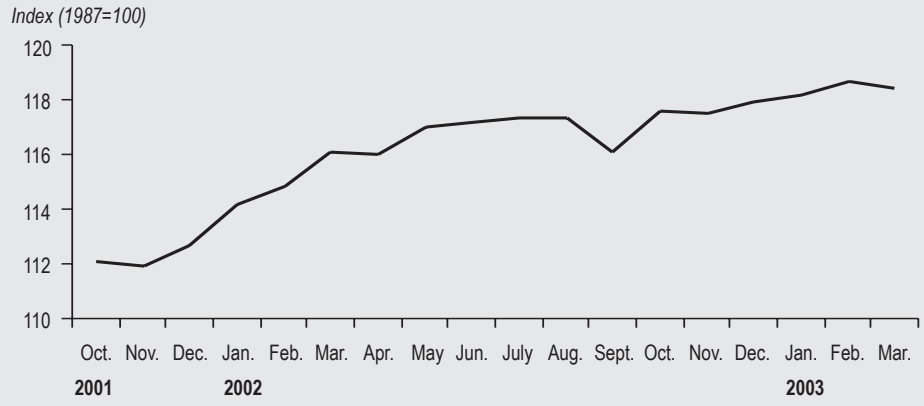
The "goods" side of the economy comprises manufacturing, natural resource extraction and construction. Construction is the only one of the three that is positive right now, and that could change in the coming months. Natural resource extraction, which is dominated by mining, is going through a very rough time, significantly impacting some of the rural counties. Currently, the biggest negative for the state is manufacturing, where employment fell 3.9 percent in 2001 and 8.8 percent in 2002. In February, it was down another 5.3 percent over last year.

Arizona's manufacturing is heavily skewed to business-related manufacturing, and business spending has yet to recover. It is also closely tied to high tech, which had been showing some signs of revival prior to the Iraq crisis. Semiconductor billings, which had been up for nine straight months, dipped for three months and then recovered in March. Unfortunately, there is some evidence that the rebound may be due to inventory buildup due to SARS fears. SARS, which has not had a significant impact on the overall economy, does have the potential to negatively impact the electronics industry. Manufacturing in the electronics industry has overwhelmingly been moved to Asia, and in recent years China has been gaining ground on the rest of Asia. SARS seems contained in most of Asia, but the prospects for containment in China are much less certain. Motorola has already had to close its China headquarters, and production for a long list of companies is bound to be adversely affected when entire apartment complexes are being quarantined. Arizona will feel the impact if the resulting loss of profits further delays local companies' hiring plans.

The one-month drop in the index is hardly worrisome by itself, given the unsettled economic climate, but it is clear that the manufacturing portion of Arizona's economy is not out of the woods yet. It is impossible to predict the course of the SARS epidemic, but if it goes badly, high-tech manufacturing could be in for an even worse time.

— Tracy Clark
Associate Director
Bank One Economic Outlook Center

FIGURE I
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



Source: Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

Little recovery in 2002 in either employment or retail sales

Though the end of the recession that began in April 2001 has not been officially announced, it likely ended early in 2002. If the recession indeed concluded then, it was an average recession both in length and magnitude of decline in economic activity. However, little recovery occurred during the remainder of 2002, similar to the weakness experienced after the end of the prior recession in 1991, but not typical of the very brief recovery periods of most recessions since the mid-20th century.

NATIONAL ECONOMIC CYCLE

The timing of national recessions is determined by the National Bureau of Economic Research, which particularly considers two monthly measures of economic activity: employment and inflation-adjusted personal income less transfer payments. Industrial production and sales in the manufacturing and wholesale-retail sectors are among the other measures reviewed. Recessionary periods are not defined by gross domestic product; while this is the broadest measure of economic performance, its quarterly growth rates frequently are erratic.

Nationally, employment declined in every month from April 2001 through April 2002. Since then, generally small monthly gains and losses have been measured, with the large decrease in February 2003 putting employment slightly lower than in April 2002. Real personal income less transfer payments also declined for a year, from the beginning to the end of 2001 (measured on a quarterly basis). Small advances were measured throughout 2002.

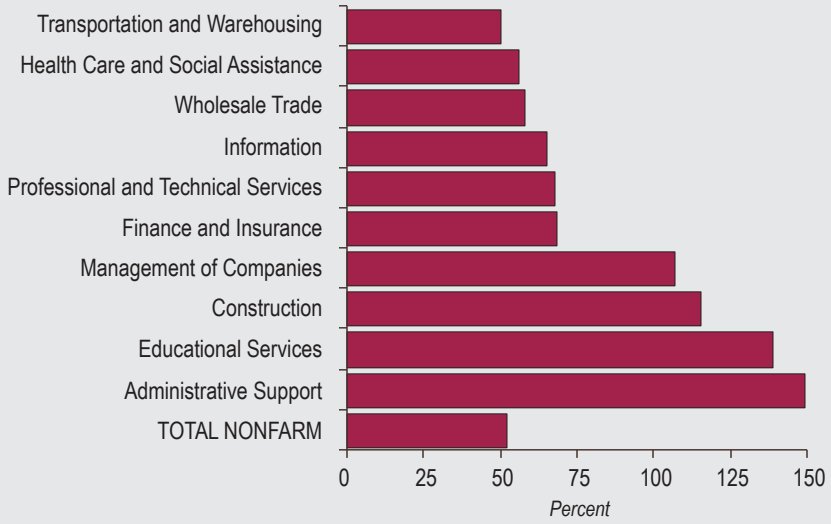
Economic cycles since the mid-20th century have consisted of a recessionary period lasting from six to 16 months in length and an expansionary period of highly variable length — from 12 to 120 months. The expansionary period can be divided into three parts: a generally brief recovery period of modest growth, a period of strong growth, and a period of slowing growth of about a year in length that deteriorates into a recession. In longer expansionary periods, the period of strong growth often is split into two parts, separated by a period of slower growth that in other cycles terminates in a recession. These phases of the expansionary part of the cycle are more obvious measured by employment than by personal income less transfer payments.

As seen in Table 1, while most recovery periods have been fewer than five months in length, the recovery in the last cycle lasted 22 months. The current employment recovery began in May 2002. In the 10 months through February 2003, the average monthly change was -13,000. The first 10 months of the prior recovery were nearly as weak, but employment gains became larger after that. This suggests that labor markets should be mending now, but the uncertainty of the international situation likely will postpone such improvement.

The remainder of the last economic expansion was typical in length and intensity except for the second strong growth period lasting 20 months longer than any other. The recession that began in April 2001 was ushered in by a slow-growth period of 10 months, in which employment rose an average of 60,000 a month. The length and strength of this period were similar to those of prior slow-growth periods that ended in a recession. The 2001-02 period of contraction lasted 13 months, during which employment

FIGURE I

PERCENT CHANGE IN ARIZONA EMPLOYMENT, 1991 to 2002
Sectors with Greatest Gains



Note: Educational services includes only private-sector operations.

TABLE 1

NATIONAL EMPLOYMENT CHANGE BY PHASE OF ECONOMIC CYCLE

	Economic Cycle								
Phase	*1991-2002*	*1982-1991*	*1980-1982*	*1975-1980*	*1970-1975*	*1961-1970*	*1958-1961*	*1954-1958*	*1949-1954*
MONTHLY NUMERIC AVERAGE (in thousands)									
Recovery	75	74		45	112	121	70	92	97
First Strong Growth	295	316	221	275	252	246	251	204	354
First Slow Growth	137	139	68	118	67	118	110	75	13
Second Strong Growth	258	258		316		229			325
Second Slow Growth	60	164		116		94			29
Recession	-138	-160	-173	-330	-379	-131	-125	-164	-125
LENGTH OF PHASE IN MONTHS									
Recovery	22	4		2	11	44	2	2	4
First Strong Growth	23	26	6	10	25	26	10	16	13
First Slow Growth	11	13	6	6	11	13	11	13	16
Second Strong Growth	52	32		32		17			7
Second Slow Growth	10	16		9		9			4
Recession	13	11	16	4	6	8	10	14	14

Note: Not all cycles have second periods of strong growth/slow growth; no recovery period occurred during the 1980-82 cycle.

Source (Figure I and Table 1): Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

decreased at an average monthly pace of 138,000. Both the length and intensity of the declines were typical of prior recessions.

ARIZONA EMPLOYMENT

Like the nation, Arizona experienced slow employment growth from June 2000 through March 2001, with the recession beginning in April 2001. The year-over-year employment change was negative from October 2001 through June 2002, compared with national declines from September 2001 into 2003. The deepest year-over-year decrease was 1.3 percent, both nationally and in Arizona.

The Arizona employment figures reflect the annual benchmarking performed by the Arizona Department of Economic Security. Employment was revised up for most of 2002 with a minor decrease in the 2001 estimates.

The annual average change in employment in Arizona in 2002 was nil, following a gain of 22,300 in 2001. Employment had climbed between 67,000 and 108,000 in each year between 1993 and 2000. The magnitude of the increases during these years were not much different than at the peak of the 1980s expansion, but the number of years of strong advances in the 1990s was greater.

The annual change in employment went from a gain of 73,000 at the end of 2000 to a loss of 30,000 at the end of 2001. Improving conditions during 2002 resulted in a 17,000 year-over-year rise at the end of the year. On a percentage basis, employment growth dropped from 3.3 percent at the end of 2000 to -1.3 percent at the end of 2001, then improved to 0.7 percent at the end of 2002.

Annual average employment gains of 10,000 in 2002 in the health care and social services sector exceeded that of any year in the prior economic cycle. Advances also were measured in private-sector educational services and in local government (both education and other positions). Retail trade employment rebounded from a loss in 2001 to an increase in 2002, but little change in employment occurred in most other sectors in 2002, with small decreases common. The exception was manufacturing, which lost nearly 18,000 jobs.

For the entire cycle from 1991 through 2002, the state added 774,000 nonfarm jobs, with 85 percent in the private sector. Goods-producing sectors accounted for only 13 percent of all jobs created. Two sectors stand out as being among the leaders on both numeric employment increase and percentage gain: administrative support and construction. Employment services (largely temporary and contract workers) accounted for most of the rise in administrative support employment. While government had a large numeric increase, its percent change in employment was 43 percent over the 11 years, compared to 54 percent in the private sector. The sectors with the largest percentage gains are shown in Figure I.

In the state's 13 less populous counties, employment rose in both 2001 and 2002, at a pace not far below that of preceding years. In contrast, employment declined in each year in Pima County, with year-over-year changes negative from January 2001 through September 2002. Job growth occurred in 2001 in Maricopa County, but the small percentage decrease in 2002 was comparable to that in Pima County. Year-over-year, employment fell from October 2001 through September 2002 in Maricopa County. With employment dropping in the two populous counties (by an annual average of 7,200 in Maricopa and 1,300 in Pima), Yavapai County had the unusual distinction of leading the state in growth in 2002 (up 2,100 jobs, or 4 percent). Mohave County was second on both numeric and percentage job growth. In contrast, employment dipped in both 2001 and 2002 in Apache, Gila and Greenlee counties, with losses in 2002 in Graham and Santa Cruz counties.

RETAIL SALES

Retail sales in Arizona were weak throughout 2002, though holiday sales during December were somewhat stronger. Retail sales growth began to slow in November 2000; since May 2001, inflation-adjusted year-over-year changes have been flat or negative. For the entire year, real retail sales were flat in 2002, following a marginal decline in 2001. Real gains from 1992 through 2000 had been at least 3.9 percent in every year, mostly exceeding 5 percent (see Table 2).

Taxable retail sales in Arizona totaled $45.4 billion in 2002. Among the categories shown in Table 3, sales volumes were greatest for motor vehicles and restaurants/bars, though the not-categorized sales equaled the sum of these two categories. The performance was better in 2002 than in 2001 in most categories, but the inflation-adjusted sales value of motor vehicles declined in 2002 compared to strong growth in 2001. Inflation-adjusted decreases occurred in 2002 in half of the categories. The only category with strong growth was that including building materials, hardware,

TABLE 2
ARIZONA RETAIL SALES
(Percent Change)

	Nominal	*Real*	*Real per Capita*
1992	7.7%	5.1%	2.3%
1993	9.0	6.4	3.3
1994	12.0	9.8	6.1
1995	8.8	6.5	2.5
1996	5.9	3.9	0.1
1997	7.0	5.0	1.4
1998	7.2	5.9	2.5
1999	10.0	8.4	5.1
2000	7.8	5.5	2.4
2001	2.0	-0.3	-3.2
2002	1.3	0.2	-2.5

TABLE 3
ARIZONA RETAIL SALES BY CATEGORY
(In Millions)

		Real Percent Change			
	2001	*2002*	*2001*	*2000*	*1991-2002*
Not Categorized*	$13,833	3.9%	-2.5%	7.6%	105%
Motor Vehicles	7,240	-4.9	7.9	10.9	139
Restaurants and Bars	6,562	2.0	0.3	5.0	66
General Merchandise	3,196	-13.3	-8.1	3.1	9
Food Stores**	3,111	2.1	0.1	-0.1	28
Miscellaneous	2,643	-0.6	-3.9	0.9	27
Apparel and Accessories	2,505	2.1	4.2	3.8	43
Building Materials	2,407	8.0	5.8	3.2	100
Furniture Stores	1,967	-1.3	-7.0	4.9	72
Miscellaneous Vehicles	1,962	-0.6	-3.9	0.9	92
TOTAL	45,426	0.2	-0.3	5.5	74

* Sales by companies whose primary business is not retail trade
** Sales of non-food items only

Source (Tables 2 and 3): Center for Business Research, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University. Retail sales from Arizona Department of Revenue. Inflation adjustment uses the GDP Implicit Price Deflator of the U.S. Department of Commerce.

garden supply and mobile home dealers.

Between 1991 and 2002 (representing an entire economic cycle), strong gains were recorded by companies whose primary business is not retail sales and in the motor vehicles and building materials categories. Sales growth of miscellaneous vehicles also was above average. Increases were less than half the overall figure in general merchandise stores, food stores, and miscellaneous retail and also were below average in apparel and accessories.

In Maricopa County, retail sales in 2002 reached $30.7 billion, two-thirds of the state's total. Real retail sales decreased about 1 percent for the second straight year in Maricopa County. Inflation-adjusted sales were flat in each year in Pima County but sales in the balance of the state continued to rise, going up nearly 5 percent in 2002. In the Phoenix area, year-over-year sales were considerably lower during spring 2002, but small real gains were measured during the last half of the year. Sales did not dip as much in the Tucson area but also did not recover later in the year. Sales were moderately strong throughout the year in the balance of the state, which had experienced its weakest sales during the fourth quarter of 2000.

Nationally, real retail sales (which are defined somewhat differently than in Arizona — see box) rose 2 percent in 2002, a slight improvement over the 1 percent advance during 2001. The cumulative inflation-adjusted gains over the last 10 years (national data were revised back only to 1992) were 64 percent in Arizona and 46 percent nationally. However, Arizona's much more rapid population growth accounted for all of the state's greater advance in retail sales. Real per capita sales growth in Arizona between 1992 and 2002 was only 19 percent, compared to the national average of 30 percent. The cumulative real per capita increase in Maricopa County also was less than the national average at 22 percent, with lesser advances of only 14 percent in Pima County and 8 percent in the balance of the state.

Arizona's real per person loss in taxable retail sales in both 2001 and 2002 was 3 percent, the same as in the previous recessionary years of 1982, 1990 and 1991. In contrast, real per capita sales rose in each year between 1992 and 2000, by more than 2 percent in seven years. Nationally, real per capita retail sales continued to rise in 2001 and 2002, though the increase in 2001 was marginal.

The decrease in real per capita sales in Maricopa County was 4 percent in both 2001 and 2002, compared to 2 percent losses each year in Pima County, and a 1 percent dip in 2001 but a 2 percent rise in 2002 in the balance of the state.

— Tom R. Rex
Research Manager

The retail sales data discussed in this article are derived from sales taxes collected by the Arizona Department of Revenue. This data source is limited in that it is designed to be an accounting series in which the emphasis is on collection of taxes, thus categorical and timing errors in the reports of retailers are not corrected. Information is available only for items subject to the general sales tax; food purchased to be consumed at home and gasoline are excluded. The categorical figures shown in Table 3 should be viewed as estimates. The Arizona data are not consistent with national data, which include food and gasoline but exclude sales made by companies whose primary business is not retail trade.

Business Conditions Index slightly higher in March

The seasonally adjusted Arizona Business Conditions Index rose slightly to 51.3 in March from 51.2 the previous month. An index reading over 50 indicates that the local economy is growing; below 50 suggests a slowdown in the overall level of economic activity in the near term.

ANALYSIS

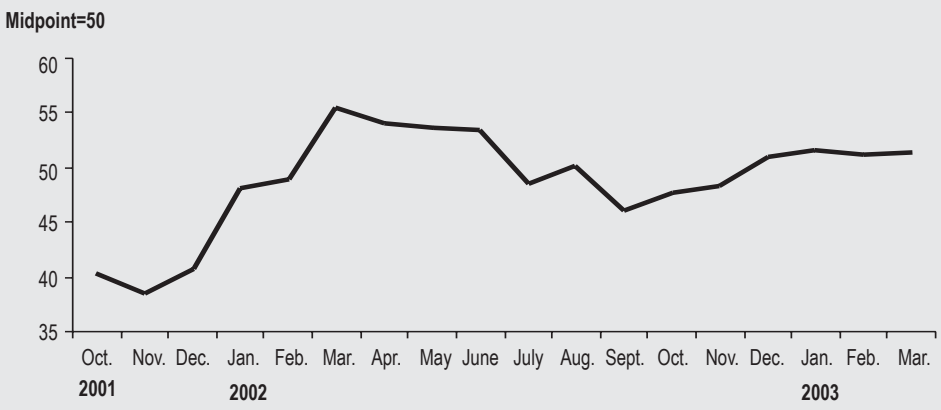
Arizona's index ran contrary to the national ISM Purchasing Managers Index, which fell below the critical 50-point mark in March. This indicates that some, albeit mild, growth may remain present in the local economy in the short term. Note: this survey was completed as the war in Iraq began and may not fully reflect new expectations formed over the last few weeks.

The manufacturing sector remained neutral, but the non-manufacturing sector showed a fairly healthy reading. As a positive sign, the subindex of new orders rose to 53.5 in March from 51.2 in February. The employment component remains low, at 44.8. This is in line with the lack of movement seen in the overall index. The production component also showed very little movement in March.

The Price Index jumped by 2.8 points to reach 62.5 in March. This is the highest level since September 2000. While not at the worrisome levels seen during periods of high inflation, this upward pressure in prices appears to be coming from sources such as increased prices for important commodities rather than higher market demand. It appears that the Arizona economy is continuing to waver in neutral territory between healthy growth and a slowing of business activity.

— Dawn McLaren
Research Economist
Bank One Economic Outlook Center

FIGURE I
ARIZONA BUSINESS CONDITIONS INDEX*



*Excludes Price Index

Source: Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

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ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Current Value	Previous Value	Percent Change Previous Period	Percent Change from Year Ago	Year-to-Date Value	Year-to-Date Percent Change from Year Ago
LEADING ECONOMIC INDEX (1987 = 100)							
Arizona	March	118.4	118.7	-0.3	2.0	NA	NA
BUSINESS CONDITIONS INDEX							
Arizona	March	51.3	51.2	0.3	-7.7	NA	NA
BUILDING PERMITS (Thousands of $)							
Maricopa County	February	688,219	631,447	9.0	8.7	1,319,666	1.4
Pima County	February	101,698	124,274	-18.2	-3.4	225,972	12.9
Balance of State	February	181,408	192,435	-5.7	15.5	373,843	20.0
Arizona	February	971,325	948,156	2.4	8.5	1,919,481	5.9
TOTAL HOUSING UNITS AUTHORIZED							
Maricopa County	February	3,335	2,724	22.4	18.0	6,059	8.3
Pima County	February	670	599	11.9	-6.4	1,269	0.6
Balance of State	February	1,449	1,535	-5.6	11.3	2,984	15.2
Arizona	February	5,454	4,858	12.3	12.6	10,312	9.1
HOME SALES							
Maricopa County - Number	February	7,490	7,240	3.5	6.5	14,730	13.4
Maricopa County - Median Price($)	February	149,000	147,375	1.1	6.4	144,300	2.6
HOUSING AFFORDABILITY INDEXES							
Metropolitan Phoenix - New Homes	4th Quarter	115	115	0.0	2.7	NA	NA
Metropolitan Phoenix - Resale Homes	4th Quarter	128	126	1.6	0.8	NA	NA
MORTGAGE RATES (30-year Fixed)							
Maricopa County	March	5.4	5.5	-1.8	-19.4	NA	NA
POPULATION ESTIMATES (Thousands)							
Maricopa County	4th Quarter	3,329	3,310	0.6	2.7	NA	NA
Pima County	4th Quarter	893	888	0.5	1.8	NA	NA
Balance of State	4th Quarter	1,314	1,304	0.8	2.8	NA	NA
Arizona	4th Quarter	5,536	5,502	0.6	2.6	NA	NA
RETAIL SALES (Millions of $)							
Maricopa County	February	2,478	2,426	2.1	2.2	4,905	2.9
Arizona	February	3,650	3,583	1.9	2.5	7,233	3.3

Note: The above figures reflect the latest data available as of date of publication and are subject to revision.

NA = Not Applicable r = Revised

Source: Center for Business Research, Arizona Real Estate Center, and Bank One Economic Outlook Center, affiliates of the L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University. Retail sales data are from the Arizona Department of Revenue.