

AZB ARIZONA BUSINESS

ARIZONA STATE UNIVERSITY'S MONTHLY NEWSLETTER ON THE ARIZONA ECONOMY

Events of Sept. 11 accelerate slide for U.S., state

Asked recently if this is the most difficult forecast I have ever had to do, I answered in the affirmative for two reasons. Economists are trained to write and think in terms like “exogenous shocks,” “marginal propensity to consume” and the “natural rate of unemployment.” At the same time we realize that each half percent up or down in a GDP forecast represents thousands of jobs either created or destroyed, and a significant economic burden or boon to many. It is difficult enough writing about an exogenous shock like the Asian financial crisis of 1998, because it represented significant pain for many worldwide. It is much worse to write about an exogenous shock that involved the death of thousands, and represents significant hardship for thousands more. This economic analysis may speak of things in dry academic terms, but we have not lost sight of the human impacts underlying the shifting economy.

The struggle involved in this analysis also is due to a more tangible reason. Economic forecasting is a combination of analyzing the past and the present and thinking about the future to come up with a forecast. The events of Sept. 11 rendered the past and current economic data largely useless, for a few months at least. Our ability to think about the future is also limited by the scope and nature of the attacks, which are close to being unique in American experience. Compared to previous forecasts, this one therefore is based much less on the data and more on educated conjecture than is usually the case.

While it is certainly true that the size and nature of an exogenous shock has something to do with the impact it produces, the economic environment in which it occurs is of equal importance. The U.S. economy as a whole barely noticed the Asian financial crisis because the stock market was posting gains, consumers were very optimistic and GDP was growing well above trend. However, the situation was very different on Sept. 11: The national and local economies were in a weakened state, with second quarter GDP growth barely positive. The consensus was that third quarter GDP growth would be negative or nearly so, and while the fourth quarter was expected to be positive the improvement would not have been

dramatic. Manufacturing already was in recession, and the health of the rest of the economy was dependent on the course of consumer spending. Consumers were saddled with high debt levels and increasing uncertainty about the economy and their own job prospects. Consumer confidence had dropped significantly prior to the attacks, although auto and home sales were holding up surprisingly well because of interest rate cuts. Real retail sales, which had been negative early in 2001, turned positive again by July. The prospects were for positive but lackluster growth going into 2002 — primarily because there were no obvious candidates to lift the economy out of the doldrums. Housing and cars were unlikely to have any significant pent-up demand, and consumers were still struggling with debt heavy balance sheets. The economy was expected to improve as manufacturing got over the Y2K bug and the spending binge leading up to it, but that improvement was likely to be gradual at best. Meanwhile, the United States would not be able to depend on much of a boost from major trading partners — their economies were deteriorating as well.

The direct and indirect impacts of the terrorist attacks have worsened the outlook for at least two quarters, and perhaps longer. The direct impacts affect New York City, the airlines/airports and tourism industries. The attacks also significantly disrupted business in general and manufacturing in particular because of the reliance on just-in-time inventory management and the disruption of transportation just after the attacks. Additionally, the impact on consumer confidence, while difficult to measure, is likely to be significant.

The greatest impact is likely to be felt during the third quarter. The disruption to the center of American finance was almost total for at least a week, and had lingering effects for several

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more weeks. The airline industry suffered a total shutdown for days and responded with massive layoffs immediately. Airports and the companies associated with them faced the loss of landing fees and retail sales. Skycaps were laid off. Fearful fliers canceled flights and postponed or canceled trips of any kind which brought the tourism industry to a virtual standstill. Manufacturing, which already had been

in recession, faced parts shortages for orders, and in many cases an inability to deliver completed goods. Consumer spending nosedived as people stayed home glued to the media, their shopping trips deferred due to more pressing concerns.

The impacts in the fourth quarter will not be quite so dramatic, but a second negative quarter is likely. Financial markets appear to have already recovered, although

uncertainty over further terrorist attacks and the course of the economy remain a negative. Airlines are flying again and passenger counts are climbing, but increased security measures mean that airports are capable of processing fewer passengers than before, no matter how many people want to fly. Manufacturing is faced with higher shipping costs and longer delays. Tourism, which was not

TABLE 1
2001 AND 2002 ECONOMIC FORECASTS: UNITED STATES

	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Forecast 2001	Forecast 2002
Gross Domestic Product						
Billions of Current Dollars	8,159.5	8,508.9	8,856.5	9,224.0	9,316.2	9,465.3
Percent Change	4.4	4.3	4.1	4.1	1.0	1.6
Industrial Production (Percent Change)	6.7	4.8	4.1	5.6	(2.6)	0.8
Net Exports (Billions of Current Dollars)	(113.3)	(221.1)	(316.9)	(399.1)	(415.0)	(425.0)
Housing Starts						
Number in Thousands	1,474.0	1,616.9	1,666.5	1,593.1	1,601.1	1,585.1
Percent Change*	(0.2)	9.7	3.1	(4.4)	0.5	(1.0)
Unemployment Rate (Percent)	5.0	4.5	4.2	4.0	5.0	4.7
Consumer Price Index (Percent Change)	2.3	1.6	2.2	3.4	3.0	2.4
Three-Month Treasury Bill Rate (Percent)	5.1	4.8	4.6	5.8	3.5	2.7
10-Year Treasury Note Rate (Percent)	6.4	5.3	5.6	6.0	5.0	5.0

*Calculated prior to rounding

TABLE 2
2001 AND 2002 ECONOMIC FORECASTS: ARIZONA

	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Forecast 2001	Forecast 2002
Personal Income						
Millions of Current Dollars	103,702	112,634	120,287	131,039	138,639	146,958
Percent Change	8.3	8.6	6.8	8.9	5.8	6.0
Retail Sales						
Millions of Current Dollars	34,568	37,071	40,769	43,940	45,478	47,661
Percent Change	7.0	7.2	10.0	7.8	3.5	4.8
Unemployment Rate (Percent)	4.6	4.1	4.4	3.9	4.8	4.5
Wage and Salary Employment						
Number in Thousands	1,984.6	2,074.7	2,163.1	2,248.0	2,275.6	2,314.0
Percent Change	4.9	4.5	4.3	3.9	1.2	1.7
Population *						
Number in Thousands	4,570	4,703	4,837	4,963	5,082	5,199
Percent Change	3.0	2.9	2.8	2.6	2.4	2.3
Single-Family Units Permitted						
Number	42,993	50,997	51,764	48,846	43,961	39,126
Percent Change	6.5	18.6	1.5	(5.6)	(10.0)	(11.0)
Multifamily Units Permitted **						
Number	13,043	13,218	12,067	10,920	9,282	8,818
Percent Change	11.6	1.3	(8.7)	(9.5)	(15.0)	(5.0)

* Population figures do not reflect 2000 census data

** Apartment complexes of three or more units

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

doing well before the attacks, has to deal with a lingering fear of flying and increased levels of inconvenience for passengers. Consumer spending will be affected by lower confidence and consumers distracted by the war on terrorism. Spending patterns will change — at least in the short run — as discount, drugstore and wholesale clubs experience sales increases while department, apparel, electronics and footwear stores will see declines.

The fate of the first quarter of 2002 — and to a lesser extent, the fourth quarter of 2001 — will depend on how long overt military action lasts and whether there are further terrorist attacks and the form they

take. There is also the question of what it would take to boost the economy out of the doldrums. Consumers are unlikely to have any pent-up demand, and business spending will increase only gradually. The sole candidate for economic booster rocket is the high level of monetary and fiscal stimulus applied by the Federal Reserve and Congress, respectively. The Federal Reserve has pushed short-term interest rates down to Kennedy-era levels, which requires pumping massive amounts of liquidity into the system. Also, tax cuts already on the books or under consideration could further boost the economy in short order. However, the effectiveness of these

measures has yet to be seen. Liquidity is useless unless firms and individuals actually borrow the money and spend it on something. Tax cuts, if pursued too aggressively, could be interpreted by consumers as a signal that things are worse than they thought, thus prompting them to save the money rather than spend it. Policy makers must also guard against overdoing the stimulus, at the risk of inducing inflation.

The economy is expected to improve into 2003, with real economic growth climbing into the high 2 or low 3 percent range. The Fed likely will begin to allow interest rates inch up either in late 2002 or sometime

TABLE 3
2001 AND 2002 ECONOMIC FORECASTS: MARICOPA COUNTY

	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Forecast 2001	Forecast 2002
Retail Sales						
Millions of Current Dollars.....	23,360	25,207	27,825	30,302	31,271	32,835
Percent Change.....	7.8	7.9	10.4	8.9	3.2	5.0
Unemployment Rate (Percent).....	3.0	2.7	3.0	2.6	3.9	3.7
Wage and Salary Employment						
Number in Thousands.....	1,344.2	1,418.8	1,487.2	1,544.6	1,567.7	1,602.2
Percent Change.....	5.6	5.5	4.8	3.9	1.5	2.2
Population *						
Number in Thousands.....	2,706	2,794	2,882	2,966	3,046	3,125
Percent Change.....	3.2	3.3	3.1	2.9	2.7	2.6
Single-Family Units Permitted						
Number in Thousands.....	30,466	35,603	35,430	33,107	30,790	24,632
Percent Change.....	7.6	16.9	(0.5)	(6.6)	(7.0)	(20.0)
Multifamily Units Permitted **						
Number in Thousands.....	10,787	10,529	9,524	9,490	8,067	7,744
Percent Change.....	10.9	(2.4)	(9.5)	(0.4)	(15.0)	(4.0)

* Population figures do not reflect 2000 census data ** Apartment complexes of three or more units

TABLE 4
ARIZONA EMPLOYMENT FORECASTS: 2001 and 2002
(In Thousands)

	Actual 1997	Percent Change	Actual 1998	Percent Change	Actual 1999	Percent Change	Actual 2000	Percent Change	Forecast 2001	Percent Change	Forecast 2002	Percent Change
Manufacturing.....	207.4	3.8	216.0	4.1	211.7	(2.0)	214.9	1.5	211.7	(1.5)	213.8	1.0
Mining.....	13.8	(1.4)	13.0	(5.8)	11.4	(12.3)	9.8	(14.0)	9.3	(5.0)	9.3	0.0
Construction.....	131.8	4.4	143.8	9.1	154.7	7.6	162.0	4.7	162.0	0.0	149.0	(8.0)
TCPU*.....	96.6	5.2	100.9	4.5	104.2	3.3	108.7	4.3	110.0	1.2	113.3	3.0
Trade.....	482.4	3.9	498.0	3.2	509.7	2.3	525.6	3.1	534.6	1.7	550.6	3.0
FIRE**.....	127.7	9.1	135.6	6.2	139.6	2.9	143.6	2.9	146.9	2.3	151.3	3.0
Services.....	596.7	6.4	626.1	4.9	677.8	8.3	716.9	5.8	726.2	1.3	748.0	3.0
Government.....	328.2	3.2	341.5	4.1	354.1	3.7	366.6	3.5	375.1	2.3	378.8	1.0
Total Wage and Salary Employment.....	1,984.6	4.9	2,074.7	4.5	2,163.1	4.3	2,248.0	3.9	2,275.6	1.2	2,314.0	1.7
Unemployment Rate.....	4.6%		4.1%		4.4%		3.9%		4.8%		4.5%	

*Transportation, Communications and Public Utilities **Finance, Insurance and Real Estate
Source (Tables 3 and 4): Bank One Economic Outlook Center, L. William Seidman Research Institute, College of Business, Arizona State University.

in 2003, depending on how strongly the economy reacts to the stimulus package. The bulk of the economic improvement will come from the consumer, although manufacturing should start reviving as well.

ARIZONA

Arizona currently is tracking the national economy, and is subject to almost all the same economic forces. The state's economic position had been deteriorating before Sept. 11, and the fallout from the attacks will further slow economic activity. It is not clear that Arizona will suffer more than average, as has been suggested by some — but the economy will feel hits to tourism, tax revenues and employment growth. The outlook for 2003 is for the economy to improve from 2002 levels, but we are unlikely to rebound quickly from this recession as has happened in the past.

The impact on tourism will vary by region. The urban areas are more dependent

on business travel, conferences and conventions, while the rest of the state is more leisure travel oriented. Business travel, because it is primarily by air, dropped the most dramatically following the attacks, but it has since begun to recover and will continue to improve in 2002. Travel by air for leisure purposes is likely to face a longer recovery period, but regional travel to destinations accessible by car may fare better.

The impact on state and local tax revenues may be the most visible problem as the state economy slows. State and local governments are increasingly dependent on sales taxes and becoming less dependent on income and property taxes because of tax cuts enacted during our long economic expansion. Sales and use taxes are very cyclical, rising sharply during expansions and falling sharply during recessions. Unfortunately from a budget perspective, demand for state services are counter-

cyclical, growing rapidly when the economy worsens and declining when times are good. The state is also faced with significantly lower income tax collections because of the fall in the stock market. Thus, the budgetary impact will be more pronounced than the general condition of the economy would at first suggest.

Employment in Arizona for 2001 will be only slightly (just over 1 percent) above last year. The August estimate of the number of jobs in the state was 2,310,100. The November estimate dropped by 34,500, to 2,275,600 jobs. Manufacturing and mining are the only sectors with outright declines, while construction will be either flat or negative. This represents a major change from earlier in the year, when it appeared that construction might add jobs.

— Tracy Clark
Senior Economist

Bank One Economic Outlook Center

Arizona Leading Index rises in September

The Bank One Arizona Index of Leading Economic Indicators rose in September to 111.9. The number was 0.4 percent above the 111.5 number for August, and 1.2 percent above last September's 110.6 (1987 = 100).

The inflation-adjusted value of the money supply M2, delivery times and inventories were positive. Employment from the Purchasing Managers Survey, new orders, materials inventories, sensitive materials prices, hours worked in manufacturing and the inflation-adjusted value of Maricopa County residential building permits were negative.

ANALYSIS

The upswing in this month's index may be misleading. The contribution of the money supply to the index was the third highest since the start of the index in January of 1970. Also, the delivery times lengthened primarily because of the paralysis of the air and other transport systems after Sept. 11. The number of negative factors is not encouraging, and three of the drops were substantial.

Due to the Federal Reserve's aggressive actions in the wake of Sept. 11, short-term interest rates have dropped to levels not seen since the early 1960s, which does not leave much more room for monetary action by the Fed. The rush of liquidity into the banking system helped in the first weeks following the terrorist attacks because loans did spike. However, borrowing from banks resumed the

same course after spiking, with overall loans and leases flat and commercial and industrial lending continuing to fall. Commercial paper from non-financial institutions has started to increase, likely in response to the interest rate levels. The Fed's actions have succeeded in blunting the impact of the terrorist attacks to some degree, but the economy will not take off again until businesses and individuals start borrowing again. The president and Congress have committed to stimulating the economy through increased spending and tax relief. The problem with these attempts is the slowness of the political process and the time

lag between the approval of a package and its eventual impact.

The economy should start to feel the medicine some time in the first quarter. A number of economists believe that the stimulus will be so strong that 2002 will be dramatically more robust than 2001. If this scenario unfolds, the Federal Reserve would have to reverse course and tighten monetary policy again.

— Tracy Clark
Senior Economist

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FIGURE I



Deregulation yields few choices for Arizona consumers

The Electric Power Competition Act passed in 1998 by the Arizona Legislature redefined the relationship between the consumer and publicly owned power entities. The Act was designed to provide power consumers with greater control over managing their energy costs. Arizona's Corporation Commission (ACC) and public power utilities were required to work together to ensure that rules, procedures and orders were applied uniformly statewide. For background information on deregulation in Arizona and other Western states, see the January 2000 issue of *AZB/Arizona Business* or the report on the Center for Business Research's Web site: www.cob.asu.edu/seid/cbr.

As of Jan. 1, 2001, Arizona's retail electricity market has been deregulated. Retail customers so far have had little competitive choice, as discussed in this article.

DEREGULATION IN CALIFORNIA

California was the first state nationwide to deregulate its electrical markets. Its transition away from regulation did not go smoothly, which has an impact on deregulation plans in other states. The situation in Arizona, however, is fundamentally different from that in California.

When California passed its utility deregulation law in 1996, the goal was to reduce electricity rates. However, prices rose instead as the demand for power increased while the supply of energy available to California decreased.

As the California economy expanded in the 1990s, electricity consumption increased while California's generating capacity remained stagnant. At the same time, as other Western state economies grew rapidly (led by large desert metropolitan areas in Arizona and Nevada), the pool of electricity produced in other Western states available for sale to California decreased. In addition, drought conditions in the Northwest reduced hydroelectric power generation in that region, further limiting the amount of electricity available for export to California. Without the development of additional baseload capacity, the state became increasingly reliant on more costly sources of electricity. Prohibited by the California Legislature from entering long-term supply contracts, electricity providers were forced to buy immediately available power from wholesalers on the spot market or "daily" market. California power users thus became more susceptible to price volatility.

Wholesale electricity and natural gas prices rose quickly as the supply of electricity typically available for export to California was reduced. However, retail price caps imposed by California legislation discouraged the development of new power plants. Combined with a limited capacity to import electricity, transmission limitations within the state, and the unusually warm summer in 2000, the electricity shortage resulted in rolling power blackouts.

CALIFORNIA'S EFFECT ON OTHER STATES

Over the past two years, the problems with utility deregulation in California have made the public keenly aware of shortfalls in deregulation implementation. It also brings attention to a fundamental requirement of a

deregulated market: an adequate supply of electricity and transmission capacity.

Each state has different factors to consider in developing deregulation procedures. States relying on a greater variety of fuel sources, producing a majority of their electricity, having an adequate overall supply of power, and having sufficient transmission capacity are better able to survive wholesale electricity price fluctuations in a deregulated market.

The destabilization of California's utilities market, resulting in price spikes and blackouts, has stalled the advance of retail competition in many states while a few states forge ahead with their plans. Until recently, no states had repealed current deregulation legislation. Rather, some states such as New Mexico and Montana had changed their laws

TABLE 1
WESTERN STATES RESTRUCTURING SCHEDULE
As of September 2001

	<i>Partial Deregulation</i>	<i>Full Deregulation</i>
Arizona	Dec. 31, 1998, for 20 percent of SRP's consumers; Oct. 1, 1999, for 20 percent of APS's consumers; Jan. 29, 2000 for 20 percent of TEP's consumers	Full access for all SRP consumers in June 2000, and for all APS and TEP consumers in January 2001. Price caps will be lifted in 2004 for APS and in 2008 for TEP.
California	Not Applicable	Full access on March 31, 1998 for all consumers. In April 2001, the Federal Energy Regulatory Commission announced a plan lasting up to one year to help stabilize the state's utilities market. On Sept. 20, 2001, California's Public Utilities Commission suspended consumer choice of power supplier.
Montana	July 1, 1998, for large consumers. Nov. 1, 1998, for residential and smaller consumers.	Full access for residential consumers originally planned for April 1, 2000, was delayed until 2004 by the Montana Public Service Commission due to "lack of competitive electricity supply markets."
Nevada	Originally scheduled for March 2001, but not implemented.	In April 2001, Nevada's original deregulation legislation was repealed, making it the first state to rescind a deregulation plan.
New Mexico	Originally scheduled for January 2001 for residential and smaller consumers, but not implemented.	Full access for all consumers originally planned for Jan. 1, 2001, was delayed until 2007, but utilities were authorized to build or acquire new generating plants.
Oregon	Oct. 1, 2000 for large industrial and commercial consumers.	Full access for nonresidential consumers in October 2001 was delayed until March 2002.
Texas	Pilot program, originally scheduled for June 2001, allowing 5 percent of consumers to select suppliers, was delayed until July 31, 2001.	Full access in January 2002. Some areas of East Texas are considering delaying deregulation beyond the January 2002 deadline.

Source: Energy Information Administration and the Federal Energy Management Program

to delay its onset (see Table 1). In April 2001, Nevada became the first state to officially eliminate a plan to deregulate its electricity market. Other states that were considering deregulation have determined that a competitive utilities market would raise electricity prices, and have taken no additional legislative action or have extended their research evaluation period.

As of September 2001, two of 12 Western states (Arizona and Texas) have continued implementation of the utilities deregulation process. New natural gas-powered generating stations were developed extensively to provide Texas with a copious supply of electricity. The state's pilot deregulation program initiated July 31, 2001, has had a slow start plagued with computer glitches (one generator's bid was not submitted on time causing a shortage of standby power) resulting in short-term price spikes in wholesale electricity. Also in September, Texas legislators raised the prospect of delaying full deregulation implementation past the current launch date of January 2002.

Montana, New Mexico and Oregon have delayed their deregulation process in light of California's situation. In July 1998, Montana began its first phase of deregulation by allowing its largest power users to select their power provider, and in November 1998 5 percent of residential and small consumers were able to select their electricity supplier under a pilot program. Due to the lack of a competitive electricity supply market in Montana, the Montana Public Service Commission postponed the state's implementation of full competitive access until July 2004.

New Mexico's Electric Utility Restructuring Act of 1999 would have opened part of the state's utilities market to competition by 2000 with full implementation in January 2002. In March of this year, however, deregulation and the separation of utilities was postponed until 2007.

Oregon's competitive market plan, approved in July 1999, is different from those of other states in that only non-residential consumers will have direct access. Residential power users will be offered a choice of pricing plans regulated by the Oregon Public Utilities Commission. Full access for Oregon's non-residential consumers was set to begin in October 2001. Pilot programs testing the market were completed in several Oregon communities; however, deregulation recently was delayed until March 1, 2002.

Five Western states (Colorado, Idaho, Washington, Wyoming, and Utah) have

determined that deregulation is either not a viable cost-saving option or that further research is required before making a determination about deregulation. In May 1999, Colorado's Electric Advisory Panel concluded that market restructuring would raise electricity prices. Idaho has some of the least expensive power in the country, thus no action has been taken since a deregulation report was issued to its Legislation Council Committee in January 1999. In Washington, guidelines for restructuring were issued in 1995 and the state is considering deregulation options including a pilot program, but no significant effort to deregulate has occurred. A restructuring act was introduced in Wyoming in February 2000, but additional action has not been taken. No legislative proposals for deregulation have been introduced in Utah. Instead, the state Legislature extended the time for research and evaluation by its Electrical Deregulation and Customer Choice Task Force until Nov. 30, 2002.

Reeling from soaring wholesale electricity costs, Nevada's Legislature passed emergency legislation on April 18, 2001 repealing the state's electric deregulation plan and suspending the sale of power plants. The law allows a gradual recovery of rising costs by the state's utilities.

STATUS OF DEREGULATION IN ARIZONA

An early plan to require Arizona's utilities to sell their power plants was abandoned. In contrast to California, Arizona's deregulation legislation did not require utilities to sell their power plants to third parties. Instead, they were allowed to transfer their generation into separate subsidiaries (e.g. Arizona Public Service Company (APS), APS Energy Services, and Pinnacle West Energy are subsidiaries of Pinnacle West Capital Corporation).

As of January 2001, 100 percent of Arizona's retail utilities territory was deregulated, allowing all power customers the ability to choose their electricity service provider. Full access for Salt River Project (SRP) customers began in June 2000; SRP is not under the jurisdiction of the Arizona Corporation Commission that delayed competition for Arizona Public Services and Tucson Electric Power (TEP). In January 2001, both APS and TEP opened their retail territory to competition. Retail electricity price caps imposed by the state Legislature will be lifted after a stranded cost recovery period lasting until 2004 for APS and 2008 for TEP. The stranded cost period specifies rules and limits

time under which public power entities may recover costs associated with "investments in generating capacity left stranded when a customer leaves the system."

While keeping rates down in the short term, rate reductions and rate caps as part of the deregulation process have kept retail electricity prices at an artificial level while preventing rising wholesale prices from being passed along to the consumer. By keeping electricity rates for incumbent utilities at a non-competitive level until 2004, competition for Arizona consumers by power generators new to Arizona has been deterred. Without economic profitability to attract development of power plants, new entrants would have to operate at a loss to enter the market before the rate caps are lifted.

Market competition between existing providers also has been inhibited. Although Arizona's retail electricity market was fully opened to competition in January of this year, without the entrance of new power suppliers the choice of provider in the Phoenix area is limited to APS and SRP. Since retail electricity prices were capped below wholesale rates, SRP — the lower-rate provider — will not accept customers served by APS because it cannot make a profit. In Tucson, TEP remains the sole electricity provider and has not entered the Phoenix market.

Power plants located in Arizona that are owned by traditional Arizona utilities have the capacity to produce 11,708 megawatts of power per day. Arizona utilities generated enough power to cover the 2001 summer peak demand of 11,000 megawatts per day consumed by businesses and residences. Power generation facilities located in nearby states that are partially owned by Arizona utilities produce another 4,300 megawatts of power which, presumably, is available for Arizona use.

In Arizona, 21 new plants and plant expansion applications have been brought before the ACC. Six of the applications are new plant and plant expansions proposed by APS, SRP, and TEP. One application by New York-based Caithness Big Sandy was denied and another application by locally based AES/New Energy Arizona was withdrawn when the company canceled plans for the project.

Of the planned growth of Arizona-based utilities, the first of two units at APS's West Phoenix expansion began delivering power in May 2001, and construction has begun on one of the company's generating units at the new Red Hawk plant. SRP's Kyrene expansion is

on schedule to begin delivering power in May 2002. TEP is developing and/or expanding the capacity of two plants. If these locally owned plants and plant expansions build their total planned generation capacity, they will add more than 5,700 megawatts of capacity for Arizona consumers.

Moreover, three additional plants funded by out-of-state companies are under construction. A total of 11,700 megawatts of additional capacity would be available if all of the 13 proposed non-locally affiliated plants are completed. However, most of these recently opened, under construction, and planned facilities are intended to be "merchant plants" which sell power on the open market to the highest bidder, rather than competing with Arizona utilities for customers. They have been attracted by the state's low real estate prices and faster review process. Many of the companies proposing plants in Arizona are expecting their electricity to be consumed by power-deficient California. In light of the number of merchant plants planning to locate in Arizona and send power to California, the ACC now is requesting that new applicants demonstrate their ability to transmit electricity to their intended market. Who will be held accountable for augmenting transmission capacity from and within Arizona is currently under debate.

Two new export-oriented plants were brought online this year. In June 2001, California-based Calpine opened its South Point plant near the Fort Mohave Indian Reservation. Desert Basin, constructed by Reliant of Texas in Pinal County, started delivering power in June 2001. North Carolina-based Duke/Griffith expects to have its Mohave County Griffith Energy plant operational in Fall 2001.

Three merchant plants currently are under construction with anticipated completion dates in the next two years. Construction on Sempra Energy Resource's Mesquite Generating Station in Maricopa County began last spring and is expected to be operational by October 2002. California's Pacific Gas and Electric is constructing the Harquahala power plant west of Wintersburg in western Maricopa County, to be completed by January 2003. Panda Energy is developing a large facility northeast of Gila Bend and is anticipating power delivery by June 2002.

Other out-of-state companies with plans to build power plants in Arizona are scheduled to begin over the next few years. Duke Energy of North Carolina was granted an expansion of its new Arlington facility in Maricopa County. Power Development Enterprises/Industrial Power Technology of California is planning to start building

a new power plant this fall northwest of Gila Bend in Maricopa County. PPL Global of Pennsylvania expects to have part of its Sundance Energy Project online by the summer of 2002. Allegheny Energy Supply Company's proposed La Paz Generating Facility anticipates having its first of two phases operational in late 2004 after the price caps have been lifted.

LOOKING AHEAD

While there is no prospect of increased choice for Arizona consumers in the short term, competition may increase after rate caps are lifted. However, in order to compete in the new marketplace, companies will need an economic incentive such as a large network of high-demand customers that is easily accessed and managed. Even with increased competition, it is unclear what will happen to retail rates after price caps are lifted. Lower rates will not necessarily prevail if the free-market price of electricity remains higher than the capped price, and Arizona consumers may see higher retail prices in 2004-2008 when the caps are removed. In the end, free-market rates will be determined by supply and demand.

— **Katrina S. Walls**
Research Analyst

Arizona Purchasing Managers Index falls in September

The seasonally adjusted Arizona Purchasing Managers Index fell to 39.0 in September — the lowest level since mid-1982 — from 41.4 the previous month. An index reading of over 50 indicates that the local economy is growing, while a reading below 50 suggests a slowdown in the overall level of economic activity in the near term.

ANALYSIS

The index had begun to show signs of recovery in July, but slumped in August. In a first look at business conditions prevailing after the attacks on the World Trade Center and the Pentagon, the September index shows a significant deterioration.

The biggest decline occurred in the sub-index of New Orders, which fell 8.8 points, from 44.5 in August to 35.7 in September. Rising by the same amount was the sub-index of Delivery Times, from 46.5 to 55.3. Usually a change in Delivery Times indicates a turn for the better in the economy, but here it is simply a reflection of the delays caused by

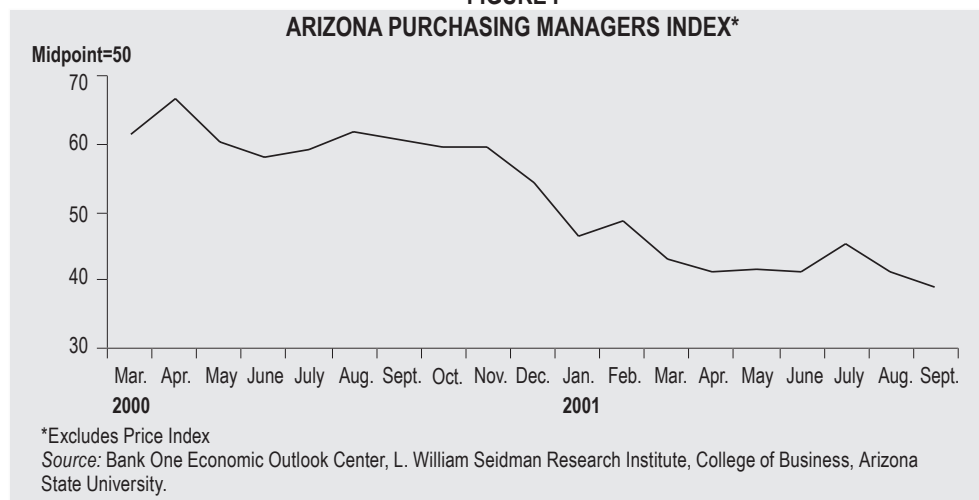
interruption in mail service, imports and exports. The employment sub-index fell from 39.5 to 33.3 as airline industry layoffs in the aftermath of the terrorist attacks begin to take their toll on local business.

The Price Index rose in September to

47.6 from 45.0 in August. This indicates more upward pressure on prices in the local economy.

— **Dawn McLaren**
Research Economist
Bank One Economic Outlook Center

FIGURE I
ARIZONA PURCHASING MANAGERS INDEX*





College of Business

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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	Percent Change from Year Ago
LEADING ECONOMIC INDEX (1987 = 100)							
Arizona	September	111.9	111.5	0.4	1.2	NA	NA
PURCHASING MANAGERS INDEX							
Arizona	September	39.0	41.4	-5.8	-35.8	NA	NA
BUILDING PERMITS (Thousands of \$)							
Maricopa County	August	817,881	761,708 r	7	16	6,853,923	14
Pima County	August	117,389	129,917	-10	24	927,474	7
Balance of State	August	186,471	163,916 r	14	26	1,273,380	6
Arizona	August	1,121,741	1,055,541 r	6	19	9,054,777	12
TOTAL HOUSING UNITS AUTHORIZED							
Maricopa County	August	3,759	3,563 r	6	7	32,347	4
Pima County	August	741	697	6	9	5,809	2
Balance of State	August	1,412	1,310 r	8	16	10,636	4
Arizona	August	5,912	5,570 r	6	9	48,792	4
HOME SALES							
Maricopa County - Number	August	8,310	10,660	-22	10.9	69,030	4.1
Maricopa County - Median Price(\$)	August	139,000	139,000	0	4	136,500	4.9
HOUSING AFFORDABILITY INDEXES							
Metropolitan Phoenix - New Homes	2nd Quarter	98	98	0	10.1	NA	NA
Metropolitan Phoenix - Resale Homes	2nd Quarter	113	117	-3.4	9.7	NA	NA
MORTGAGE RATES (30-year Fixed)							
Maricopa County	September	6.5	6.7	-3	-13.3	NA	NA
POPULATION ESTIMATES (Thousands)							
Maricopa County	<i>(The population estimates will be updated in January 2002.)</i>						
Arizona							
RETAIL SALES (Millions of \$)							
Maricopa County	August	2,379	2,293	3.8	0.7	20,050	2.4
Arizona	August	3,554	3,411	4.2	1.9	29,352	2.8

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, College of Business, Arizona State University. Retail sales data are from the Arizona Department of Revenue.