

## *Economic Forecast*

The U.S. economy has slowed.

How much it has slowed remains to be seen.

The U.S. economy will speed up again.

Exactly when it speeds up remains to be seen.

One question to ask is, “How did we get here?” The economy was running fast and smooth during the first half of 2000. Now it has slowed considerably and may even be sputtering. The following factors all played a part in the slowdown.

- ↓ The Federal Reserve, out of concern that the economy may have been running too fast, raised interest rates.
- ↓ Energy prices increased, reducing consumers’ discretionary income.
- ↓ The stock market declined, reducing the wealth effect and possibly even causing a negative wealth effect.
- ↓ Investment slowed in response to higher interest rates.
- ↓ Inventories began to accumulate as consumer spending slowed.
- ↓ Credit got tighter, leading to slower consumer and business spending and investment.

A recovery will depend on a reversal of the above factors.

- ↑ Lower interest rates will encourage both consumer spending and business investment. The Federal Reserve has already taken one step in reducing interest rates and further steps are expected.
- ↑ Lower oil and energy prices will increase consumers’ discretionary income.
- ↑ Stable and rising stock markets will encourage both consumers and businesses.

The Federal Reserve has already taken one step in reducing interest rates and further steps are expected. However, monetary policy generally operates with a six to twelve month lag. The effects of the most recent rate cut and the one anticipated this week are not expected to have any appreciable effect until mid-year. However, the cuts may act to boost consumer confidence. If consumer confidence rebounds and spending picks back up, then the length of the slowdown may be shortened.

Energy prices are dependent on supply and demand. The supply of crude oil, although not completely controlled by the OPEC cartel, is basically out of our control. The demand for crude oil and other energy is largely dependent on the weather. A severe

winter would increase prices. Demand (and price) may moderate in the spring, but will likely increase during the summer.

Even if stock markets stabilize and start rising again, investors may be wary of spending their wealth as they did before.

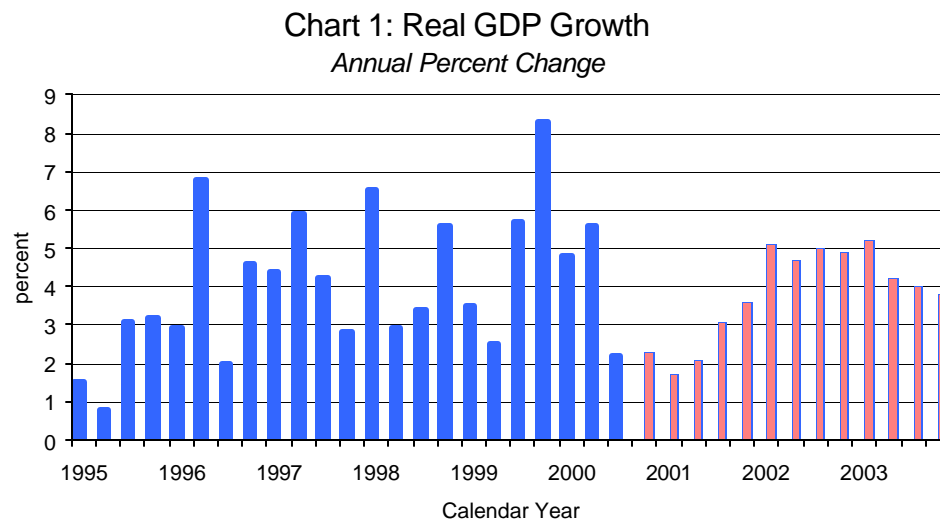
Given the current uncertainty surrounding the economy, forecasting is difficult. Different forecasting firms have different forecasts, and firms update their forecasts periodically in response to new reports or policy actions. First Union Bank, in their January 10, 2001 Monthly Economic Outlook commented,

The fact is that no one, and no model, can divine as yet if 2001 will see negative GDP. Forecasting at this point in a cycle is more intuition than modeling. There are too many unknowables.

Even though we agree with this statement, we must choose a forecast to use for our forecasts of tax revenues. DRI's January forecast was revised to take into account the early January Federal Reserve interest rate cuts. It is the most current forecast that we have access to. The forecast assumes that the current economic slowdown will last for approximately the next six months (through the remainder of fiscal year 2001). The economy is expected to pick back up during the middle of calendar year 2001 (the start of fiscal year 2002). This implies slower revenue growth for the remainder of fiscal year 2001 with healthier revenue growth for the next biennium.

## Gross Domestic Product

The chart below depicts growth in real (inflation adjusted) gross domestic product from the first quarter of 1995 through the third quarter of 2000 along with forecasted growth starting with the fourth quarter of 2000. Growth averaged 4.1 percent from the first quarter of 1995 through the second quarter of 2000 before falling to 2.2 percent during the third quarter. The advanced estimate for the fourth quarter of 2000 is to be released January 31. DRI's January forecast estimates fourth quarter GDP growth to be 2.3 percent with growth falling to 1.7 percent for the first quarter of 2001. However, Federal Reserve Chairman Alan Greenspan, in testimony before the Senate Budget Committee, commented that the economy is currently (in the first quarter of 2001) close to zero growth.



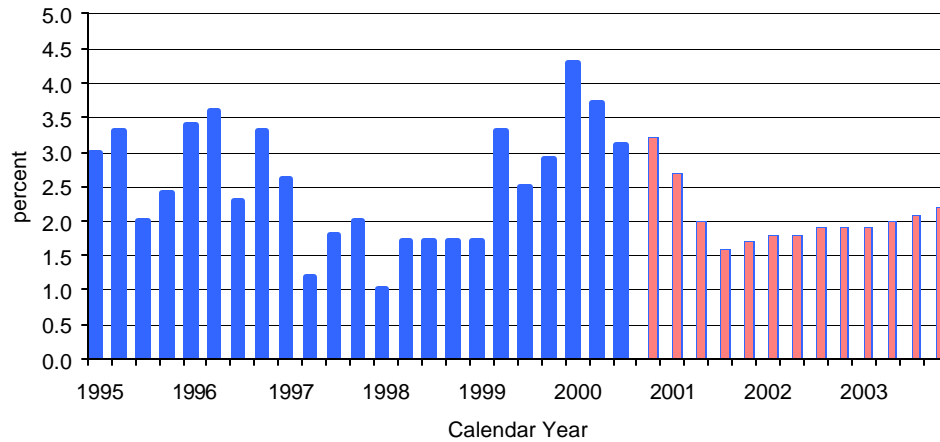
The table below contains forecasted growth in real GDP. Estimates are from the Governor's Economic Advisory Council (GEAC) November meeting and DRI's January forecast. The GEAC forecast is on an annual basis and the DRI forecast is broken down by quarter. The DRI forecast assumes slow growth for the first two quarters of calendar 2001 (the last two quarters of fiscal year 2001) with growth picking up in the third quarter of calendar 2001 (the first quarter of fiscal year 2002). Although the DRI forecast has lower GDP growth for calendar 2001 than the GEAC forecast, the forecasted growth for calendar 2002 and 2003 is greater. Based on the DRI forecast, the outlook for the next biennium is bright.

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GEAC		3.3				3.3				3.5		
DRI	1.7	2.1	3.1	3.6	5.1	4.7	5.0	4.9	5.2	4.2	4.0	3.8
DRI (yearly average)		2.6				4.9				4.3		

## *Inflation*

The chart below depicts the inflation rate (measured by changes in the Consumer Price Index (CPI)) from the first quarter of 1995 through the third quarter of 2000 along with forecasted inflation (from DRI's January forecast) starting with the fourth quarter of 2000. CPI inflation averaged 2.5 percent from the first quarter of 1995 through the third quarter of 2001. The DRI forecast has inflation averaging 1.8 percent over the next biennium.

**Chart 2: CPI Inflation**  
*Annual Percent Change*



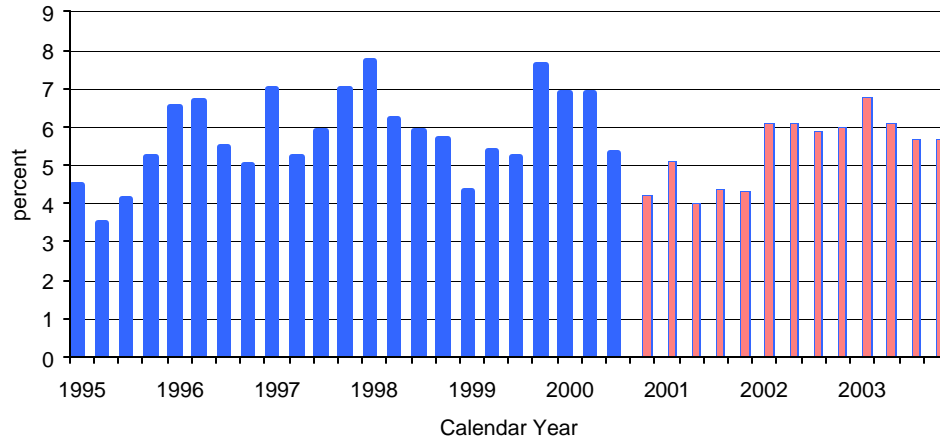
**Table 2**

	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GEAC		2.7				2.5				2.8		
DRI	2.7	2.0	1.6	1.7	1.8	1.8	1.9	1.9	1.9	2.0	2.1	2.2
DRI (yearly average)		2.0				1.8				2.1		

## Income

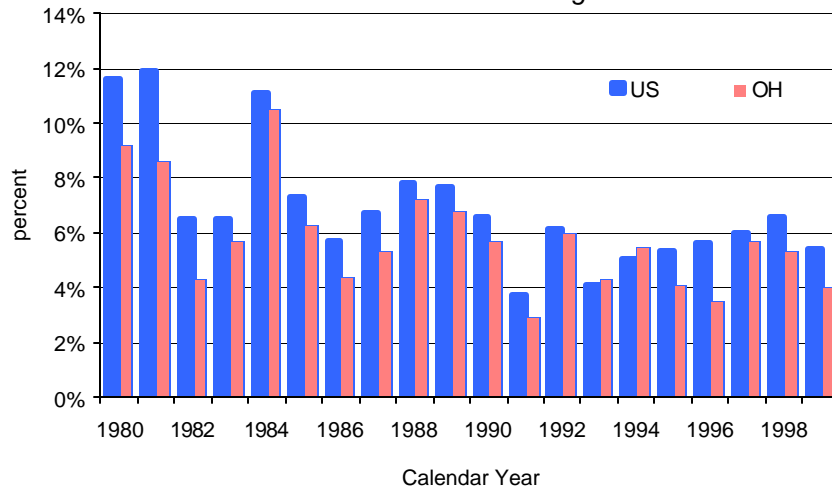
The chart below depicts growth in U.S. personal income from the first quarter of 1995 through the third quarter of 2000 along with forecasted inflation (from DRI's January forecast) starting with the fourth quarter of 2000. Income growth averaged 5.8 percent from the first quarter of 1995 through the third quarter of 2001. The DRI forecast has U.S. personal income growth averaging 4.6 percent for the remainder of fiscal year 2001 and 5.7 percent over the next biennium.

Chart 3: U.S. Personal Income Growth  
Annual Percent Change



Ohio personal income growth tends to be less than the U.S. rate. From 1980 through 1999, the U.S. average growth rate was 6.9 percent while the average for Ohio was 5.8 percent. Ohio personal income growth averaged 84.5 percent of the U.S. rate. If this relationship continues, Ohio personal income growth should be 3.9 percent for the remainder of fiscal year 2001 and 4.8 percent over the next biennium.

Chart 4: Personal Income Growth Comparison  
Annual Percent Change



The table below contains forecasted growth in personal for the U.S. and Ohio. Estimates are from the Governor’s Economic Advisory Council (GEAC) November meeting and DRI’s January forecast. The rates labeled as DRI for Ohio were calculated as 84.5 percent of their U.S. forecasted growth rate. The GEAC forecast is on an annual basis and the DRI forecast is broken down by quarter. Both forecasts have slower growth for 2001 with higher growth for 2002 and 2003. The DRI forecast has U.S. personal income growth at 5.7 percent and Ohio growth at 4.8 percent over the next biennium.

**Table 3**

U.S Personal Income	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GEAC		5.9				5.2				5.4		
DRI	5.1	4.0	4.4	4.3	6.1	6.1	5.9	6.0	6.8	6.1	5.7	5.7
DRI (yearly average)		4.4				6.0				6.1		

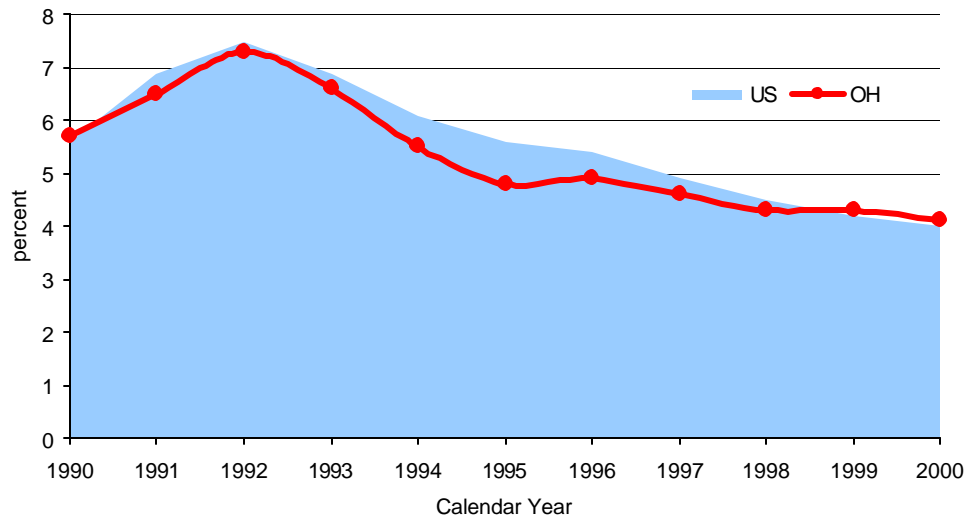
  

Ohio Personal Income	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GEAC		5.1				4.5				4.7		
DRI	4.3	3.4	3.7	3.6	5.2	5.1	4.9	5.1	5.7	5.2	4.9	4.8
DRI (yearly average)		3.8				5.1				5.2		

## Unemployment

For most of the 1990's, Ohio's unemployment rate was below the national average. As the economic expansion that started in 1992 proceeded, unemployment rates fell and both the U.S. and Ohio rates settled into a range between 3.9 and 4.2 percent. As the economy slows, these are expected to increase.

Chart 5: Ohio and National Unemployment Rates



The table below contains forecasted unemployment rates for the U.S. and Ohio. Estimates are from the Governor's Economic Advisory Council (GEAC) November meeting and DRI's January forecast. The DRI forecast for Ohio unemployment was not available. Our thought is that the increase in unemployment will be greater in Ohio due to its manufacturing concentration.

Table 4	2001				2002				2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
U.S. Unemployment Rate												
GEAC		4.2				4.4				4.5		
DRI	4.3	4.6	4.9	5.1	5.1	5.1	5.0	4.9	4.7	4.7	4.6	4.6
DRI (yearly average)		4.7				5.0				4.7		
Ohio Unemployment Rate	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GEAC		4.3				4.5				4.5		

## ***Manufacturing***

Manufacturing remains a significant sector of Ohio's economy. In 1998, manufacturing accounted for 25 percent of Ohio's gross state product and 20 percent of its wage and salary employment. By comparison, manufacturing accounted for 16 percent of U.S. gross domestic product and 15 percent of employment in 1998. Additionally, Ohio is not only concentrated in manufacturing, it is concentrated in durable goods manufacturing. In 1998, 67 percent of Ohio's manufacturing GSP came from durable goods. For the nation as a whole, the figure was 59 percent. Ohio's dependence on manufacturing is important to any Ohio forecast. Changes in the U.S. manufacturing will be felt more in Ohio than in the nation as a whole.

A recent WEFA economic briefing is titled "Traditional U.S. Manufacturing in Recession." The briefing paper distinguishes between two "distinctly different" manufacturing sectors – high tech (computer, communications equipment, and semiconductor industries) and all other (or "traditional manufacturing"). The high tech sector has in general enjoyed high growth in recent years while traditional manufacturing has experienced slower growth. In the second half of 2000, traditional manufacturing has experienced negative growth, which qualifies as a recession using the definition of two consecutive quarters of decline. Traditional manufacturing output fell at a 1.4 percent annual rate in the third quarter of 2000 and 5.1 percent during the fourth. Specific industries experiencing decline are:

motor vehicles and parts	primary metals
lumber and products	textile mill products
apparel products	petroleum products
rubber and plastic products	leather and products

Another WEFA report notes that "many industries as measured by business investment are already in a recession." Below is a list of 16 industries that are experiencing negative growth.

Negative growth in Q1, Q2 & Q3    Heavy Trucks, Service Industry Machinery

Negative growth in Q2 & Q3    Autos, Fabricated Metal Products, Household Appliances, Mining and Oilfield Machinery

Negative growth in Q3    Communication Equipment, Photocopy and related optical equipment, Aircraft, Furniture and Fixtures, Other Furniture, Equipment Scrap, General Industry Equipment, Internal Combustion Engines, Construction Machinery, and Railroads

Source: WEFA U.S. Macro Special Study, "What If: A Severe Recession," January 2001