National Economic Trends

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THE FEDERAL RESERVE BANK of ST. LOUIS

Gasoline Affordability

In February 1999, the average production worker in the United States earned $13.28 per hour, enough to buy more than 14 gallons of gasoline, which, according to a Department of Energy nationwide survey, was selling at $0.92 per gallon. By May 2004, the average hourly wage had risen about 18 percent to $15.63 per hour, but the price of gasoline had risen more than 100 percent to $1.98 per gallon. Thus, an hour of work in May would purchase less than 8 gallons of gasoline. Gasoline's increased cost has led some to speculate that Americans will lose their appetite for gas-guzzling SUVs.

February 1999, however, was the low point in the history of gasoline prices relative to hourly earnings. The average worker at that time could purchase more gasoline with an hour's wage than in any month going back to 1967. Furthermore, May 2004 is far from the high point in gasoline costs. In March 1981, the hourly wage was $7.28 and the price of gasoline was about $1.30 per gallon. The Department of Energy survey data on retail gasoline prices does not begin until 1990, but we do have the Bureau of Labor Statistics Consumer Price Index (CPI) on the average price of gasoline. This index was 26.3 in January 1967—when the average worker was paid $2.79 per hour—and rose to 113 in March 1981. The same index was 85.1 in February 1999 and 164.2 in May 2004. So the actual price paid at the pump was about 25 percent lower in 1999 than it was in 1981, and the wage rate was almost twice as high.

The chart presents an index of the cost of gasoline relative to the average hourly earnings of production workers in the United States. It is the ratio of the CPI index for the price of gasoline divided by the average hourly wage rate. During the past 38 years, the cost of gasoline relative to the wage rate has been flat, with wide fluctuation around the trend. The chart includes a trend line equal to the 1967 ratio—a time when Americans did not worry much about fuel efficiency.

Between 1967 and 1973, the price of gasoline was relatively stable while wages rose, making gasoline more affordable for the average worker. The 1973 oil price hike led to a rapid rise in gasoline prices in 1974. Afterward, gasoline costs remained relatively flat with a slight downward trend until the next oil price shock hit in 1979. Our index shows that the cost of gasoline relative to a worker's hourly wage reached a peak in March 1981, declined sharply in 1986, and remained relatively stable for the next decade. There was a brief spike in 1990 when Iraq occupied Kuwait, but the price quickly settled back to the 1967 norm.

In 1997 and 1998, falling oil prices led to a decline in gasoline prices and to a peak in the affordability of gasoline in early 1999. Since then, gasoline prices have become more volatile, but they have not strayed far from the affordability level that we saw in 1967. Unless this modestly higher price persists and continues to rise in tandem with or faster than wages, we would not expect it to dent consumer demand for SUVs.

—William T. Gavin