World oil prices rose to record highs in the summer of 2006, reaching $77 per barrel. In addition to an "uncertainty premium" brought about by the war in Iraq and the lack of excess OPEC production capacity, part of the strength in oil prices was attributed to the strength of Chinese and Indian oil demand. All previous papers on the effect of oil price shocks on world economies have emphasized the role of supply shocks. Unfavorable supply shocks have been shown to cause declines in GDP, an increased price level and higher interest rates. In looking at U.S. business cycles since World War II, the relationship between oil price shocks and U.S. economic activity seems much weaker in the current high-oil-price period. One explanation is that the relationship between oil price shocks and economic activity has been altered by changing market conditions, such as a reduction in the energy-to-GDP ratio. Another explanation is that because the price gains are the result of increased demand rather than reduced supply, the effect on the economy is less. We use a state-space model to investigate the differential effects of supply versus demand shocks. Restrictions from economic theory help identify the underlying states that drive oil price movements, where the states can be interpreted as supply or demand shocks.