Current Economic Conditions

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A QUESTION OF WHEN, NOT IF

Last month, I wrote that "only a big jump in oil prices, perhaps associated with a Russian invasion of Ukraine," was likely to move me away from my strong-growth forecast for 2022. The feared invasion began on February 24. Since then, the price of Brent Blend crude oil has risen as high as \$137/barrel, up from \$20 in April 2020 and \$70 as recently as December 1. This matters because every U.S. recession since 1973 has been preceded by both an inverted yield curve – short-term interest rates above long-term bond yields – and at least a doubling in oil prices. The synchronicity of yield curve inversions and oil price shocks makes it hard for econometric models to separate the respective impacts of rising interest rates and rising oil prices. I believe these models overstate the importance of interest rates and understate the importance of oil prices. (If any of you have ever changed an investment decision, not including a home purchase, because of a one-percentage-point change in interest rates, I'd love to hear from you.)

In theory, higher oil prices shouldn't hurt the U.S. economy as much as they did in the 1970s, for two reasons. First, the economy is much more energy-efficient than it was then, using about 25% as much



energy per dollar of Gross Domestic Product as it did then. Second, U.S. oil production has boomed since 2008. Whereas higher oil prices used to result in a major transfer of income from U.S. consumers to foreign producers, the transfer now goes from U.S. consumers to U.S. producers. That does not mean that higher oil prices don't hurt economic growth anymore, just that one transmission mechanism from higher oil prices to slower growth has been disabled. A decade ago, econometric analyses showed that a \$10/barrel increase in oil prices reduced U.S. GDP growth by 0.2-0.3 percentage points for two years. If those analyses were repeated today, I'd expect them to show a smaller impact, perhaps 0.15-0.2 percentage points.

That suggests that the recent rise in oil prices wasn't big enough to cause a recession even before prices fell back below \$100/barrel this week. (The decline reflects hopes for an end to the war in Ukraine and to COVID-related shutdowns in China.) Also, in real (inflation-adjusted) terms, \$130/barrel is well below where oil prices were in 2011 and 2012, and we did not have a recession then. However, as I said above, I believe econometric models understate the impact of oil prices. A possible reason is that oil prices have psychological effects that are disproportionate to their direct pocketbook impact. The piece of economic data that people see most often and care about most doesn't come for a government statistical agency; it's on a sign by the side of the road. Gasoline prices alternate with the unemployment rate and stock prices in driving consumer confidence. (Consumers focus on one of these at a time, not on a weighted average of all three.) The University of Michigan Consumer Sentiment Index fell in early March to its lowest level since 2011, even lower than in 2020 during the worst recession in 75 years. Former colleagues who can easily afford another \$10-20 for a tank of gas have emailed me to complain.

Past episodes suggest that sudden oil shocks can throw the economy into a recession quite quickly, while gradual increases affect the economy with a lag. In 1973 (Arab Oil Embargo) and 1990 (Iraqi



Oil Prices and Yield Curve Inversions vs US Recessions

invasion of Kuwait), oil price increases were sudden and recessions began almost and sharp. immediately. In 1978-1979 (Iranian Revolution) and 2003-2008 (surging oil imports in China), oil price increases were more gradual, and recessions began a year or more after prices turned up. In all these episodes except the lead-up to the 2008-2009 Great Recession, the yield curve was inverted before oil prices started up. Would inverted yields have caused these recessions if oil prices hadn't risen? Would oil prices have caused these recessions if the yield curve hadn't been inverted? Or did the recessions require the combination of the two? I believe either can cause a recession, but the timing of historical events makes it hard to answer these questions.

Right now, the yield curve is far from inverted. If the 10-year bond yield stays where it is, it would take seven more quarter-point increases in the federal funds rate, after this week's increase, to invert the curve. If long-term bond yields increase, as I expect, it will take even more. Historically, business-cycle peaks have occurred 8-17 months after inversion of the yield curve. This suggests that if the next recession is caused by interest-rate hikes that ultimately invert the yield curve, it won't begin before late 2023. Given the historical relationship between yield curve inversions and recessions, shouldn't the Federal Reserve simply avoid inverting the curve? Most past inversions can be attributed to the Fed's reluctance to accept the relationship as anything more than coincidence or to sudden declines in long-term bond yields that inverted the curve before the Fed could react. But in some cases, the Fed simply had no choice. They had to raise interest rates enough to invert the yield curve in order to get inflation under control. I believe that's the world we're in now. I do not believe that the Fed can bring inflation back down to their 2% target without a recession. It's just a question of when that recession will begin and how severe it will be.

Even though my inflation forecast has been the highest in the Consensus Economics survey in most months, it has still been too low. The Consumer Price Index rose 0.8% in February, pushing the (year-over-year) inflation rate to 7.9%. Given the increase in gasoline prices since the invasion, expect another big increase in March. Many analysts think the uncertainty caused by the war will cause the Fed to be more cautious in raising interest rates. I disagree, for two reasons. First, inflation is so high that the Fed can't afford to delay any longer. Second, Fed Chair Powell knows (and President Biden should know) that a mild recession in 2022 or early 2023 could be blamed on Vladimir Putin, while a deep recession in late 2023 or 2024 would be blamed on Biden and Powell. If you were Jay Powell, why would you wait?

If oil prices rebound to new highs, which is possible if sanctions are expanded to include more Russian oil and gas exports, recession could come sooner than late 2023. But strong-growth momentum continued into February. Payroll employment rose 678,000 in February, and the unemployment rate fell to 3.8%. Industrial production in U.S. manufacturing surged 1.2% to its highest level since September 2018. Housing starts, which tend to lead the overall economy, rose to their highest level since 2006.

Inflation doves tell us the current inflationary episode isn't like the 1970s. Most of the them are too young to remember the 1970s. The biggest similarity is that policy makers are blaming inflation on supply shocks, such as rising oil prices, rather than on excess demand driven by fiscal and monetary policies. In September 1973, the month before the Arab Oil Embargo, CPI inflation was 7.4%. In November 1978, the month before the Iranian Revolution sent oil prices higher, it was 8.9%. It was 7.5% the month before Russia invaded Ukraine. High oil prices might cause the next recession; they didn't cause high inflation.