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Economics Group

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Recession Risk Remains Elevated: 26 Percent Probability

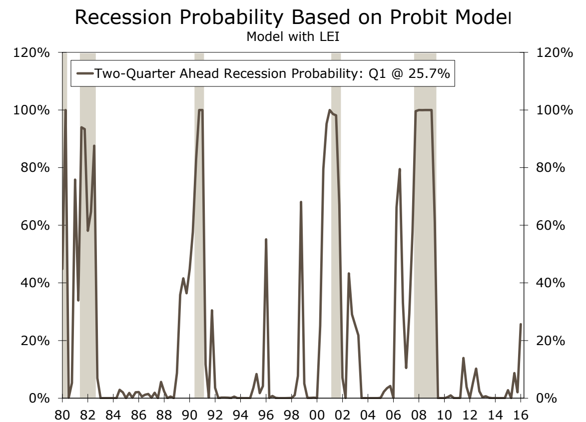
With a volatile and challenging first quarter almost in the books, the probability of a recession over the next six months is about 26 percent based on our preferred model.

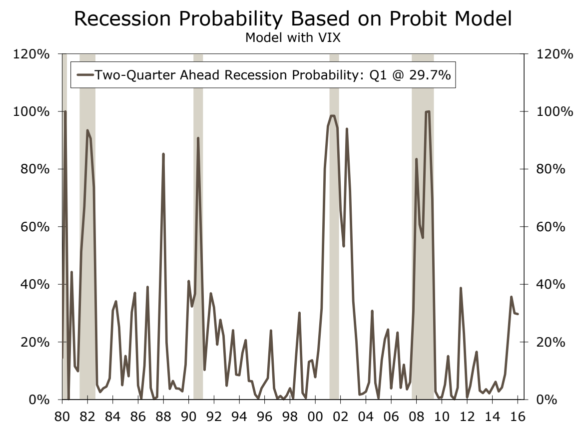
Predicting the Probability of a Recession

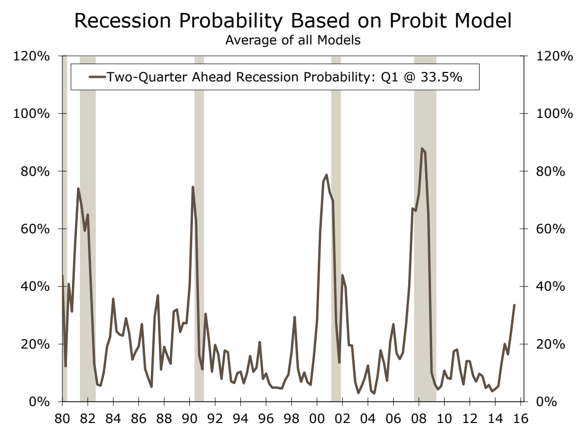
With nearly complete data for Q1 2016, our preferred recession model remains elevated relative to the past few years. Our approach uses a Probit model to predict the chances of a recession during the next six months. The model utilizes the Leading Economic Index, the S&P 500 index and the Chicago-PMI employment index as predictors. Our model has served us well; it started predicting (in real-time) a significantly higher probability of recession back in 2007 (58 percent chance of a recession in Q3 2007). In addition, we never joined the "double-dip" camp back in 2010-2012, largely because our Probit model did not indicate a high-likelihood of recession during that time period. Using the most recent data (through March 2016), our model suggests an elevated probability of a U.S. recession during the next six months (about 26 percent, top graph). The trend for the predictors, such as the S&P 500 and the LEI, has been weak the past few months. Prior to March's 0.2 percent increase, the LEI had fallen for three months in a row for the first time since the Great Recession. That said, the recent improvement in these indicators toward the end of Q1 offers some signs of positive momentum heading into the second quarter. In addition, although it is the highest reading in the post-Great Recession era, the probability is still well below the threshold of above 50 percent for a recession call.

In addition to our preferred model, we have built eight different models to capture the range of recession risk estimates posed by alternative model specifications. In a recent report on recession probabilities, we presented the results from all models, and in this update we share a few select results. One model, which utilizes the VIX to capture financial market volatility, suggests about a 30 percent probability of recession (middle graph). One way to summarize the results from these models is to average the probabilities and then examine the historical performance of this average. The current average probability is 33.5 percent, and this method predicted all recessions successfully since 1980 without producing any false positives (bottom graph).

For decision makers, the elevated recession probability based on our preferred model is a more serious sign, as the quarterly probability has not crossed the 20 percent line in the post Great-Recession era. At present, we are not calling for a recession within the next six months. However, given that the recession probabilities based on our preferred model and the average of all models are somewhat elevated, it is not wise to entirely dismiss recession risk. Our call for Q1 real GDP growth is just 0.1 percent, which is consistent with elevated recession probabilities and well-below the average quarterly growth rate of about two percent over the past five years. With this in mind, we will closely monitor the upcoming data in the coming weeks and months to assess where the U.S. economy is headed.







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