US Daily: Consensus Estimates of Recession Risk: The Wisdom of Crowds? (Struyven/Walker)

- Markets and forecasters are increasingly worried that a recession could be coming in 2019 or 2020. The consensus estimate of the probability that real GDP will be falling four quarters ahead has now reached its highest level since 2008 in the Survey of Professional Forecasters. To assess the implications, we analyze the historical performance of these consensus numbers in predicting recessions.
- While consensus rarely looks for contractions in output in its *baseline* projection, we show that consensus *probabilities* of a contraction do have significant value in predicting actual recessions. This historical predictive content, however, appears to diminish rapidly with the horizon.
- The latest consensus odds of a fall in GDP remain at levels well below those historically associated with a subsequent recession. At the 2-quarter horizon, the current contraction odds of 14% are substantially below the 40% threshold historically associated with a recession baseline. At the 4-quarter horizon, the current consensus odds of 23% imply <20% recession odds, and would have to exceed their 33% all-time high to signal a recession baseline.
- We see two takeaways. First, the fact that the higher consensus odds of a fall in GDP in 2019 are concentrated at the 3- and especially 4-quarter horizon, but remain low at shorter horizons, supports our view that a 2019 recession is unlikely. Second, the finding that the predictive content declines with the horizon diminishes the signal from the popular view that recession is coming in 2020. The "wisdom of crowds" can be useful for predicting recessions, but primarily at relatively short horizons.

Jan Hatzius
+1(212)902-0394 | jan.hatzius@gs.com
Goldman Sachs & Co. LLC

Alec Phillips
+1(202)637-3746 | alec.phillips@gs.com
Goldman Sachs & Co. LLC

David Mericle
+1(212)357-2619 |
david.mericle@gs.com
Goldman Sachs & Co. LLC

Spencer Hill
+1(212)357-7621 | spencer.hill@gs.com
Goldman Sachs & Co. LLC

Daan Struyven
+1(212)357-4172 |
daan.struyven@gs.com
Goldman Sachs & Co. LLC

Brian Chen
+1(212)357-8483 | brian.chen@gs.com
Goldman Sachs & Co. LLC

David Choi
+1(212)357-6224 | david.choi@gs.com
Goldman Sachs & Co. LLC

Blake Taylor
+1(202)637-3756 | blake.taylor@gs.com
Goldman Sachs & Co. LLC

Ronnie Walker
+1(917)343-4543 |
ronnie.walker@gs.com
Goldman Sachs & Co. LLC

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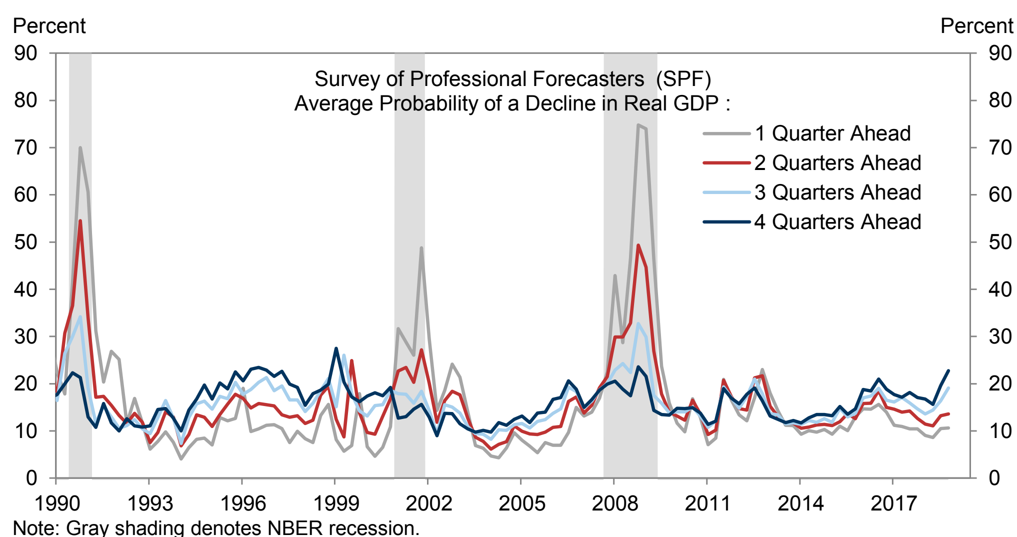
Consensus Estimates of Recession Risk: The Wisdom of Crowds?

Markets and forecasters are increasingly worried that a recession could be coming in 2019 or 2020. For instance, the Blue Chip consensus sees >20% odds that a recession starts in 2019 and >30% odds that a recession starts in 2020.

Exhibit 1 shows that consensus concerns about a 2019 recession are mostly focused on the second half of the year. While the consensus estimate of the probability that real GDP will be falling four quarters ahead has now reached its highest level since 2008 in the Survey of Professional Forecasters (SPF), the odds remain low 1 and 2 quarters ahead. To assess the implications, this comment analyzes the historical performance of consensus in predicting recessions.

Exhibit 1: Consensus Probability of a Decline in Real GDP 4Q Ahead at Highest Level Since 2008



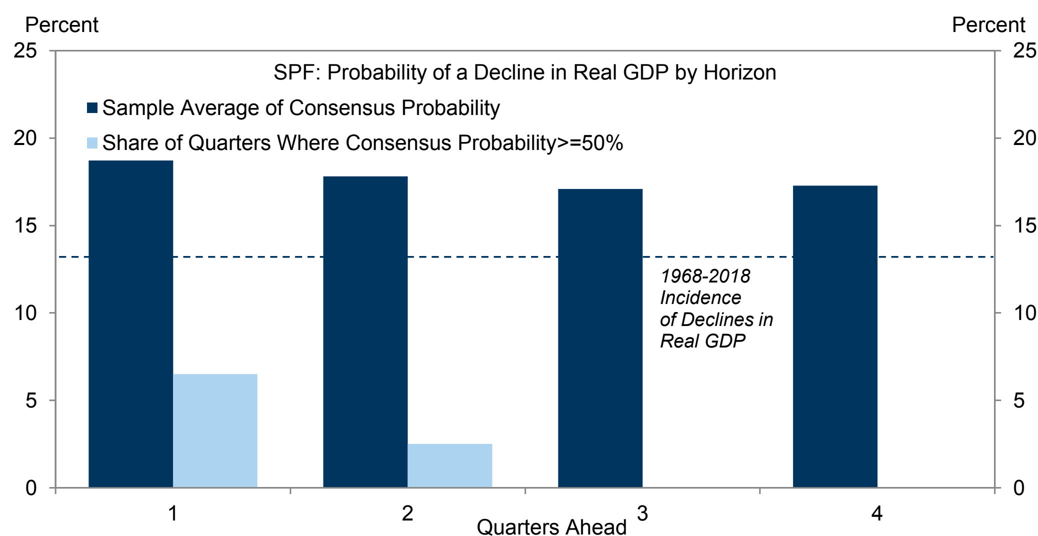
Source: Federal Reserve

To quantify the signal from recession risk estimates, we look at the history of SPF consensus probabilities of a decline in output 1, 2, 3 and 4 quarters ahead. Exhibit 2 summarizes the available data (back to 1968).

Two observations stand out. First, the consensus probability of a decline in real GDP rarely exceeds 50% at any horizon, and has actually never risen above 50% 3 or 4 quarters ahead.[1] Forecasters typically do not look for falling GDP in their baseline more than 2 quarters ahead of an actual contraction. And when a contraction occurs, their base case is that it will be short-lived. Second, while estimates of the probability of a fall in output have rarely risen above 50%, they have exceeded, on average, the realized probability of quarterly output declines of 13% over the period 1968-2018.

[1] The only period outside of an NBER recession where SPF consensus had greater than 50% odds of a fall in GDP two quarters ahead started in 1979Q3 and extended through the recession that started in 1980Q2.

Exhibit 2: Consensus Odds of a Contraction Rarely Exceed 50%



Source: Federal Reserve, Goldman Sachs Global Investment Research

While consensus rarely looks for contractions in output in its *baseline* projection, we show that consensus *probabilities* of a contraction do have significant value in predicting actual recessions. To illustrate this, Exhibit 3 shows the fitted recession odds from a probit model that explains the incidence of an NBER recession using the SPF probabilities of a decline in real GDP and a constant. In practice, the model simply rescales the SPF forecasts non-linearly, taking into account that forecasts tend to be quite clustered and rarely exceed 50%.

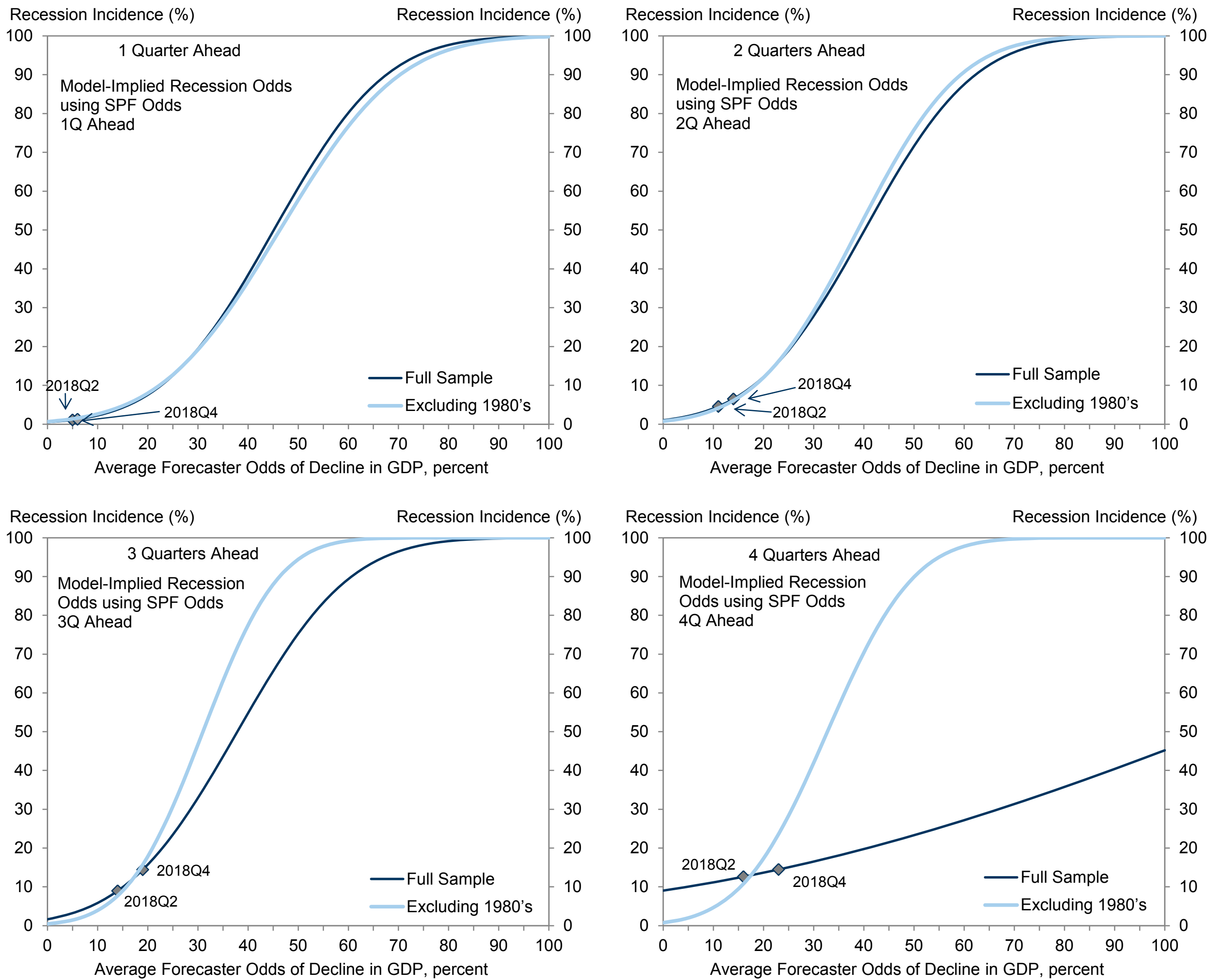
We present results both for the entire 1968-2018 period and a second sample that excludes the 1980s, which may be less comparable to today as the double dip of the early 80s recessions led to a systematic upward shift in the reported SPF contraction odds.

Two results stand out. First, a rise in the SPF contraction probability beyond the 20% range is quite informative about the risk of recession. Second, the predictive content tends to diminish with the forecast horizon.[2] This loss of forecasting power is more pronounced in the full sample, which includes the 1980s. To see this, note that a completely horizontal line provides no incremental information relative to the realized historical recession probability. And as the dark blue line in the bottom right panel shows, the 4-quarter ahead fitted curve for the full sample is fairly horizontal.[3]

[2] The pseudo R-squared values—a standard measure of goodness of fit for probit models—in the restricted sample equal 40%, 25%, 15% and 7% for the 1-,2-,3-, and 4- quarter horizons, respectively.

[3] The results are qualitatively similar when using a simple linear regression model.

Exhibit 3: Consensus Odds of a Contraction Have Highest Value in Predicting Recessions at Short Horizons



Source: Goldman Sachs Global Investment Research

Exhibit 3 also displays the recession odds implied by the most recent SPF responses. Overall, the consensus odds of a fall in GDP remain at levels well below those historically associated with a subsequent recession. For instance, at the 2-quarter horizon, the current contraction odds of 14% are substantially below the 40% threshold historically associated with a recession baseline.[4] At the 4-quarter horizon, the current consensus odds of 23% imply <20% recession odds, if we average the 14% full sample number and the 24% number from the restricted sample. In fact, the 4-quarter consensus odds would have to exceed their 33% all-time high to signal a recession baseline.

What may explain these characteristics of consensus recession forecasts? The most straightforward explanation is that recessions are simply very difficult to anticipate. Another interpretation from behavioral economics is that forecasters tend to update

[4] The 40% threshold historically associated with a recession baseline at the 2-quarter horizon conditions on currently being in an expansion. This threshold and the thresholds at the other horizons are similar when including recession starting points.

their baseline recession risk in the right direction, but too conservatively. As a result, their baseline projection rarely includes a recession, perhaps reflecting belief perseverance, overconfidence, or career risk considerations—i.e. an excessive aversion to the risk of calling a recession that does not happen because it mars a forecaster in the public eye.

Overall, we see two takeaways. First, the fact that forecasters see a decline in GDP in the next couple of quarters (the horizon at which it has the best track record) as very unlikely supports our view that the risk of a recession in 2019 is still low. Second, while the consensus probability of recession at longer horizons of 3-4 quarters has increased—a move that is consistent with our view of rising risks beyond 2019—our analysis shows that the predictive content of these longer-term estimates is relatively low.

Daan Struyven

Ronnie Walker

Disclosure Appendix

Reg AC

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