Economic Research Note

ECB forward guidance: more clarity needed

- ECB’s reaction function is driven by factors it tends to downplay, e.g., capacity use and core inflation
- Its forward guidance is based on such variables, but ECB must also clarify how it thinks these will evolve

Since early July, the ECB has been giving forward guidance to ensure that term interest rates in the Euro area are not influenced too much by external factors, in particular by Fed action. The ECB has left ambiguous what “extended” means in practice, but Draghi said in early August that rate hike expectations in markets were “unwarranted.” Given the level of forward rates at the time, this suggested an “extended” period that is significantly longer than two years. Rate expectations in markets have increased further since then. To some extent this reflects further spillover from the US, but it also reflects uncertainty about how the ECB will respond to better growth.

We see two issues if the ECB is to make its guidance credible. First, it must be clearer about its reaction function and explain that its behavior and the inflation process are driven by slower-moving level variables (e.g., the output gap and the unemployment rate) rather than growth momentum. Second, it must clarify how it sees these slower-moving level variables evolving as the economy recovers.

The ECB’s pre-crisis reaction function

There can often be a very large gap between the ECB’s rhetoric and how it actually sets policy. The rhetoric typically downplays the role of the output gap and core inflation outputs as variables that help to gauge the underlying inflation pressures in the region. Instead, the ECB has emphasized anchored inflation expectations and nominal rigidities in moving inflation back up to the target, even when unemployment is high and resource use is low. The ECB has also had a tendency to worry a lot about increases in headline inflation caused by global energy and food prices, partly because of what it might do to wage setting and partly because it has viewed rising commodity prices globally as revealing something about global slack and imported price pressures.

However, the ECB’s actual behavior before 2008 can be explained very well using exactly those variables that the central bank has tended to downplay. A simple reaction function, that has tracked the main policy rate very closely over this period, uses only four variables: capacity utilization in manufacturing (from the European Commission survey), the current level of core inflation, the level of the nominal effective exchange rate, and recent M3 growth (corrected for portfolio shifts after 2001). And, even on its own, the European Commission’s latest estimate of the output gap explains 88% of the variation of the ECB’s main refinancing rate between 1999 and 2007.

Back to the old reaction function

Since early 2008, it has been much harder to explain the ECB’s interest rate setting decisions using such reaction functions. Our preferred reaction function (first chart) was predicting a highly negative policy interest rate by late 2008, while the ECB stopped short of the zero lower bound by cutting its main refinancing rate to only 1%. To some extent, this may have been because the 2008-09 recession was concentrated in manufacturing, so that capacity utilization in that sector overstated the size of the output gap in the broader economy.
Broader measures of slack suggest that the ECB had eased too little for only a short period in 2009 (if using the EC’s output gap estimate) or that the ECB has been setting policy appropriately at all times (if using a very simple measure of the unemployment rate gap). Interestingly, all reaction functions predicted the two rate hikes in early 2011.

More recently, even our preferred reaction function (first chart on previous page) has become more aligned with where the ECB has set its policy interest rate. And, conceptually, the ECB’s new forward guidance is now pointing to the same variables that feed into this reaction function. In particular, the ECB’s expectation that rates can remain low for an “extended period” is based on a “subdued outlook for inflation” given the broad-based weakness in the real economy and “subdued monetary dynamics.” Later, the ECB added that the “broad-based weakness in the real economy” refers to the “subdued trend in aggregate demand in an environment of weak labor market conditions and low capacity utilization.” The language could be clearer, but the guidance is effectively built on the view that unemployment is high and the level of activity is low, i.e., that there is slack in the economy.

The outlook for slack

Even if the ECB clarifies that the output gap and capacity are key inputs into its reaction function, the ECB will also have to clarify how it expects measures of slack to evolve.

- **Unemployment to stay high, but what about the natural rate?** A simple Okun’s law relationship suggests that the unemployment rate in the Euro area is unlikely to fall much from its current level of 12%, even if the economy grows at a 1.5% q/q pace next year (as both we and the ECB expect). But, even if correct, the natural rate may rise over time if hysteresis becomes a problem. We note that, rather than setting policy to the level of the unemployment rate, the ECB has in the past set policy much more closely to the unemployment rate gap (i.e., the divergence from the natural rate). If the natural rate is expected to rise over time, the ECB’s assessment of downward inflation pressures will also change.

- **Capacity use could rise quickly.** Capacity utilization in manufacturing has seen huge swings since 2008, which have been hard to explain with output-based measures of manufacturing activity (e.g., the PMI and IP). This creates some uncertainty. Based on the pre-2008 relationship between capacity use and the PMI (or IP), our growth forecast is not firm enough to push capacity use up in the coming quarters (e.g., it did not rise between 1Q03 and 4Q05 even though IP grew at a 1.7% q/q annualized pace). But, the post-2009 relationship implies a higher sensitivity of capacity use to the PMI (and IP growth). If it continues to hold, then capacity use will rise rapidly in the coming quarters.

**Some clarification would help**

Our own view is that the output gap is larger and that it will not fall as quickly as assumed, for example by the European Commission. Hence, we think that inflation will remain low, which should convince the ECB to stay on hold for a long time (we expect until autumn 2016). But, even if the ECB ends up staying on hold for such a long period, it must be convinced of this ex ante if it is to give strong guidance.

For this, it needs to clarify how it thinks slack will evolve. In particular, the ECB must address the assumption about a very weak supply-side that is implicit in the European Commission’s forecasts and much of its own commentary. In particular, with a very weak supply side, a number of reaction functions would point to rate hikes starting earlier than Draghi has implied. We also note that in its June forecasts, the ECB staff noted that core inflation was likely to edge lower this year (due to weak activity) and edge higher next year (due to modestly recovering activity). This hints at a shrinking output gap.
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