

Economics Group

Interest Rate Weekly

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Multiple Markets, Multiple Surprises: A Bumpy Ride Ahead?

Our emphasis on a multimarket economy focuses on the linkages between sectors and markets. Evaluating the behavior of a particular series is essential for decision-makers as they design and implement policy.

Rate Setting in Global Capital Markets

Traditionally, analysis starts with the domestic and then moves internationally. Let's reverse the process. As illustrated in the top diagram, there appears to be a link between the EUR/USD exchange rate and the German/USD 2-year spread. If there is a relationship, the next natural question is whether that relationship is statistically significant? Before we jump to test for a statistical relationship, we must make sure both series are mean-reverting (stationary and no structural breaks). Put simply, if both series are mean-reverting and have a statistically significant relationship then we can forecast a path for the EUR/USD using the interest rate spread. However, both series are non-stationary and suffer breaks during the 2000-2017 period, thus they are not mean-reverting. This result is not very surprising to us, as both the U.S. and Eurozone have had divergent monetary policies as well as different paces of economic growth. For example, the German 2-year bund yield entered into negative territory in July 2012 and has remained there since August 2014. The U.S. 2-year yield remains positive in our sample period of 2000-2017.

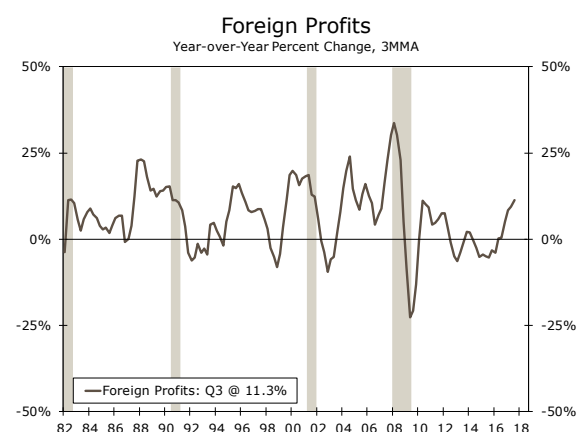
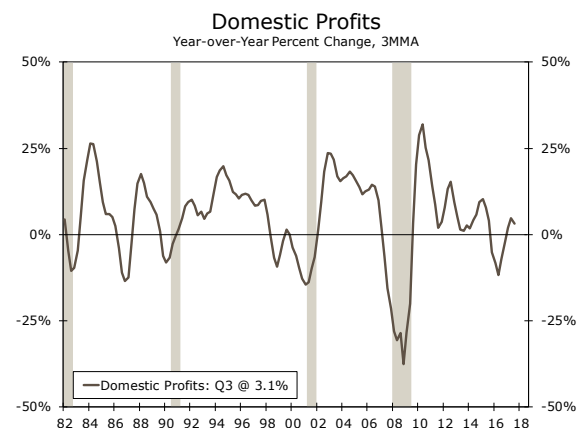
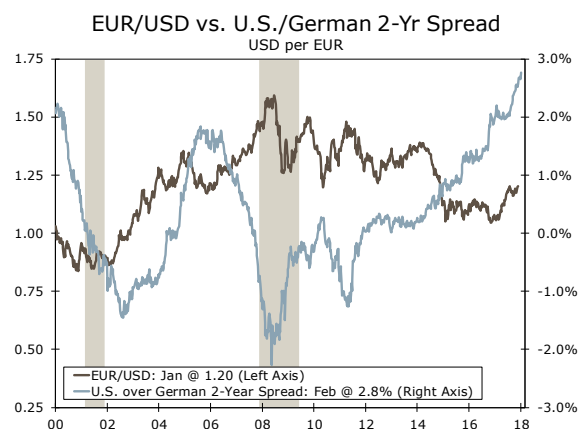
Domestic Profits: Mean Reverting

Domestic corporate profit growth rates turn out to be mean-reverting for the 1982-2017 period, middle graph. The long-run mean appears to be around 7 percent. That is, profit growth moves around the average growth rate during the sample period. There are some deviations (stronger/weaker periods of growth) from the mean, but those deviations are temporary in nature. Thus, decision makers are able to generate a reliable forecast of domestic profit growth using a set of predictors.

Foreign Profits: Not-Mean Reverting

Conversely, the foreign profit growth rate series has a break in Q4-2008 and the series has shifted downward since then, bottom graph. In other words, the effect of the Great Recession on foreign profit growth was long lasting. Potential reasons of the break includes a slower global recovery from the recession compared to the U.S.

In sum, when analyzing multiple markets, decision-makers must evaluate the behavior of each market in order to understand the underlying structures of those markets. Furthermore, graphs are a useful tool to illustrate different market activities, however, statistical tools will help to estimate a precise relationship (or no relationship) between markets of interest. Specifically, when dealing with multiple countries (exchange rates or/and interest rates spread) then a careful analysis is needed to form reliable decision making. Because, sometimes, different countries follow different stance of monetary policy (and fiscal policy). Therefore, a re-evaluation of existing relationships is a key to effective decision making.



Wells Fargo U.S. Interest Rate Forecast

| | Actual | | | | Forecast | | | | | | | |
|----------------------------|---------------|-----------|-----------|-----------|-----------------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|
| | 2017 | | | | 2018 | | | | 2019 | | | |
| | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Quarter End Interest Rates | | | | | | | | | | | | |
| Federal Funds Target Rate | 1.00 | 1.25 | 1.25 | 1.50 | 1.75 | 2.00 | 2.25 | 2.25 | 2.50 | 2.50 | 2.75 | 2.75 |
| 3 Month LIBOR | 1.15 | 1.30 | 1.33 | 1.69 | 1.90 | 2.15 | 2.40 | 2.40 | 2.65 | 2.65 | 2.90 | 2.90 |
| Prime Rate | 4.00 | 4.25 | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 | 5.25 | 5.50 | 5.50 | 5.75 | 5.75 |
| Conventional Mortgage Rate | 4.20 | 3.90 | 3.81 | 3.94 | 4.25 | 4.25 | 4.35 | 4.45 | 4.55 | 4.60 | 4.72 | 4.77 |
| 3 Month Bill | 0.76 | 1.03 | 1.06 | 1.39 | 1.60 | 1.85 | 2.10 | 2.15 | 2.35 | 2.40 | 2.60 | 2.65 |
| 6 Month Bill | 0.91 | 1.14 | 1.20 | 1.53 | 1.70 | 1.95 | 2.20 | 2.25 | 2.45 | 2.50 | 2.70 | 2.75 |
| 1 Year Bill | 1.03 | 1.24 | 1.31 | 1.76 | 1.90 | 2.05 | 2.25 | 2.30 | 2.50 | 2.55 | 2.75 | 2.80 |
| 2 Year Note | 1.27 | 1.38 | 1.47 | 1.89 | 2.20 | 2.30 | 2.45 | 2.55 | 2.70 | 2.80 | 2.93 | 3.00 |
| 5 Year Note | 1.93 | 1.89 | 1.92 | 2.20 | 2.60 | 2.70 | 2.80 | 2.88 | 2.93 | 2.97 | 3.10 | 3.17 |
| 10 Year Note | 2.40 | 2.31 | 2.33 | 2.40 | 2.80 | 2.85 | 2.95 | 3.05 | 3.15 | 3.20 | 3.32 | 3.37 |
| 30 Year Bond | 3.02 | 2.84 | 2.86 | 2.74 | 3.15 | 3.25 | 3.35 | 3.45 | 3.52 | 3.55 | 3.66 | 3.70 |

Forecast as of: February 7, 2018

Wells Fargo U.S. Economic Forecast and FOMC Central Tendency Projections

| | <u>2017</u> | <u>2018</u> | <u>2019</u> |
|--|--------------------|--------------------|--------------------|
| Change in Real Gross Domestic Product | | | |
| Wells Fargo | 2.5 | 2.9 | 2.9 |
| FOMC | 2.4 to 2.5 | 2.2 to 2.6 | 1.9 to 2.3 |
| Unemployment Rate | | | |
| Wells Fargo | 4.1 | 3.8 | 3.7 |
| FOMC | 4.1 | 3.7 to 4.0 | 3.6 to 4.0 |
| PCE Inflation | | | |
| Wells Fargo | 1.7 | 1.9 | 2.1 |
| FOMC | 1.6 to 1.7 | 1.7 to 1.9 | 2.0 |
| "Core" PCE Deflator | | | |
| Wells Fargo | 1.5 | 1.9 | 1.9 |
| FOMC | 1.5 | 1.7 to 1.9 | 2.0 |

Forecast as of: February 7, 2018

NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation is the percentage rate of change in the price index for personal consumption expenditures (PCE). Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated.

Fed Data as of: December 13, 2017

Source: IHS Global Insight, Bloomberg LP, Federal Reserve Board and Wells Fargo Securities

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