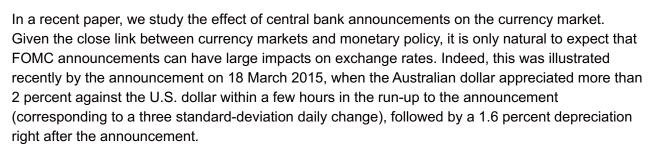
## Some currency trading positions yield increased returns around Fed announcements

The announcements of the Federal Reserve Bank can have huge impacts on the world currency market. Alireza Tahbaz-Salehi, Andrea Vedolin and Philippe Muelle argue that these impacts reflects the high degree of monetary policy uncertainty.

Announcements by the Federal Open Market Committee (FOMC), which occur regularly at prespecified dates, are one of the most highly anticipated events by investors around the world. Through these announcements, the Federal Reserve communicates monetary policy in the form of setting the target federal funds rate which is the interest rate at which financial institutions lend to each other overnight.





In this paper, we document that announcements by the FOMC have an economically and statistically significant impact on the excess returns of a host of different currencies vis-a-vis the U.S. dollar. More specifically, by relying on high-frequency data, we document that a trading strategy that is short the U.S. dollar and long other currencies exhibits significantly larger excess returns on days with scheduled FOMC announcements relative to non-announcement days. Crucially, the excess returns earned by following such a strategy span the entire announcement day, consisting of a pre- as well as a post-announcement component. We also document that these excess returns (i) are higher for currencies with higher interest rate differentials vis-a-vis the U.S.; (ii) increase with market participants' uncertainty about monetary policy; and (iii) intensify when the Fed adopts a policy of monetary easing.

We interpret these findings through the lens of a parsimonious model of exchange rate determination, in which constrained financiers with short investment horizons intermediate global demand for currencies. These financiers can actively engage in currency trades, but have a downward-sloping demand for risk taking, which limits their risk-bearing capacity. Such a limit can arise for a variety of reasons, such as limited commitment frictions or value-at-risk constraints. Higher currency returns during announcement days are meant to compensate investors for the uncertainty in monetary policy, hence, even if the Federal Reserve does not take any action or leaves the target federal funds rate as is, investors will earn a premium for holding the currency during these risky days. This is what







we label the pre-announcement return. In addition to this effect, however, the actual realization of the monetary policy shock (i.e. whether the Federal Reserve ultimately changes the interest rate) also has an effect, leading to what we call the post-announcement effect. Indeed, we know that an ex post adoption of an expansionary monetary policy (corresponding to an interest rate reduction by the Fed) further increases currency returns.

To empirically study currency risk premia around announcement days, we use 20 years of high-frequency data for the ten most traded currencies. We find that, in line with our theoretical model, a simple trading strategy that is short the U.S. dollar and long the other currencies yields economically significant returns on announcement days compared to non-announcement days. Furthermore, we document that returns earned on the eight announcement day account for a significant fraction of the currencies' yearly excess returns. Crucially, we also find that currencies exhibit excess returns that span the entire announcement day, consisting of a pre- and a post-announcement component, as predicted by our model.

Our explanation for these large returns around announcement days is that they reflect a premium for heightened monetary policy uncertainty or more generally a tightening of financiers' risk-bearing capacity. Using different proxies for monetary policy uncertainty (such as an implied volatility index from Treasury futures options and an uncertainty measure constructed from survey forecasts about the future federal funds rate), we find that an increase in market participants' uncertainty is indeed associated with higher returns around FOMC announcement days.

Featured image credit: Wall Street, by Butz.2013 CC-BY-2.0

This article was originally posted on LSE Business Review, and is based on the authors' paper Exchange Rates and Monetary Policy Uncertainty (December 2015), LSE's Systemic Risk Centre.

Please read our comments policy before commenting.

Note: This article gives the views of the author, and not the position of USAPP – American Politics and Policy, nor the London School of Economics.

Shortened URL for this post: http://bit.ly/214QLkd

## About the authors

Alireza Tahbaz-Salehi - Columbia Business School

Alireza Tahbaz-Salehi is Daniel W. Stanton Association Professor of Business at Columbia Business School. His research focuses on the implications of network economies for business cycle fluctuations and financial stability.



## Andrea Vedolin – LSE Department of Finance

Andrea Vedolin is an assistant professor in the Department of Finance at the London School of Economics and Political Science. Her research focuses on theoretical and empirical asset pricing.



## Philippe Mueller – LSE Department of Finance

Philippe Mueller is an assistant professor in the Department of Finance at the London School of Economics and Political Science. His research interests are in financial econometrics, empirical asset pricing and macro-finance.



• CC BY-NC 3.0 2015 LSE USAPP