

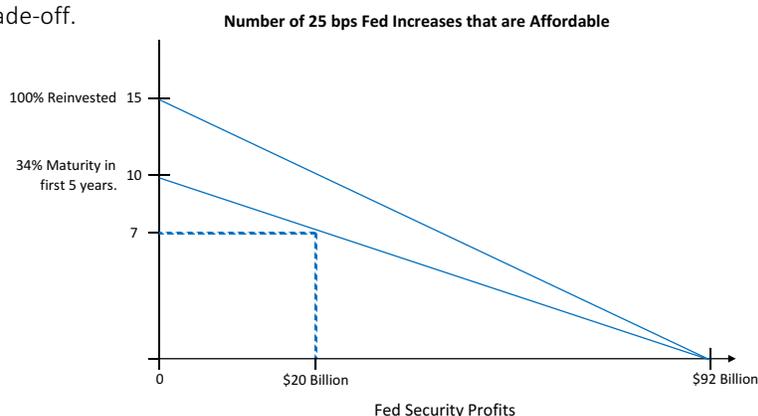
Quantitative Easing seems like such a wonderful free lunch. The Fed buys Treasuries, helps finance the Federal deficit and gives almost all the interest income back to the Treasury. Currently the Federal Reserve owns about 15% of all the government debt held by the public. It was definitely fun.

Oh, Oh! Now it could be that the free lunch comes with a bill. The Federal Reserve faces a trade-off as it begins to plan for running off the securities it owns in its SOMA account. It acquired these Treasuries through 3 separate Quantitative Easing programs, which consisted of buying Treasury securities and agency mortgage backed securities by simply giving the prior owners "a credit" at the Fed. These credits, as planned, resulted in a substantial amount in excess reserves in the banking system. To correct a common misconception, excess reserves are not part of the money supply. Banks can use these reserves to create loans, which is then transformed into the money supply. The great inflation, forecasted by those that did not understand this, did not occur.

Excess reserves are currently slightly more than \$2 trillion dollars. By selling Treasuries (or simply letting them mature) the asset is transferred to a new owner and some of those excess reserves are used up in the Treasury purchase. To get rid of these excess reserves you need to sell securities. However, only 34% of the current holdings in the Fed SOMA account mature in the next 5 years. Since most securities have longer maturities than five years this implies that the Fed will have an impact on longer term rates (increasing) if it plans to run off its portfolio faster than its maturity profile.

As we reviewed a couple of weeks ago it costs the Fed substantial resources to increase short-term rates and maintain its 25-bps range. However, if SOMA securities are not reinvested (or if they are simply sold) there would be less cash flow available to the Fed to support the range of Fed Funds. Additionally, if SOMA securities are not reinvested, *ceterus paribus*, rates should increase along the yield curve, which would impact the value of the remaining Fed holdings.

There is a trade-off, or rather a balancing act, that the Fed needs to do to end its excess security holdings. The more securities that it sells the less it can afford to increase rates, and the less it sells the higher the rates it can afford to maintain the 25-bps range. The graph below illustrates this trade-off.



Given our prior analysis if the Fed never sells any securities but, instead, reinvests everything and maintains the current securities level, the Fed could afford 15 more 25 bps increases from the current level, to a range of 4.5% - 4.75%.

If the Fed simply ran off its holdings as securities matured over the next five years then the Fed could afford a range of the Fed Funds rate from 3.25% - 3.50%.

From the above chart if the Fed wanted to maintain its profitability of about \$20 billion dollars as it was prior to the Great Recession, then the Fed could afford approximately 7 increases of 25-bps each, bringing the affordable Fed Funds range down to 2.50% - 2.75%.

The Fed faces a tricky trade off which has not been highlighted in the discussions of decreasing the current security portfolio. The Fed could save money by widening the current 25-bps range, but this would lead to more short-term rate volatility.

Buying the Treasuries was easy and fun. Getting rid of them is a more complicated matter.