A Note on the 'New Normal' of Central Bank's Balance Sheet Yosuke Takeda, Yuki Fukumoto and Yasuhide Yajima January 12, 2018

Abstract

We consider the 'new normal' toward which a central bank tapers its balance sheet once expanded with unconventional monetary policy measures. The new normal balance sheet should be resilient to a next-coming financial crisis (Romer and Romer, 2017). How large should be a size of the balance sheet? What composition would be optimal? In order to evaluate these quantitative issues, we exploit a model of Stein (2012) and Greenwood et al. (2015) taking into account central bank's maturity transformation and excess reserve's liquidity service. In our 3-period model of debt management with a central bank's balance sheet, the new normal policy instruments are both interests on excess reserves and reverse repurchase facility. As policy effects on social welfare, there are four mechanisms to consider: lowering tax rate; smoothing tax distortion; providing liquidity service; and lowering fire-sale cost. The model suggests that in the face of higher interest rate risk as in financial crises, the central bank should make the balance sheet of larger size and also composed of more short-term bonds than otherwise. It also implies that compared with the old *bills-only doctrine*, the new normal central bank is required a significantly larger size of balance sheet with more short-term bonds, especially in high interest rate risk.