Disintermediating the Federal Funds Market

Tsz-Nga Wong
FRB Richmond

Mengbo Zhang
UCLA

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We document a new channel mediating the effects of monetary policy and regulation, the disintermediation channel. When the interest rate on excess reserves (IOER) increases, fewer banks are intermediating in the Fed funds market, and they intermediate less. Thus, the total Fed funds traded decreases and the dispersion of Fed fund rates widens. Similarly, disintermediation happens after Basel III and raising the balance sheet cost. The magnitude of the disintermediation channel is significant and comparable to the direct channel, for example, of IOER, which is insignificant. To explain that, we develop a continuous-time search-and-bargaining model of divisible funds that includes the matching model (e.g. Afonso-Lagos ECTA 2015) and the transaction cost model (e.g. Hamilton JPE 1996) as special cases. We solve the equilibrium in closed form, derive the dynamic distributions of trades and Fed fund rates, and the stopping times of entry and exit from the Fed fund market. IOER reduces the spread of marginal value of the fund, and hence the gain of intermediation. In general, the equilibrium is constrained inefficient, as banks trade too frequently.

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