

The Reversal Interest Rate and Low Profitability Channel of

Negative Interest Rates in Bank Lending

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Abstract. In this paper, we examine the effects of negative interest rate policy on loan amounts and firm fixed investments using bank-firm matched data for Japanese listed firms and then provide new insights into the reversal interest rate hypothesis. To this end, we thoroughly exploit the situation where the introduction of a negative policy rate (NPR) by the Bank of Japan in February 2016 was unforeseen by Japanese banks. By employing causal estimation methods, we find that the introduction had a negative impact on the loan amounts from banks that were exposed to NPR. Furthermore, firms that borrowed from the NPR-exposed banks reduced their fixed investments. Next, assuming that the NPR-exposed banks faced a reversal interest rate (RIR), we further investigate the background of these results. We demonstrate that the NPR introduction would lead the NPR-exposed banks to expect even lower profitability of lending than nonexposed ones, not only because lending margins tightened far and wide but also because they did not compensate sufficiently for negative deposit spreads with lending rates and net non-interest incomes. The introduction, therefore, would work as a negative news shock to those banks, preventing them from lending.

JEL classification: E44, E52, G21.

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