Firms' climate risks and bank lending: Evidence from the COVID-19

crisis¹

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Abstract

We investigate the effect of firms' climate risks on banks' lending behavior during the

COVID-19 crisis. Using Japanese firm-bank loan matched data, we show that banks

decrease lending to firms with heavy emissions of carbon dioxide (CO₂) during the crisis

and the following year. However, banks that heavily invested in these firms prior to the

COVID-19 pandemic increase their lending during the pandemic. This lending behavior

of banks is more apparent when lending to high CO2 intensity firms that disclose the ESG

policy, that experienced a significant decline in sales or those with a high leverage ratio.

We also find that banks with high capital ratio and liquidity ratio extend loans to high

CO₂ intensity firms when they had large investment prior to pandemic. Our results are

robust when we consider zombie lending. Our results indicate that banks considerate the

firms' climate risks to reallocate funds during the revenue shock.

Keywords: transition risk, transmission, climate change, bank lending, risk

management

JEL classification: G21, G32, P28, Q54

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