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Employment and the Collateral Channel of Monetary Policy

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This paper uses a detailed firm-level dataset to show that monetary policy propagates via asset prices through corporate debt collateralised on real estate. Our research design exploits the fact that many small and medium sized firms use the homes of the firm's directors as a key source of collateral, and directors' homes are typically not in the same region as their firm. This spatial separation of firms and firms' collateral allows us to separate the propagation of monetary policy via fluctuations in collateral values from that via demand channels.

Our paper finds three main results. First, firm-level employment responds heterogeneously to an identified monetary policy shock: with firms who are younger and more levered being particularly sensitive. Second, we present survey evidence to show that these types of firms are particularly reliant on asset based borrowing - and in particular real estate collateral – to finance their activities. Third, we show that monetary policy has a large and spatially heterogeneous effect on the value of this form of collateral. In light of these facts, our key result is that the response of younger, more levered firms is much stronger when collateral values are also sensitive to monetary policy (the same is not true for older, less levered firms that are less reliant on collateralised borrowing). This finding is mirrored by the response of corporate debt to monetary policy shocks.

We argue that these findings are consistent with monetary policy transmitting via asset prices through collateral constraints on specific firms. Furthermore, this interaction between collateral values, monetary policy and firm-level characteristics is of quantitative importance. It is large enough both to explain most of the observed firm level heterogeneity in response to monetary shocks *and* to explain a sizeable share of the aggregate employment response to monetary policy.