



## Home Values and Firm Behaviour\*

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Saleem Bahaj<sup>1,2</sup>, Angus Foulis<sup>1,2</sup> and Gabor Pinter<sup>1,2,</sup>

<sup>1</sup>Bank of England, <sup>2</sup>Centre for Macroeconomics

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Economic mechanisms that generate a causal link between real estate prices and the macroeconomy have been a focus of attention in the recent literature. The extant literature pictures this link running through two main channels. First, households, particularly those that are financially constrained, use increases in real estate wealth to finance consumption (Mian and Sufi, 2011; Berger et al., 2017). Second, credit constrained firms use increases in the value of their commercial real estate to finance investment (Chaney et al., 2012; Liu et al., 2013). This paper explores a mechanism at the intersection of these two channels. The residential wealth owned by households is an important source of collateral to finance the corporate sector. It is common for the owners of small and medium sized enterprises (SMEs) to pledge their homes to finance their firms. The literature has yet to disentangle and quantify the aggregate consequences of this. The macroeconomic implications could be profound: the homes of the households who run firms are worth 80% of GDP and four times the value of owner occupied corporate real estate. And while this residential real estate largely supports the financing of smaller enterprises, such enterprises are responsible for a considerable share of economic activity and business cycle fluctuations.

We address this issue by using a feature of firm level data in the UK: the persons responsible for running a firm – known as *directors* – must declare their residential address to the public registrar. By matching this information to transaction level data on residential properties and administrative data on mortgages, we are able to obtain a time series of the value of each director's home and the equity contained within it. Our key microeconometric result is that a £1 increase in the value of the homes of a firm's directors leads the average firm in our sample to invest £0.03 more and spend an additional £0.03 on total wages.

Using this, a back of the envelope calculation suggests that a 1% increase in real estate prices leads, through this channel, to up to a 0.28% rise in business investment and a 0.08% rise in total wages paid. We complement this with evidence on how a firm responds to changes in the value of its own corporate real estate; we find that, in aggregate, the residential real estate of directors is at least as important for activity. We use an estimated general equilibrium model to quantify the importance of both types of real estate for the propagation of shocks to the macroeconomy.