





House Prices and Job Losses

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Why are house prices -80% correlated with job losses over the UK business cycle? My paper studies this striking fact together with the strong comovements between house prices and labour market variables in general. First, a regional panel is estimated to quantify the impact of house prices on the unemployment, job finding and job separation rates, whereby rejection rates of planning applications are used as instruments to find exogenous variation in house prices. Second, an orthogonalised VAR is used to estimate the aggregate impact of house price shocks. Both methods confirm the large impact of house price shocks on labour market variables and credit supply.

The proposed mechanism that can explain these dynamic links is the one related to the collateral channel: adverse movements in real estate prices reduce the borrowing capacity of firms resulting in an increase (decrease) in job destruction (job creation), leading to higher levels of unemployment rates. This is consistent with the facts that 40% of all borrowing from banks in the UK corporate sector is directly secured against commercial real estate, and this ratio is higher for small and medium size enterprises (SMEs) that generate about 50% of total UK employment and GVA.

The general equilibrium model with collateral constraints, endogenous job separation and housing shocks is confronted with macroeconomic data via Bayesian methods covering the period 1985-2012. The results suggest that shocks to house prices (i) explain about 10% of output fluctuations and about 20% of fluctuations in corporate credit, unemployment and job separation rates via the collateral channel over the forecast horizon, and (ii) were a major cause in triggering the 1990 and 2008 recessions in the UK.

To provide external validation on the theoretical model, I show that (i) the DSGE-model-implied housing shock has an 80% correlation with that implied by the VAR model, and (ii) the vacancy-unemployment ratio implied by the theoretical model tracks closely the off-model empirical estimate of the vacancy-unemployment ratio.