Mortgage Cash-flows and Employment

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This paper quantifies the impact of the cash-flow channel of monetary policy on employment by combining novel micro datasets with near-universal coverage. When policy interest rates fall, families with a mortgage spend the extra cash-flow in their local economy and this increases labor demand. I exploit regional heterogeneity in the concentration of adjustable-rate mortgages resulting from the timing of mortgaging activity to identify the effect of neighborhood cash-flow shocks on locally non-tradable employment during the Great Recession.

I first model the evolution of around five million mortgage payment flows to estimate the household-level change in cash flows that followed from the unexpected easing of monetary policy in the fall of 2008. I go on to define locally non-tradable establishments as those generating revenues from nearby customers and group households into neighborhoods. I then exploit the staggered timing of interest rate pass-through to estimate the relationship between changes in cumulative neighborhood-level cash-flow shocks in the nine quarters after the dramatic fall in interest rates, and the growth of locally non-tradable employment between 2007 and 2010.

I estimate that a reduction in mortgage payments of £1,000 per household led to a 0.3 percentage point increase in locally non-tradable employment growth over three years of the Great Recession. On average, my results suggest that a total cash-flow injection in a neighborhood of around £350,000 saved one locally non-tradable job over that time horizon, which is consistent with estimates of the marginal propensity to consume out of windfalls and salaries in the locally non-tradable sector.

Between half and two thirds of the employment effect in the locally non-tradable sector came about through establishments boosting staff numbers. The rest of the effect manifested itself via an increased probability of establishment birth, and a decreased probability of establishment death, between 2007 and 2010. The strongest effects I find are for establishments in the auto service and restaurant sector, and there appears to be almost no effect in the retail sector, which accounts for more than half of locally non-tradable employment.

The cash-flow channel of employment varied substantially across the country. In part, this was due to the distribution of mortgagors on different types of contract, which was a key driver for the spatial distribution of neighborhood cash-flow shocks. Moreover, the joint spatial distribution of mortgage and labor market structures led to significant heterogeneity in the traction of conventional monetary policy across the country in the Great Recession. Regions where the local economy was relatively self-contained and employed a large share of people in the locally non-tradable sector enjoyed more of the direct benefits of monetary policy through stronger employment growth. My results suggest that the impact from the overall change in policy rates on total employment growth in the Great Recession varied by up to 0.5pp across neighborhoods. Since both employment and mortgage market structures are likely to vary over time, their joint evolution is important for an up-to-date understanding of the monetary transmission mechanism across regions and industrial sectors.