RESEARCH BRIEF

Dynamism Diminished: The Role of Housing Markets and Credit Conditions

Based on BFI Working Paper No. 2019-05, “Dynamism Diminished: The Role of Housing Markets and Credit Conditions,” by Steven J. Davis, international business and economics professor at UChicago’s Booth School of Business and Senior Fellow at the Hoover Institution, and John Haltiwanger, economics professor, University of Maryland

KEY TAKEAWAYS

☑️ The share of workers employed by young firms fell by nearly half between 1987 and 2014

☑️ Young firms’ finances are often dependent on housing prices, which fluctuate greatly

☑️ Young firms hire a relatively larger share of young and less-educated workers

☑️ The great housing bust after 2006 largely drove an historic collapse in the young-firm-share of employment

The Great Recession of 2007-09 raised several issues about the relationship of housing markets to economic activity. One issue concerns the impact of housing prices on the development of new and young firms. Another involves how housing market ups and downs affect local economies.

Employment at young US firms (less than 60 months since first paid employee) has declined steadily since 1987, when it stood at 17.9 percent, plunging to just 9.1 percent in 2014. While their activity is consistently marked by strong cyclical fluctuations, young firms experienced an especially sharp contraction during the Great Recession and a slow recovery afterwards.

What is the role of housing market conditions—boom or bust—in shaping the fortunes of young firms? What is the role of credit markets? How are labor markets affected? New research by Steven J. Davis, international business and economics professor at UChicago’s Booth School of Business and Senior Fellow at the Hoover Institution, and John Haltiwanger, economics professor at the University of Maryland, addresses these and other questions. Among other findings, in “Dynamism Diminished: The Role of Housing Markets and Credit Conditions,” they find that the great housing bust after 2006 largely drove an historic collapse in the employment shares of young firms.
Young firms depend on housing wealth

While the share of private-sector employment at young firms has declined over the last 35 years, it is highly sensitive to cyclical conditions, as shown in Figure 1. Also, those swings—both up and down—are closely related to housing prices; when housing prices rise, so does the share of employment at young firms, with the opposite effect occurring when housing prices fall. The authors’ hypothesis at the outset of their research was that entrepreneurs, on average, depend on housing wealth to fund their new businesses, for example, through home equity loans. In the case of the recent housing crisis, housing prices fell (quite drastically in some regions), and banks pulled back on lending, further straining young firms’ financial resources.

To test this hypothesis and answer questions about the role of housing and credit markets on young firms, the authors analyzed employment and credit data over time and across metropolitan statistical areas (MSAs). They estimate the causal effect of local house price changes and local shifts in bank lending on young-firm activity. They also provide evidence on the channel through which house price changes affect local economies and labor markets.

Figure 1: The Employment Share of Young Firms Is Highly Cyclical

Notes: Each bar shows the annual average log change in the share of private sector employees at young firms during the indicated cycle episode, deviated about the sample mean log change of minus 2.2 log points per year. Green bars denote aggregate expansion episodes, and red bars denote aggregate contraction episodes. All annual changes are from one mid-March payroll period to the next. For each cycle episode, the reported interval represents the average annual log change from March of the initial to March of the ending year. For example, 1980-83 represents the average annual log changes for 1980-81, 1981-82 and 1982-83. See working paper for an exact description of the calculations.

How Do House Price Fluctuations Affect the Economy?

Much post-crisis research into housing price effects on local economies stresses the role of consumption demand. The consumption-demand story suggests that all firms, regardless of age, are impacted similarly by a fall in demand for their industry’s output. According to this view, the age structure of activity in the local industry does not matter for its response to a local housing bust.

Davis and Haltiwanger find overwhelming statistical evidence against this view. Instead, they find larger effects of housing price movements on local industry activity when young firms account for a larger share of employment in the local industry. This finding supports the alternative view that housing prices work partly through wealth, liquidity and collateral effects on the propensity to start a new business or expand a young one. In other words, firm age – and the firm age structure of the local industry – matter for the industry response to a local industry demand shock.

This result does not mean that consumption demand effects are unimportant. It does say that they aren’t the only important channel through which housing market ups and downs affect local and national economies.
Housing cycles do not affect all MSAs equally. For example, consider a city that is land-locked or restricts housing supply through regulation. An increase in the city's demand for housing generates a larger runup in housing prices and housing wealth than a similar city with an elastic supply of housing. The authors use this idea in various ways to isolate locally exogenous shifts in housing prices. They then estimate and quantify the effects of housing price swings on young firms and local economies. The authors conclude that the great housing bust after 2006 largely drove the historic collapse in the young firm share of employment during the Great Recession. The pullback in bank lending to younger firms played a secondary role.

The authors’ rich dataset span a long time period, which is especially useful when estimating the impact of bank lending on young firms. Banks are not all the same. They serve different markets, have different lending practices when it comes to small and young businesses, and are hit differently by financial crises and national business cycles. While almost all national banks retrenched their lending practices in response to the financial crisis of 2007-09, some were in better shape than others and better able to weather the storm and participate in the nascent recovery.

Employment at young US firms (less than 60 months since first paid employee), has declined steadily since 1987, when it stood at 17.9 percent, plunging to just 9.1 percent in 2014.

### Table 1: Share of Employment at Young Firms by Demographic Characteristics

<table>
<thead>
<tr>
<th>Worker Age and Gender</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-24</td>
<td>13.9</td>
<td>11.9</td>
</tr>
<tr>
<td>25-44</td>
<td>12.3</td>
<td>10.3</td>
</tr>
<tr>
<td>45-54</td>
<td>9.5</td>
<td>8.2</td>
</tr>
<tr>
<td>55-64</td>
<td>8.8</td>
<td>7.6</td>
</tr>
<tr>
<td>All</td>
<td>11.6</td>
<td>9.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education and Gender</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; High School</td>
<td>12.7</td>
<td>11.4</td>
</tr>
<tr>
<td>High School</td>
<td>10.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Some College</td>
<td>10.7</td>
<td>9.0</td>
</tr>
<tr>
<td>Undergrad +</td>
<td>11.3</td>
<td>8.6</td>
</tr>
<tr>
<td>All</td>
<td>11.2</td>
<td>9.3</td>
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</tbody>
</table>
more than the average small business when banks scale back lending to small firms. Similarly, the authors find that the negative effects of falling housing prices are felt more strongly by young rather than small businesses.

The paper also offers insights into implications for the employees of those businesses. That young firms tend to hire younger employees is perhaps unsurprising, but the authors also find that young firms tend to hire less-educated workers, as shown in Table 1. As an example, in 2010 young firms employed 10 percent of female workers who did not finish high school but only 7 percent of female workers with a college degree.

As a result, the fortunes of young firms have an outsized impact on younger and less-educated workers. Thus, the housing bust and financial crisis hurt younger and less-educated workers through their particular effects on the fortunes of young firms in addition to their broader effects on the overall level of economic activity.

**Conclusion**

Young firms live a financially precarious life, often dependent on self-funding tied to the value of the owners’ homes. Young firms are sometimes buffeted by economic developments and financial shocks beyond their control. This was especially true during and after the housing bust when the employment share of young firms, already steadily declining since the late 1980s, dipped even lower. This research also reveals that young firms hire a relatively large share of younger and less-educated workers, shedding new light on the labor market opportunities of these demographic groups.

There are also lessons about the effects of crisis and post-crisis policy initiatives. One obvious lesson is that housing market ups and downs affect local and national economies through effects on the wealth and liquidity of the owners of new and young firms. The authors’ results also suggest that the recapitalization of the U.S. banking system prevented an even larger collapse in the activity levels of young firms.

**CLOSING TAKEAWAY**

The housing bust and financial crisis hurt younger and less-educated workers through their particular effects on the fortunes of young firms in addition to their broader effects on the overall level of economic activity.

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NO. 2019-05 · JANUARY 2019

*Dynamism Diminished: The Role of Housing Markets and Credit Conditions*

bfi.uchicago.edu/Davis-WP-201905

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