

# **Firm Dynamics and Innovation: Evidence from Decomposing Top Sales Shares**

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What do changes in top sales shares signal about changes in firm dynamics? I use an accounting decomposition to identify two sources of top sales share growth: (i) incumbent top firms grow bigger; (ii) new top firms replace old top firms. Over the 1950-2019 period, incumbent top firms contribute about four times as much as new top firms to the growth of sales share accrued to top 0.01% firms in the US economy. I then build an analytical framework to estimate a firm dynamics process in which firms grow in response to an own innovation shock and shrink at the impact of a creative destruction shock using the empirical decomposition terms of top share growth. I find that own innovation is the major force that drives top sales share growth. The decline in the top sales shares in the 1980s is associated with a higher aggregate productivity growth, while the rise in the top sales shares since the late 1990s implies a slightly lower productivity growth.