

Innovation and Concentration: Theory and Evidence from Decomposing Top Sales Share Growth

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I study the causes and implications of the rise in firm sales concentration by inferring the underlying innovation process that drives firm dynamics. To achieve this, I first use an accounting decomposition to identify two sources of top share growth: (i) incumbent top firms grow bigger; (ii) new top firms replace old top firms. When individual firms grow in response to an own innovation shock and shrink at the impact of a creative destruction shock, the growth of top share can result either from an increase in own innovation or a decrease in creative destruction. I then build an analytical framework and show that own innovation and creative destruction have differential impact on the two components of top share growth. Via this mechanism, I use the two sources of top share growth obtained from the accounting decomposition to identify the rates of own innovation and creative destruction that drive firm dynamics. I find that the rise in annualized top share growth rate from -1.21% over the 1980-1990 period to 0.95% over the 1990-2010 period are mainly due to increase in own innovation, while the increase in creative destruction offsets a small amount of the rise in top share growth. Both the increases in own innovation and creative destruction contribute to the increase in aggregate productivity growth.