

## Creative Destruction through Innovation Bursts

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In theories of creative destruction, product innovation is a key driver of aggregate growth. In this paper, we confront the predictions of these theories about product dynamics with empirical patterns in product-level data on the near-universe of French manufacturing firms. We find that the process of product innovation frequently exhibits *bursts*—episodes in which firms rapidly add multiple products to their portfolio. Such bursts lead to substantial shifts in revenue and explain the majority of the variance in firm-level growth. We introduce a model of firm product innovation compatible with such a process that also nests the canonical models of creative destruction. We show that innovation bursts alter the equilibrium composition of age, size, and innovation efficiency of firms, and further explain the concentration of production among superstar firms. Our model thus enables the joint study of the determinants of industry concentration and growth in a setting consistent with the empirical patterns of product dynamics.