The goal of this research is to study the link between non-conventional patterns of firm-level adjustment of physical capital and the firms' and the overall sector's productivity dynamics. Particular focus is given to lumpy investment patterns caused that can lead to disruptions in firm-level productivity, a phenomenon observed in the relevant literature. Moreover, the goal is to highlight the significance of these disruptions for the estimation of related models and the measurement of relevant economic variables at both the micro and possibly the macro level.