Firm Growth and Intra-Industry Diversification in the Semiconductors Industry

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Abstract ID: 211

Inviato: 12/04/2023

Evento: XXI Workshop Annuale SIEPI

Argomento: 4. Dinamica industriale e imprenditorialità

Parole chiave: Firm growth, Gibrat's Law, Intra-industry diversification, Sector dynamics., Semiconductors

The current paper exploits granulated data provided by the Omdia Semiconductors Research and Consulting Team to investigate firm growth and diversification dynamics in the semiconductor industry. The study introduces a set of stylized facts that differs from those proposed in other sectors, e.g., the pharmaceutical industry. We provide evidence that two different populations of firms are active in the sector under analysis: Fabless and IDM. In this respect, the relation between average growth rate and firm size is positive and significant when building the size classes separately for the two groups. This finding suggests a violation of Gibrat's Law and a departure from most empirical studies, which mainly found a negative or non-significant association. On the contrary, the relationship between growth variance, skewness, kurtosis, and firm size is coherent with the dominant literature. The violation of the Law seems to be accounted for by a diversification effect. Furthermore, the correlation analysis between the growth dynamics of firms in their active submarkets proves the existence of inter-dependences. The results proposed violate all the models put forwards to account for growth dynamics. Hence, they should stimulate the theoretical speculation on intra-industry diversification patterns and growth dynamics of firms.