Production in modern economies is characterized by a complex interlock of a supply chain network among very heterogeneous firms. Indeed, even within the same narrowly defined industry, firms are greatly different with respect to size, productivity, age, quality, mark-ups, number of goods produced.

How to measure this heterogeneity and what are its source? How does this heterogeneity and the firm-to-firm network affect aggregate outcome? What is the role of this heterogeneity to explain cross-country difference in aggregate productivity? How does this complex structure of production affect the business cycle?

Many macroeconomic models assume that production is carried out by one representative firm. Does departing from the assumption of a representative firm matter for macroeconomics? In this lecture, we review how recent developments in macroeconomics answered this question. After reviewing the stylized facts about firms/industry dynamics, we will describe the standard models that can rationalize these facts. We then discuss how frictions faced by firm can generate misallocation of factors and affect the level of aggregate productivity. Finally, we will study how firm and industry dynamics shape the business cycle.

Outline:

1. **Empirical Evidence**: What do we know about firm heterogeneity?
3. **Frictions and Misallocation**: How does firm heterogeneity affect the allocation of factors?
References:


