

# **Syllabus**

[cmcd.economia@fgv.br]

**Course Name:** Heterogeneous firms in Macroeconomics: Theory and Data

Faculty:

2026 1<sup>ND</sup> SEMESTER

#### **COURSE OUTLINE**

This course explores the role of heterogeneity in macroeconomics, focusing on the production side of the economy. The program covers models of firm dynamics, models of factors' misallocation with heterogeneous firms, and models of production network. A special focus will be given to the aggregation of heterogeneous production units to total output and productivity. To motivate and test the theories, we will also study how to use firm-level data to identify shocks, estimate production functions, and measure aggregate misallocation.

## **COURSE PROGRAM**

- Cross-sectional identification of shocks with sector and firm-level data
- Models with heterogeneous firms
- Models with endogenous entrepreneurship, firms' entry and exit
- Financial frictions and firm dynamics
- Aggregation of output and misallocation
- Production function estimation
- Models of market power and estimation of markups
- Models of production network
- From micro shocks to macro fluctuations

### **BIBLIOGRAPHY**

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JERMANN and QUADRINI, "Macroeconomic effects of financial shocks". American Economics Review, 2012.

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GABAIX, X., "The Granular Origins of Aggregate Fluctuations". Econometrica, 2011.

ACEMOGLU, CARVALHO, OZDAGLAR and TAHBAZ-SALEHI, "The Network Origins of Aggregate Fluctuations". Econometrica, 2012.

LIU, E., "Industrial policies in production networks". Quarterly Journal of Economics, 2019.

BAQAEE and FARHI, "Productivity and misallocation in general equilibrium". Quarterly Journal of Economics, 2020.

BIGIO and LA'O, "Distortions in production networks". Quarterly Journal of Economics, 2020.

CARVALHO, NIREI, SAITO, and TAHBAZ-SALEHI, "Supply Chain Disruptions: Evidence from the Great East Japan Earthquake". Quarterly Journal of Economics, 2021

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### **GRADING**

- Short presentation of a paper (30%)
- Research project (35%)
- Final exam (35%)

#### **CONTACT**