

Topics in Macroeconomics V: **Finance, Firm Dynamics, and Aggregate Outcomes**

2018-19 Academic Year
Master of Research in Economics, Finance and Management

1. Description of the subject

- Topics in Macroeconomics V. Code: 32082
- Total credits: 3 ECTS Workload: 75 hours
- Term: 3rd
- Type of subject: Optative
- Department of Economics and Business
- Teaching team: Andrea Caggese

2. Teaching guide

Introduction

We will cover recent research exploring the relation between firm-level frictions, firm dynamics, and their aggregate implications.

Although a substantial part of the course is devoted to analysing financial factors, we will study a general framework applicable to study also the effects of other frictions.

The objective of the course is twofold: first, to analyse the extent to which recent theories are successful in explaining the empirical evidence, and which relevant questions remain unanswered; second, to illustrate the building blocks of a theoretical framework able to address such questions.

Admission Criteria

This course is for Mres/PhD students. MSc Economics students can register in this course if:

- i) Their average grade in the first term courses is above 6.5.
- ii) The total number of students attending is not larger than 15.

Content

List of Topics

1) Firm dynamics, misallocation, and aggregate productivity.

i) Stylised facts on firm dynamics; ii) Dispersion in productivity and misallocation of resources: empirical evidence, theory, and aggregate implications.

2) Finance and firm dynamics: the facts and a basic framework.

i) Empirical evidence on the causal link from financial frictions to firm decisions at the micro-level, and their implications for both aggregate productivity and business cycle fluctuations. ii) Theoretical framework on financial frictions and firm dynamics.

3) Applications.

i) Innovation, reallocation, and growth ii) Financial frictions, and the misallocation of skilled labour and intangible capital.

4) Finance, firm dynamics and the business cycle: empirical evidence and theory.

Preliminary Syllabus

Note: this is preliminary. New papers will be added before the course starts

1) Firm dynamics, misallocation, and aggregate productivity.

- Cabral, Luís M B, and José Mata. 2003. "On the Evolution of the Firm Size Distribution: Facts and Theory." *American Economic Review*, 93(4): 1075-1090.
- Syverson, C., 2011, What Determines Productivity?, *Journal of Economic Literature* 2011, 49:2, 326–365
- Hsieh, C. and P.J. Klenow (2009). "Misallocation and Manufacturing TFP in China and India", *The Quarterly Journal of Economics* 124, 1403-1448.
- Haltiwanger, John, Robert Kulick and Chad Syverson. 2018. "Misallocation Measures: The Distortion that Ate the Residual." NBER Working Paper No. 24199
- Lucia Foster, Cheryl Grin, John C. Haltiwanger, Zoltan Wolf, 2018, Innovation, Productivity Dispersion and Productivity Growth. NBER Working Paper 24420
- John Asker, Allan Collard-Wexler, and Jan De Loecker, Dynamic Inputs and Resource (Mis)Allocation, *Journal of Political Economy* 2014 122:5, 1013-1063

2) Finance and firm dynamics: the facts and a basic framework.

Empirical evidence

- Almeida, H., Campello, M., Laranjeira, B., Weisbenner, S. 2012. Corporate Debt Maturity and the Real Effects of the 2007 Credit Crisis. *Critical Finance Review*, 1: 3-58
- Braun, M, and B. Larrain, 2005, Finance and the Business Cycle: International, Inter-Industry Evidence, *The Journal of Finance*, Vol. 60, No. 3, pp. 1097-1128.
- Farre-Mensa, Joan, and Alexander Ljungqvist. "Do Measures of Financial Constraints Measure Financial Constraints?" *Review of Financial Studies* 29, no. 2 (February 2016): 271–308.
- Chodorow-Reich, G. (2014). The Employment Effects of Credit Market Disruptions: Firm-level Evidence from the 2008–9 Financial Crisis. *The Quarterly Journal of Economics*, 129(1), 1-59.
- Dell'Ariccia, Giovanni, Detragiache, Enrica, and Rajan, Raghuram, 2008, "The real effect of banking crises," *Journal of Financial Intermediation*, Elsevier, vol. 17(1), pages 89-112. Additional Readings
- Hadlock, Charles J., and Joshua R. Pierce, 2010, New evidence on measuring financial constraints: Moving beyond the KZ Index, *Review of Financial Studies* 23, 1909–1940.
- Kaplan, Steven N., and Luigi Zingales, 1997, Do investment-cash flow sensitivities provide useful measures of financing constraints?, *Quarterly Journal of Economics* 115, 707–712.
- Simon Gilchrist, Jae Sim and Egon Zakrajsek, 2013, "Misallocation and Financial Frictions: Some Direct Evidence from the Dispersion in Borrowing Costs", *Review of Economic Dynamics*, January 2013.

Theory

- Buera, Francisco J., Joseph P. Kaboski, and Yongseok Shin. 2011. "Finance and Development: A Tale of Two Sectors." *American Economic Review*, 101(5).
- Caggese, A., and V. Cuñat, 2013, "Financing Constraints, Firm Dynamics, Export Decisions, and Aggregate Productivity", *Review of Economic Dynamics*, Special Issue on Misallocation and Productivity, edited by Diego Restuccia & Richard Rogerson, vol. 16(1), pages 177-193, January 2013.
- * G. Clementi, H. Hopenhayn, A Theory of Financing Constraints and Firm Dynamics, *Quarterly Journal of Economics*, Volume 121, Issue 1, February 2006, pages 229-265
- Buera, Francisco J. and Benjamin Moll. 2015. "Aggregate Implications of a Credit Crunch: The Importance of Heterogeneity." *American Economic Journal: Macroeconomics*, 7(3): 1-42.
- Moll, Benjamin. 2014. "Productivity Losses from Financial Frictions: Can Self-Financing Undo Capital Misallocation?" *American Economic Review*, 104(10): 3186-3221.
- Oberfield, Ezra, 2013. Productivity and misallocation during a crisis: Evidence from the Chilean crisis of 1982. *Review of Economic Dynamics* 16 (1), 100–119

3) Applications.

- Caggese, A., 2018, "Financing Constraints, Radical versus Incremental Innovation, and Aggregate productivity", *American Economic Journal: Macroeconomics*, Forthcoming.
- Midrigan, Virgiliu, and Daniel Yi Xu. 2014. "Finance and Misallocation: Evidence from Plant-Level Data." *American Economic Review*, 104(2): 422-58
- Hsieh, Chang-Tai and Klenow, Peter J., 2014, The Life Cycle of Plants in India and Mexico, *Quarterly Journal of Economics*, Vol. 129, Issue 3
- Klette, T. J. and S. Kortum (2004). Innovating Firms and Aggregate Innovation. *Journal of Political Economy*, 112, 986-1018.
- Caggese, A., Metzger, D., and V. Cunat, 2016, "Firing the Wrong Workers: Financing Constraints and Labor Misallocation", Working Paper.
- Acemoglu, D., U. Akcigit, N. Bloom, and W. R. Kerr (2013). Innovation, Reallocation and Growth. National Bureau of Economic Research WP 18993.
- Daron Acemoglu, Ufuk Akcigit, Murat Alp Celik, 2014, Young, Restless and Creative: Openness to Disruption and Creative Innovations, NBER Working Paper No. 19894
- Ufuk Akcigit, William R. Kerr, 2010, Growth Through Heterogeneous Innovations, NBER Working Paper No. 16443
- Caggese, A., 2012, "Entrepreneurial Risk, Investment and Innovation", *Journal of Financial Economics*, n.106, November 2012, 287-307.

4) Finance, firm dynamics and the business cycle: empirical evidence and theory.

- Arellano, C., Yan, Bai, and Patrick Kehoe, 2012, Financial Markets and Fluctuations in Volatility, Mimeo, Minneapolis Fed.
- Jermann, Urban J. and Quadrini, Vincenzo, Macroeconomic Effects of Financial Shocks, *American Economic Review*: Vol. 102 No. 1 (February 2012)
- Caggese, A., and A. Perez, 2016, "Reallocation of Intangible Capital and Secular Stagnation", Working paper.
- Sedlacek, P., and V. Sterk, 2016, The Growth Potential of Startups over the Business Cycle, Mimeo.
- Aubhik Khan, Julia K. Thomas, 2013, "Credit Shocks and Aggregate Fluctuations in an Economy with Production Heterogeneity," *Journal of Political Economy*, 121, no. 6 (2013): 1055-1107.
- Christiano, Lawrence J., Roberto Motto, and Massimo Rostagno. 2014. "Risk Shocks." *American Economic Review*, 104(1): 27-65.
- Gilchrist, S., Sim, J., and Zakrajsek, E., (2014). "Uncertainty, Financial Frictions and Investment Dynamics," Working Paper.
- Caggese, A. and Perez, A., 2016, "The Interaction Between Household and Firm Dynamics and the Amplification of Financial Shocks", working paper, Barcelona Graduate school of Economics.
- Mian, A., and Sufi, A. (2014). "What Explains the 2007-2009 Drop in Employment?" *Econometrica*, Vol. 82, No. 6, November, 2014, 2197-2223.
- Bloom, Nicholas. 2009. "The Impact of Uncertainty Shocks." *Econometrica* 77(3): 623-686.
- Bloom, Nicholas, Max Floetotto, Itay Saporta-Eksten, Nir Jaimovich, and Stephen Terry, 2011, Really Uncertain Business Cycles."Stanford University Working Paper.
- Caggese, A., 2012, How important are capital markets imperfections in determining firm decisions and aggregate fluctuations? CREI Opuscles, http://www.crei.cat/files/filesOpuscle/39/121127131924_ENG_33_ANG3.pdf
- Gaulti B. Eggertsson and Paul Krugman, Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach, *The Quarterly Journal of Economics* (2012) 127(3): 1469-1513
- Simon Gilchrist & Egon Zakrajsek, 2012. "Credit Spreads and Business Cycle Fluctuations," *American Economic Review*, American Economic Association, vol. 102(4), pages 1692-1720, June.
- Xavier Giroud, Holger M. Mueller, 2015, Firm Leverage and Unemployment during the Great Recession, , NBER Working Paper No. 2107.
- Veronica Guerrieri, Guido Lorenzoni, Credit Crises, Precautionary Savings, and the Liquidity Trap, NBER Working Paper No. 17583

🔗 Teaching methodology

During the last week of the course, each student will make a presentation:

Presentations can be chosen as follows:

- i. A recent paper of her/his choice that is related to the topics seen in the lectures.
 - a. I will provide a list of suitable papers before the beginning of the course. A paper outside the reading list can also be presented, subject to my approval.
 - b. I will value: i) the ability to explain the motivation and the objectives, and to illustrate the methods used and main results obtained within the time of the presentation; ii) a critical evaluation of the results, whenever relevant also by comparing them to the papers discussed in the course.
- ii. A research project, which can be either an original empirical or quantitative work, or an original theoretical work (topic of project subject to my approval).
- iii. A survey of research on a topic related to the course (subject to my approval).

🔗 Assessment and Grading System

The final grade structure is as follows:

- 1) Presentations: the presentation of a paper or of a survey of research will count for 25%. A presentation of original research will count for 50% of the final mark.
- 2) Final take home exam: 4 questions, 1 question from each topic. Must answer at least 2 questions if the exam counts for 50% of the final mark, and at least 3 questions if it counts for 75% of the final mark.

3. Programme of activities

- Estimated time spent on the subject: 75 hours
 - In the classroom: 20
 - Outside the classroom: 55

Weekly timetable of learning and assessment activities

Week (dates)	Work in the classroom (plenary, seminar, practical, etc.)	Estimated time	Activities outside the classroom (time studying, preparing activities, etc.)	Estimated time
1st week	Topic	4 hours	Study lecture material, read the papers, and solve non compulsory problem sets	8 Hours
2nd week	Topic 2	4 hours	Study lecture material, read the papers, and solve non compulsory problem sets	8 Hours
3rdweek	Topic 3	4 hours	Study lecture material, read the papers, and solve non compulsory problem sets	8 Hours
4th week	Topic 4	4 hours	Study lecture material, read the papers, and solve non compulsory problem sets	8 Hours
5th week	Students Presentations	4 hours	Prepare presentation	8 Hours
Exam Period	Final take home Exam		Exam preparation	15 Hours
Total hours		20		55
	Hours		Hours	