

Corporate Finance

SYLLABUS

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In the first part, we will cover the “applied” side of corporate finance, and focus essentially on “non-classical” and new topics that have emerged in the field: entrepreneurship, labor, productivity / innovation and finance, etc.

In addition to presenting some classic papers, the class will put a major emphasis on the methodological aspects of the papers, to develop a sense of “how to do good empirical research”.

Depending on your interests and the pace of the course, we will select and then go through some of these more advanced topics. There will therefore necessarily be some changes to this syllabus over time. I will thus update it as time goes by. The following reading list provides the reference to all the papers that will be mentioned during the class

This is the reading list. We will discuss these papers in class. It will be a better experience for you if you have looked at them before, even quickly. As you can see the list is pretty long, so I have highlighted with a (*) the one that I think you should *absolutely* read. I may add a few more paper as we go.

Lecture: Finance and Growth

The very aggregate picture

- King, R. G., & Levine, R. (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics*, 108(3), pp. 717–737.
- (*) Rajan & Zingales (1998) “Financial Dependence and Growth,” *American Economic Review* 88,

State diff-in-diff and county-border estimator

- (*) Jayaratne, J., & Strahan, P. E. (1996). The Finance-Growth Nexus: Evidence from Bank Branch Deregulation. *Quarterly Journal of Economics*, 111(3), pp. 639–670.
- Huang, R. R. (2008). Evaluating the real effect of bank branching deregulation: Comparing contiguous counties across US state borders. *Journal of Financial Economics*, 87(3), 678–705.

- Hagedorn, M., Karahan, F., Manovskii, I., & Mitman, K. (2013). Unemployment benefits and unemployment in the great recession: the role of macro effects. *Working Paper*, (October 2013), 1 – 52.
- Dube, A., Lester, T. W., & Reich, M. (2010). Minimum wage effects across state borders: estimates using contiguous counties. *Review of Economics and Statistics*, 92(November), 945–964.

Opening the black-box: why finance affects growth?

Lower cost of capital

- Bandiera, Caprio, Honohan, Schiantarelli (2000) "Does financial reform raise or reduce saving?", *Review of Economics and Statistics* 82 (2), 239-263

Better risk-sharing

- Kalemli-Ozcan, Sørensen & Yosha (2003), "Risk Sharing and Industrial Specialization: Regional and International Evidence" *American Economic Review*, 93, 2003.
- Acharya, V. V, Imbs, J., & Sturgess, J. (2011). Finance and Efficiency: Do Bank Branching Regulations Matter? *Review of Finance*, 15(1), 135–172.

Better capital allocation

- Bartelsman, Eric, John Haltiwanger, and Stefano Scarpetta. 2013. "Cross-Country Differences in Productivity: The Role of Allocation and Selection." *American Economic Review*, 103(1): 305-34
- (*) Bertrand, M., Schoar, A., & Thesmar, D. (2007). Banking Deregulation and Industry Structure: Evidence from the French Banking Reforms of 1985. *Journal of Finance*, 62(2), pp. 597–628.

Misallocation of capital

- (*) Restuccia, Diego, and Richard Rogerson. 2008. "Policy distortions and aggregate productivity with heterogeneous establishments." *Review of Economic Dynamics* 11 (4): 707–720
- (*) Restuccia, D., & Rogerson, R. (2017). The Causes and Costs of Misallocation. *Journal of Economic Perspectives*, 31(3), 151–174.
- (*) Bau N. and A. Matray (2019) "Misallocation and Capital Market Integration: Evidence From India", *CEPR Working Paper*

Lecture: Investment and Credit Constraints

Are firms credit constrained?

- Benabou, Roland. 1996. "Inequality and Growth," NBER Macroeconomics Annual, 11, pp. 11-74
- Piketty (1997). "The Dynamics of the Wealth Distribution and the Interest Rate with Credit Rationing," *Review of Economics Studies*, 64:2, pp. 173-90
- (*) Aghion, P., Caroli, E., & García-Peñalosa, C. (1999). Inequality and Economic Growth: The Perspective of the New Growth Theories. *Journal of Economic Literature*, 37(4), 1615–1660.
- Abel, Andrew B. and Janice C. Eberly, "A Unified Model of Investment Under Uncertainty," *American Economic Review*, 84, December 1994, pp. 1369-1384.
- (*) Stiglitz and Weiss (1981) "Credit Rationing in Markets with imperfect information", in *American Economic Review*, vol.71, no°3, pp.393-410
- (*) Moll, B. (2014). Productivity Losses from Financial Frictions: Can Self-Financing Undo Capital Misallocation? *American Economic Review*, 104(10), 3186–3221.
- (**) Crouzet, N., & Mehrotra, N. R. (2020). Small and Large Firms over the Business Cycle. *American Economic Review*, 110(11), 3549–3601.
- Kehrig and Vincent (2013) Financial Frictions and Investment Dynamics in Multi-Plant Firms, *Working Paper*

Cash flows and working cap

- (*) Hoberg, G., & Maksimovic, V. (2015). Redefining financial constraints: A text-based analysis. *Review of Financial Studies*, 28(5), 1312–1352.
- Hadlock, C. J., & Pierce, J. R. (2010). New Evidence on Measuring Financial Constraints: Moving Beyond the KZ Index. *Review of Financial Studies*, 23(5), 1909–1940.
- (*) Alfaro, I., Bloom, N., & Lin, X. (2018). The Finance Uncertainty Multiplier. *NBER Working Paper*, (24571).
- Fazzari, Hubbard & Petersen (1988), "Financing Constraints and Corporate Investment," *Brookings Papers on Economics Activity*, pp. 141-195.
- Kaplan & Zingales (1997), "Do Investment-Cash Flow Sensitivities Provide Useful Measures of Financing Constraints?" *Quarterly Journal of Economics* 112, pp. 159-216
- Blanchard, Lopez-de-Silanes & Shleifer, Andrei (1994), "What do firms do with cash windfalls?" *Journal of Financial Economics* 36, pp. 337-360.

- Rauh (2006), “Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans,” *Journal of Finance* 61, pp. 33-71
- Bakke and Whited (2012) Threshold Events and Identification: A Study of Cash Shortfalls. *Journal of Finance*, 67: 1083–1111

Debt

- 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(1), 3–58.
- (*) Benmelech, E., Frydman, C., & Papanikolaou, D. (2019). Financial frictions and employment during the Great Depression. *Journal of Financial Economics*, 133(3), 541–563.
- Carvalho, D. (2015). Financing Constraints and the Amplification of Aggregate Downturns. *Review of Financial Studies*, 28(9), 2463–2501.
- (*) Chaney Sraer and Thesmar (2012) "The Collateral Channel: How Real Estate Shocks Affect Corporate Investment", *American Economic Review*
- Duval, R., Hong, G. H., & Timmer, Y. (2019). Financial Frictions and the Great Productivity Slowdown. *Review of Financial Studies*, 33(2), 475–503.
- Cvijanović, D. (2014). Real estate prices and firm capital structure. *Review of Financial Studies*, 27(9), 2690–2735.
- (*) Gan, J. (2007). Collateral, debt capacity, and corporate investment: Evidence from a natural experiment. *Journal of Financial Economics*, 85(3), 709–734.
- Deaton, Angus. 2010. "Instruments, Randomization, and Learning about Development." *Journal of Economic Literature*, 48(2): 424-55.
- de Mel, S., McKenzie, D., & Woodruff, C. (2008). Returns to Capital in Microenterprises: Evidence from a Field Experiment. *Quarterly Journal of Economics*, 123(4), 1329–1372.
- Hsieh, Chang-Tai, and Benjamin A. Olken. 2014. "The Missing "Missing Middle"." *Journal of Economic Perspectives*, 28(3): 89-108.

Exercise: compare Gan (2007) and Chaney et al. (2012)

Equity. Effect on investment: financing, pressure and learning channels

- (*) Baker, M., J. C. Stein, and J. Wurgler. 2003. When Does the Market Matter? Stock Prices and the Investment of Equity-Dependent Firms. *Quarterly Journal of Economics* 118:969
- Coval, J., and E. Stafford. 2007. Asset Fire Sales (and Purchases) in Equity Markets. *Journal of Financial Economics* 86:479
- (*) David, J. M., Hopenhayn, H. A., & Venkateswaran, V. (2016). Information, Misallocation and Aggregate Productivity. *Quarterly Journal of Economics*.
- (*) Dessaint, O., Foucault, T., Frésard, L., & Matray, A. (2018). Noisy Stock Prices and Corporate Investment. *Review of Financial Studies*.

- (*) Edmans, A., I. Goldstein, and W. Jiang. 2012. The Real Effects of Financial Markets: The Impact of Prices on Takeovers. *Journal of Finance* 67:933{971.
- Stein, J. 1988. Takeover Threats and Managerial Myopia. *Journal of Political Economy* 96:1
- -- 1989. Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior. *Quarterly Journal of Economics* 104:655
- (*) van Binsbergen, J. H., & Opp, C. (forthcoming). Real Anomalies. *Journal of Finance*, 0(0).
- Wurgler J. (2000) "Financial Markets and the Allocation of Capital", *Journal of Financial Economics*

Discussion: does the stock market promote long-term investment or amplify short-termism?

Innovation

- (*) Bernstein, S. (2015). Does Going Public Affect Innovation? *Journal of Finance*, 70(4), 1365–1403.
- Cong, L. W., & Howell, S. T. (2018). IPO Intervention and Innovation: Evidence from China. *NBER Working Paper*, (24657)

Investment

- (*) Asker, J., Farre-mensa, J., and Ljungqvist, A. (2015). Corporate Investment and Stock Market Listing: A Puzzle? *Review of Financial Studies*.
- (*) Maksimovic, V., Phillips, G., & Yang, L. (2019). Do Public Firms Respond to Industry Opportunities More Than Private Firms? The Impact of Initial Firm Quality. *Working Paper*.

Bank lending

- Falato, A., and Scharfstein, D. (2016). The Stock Market and Bank Risk-Taking. *NBER Working Paper*, (22689)

Labor and Customer base acquisition

- (*) Beaumont and Lenoir (2019) Building a Customer Base under Liquidity Constraints, Working Paper
- (*) Fonseca and Van Doornik (2019) "Financial Development, Labor Markets, and Aggregate Productivity: Evidence from Brazil", Working Paper

Exercise: referee report Dong, M., Hirshleifer, D., & Teoh, S. H. (2017). Stock Market Overvaluation, Moon Shots, and Corporate Innovation. *NBER Working Paper*, (24142).

Exercise: compare

- Denes, M., Wang, X., & Xu, T. (2019). Financing Entrepreneurship: Tax Incentives for Early-Stage Investors. *Working Paper*
- Gonzalez-Uribe, J., & Paravisini, D. (2019). How Sensitive is Young Firm Investment to the Cost of Outside Equity? Evidence from a UK Tax Relief. *Working Paper*.
- Howell, S. T., & Mezzanotti, F. (2019). Financing Entrepreneurship through the Tax Code: Angel Investor Tax Credits. *NBER Working Paper*.

Lecture: Innovation Outside Venture Capital

A large part of the literature has studied the role of venture capital in funding innovation. I voluntarily abstract from it to focus on less well-covered (yet as important) topics.

Surveys – Overview Papers

- Carlino, G., & Kerr, W. R. (2015). Chapter 6 - Agglomeration and Innovation. In *Handbook of Regional and Urban Economics* (Vol. Volume 5, pp. 349–404). Elsevier.
- Kerr, W., & Nanda, R. (2015). Financing Innovation. *Annual Review of Financial Economics*, 7(1), 445–462.
- Hall, B. H., & Lerner, J. (2010). Chapter 14 - The Financing of R&D and Innovation. In *Handbook of The Economics of Innovation, Vol.1* (Vol. Volume 1, pp. 609–639). North-Holland.

Financing innovation

Introduction: what is special about innovation?

- Berstein, S., Giroud, X., & Townsend, R. R. (2016). The Impact of Venture Capital Monitoring. *Journal of Finance*, 71(4), 1591–1622.
- Hellmann, T., Lindsey, L., & Puri, M. (2008). Building Relationships Early: Banks in Venture Capital. *Review of Financial Studies*, 21(2), 513–541.

The “surprising” importance of banks

- Benfratello, L., Schiantarelli, F., & Sembenelli, A. (2008). Banks and innovation: Microeconomic evidence on Italian firms. *Journal of Financial Economics*, 90(2), 197–217.
- (*) Hombert, J., & Matray, A. (2016). The Real Effects of Lending Relationships on Innovative Firms and Inventor Mobility. *Review of Financial Studies*, 30(7), 2413–2445.
- Nicholas, T., & Nanda, R. (2014). Did Bank Distress Stifle Innovation During the Great Depression. *Journal of Financial Economics*, 114(2), 273–292.

- (*) Petersen, M. A., & Rajan, R. G. (1995). The Effect of Credit Market Competition on Lending Relationships. *Quarterly Journal of Economics*, 110(2), 407–443.

The stock market: a panacea?

- Bernstein, S. (2015). Does Going Public Affect Innovation? *Journal of Finance*, 70(4), 1365–1403.
- Cong, L. W., & Howell, S. T. (2018). IPO Intervention and Innovation: Evidence from China. *NBER Working Paper*, (24657)
- Cohen, L., Diether, K., & Malloy, C. (2013). Misvaluing Innovation. *Review of Financial Studies*, 26(3), 635–666.

The role of firm cash-holding

- (*) Aghion, P., Askenazy, P., Berman, N., Cetto, G., & Eymard, L. (2012). Credit constraints and the cyclical investment: Evidence from France. *Journal of the European Economic Association*, 10(5), 1001–1024.
- Aghion, P., Hemous, D., & Kharroubi, E. (2014). Cyclical fiscal policy, credit constraints, and industry growth. *Journal of Monetary Economics*, (340).
- Begenau, J., & Palazzo, B. (2017). Firm Selection and Corporate Cash Holdings. *NBER Working Paper*, (23249).
- (*) Moll, B. (2014). Productivity Losses from Financial Frictions: Can Self-Financing Undo Capital Misallocation? *American Economic Review*, 104(10), 3186–3221.

Exercice: referee report

Falato, A., & Sim, J. (2014). Why Do Innovative Firms Hold So Much Cash? Evidence from Changes in State R&D Tax Credits. *Working Paper*.

Good and Bad Bubbles

- Brown, J. R., Fazzari, S. M., & Petersen, B. C. (2009). Financing Innovation and Growth: Cash Flow, External Equity, and the 1990s R&D Boom. *Journal of Finance*, 64(1), 151–185.
- Campello, M., and J.R. Graham. 2013. Do Stock Prices Influence Corporate Decisions? Evidence from the Technology Bubble. *Journal of Financial Economics* 107:89–110.
- (*) Hombert, J., & Matray, A. (2019). Technology Boom, Labor Reallocation, and Human Capital Depreciation, Working Paper, 1–42.

Organization and Innovation

Organization → innovation

- (*) Bloom, N., Sadun, R., & Van Reenen, J. (2012). Americans Do IT Better: US Multinationals and the Productivity Miracle. *American Economic Review*, 102(1), 167–201.
- (*) Seru, A. (2014). Firm Boundaries Matter : Evidence from Conglomerates and R & D Activity. *Journal of Financial Economics*, 111(2), 381–405.
- Frésard, L., Hoberg, G., & Phillips, G. (2019). Innovation Activities and Integration through Vertical Acquisitions. *Review of Financial Studies*

Knowledge Spillovers: the Role of Worker Mobility

- Agrawal, A., Cockburn, I., Galasso, A., & Oettl, A. (2014). Why are some regions more innovative than others? The role of small firms in the presence of large labs. *Journal of Urban Economics*, 81(0), 149–165.
- Akcigit, U., Caicedo, S., Miguelez, E., Stantcheva, S., & Sterzi, V. (2018). Dancing with the Stars: Innovation Through Interactions. *NBER Working Paper*, (24466)
- (*) Bloom, N., Schankerman, M., & Van Reenen, J. (2013). Identifying Technology Spillovers and Product Market Rivalry. *Econometrica*, 81(4), 1347–1393.
- (*) Matray A (2018) “The Local Innovation Spillovers of Listed Firms”, *Working Paper*

Lecture: Trade and corporate finance

What does import competition measure? A case study on the innovation debate

- (*) Hombert, J., and Matray, A. (2018). Can Innovation Help U.S. Manufacturing Firms Escape Import Competition from China? *Journal of Finance*, 73(5), 2003–2039.
- (*) Aghion, Philippe, Nick Bloom, Richard Blundell, Rachel Griffith, and Peter Howitt, 2005, Competition and innovation: An inverted-U relationship, *Quarterly Journal of Economics* 120, 701–728.

- (*) Autor, David H., David Dorn, Gordon H. Hanson, Gary Pisano, and Pian Shu, 2016, Foreign competition and domestic innovation: Evidence from U.S. patents, NBER Working Paper 22879.
- (*) Bloom, N., Draca, M., & Van Reenen, J. (2015). Trade Induced Technical Change? The Impact of Chinese Imports on innovation, IT and Productivity. *Review of Economic Studies*.
- (*) Frésard, Laurent, 2010, Financial strength and product market behavior: The real effects of corporate cash holdings, *Journal of Finance* 65, 1097–1122.
- Frésard, Laurent, and Philip Valta, 2016, How does corporate investment respond to increased entry threats? *Review of Corporate Finance Studies* 5, 1–35
- Steinwender, C. (2015). The Roles of Import Competition and Export Opportunities for Technical Change. *Working Paper*, (1334), 1–46.
- Wilson, Daniel J., 2009, Beggar thy neighbor? The in-state, out-of-state and aggregate effects of R&D tax credits, *Review of Economics and Statistics* 91, 431–436.

Export, offshoring and Innovation

- Aghion, P., Bergeaud, A., Lequien, M., & Melitz, M. J. (2017). The Impact of Exports on Innovation: Theory and Evidence. *NBER Working Paper*, 1–33.
- Branstetter, L., & Chen, J.-R. (2017). Does offshoring manufacturing harm innovation in the home country? Evidence from Taiwan and China. *Working Paper*, 1–34.

Credit constraints and the pattern of trade

- Amiti, Mary, and David E. Weinstein. 2011. “Exports and financial shocks.” *Quarterly Journal of Economics*, 126(4): 1841–1877.
- Antràs, Pol, and C Fritz Foley. 2015. “Poultry in Motion: A Study of International Trade Finance Practices.” *Journal of Political Economy*, 123(4): 853–901.
- Beaumont, P., & Lenoir, C. (2018). Building a Customer Base under Liquidity Constraints. *Working Paper*, 1–54.
- Carluccio, J., & Fally, T. (2012). Global Sourcing under Imperfect Capital Markets. *Review of Economics and Statistics*, 94(3), 740–763.

- Chaney, Thomas. 2016. “Liquidity constrained exporters.” *Journal of Economic Dynamics and Control*, 72: 141 – 154.
- Manova, Kalina. 2013. “Credit Constraints, Heterogeneous Firms and International Trade.” *Review of Economic Studies*, 80: 711–744
- Paravisini, Daniel, Veronica Rappoport, Philipp Schnabl, and Daniel Wolfenzon. 2014. “Dissecting the Effect of Credit Supply on Trade: Evidence from Matched Credit-Export Data.” *Review of Economic Studies*, 1–26.
- Xu, C. (2018). Reshaping Global Trade: The Immediate and Long-Run Effects of Bank Failures. *Working Paper*.

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Lecture: Misallocation

Surveys

- Buera, F. J., Kaboski, J. P., & Shin, Y. (2015). *Entrepreneurship and Financial Frictions: A Macroeconomic Perspective*. *Annual Review of Economics*, 7(1), 409–436.
- Buera, F. J., Kaboski, J. P., & Townsend, R. M. (2021). From Micro to Macro Development. *NBER Working Paper*.
- Eisfeldt, A. L., & Shi, Y. (2018). Capital Reallocation. *Annual Review of Financial Economics*, 10(1), 361–386.
- Hopenhayn, H. A. (2014). Firms, Misallocation, and Aggregate Productivity: A Review. *Annual Review of Economics*, 6(1), 735–770.
- Quadrini, V. (2009). Entrepreneurship in macroeconomics. *Annals of Finance*, 5(3), 295–311.
- Restuccia, D., & Rogerson, R. (2017). The Causes and Costs of Misallocation. *Journal of Economic Perspectives*, 31(3), 151–174.

Definition and measurement issues

- Asker, John, Allan Collard-Wexler, and Jan De Loecker. 2014. “Dynamic Inputs and Resource(Mis)Allocation.” *Journal of Political Economy* 122 (5): 1013–1063.
- (*) Bau N. and A. Matray (2020) "Misallocation and Capital Market Integration: Evidence From India", *NBER Working Paper*
- Foster, L., Haltiwanger, J. C., & Krizan, C. J. (2001). Aggregate Productivity Growth: Lessons from Microeconomic Evidence. In *New Developments in Productivity Analysis* (pp. 303–372). University of Chicago Press.
- Gollin, D., & Udry, C. (2021). Heterogeneity, Measurement Error, and Misallocation: Evidence from African Agriculture. *Journal of Political Economy*, 129(1), 1–80.

- Haltiwanger, John, Robert Kulick, and Chad Syverson. 2018. “Misallocation Measures: The Distortion That Ate the Residual.” *NBER Working Paper, no. 24199*.
- (*) Hsieh, C.-T., & Klenow, P. J. (2009). Misallocation and Manufacturing TEP in China and India. *Quarterly Journal of Economics*, 124(4), 1403–1448.
- (*) Hsieh, C.-T., & Klenow, P. J. (2017). The Reallocation Myth. *Working Paper*.
- Khandelwal, A. K., Schott, P. K., & Wei, S. J. (2013). Trade liberalization and embedded institutional reform: Evidence from Chinese exporters. *American Economic Review*, 103(6), 2169–2195.
- Petrin, Amil, and James Levinsohn. 2012. “Measuring aggregate productivity growth using plant-level data.” *RAND Journal of Economics* 43 (4): 705–725.
- (*) Restuccia, Diego, and Richard Rogerson. 2008. “Policy distortions and aggregate productivity with heterogeneous establishments.” *Review of Economic Dynamics* 11 (4): 707–720
- (*) Restuccia, D., & Rogerson, R. (2017). The Causes and Costs of Misallocation. *Journal of Economic Perspectives*, 31(3), 151–174.
- Rotemberg, M., & White, T. K. (2017). Measuring Cross-Country Differences in Misallocation. *Working Paper*, 1–27.
- Sraer, David, and David Thesmar. 2020. “A Sufficient Statistics Approach for Aggregating Firm-Level Experiments.” *NBER Working Paper*.
- Ziebarth, N. L. (2013). Are China and India backward? Evidence from the 19th century U.S. Census of Manufactures. *Review of Economic Dynamics*, 16(1), 86–99.

Why does finance create misallocation?

- Brooks, W., & DAVIS, A. (2020). Credit market frictions and trade liberalizations. *Journal of Monetary Economics*, 111, 32–47.
- (*) Buera, F. J., Kaboski, J. P., & Shin, Y. (2011). Finance and Development: A Tale of Two Sectors. *American Economic Review*, 101(5), 1964–2002
- (*) Matray and Boissel (2021) Higher Dividend Taxes, No Problem! Evidence from Taxing Entrepreneurs in France, *Working Paper*
- (*) Gopinath, G., Kalemli-Özcan, Ş., Karabarbounis, L., & Villegas-Sanchez, C. (2017). Capital Allocation and Productivity in South Europe. *Quarterly Journal of Economics*, 132(4), 1915–1967.
- David, J. M., & Venkateswaran, V. (2019). The Sources of Capital Misallocation. *American Economic Review*, 109(7), 2531–2567.
- (*) Kehrig and Vincent (2020) Good Dispersion, Bad Dispersion, *Working Paper*
- Midrigan, V., & Xu, D. Y. (2014). Finance and Misallocation: Evidence from Plant-Level Data. *American Economic Review*, 104(2), 422–458.
- Moll, B. (2014). Productivity Losses from Financial Frictions: Can Self-Financing Undo Capital Misallocation? *American Economic Review*, 104(10), 3186–3221.
- Paulson, A., Townsend, R., & Karaivanov, A. (2006). Distinguishing Limited Liability from Moral Hazard in a Model of Entrepreneurship. *Journal of Political Economy*, 114(1), 100–144.

What is misallocated?

- Acabbi, E. M., Panetti, E., & Sforza, A. (2020). The Financial Channels of Labor Rigidities: Evidence from Portugal. *Working Paper*.
- Bilal, A., & Rossi-Hansberg, E. (2021). Location as an Asset. *Econometrica*, (forthcoming).
- Boeri-Ichino-Moretti-Posch (2020). Wage Equalization and Regional Misallocation: Evidence from Italian and German Provinces. *Journal of the European Economic Association*, forthcoming
- Costinot, A., & Donaldson, D. (2016). How Large Are the Gains from Economic Integration? Theory and Evidence from U.S. Agriculture, 1880-1997. *Working Paper*.
- Costinot, A., Donaldson, D., & Smith, C. (2016). Evolving Comparative Advantage and the Impact of Climate Change in Agricultural Markets: Evidence from 1.7 Million Fields around the World. *Journal of Political Economy*, 124(1), 205–248.
- David, J., Hopenhayn, H., & Venkateswaran, V. (2016). Information, Misallocation, and Aggregate Productivity. *Quarterly Journal of Economics*, 131(2), 943–1005.
- Duranton, G., Ghani, E., Goswami, A., & Kerr, W. (2015). The Misallocation of Land and Other Factors of Production in India. *Working Paper*
- (*) Fonseca, J., & Doornik, B. Van. (2021). Financial Development, Labor Markets, and Aggregate Productivity: Evidence from Brazil. *Journal of Financial Economics*, forthcoming.
- Hombert, J., & Matray, A. (2020). Technology Boom, Labor Reallocation, and Human Capital Depreciation. *Working Paper*, 1–42.
- (*) Hsieh, C.-T., Hurst, E., Jones, C. I., & Klenow, P. J. (2019). The Allocation of Talent and U.S. Economic Growth. *Econometrica*, 87(5), 1439–1474.
- Hsieh-Moretti (2019). Housing Constraints and Spatial Misallocation. *American Economic Journal: Macroeconomics*, 11(2), 1–39.
- Mian, A., Sufi, A., & Verner, E. (2020). How Does Credit Supply Expansion Affect the Real Economy? The Productive Capacity and Household Demand Channels. *Journal of Finance*.
- Ouazad, A., & Ranciere, R. (2016). Credit Standards and Segregation. *Review of Economics & Statistics*, 1–65.
- Whited, T. M., & Zhao, J. (2021). The Misallocation of Finance. *Journal of Finance*, forthcoming.

Which capital frictions really matter?

- Baqaee, D., Farhi, E., & Sangani, K. (2021). The Supply-Side Effects of Monetary Policy. *NBER Working Paper*, 28345.
- Dix-Carneiro, R., & Kovak, B. K. (2017). Trade Liberalization and Regional Dynamics. *American Economic Review*, 107(10).
- Lanteri, A., & Rampini, A. A. (2021). Constrained-Efficient Capital Reallocation. *NBER Working Paper*, 28384.

- Lanteri, A. (2018). The Market for Used Capital: Endogenous Irreversibility and Reallocation over the Business Cycle. *American Economic Review*, 108(9), 2383–2419.
- Tan, E. (2017). Entrepreneurial Investment Dynamics and the Wealth Distribution. *Working Paper*, 1–88.
- Topalova, P. (2010). Factor Immobility and Regional Impacts of Trade Liberalization: Evidence on Poverty from India. *American Economic Journal: Applied Economics*, 2(4), 1-41.

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Lecture: Finance and Labor

Labor and capital structure

- Perotti, E. C., & Spier, K. E. (1993). Capital Structure as a Bargaining Tool: The Role of Leverage in Contract Renegotiation. *American Economic Review*, 83(5), 1131–1141.
- Matsa, D. A. (2010). Capital Structure as a Strategic Variable: Evidence from Collective Bargaining. *Journal of Finance*, 65(3), 1197–1232.
- Simintzi, E., Vig, V., & Volpin, P. (2014). Labor Protection and Leverage. *Rev. Financ. Stud.*,
- Agrawal, A. K., & Matsa, D. A. (2012). Labor Unemployment Risk and Corporate Financing Decisions. *Journal of Financial Economics*.

Labor and investment

- Lewis, E. (2011). Immigration, Skill Mix, and Capital Skill Complementarity. *Quarterly Journal of Economics*, 126(2), 1029–1069.
- Lafortune, J., Tessada, J., & Lewis, E. (2015). People and Machines: A Look at the Evolving Relationship Between Capital and Skill In Manufacturing 1860-1930 Using Immigration Shocks. *NBER Working Paper*, (21435).
- Burchardi, K. B., Chaney, T., & Hassan, T. A. (2016). Migrants, Ancestors, and Investment. *NBER Working Paper*, (21847).
- Dessaint, Golubov and Volpin (2016) “Employment Protection and Takeovers”, *Working Paper*
- Ouimet, P., & Zarutskie, R. (2011). Acquiring Labor. *Working Paper*, (August), 1–49.

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