Entrepreneurship research is the study of the origin, evolution and impact of new firms and ideas. This mini-course exposes students to key research issues and methodologies. Students from Phd programs in Economics, Finance, and Management are encouraged to participate. The course covers both theoretical and empirical material. A central purpose will be to provide the students with background knowledge and tools to do independent work in the area. The lectures cover four different topics: Entrepreneurial entry, entrepreneurial returns and motivations, startup performance, business dynamics, and entrepreneurship in China, where the final topic is integrated with student presentations.

Instructor: Professor Hans K. Hvide, University of Bergen and CEPR. Home page: http://hans.hvide.googlepages.com/. Email: hans.hvide@uib.no.

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Course material: A preliminary version (including this syllabus) will be distributed and posted at the course webpage.

Requirements for course credit: (1)Participation in all sessions, (2)Student presentation, (3)Passing grade on take-home exam.

Student preparation: students are expected to prepare prior to every lecture, and to participate actively in discussions.

Student presentations: Please see the final pages of the syllabus for details.

Take-home exam: The take-home exam will be arranged over two weeks (student requests for timing will be taken seriously). The workload of the take-home exam will be approximately five days of full-time work.

Course registration: Fudan organizes

Course homepage: https://sites.google.com/site/hanshvide/teaching/fudan

Syllabus, Entrepreneurship

Essential readings when preparing for a lecture is marked with a (*).

Background readings

Bhidé, Amar (2000). The Origins and Evolution of New Businesses. *Oxford University Press*. (Study of 100 fast-growing companies in the U.S., enjoyable read)

Part 1. Entrepreneurial entry and credit constraints (about 4 hours)

We start out by discussing "What is entrepreneurship?" and then examine a canonical model for the transition between paid work and entrepreneurship. After studying the mechanics of the model we review empirical evidence. We also discuss public policy and the notion of the "marginal entrepreneur".

Readings

Andersen, S. & K. Nielsen (2012). Ability or Finances as Constraints to Entrepreneurship? Evidence from Survival Rates in a Natural Experiment. *Review of Financial Studies*, 25, 3684-3710.

(*)Evans, D. S. & B. Jovanovic (1989). An Estimated Model of Entrepreneurial Choice under Liquidity Constraints. *Journal of Political Economy*, 97, 808-827.

(*)Hurst, E. & A. Lusardi (2004). Liquidity Constraints, Household Wealth, and Entrepreneurship. *Journal of Political Economy*, 112, 319-47.

Hvide, H. K. & B. Jones (2018). Innovation by University Employees. *American Economic Review*, 108, 1860-88.

Additional readings

Babina, T (2020). Destructive Creation at Work: How Financial Distress Spurs Entrepreneurship. *Review of Financial Studies*, 33, 4061–4101.

Barrios, J. M., Y. V. Hochberg, and H. Yi (2022). Launching with a parachute: The gig economy and new business formation. *Journal of Financial Economics*, 144, 22-43.

Baumol, W. (1990). Entrepreneurship: Productive, Unproductive and Destructive, *Journal of Political Economy*, 98, 893-921. A mini-classic on productive vs unproductive entrepreneurship.

Bernstein, S., A. Korteweg & K. Laws (2017). Attracting Early-Stage Investors: Evidence from a Randomized Field Experiment. *Journal of Finance*, 72, 509-38.

Bernstein, S., E. Colonnelli, D. Malacrino, and T. McQuade (2022). Who Creates New Firms When Local Opportunities Arise? *Journal of Financial Economics*, 143, 107–130.

Botelho, T. L., D. Fehder & Y. Hochberg (2021). Innovation-Driven Entrepreneurship (a survey). NBER wp.

Hacamo, I. & K. Kleiner (2024). Forced Entrepreneurs. Forthcoming, *Journal of Finance*. Herkenhoff, K., G. Phillips, E. Cohen-Cole (2024). The Impact of Consumer Credit Access on Self-Employment and Entrepreneurship. Forthcoming, *Journal of Financial Economics*. Hombert, J., A. Schoar, D. Sraer & D. Thesmar (2020). Can Unemployment Insurance Spur Entrepreneurial Activity? Evidence from France. *Journal of Finance*, 75, 1247-85.

Part 2. Entrepreneurial returns and motivation (about 3 hours)

How well do entrepreneurs and startups do financially? We examine evidence on entrepreneurial returns and performance, and how performance interacts with selection into entrepreneurship. We then discuss alternative motivations for entrepreneurs, and the extent to which entrepreneurs have preferences or beliefs that are different.

Readings:

Aastebro, T., H. Herz, R. Nanda, and R. A. Weber (2014). Seeking the Roots of Entrepreneurship: Insights from Behavioral Economics. *Journal of Economic Perspectives*, 28, 49-70.

(*) Hamilton, B. (2000). Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-Employment. *Journal of Political Economy*, 108, 604-31.

(*)Hvide, H. K. & G. Panos (2014). Risk Tolerance and Entrepreneurship. *Journal of Financial Economics*, 111, 200-23.

Kerr, W. R., R. Nanda & M. Rhodes-Kropf. Entrepreneurship as Experimentation (2014). *Journal of Economic Perspectives*, 28, 25-48.

Landier, A. & D. Thesmar (2008). Financial Contracting with Optimistic Entrepreneurs: Theory and Evidence. *Review of Financial Studies*, 22, 117-50.

Kihlstrom, R. & J. J. Laffont (1979). A General Equilibrium Entrepreneurial Theory of the Firm Based on Risk Aversion. *Journal of Political Economy*, 87, 719-48.

Manso, G. (2016). Experimentation and the Returns to Entrepreneurship. *Review of Financial Studies*, 29, 2319-2340.

Moskowitz, T. & A. Vissing-Jorgensen (2002). The Returns to Entrepreneurial Investment: A Private Equity Premium Puzzle? *American Economic Review*, 92, 745-78.

Additional readings

Camerer, C. & D. Lovallo (1999). Overconfidence and Excess Entry: An Experimental Approach. *American Economic Review*, 89, 306-18.

Engelberg, J., J. Guzman, R. Lu & W. Mullins (2022), Partisan Entrepreneurship. Forthcoming, *Journal of Finance*.

Hall, R. & S. E. Woodward (2010). The Burden of the Nondiversifiable Risk of Entrepreneurship. *American Economic Review*, 100, 1163–1194.

Hayward, M. L. A., D. A. Shepherd & D. Griffin (2006). A Hubris Theory of Entrepreneurship. Management Science, 52, 160-72.

Kanbur, S. M. (1979a). Of Risk Taking and the Personal Distribution of Income. *Journal of Political Economy*, 87, 769-97.

Kanbur, S. M. (1979b). Impatience, Information and Risk Taking in a General Equilibrium Model of Entrepreneurial Choice. *Review of Economic Studies*, 707-18.

Lazear, E. (2005). Entrepreneurship. Journal of Labor Economics, 23, 649-80.

Lucas, R. (1978). On the Size Distribution of Business Firms. *Bell Journal of Economics*, 9, 508-23.

Shane, S., E. A. Locke & C. J. Collins (2003). Entrepreneurial Motivation. *Human Resource Management Review*, 13, 257-79.

Vereshchagina, V. & H. A. Hopenhayn (2009). Risk Taking by Entrepreneurs. *American Economic Review*, 99, 1808–1830.

Part 3. Startup performance (about 3 hours)

What determines whether a startup performs well or poorly? We consider mainly causal evidence on factors that influence startup performance. Some of the factors we study are the engagement of the entrepreneur, patent shocks, wealth shocks, and demand shocks.

Readings:

(*)Becker, S. & H. K. Hvide (2022). Entrepreneur Death and Startup Performance. *Review of Finance*, 26, 163-185.

Bernstein, S., X. Giroud & R. R. Townsend (2016). The Impact of Venture Capital Monitoring. *Journal of Finance*, 71, 1591-1622.

Fang, H., M. Li, Z. Wu & Y. Zhang (2023). Reluctant Entrepreneurs: Evidence from China's SOE Reform. NBER WP 31700.

Farre-Mensa, D. Hegde, and A. Ljungquist (2019). What Is a Patent Worth? Evidence from the U.S. Patent "Lottery". *Journal of Finance*, 75, 639-682.

(*)Hvide, H. K. & T. Meling (2023). Do Transitory Demand Shocks have Long-Term Effects for Startups? (2023). *Review of Financial Studies*, 36, 317-50.

Hvide, H. K. & P. Oyer. Dinner Table Capital and Entrepreneurship (2023). See ssrn.com.

Lerner, J. & U. Malmendier (2013). With a Little Help from My (Random) Friends: Success and Failure in Post-Business School Entrepreneurship. *Review of Financial Studies*, 26, 2411–2452.

Ring, M. (2023). Entrepreneurial Wealth and Employment: Tracing Out the Effects of a Stock Market Crash. *Journal of Finance*, 78, 3343-85.

Additional readings

Hvide, H. K. & J. Møen (2010). Lean and Hungry or Fat and Content? Entrepreneurs' Wealth and Start-up Performance. *Management Science*, 56, 1242-58.

Smith, M., Yagan, D., Zidar, O., and Zwick, E. (2019): Capitalists in the twenty-first century. *Quarterly Journal of Economics*, 134, 1675–1745.

Part 4. Entrepreneurship and business dynamism (about 4 hours)

Does entrepreneurship matter in the scheme of things? In this part we study recent evidence on how entrepreneurship affects business dynamism, the creation of new jobs, and the economy's response to technological shocks.

Readings

Adelino, M., S. Ma & D. Robinson (2017). Firm Age, Investment Opportunities, and Job Creation. *Journal of Finance*, 72, 999-1038.

(*)Colaiacovo, I., Gross, D. P., and Guzman, J. A. (2023). The composition and dynamics of technology-enabled entrepreneurship. Working paper, Harvard Business School.

(*) Haltiwanger, J. (2022). Entrepreneurship in the twenty-first century. *Small Business Economics*, 58, 27–40.

Haltiwanger, J., Jarmin, R. S., and Miranda, J. (2013). Who creates jobs? Small versus large versus young. *Review of Economics and Statistics*, 95(2):347–361.

(*)Hvide, H. K. & T. Meling (2023). New Technology and Business Dynamics. See ssrn.com. Kerr, W. & R. Nanda (2009). Democratizing entry: banking deregulations, financing constraints, and entrepreneurship. *Journal of Financial Economics*, 94, 124-49.

Additional readings

Agcigit, U. & S. T. Ates (2023). What Happened to U.S. Business Dynamism? Forthcoming, *Journal of Political Economy*.

Decker, R. A., Haltiwanger, J., Jarmin, R. S., and Miranda, J. (2020). Changing business dynamism and productivity: Shocks versus responsiveness. *American Economic Review*, 12, 3952–90.

Foster, L., J. Haltiwanger & C. Syverson (2008). Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability? *American Economic Review*, 98, 394--425.

Gort, M. & S. Klepper (1982). Time Paths in the Diffusion of Product Innovations. *Economic Journal*, 92, 630-653.

Guzman, J. and Stern, S. (2020). The state of American entrepreneurship: New estimates of the quantity and quality of entrepreneurship for 32 US states, 1988–2014. *American Economic Journal: Economic Policy*, 124, 212–43.

Sedlacek, P. and Sterk, V. (2017). The growth potential of startups over the business

cycle. American Economic Review, 107, 3182–3210.

Syverson, C. (2011). What Determines Productivity? *Journal of Economic Literature*, 49, 326–365.

Part 5. Entrepreneurship in China and student presentations (about 3 hours)

Here we review work on entrepreneurship in China, in combination with student presentations. See below for information about the format of the student presentations.

Chen, Z. Z. Liu, J. C. S. Serrato, and D. Y. Xu (2021). Notching R&D Investment with Corporate Income Tax Cuts in China. *American Economic Review*, 111, 2065–2100.

Dai, R., D. Mookherjee, K. Munshi, and X. Zhang (2023). Entrepreneurship in China's Structural Transitions: Network Expansion and Overhang. NBER working paper 31477.

Fang, H., M. Li, Z. Wu, and Y. Zhang (2023). Reluctant Entrepreneurs: Evidence from China's SOE Reform. NBER wp 31700.

He, Z., B. Liu, F. Zhu (2022). Share pledging in China: Funding listed firms or funding entrepreneurship? NBER wp 29731.

Lerner, J. J. Liu, J. Moscona, and D. Y Yang (2024). Appropriate Entrepreneurship? The Rise of China and the Developing World. NBER wp 32193. http://www.nber.org/papers/w32193 Lu, Y., G. M. Phillips, and J. Yang (2024). The Impact of Cloud Computing and AI on Industry Dynamics and Equity Financing Yao Lu, Gordon M. Phillips and Jia Yang. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4480570.

Tian, X. and J. Xu (2022). Do Place-Based Policies Promote Local Innovation and Entrepreneurship? *Review of Finance*, 595–635.

Wei, S.-J., Z. Xie, and X. Zhang (2017). From "Made in China" to "Innovated in China": Necessity, Prospect, and Challenges. *Journal of Economic Perspectives*, 31, 49–70.

Student presentations

The format for the student presentations is about 6 minutes individual presentations (including questions and discussion), or possibly mini-group presentations (two students max per group – they get 12 minutes). The students are encouraged to pick a paper from the list above (Entrepreneurship in China) or a recent paper from other parts of the syllabus.

You are also free to propose a paper outside this list, ideally a high-quality working paper but recently published papers are also of interest (one place to look is at the home pages of the researchers listed below, or at the links of the NBER bootcamps, also listed below). In previous versions of the course, students have presented their own entrepreneurship papers. This is highly welcome.

Some aid for the student presentation is to ask yourself these questions:

- i. Brief: what is the motivation for the paper? Relate to existing literature-
- ii. What is the (main) research question? Why important (or not so important). Relate to existing literature.
- iii. How does the paper analyze the questions? Is the method (and data, if applicable) appropriate? Are these causal effects or correlational effects?
- iv. What are the results? Which issues are there in the interpretation? Relate to iii.
- v. What are the research (and policy, if applicable) implications of the paper? Relate to ii and i. What do you think is the overall quality of the paper?
- vi. Are there projects that might be worth doing in the extension of this paper? What would be the data requirements and are these requirements feasible?

Timetable

Session 1: 9:00-11:30 am Apr 22 (Monday) Session 2: 9:00-11:30 am Apr 23 (Tuesday) Session 3: 6:30-09:00 pm Apr 23 (Tuesday) Session 4: 9:00-11:30 am Apr 24 (Wednesday) Session 5: 9:00-11:30 am Apr 25 (Thursday) Session 6: 9:00-11:30 am Apr 26 (Friday)

Links

Get acquinted with entrepreneurship by browsing at the web pages of leading researchers. Here is a partial list:

Thomas Astebro, HEC,

 $https://www.hec.edu/en/faculty-research/faculty-directory/faculty-member/ASTEBRO-Thom\ as.$

Ufuk Akcigit, U Chicago, http://www.ufukakcigit.com/research-1

Tania Babina, Columbia, https://www.taniababina.com/

Shai Bernstein, HBS. https://sites.google.com/view/shai-bernstein/home

Michael Ewens, Columbia, https://michaelewens.com/research/

John Haltiwanger, U of Maryland, https://econweb.umd.edu/~haltiwan/

Camille Hebert, U Toronto, https://sites.google.com/site/camhebert/home

Thomas Hellmann, U of British Columbia, http://strategy.sauder.ubc.ca/hellmann/

Johan Hombert, HEC Paris,

https://www.hec.edu/en/faculty-research/faculty-directory/faculty-member/HOMBERT-Johan

Sabrina Howell, NYU, http://www.sabrina-howell.com/

Hans K. Hvide, U Bergen, https://sites.google.com/site/hanshvide/home

William Kerr, HBS, https://www.hbs.edu/faculty/Pages/profile.aspx?facId=337265

Josh Lerner, HBS, https://www.hbs.edu/faculty/Pages/profile.aspx?facId=9961

Adrien Matray, Princeton. https://sites.google.com/view/adrienmatray/home

Ramana Nanda, Imperial College, https://www.imperial.ac.uk/people/ramana.nanda

Antoinette Schoar, MIT Sloan School, http://www.mit.edu/~aschoar/Research.htm

Morten Sorensen, Dartmouth College,

https://www.tuck.dartmouth.edu/faculty/faculty-directory/morten-sorensen

Rick Townsend, UCSD. https://sites.google.com/site/rrtowns/

The <u>NBER entrepreneurship group</u> is in some ways the global center of entrepreneurship research. You are strongly encouraged to look up recent working papers etc.

The following links provide some literature from recent NBER entrepreneurship bootcamps. Recommended.

2023 NBER bootcamp

2022 NBER bootcamp

2021 NBER bootcamp

Student presentation

There are two main options for what to present. Pick a paper on entrepreneurship in China, see list above, or pick a paper from the reading list. Students in groups of maximum two is allowed.

NB: approval of topic is required. Send a suggestion by email to hans.hvide@uib.no before midnight Wednesday.