

FinTech and Blockchains

Prof. David Yermack
Swedish House of Finance
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This doctoral mini-course will survey research in the new field of FinTech. FinTech uses information technology to disrupt and restructure the financial services industry, often by introducing decentralized, peer-to-peer business models that disintermediate banks, stock exchanges, and other third parties.

The reading list below is preliminary and will likely be revised prior to the start of the course, due to the fast-changing nature of the subject matter.

Assessment will be based on a take-home assignment distributed at the end of the course.

Wednesday 16 May, 13:45 – 18:00 with two breaks

I. Introduction to digital currency, blockchains, and distributed ledgers

- Haber and Stornetta, 1991, “How to time stamp a digital document,” *Lecture Notes in Computer Science* 557, 437-455.
- Nakamoto, 2008, “Bitcoin: A peer-to-peer electronic cash system,” unpublished manuscript.
- Harvey, 2014, “Cryptofinance,” unpublished manuscript.
- Harvey, 2014, “Bitcoin myths and facts,” unpublished manuscript.
- Yermack, 2015, “Is bitcoin a real currency? An economic appraisal,” *Handbook of Digital Currency*, ch. 2.
- Foley, Karlsen, and Putnins, 2018, “Sex, drugs, and bitcoin: How much illegal activity is financed through cryptocurrencies?” unpublished manuscript.
- Philippon, 2018, “The FinTech opportunity,” unpublished manuscript.

II. Mining and consensus

- Saleh, 2017, “Blockchain without waste: Proof of stake,” unpublished manuscript.
- Biais, Bisiere, Bouvard, and Casamatta, 2018, “The blockchain folk theorem,” Unpublished manuscript.
- Easley, O’Hara, and Basu, 2018, “From mining to markets: The evolution of blockchain transaction fees,” unpublished manuscript.
- Baldimtsi, Cong, He, and Li, 2018, “The creation and organization of firms: Theory and evidence from bitcoin mining pools,” in progress.

Thursday 17 May, 9:00 – 12:15 with one break

III. Smart contracts, decentralized autonomous organizations, and the Internet of things

- Szabo, 1997, “Formalizing and securing relationships on public networks,” *First Monday* 2:9.
- Leising, 2017, “The ether thief,” *Bloomberg Markets*, June 13.
- Chen, Wu, and Yang, 2018, “How valuable is FinTech innovation?” unpublished manuscript.

IV. Capital market applications

- Yermack, 2017, “Corporate governance and blockchains,” *Review of Finance* 21, 7-31.
- Li and Mann, 2017, “Initial coin offerings and platform building,” unpublished manuscript.
- Das, 2017, “The future of FinTech,” unpublished manuscript.
- Catalini and Gans, 2018, “Initial coin offerings and the value of crypto tokens,” unpublished manuscript.
- Fuster, Plosser, Schnabl and Vickery, 2018, “The role of technology in mortgage lending,” unpublished manuscript.

Thursday 17 May, 13:30 – 16:45 with one break

V. Peer to peer capital markets

- Ravina, 2012, “Love and loans: The effect of beauty and personal characteristics in credit markets,” unpublished manuscript.
- Tang, 2018, “Peer-to-peer lenders versus banks: Substitutes or compliments?” unpublished manuscript.
- Valee and Zeng, 2018, “Marketplace lending: A new banking paradigm,” unpublished manuscript.

VI. FinTech and investment research

- Rogers, Skinner, and Zechman, 2017, “Run EDGAR run: SEC dissemination in a high frequency world,” *Journal of Accounting Research* 55, 459-505.
- Grennan and Michaely, 2018, “FinTechs and the market for financial analysis,” unpublished manuscript.
- Berg, Burg, Gombovic, and Puri, 2018, “On the rise of FinTechs: Credit scoring using digital footprints,” unpublished manuscript.
- D’Acunto, Prabhala, and Rossi, 2018, “The promises and pitfalls of robo-advising,” unpublished manuscript.
- Gandal, Hamrick, Moore, and Oberman, 2018, “Price manipulation in the bitcoin ecosystem,” *Journal of Monetary Economics*, forthcoming.

- Bailey, Cao, Kuchler, and Stroebel, 2018, “The economic effects of social networks: Evidence from the housing market,” *Journal of Political Economy*, forthcoming.