

Research seminar (MW86)  
Summer semester 2022  
Dr. Apoorva Gupta

## **Seminar: Economics of Innovation**

Content: In this course, we will think about the economics of innovation. A large literature shows that innovation is the key driver of economic growth, although notable market failures prevent players from optimally investing in R&D. To overcome these market failures, the State actively invests in R&D, and uses policy-tools such as R&D subsidies, intellectual property rights, and grants. This course will look at the empirical and theoretical research in these topics.

A list of topics and main reference readings is proposed below. Students are expected to make a presentation and subsequently write an essay on a topic of their choice, both in English. Besides the main reading, it is expected that students cite and evaluate additional relevant literature. Suggestions for alternative projects that are related to the topic of the seminar are welcome.

Target group: MSc VWL / MSc BWL  
SWS/Credit points: 2 SWS / 4 ECTS  
Maximum number of students: 15  
Examination: 5000 words essay and presentation

Grading:

20 min Presentation: 30%  
Essay: 60%  
Class participation: 10%

## **Innovation and economic growth**

### **1) Idea driven growth: Sustainable or not?**

Bloom, Nicholas, Charles I. Jones, John Van Reenen, and Michael Webb. "Are ideas getting harder to find?." *American Economic Review* 110, no. 4 (2020): 1104-44.

### **2) Measuring the importance of technological innovation for economic growth**

Kogan, Leonid, Dimitris Papanikolaou, Amit Seru, and Noah Stoffman. "Technological innovation, resource allocation, and growth." *The Quarterly Journal of Economics* 132, no. 2 (2017): 665-712.

## Market failures

### 3) Social return of research and development

Jones, B. F., & Summers, L. H. (2020). A Calculation of the Social Returns to Innovation (No. w27863). National Bureau of Economic Research.

Bloom, Nicholas, Mark Schankerman, and John Van Reenen. "Identifying technology spillovers and product market rivalry." *Econometrica* 81, no. 4 (2013): 1347-1393.

Arora, A., Belenzon, S., & Sheer, L. (2021). Knowledge spillovers and corporate investment in scientific research. *American Economic Review*, 111(3), 871-98.

### 4) Business stealing

Garcia-Macia, Daniel, Chang-Tai Hsieh, and Peter J. Klenow. "How destructive is innovation?" *Econometrica* 87, no. 5 (2019): 1507-1541.

## Role of the State

### 5) Mission oriented innovation policy: The role of the State

Mariana Mazzucato and Caetano Penna (2016) "[Beyond market failures: the market creating and shaping roles of state investment banks](#)", *Journal of Economic Policy Reform*, 19(4): 305-326, [SPRU working paper version](#)

### 6) Universities and R&D

Veugelers, R. (2016). The embodiment of knowledge: Universities as engines of growth. *Oxford Review of Economic Policy*, 32(4), 615-631.

## Incentives for Innovation

Bloom, Nicholas, John Van Reenen, and Heidi Williams (2019) "A toolkit of policies to promote innovation" *Journal of Economic Perspectives* 33 (3): 163-84

### 7) R&D tax credits

Ivus, O., Jose, M., & Sharma, R. (2021). R&D tax credit and innovation: Evidence from private firms in india. *Research Policy*, 50(1), 104128.

Dechezleprêtre, A., Einiö, E., Martin, R., Nguyen, K. T., & Van Reenen, J. (2016). *Do tax incentives for research increase firm innovation? An RD design for R&D* (No. w22405). National Bureau of Economic Research.

## **8) Intellectual property rights**

Moscona, J. (2021). *Flowers of Invention: Patent Protection and Productivity Growth in US Agriculture*. Available at SSRN 3924439.

Boldrin, Michele and David K. Levine. 2013. "The Case Against Patents." *Journal of Economic Perspectives* 27 (1): 3–22.

## **9) Research Grants**

Azoulay, Pierre, Joshua S. Graff Zivin, Danielle Li, and Bhaven N. Sampat (2019) "Public R&D investments and private-sector patenting: Evidence from NIH funding rules," *Review of Economic Studies* 86(1): 117–52