Remote Talks: Changes to Economics Seminars During COVID-19

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Why should we care about who speaks?

- Invited seminars are a means for speakers to
  - get access to feedback
  - build professional networks
  - disseminate their research

- Hosting institutions benefit through network effects and by learning about new research

- Potentially there are positive externalities on junior researchers through role model effects (Porter and Serra 2020)

Online seminars reduced the cost of presenting

- The pandemic increased the share of people working from home and forced experimentation with ICT (for example, Zoom)

- The biggest innovation in scientific communication were online conferences and seminars

- Attending a conference in-person vs. online

- Two days of presenting a seminar in-person vs. a few hours online

What this paper does

- Collects information on 19,250 seminars in the fall for each AY between 2018 and 2022 for 270 institutions

- Complements seminar data with information on speaker gender, productivity, and academic age

- Finds that the introduction of virtual seminars increased the likelihood that female and more productive economists were speakers

- The likelihood that the speaker was female increased by 7.5 percentage points in AY 2020

- "Superstar effects" occurred and the speaker productivity was higher along different margins (e.g., the average rank of speaker's institution decreased by 8 positions)

Empirical Analysis

Speaker-level Analysis

- Let **h** denote the host institution, **s** the seminar series of the department, and **t** the academic year in which the seminar was held. Let additionally **i** denote a seminar talk held by an individual speaker.

$$\mathbb{1}(\text{female}_{ihst}) = \lambda_{hs} + \gamma \times X_i + \beta \times \mathbb{1}(t = \text{Academic year } 2020/21) + \epsilon_{ihst},$$

  λ_{hs} is a host institution-seminar series specific fixed effect and ϵ_{hst} the error term.

- X_i is speakers' experience

- Standard errors are clustered at the level of the host institution-seminar series level

The association between speakers' gender and the COVID-19 shock

	(1)	(2)	(3)	(4)
		$\mathbb{1}(\text{female}_{ihst})$		
$\mathbb{1}(t = \text{AY 2020/21})$	0.075***	0.057***	0.055***	0.082***
	(0.009)	(0.012)	(0.009)	(0.013)
$\mathbb{1}(t = \text{AY 2020/21}$		0.032*		
$\times \mathbb{1}(1,475\text{km} < \text{Dist.}_{iht})$		(0.018)		
$\mathbb{1}(t = \text{AY 2020/21})$			0.074***	
$\times \mathbb{1}(1,475\text{km} < \text{Distance}_{iht} < 5,000\text{km})$			(0.022)	
$\mathbb{1}(t = \text{AY 2020/21}) \times \text{Experience}_i$				-0.0006
				(0.0007)
Guest institution FE	No	Yes	Yes	No
Distance dummy	No	Yes	Yes	No
R^2	0.095	0.095	0.095	0.095
Observations	12,335	12,335	12,335	12,335

Distance by gender

The return to in-person seminars in 2021

- Estimation of a time-fixed effect may not reflect the effect of remote seminars

- Use the staggered timing of returning to in-person seminars in AY 2021

- 55.6 percent of seminars were held online

The association between speakers' gender and online presentations

	(1)	(2)	(3)
	$\mathbb{1}$(Online presentation$_{ihst}$)		
$\mathbb{1}$(female$_{ihst}$)	0.046***	0.051***	0.048***
	(0.016)	(0.017)	(0.018)
IHS(Distance$_{iht}$)	0.034***	0.033***	0.020***
	(0.004)	(0.004)	(0.005)
Rank speaker institution$_{ist}$		-0.0001	-0.0001
		(0.0001)	(0.0001)
Host institution $\times$ Seminar series FE	Yes	Yes	Yes
Host country $\times$ Speaker country FE	No	No	Yes
R^2	0.558	0.552	0.601
Observations	2,841	2,504	2,312

The association between speakers' gender and seminars in 2021 and 2022

	(1) $\mathbb{1}(\text{Speaker is female}_{ihst})$
$\mathbb{1}(t = \text{Academic year } 2020/21)$	0.074***
	(0.009)
$\mathbb{1}(t = \text{Academic year } 2021/22)$	0.068***
	(0.008)
$\mathbb{1}(t = \text{Academic year } 2022/23)$	0.049***
	(0.008)
R^2	0.080
Observations	17,295

Robustness checks

- Comparing newly established public online seminars and institutional seminars `Results`

- Number of seminars `Results`

- Discussants at the NBER SI `Results`

- Cancellations by female speakers unaffected `Results`

- Excluding rescheduled seminars `Results`

- Excluding pandemic-related titles `Results`

- Controlling for speaker fields `Results`

- Excluding female superstar speakers `Results`

Concentration among speakers increased

- Superstar effects occurred for both genders

- Comparing pre-COVID-19 to COVID-19
    - The average number of seminars per female speaker increased from 1.54 to 1.74
    - The share of women with three or more seminars increased from 6.7 percentage points to 9.4 percentage points
    - The number of female speakers increased by 2.6 percentage points

Conclusion

- The widespread use of online seminars during COVID-19 is potentially having some permanent component

- The COVID-19 shock increased inequality between speakers in favor of "stars", but reduced gender-specific inequality

- Offering option to hold a seminar virtually could reduce gender-specific inequality

- Balancing act as network opportunities are limited online

The association between the number of seminars and the COVID-19 shock

	(1) Number of seminars$_{it}$
$\mathbb{1}(t = \text{AY } 2020/21) \times \mathbb{1}(\text{female}_i)$	0.218***
	(0.031)
Individual FE	Yes
Individual controls × Time FE	Yes
Time FE	Yes
R^2	0.384
Observations	19,509

Density of bilateral distances by gender
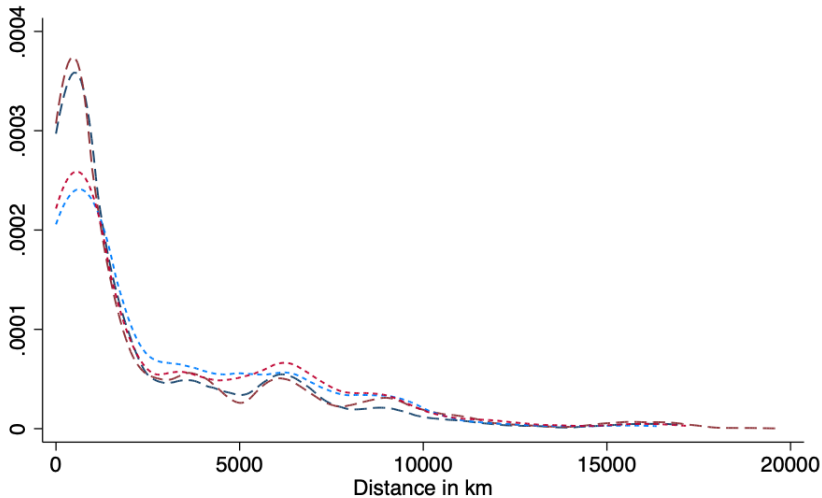
Go back

Excluding rescheduled seminars

	(1)
	$\mathbb{1}(\text{female}_{ihst})$
$\mathbb{1}(t = \text{Academic year } 2020/21)$	0.072***
	(0.009)
R^2	0.095
Observations	11,982

Go back

Excluding pandemic-related titles

| | (1) |
	$\mathbb{1}(\text{female}_{ihst})$
$\mathbb{1}(t = \text{Academic year 2020/21})$	0.072***
	(0.009)
R^2	0.095
Observations	12,108

Controlling for speaker fields

	(1)
	$\mathbb{1}(\text{female}_{ihst})$
$\mathbb{1}(t = \text{Academic year 2020/21})$	0.075***
	(0.010)
Field FE	Yes
R^2	0.190
Observations	7,615

Excluding female superstar speakers

	(1)
	$\mathbb{1}(\text{female}_{ihst})$
$\mathbb{1}(t = \text{Academic year 2020/21})$	0.065***
	(0.010)
R^2	0.104
Observations	8,800

Estimating the effect using a logit regression

	(1)
	$\mathbb{1}(\text{Speaker is female}_{ihst})$
$\mathbb{1}(t = \text{Academic year 2020/21})$	0.442***
	(0.048)
Log-likelihood	-6190.09
Observations	12,152

Reporting of online seminars by institutions

	(1) $\mathbb{1}$(Speaker is female$_{ihst}$)
$\mathbb{1}(t = $ Academic year 2020/21$)$	0.072***
	(0.009)
R^2	0.097
Observations	10,155

The association between cancellations and the COVID-19 shock

	(1) Share of female cancellations$_{ht}$
$\mathbb{1}(t =$ Academic year 2020/21)	0.005
	(0.003)
R^2	0.310
Observations	180

Discussants at the NBER SI

	(1)
	$\mathbb{1}(\text{female}_{iprt})$
$\mathbb{1}(t = \text{Summer 2021})$	0.113***
	(0.039)
Program FE	Yes
Individual-level control	Yes
R^2	0.065
Observations	942

Summary statistics by institutional and public seminars

	Mean$_{inst.}$	Mean$_{public}$	Difference
$\mathbb{1}(\text{female}_{ihst})$	0.297	0.342	-0.045

Notes: The data for institutions comprise 509 seminar series and 3,794 seminars. The data on public seminars include 31 seminar series and up to 281 seminar speakers. All values are for the academic year 2020/21.