

## Abstract

We study the influence of editors and coeditors of the American Economic Review (AER) on the topic structure of papers published in the AER between 1976 and 2013 using a textual analysis of manuscripts. We compare AER's topic structure to that of other top general interest journals and we find:

- 1- The appointment of new AER editors is accompanied by a minor co-movement of AER topics towards topics of editor's post-appointment publications
- 2- The appointment of new AER editors serves more to premeditate trends in the other top journals.

## Data and the LDA Model

- We study the corpus of texts in the AER, QJE, JPE, REStud, and Econometrica, and all articles written by AER's editors between 1976 and 2013.
- We compare trends in topic frequencies in articles published by newly appointed editors of the AER taking office between 1985 and 2011 against topic frequencies observed in articles published in the AER and in the other Top 5.
- We preprocess full texts of research articles through several technical steps of stemming and removing text. After this, the topic analysis was performed using Latent Dirichlet Allocation (LDA) model.
- Each topic is a probability distribution over words that are encountered in the whole text corpus.
- Topics are constructed to fit a model consisting of a mixture of distributions over words, subject to a pre-specified number of topics. Our ex-ante specification is based on 200 topics; results remain qualitatively similar if the number of topics is increased.

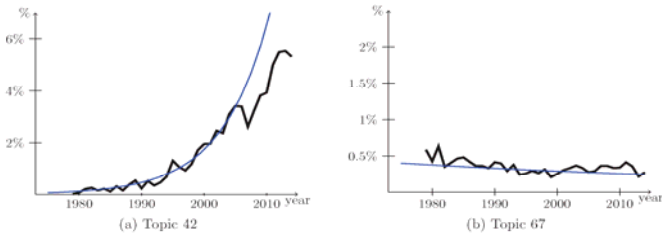


Figure 1: Topics change over time

**Topic 42** contains this cluster of words: *effect estim year result column us tabl control specif data sampl regress includ panel level coefficient fix\_effect differ measure report*  
**Topic 67** contains this cluster of words: *market competit share price differ particip segment new structur number mar\_ket side power suppli effici unit determin inform oper profit*

## Estimating Topic Loadings

$AER_{i,pre/post}^c$ : frequency of topic  $c$  in the AER before/after editor  $i$ 's tenure at the AER.

$Top5_{i,pre/post}^c$ : frequency of topic  $c$  in Top 5 (other than the AER) after editor  $i$ 's tenure at the AER.

$Editor_{i,pre/post}^c$ : frequency of topic  $c$  in editor  $i$ 's publications before/after their tenure at the AER.

$$AER_{i,post}^c = F(AER_{i,pre}^c, Top5_{i,pre}^c, \{Editor\ Preferences\}, FE^c)$$

$$Top5_{i,post}^c = F(AER_{i,pre}^c, Top5_{i,pre}^c, \{Editor\ Preferences\}, FE^c)$$

Editor preferences are captured in three ways: Editors' topic frequencies *before* their tenure, *after* their tenure, and by using *fitted values* obtained from regressing editor's topic frequencies during their tenure on AER's, Top5's, and editor's own topic frequencies observed before their tenure.

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## Results

Table 2: Journals' Topics and Editor's Preference with Four Year Window and One Year Lag

	$Editor_{i,pre}^c$		$AER_{i,post}^c$		$Top5_{i,post}^c$			$(AER - Top5)_{i,post}^c$			
	(1)pre	(2)post	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
$AER_{i,pre}^c$	-0.130 (0.225)	0.568** (0.181)	0.197*** (0.0516)	0.195*** (0.0514)	0.193*** (0.0511)	0.199** (0.0728)	0.197** (0.0729)	0.200** (0.0728)	-0.00198 (0.0767)	-0.00185 (0.0769)	-0.00714 (0.0769)
$Top5_{i,pre}^c$	0.471** (0.175)	0.347 (0.210)	0.276*** (0.0499)	0.275*** (0.0495)	0.274*** (0.0497)	0.353*** (0.0626)	0.350*** (0.0623)	0.353*** (0.0627)	-0.0762 (0.0761)	-0.0749 (0.0763)	-0.0794 (0.0761)
$Editor_{i,pre}^c$		0.240** (0.0203)	0.00167 (0.00174)			-0.000519 (0.00157)			0.00219 (0.00221)		
$Editor_{i,post}^c$				0.00429* (0.00173)			0.00506* (0.00210)			-0.000767 (0.00237)	
$Editor_{i,post}^{c,fitted}$					0.00695 (0.00724)			-0.00216 (0.00655)			0.00910 (0.00921)
Topics FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2925	2925	2925	2925	2925	2925	2925	2925	2925	2925	2925
R <sup>2</sup>	0.496	0.574	0.984	0.984	0.984	0.981	0.981	0.981	0.671	0.671	0.671

Standard errors in parentheses  
 \*  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table 3: Journals' Topics and Editor's Preference with Four Year Window and Two Year Lag

	$Editor_{i,pre}^c$		$AER_{i,post}^c$		$Top5_{i,post}^c$			$(AER - Top5)_{i,post}^c$			
	(1)pre	(2)post	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
$AER_{i,pre}^c$	0.394* (0.200)	0.271 (0.198)	0.238*** (0.0525)	0.238*** (0.0524)	0.237*** (0.0525)	0.176** (0.0535)	0.175** (0.0535)	0.173** (0.0541)	0.0620 (0.0637)	0.0631 (0.0636)	0.0642 (0.0640)
$Top5_{i,pre}^c$	0.422* (0.224)	-0.0580 (0.197)	0.225*** (0.0481)	0.225*** (0.0482)	0.225*** (0.0482)	0.333*** (0.0705)	0.334*** (0.0705)	0.333*** (0.0705)	-0.108 (0.0758)	-0.108 (0.0758)	-0.108 (0.0758)
$Editor_{i,pre}^c$		0.235*** (0.0273)	0.00108 (0.00224)			0.00298 (0.00289)			-0.00191 (0.00360)		
$Editor_{i,post}^c$				0.00142 (0.00164)			0.00625** (0.00216)			-0.00483* (0.00249)	
$Editor_{i,post}^{c,fitted}$					0.00458 (0.00954)		0.0127 (0.0123)				-0.00810 (0.0153)
Topics FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2925	2925	2925	2925	2925	2925	2925	2925	2925	2925	2925
R <sup>2</sup>	0.560	0.541	0.985	0.985	0.985	0.976	0.976	0.976	0.571	0.571	0.571

Standard errors in parentheses  
 \*  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Editors' topics before their tenure at the AER strongly align with topics in the other Top 5.

A 4-year window with 1-year publication lag (Table 2) reveals that post-tenure topics of editors positively correlate with post-tenure topics observed in the AER and the other Top 5 and with a larger point estimate in case of the other Top 5.

When publication lag is increased to 2 years (Table 3) no significant correlation is obtained between editors' and AER's current topics. Editors' topics remain significantly correlated to the other Top 5. Moreover this is significantly correlated to the topic gap between the AER and the other Top 5.

The size of the effect is quite small, amounting to a replacement of 1-3 regular papers in 100 by a paper that is devoted only to the newly appointed editor's interests. Most editors' work is not too far from what was published in the AER before their appointment. So, 1-3% is the estimate of the appointment effect from above.

We know neither the editors who were handling individual papers nor what was rejected by the very same editors. The effect of the former clearly will make our coefficients biased towards zero.

## Conclusions

We find that AER's topic frequencies align with those observed in editors' own publications while being an editor, which align with the topics of the other Top 5 before becoming an editor. Moreover, point estimates for editors' topics when regressed on topics of other Top 5 are larger.

A possible interpretation is that editors are hired to make sure that the AER keeps up its line of publication topics in line with what is trending in the other Top 5 journals.

## References

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