AI and Shocks to Labor Demand, Labor Supply and Labor Mobility

NABE Session

AEA Meetings 2026

Rob Seamans – NYU Stern School of Business

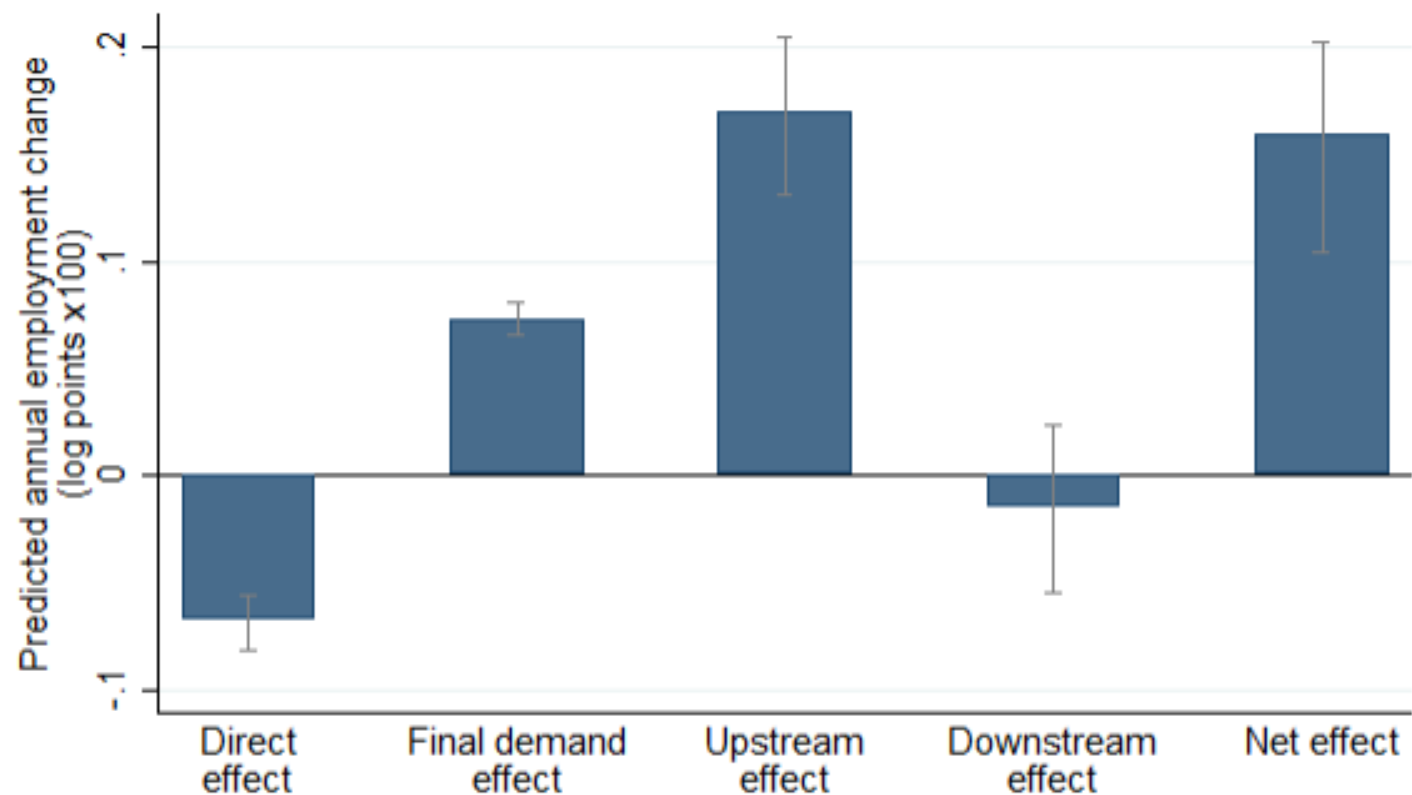# Points

1. Humans are agentic.

   If there is a drop in demand for labor in one area (task, occupation, industry, geography), then humans will "move" to other areas where there is an increase in demand (or at least less of a drop in demand)

2. We see evidence of this historically

3. We see early evidence of this with AI

4. Maybe AI can help with this transition

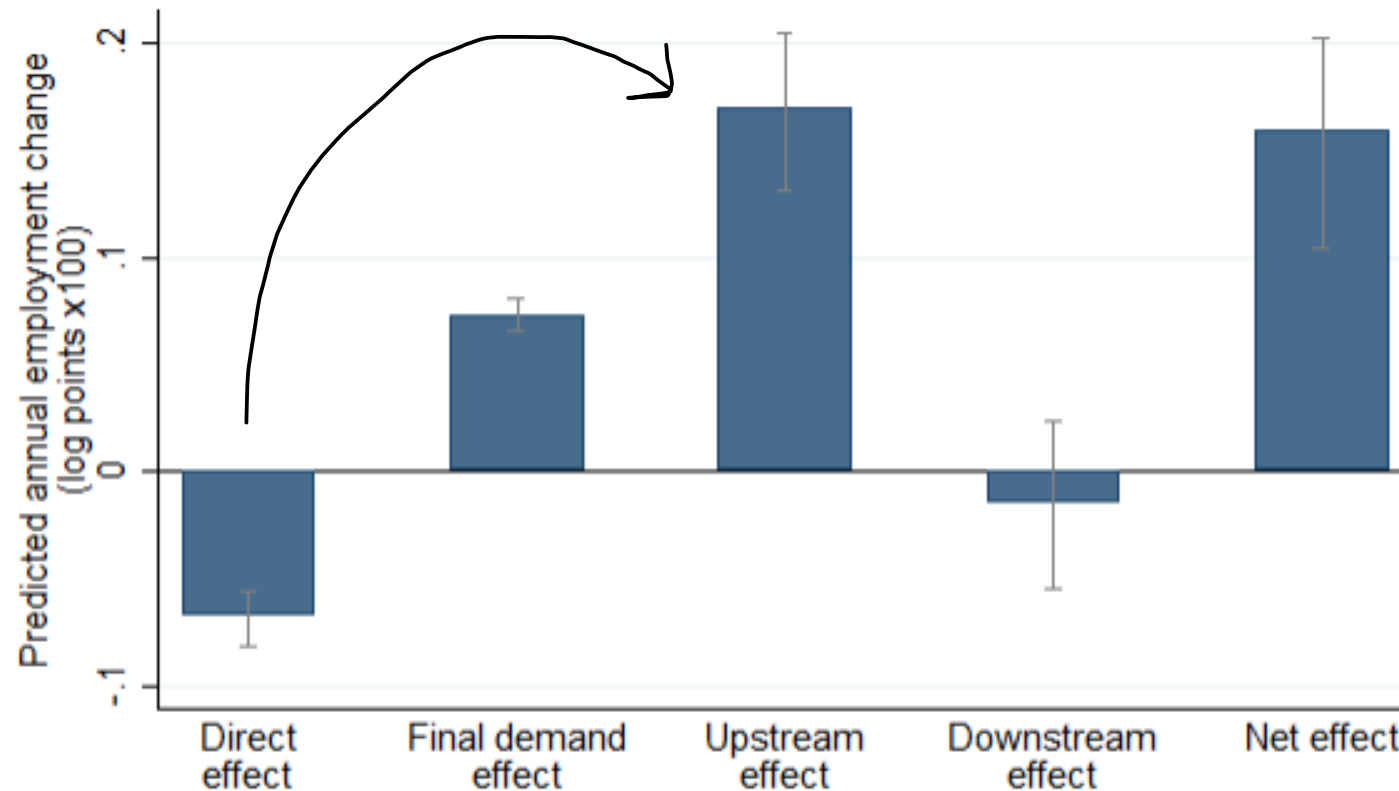# Tech shocks *should* increase employment

Figure 1A: Predicted Effects of TFP Growth on Aggregate Employment, 1970 – 2007

Source: Autor and Salomons, 2018

But, need to move from low to high demand

Figure 1A: Predicted Effects of TFP Growth on Aggregate Employment, 1970 – 2007
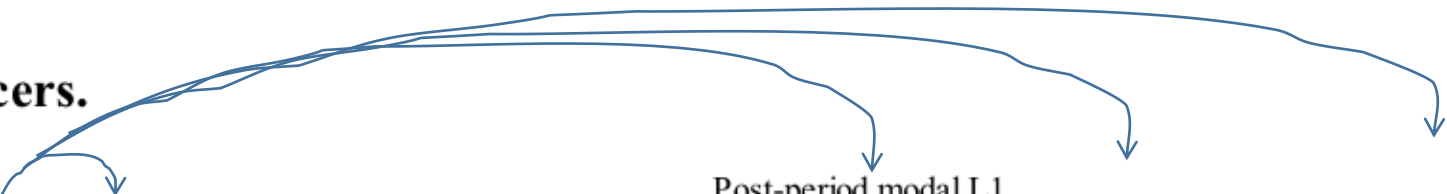
Source: Autor and Salomons, 2018

Upwork freelancers reposition themselves

Panel B. Incumbent freelancers.

| | | Post-period modal L1 | | | | | | | | | | | |
L1 Name	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Writing	-10.2%	0.6%	0.0%	0.2%	0.2%	0.1%	0.9%	0.0%	1.8%	0.0%	1.3%	0.6%	4.4%
2 Translation	1.1%	-12.0%	0.1%	0.0%	0.1%	0.3%	1.2%	0.0%	2.8%	-0.1%	0.2%	0.4%	5.9%
3 Customer Service	-0.1%	-0.4%	-10.5%	0.2%	0.0%	-0.1%	0.6%	-0.6%	3.3%	0.1%	1.9%	0.3%	5.3%
4 Engineering & Architecture	-0.1%	0.1%	0.1%	-4.8%	0.1%	-0.2%	-0.1%	0.0%	0.3%	0.0%	0.2%	0.2%	4.3%
5 Accounting & Consulting	-0.7%	0.1%	0.0%	0.1%	-6.9%	-0.1%	0.0%	0.0%	2.4%	-0.2%	0.0%	0.4%	4.9%
6 Web, Mobile & Software Dev	0.1%	0.1%	0.0%	0.0%	0.0%	-4.6%	0.5%	0.1%	0.4%	0.0%	0.2%	0.4%	2.7%
7 Design & Creative	0.3%	0.2%	0.0%	0.4%	0.0%	-0.1%	-8.5%	0.0%	0.9%	0.0%	0.4%	0.2%	6.2%
8 IT & Networking	0.0%	0.0%	0.5%	0.0%	0.1%	-1.6%	-0.1%	-1.9%	0.3%	0.0%	0.2%	0.3%	2.3%
9 Admin Support	0.4%	0.2%	-0.4%	0.1%	-0.3%	-0.1%	0.8%	0.0%	-8.9%	0.0%	-0.9%	0.5%	8.7%
10 Legal	-0.2%	0.1%	0.1%	0.3%	-1.0%	0.0%	0.1%	-0.1%	-0.1%	-1.4%	0.2%	0.0%	2.1%
11 Sales & Marketing	0.1%	0.1%	-0.1%	0.0%	0.0%	0.3%	1.0%	0.0%	1.5%	0.0%	-9.0%	0.4%	5.6%
12 Data Science & Analytics	0.1%	0.0%	0.0%	0.0%	-0.3%	-2.1%	0.2%	0.0%	1.2%	0.0%	0.1%	-2.7%	3.5%

Pre-period modal L1

w/ Ted Lieu (Upwork), Manav Raj (Wharton), Shun Yu (Wharton)

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(left axis: Pre-period modal L1)

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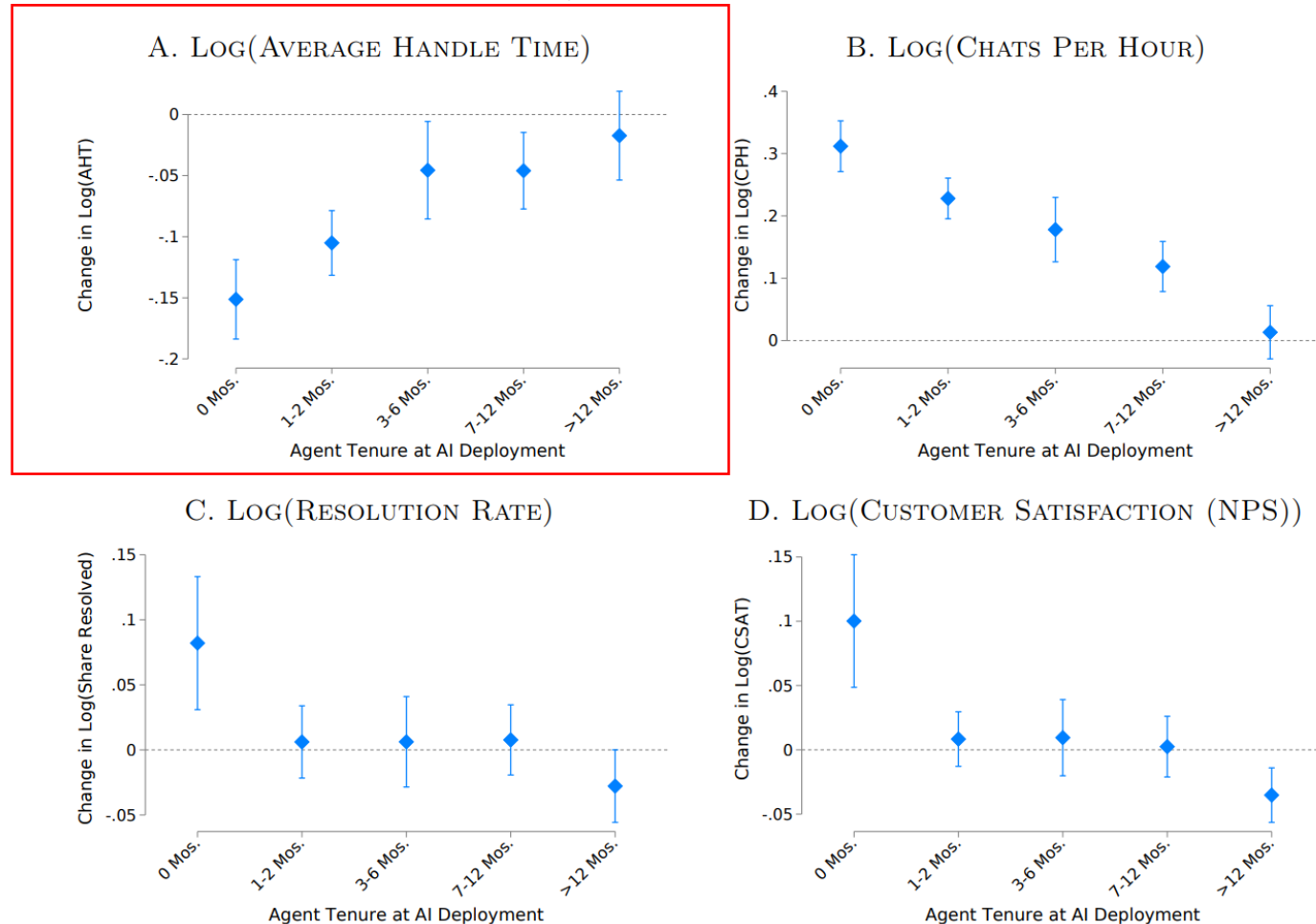
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2. We see evidence of this historically

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Can AI help with transitions?

FIGURE 7: HETEROGENEITY OF AI IMPACT BY PRE-AI WORKER TENURE CONTROLLING FOR SKILL, ADDITIONAL OUTCOMES

- "Generative AI at Work" Brynjolfsson, Li, Raymond (QJE, 2025)

- AI boosts productivity of customer service reps

- Largest productivity gains are for those with the least experience in customer service

9

Can AI help with transitions?

- Emerging evidence that AI can speed up learning in some settings
  - Peng et al. (2023) software engineers
  - Noy and Zhang (2023) writing tasks
  - Choi and Schwarcz (2023) legal
  - Dell'Acqua et al. (2023) management consulting
  - Brynjolfsson et al. (2025) customer service

➔ *AI may help lower frictions when moving to a new job, occupation, industry*

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