Discussion of 'The Rapid Adoption of Generative AI' by A. Bick, A. Blandin and D. Deming

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Highlights of the Paper

- Nationally representative survey
- Careful benchmarking to ensure **representativeness**
- Not only usage, but also **intensity and self-reported time savings**
- Zoom in on who uses it and **for which (job) tasks**
- Shed light on where genAI might land relative to the vast **range of existing productivity estimates**

Caveat: Model in the paper =simple growth accounting; model in presentation = task-based framework

→ Timely and important evidence and a pleasure to read!

What is the Core Research Question?

- **Adoption**: Who is adopting and how much?
- **Labor Market Gains**: Where is it used and what for?
- **Productivity**: What are the implications for productivity?

Not clear in the Paper - clarify that ultimate goal is implications for productivity and wage inequality(?)

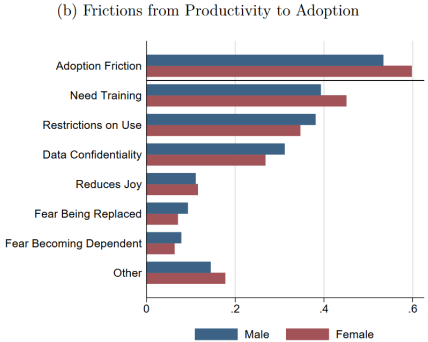
Questions and Suggestions: **Who is adopting?**

- **Who are those non-adopters** (11.6%) that never heard about genAI?
- Share of non-users who say that they do not know how to use it?
- How does the demographic pattern of AI adoption **compare to demographics of PC users?**
- Private use > work use/employer encouragement: **Who are these 'private AI pioneers'?**

→ Important to understand social and distributional consequences of AI penetration (digital divide, training needs, who is (not) prepared for the new GPT?, future potential growth of AI use)

Similarities across Countries

Humlum and Vestergaard (2024): large representative survey in Denmark in 2023/2024
Key difference: 11 exposed occupations!

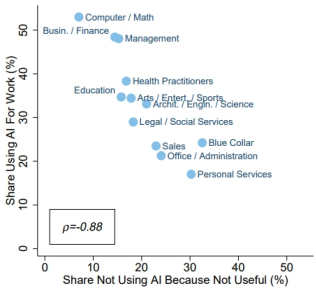


Many similarities: demographics, adoption pattern across occupations (visually), extensive vs. intensive margin, perceived barriers

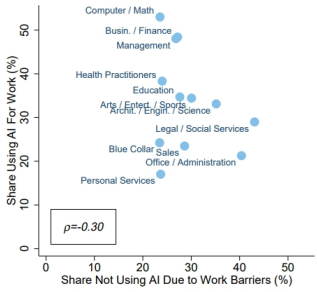
Questions and Suggestions: **Labor Market Gains**

- You **worry mostly about occupations with low use but high exposure**
- BUT: Only 50% in computer/math, 45% of managers and 40% in business/finance use genAI → Why so low?

(c) Share Stating AI Not Useful



(d) Share Stating AI Barriers at Work



Questions and Suggestions: **Labor Market Gains**

- Get a sense of the **productivity effects for labor**
- Paper: Are tasks performed by genAI (Figure 7) at the **core of the occupation? Or are these 'assisting' tasks?**
- Core: deskilling (Presentation: 'nuanced'), Assistance: upskilling (Presentation: 'generic')

Example: Translator - use for translation or use for communications

→ Effects depend on where in the task bundle AI comes in (substitute/complements?

Paper: **Productivity Accounting**

- **Caveat: Self-assessed time savings** through genAI
  - How many does genAI divert from work/actual task?
  - How to answer the question if you do work (e.g. using LLMs), which would not be feasible without genAI (reinstatement effect through new tasks)?

Paper: **Productivity Accounting**

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- **Caveats on productivity calculations (Paper)**
  - Elephant in the room: Potential displacement effects → upper bound
  - Mitigating effects through wage adjustments?
  - Selection into AI use (upper bound?)
  - Lower bound estimate as **only time savings** are counted

  → Multiplier, time allocation, reorganization etc.

Despite these caveats: remarkable that estimates are larger and accrue faster than Acemoglu's cautious estimates!

Presentation: Some Comments on Model

- Multiple tasks: generic vs. nuanced (David Autor: low or high human expertise)
- Allow for **selection of workers** (differential productivities)
- Allow workers to **reallocate time across tasks**

Gathmann et al. (2025): AI shifts tasks within occupations away from information gathering (sort of generic) toward monitoring and evaluating processes (nuanced)

- **No displacement**

Gathmann et al. (2025) and many others: few displacement effects; BUT: labor market entrants face fewer employment opportunities

- **No occupation switches**

Gathmann et al. (2025): So far, little evidence that incumbents switch; but labor market entrants might (supply response)!

Presentation: Questions on Results

- Key result: Who benefits and how much **depends on substitutability or complementarity between job tasks** (task-based framework)
- Selection (worker productivity) vs. task complementarity (technology)?
- Calibration: Occupations are gross substitutes

→ You would expect some shifting across occupations

- Productivity estimates: become **larger relative to productivity accounting**

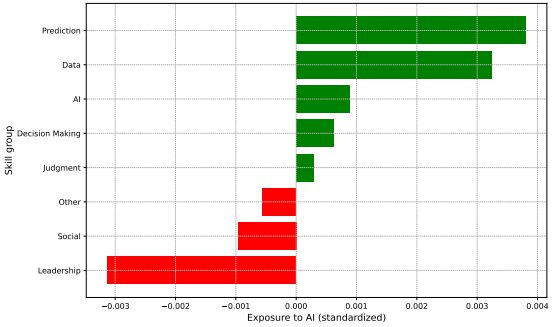
→ Why?

- **Wage effects**: I find them less transparent/convincing
  - Wage differences between users and non-users?
  - Generic labor share - where do numbers (Slide 28) come from?
- What about the **labor demand side?**

Some Evidence on Adjustments on the Demand Side

Feimi, Gathmann, Gregory, Marguerit (2025): Labor Demand Changes with AI: Evidence from Europe

Skill-specific AI exposure (Felten et al., Elounou et al.)



Impact on Skills Demand

Panel B: With Occupation Fixed Effects								
DAIOE	0.012***	0.034**	0.015**	-0.001	-0.020	-0.081***	-0.004	0.003
	(0.004)	(0.017)	(0.007)	(0.016)	(0.014)	(0.018)	(0.020)	(0.011)
DAIOE×2023	-0.002	-0.005	-0.002	-0.008	0.008	0.002	0.005	0.000
	(0.002)	(0.006)	(0.002)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)
Effective F-Stat (DAIOE)	637	637	637	637	637	637	637	637
Effective F-Stat (DAIOE×2023)	396	396	396	396	396	396	396	396
Obs (mil.)	3.3 million job ads							
Mean of dep var	0.02	0.30	0.04	0.30	0.60	0.85	0.37	0.87

Demand for exposed skills/tasks goes up (substitutes, but dominated by scale effect)

Thank you!

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