# Discussion of

*Mind the Gap: AI Adoption in Europe and the US*

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# A First-Order Contribution

The most **internationally comparable** picture we have so far of AI adoption, with especially rich **worker** evidence

- Harmonized worker surveys: 2 waves $\times$ 7 countries $\times$ $\sim$5,000 respondents
- Triangulated with firm-level data (EU-ICT-Firm, US Census BTOS)

**Great use of data**

- Formal decomposition of cross-country gaps
- Industry x country analysis of productivity and employment effects

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**43%**
US workers use GenAI for their job

**32%**
European workers (avg. across 6 countries)

**55%**
of gap accounted for by demographics, occupation, firm size & industry

**80%**
of remaining gap accounted for by employer encouragement

# Three Questions for the Discussion

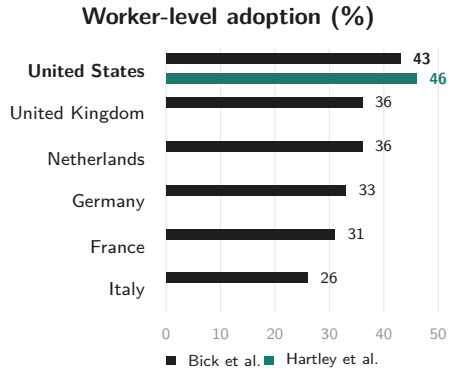
**I** Is the US–Europe AI adoption gap **real**—and how large is it?

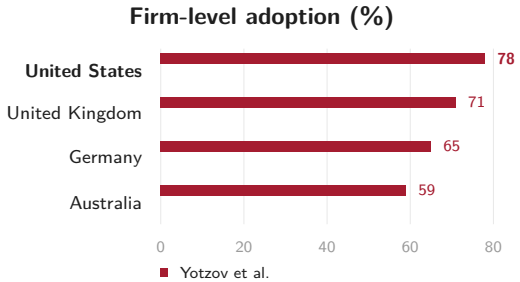
**II** What are the **drivers** of this gap?

**III** What does this paper open up — for research and policy?

# I. Is the Gap Real?

## Multiple datasets imply a US lead, but they do not agree on magnitudes




Workers: % using GenAI for work (Bick et al.; Hartley et al.). Firms: % using any AI technology, executive survey (Yotzov et al.).

# But magnitudes of the gaps are not yet clear

## Methodological choices drive differences in absolute terms

| Study | Question framing | Respondents | Sampling frame |
|---|---|---|---|
| **US Census BTOS** | AI for *production* (narrow) | Business managers | Full size distribution |
| **EU-ICT-Firm** | AI for *any business purpose* (broad): **5**× the "production" share | ICT experts | Firms with >10 employees |
| **Yotzov et al.** | AI for *any business purpose* (broad) | C-suite executives | Central bank panels; heavily skewed towards large firms |

## Next frontier of measurement: define with much more precision

- What constitutes "adoption" from a productivity standpoint
- Who in the firm is best placed to know about adoption

# II. What is driving the gap in GenAI adoption?

**Correlates resemble the ICT era**

- US–Europe, Northern vs Southern Europe gaps
- Firm-size gradients
- Management correlates (Bloom, Sadun & Van Reenen, 2012; Bresnahan et al., 2002)

Suggestive of a **familiar story**

- Differences in organizational capacity to absorb new technologies

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This raises **two questions**

1. Will dynamics of GenAI adoption within and across countries be similar?
2. Can organizational differences in technology absorption across firms be closed?

# GenAI $\neq$ ICT Adoption

GenAI adoption (probably) even more dependent on **organizational choices**

1. **Uncertainty**
   - Firms don't yet know ex ante which tasks GenAI will be useful for
   - Differences in effectiveness even across adjacent tasks ( (Dell'Acqua et al., 2025 "jagged frontier"))

   $\Rightarrow$ **GenAI raises the value of bottom-up experimentation and learning**

2. **Effect on Expertise**
   - AI can reshape the value of expertise within firms: not simply automation—it changes what it means to be an expert and optimal allocation of authority (Ide and Talamas, 2025; Dell'Acqua et al., 2025)
   - Quasi-fixed nature of labor may prevent task reallocation across workers (Oi, 1962)

   $\Rightarrow$ **GenAI raises the value of managing reorganization (including possible resistance from *incumbent experts*)**

# Why does encouragement to use GenAI vary across countries?

Differences in firm **encouragement** to use GenAI explains ∼80% of the US–Europe gap, and 100% of the effect of management

- Do differences in encouragement reflect efficient adaptation to institutions, or organizational frictions?

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- Regulatory regimes
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**Organizational frictions**

- Information gaps
- Suboptimal experimentation
- Lack of organizational complements
- Resistance to change
- Suboptimal diffusion of knowledge

# Exploring organizational frictions in large international samples is possible

**Proxies from existing literature: easy**

- Firm age: Younger firms adopt more *and* expect higher productivity gains (Yotzov et al., Figs. 6, 8; Table 3; David, 1990)
- Firm ownership: Family-owned and controlled firms less likely to decentralize and reward merit (Bandiera et al. 2015; Bloom, Sadun and Van Reenen, 2014)

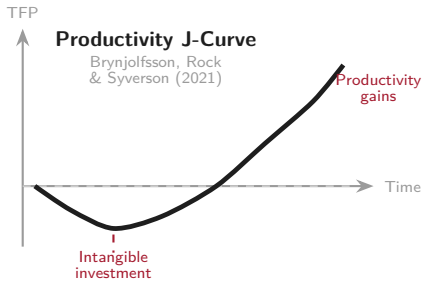
**Direct measurement: harder, but possible (WMS)**

- MOPS
- GenAI specific practices (experimentation, decentralization, workflow changes)

# III. Broader Implications

If adoption depends on **organizational redesign**—not just technology investment—then standard diffusion models will get the trajectory of GenAI adoption (and expected productivity impact within and across countries) wrong

- The "intangible investment" phase features a steeper dip, due to **experimentation and reorganization**
- Frictions are **fixed & disruption costs** (resistance, coordination failures), not convex adjustment costs (Caroli & Van Reenen, 2001)
- Implies **longer delays, sharper transitions**—and larger cross-country divergence



# Research Agenda: (very) Micro to Macro

A call for a multi-pronged approach

1. **A better understanding of adoption dynamics, including the encouragement effect (or lack of encouragement)**
   - Will require much deeper investigation of what happens inside firms
2. **More comparable firm level data on GenAI adoption and productivity impact**
   - Link organizational practices, AI adoption, richer firm characteristics and firm productivity over time, harmonized approach (US Census gold standard for other countries)
   - Go beyond productivity measured in terms of time savings: use of GenAI for new tasks likely to be very relevant too
3. **Macro models with organizational frictions**
   - Needed to develop more realistic predictions of diffusion speed and distributional impact of GenAI

# A better understanding of GenAI adoption is also crucial for policy

Different policy frameworks emerging

- EU AI Act focused on mitigating **risk** through regulatory intervention, not adoption
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## What if organizational frictions mattered?

| Friction | Mechanism | Policy lever |
|---|---|---|
| **Access costs** | Per-seat costs deter SMEs from providing tools | Subsidize AI licenses; public procurement (cf. broadband) |
| **Experimentation** | Don't know which uses work; trial is costly | Sectoral testbeds; share results (cf. ag. extension; Griliches, 1957) |
| **Peer effects** | No local exemplars $\rightarrow$ no adoption | AI "champions"; cross-firm networks (Bloom et al., 2013; Giorcelli, 2019) |
| **Expert resistance** | Workers resist tools that devalue expertise | Retraining; co-design deployment (cf. Autor et al., 2013) |

# Summing Up

This paper provides a **first-order contribution**: the most comprehensive and carefully constructed picture of GenAI adoption across the developed world, with a credible decomposition of the US–Europe gap.

But fully understanding GenAI adoption—within and across countries—will require **much more**, on two fronts:

- **Data:** more precise measures of adoption (what, how much, by whom); richer firm characteristics (age, ownership, organizational practices); harmonized panels that track adoption and productivity over time; credible identification of adoption drivers
- **Theory:** models of technology diffusion with organizational frictions—experimentation costs, coordination failures, resistance to change—that can generate realistic predictions of adoption speed and cross-country divergence