Nick Bloom
The Impact of AI on US Productivity

On Thursday, February 19, Nick Bloom joined Markus' Academy for a conversation on the impact of AI on US productivity. Nick Bloom is the William Eberle Professor of Economics at Stanford University, a Senior Fellow of the Stanford Institute for Economic Policy Research, and the Co-Director of the Productivity, Innovation and Entrepreneurship program at NBER.[1]

A summary in four bullets:
- We see an extremely wide range of forecasts for AI's growth impact—from Dario Amodei (2026), who projects 10–20% annual growth, to Daron Acemoglu (2025), who estimates 0.5% total additional growth over a decade
- Given the uncertainty and the lack of clear historical precedents, **managers' expectations may be our best available data**
- In their recent working paper, Bloom and coauthors (2026) leverage existing central bank surveys to ask 6,000 executives about AI
- They document four facts:
    1. ~70% of firms use AI
    2. ~75% of executives use AI, with an average 1.5 hours per week
    3. AI has had little impact on employment and productivity in the last 3 years
    4. AI is expected to double productivity growth over the next 3 years

[08:41] A new age of productivity growth?
- The history of productivity growth has had three phases: (1) near zero until around 1800; (2) an acceleration until the mid-20th century, peaking around 4% in the 1960s; and (3) a secular slowdown since then, to roughly 1% today
- Bloom et al. (2020) argue that the decline in productivity growth is due to the fact that **ideas are getting harder to find**. Will AI reverse this trend?

[19:05] What is the current data on firm AI use?
- Individuals' AI adoption has risen from ~10% in the spring of 2023 to 30–40% today
- The Survey of Working Arrangements and Attitudes (also run by Bloom and his coauthors) shows people's AI usage is more common at home than at work, and is strongly correlated with education, industry, and occupation
- Yet, we have **much less data on firms' AI usage**
- Official business surveys, such as the US Census Business Trends and Outlook Survey, often report low and flat AI adoption (~17%). They likely **understate true usage because responses are provided by junior employees** lacking comprehensive knowledge of their firms
- At the same time, many surveys where firms are paid to participate suffer from the "impostor problem", being filled largely by bots

[24:58] The survey

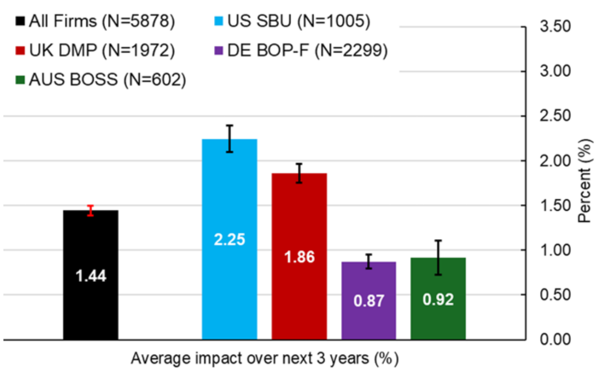
[1] Summary produced by Pablo Balsinde (PhD student, Stockholm School of Economics).

- They leveraged **existing firm survey panels** in US, UK, Germany and Australia. In all cases except Australia they are **run by the central bank**
- The surveys are mainly answered by the CFOs and CEOs of firms that have an average of ~250 employees
- Executives, while unpaid, **participate because they see the data**, and can see how they are benchmarked against other firms. Since answers remain private, they have no incentive to overreport AI usage
- The surveys ask managers to forecast future sales, so they validate the responses by comparing them with realized sales; forecasts track actual outcomes closely

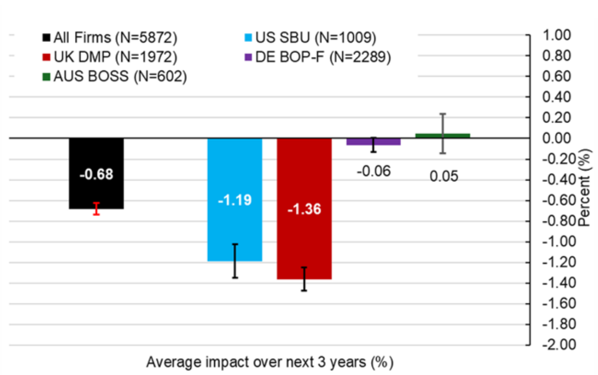
[29:29] Results on firms' AI use

- Only 69% of executives use AI for at least 1 hour a week. 29% do so between 1 and 5 hours a week
- **78% of firms use some form of AI technology.** Firms that use more AI are younger and larger, and have higher labor productivity, better paid employees, and younger directors
- Last three years: 91% report no productivity impact from AI; on average, respondents estimate AI increased sales growth by 0.24% in total
- Next three years: 39% expect no productivity impact from AI; **on average, respondents expect sales growth of 2.25% in total from AI.** Expected gains are ~60% lower in Germany and Australia than in the U.S.
- These estimates of AI's future impact are striking, since productivity growth has been around 1% for the last few decades
- They may justify cutting rates if they signal a sustained productivity-driven expansion in supply that lowers inflation pressure, as Kevin Warsh has suggested

Expected impact on Productivity



Expected impact on Employment



[43:39] Employment effects and employee responses

- In the next three years, only 42% expect no AI impact on employment; on average, **respondents expect employment declines of 1.2% in total**. Two thirds of this comes from less hiring
- They also asked employees the same questions. Workers report a similar AI usage (1.8 hours per week)
- **Workers expect much smaller productivity gains** (0.92% in the next 3 years). But are more optimistic on employment, expecting AI to increase it by 0.45%

- One may argue employees' responses are more accurate because they are closer to production bottlenecks, but executives are largely accurate on their sales forecasts. Executives' confidence of their answers is also at pre-pandemic levels

Timestamps:

[08:41] A new age of productivity growth?
[19:05] What is the current data on firm AI use?
[24:58] The survey
[29:29] Results on firms' AI use
[43:39] Employment effects and employee responses