Measuring the Economic Effects of AI

A path forward

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This is the summary of a new EIG report outlining the most valuable steps that policymakers should take to better measure the economic effects of AI.

Artificial Intelligence appears destined to reshape the labor market and how firms produce goods and services. Workers, firms, and policymakers will need timely information about how the economy is changing, answering questions such as:

- How many firms use AI? How many workers do?
- How do firms that use AI differ from those that do not?
- What industries are expanding and what industries are contracting?
- What skills and occupations are in high demand, and which are increasingly less valuable?
- What types of workers are switching jobs and which are losing jobs and stuck in unemployment or falling out of the labor force?
- What types of new businesses are being created and how fast are they growing?

High-quality data enables displaced workers to find a new career, students to choose the right skills for the new labor market they will face, and firms to choose which investments to make and which operations to expand or shrink.

The good news is that there is already widespread agreement that something needs to be done.[1] Not only that, but much of the statistical infrastructure needed to measure AI's impact on the economy — surveys that can be expanded, administrative data to combine, human capital within the federal statistical system — already exists.

Policymakers simply need to make some targeted investments and scale what is already working.

Table 1 summarizes EIG's recommendations. For the full discussion of which measures of AI's impact are currently available; a summary of findings thus far; and a detailed description of what can be done to improve measurement of AI, see the full report here.

1 See the Trump administration's AI Action Plan, the AI Workforce PREPARE Act introduced by Senator Jim Banks, and the Great American Artificial Intelligence Act introduced by Representatives Jay Obernolte and Lori Trahan.

TABLE 1. How to Improve Measurement of the Economic Effects of AI

	Recommendation	Benefit
1	**Add AI questions to the ABS every year and run more-frequent AI Supplements in the BTOS.**	ABS: More-regularly collected direct estimates of the impacts of AI from a large sample with many complementary measures about firm characteristics. BTOS: More-regular estimates of AI diffusion and its impact on firms' labor demand. Fast response to important measurement questions.
2	**Add occupation to the Quarterly Workforce Indicators data.**	Timely estimates of shifting labor demand — which types of jobs are growing and which are shrinking, and in which industries and geographies. If combined with occupational AI-exposure measures, could be used to evaluate how AI is impacting employment, hires, and separations.
3	**Add AI questions to the Job Openings and Labor Turnover Survey.**	Timely measures of the count of hires and layoffs at AI-using firms and potentially due to AI, based on the firm's self-assessment.
4	**Add supplemental questions to the CPS.**	The share of individuals and workers using AI, what they use it for, and how they see it impacting their work and home.
5	**Link firm-usage information from surveys like ABS and BTOS to employee-employer data.**	Estimates of employment, hires, and separations at AI-using firms by industry and geography. An important input into longitudinal analyses of causal effects of AI use on firms and workers.
6	**More data-sharing agreements between AI labs and statistical agencies.**	Estimates of the characteristics of businesses actually using AI services, including their employment dynamics and productivity from large samples within a nationally representative sampling frame. These statistics could be separated by intensity of use.
7	**AI business starts in the Business Formation Statistics.**	Timely counts of AI-related business applications with predictions of the number of AI-related employer business formations over the coming two years.
8	**Scale efforts to link university records to QWI data.**	Estimates of the changing demand for skill via the employment outcomes of college graduates by cohort and degree type.
9	**Standardized AI-usage data from large AI labs.**	More useful estimates derived from AI usage information that could be linked to data about workers and businesses.
10	**Combine National Directory of New Hires (NDNH) and Quarterly Workforce Indicators (QWI) data.**	Timely information on hires and UI claims by the characteristics stored within the QWI data, including demographics, industry, and geography.
11	**Encourage detailed econometric studies using matched microdata.**	More informative and detailed evidence about the impacts of AI on workers and businesses, potentially including causal estimates.