

Productivity and Performance in the U.S. Construction Industry

PROBLEM

In the U.S., over many decades, manufacturing industry productivity has been consistently increasing, while construction industry productivity has been stagnating or falling. For example, official U.S. government statistics indicate that, over the period of 1987-2013, total factor productivity, which measures the amount of output for a given amount of all inputs (labor, capital, materials, etc.), increased 74% in U.S. manufacturing industry, but fell by 10% in the U.S. construction industry. Constructing green buildings and cities requires the construction industry to produce more output and better output. Meeting societal goals in affordable housing and toward urbanization requires the construction industry to produce more and better output at lower cost. Improving productivity in construction is therefore a key aspect of creating green buildings and cities that achieve social goals.



GUIDING QUESTIONS

This project seeks to understand why productivity in U.S. construction has been stagnant, how productivity can be improved, and how official government statistics can better measure productivity.

What explains stagnating or falling productivity in U.S. construction? What kinds of construction and what kinds of firms exhibit better or worse productivity performance? Do official government statistics accurately measure productivity in construction? How can official government statistics be improved to better measure construction industry productivity? How can the construction industry improve productivity? What technology innovations or organizational changes have potential for generating productivity improvements?

PROJECT DESCRIPTION

This project uses confidential U.S. Census microdata on firms and establishments to analyze productivity and performance in the U.S. construction industry and related supply chain industries, e.g., building materials and components. Publicly available official government statistics on productivity are based on aggregate industry data. This project uses the underlying disaggregated data on firms and establishments to identify which are performing better or worse, and what explains better or worse performance.



IMPACT

This project will help economic policymakers better understand productivity performance in U.S. construction, and improve data and methods for measurement of productivity in construction. The project will also help policymakers and industry practitioners improve construction productivity by highlighting policies and practices associated with higher productivity.

Identify industry and other factors associated with higher productivity in construction. Improve data and methods for measurement of productivity in construction.



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