

Macro Roundup Article

Headline: [America, Jump-Started: World War II R&D; and the Takeoff of the US Innovation System](#)

Article Link: <https://www.aeaweb.org/articles?id=10.1257/aer.20221365&&from;=f>

Author(s)	Daniel Gross and Bhaven Sampat
Publication	American Economic Review
Publication Date	December 01, 2023

Tweet: During World War II, American defense innovation spending was responsible for 1 in 8 American patents. Areas where defense research dollars were spent produced 40% to 50% more patents annually by the 1970s relative to pre-war levels.

Summary: In this paper, we study the long-run effects of the largest R&D shock in U.S. history. In World War II, the newly-created Office of Scientific Research and Development (OSRD) led an expansive effort to develop technologies and medical treatments for the Allied war effort. From 1940 to 1945, OSRD engaged industrial and academic contractors in more than 2,200 R&D contracts at over \$9 billion (2022 dollars), despite no pre-war tradition of funding extramural (externally-performed) R&D. At the height of the war, the U.S. government was funding the research behind nearly 1 of every 8 U.S. patents—more than five times pre-war and modern levels, and nearly twice the level at the peak of the Cold War in the 1950s and 1960s. The immediate effect of these investments was a range of technological advances which were not only instrumental to the success of the Allied campaign, but also of wide civilian value after the war ended. Its longer-run impact was to reshape the U.S. innovation system. Related: Moonshot: Public R&D and Growth and Public R&D Spillovers and Productivity Growth and Pentagon Plans Vast AI Fleet to Counter China Threat

Primary Topic: Security

Topics: Academic paper, Innovation/Research, Investment, Productivity, Security, Weekly

Permalink: <https://www.edwardconard.com/macro-roundup/during-world-war-ii-american-defense-innovation-spending-was-responsible-for-1-in-8-american-patents-areas-where-defense-research-dollars-were-spent-produced-40-to-50-more-patents-annually-by-the-1?view=detail>

Featured Image

Link: <https://www.edwardconard.com/wp-content/uploads/2023/12/DOD-Spending-Figure-1.png>