

26th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
Industrial Policies as Drivers of the Space Economy (3)

Author: Mr. David Vaccaro
Futron Corporation, United States, dvaccaro@avascent.com

Mr. Ian Christensen
Futron Corporation, United States, icht Christensen@futron.com

Mr. Dustin Kaiser
Futron Corporation, United States, dkaiser@futron.com

Mr. Joseph Fuller
Futron Corporation, United States, jfuller@futron.com

Mr. Jay Gullish
Futron Corporation, United States, jgullish@futron.com

COMPARING POLICY BEST PRACTICES: WHICH NATIONAL SPACE POLICY MEASURES
EMPIRICALLY DEMONSTRATE THE GREATEST ECONOMIC RETURNS?

Abstract

National policymakers and industry leaders are increasingly challenged to align space policy with tangible rewards—whether new technological milestones, concrete financial results, measurable human capital benefits, or economic outcomes. Across international boundaries and boardrooms, there is more focus than ever on quantitative statistical analysis. Yet although the field of space economic metrics is emerging in response to these needs, it remains nascent. Through both formal and informal channels, government, business, and academia actors are together engaged in an ongoing discourse about the foundational measurements of national space performance—and equally important, best practices in international data collection and methodology.

Against this backdrop—and in the third year of the IAC's new session on space economics—this paper seeks to highlight trends in international space competitiveness through a distinct lens: a large basket of politico-economic metrics tracked consistently over five years across multiple national or multinational space actors.

To contextualize this discussion, this paper will reference the latest results of The Space Competitiveness Index (SCI), a set of quantitative, qualitative, and proxy indicators that characterize the space landscape in three dimensions—government, human capital, and industry—using 60+ distinct metrics. As of 2012, the SCI model will be populated with five full years of data, permitting a robust baseline analysis of major trends in the relative strengths and weaknesses of key space actors over time. In addition to highlighting changes in comparative positioning among longstanding space-participant countries, these five-year trends also enable consideration of how an emerging tier of space actors, such as Australia and Iran, fit into the global space picture.

By reviewing these trends, the paper will show how a methodology such as the SCI can address a critical question: how does space activity add economic value to societies? By providing a framework for evaluating government space spending, quantifying human capital, mapping space education, and assessing industry investment, the SCI and similar benchmarking structures provide powerful decision management tools for ensuring that strategic space goals align positively with actual economic outcomes.