

OF ECONOMY, ECOSYSTEMS AND ECONOMICS

SPACE AS A DEVELOPMENT IMPERATIVE AND CATALYST OF GROWTH

HELD AT THE MARGINS OF THE 68TH SESSION OF COPUOS | 30 JUNE 2025

KEY TAKEAWAYS

INTRODUCTION

This side event marked the first time that the space economy was examined through the lens of economics at the margins of COPUOS—an important step toward advancing a more grounded, policy-relevant understanding of how space can serve as a catalyst for sustainable development and economic growth. The discussion focused on three key themes: (1) why space agencies need economists and how the role of space agency has evolved; (2) how to move beyond the “space bubble” to maximize the impact of space applications in non-space sectors; and (3) how countries regardless of their current state of space development can build sustainable space economies. To bring these themes to life, we contrasted two very different national experiences: Brazil and Singapore. Despite their differences in geographical size, institutional maturity, and economic structure, both countries illustrate how a space economy can be shaped to reflect national strengths and priorities.

The discussion underscored that building a sustainable and inclusive space economy requires aligning economic rationale with national priorities, fostering enabling ecosystems, and forging cross-sectoral connections. Every country—regardless of scale or starting point—can tailor its space strategy to deliver meaningful value to its people.

1. ECONOMIC EXPERTISE IS ESSENTIAL FOR STRATEGIC SPACE POLICY

As space agencies evolve from research-driven institutions to market enablers, economic expertise is increasingly critical. Economists help space institutions assess trade-offs, allocate scarce resources wisely, identify market gaps, and articulate the broader socio-economic value of space investments. Their work ensures that public funding yields measurable returns and helps build commercial space ecosystems that are both viable and aligned with national development goals.

2. INTEGRATING SPACE INTO THE BROADER ECONOMY

Unlocking the full potential of space requires embedding its applications into mainstream sectors such as agriculture, energy, finance, and disaster management. Doing so involves moving beyond technical discussions and aligning space capabilities with real-world needs. Effective strategies include demand-driven use cases, end-user engagement, and sector-specific communication focused on return on investment and impact. This transition from upstream focus to downstream integration is vital for sustainable market growth.



United Nations
Office for Outer Space Affairs

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3. BRAZIL'S STRATEGY: LEVERAGE LEGACY, FOCUS ON COMMERCIALIZATION AND INTERNATIONALIZATION

Brazil demonstrates how a country can shape its space economy around national strengths despite budgetary constraints. By focusing on Earth observation for environmental monitoring and climate resilience, Brazil builds on decades of technical experience and international cooperation. Ongoing reforms aim to open the sector through regulatory modernization, commercialization, internationalization and support for entrepreneurship, aligning space development with Brazil's global role in environmental stewardship.

4. SINGAPORE'S APPROACH: TARGETED INNOVATION AND GLOBAL INTEGRATION

Singapore offers a pragmatic model for small, open economies seeking to enter the space sector. Rather than investing heavily in upstream capabilities, Singapore focuses on strategic niches—such as secure communications and satellite analytics—and supports industry growth through R&D funding, access to launch opportunities and international trade promotion. Government support is structured to de-risk early innovation, crowd in investment rather than crowding out, and connecting domestic firms to global markets. Human capital is cultivated by drawing talent from adjacent STEM sectors and attracting global talents through targeted initiatives. The emphasis is on practical, high-impact innovation that scales across borders.

5. ADVICE TO COUNTRIES AT EARLY STAGE OF DEVELOPING THEIR SPACE ECONOMY

“ We need to articulate and communicate the value of space to national development, in terms of jobs, tax revenues etc., to the country, to business leaders, and to the general public. This is very useful to help people understand why keep we doing space and what that funding delivers to the country. In addition to helping to identify good opportunities for investment...

- Akhil Rao, Founder at Rational Futures and former Chief Economist at NASA

We need to target markets outside of the “space bubble” and ask what value this can bring to other non-space industries... We have to think about who we are doing this for and what they are interested in... It is useful to have the user already on board from the beginning and start with something where there is already maybe a clear value at hand...

- Patrick Pils, CEO, Leto Space

There's a lot of unexploited value from data streams we really have... Ask businesses and agencies what some of the problems they're trying to solve are, and then share with them some of these uses of space data...

- Tiana Desker, Deputy Executive Director, Office of Space Technology and Industry Singapore

We need to provide financial support to startups and foster entrepreneurial spirit...

- Leila Fonseca, Head of Strategic Studies and New Business, Brazilian Space Agency”

