Paper ID: 13068
student

BUSINESS INNOVATION SYMPOSIUM (E6)
Joint Session on Global Public/Private Innovative Initiatives in Spaceflight (4-D4.2)

Author: Dr. Alanna Krolikowski
Harvard University, United States

CHINA-U.S. RELATIONS IN COMMERCIAL SPACE AND AIRCRAFT MANUFACTURING: SPECIALIST CULTURES AND PATTERNS OF TRANSNATIONAL INDUSTRY INTEGRATION

Abstract

While commercial space is often represented as posing unique technical and market barriers to new entrants, it shares some of these features with other high-technology sectors. Governments fostering the entry of their national industry players into global space markets face challenges similar to those of nurturing national champions in other globalized sectors. In some sectors, governments adopt policies promoting the integration of their industry to a global sector as a means to building national technical capacity. In other sectors, governments foster the development of indigenous capabilities in an industry before supporting its participation in a global market.

This paper explores why governments pursue transnational integration strategies in some sectors and national development strategies in others. This paper examines this question through a comparison of trade relations between China and the United States in the commercial space and commercial aircraft-manufacturing sectors. China-U.S. relations have taken strikingly different courses in these two sectors. In the aircraft sector, the two countries' industries have integrated their activities across a range of sub-sectors and products. By contrast, in space, their industries have not traded or integrated their activities. This research examines why and how China-U.S. relations have evolved differently in these two sectors since 1989.

The divergent trajectories taken by China-U.S. relations in these two sectors are puzzling because both sectors present similar incentives and disincentives for transnational industry integration. For example, the Chinese and U.S. economies feature important complementarities in both sectors. Technology transfers also carry defense implications that present obstacles to trade in both sectors. Existing theoretical perspectives on strategic international trade do not explain this sectoral variation.

This paper proposes that this variation is traceable to differences in the specialist cultures shared by participants in commercial air and space. These cultures vary across the two sectors, but are shared across countries. Air and space specialists tend to hold different philosophical conceptions of market and technical barriers to entry, underpinned by different theories of technical change and economic globalization. The assumptions of sectoral specialists shape government choices on technology and trade policy and influence industry strategies in both China and the United States.

An empirical and qualitative process-tracing approach allows for inferences about whether and how contrasting sectoral cultures account for the international outcomes under study. Data for this study was collected through over 120 interviews with participants in the Chinese and U.S. air and space sectors, participant observation, and document analysis.