BUSINESS INNOVATION SYMPOSIUM (E6) New Business Models in Traditional Space Industry Applications (2)

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CHINA-OECD INDUSTRY INTEGRATION IN CIVIL-COMMERCIAL AIR AND SPACE

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 strategic high-technology sectors. Governments fostering the entry of their domestic industrial players to global space markets face similar choices and challenges to governments attempting to nurture national champions in other globalized sectors. In some sectors, governments adopt policies promoting the integration of their domestic industry to a global sector as a means to building national technical capabilities. 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. It examines this question through a comparison of trade relations between China and the countries of the Organisation for Economic Co-operation and Development (OECD) in the civil-commercial aircraft and space sectors since 1989. China-OECD relations take strikingly different trajectories in these two sectors. In the aircraft sector, the two entities' commercial industries are integrating their activities across an expanding range of sub-sectors and products. By contrast, in space, their commercial applications industries are not integrating. The divergent trajectories taken by China-OECD relations in these two sectors are puzzling because both sectors present similar incentives and disincentives for transnational industry integration. For example, the Chinese and OECD economies feature important complementarities in both sectors and there are defense implications to the technologies at stake that pose obstacles to trade in both sectors. Existing theoretical perspectives on strategic international trade do not fully explain this sectoral variation. This paper proposes that this variation is traceable to differences in the cultures of participants in commercial air and space, shared across both China and OECD countries. Actors in the air sector and those in the space sector tend to hold different philosophical conceptions of market and technical barriers to entry, underpinned by different theories of technical change and economic globalization. These shared assumptions shape governments' choices on technology and trade policy and influence industry strategies in both China and the OECD. 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 70 open-ended interviews with participants in the Chinese air and space sectors, more interviews in OECD states, participant observation, and document analysis.