

CALL FOR PAPERS

Innovation, Global Value Chains, and Globalization Measurement: A Workshop

November 5-6, 2020*
Washington, DC

**Hosted by the National Academies of Sciences, Engineering, and Medicine
Funded by the National Center for Science and Engineering Statistics,
within the National Science Foundation**

In recent decades, production processes of final products have been increasingly fragmented across countries in what are called Global Value Chains (GVCs). Production of intermediate goods or services is increasingly outsourced to a foreign affiliate, in the case of multinational companies, or to unrelated companies. Estimates are that about 70 percent of all global trade is in these intermediate goods and services. This increased use of global value chains poses challenges for our statistical system. While National Statistical Organizations collect a great deal of information on economic performance, trade, employment, and foreign direct investment, this information cannot always be used to quantify the international linkages and flows that characterize these cross-border transactions, especially those related to research and development (R&D) or software. The National Academies of Sciences, Engineering, and Medicine will hold a workshop to address measurement needs and related gaps in the theory on globalization of research and development and publish a proceedings volume summarizing the workshop discussions. More accurate and complete characterization of economic activity and economic health will improve governments' capabilities for assessing current and prospective economic policies, the nature of R&D in global value chains and the overall role companies play in it, and any national security implications of the current or prospective landscape.

The workshop will address measurement and related theoretical gaps regarding globalization of innovation involving Global Value Chains, Multinational Enterprises (MNEs), and related international production arrangements and transactions. By "innovation," we mean to include various stages of the development of new products and processes, including research and development, commercialization, and adoption. **We are particularly interested in those processes that result in the creation of innovation-related assets that are intangible, such as R&D expenditures, new product designs, and trade secrets.**

While theoretical research on offshoring has considered trade in R&D services and other intangibles, new international databases on trade in value added and input-output tables have largely focused on goods or the manufacturing sector, in no small part due to data limitations on services and intangibles.

The organizing committee seeks papers addressing conceptual or empirical exploratory papers focusing on the globalization of innovation intangible assets. The workshop will focus on two topics: (i) addressing theoretical gaps about innovation in GVCs and (ii) measurement gaps/data limitations. The committee hopes to solicit interdisciplinary perspectives that would improve measures of R&D and other intangible innovation assets related to GVCs and MNEs.

Potential research topics include but are not limited to:

- The impact of globalization on productivity and/or trade in intermediate goods and services;
- Factors that determine socially and privately optimal R&D locations, such as clusters of expertise in related tasks, production, and R&D in related industries; or national goals, such as insuring against various types of risks;
- The impact on innovation and GVCs of policies that limit or promote trade or flow of intellectual property, including tariffs;
- Business strategy and incentives in new product development;
- Organization of MNEs, global markets, and the structure of intra-firm transactions (e.g., Industrial Organization, International Business, and R&D Management);
- Conceptual frameworks to understand the impact of IPP [intellectual property products] trade in international economic accounts;
- Valuation of intangible assets;
- Economic implications of international taxation for intangibles; and
- Methods for collecting data about firm-to-firm interaction in supply chains

Anyone interested in contributing a paper at this National Academies workshop should deliver by June 1, 2020 a short (2-3 page) abstract to the National Academies' Board on Science, Technology, and Economic Policy (STEP) at step@nas.edu. Authors whose abstracts are selected will be informed by July 1, 2020, with short papers due to the organizers by October 12, 2020.

While the workshop will be open to others not presenting, travel expenses will be paid only for paper authors, discussants, and workshop organizers. Summaries of the papers will be compiled into a proceedings document published by the National Academies Press, but authors are encouraged to publish their revised papers in academic journals after the workshop.

TENTATIVE TIMELINE

June 1, 2020: Abstracts Due

July 1, 2020: Selection of Abstracts

October 12, 2020: Papers due to Organizers

November 5-6, 2020: Two-Day Workshop in Washington, DC*

**Developments around COVID-19 may change the date of the workshop.*

PLANNING COMMITTEE:

Co-chairs: Susan Helper (Case Western Reserve University) and Wolfgang Keller (University of Colorado, Boulder)

Nadim Ahmad, OECD

Davin Chor, Dartmouth College

Kelly Sims Gallagher, Tufts University

Eduardo Morales, Princeton University

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