



Accounting for Global Value Chains



In 2015, the Statistical Commission established the **Expert Group on International Trade and Economic Globalization Statistics** to prepare a measurement framework for international trade and globalization statistics



Europe: Ireland (Chair), Denmark, Italy, the Netherlands, UK

Americas: Canada, Colombia, Costa Rica, Mexico, USA

Africa: Cabo Verde, Morocco, South Africa, Uganda

Asia: China, India, Iran, Kazakhstan, Republic of Korea, Thailand, Viet Nam

Organizations: Eurostat, IMF, OECD, UNCTAD, WTO, ECE, UNSD



Guidelines on Accounting for GVCs

United Nations Statistics Division

Guidelines on Accounting for Global Value Chains

now available on our website: <https://unstats.un.org/unsd/business-stat/gvc>



Statistics Division

Business Statistics

Global Value Chains



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 [Guidelines on Accounting for GVCs: GVC satellite accounts and integrated business Statistics](#)

The [Guidelines on Accounting for Global Value Chains: GVC Satellite Accounts and Integrated Business Statistics](#) were prepared by the Expert Group on International Trade and Economic Globalization Statistics. The Expert Group was established by the United Nations Statistical Commission in 2015 to address the challenges that globalization and emerging complex production arrangements pose to compiling macroeconomic and business statistics, including the supporting business registers.



How to define a Global Value Chain?

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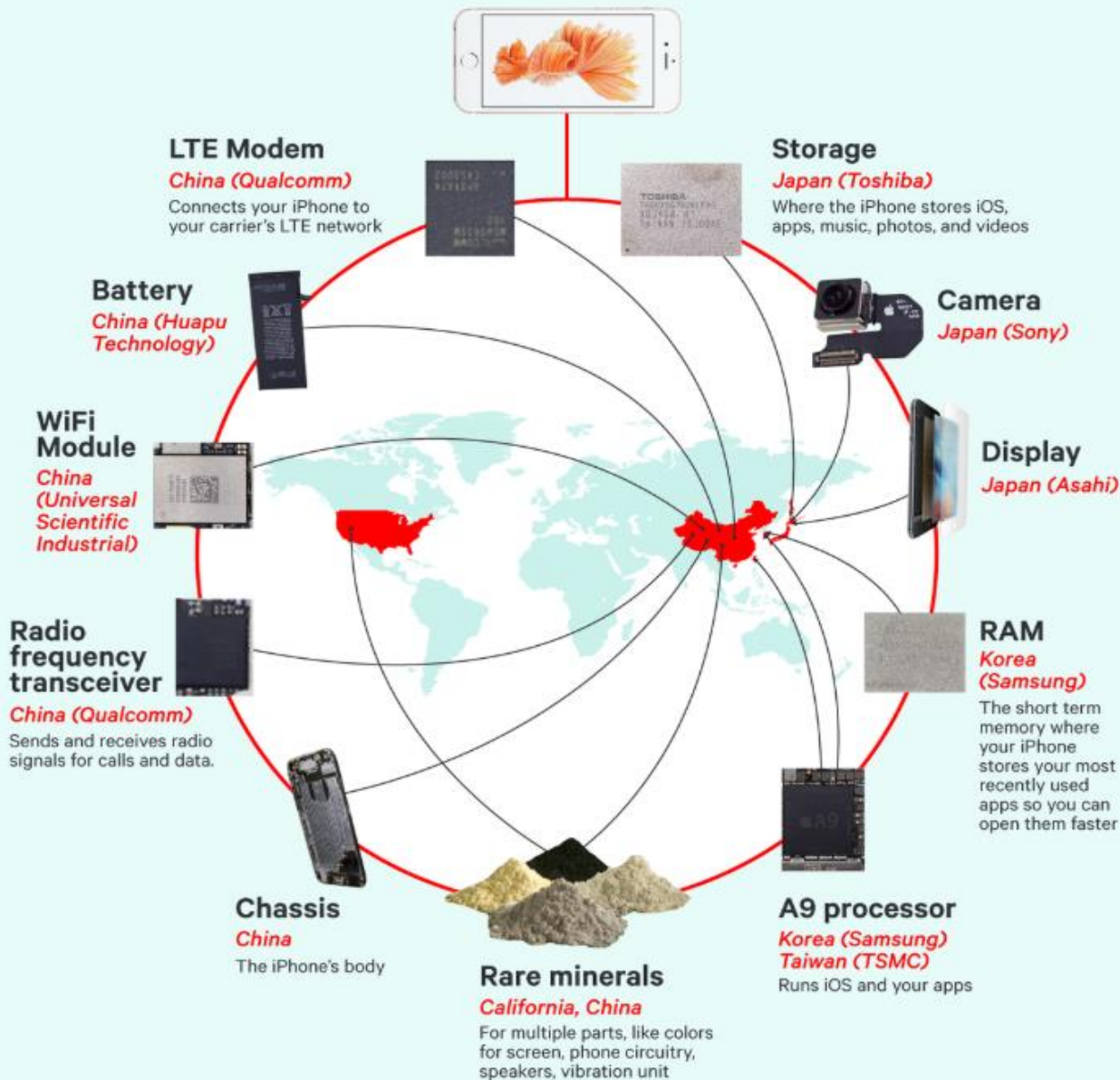
“The full range of activities that firms and workers perform to bring a product from its conception to end use and beyond, including **research and development, design, production, marketing, distribution & support** to the final consumer.”





Global Production Arrangement for an iPhone

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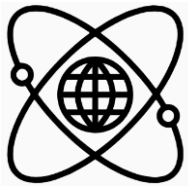


According to a 2010 Asian Development Bank Institute study, it is estimated that **\$6.54** or **3.4%** of the total factory price of an iPhone 4 was added in China



Analytical and Policy Framework of GVCs

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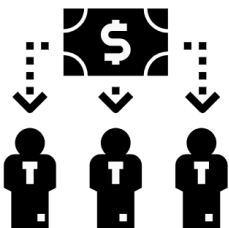
- The flows of goods, services, people, ideas & capital are **interdependent and must be assessed jointly**



- **Gross bilateral trade balances hide significant import content.** Protectionist measures based on gross trade flows can (i): lower the competitiveness of domestic lead firms that rely on imported inputs; (ii) tax domestic value-added embodied in imports; and (iii) lead to higher consumer prices if firms pass through costs



- **Economic development** can occur through GVC upgrading



- Statistics classified into **business functions rather than aggregated industrial sectors** help to better illuminate impacts on labor and welfare.



Guidelines on Accounting for Global Value Chains

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- ➡ In 2019 the **UN Statistical Commission** encouraged countries to implement the Guidelines.
- ➡ The Guidelines provide a **national perspective** on globalization based on a GVC model.
- ➡ **Focus on a specific GVC with major trading partners** to highlight the multi-country supply chain of goods, value-adding services & institutional arrangements.
- ➡ **Flexible** implementation approach.
- ➡ Allows for an **integrated presentation** of production, income, assets and liabilities by partner country for those GVC industries that play a significant role in national economy.
- ➡ The results are **GVC-specific, multi-country supply and use tables** and related **institutional sector accounts** for a particular GVC industry.



The GVC Accounting Framework

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- **GVC satellite accounts** measure specific aspects of GVCs that are otherwise hidden in the macro-economic accounts.
- **GVC-specific Supply and Use Tables and GVC-specific Institutional Sector Accounts** are comparable across countries using standardized GVC specific products and industry classifications and sector classifications.
- **Business functions** are mapped to the international classifications of products and economic activities; e.g., in the automotive GVC, the core business function is manufacture of motor vehicles.
- **Participating firms** are classified as:
 - Lead firm* - the firm that 'controls' the chain
 - Affiliated Supplier*
 - o Controlled [Subsidiary (controlled)]
 - o Non-controlled [Associates (influenced)]
 - Non-affiliated supplier*



The **institutional sector classification** of the 2008 SNA:

- Non-financial corporations
- Financial corporations
- General Government
 - Households
- Non-profit institutions serving households

- The GVC extension to the institutional sector framework is largely made to accommodate concepts from FDI.
- Financial and non-financial corporations are further distinguished between **foreign-controlled (and foreign-influenced)** and **nationally-controlled corporations.**



Selection of a GVC

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- The economic dominance of the GVC in total economy.
- Importance of the investment and trade relationships with the partner countries in the GVC.
- Desire to better understand a country's position in the GVC or to measure its impact on income, employment and productivity.
- The exposures of GVC-related enterprises in the financial sector to major risks in foreign capital markets.
- Based on trends in the data; e.g., identifying a country's most heavily-traded intermediate products.
- Ultimately, the selection may depend on policy interests, particularly those related to income, jobs and productivity.



Flexibility in GVC Satellite Accounting

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National GVC-specific SUT only

+

Multi-country GVC-specific SUT

+

National GVC specific
institutional sector accounts

+

Multi-country GVC specific
institutional sector accounts



What are the data sources?

- Firm-level data aided by profiling conducted by large case units
- Micro Data Linking, data exchange and data linking
- Business registers should identify **cross-border control and ownership** established by the lead firms in their firm networks
- UNSD is working on a **Global Enterprise Groups Register**

What are the benefits of using microdata?

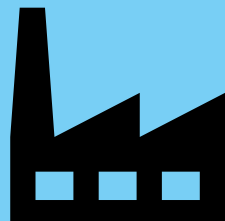
- Will allow for indicators on employment, income, productivity and international trade **within the GVCs** as compared to firms **not participating in the GVCs**
- And tailored collaboration between partner countries in analyzing **bi-lateral asymmetries**



Policy examples from several countries

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Domestic value-added of exports in manufacturing in Mexico



Morocco's participation in the Automotive GVC



Trade Policy implications of GVCs in the United States



Costa Rica's participation in the Medical Devices GVC





Way forward for GVC analysis

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- An **online compendium** with more detailed information
- Countries compile GVC satellite accounts on a pilot basis and share experience – e.g. EU IGA projects
- Continuation of the work on globalization in newly established **UN Committee of Experts on Business & Trade Statistics**



- In **2015 the** Statistical Commission also agreed with the proposed work plan of the Expert Group to promote and advance the creation of a **global enterprise group register**



What is a global groups register (GGR)?

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- A register of the **world's largest MNE groups**
- Identifies their **legal structure across countries**
- Is different from a statistical business register (and the Euro Groups Register) because it relies only on **free public sources** (no data input from national statistical offices)
- UNSD has thus far focused on profiling the **top 100 MNEs**:
 - Identified possible sources for the GGR
 - Defined profiling methods
 - Automatized the processing
 - Building a database and user interface



Aims of the GGR



- To help statistical offices see the non-national part of MNEs in their country
- To facilitate data sharing among countries, using the GGR as a common, public source
- Help analyzing globalization effects and global value chains
- Together with OECD, exploring possibilities of collaboration on ADIMA and the GGR
- Working on creating visualizations and identifying analytical indicators that can be derived from the GGR
- Soon will be able to produce a beta version of the GGR on the top 100 MNEs (expected Q4 2020), possibly in collaboration with OECD
- Seek future collaboration with other partners to to develop a strategy for updating the MNEs profiles

A large, semi-transparent globe graphic is centered in the background, featuring a grid of latitude and longitude lines.

Thank You!

Nancy Snyder
snydern@un.org