

Industry-specific chains

Importance of intangibles for growth and productivity

Balancing cost and efficiency with stability and sustainability

Prepared by Ivo Havinga

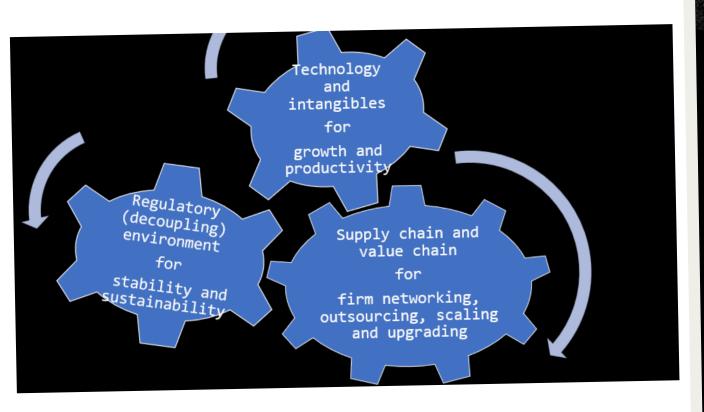
United Nations Committee of Experts on Business and Trade Statistics

United Nations Secretariat Building, New York

6 to 9 September 2022

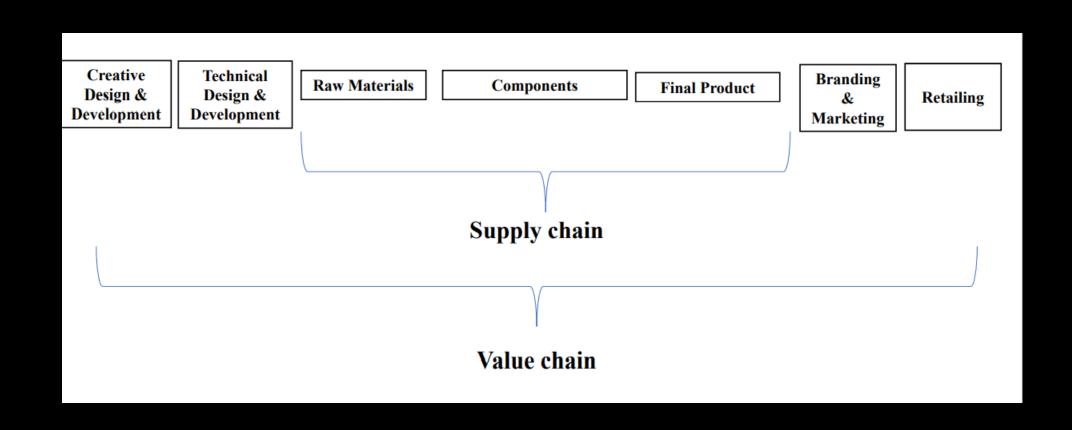
Access to Privately-held Data for Measuring Global Supply Chains and Value Chains

Outline of presentation



- Refresher- illustration for global value and supply chains
- Headlines on the changing global production arrangements
- Confluence of forces requiring GVC use cases and access to privately held data
- Industry specific GVC accounting
 - + Features, industry selection, and dashboard
- Technology and intangibles
 - + Future of growth and productivity business investment in intangibles, getting tangible about intangibles
- Proposed business and trade research priorities for GVC use cases in collaboration with corporate sector, national accountants and academics

Illustration of a global supply chain and value chain



Today's headlines on the changing global production arrangements

 "you really have a different iteration of globalization emerging. The last 20 years have been organized around cost and efficiency. That's being balanced against or replaced by stability and sustainability"

Financial Times 5 September 2022, Rahm Emanuel, US Ambassador to Japan

historic uncertainty about market growth, inflation and the terms of competition. "we all know about the term risk premium. Well there's a predictability premium out there .. Business people and governments: that's all what they are talking about"

Financial Times 5 September 2022, Rahm Emanuel, US Ambassador to Japan

Confluence of forces requiring GVC use

cases with access to privately held data





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 in network as: Lead firm - the firm that 'controls' the chain; Affiliated Supplier - Controlled [Subsidiary]; Non-controlled [Associates (influenced)]; Non-affiliated supplier



Selection of industry specific GVC

- Economic dominance of the GVC in total economy
- Importance of the investment and trade relationships with the partner countries in the GVC
- Country's position in the GVC or to measure its impact on income, employment and productivity
- Exposure of GVC-related enterprises to major risks in foreign markets
- 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, productivity, stability, and sustainability

• ...



Industry specific GVC dashboard, national and abroad

- Turnover
- Imports and exports of goods and services total and by main products
- Employment and employment related statistics (number, hours worked, skills/occupations,etc
- Value added
- Production
- Investments, tangibles and intangibels (R&D, software)
- Innovation and ICT
- Energy use
- Solid waste and emissions
- Firm network/chain with ownerships/control details link to Global Group Register/ADIMA, European Group Register of MNEs
- •



Broader capital framework is needed for growth and productivity analysis. The role of business intangibles in the economy is critical and substantial further progress is both possible and necessary (Corredo, Hulten, and Sichel, Measuring Capital and Technology An Expanded Framework, 2005)

- In the past quarter-century, investment in so-called intangible assets such as intellectual property, research, software, and managerial and organizational skills has soared. (Haskel and Westlake)
- Recent McKinsey Global Institute (MGI) research found that, by 2019, intangibles accounted for 40% of all investment in the United States and ten European economies, up 29% from 1995. And intangibles investment appears to have surged again in 2020 as digitalization accelerated in response to the COVID-19 pandemic.
- MGI's research found that companies in the top quartile for growth invest 2.6 times more in intangible assets than the bottom 50% of firms. Similarly, economic sectors that have invested more than 12% of their gross value added (GVA) in intangible assets grew 28% faster than other sectors.



Getting tangible

about intangibles

Successful intangibles-based firms expand training in their own people and economic competences. They have formidable incentives to continue investing in intangibles.

Companies and governments should do everything they can to spread the skills that will open up opportunities for more individuals and firms in the digital economy.

Governments can play a key role in reskilling and in ensuring that the right knowledge infrastructure is in place. That means focusing on education, internet and other communications technologies, urban planning, and public science spending.

The digitized, dematerialized economy is already here, and its spread is unstoppable. The challenge is to manage the transition in a way that benefits the many and not just the few and avoid inequality in opportunity to grow and prosper



Getting tangible

about intangibles

- Some types of intangible capital identified by Corrado, Hulten, and Sichel (2005, 2009)—including industrial design, organizational capital, training, and brand equity/marketing assets—typically are not counted as business investment in national accounts. These assets are extensively deployed by businesses and so affect economic growth, though their effect on measured economic growth is confounded by their omission from measures of output (not counted as business investment) and from measures of inputs (not counted as productive capital)
- Mohnen, Polder, and van Leeuwen Measuring and Accounting for Innovation in the Twenty-First Century (2021) merge the Dutch Business Register and Oslo Manual-based innovation survey data. In their merged dataset, which spans 2008-12, 45 percent of manufacturing and 35 percent of service sector firms report organizational innovation (the introduction of new business practices, knowledge management systems, methods of workplace organization, and management of external relations). They find strong complementarities between ICT investment and organization innovation. Their approach enables them to calculate rates of return, and they find the highest rate of return to be for firms investing in ICT but also organizational innovation.

Proposed research priorities for GVC related use case

Technology and intangibles for growth and productivity

Supply chain and value chain for firm networking, outsourcing, scaling and upgrading

Objective of GVC use cases: advance methods; firm level data access; data access principles; networking between NSOs, firms, and government; capacity development and release of experimental data

Research priorities

Industry specific GVC satellite studies using the UN GVC Satellite Accounting Guidelines informing the contributions of the industry for major aggregates like added value, employment, etc. using firm level data of MNEs and SMEs. GVC Satellite is recommended for inclusion in 2025 SNA

Industry specific MNEs studies on intangible capitals not yet included in national accounts for specific assets related to organizational capital, human capital, branding equity/marketing assets, etc. using firm level data – forthcoming recommendation on the Beyond GDP Network Sprint and SNA Update recommendation that marketing asset is a produced asset