

# Global Value Chain Development Report 2021: Beyond Production

Key messages and findings



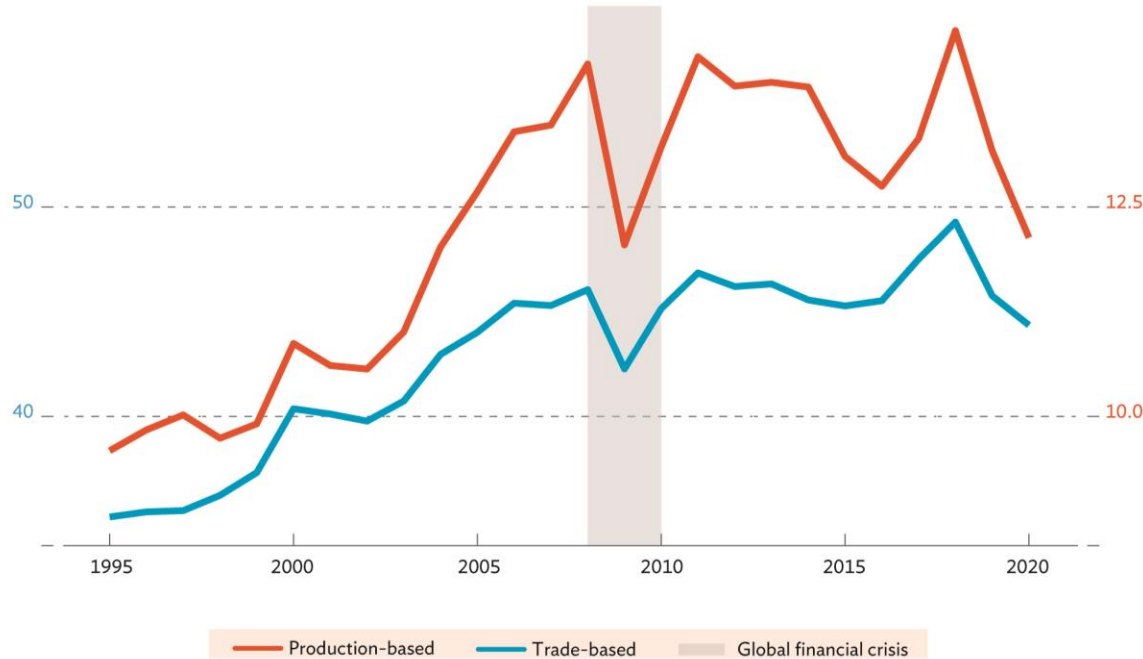
## Background – A collaborative approach

- 5 main partners (Asian Development Bank, Research Institute on Global Value Chains at the University of International Business and Economics in Beijing, World Trade Organization, Institute of Developing Economies – Japan External Trade Organization, and China Development Research Foundation)...
- ...contributed 6 chapters over a 2-year period from 2019 to 2021...
- ...based on 25 background papers from 20 research institutions in eight countries...
- ...to produce the 3<sup>rd</sup> edition of a biennial series.



# Chapter 1: Recent Trends in Global Value Chains

Figure 1.1: Global Value Chain Participation Rates, World, 1995–2020 (%)



From 1995 to 2020 for the world economy:

GVC participation rate: 35.2% to 44.4%;

Peak: 49.3% in 2018.

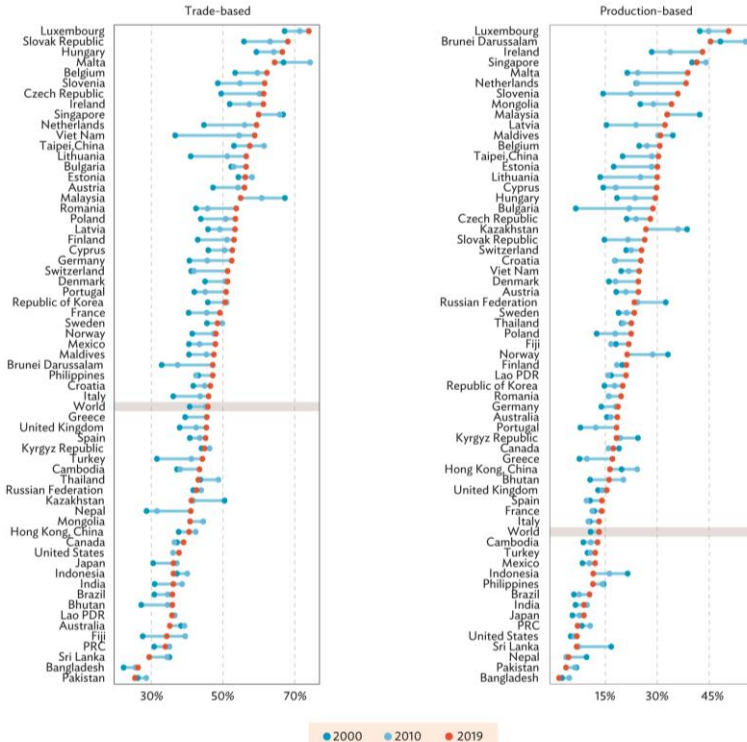
GVC's Contribution to GDP: 9.6% to 12.1%;

Peak: 14.6% in 2018

After a resurgence of growth rates in 2017 and 2018, trade conflicts and the COVID-19 pandemic disrupted GVCs after 2018.

# Chapter 1: Recent Trends in Global Value Chains

Figure 1.2: Measures of Global Value Chain Participation, 2000, 2010, 2019 (%)

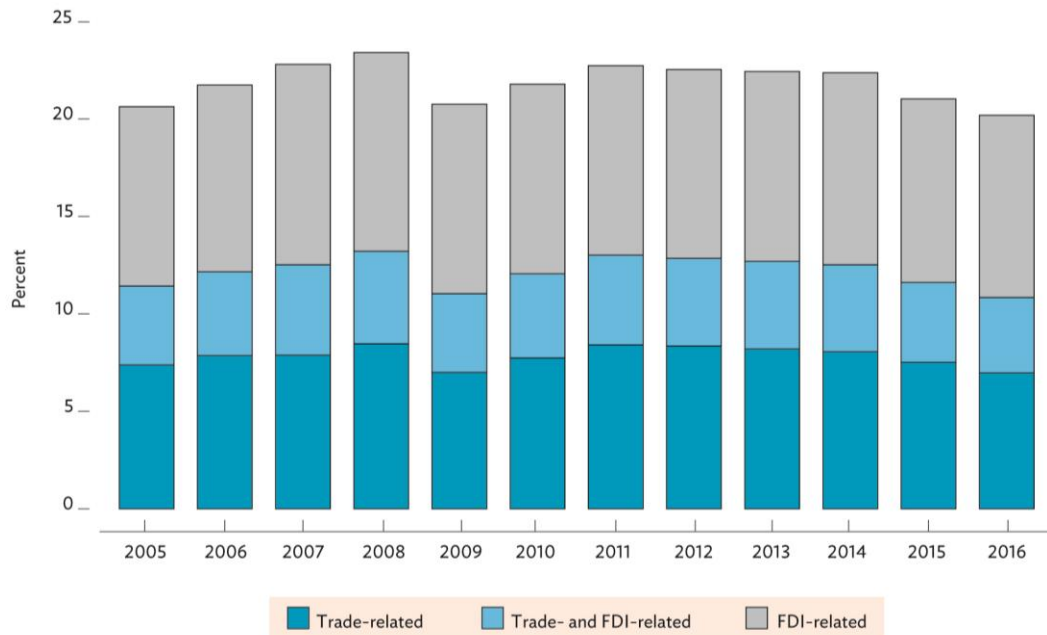


➤ Some countries saw strong increases between 2010 and 2019 such as Viet Nam, Slovenia or Romania but also Germany going from 45.6% in 2010 to 52.4% in 2019;

But  
 ➤ The GVC participation rate of the PRC, the center of global manufacturing assembly: 35.1% in 2010 & 33.9% in 2019;

# Chapter 1: Recent Trends in Global Value Chains

Figure 1.5: Global Value Chain Participation with Multinational Corporations, World, 2005–2016



Measuring GVC participation beyond production

Missing GVC activities:

- (1) local sales by foreign MNCs;
- (2) final product exports by foreign MNCs;

(1)+(2): FDI-related GVC activities (gray part in the figure), 9.3% of the world GDP in 2016.

GVC participation with MNCs: 20.2% in 2016 (as % of the world's GDP)

# Chapter 2: Trade in Intangible Assets along Global Value Chains and Intellectual Property Protection

Table 2.1 PRC's Laptop and Mobile Phone Imports from the US, and Apple Sales to the PRC, 2015–2018

Year	A PRC imports from the US in laptops and mobile phones (\$ million)	B Apple sales in the PRC (\$ billion )	C Manufacturing cost of Apple products sold in the PRC (\$ billion)	B/A (‘000)	C/A (‘000)
2015	1.67	58.72	35.17	35.2	21.1
2016	3.60	48.49	29.53	13.5	8.2
2017	2.98	44.76	27.53	15.0	9.2
2018	4.05	51.94	32.05	12.8	7.9

A new trade model:

exporting services related to intangibles via tangibles produced by foreign contract manufacturers;

different from conventional trade in services;

not crossing borders of home country;

major players: factoryless manufacturers (e.g., Apple, Nike)

*Trade statistics fail to capture these trade activities!*

*Does Apple export its products to the PRC?*



# Chapter 2: Trade in Intangible Assets along Global Value Chains and Intellectual Property Protection

Table 2.5 The US Factoryless Manufacturers and Their Trade with the PRC (\$ billion)

US Services Exports to PRC			US Trade Deficit with PRC		
Official	Adjusted for factoryless manufacturers	Change	Official	Adjusted for factoryless manufacturers	Change
57.1	85.0	48.9%	(380.0)	(352.1)	7.3%

Two consequences:

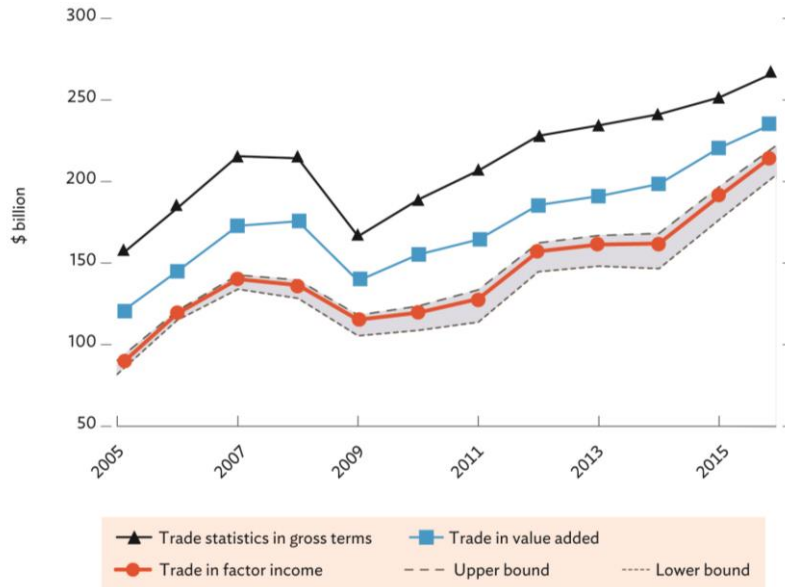
- The exports of developed economies are underestimated;
- The trade balance between developed and developing economies is incomplete;

Example: US-PRC bilateral trade

In 2018, the four factoryless manufacturers Apple, Nike, Qualcomm and AMD earned \$27.9 billion from their intangibles in the PRC, about 48.9% of the officially reported US exports in services to the PRC.

# Chapter 2: Trade in Intangible Assets along Global Value Chains and Intellectual Property Protection

Figure 2.3: Trade Surplus between the PRC and the US by Three Different Measures, 2015–2016



A new concept: Trade in Factor Income TiFI  
A country's exports are defined as the sum of the incomes earned by the factors belonging to the country in foreign markets.

Example: The PRC's trade surplus with the US in TiFI:

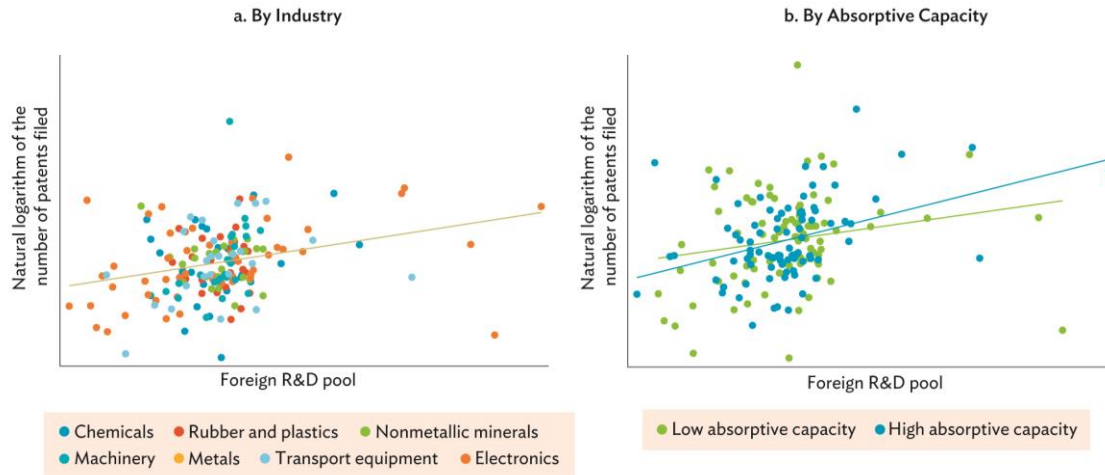
32% lower on average than that in gross value;

17.4% lower than that in TiVA



# Chapter 3: Productivity Growth, Innovation, and Upgrading along Global Value Chains

Figure 3.2: Relationship between GVC–Mediated Foreign R&D Pool and Domestic Innovation

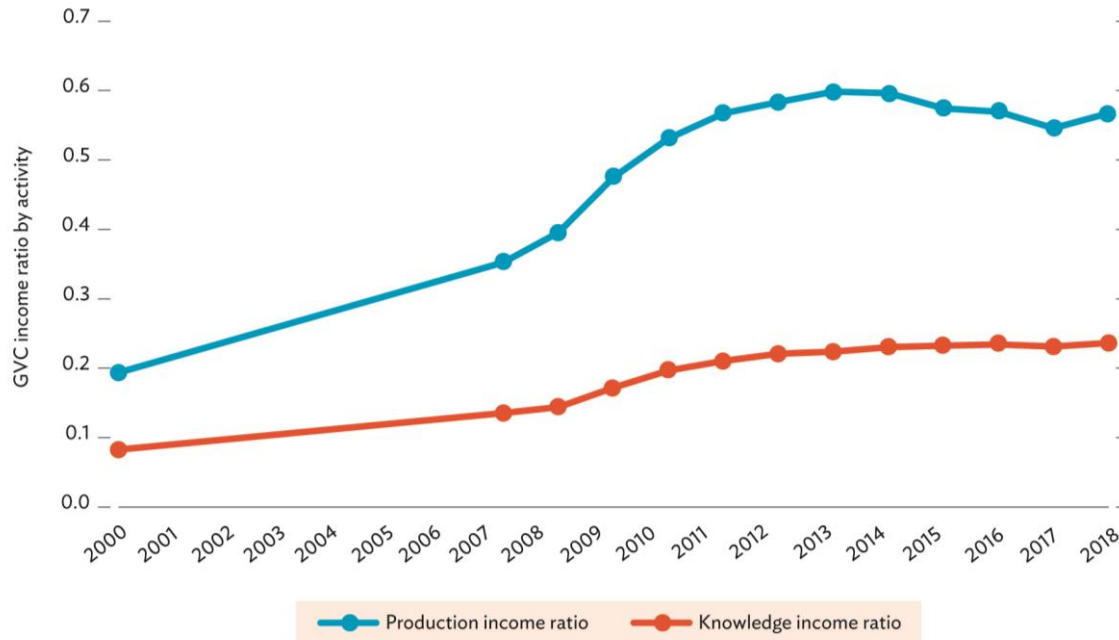


GVC participation enhances knowledge spillover from foreign R&D activities

- Domestic innovation is positively associated with access to the foreign R&D pool mediated through GVC integration. The relationship is especially strong in GVC-intensive industries, such as electronic and transportation equipment.
- Access to foreign R&D pool mediated through GVCs depends on absorptive capacity

# Chapter 3: Productivity Growth, Innovation, and Upgrading along Global Value Chains

Figure 3.7: GVC Income Ratio Aggregate by Activity in 15 Developing Asian Economies Relative to the OECD Average, 2000–2018



GVC participation facilitates the catch-up process of emerging Asia

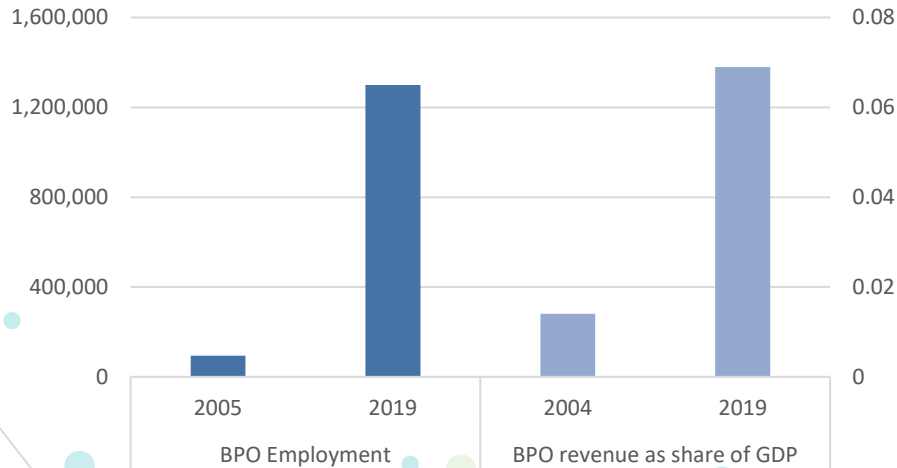
For manufacturing activities, the income ratio of emerging Asia to OECD rose from 20% to 57% during the period 2000–2018;

For knowledge intensive activities, the income ratio rose from 9% to 24%.

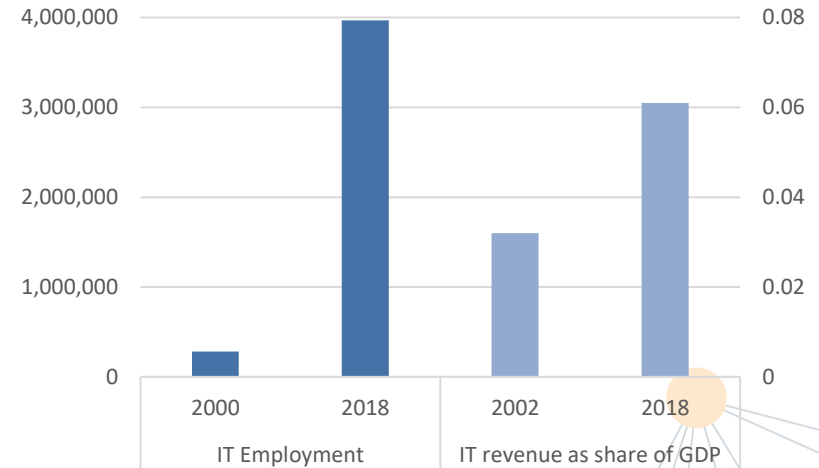
# Chapter 4: The Role of Global Services Value Chains for Services-Led Development

- Beyond manufacturing, services GVCs offer a new path for development, creates jobs and income.
- The success of Indian IT industry: a result of the deep integration with the value chains of the global software industry.
- The booming business process outsourcing (BPO) in the Philippines: a result of active participation in services GVCs.
- BPO: 24-hour call centers and voice services, online customer care and assistance, medical and legal transcription, finance and accounting, human resource activities, etc.

### Philippines



### India



# Chapter 4: The Role of Global Services Value Chains for Services-Led Development

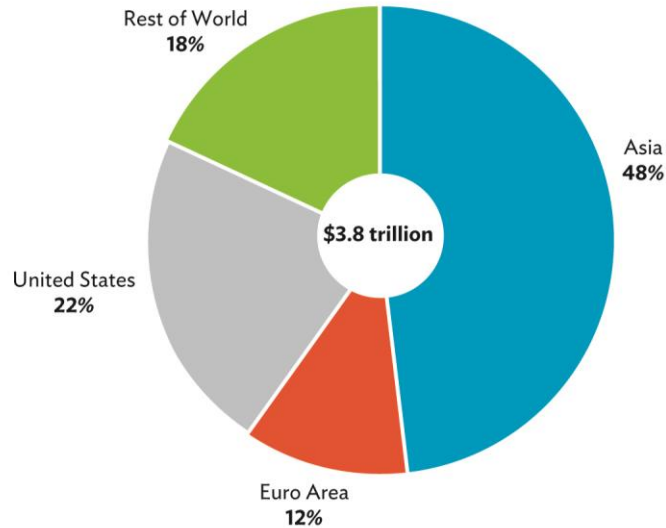
- **Fears of premature deindustrialization are unwarranted** as many services share similar characteristics to manufacturing industries (e.g. scale economies, spillovers)
- **Advantages of services** GVCs beyond employment and revenue generation:
  - **Improving gender equality** (services liberalization is estimated to account for almost 10% of the decline in India's gender education gap)
  - **Substantially greener** than manufacturing.
- **Challenges:**
  - Services GVCs are skill-intensive and might widen income inequality.
  - Services GVCs are highly concentrated in cities and might widen urban-rural divides (Figure 4.4)
  - Low-skill task of services GVCs are susceptible to automation.

## Chapter 4: The Role of Global Services Value Chains for Services-Led Development

- Participating and upgrading in services GVCs requires **increasing educational attainment**, particularly in rural areas of developing countries.
- Investing in human capital needs to go hand-in-hand with **raising R&D spending, lowering barriers to services trade and developing domestic services markets** to facilitate value-chain upgrading.
- **The rise of services GVCs and structural change towards services is a fact.** The COVID-19 pandemic will only accelerate this trend by paving the way to telemigration (i.e., providing services across borders). **Policy makers need to be proactive** to prepare their economies for this development in order to reap the gains from it.

# Chapter 6: Digital Platforms and Global Value Chains

Figure 6.3 Digital Platform Revenue by Region, 2019



Digital platform revenue: **\$3.8 trillion** in 2018

The new digital economy is based around platforms: Google (search engine), Alibaba (market place), Android (operating system), etc.

**But** unequal – the platform economy is skewed towards Asia, North America and Europe.

# Chapter 6: Digital Platforms and Global Value Chains

As a new infrastructure of GVCs, digital platforms have created **internet-driven value chains**, which are diminishing the importance of brick-and-mortar retail stores, a trend that has been further magnified by the COVID-19 pandemic.

Advantages of digital platform based GVCs:

- A. making participation easier and reducing transaction costs;
- B. lowering the cost of participating in international markets;
- C. more benefits beyond sales (digital payment and finance services, etc.);
- D. increasing inclusivity for micro, small, and medium sized enterprises;

Challenges:

- A. regulating the monopolistic power of digital platforms;
- B. Data security and the protection of consumer privacy.



## Chapter 5: Rising Risks to Global Value Chains

- Three risks to GVCs: geopolitical tensions, environmental shocks and the COVID-19 pandemic.
- Geopolitical shocks have become a primary concern for the future of GVCs in recent years.
- According to standard measures of uncertainty, the uncertainty triggered by US-PRC tensions added 20% to global uncertainty since 2016.

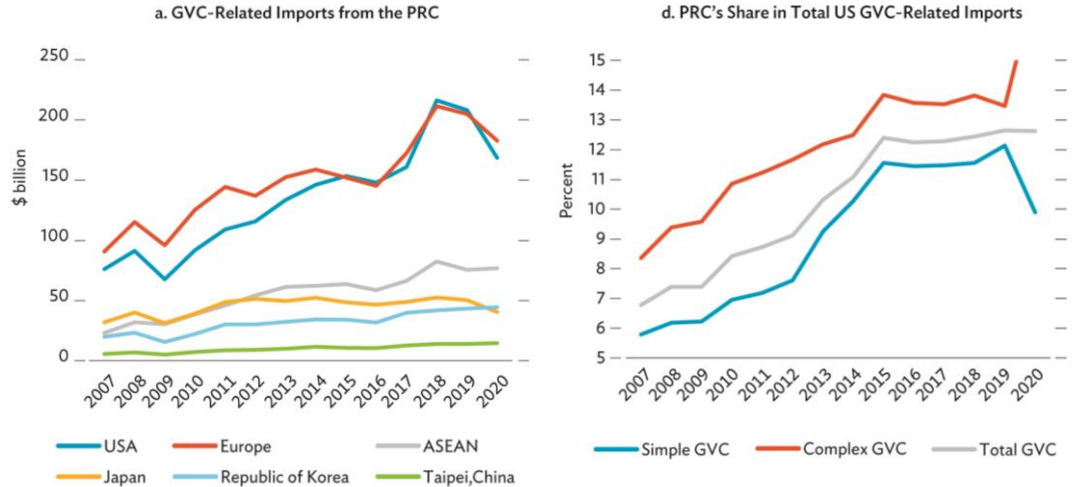


# Chapter 5: Rising Risks to Global Value Chains

US and European imports from the PRC via GVCs had increased significantly from 2007 to 2018, but fell thereafter.

The PRC's share in total US GVC-related imports has also fallen since 2018.

Figure 5.1: Aggregate Effects on GVC-Related Imports from the PRC by ASEAN members; Europe; Japan; Republic of Korea; Taipei,China; and the US



## Chapter 5: Rising Risks to Global Value Chains

- Environmental shocks (earthquakes, floods, typhoons, etc.) affect GVCs on both supply and demand sides.
- Environmental shocks are typically highly localized in domestic networks and temporally confined.
- Disasters triggered by natural hazards—are projected to increase, the environmental risks to GVCs are likely to grow substantially.



## Chapter 5: Rising Risks to Global Value Chains

The COVID-19 has disrupted the smooth operations of GVCs:

- lockdowns and border closures restrict the mobility of labor;
- the contagion effects spread via value chains globally;
- the uncertainty undermines investment, global FDI fell 42% in 2020.

Complex, lengthier GVCs with concentrated production or distribution have been the most vulnerable.

The global costs of COVID-19 lockdowns: a loss of 12.6% of global GDP.

GVCs, however, have been surprisingly resilient in adjusting to food, pharmaceutical, and medical equipment shortages so far in the pandemic

**Thank you!**

