The Future of Supply Chains in the APEC Region:

Implications for Business

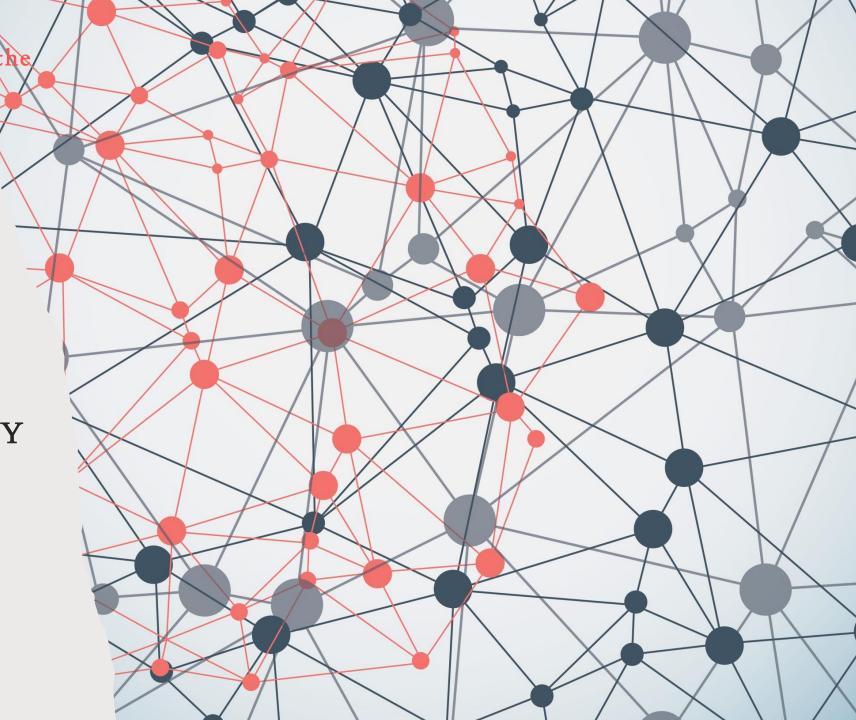
NZASC, University of Auckland Business School

SESSION 3

EVOLVING SUPPLY
CHAINS AND THE
IMPLICATIONS
FOR BUSINESS

Mia Mikic

Waikato University & ARTNeT



THREE ASPECTS

- 1. Are disruptions over?
- 2. Drivers of GVCs evolution
- 3. Some reflections on the role of services (especially logistic-related services) based on the **APEC project** (Sherry Stephenson and me)

ARE SUPPLY CHAINS DISRUPTIONS OVER? PERHAPS, BUT NOT NECESSARILY GOOD NEWS

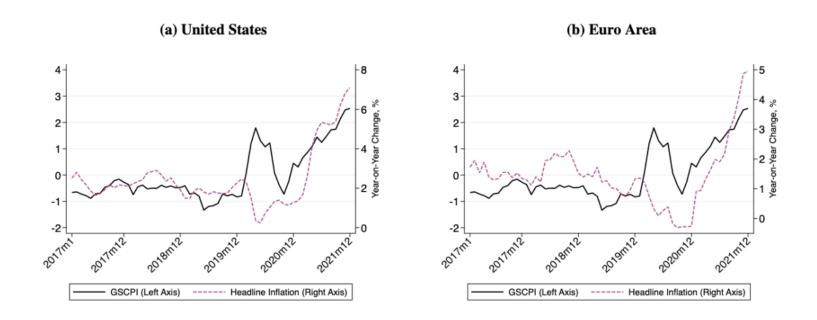
o 2020-2021:

- Demand shock (abrupt changes in *consumption composition*, government spending on health+, stimuli....)
- Supply shock (lockdowns, trade procedures, logistics capacity, shortage of workers....)
- \circ 2022 \rightarrow
- Russian invasion of Ukraine and prices of natural resources / commodities / grains (?) + destruction of infrastructure ⇒ inflation
- ➤ Shipping costs / time /congestion are declining (mostly because of cooling demand) **BUT** war + workers shortage/strikes+(?)return of pandemic + 'unknowns' might prevent costs returning to the prepandemic level ⇒ inflation
- ➤ Monetary tightening ⇒ inflation



INTERESTING CO-MOVEMENT OF SUPPLY CHAIN PRESSURE AND INFLATION

Figure 2. Supply Chain Pressure Index and Headline Inflation



Notes: This figure plots the FRBNY global supply chain index (GSCPI) on the right-hand axis of panels (a) and (b), along with US inflation in panel (a) and Euro Area inflation in panel (b). GSCPI comes from the Federal Reserve Bank of New York and inflation numbers comes from the Federal Reserve Economic Data (FRED) maintained by the Federal Reserve of St. Louis.

https://www.ecb.europa.eu/pub/conferences/ecbforum/shared/pdf/2022/Kalemli-Oezcan_paper.pdf

Goods trade barometer

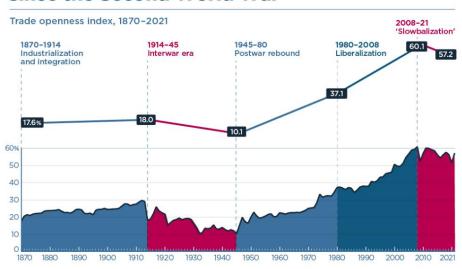
Index value, September 2022 = 96.2

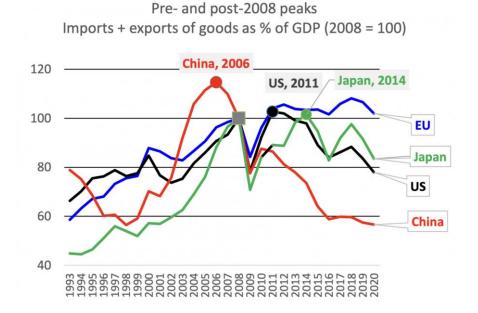


DRIVERS OF GVCs EVOLUTION

- o GVCs have contributed to globalization
- o Some debate has globalization **peaked in 2008** or not? Are we entering deglobalization?
 - o Richard Baldwin takes a more nuanced approach to globalization, (cf. to D. Irwin below)

Globalization is in retreat for the first time since the Second World War



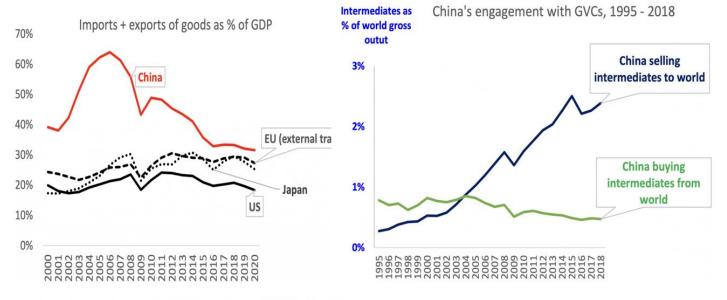


DRIVERS (2)

- O Standard set of factors contributing to a steady decline of trade costs (until the pandemic):
 - Technology allowing for fragmentation of production
 - Liberalization of trade in goods + trade rules
 - Cheaper transport
 - Cheaper communication
 - ⇒ offshoring / GVCs with "just-in-time" as a dominant business model
 - ⇒ Factory Asia **centered** in China; China's role driven by **economic** factors (and relatively **supportive international environment**)

DRIVERS (3)

• It appears that China's rapid growth in 2000s' also led to changed participation in GVCs; in Baldwin's (and others) comment (also confirmed by recent ADB study, unpublished), on China's vertical integration



Source: Author's calculations based on WTO (trade data) and WDI database (GDP data, current USDs).

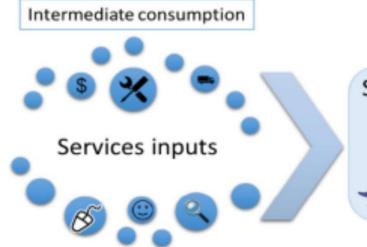
DRIVERS (4)

- o Trade war contributed to **China +1 configurations** (maturity, intentional fragmentation but still driven by economics)
- Pandemic** (discovered vulnerabilities)+ geopolitics shifted the approach
 AND brought in governments with new operating frameworks and
 complexities
 - 1.**Re-shoring** (new name for what was known as "made in —home country—)
 - 2. Near-shoring (assigning higher risk to "distance")
 - 3. Friend-shoring (in a benign form with trade promotion, FTA; if based on withdrawal of trade, cold war)
- Quantitative analyses (ADB*+) show that friend-shoring might be the least damaging and near-shoring the most harmful

DRIVERS (FROM A BUSINESS PERSPECTIVE)

- o Still very much based on **off-shoring** but increasingly internalizing risk and leakages differently and making account for the **ESG** components +SMR
- o "Just-in-case" becoming more attractive as risks getting more costly especially as governments add to the premium (geo-economic)
- o Re-shoring to be combined with automation and robotization
- o There is a hope that opportunities will arise for less popular investment destinations (in developing countries) to enter or to intensify participation in global value chains

SERVICIFICATION



Manufacturing firms use a higher number of services inputs Production

Services activities within manufacturing firms

There is more employment within manufacturing firms in support service functions such as R&D, design, logistics, marketing and sales Output



Manufacturing firms increasingly sell services bundled with goods to increase value

Source: Miroudot y Cadestin (2017)

SERVICES, LOGISTICS, SUPPLY CHAINS AND PANDEMIC

- o Service links connect different nodes in the production networks; when services are disrupted, there is no supply (chain)
- o Illustrating some transport services:
 - Maritime / cargo shipping moves 90 % of the goods traded in the world
 - Air cargo represents around 40 % on average of the space of passenger planes, representing 35-40% of the value of trade (\$6 trillion)
 - Express delivery (DHL delivers over 1.5 billion packages annually; UPS 22 million packages a day and Fedex 18 million packages a day)

APEC PROJECT ON SERVICES TO MOVE ESSENTIAL GOODS

Progress to date:

- o APEC Logistics Workshop held: March 2022
- o Study on Logistics Services published : September 2022
- o APEC agreed definition of Logistics-related Services adopted : May 2022
- o Public-Private Dialogue on Logistics Services SOM3 : August 2022

Future work:

- o Development of a Logistics Services Observatory
- o Drafting of a set of Non-binding Guidelines or Recommendations on Treatment of Logistics Services during a Crisis for consideration

LOGISTIC-RELATED SERVICES (LRS)

- Logistics-related services have been playing a central role in maintaining the flow of essential goods across borders during the pandemic.
- Since May 2022, APEC-wide adopted definition of LRS:

 A series of essential economic activities that enable the operation of efficient, sustainable, secure and resilient supply chains and allow for the predictable transport, storage, and delivery of goods and services for businesses".
- 10 sectors: customs brokerage services, cargo handling, storage and warehousing, freight forwarding, courier services, distribution services, and air-,maritime-, rail- and road transport services.

Report on Logistics Services published by APEC Group on Services

September 2022

Available at:

https://www.apec.org/docs/default-source/publications/2022/9/services-to-support-the-movement-of-essential-goods-background-paper-on-logistics-services/222 gos services-to-support-the-movement-of-essential-goods-background-paper-on-logistics-services.pdf?sfvrsn=f096afca_2



for Asia-Pacific Prosperity

Services to Support the Movement of Essential Goods Background Paper on Logistics Services

APEC Group on Services

September 2022

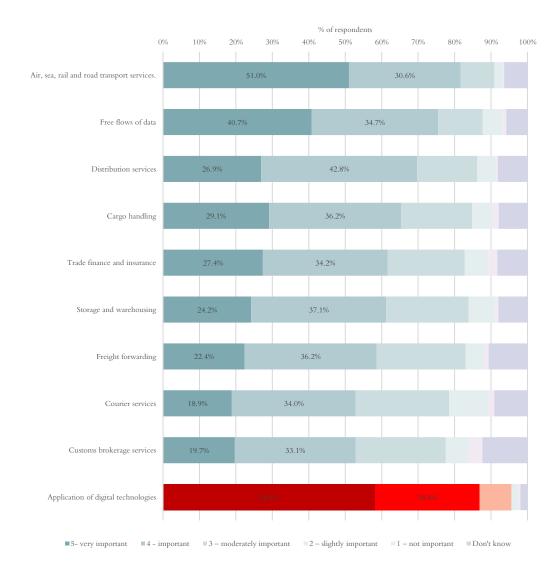
REGIONAL VIEWS ON THE IMPORTANCE OF IMPROVING ESSENTIAL SERVICES TO FACILITATE MORE RESILIENT SUPPLY CHAINS

Most important services to improve:

- -- Transport services (80%)
- --Free flow of data (78%)
- -- Distribution services (70%)
- -- Cargo handling (65%)
- --Storage & warehousing (60%)

Application of digital technologies considered to be the most critical (85%)

From the PECC State of the Region Report 2022



VIEWS OF THE REGION ON WHAT CAUSED THE DISRUPTIONS TO LOGISTICS

OF THE RESPONDENTS TO THE PECC SOTR SURVEY, THE MOST IMPORTANT FACTORS WERE FELT TO BE:

- 1. Capacity limitations on port operations and logistics constraints (61.5%)
- 2. Limitations on supply side responses to increased demand (61%)
- 3. Rapid increase in demand for consumer goods (29%)
- 4. Shortages of air and maritime crew (27%)
- > Overall, the perception throughout the Asia Pacific region is that supply side limitations and capacity issues in ports and logistics operations had the biggest impact on supply chain disruptions.

GOING FORWARD: THE REGIONAL AND WORLD CONTEXT IS NOW DIFFERENT

o How can / should logistics services operators and government adapt to the 'new normal'?

Recommendations from the PPD in Chiang Mai to make supply chains more flexible and resilient (August 2022)

- 1.Improved regulation of logistics services, especially transport
- 2. Adoption of a holistic approach towards coordinating policies across all logistics services necessary to move essential goods in the region since they are inter-linked
- 3. Firms must make faster decisions as circumstances change during times of crisis.
- For this, they need access to better and more accessible information as they switch their business model to "just in case"
- 4.Better coordination of policies across the region in a more coherent manner; more sharing of data and information
- 5. Greater liberalization of logistics services

WHAT DO RESPONDENTS IN THE SOTR SURVEY RECOMMEND?

o ENCOURAGE APEC TO PUT IN PLACE AN **INITIATIVE TO IMPROVE THE DELIVERY OF LOGISTICS SERVICES IN THE REGION** (This came in 6th out of 20 competing issues in terms of top priorities)

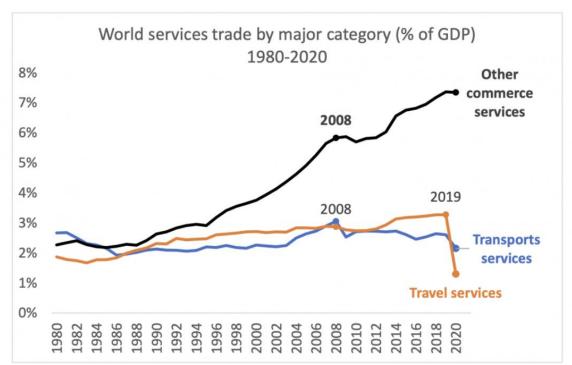
RECOMMEND FOR APECTO DEVELOP A WORK
 PROGRAM ON SUPPLY CHAINS (OR GVCs) OVERTHE
 COMING 5YEARS (Second only to Digital Trade as being the most important area for APEC economies to focus on in the near future).

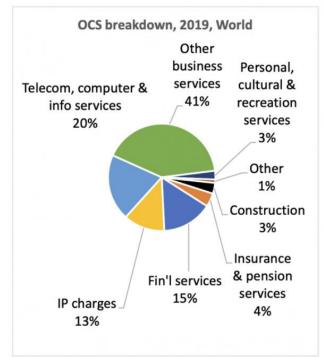
WHAT WILL THE FUTURE LOOK LIKE FOR LOGISTICS

- o Possibility of "onshoring" is unlikely but there will be changes
- o Future supply chain relationships will look different. Some relationships /partnerships have been dissolved and will be reconstructed differently
- o Greater digitization will be applied to logistics (trade) processes
- o Better and more accessible information needed so attention will continue to be focused on logistics in a more intensive way than before
- o Governments will need to have better coordination of policies towards logistics services prepared to put in place in times of crises

THANK YOUFOR LISTENING!

SERVICES TRADE BY MAJOR CATEGORY





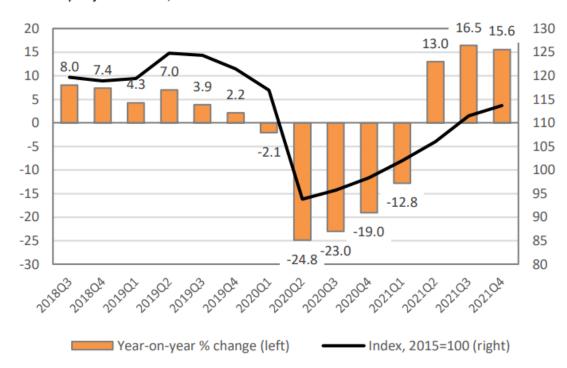
Note: EU trade excludes intra-EU trade since here we take the EU as a megaeconomy.

Source: Author's calculations based on WTO (trade data) and WDI database (GDP data, current USDs).

SERVICES ON A RISE

Global services trade activity

Seasonally-adjusted index, 2005=100



Drivers of services trade



THUS <u>BALDWIN</u> AND <u>OTHERS</u> CONCLUDE - THE FUTURE OF GLOBALIZATION IS IN INTERMEDIATE (PRODUCER) SERVICES TRADE

- Barriers to trade are radically <u>higher</u> and falling radically faster for services (??) versus goods, and, unlike farm and factory goods, there is no capacity constraint when it comes to intermediate services.
- Services now account for almost a quarter of export earnings globally. It also accounts for many export jobs, especially for women, since producing services is more labour intensive than producing goods.
- The divergence between the growth of services versus goods happened because digital technology opened the door to trade in intermediate services, and high-income countries have few or no barriers to this sort of exports (YET). WATCH THIS SPACE especially about data flows