

REGIONAL WORKSHOP ON TRADE IN SERVICES
Pacer Plus Implementation Unit

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Maritime Transportation in the Pacific:
- Regional perspectives and approaches



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ICY BRIEF

**SMALL ISLAND DEVELOPING STATES:
MARITIME TRANSPORT IN THE ERA OF
A DISRUPTIVE PANDEMIC – EMPOWER
STATES TO FEND AGAINST DISRUPTIONS
TO MARITIME TRANSPORTATION SYSTEMS,
THEIR LIFELINE TO THE WORLD**

The coronavirus disease (COVID-19) pandemic may have had less noticeable impacts on Small Island Developing States (SIDS).

impacts may exacerbate existing vulnerabilities related to trade; removal of trade-related infrastructure and policies may further disrupt transport and trade flows. The pandemic has led to disruptions to global supply chains and systems, which may have a negative impact on sustainable development.

1. Structural trends
2. Connectivity trends
3. Challenges and opportunities
4. Recommendations

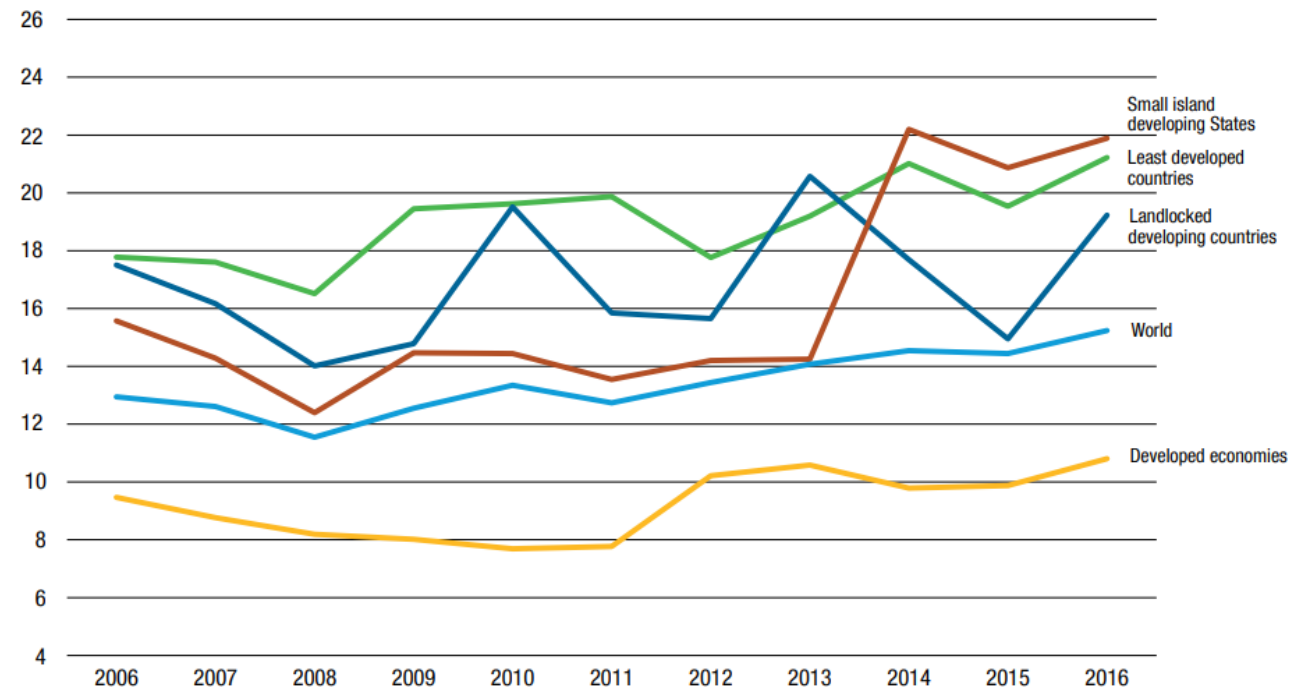
- ✓ UNCTAD Review of Maritime Transport Series
- ✓ UNCTAD Maritime Statistics



SIDS face higher transport costs



Figure 3.5. Transport and insurance costs of international trade, 2006–2016
(Percentage share of value of imports)



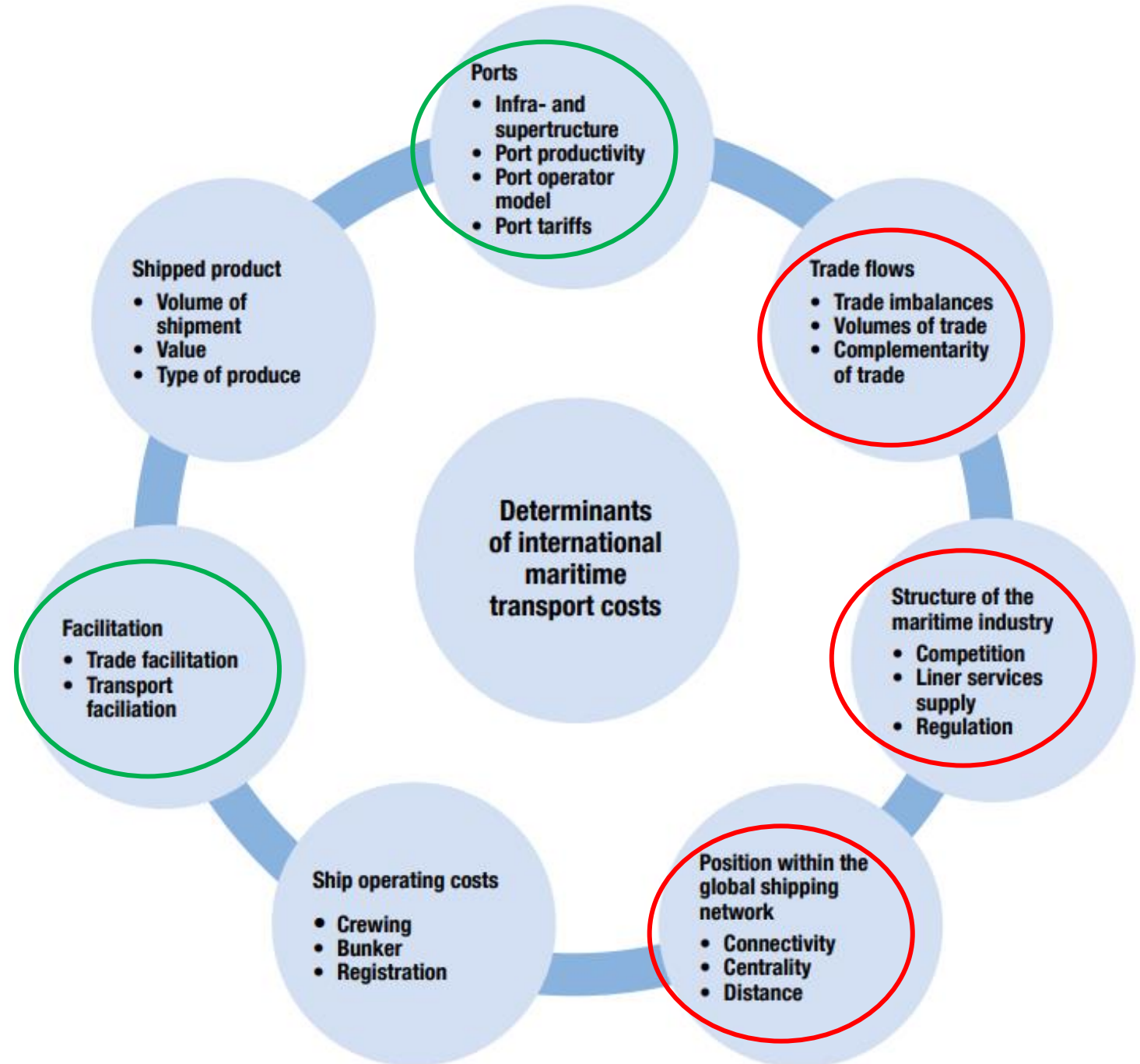
Source: UNCTAD secretariat calculations.

Note: All modes of transport; the least developed countries grouping includes 48 countries for all periods up to 2016.

Source: UNCTAD, [Review of Maritime Transport 2017 \(Maritime Connectivity\)](#), Chapter 3

Determinants of international maritime transport costs

Source: [UNCTAD Review of Maritime Transport 2015, Chapter 3](#)





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📅 Container port throughput, annual ⓘ

📅 Liner shipping bilateral connectivity index, quarterly ⓘ

📅 Liner shipping connectivity index, quarterly ⓘ

📅 Merchant fleet by country of beneficial ownership, annual ⓘ

📅 Merchant fleet by flag of registration and by type of ship, annual ⓘ

📅 Port call and performance statistics: number of port calls, annual ⓘ

📅 Port call and performance statistics: number of port calls, semi-annual ⓘ

📅 Port call and performance statistics: time spent in ports, vessel age and size, annual ⓘ

📅 Port call and performance statistics: time spent in ports, vessel age and size, semi-annual ⓘ

📅 Port liner shipping connectivity index, quarterly ⓘ

📅 Seafarer supply, quinquennial, 2015 and 2021 ⓘ

📅 Share of the world merchant fleet value by country of beneficial ownership, annual ⓘ

📅 Share of the world merchant fleet value by flag of registration, annual ⓘ

📅 Ship recycling, by country, annual ⓘ



International merchandise trade

International trade in services

Digital economy

Technology and innovation

Trade and Biodiversity

Ocean trade

Plastics trade

Creative economy

Iron ore

Maritime transport

Transport costs

Balance of payments

Output and income

Productive capacities

Inflation and exchange rates

How do you measure (maritime) connectivity?



LSCI

1. # Companies (**competition**)
2. # Services (**frequency**)
3. Size of largest ship deployed (**infrastructure and scale**)
4. # Ships deployed (**trade**)
5. Capacity deployed in TEU (**trade, total supply to shippers**)
6. # of countries connected by a direct service (**direct connections**)

Port LSCI

1. # scheduled **ship calls per week**
2. **Deployed annual capacity** (TEU) at port
3. # regular liner shipping **services** from and to the port
4. # liner shipping **companies** that provide services from and to the port
5. **Size in TEU of the largest ship deployed** on services from and to the country / [port].
6. # of other **ports that are connected to the port through direct liner shipping services**. A direct service is defined as a regular service between two ports; it may include other stops in between, but the transport of a container does not require transshipment.

Bilateral LSCI

1. # **transshipments** required to get from country A to country B
2. # **direct connections common to both** country A and B
3. # common connections by country pair with one transshipment (reflects **centrality/remoteness**)
4. Level of **competition on services** that connect country A to country B (i.e. number of companies on the thinnest route)
5. **Size of the largest ship** on the weakest route connecting country A to country B (reflects infrastructure)

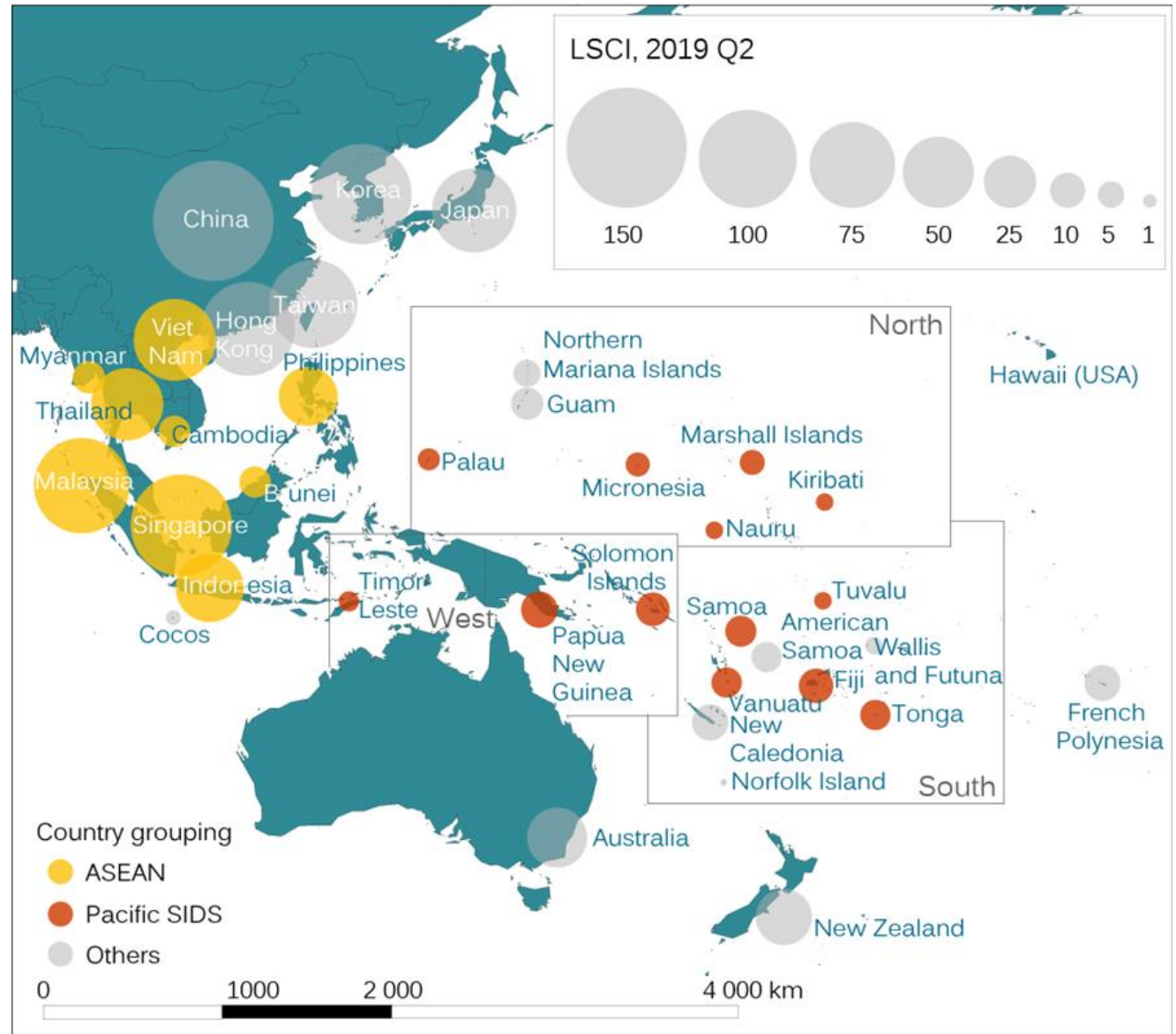
**Pacific SIDS
have low
connectivity**

Country name	Country LSCI	Country position in the 2019Q2	Top / Bottom in 2019Q2
Papua New Guinea	10.93	98	
Fiji	9.66	109	
Solomon Islands	9.11	112	
Samoa	7.47	127	
Vanuatu	7.07	132	Bottom 50
Tonga	7.05	133	Bottom 50
Marshall Islands	4.43	159	Bottom 50
Micronesia	4.04	162	Bottom 50
Palau	3.25	164	Bottom 50
East Timor	2.63	166	Bottom 50
Nauru	1.85	171	Bottom 10
Tuvalu	1.81	172	Bottom 10
Wallis & Futuna	1.81	173	Bottom 10
Kiribati	1.81	174	Bottom 10
Bermuda	1.61	175	Bottom 10
Paraguay	1.32	176	Bottom 10
Christmas Island	1.20	177	Bottom 10
Turks & Caicos	1.13	178	Bottom 10
Moldova	0.73	179	Bottom 10
Norfolk Island	0.48	180	Bottom 10

Source (table): UNCTAD and ESCAP (2022).). [Analysis of maritime connectivity in ASEAN and Pacific SIDS](#)

Source (data): [\(Country\) LSCI in UNCTADstat](#) (Q1/2006-Q3/2022)

Pacific SIDS are widely dispersed



Source: [UNCTAD & ESCAP \(2022\)](#).

BEST-CONNECTED PACIFIC PORTS (2022Q1)	LESS CONNECTED PACIFIC PORTS (2022Q1)
1. Lae, PNG (11.6)	1. Noro, SLB (2.7)
2. Suva, FJI (9.4)	2. Kwajalein, MHL (2)
3. Lautoka, FJI (9.3)	3. Truk, FSM (2)
4. Port Moresby, PNG (9.1)	4. Yap, FSM (2)
5. Apia, WSM (7.6)	5. Koror, PLW (2)
6. Honiara, SLB (7.5)	6. Vavau, TON (1.8)
7. Pago Pago, ASM (7.1)	7. Alotau, PNG (1.6)
8. Nukualofa, TON (6.9)	8. Buka, PNG (1.6)
9. Madang, PNG (6.9)	9. Port Funafuti, TUV (1.4)
10. Rabaul, PNG (6.7)	10. Oro Bay, PNG (1.1)

**PNG, FJI and SLB
home to the best-
connected Pacific
ports**

Source (table): [UNCTAD and ESCAP \(2022\)](#)

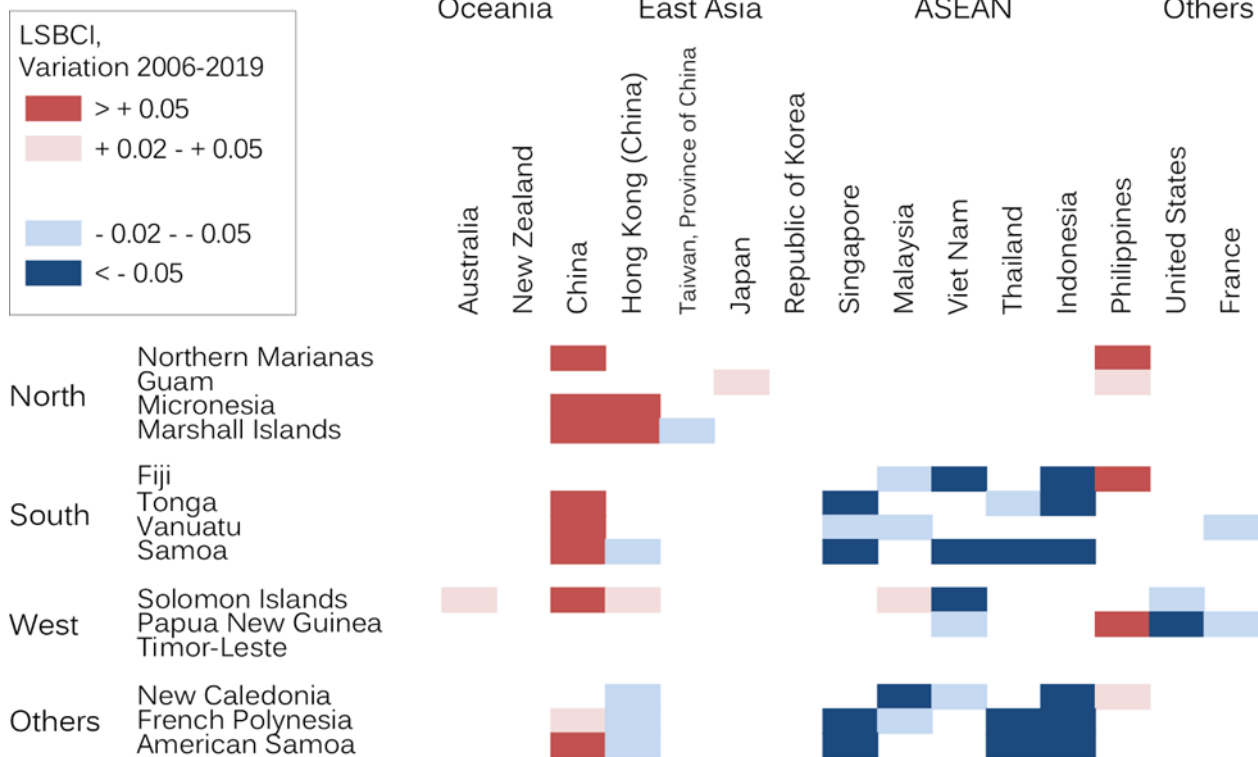
Source (data): [\(Port\) LSCI in UNCTADstat \(Q1/2006-Q3/2022\)](#)



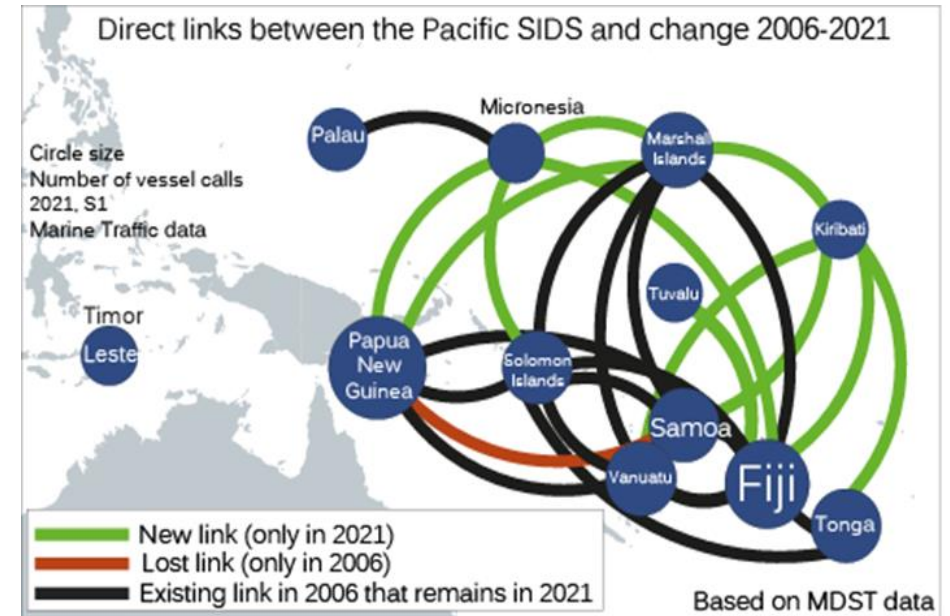
Pacific connectivity dynamics

Inter-regional connectivity

(Variation - Bilateral LSCI, 2016-2019)



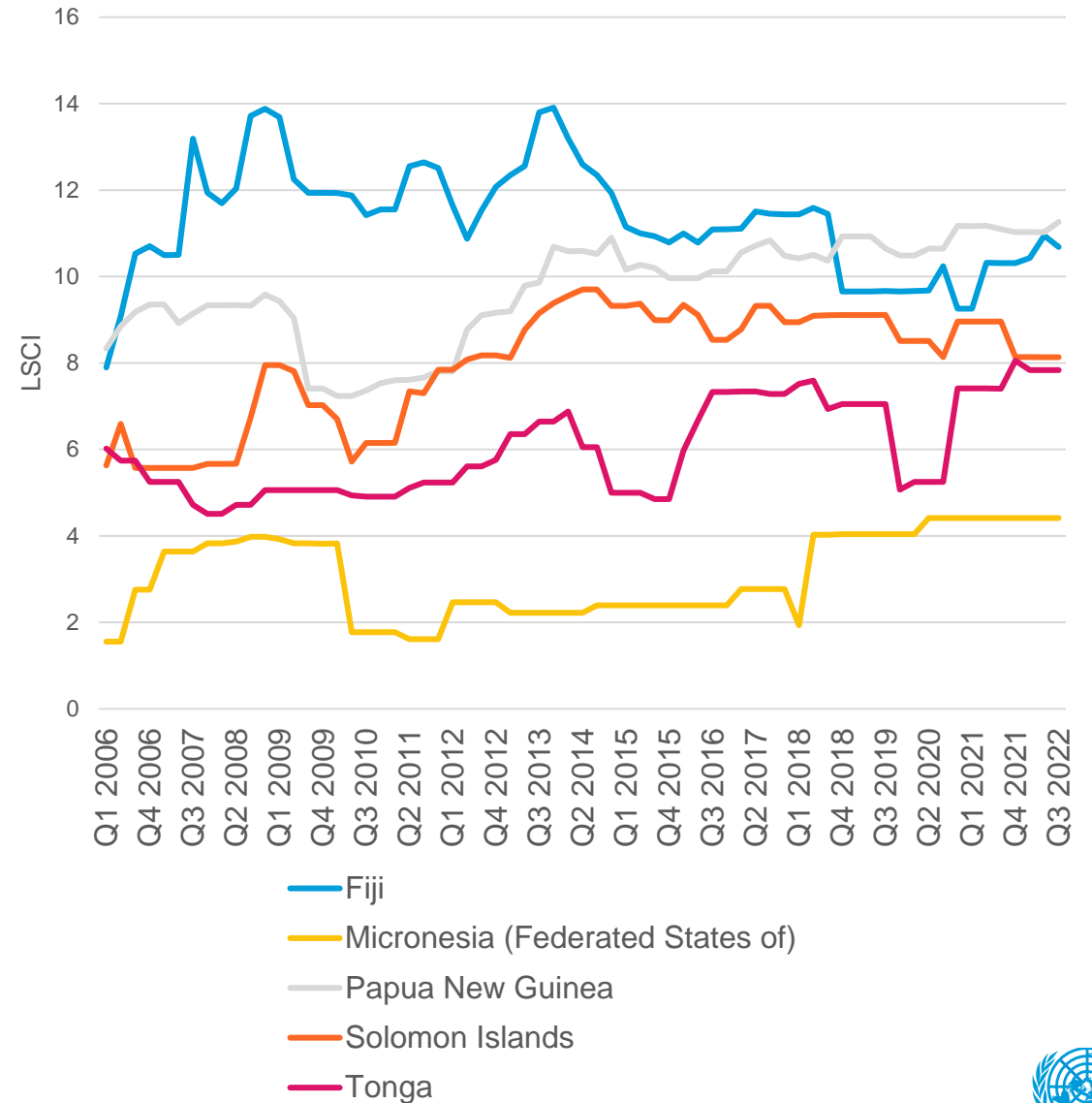
Intra-regional connectivity



Source: [UNCTAD & ESCAP \(2022\)](#).

Pacific SIDS Connectivity:

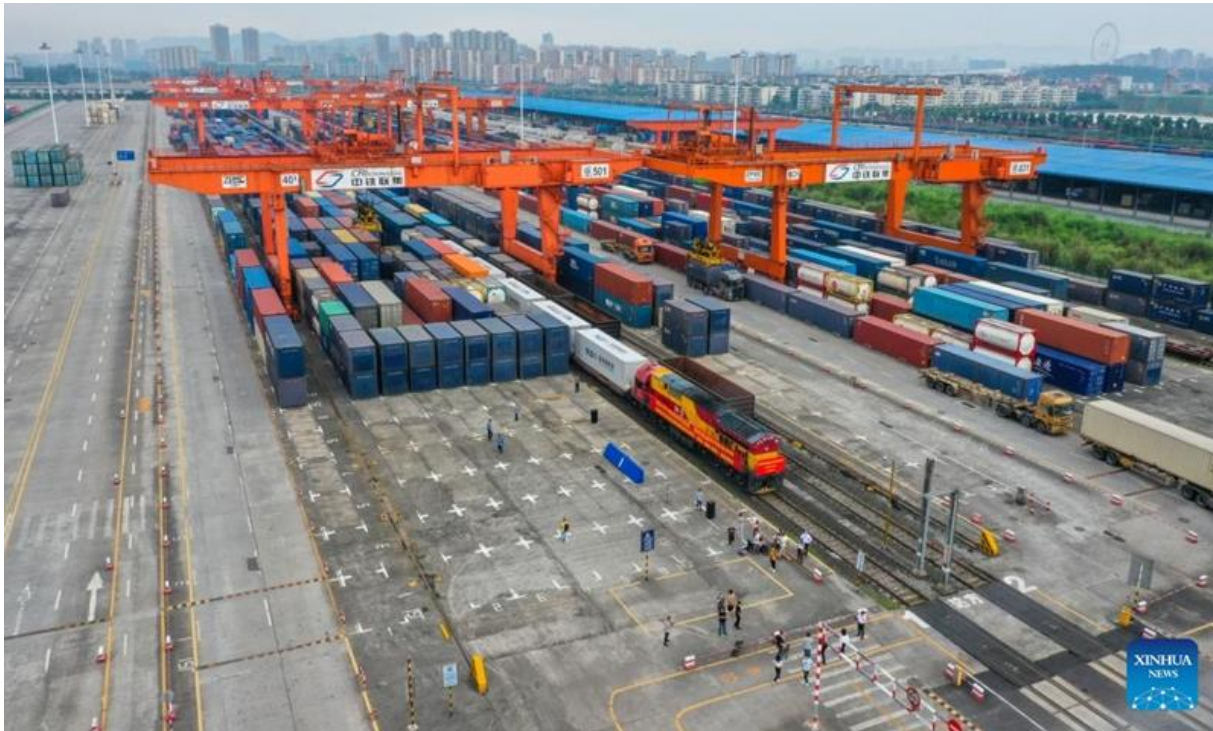
More affected by
2008/2009 crisis
than COVID
pandemic?



Source (data): [\(Country\) LSCI in UNCTADstat](#) (Q1/2006-Q3/2022)

1. Promoting port efficiency and infrastructure connectivity

Improving port **infrastructure** and efficiency



- ✓ Continuing with port reforms; Raising attractiveness of ports as port of call
- ✓ Improving **hinterland connections** and **inland facilities** (e.g. rail, road, missing links, varying technical standards, warehousing, transloading, dry ports, loading and unloading facilities, etc.).
- ✓ Promoting **multimodal transport** and transport **corridor approaches**

2. More quantity and quality services

Dealing with **imbalances** and promoting **competitive transport markets**

- ❑ Addressing operational challenges such as **empty returns** (e.g. promote capacity sharing, resource pooling, electronic platforms linking spare capacity with cargo, consolidation systems) and developing strategies to ensure the availability of backhauls.
- ❑ Promoting complementarity of exports and imports to **generate cargo and volumes** that help achieve economies of scale and reduce trade imbalances.
- Promoting **greater participation by the private sector** in the transport and trade logistics sector.
- **Liberalising** transport/logistics services/non-core freight logistics is “low-hanging fruit” policy option which may not involve heavy adjustment costs and regulatory capacity requirements.
- Providing an **enabling business environment** conducive to the development of modern logistics services.
- Promoting maritime **clusters** where shipping and port activities can boost related services sectors (e.g. banking, finance, insurance, consulting, ship repair, ship bunkering)

3. Streamlining and simplifying processes

Easing the flow of cargo and trade



Harmonizing transport regulation (e.g. road and rail transport). International conventions/standards as the basis.

Customs cooperation, Customs reform and modernization, Transit regimes, Border management

Addressing the differential treatment of exports and imports which may have important implications for the competitiveness of domestic production (e.g. manufacturing).

Other challenges and opportunities

Export potential constrained (distance, cost to market, fluctuations in global commodity pricing, challenges in cost of production, consolidation and availability of labor)

Build-Neglect-Rebuild Paradigm

Importance of territories (New Caledonia, French Polynesia, American Samoa, Guam, Northern Marianas) **and private ports** in shipping networks

Source: UNCTAD, 2023 (forthcoming). Maritime Connectivity in Pacific Island Developing States: Case studies of Fiji, the Solomon Island and Papua New Guinea

What can we do?

1. Funding of Asset management	6. Greening, resilience and sustainable energy solutions
2. Transshipment hub strategy	7. Governance
3. Digitalization of information systems	8. Human resources and capacity
4. Private sector involvement	9. Sustainable port pricing
5. Inland container terminals	10. Master Planning

Source: UNCTAD, 2023 (forthcoming). Maritime Connectivity in Pacific Island Developing States: Case studies of Fiji, the Solomon Island and Papua New Guinea