

# Asian Transport Outlook (ATO)

## How is the Transport Connectivity to National and International Markets?

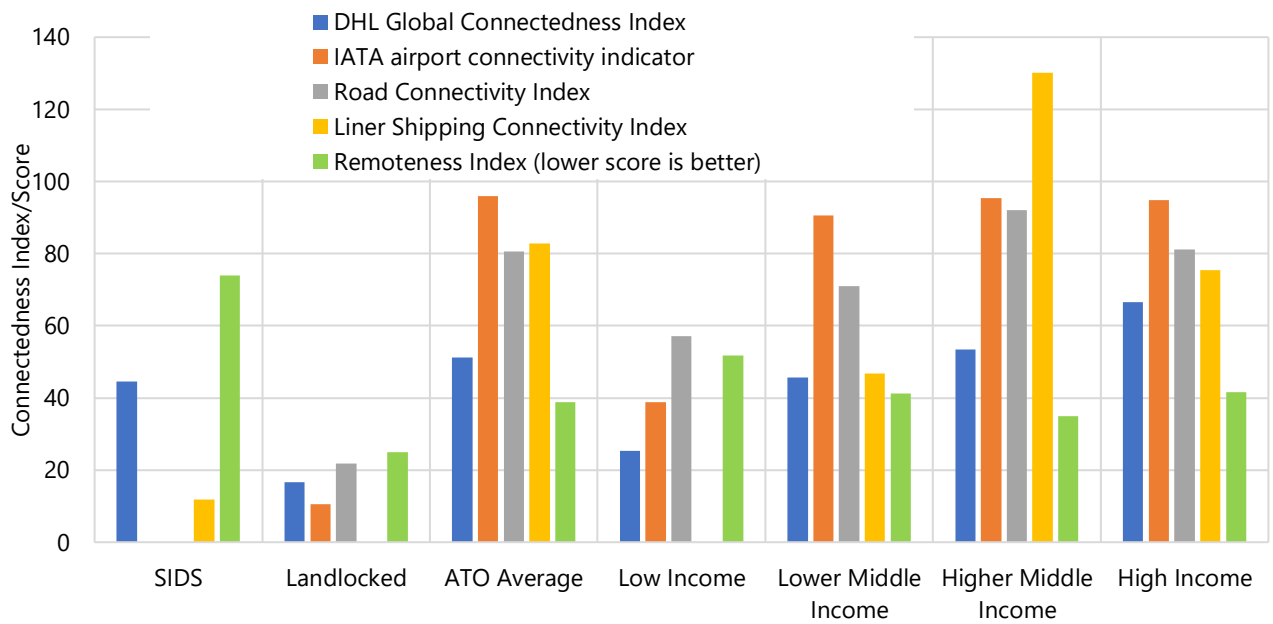
Connectivity is a measure of accessibility that ensures travel along with all origin-destination connections within a reasonable range of time and costs. No single indicator provides a full insight in the status of connectivity in the ATO economies, and thus, the empirical analysis covers air, land, and shipping transport, as well as logistics connectivity as a proxy for transport connectivity (both infrastructure and services) indicators (Fig. 1)<sup>1</sup>.

1. DHL Global Connectedness Index (ACC-NRC-002) – is a measure of globalisation, highlighting key developments in international flows of capital, trade, information, and people. The scale of this indicator ranges from 0 to 100 [best].
2. IATA airport connectivity indicator (ACC-NRC-003) – The IATA air connectivity index measures the degree to which air transport connections support a country's economic development and productivity levels. It is based on the number of available seats offered in flights originating from a country. The scale of this indicator ranges from 0 to 100 [best].
3. Road Connectivity Index (ACC-NRC-004) – this Index, developed by the World Economic Forum, comprises two elements: (a) a measure of the average speed of a driving itinerary connecting the ten or more largest cities in an economy accounting for at least 15% of the economy's total population; and (b) a measure of road straightness. The scale of this indicator ranges from 0 to 100 [best].
4. Liner Shipping Connectivity Index (ACC-NRC-005) – This index is generated from the following six components: (a) the number of scheduled ship calls per week in the country; (b) deployed annual capacity in Twenty-Foot-equivalent Units (TEU): total deployed capacity offered at the country; (c) the number of regular liner shipping services from and to the country; (d) the number of liner shipping companies that provide services from and to the country; (e) the average size in TEU of the ships deployed by the scheduled service with the largest average vessel size; and (f) the number of other countries that are connected to the country through direct liner shipping services. The higher the score, the better is the connectivity.
5. Remoteness Index (ACC-ACG-001) – The average distance to world markets is in km; the adjusted value is an index based on average length and landlockedness. Remoteness is defined as the trade-weighted average of the distance from world markets. The higher the score, the more inadequate the connectivity is considered to be.

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<sup>1</sup> Indicators like transit connectivity, railway and high-speed rail connectivity, congestion etc. are considered separately.

**Figure 1: Connectedness Index for different Country Groups**



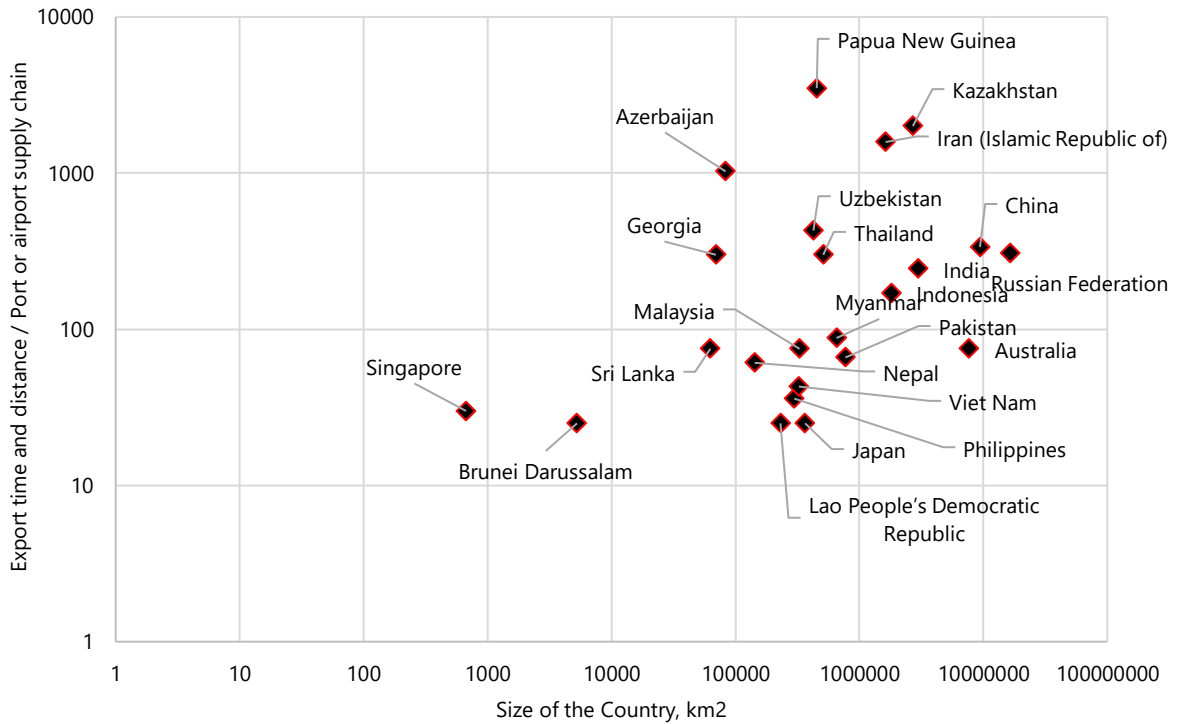
Source: DHL, IATA, World Economic Forum, UNCTAD, UN – EVI data,

ATO Data Used - ACC-NRC-002, ACC-NRC-003, ACC-NRC-004, ACC-NRC-005 & ACC-ACG-001

Transport connectivity is essential to economic development in the ATO region. High-income economies generally have better transport connectivity (infrastructure and services) compared to lower-income economies (fig. 1). In general, SIDS and land-locked economies have weaker transport connectivity when compared with other economies. However, data also shows that economies can improve connectivity through improved multi-modal accessibility without regard to distance, i.e., for example, bigger sized economies could still have lower export time and distance with better links to a port or airport supply chain (Fig. 2).

**Figure 2: Export Time and Distance Index and Size of Country**

Export time and distance / Port or airport supply chain

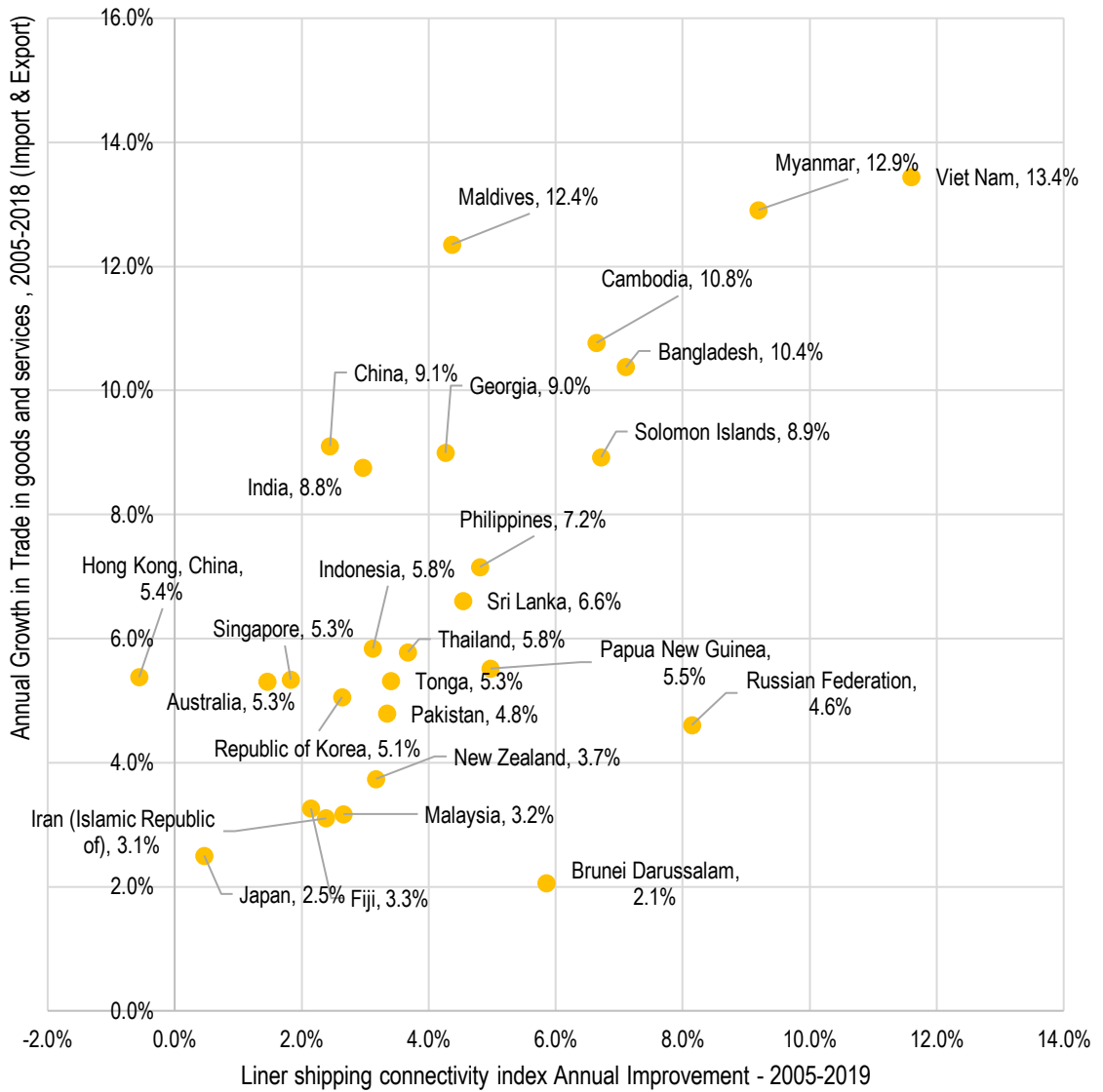


Source: World Bank

ATO Data Used: TAS-TSG-005, SEC-SEG-007

Transport connectivity is a crucial determinant of trade. Evidence from the ATO economies indicates that maritime connectivity is indeed an essential facilitator of trade (Fig. 3). Economies that realized a greater improvement in maritime connectivity have also participated in more trade.

**Figure 3: Annual Growth in Trade in Goods and Services (2005 – 2018) and Liner Shipping Annual Improvement (2005 – 2019)**



Source: UNCTAD, World Bank

ATO Data Used: ACC-NRC-005, SEC-SEG-010