

Investing in ASEAN's Digital Economy: Risks and Opportunities

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Outline

Motivation: The digital economy is a key driver of economic growth, especially in ASEAN.

Investment Landscape: Investment patterns in ASEAN are changing.

- **Concentration:** What share of investments in ASEAN flows into the digital economy?
- **Integration:** Which countries are investing in ASEAN economies?
- **Industry Specialization:** Which industries receive most investments?

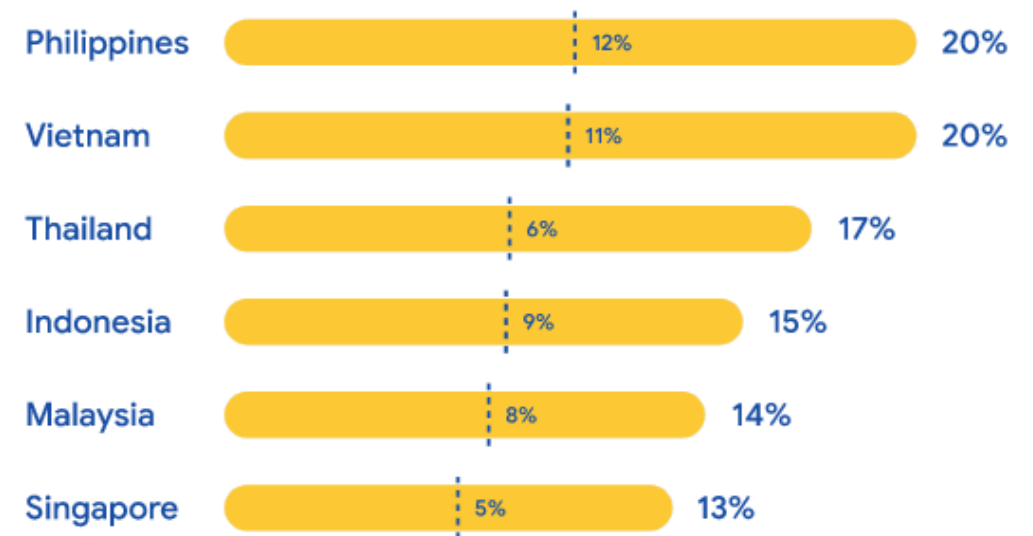
Potential Hurdles: Restrictive data policies can inhibit future investment growth.

Importance of the Digital Economy in ASEAN

- ASEAN's digital economy is set to grow to **600 billion USD by 2030**, up from 218 billion in 2023.
(Google, Temasek, Bain, 2023)
- These growth rates are projected to be higher than for total GDP.
- **Venture capital investments** are an important driver of growth in rapidly developing and innovative sectors like the digital economy.

Digital economy GMV growth vs. GDP growth (2023-2025)⁵

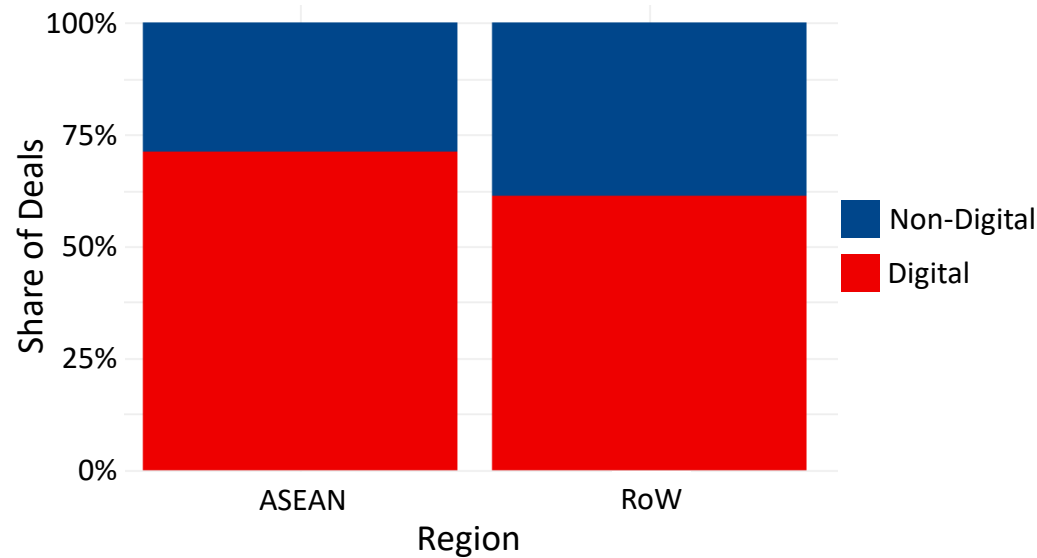
---- Expected nominal GDP CAGR — Expected digital economy CAGR



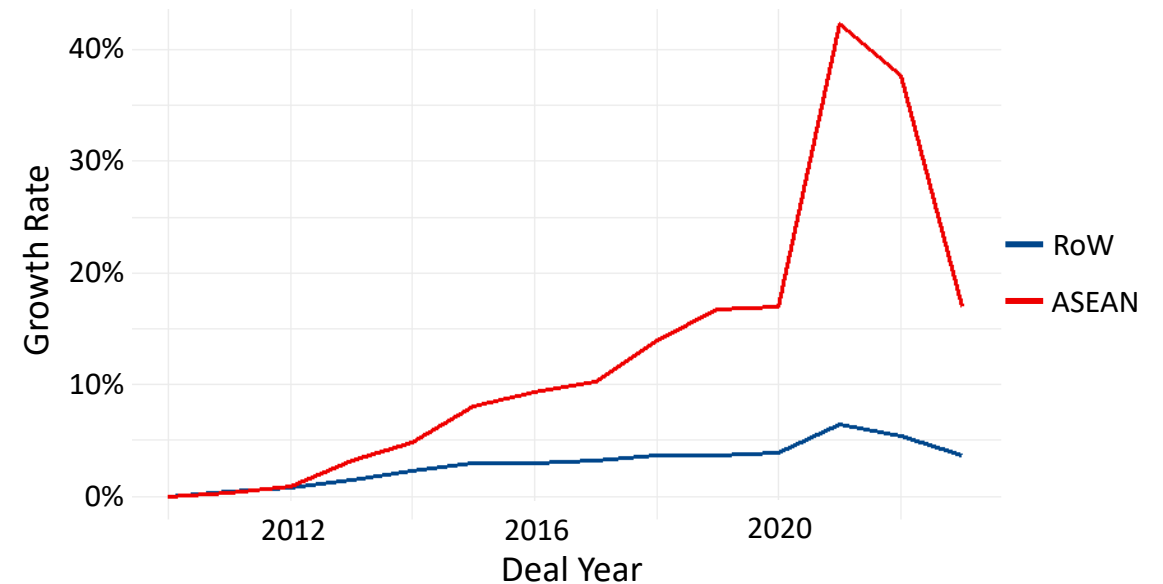
(Google, Temasek, Bain, 2023)

ASEAN's Digital Economy Investments Outperform Rest of the World

- ASEAN's share of digital economy deals is **10 percentage points higher** than for the rest of the world.
- ASEAN digital economy investments have **grown exponentially** until 2021, significantly above the world average.



Data Source: Crunchbase



Data Source: Crunchbase

Changing Investment Landscape

CONCENTRATION, INTEGRATION, INDUSTRY SPECIALIZATION

Measuring the Concentration of Digital Economy Investments

Revealed Investment Attractiveness (*RIA*): reflects how much an economy is drawing investments in its digital sector relative to the global average

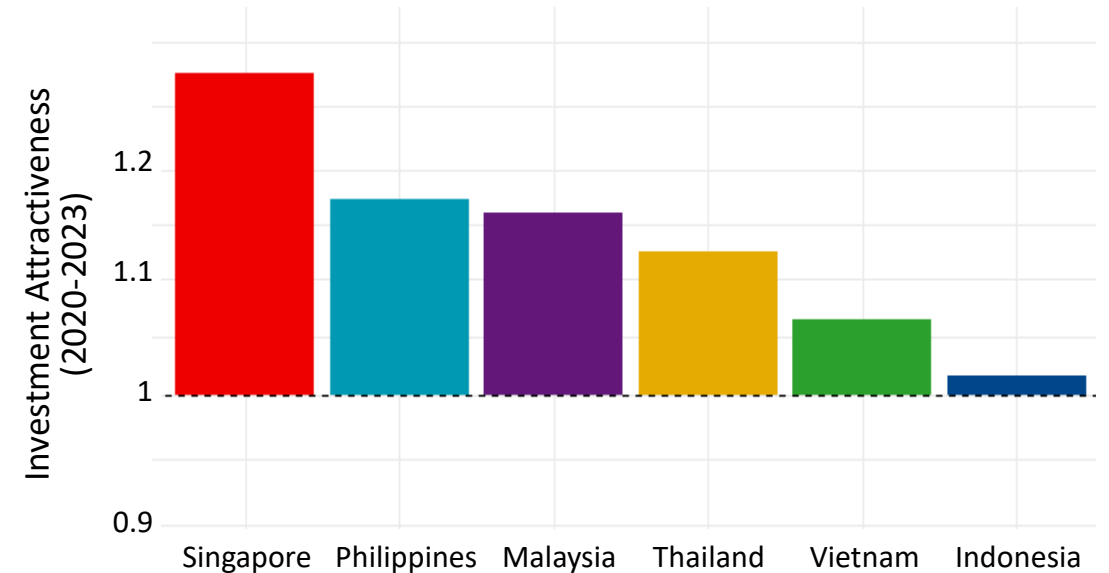
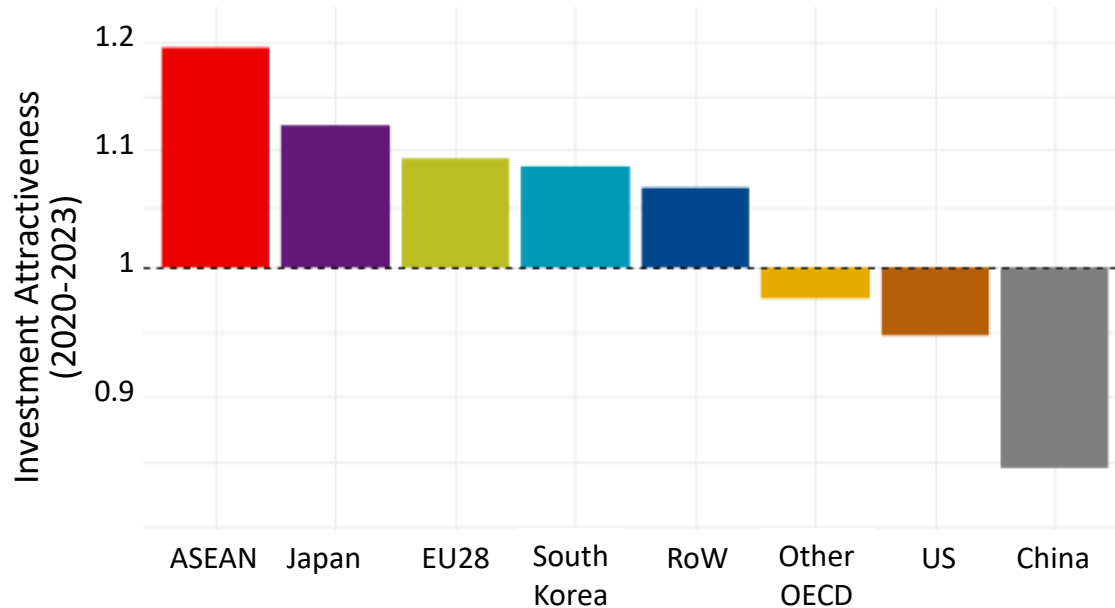
$$RIA_{it} = \frac{\text{share of digital economy investments in economy } i}{\text{global share of digital economy investments}}$$

- $RIA > 1$ indicates a country has received a **higher than average** share of digital economy investments
- $RIA < 1$ indicates a country has received a **lower than average** share of digital economy investments

ASEAN's High Concentration of Digital Economy Investments

- ASEAN has the highest concentration of investments in the digital economy than key economies

- **All ASEAN-6 countries are above the world average** in terms of concentration of investments in the digital economy.



Data Source: Crunchbase

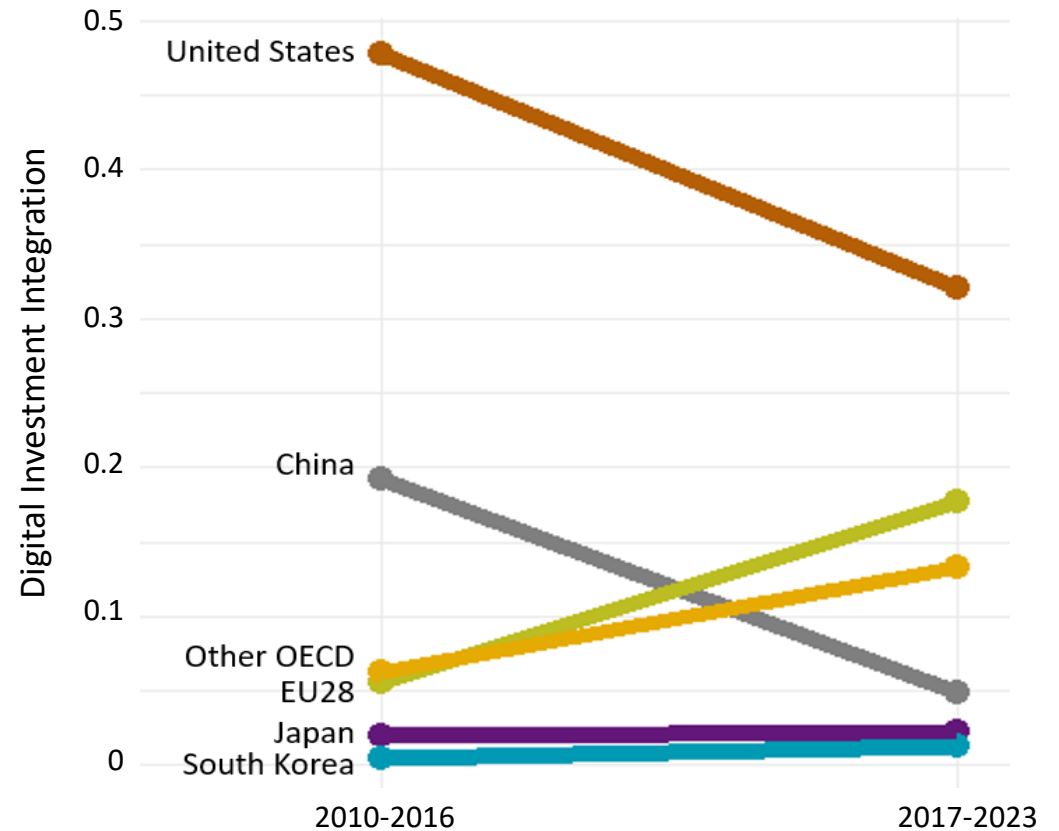
Data Source: Crunchbase

Digital Economy Investment Integration with ASEAN

Investment Integration

$$= \frac{\text{Number of investment flows between country } i \text{ and ASEAN}}{\text{Number of crossborder investment flows that involve ASEAN}}$$

- **Non-Asian economies are ASEAN's major investment partners** in terms of volume.
- The EU and other OECD countries have deepened integration with ASEAN – China and the US saw declines.



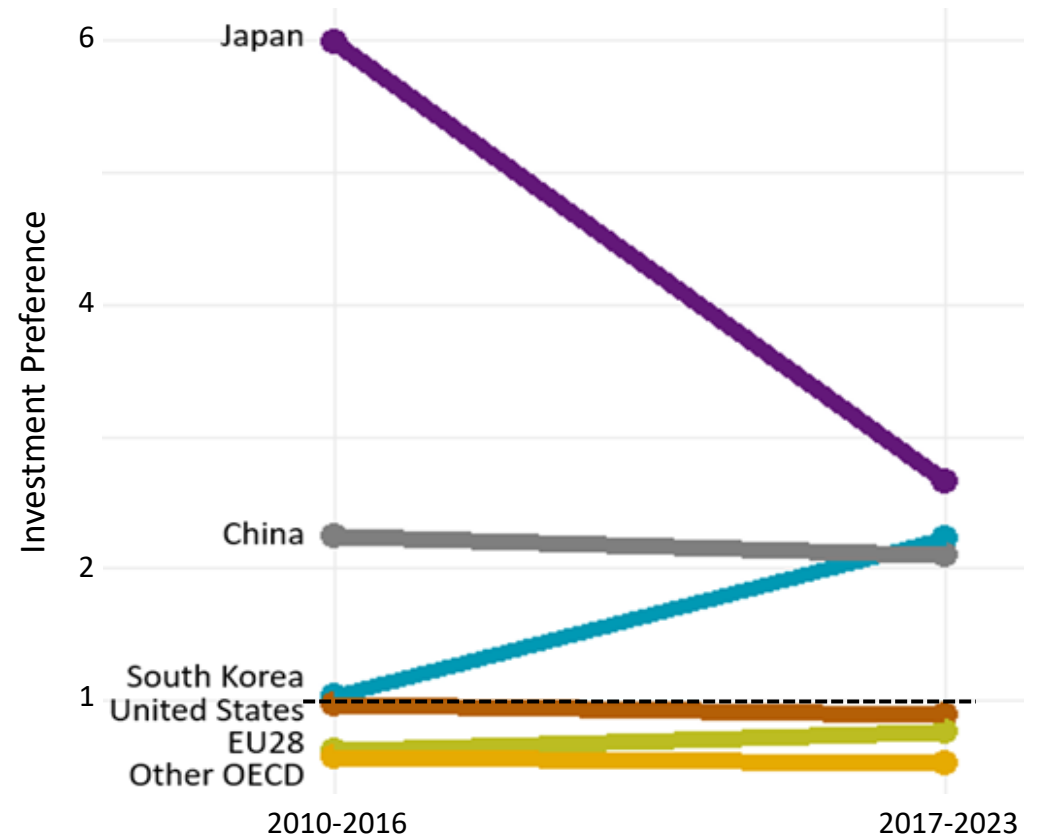
Data Source: Crunchbase

Digital Economy Investment Preference for ASEAN

Investment Preference

$$= \frac{\text{Share of country } i\text{'s investment in ASEAN}}{\text{Share of world's crossborder investment in ASEAN}}$$

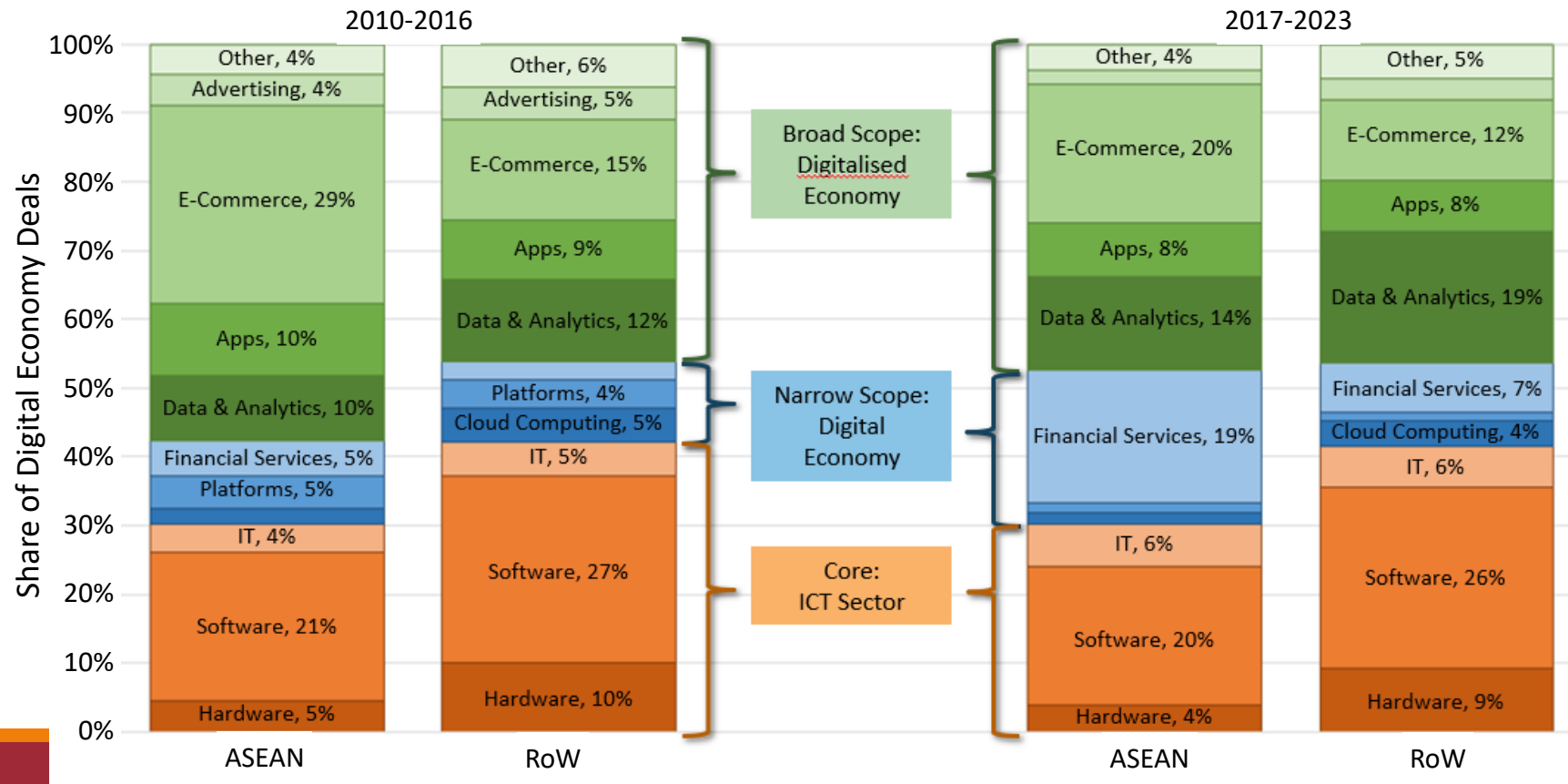
- **Asian economies have the highest shares of investment outflows into ASEAN** – non-Asian partners remain below the world average.
- Japan's investment preference for ASEAN declined. South Korea saw a significant increase.



Data Source: Crunchbase

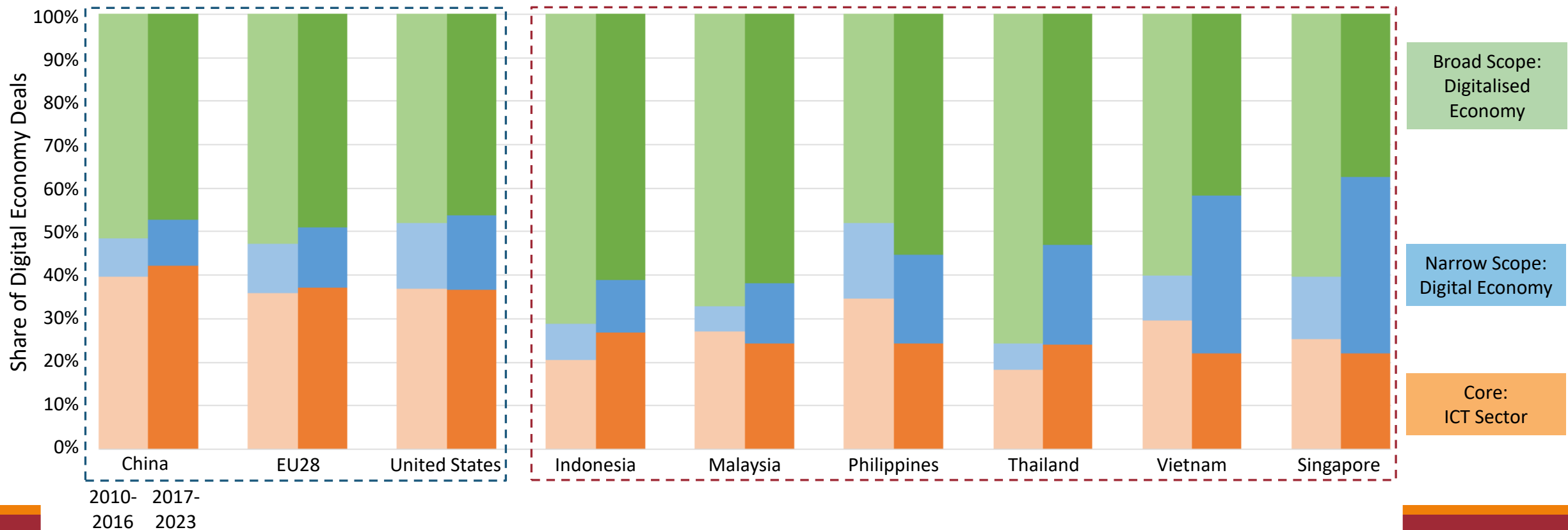
Investment by Industry: ASEAN vs RoW

- Investments in ASEAN are **concentrated outside the core ICT sector**, with financial services experiencing significant growth.



Changing Industry Specializations by Economy

- Non-ASEAN economies saw no major shift in investment share by industry group.
- Most ASEAN countries saw significant share **increases in the narrow digital economy**.



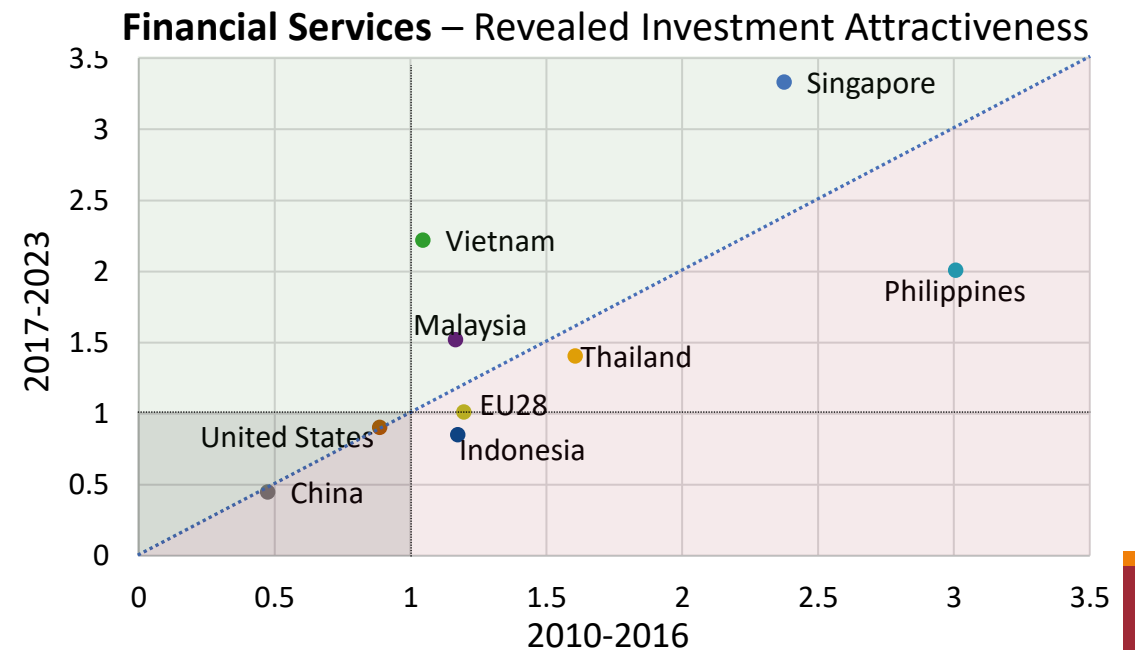
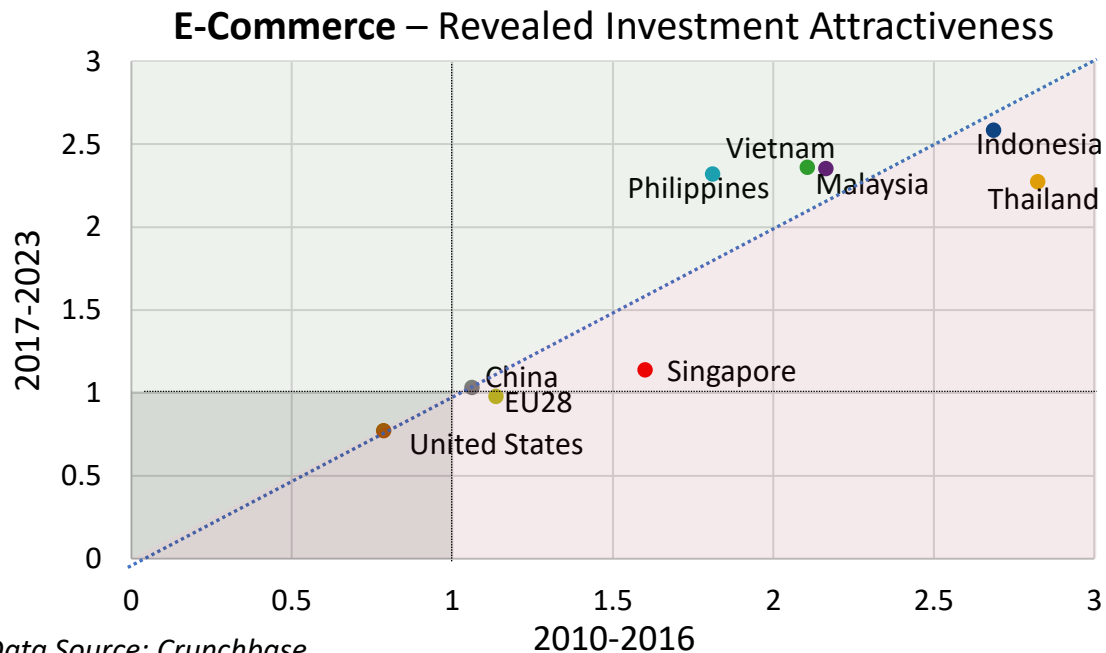
Investment Concentration in Key Industries

E-Commerce

- ASEAN economies with **large markets** attract a high share of investments in the e-commerce sector.

Financial Services

- Most ASEAN-6 economies perform well in the financial services sector.
- **Growth** is driven by Singapore, Vietnam, and Malaysia.



Potential Hurdles to Future Investment

RESTRICTIVE DIGITAL POLICY ENVIRONMENTS

Policy Restrictions as Potential Roadblocks to Investments in Digital Economy

- A more **restrictive digital trade environment has been associated with lower innovation** and productivity growth.

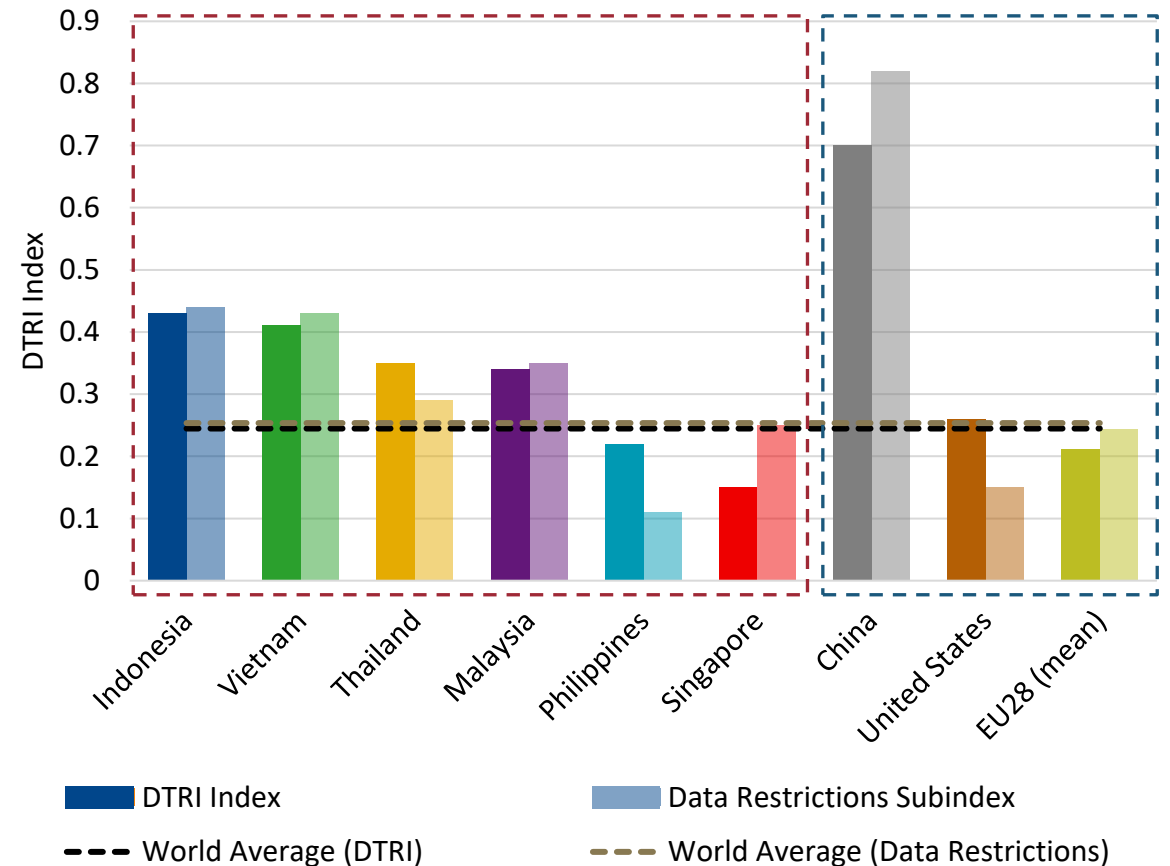
(Ferracane & Marel, 2020a & 2020b)

- Especially **restrictive cross-border data flow policies decrease firm performance and venture investments** especially in data-intensive sectors and from foreign investors

(Ferracane et al., 2020; Jia et al. 2020 & 2021)

The Digital Trade Restrictiveness Index and ASEAN Countries

- The Digital Trade Restrictiveness Index (DTRI) scores digital trade policies of 64 countries in 2018.
(Ferracane et al., 2018 (ECIPE))
- ASEAN countries display a **wide range of restrictiveness levels**:
 - On the DTRI, Singapore ranks 8th (most open) and Vietnam 61st.
 - Regarding Data Restrictions, the Philippines ranks 4th (most open) and Indonesia 60th.

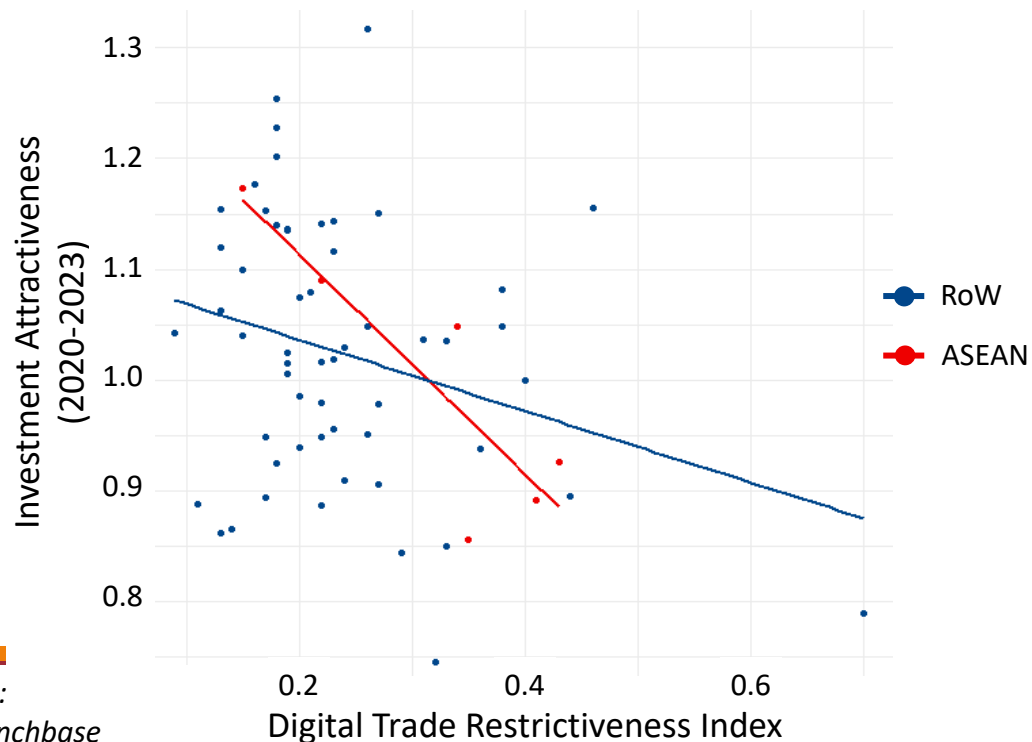


Data Source: ECIPE

Data Restrictions & Investment in Key Industries

Digital Economy as a Whole

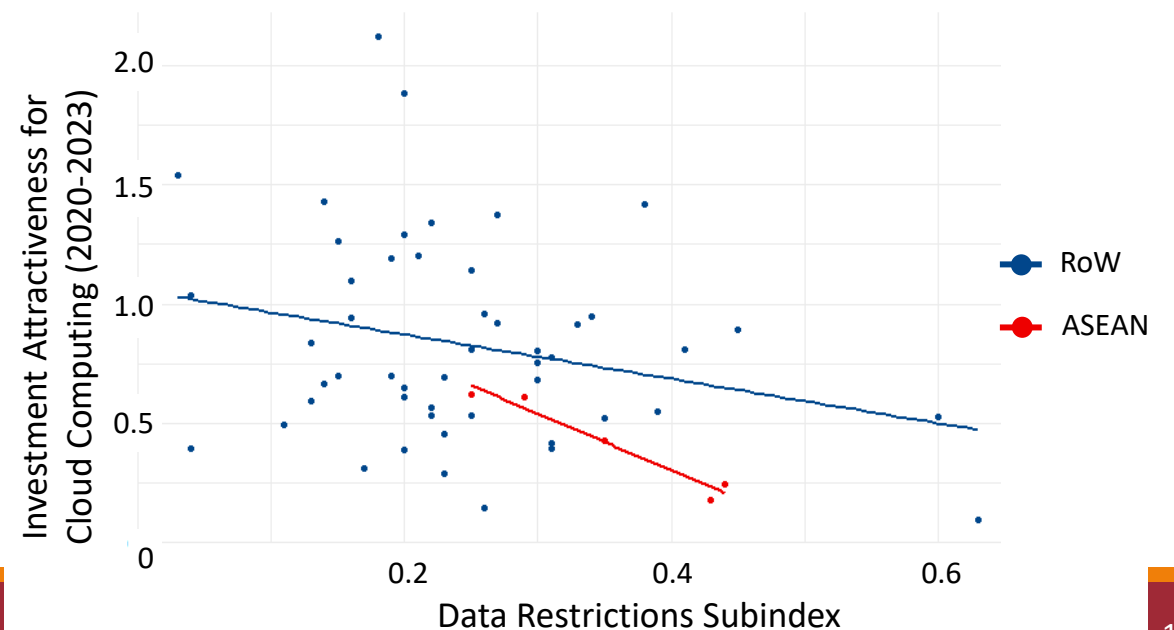
- Higher **digital trade restrictiveness is associated with a lower share of digital economy investments** globally and in ASEAN



Data Source:
ECIPE & Crunchbase

Cloud Computing

- Cloud computing is heavily reliant on (cross-border) data flows.
- Within ASEAN, data restrictions are negatively correlated with investments in cloud computing.**



*excluding China

Development of Data Restrictions in ASEAN

- In ASEAN, all countries except the Philippines have significant **restrictions to cross-border data flows to protect individual consumer or national security interests.**
- Although alignment between ASEAN countries is lacking, changes in data policies have generally been **towards reducing restrictiveness.**

Country	Current Cross-Border Data Flow Regime	Changes since 2019
Indonesia	Conditional	More open
Malaysia	Conditional	Same
Philippines	Open	Same
Singapore	Conditional	Same
Thailand	Conditional	Somewhat more open
Vietnam	Restrictive	Restrictive but with exceptions

Future Policy Harmonization

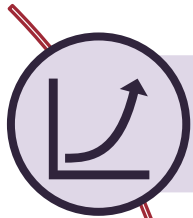
To facilitate digital economy investments ASEAN should:

- 1. Reduce barriers to data flows and digital trade.**
 - However, a **balance with individual rights and national security** must be maintained.
- 2. Harmonize digital policy regimes among ASEAN countries** to allow firms to take advantage of the regional market.
 - **ASEAN's Digital Economic Framework Agreement** can play a key role in aligning and streamlining policies to reduce barriers and foster innovation and investment.



Images Source: Wikimedia

Key Takeaways



ASEAN countries are **outperforming the rest of the world in attracting investments** in the digital economy.



Asian countries preference to invest in ASEAN remains high, while **non-Asian economies are increasing their integration with ASEAN.**



ASEAN economies have seen **significant growth in investments in data-reliant services.**



Restrictive digital policies remain a potential hurdle to future investment growth, that can be overcome by **concerted regional action.**

Thank you!
