Robots and AI:
A New Economic Era

Lili Yan Ing
Secretary General, IEA
Lead Advisor on Southeast Asia Region, ERIA

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Robots and AI: Productivity

Positive Impacts on Productivity

• Large productivity gains and substantial price reducing effects from the adoption of industrial robots and AI at both firm and aggregate levels.

• *Automators* produce more outputs and have higher productivity. They also tend to exhibit higher export shares with more variety and produce higher quality goods.

Robots and AI: Trade

Facilitates trade in goods and services

- Adoption of Robots and AI in developed countries affects trade with developing countries, exports from developing to developed countries expand in the sectors that experience the greatest robotization.

- Larger and more globally connected firms in the South are more likely to adopt Robots and AI and thus increasing their market shares at the expense of non-automating firms.

- A greater AI deployment led to more services trade and higher consumer welfare.

Robots and AI: Labor and Wages

3 Effects and 3 Channels:

Displacement effects: negative effects on labor and wages via displacement mechanism
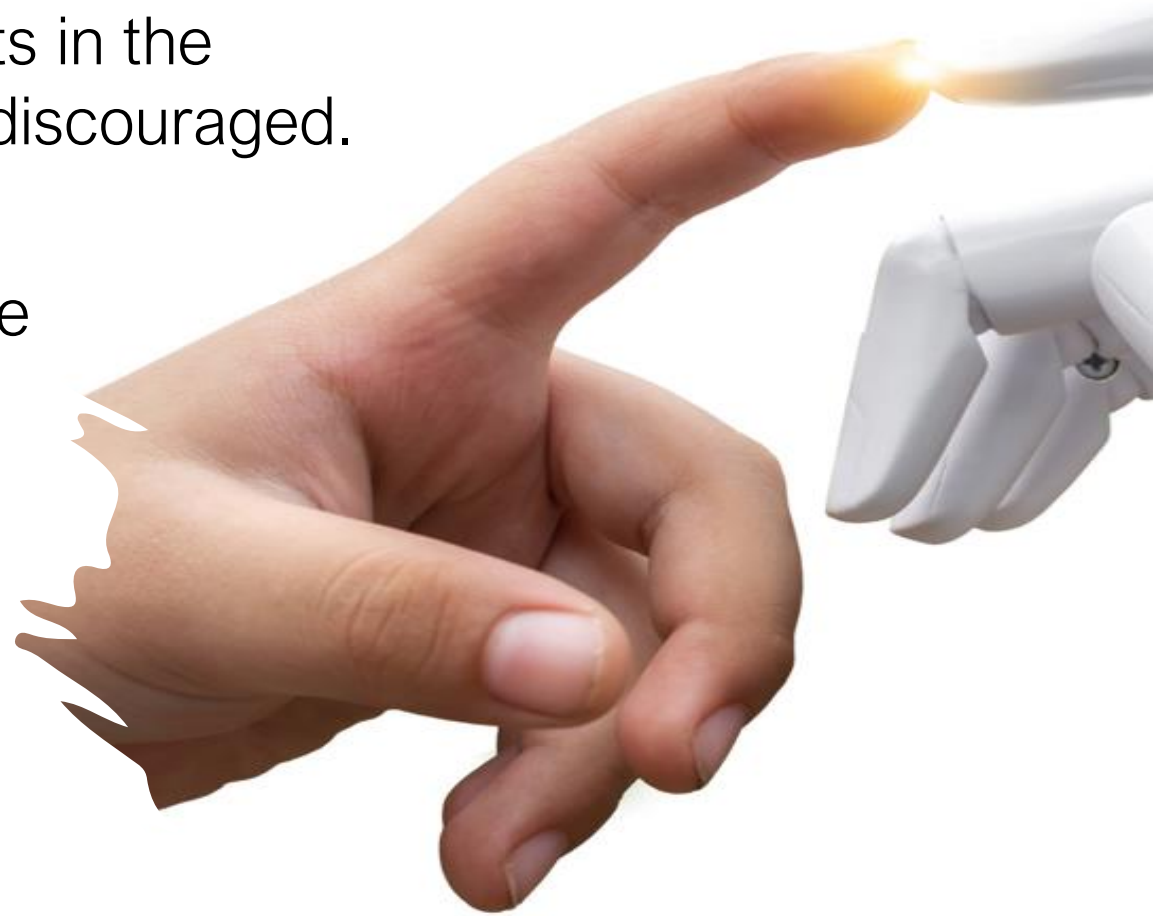
Productivity effects: positive effects on labor and wages, via improved firms' production and competitiveness.

Reinstatement effects: reinstate labor into a broader range of tasks and thus change the task content of production in favor of labor
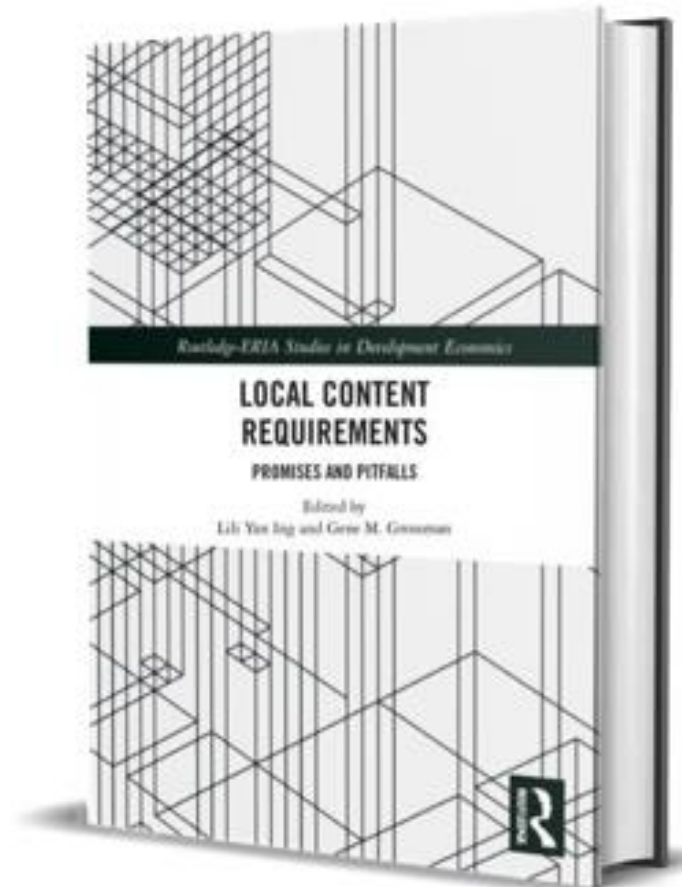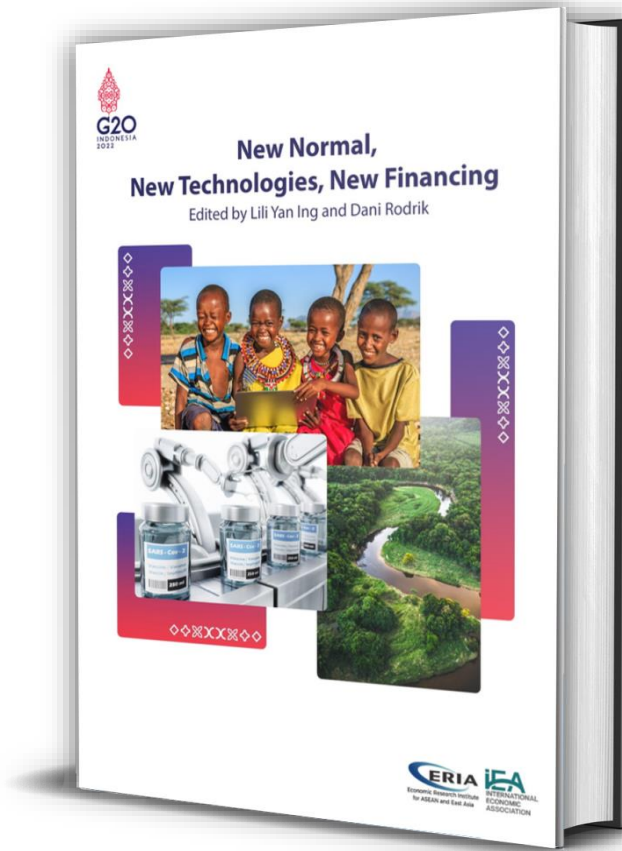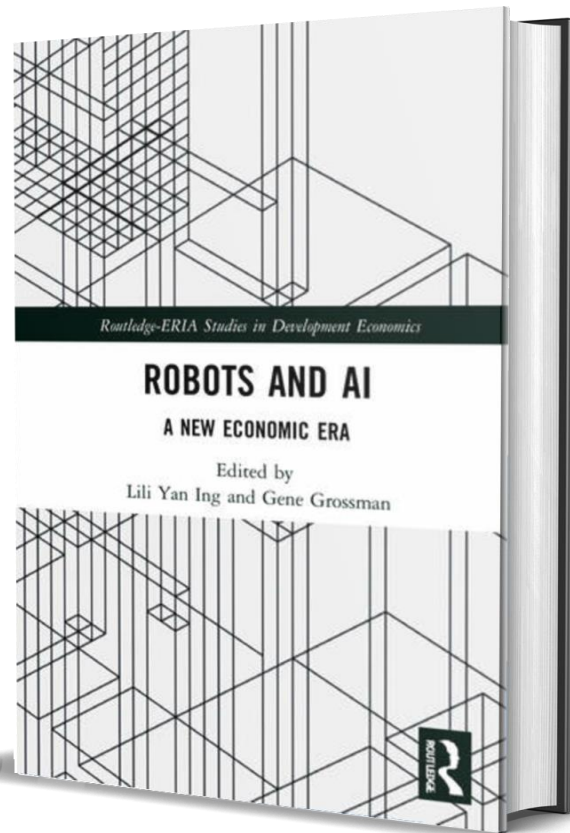
The forthcoming technological developments in the robotics and AI ought to be welcomed, not discouraged.

Yet, we need to deal challenges in the innovation and adoption of Robots and AI:

1. Nature of data: privacy, cyber security, and algorithm bias

2. Technical: Interoperability, scalability, and reliability

3. Governance and ethics.

Along with the development of robots and AI, it is our responsibility to ensure that they are *human-centric* and designed to improve human welfare.

ROBOTS AND AI
A NEW ECONOMIC ERA

New Normal, New Technologies, New Financing
Edited by Lili Yan Ing and Dani Rodrik

LOCAL CONTENT REQUIREMENTS
PROMISES AND PITFALLS

Thank You

liliyan.ing@eria.org