

RIETI-ANU Symposium:

Towards an Asia-Pacific  
Digital Economy  
Governance Regime

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# Why data and cross-border data flows matter

## AI

- Relies on data to train the AI system
- Many AI systems will be context dependent and require data specific to location
- E.g. AV, natural language processing, computer vision

## Business models

- AI adoption
- Cloud computing
- Robotics
- Digitization of business information

## International Trade

- Supply chains
- Ecommerce
- Services

## Innovation/R&D



# Adoption of digital technologies in the U.S.

NBER Report 2020, surveyed 850,000 US businesses

- Adoption of digital technologies varies but is low overall for advanced business technologies
- Adoption higher amongst larger and older companies
  - 62.5% of firms with 10,000+ employees use AI
  - 5.3% of smallest firms use AI
- Most sophisticated technologies build on use of more basic applications
  - e.g. dream before you think - cloud before AI

## Access to data and cross-border data flows are not the same issue for countries

- Large economies have lots of data domestically – China, India, US, EU trying, Indonesia, Japan
- Businesses increasingly rely on data flows
  - But digitization happening at different rates
- How important are MNCs for the economy
  - US, Japan, EU, China (increasingly), Canada, Australia

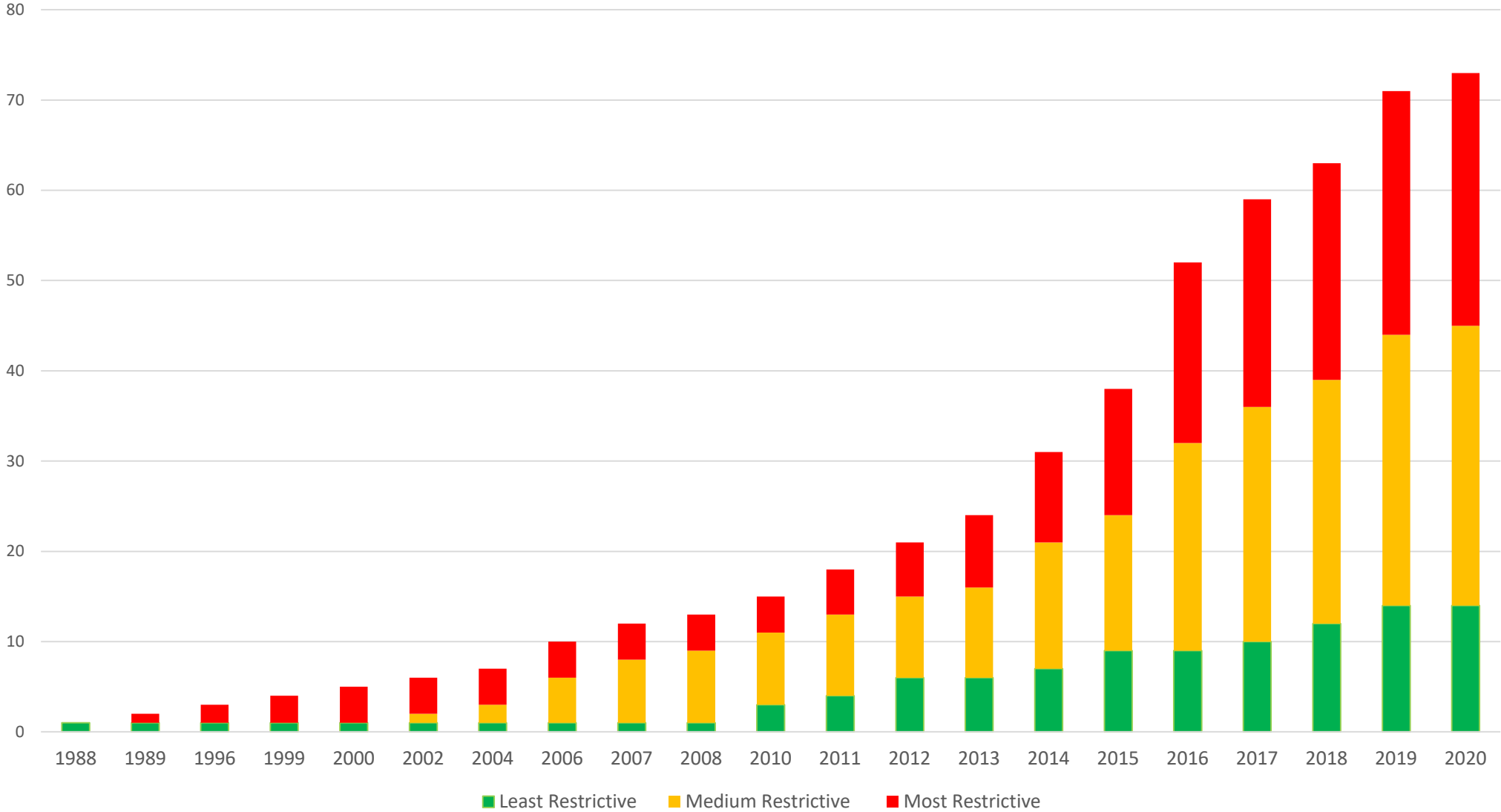
## Implications for productivity growth

- Shares of large and small businesses

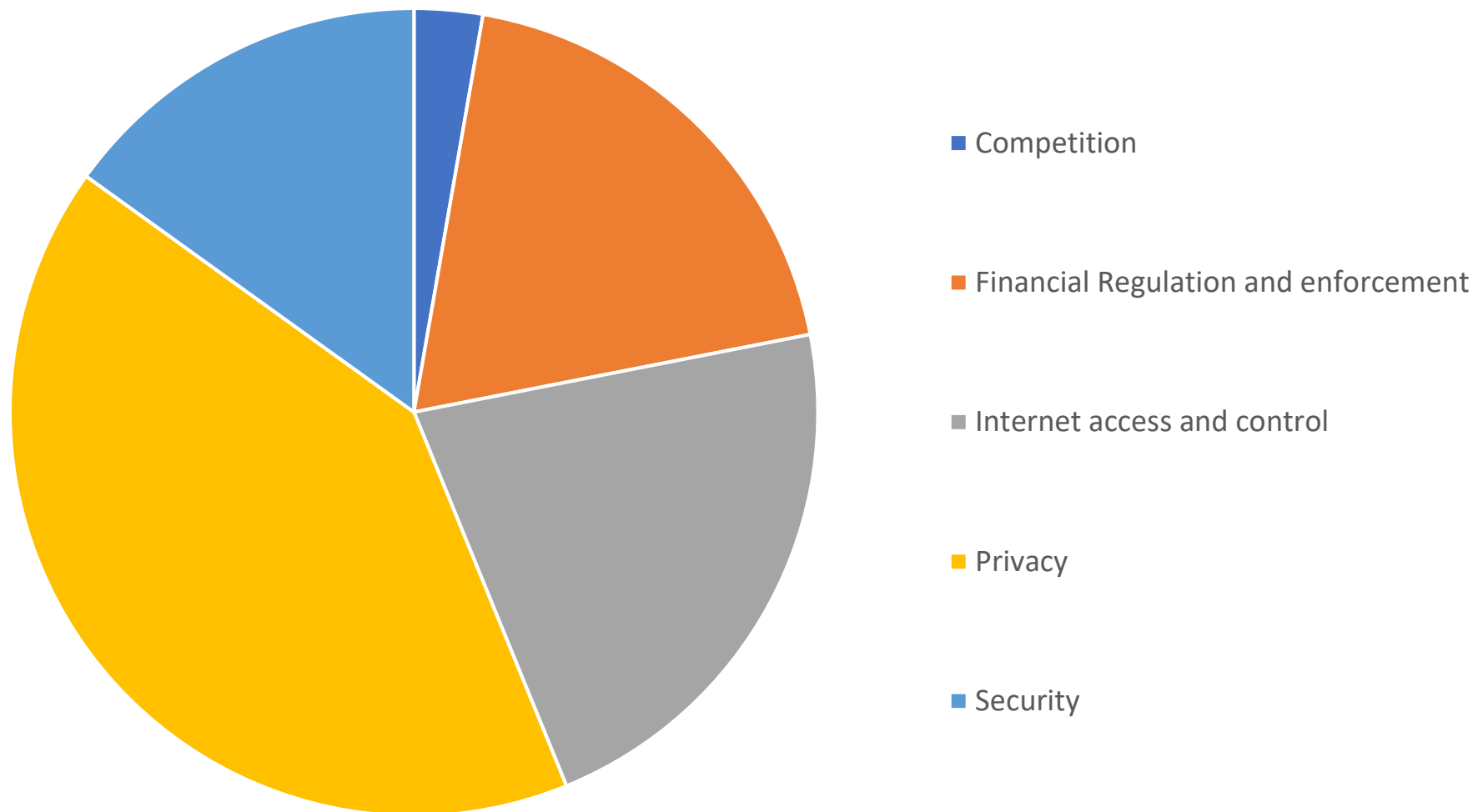
## Access to technology now a matter of geopolitics

- US export restrictions and entity list
- Dutch decision to grant license to ASML to sell chip making machines to China
- AI in particular is a dual use technologies
  - Increase investment by DoD in AI R&D and adoption

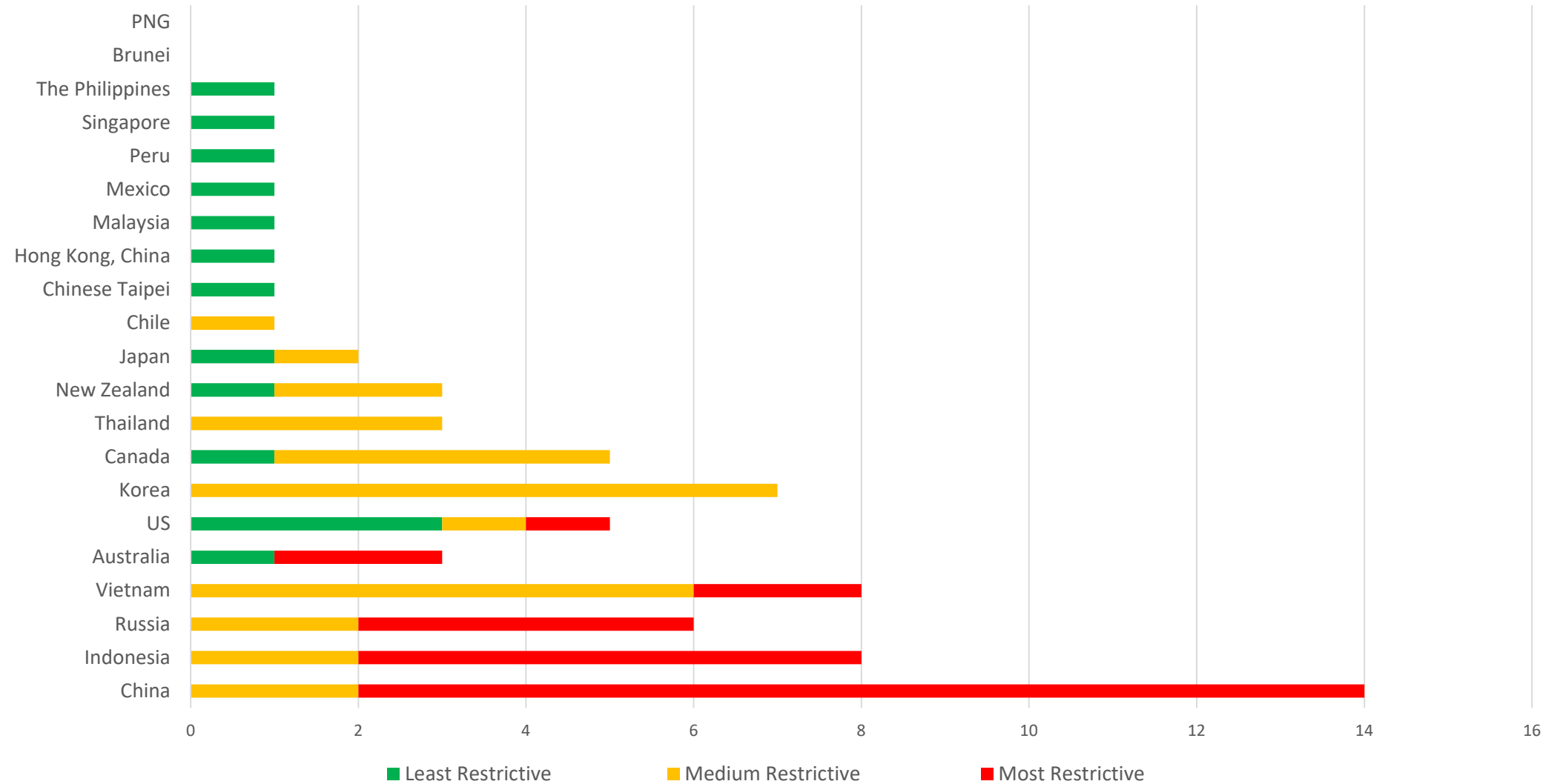
# Cumulative number of Data Flows restrictions in APEC by levels of restrictiveness



# The Regulatory objectives of cross-border data flow restrictions



# The Number of cross-border data flow restrictions are concentrated in four APEC economies





# Developing a Digital Governance Regime

- G20
- G7
- UN
- Trade agreements
- OECD
- APEC
- International standards organizations (e.g. ISO/IEC, IEEE, ITU)
- GPAI
- EU



# What more is needed

## Trust

- DFFT good starting point
- Economic + security mix + China challenge = limits an ambitious global approach
- Start with like-minded group

## A Leaders Technology Forum

- Japan, Australia, US, EU, Canada, UK, Singapore, Germany, France, Israel, S.Korea, India (?), Taiwan (?), South Africa
- Coordinate and work through existing mechanisms
- Develop norms & principles

## Expand innovation and R&D