



Localising data in a Globalised World

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Session 2: Data Protection and International Trade:
What is at stake?

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» Context

- Globalisation is underpinned by the movement of data across international borders.
- The ubiquitous exchange of data has raised concerns related to the privacy and security of consumers leading to the emergence of **new regulations** seeking to provide protection.
- Policy challenge: To enact **policies that protect privacy and security in the least trade distorting way.**
- The role of economic analysis: to **provide information** to weigh the existing trade-offs.
- Aim of our project: to **measure the impact** of the emerging data regulation on business activity and trade.
- Quantifying the impact of emerging measures is hard.
 - **Value of data** is not easily measured (data valued at use, bytes and bits vs value, inherent and potential value, etc.)
 - **Restrictiveness** of the measures uncertain
 - Little knowledge on **how firms use data** or how they choose its location.

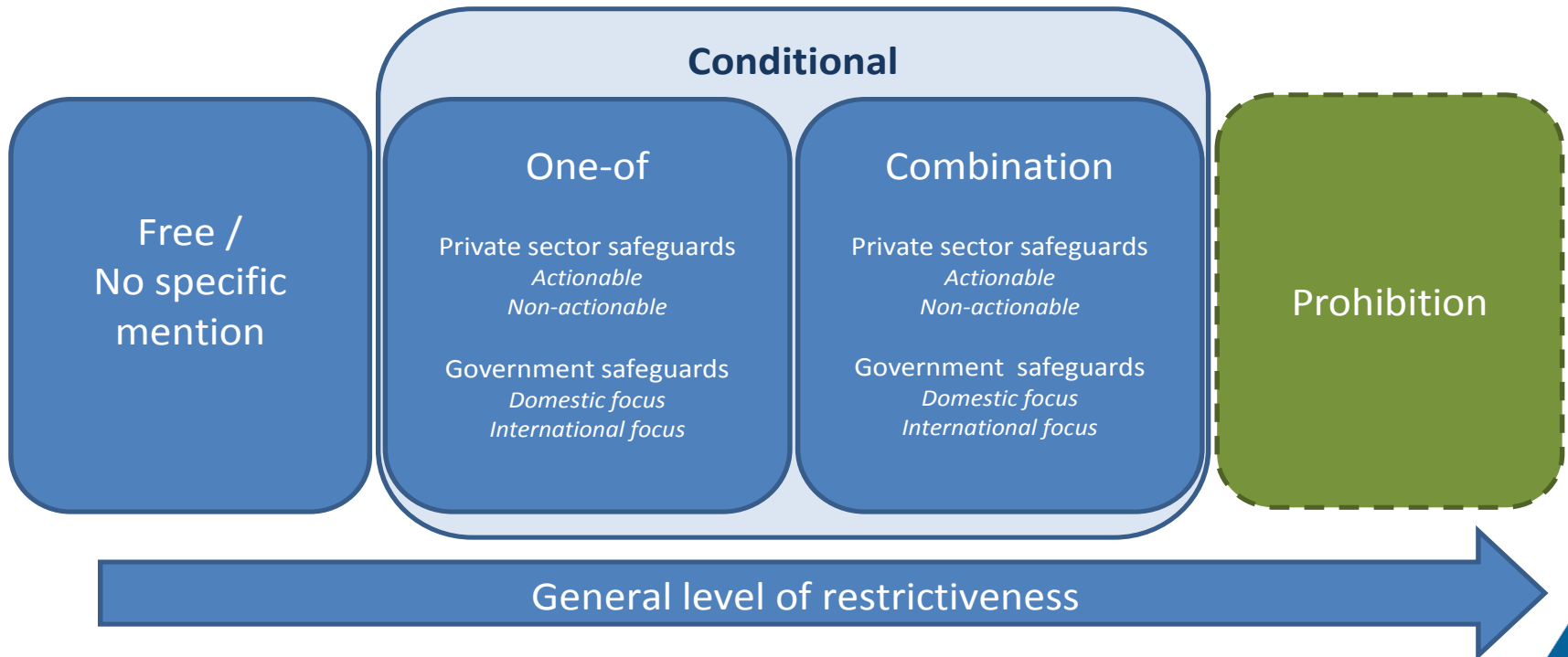


UNDERSTANDING THE MEASURES

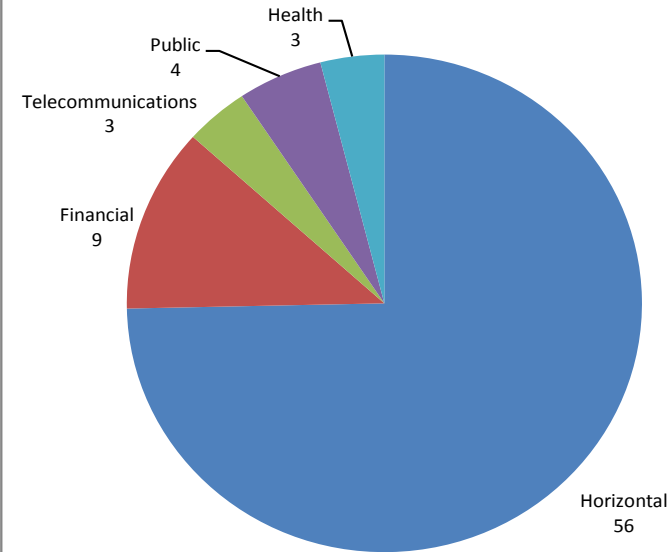
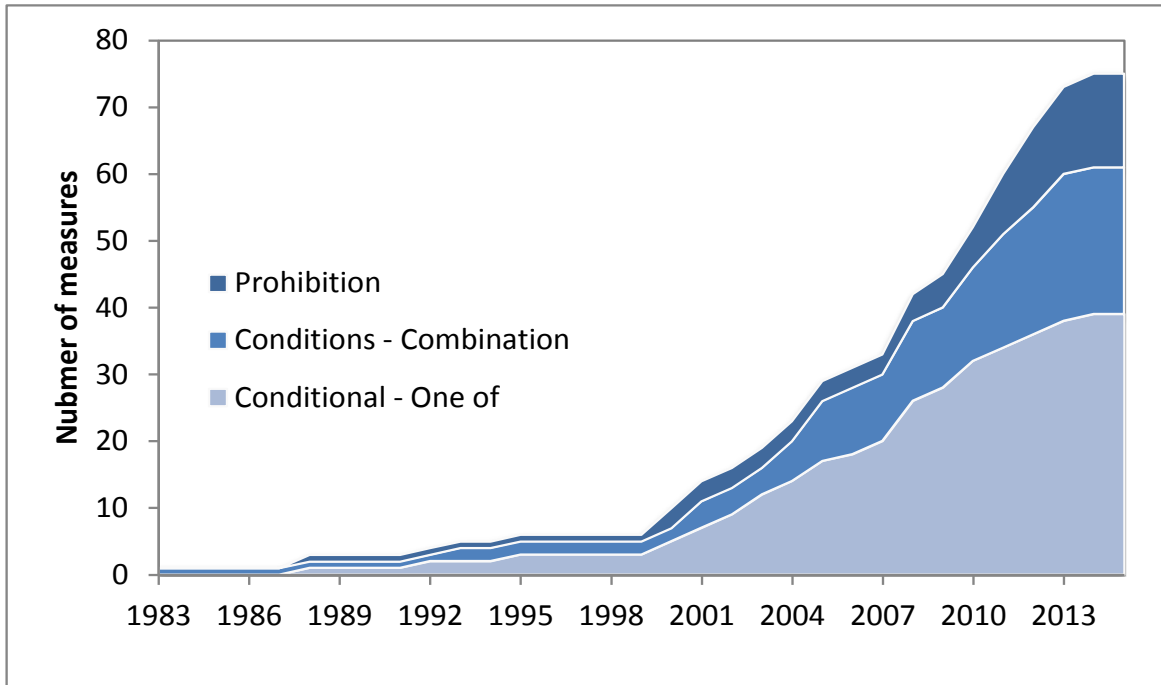
» Data regulation database

- Identified **pieces of legislation, regulation or policies** that are implemented by governments and currently in force.
- To be included, measures must **treat foreign senders/receivers differently** from domestic equivalents, or explicitly **regulate the geographic location of data storage**.
- Over 100 measures across 68 economies identified.
- Analysis of measures informs a broad taxonomy.
- Measures fall into two categories:
 - Cross-border flow measures (75)
 - Local storage requirements (41)

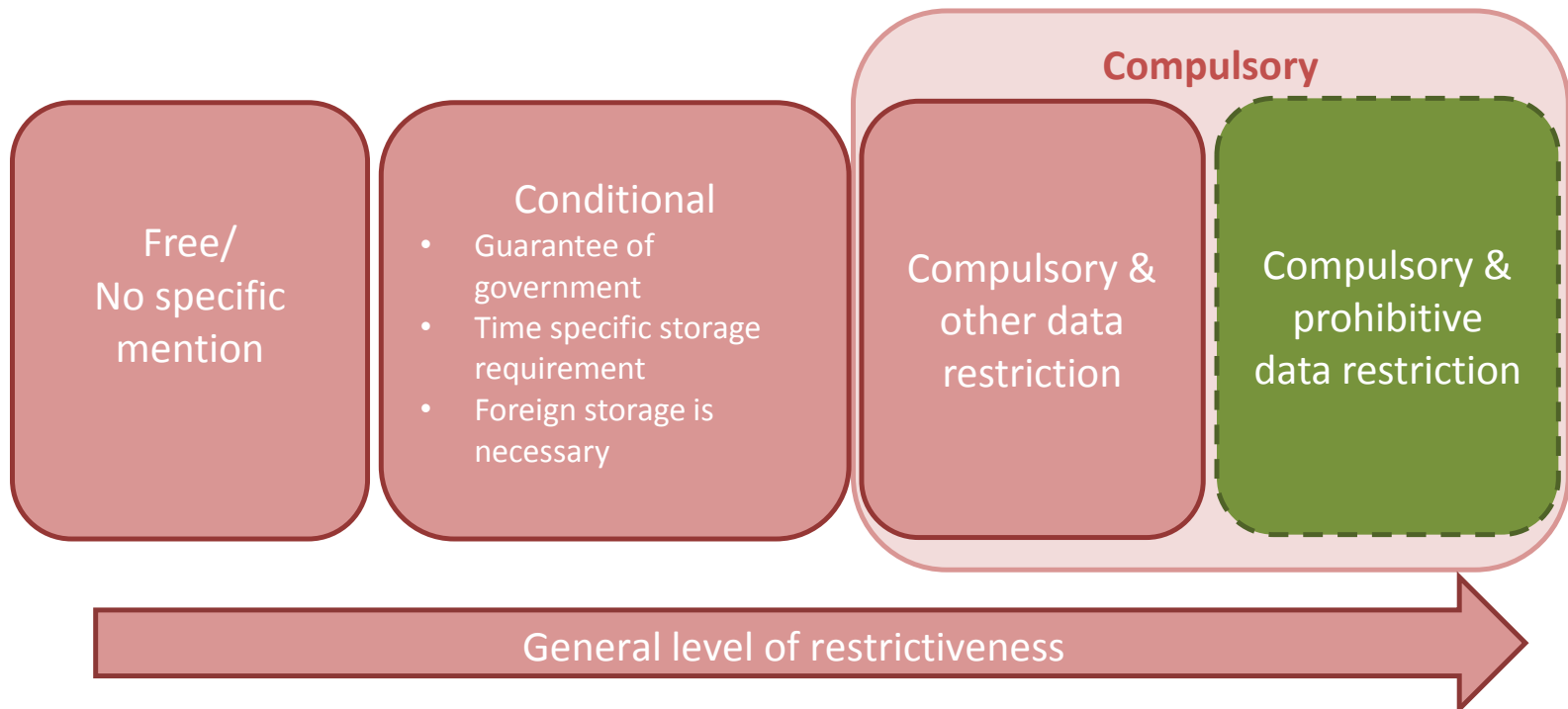
» Cross-border flow measures - Taxonomy



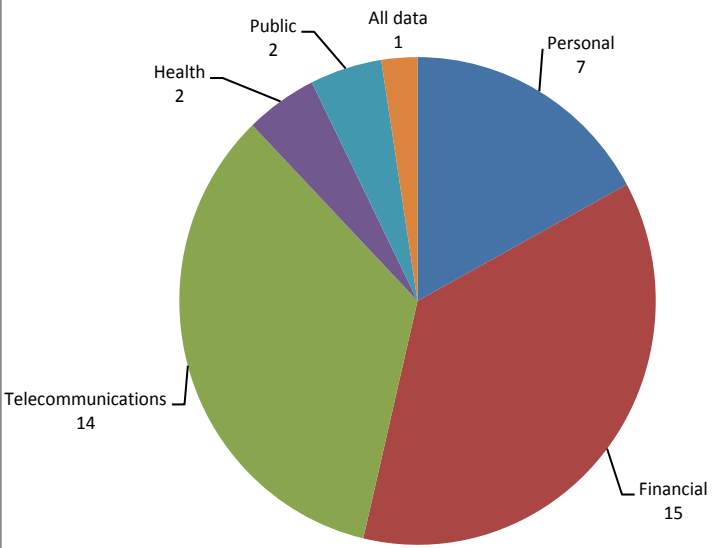
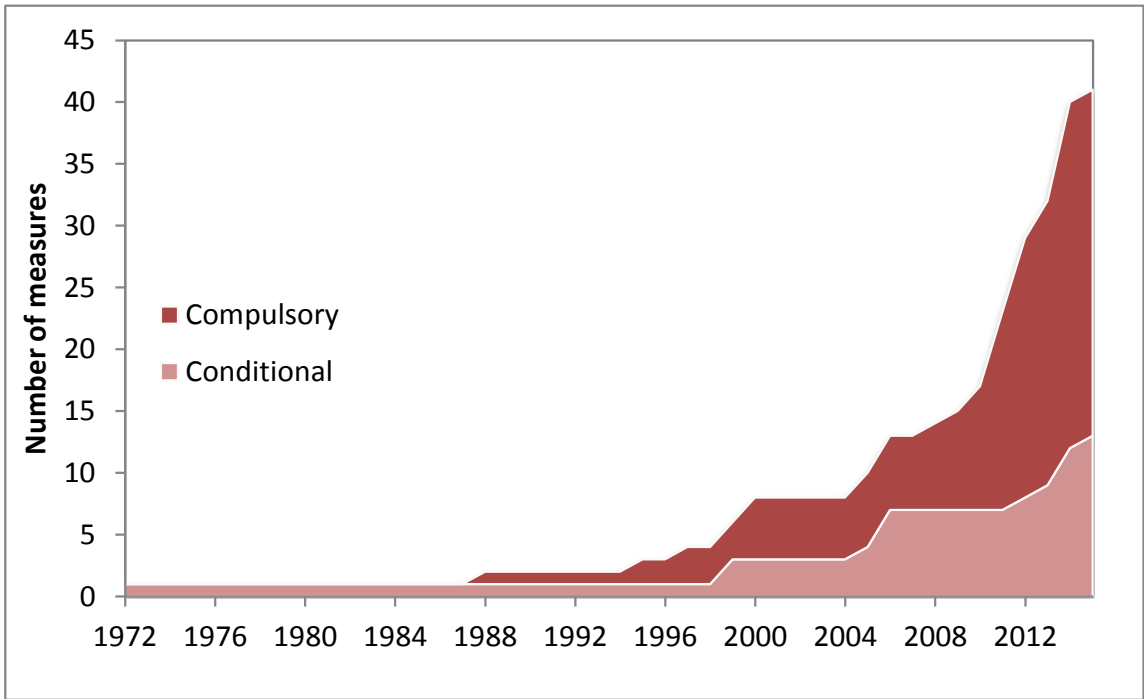
Cross-border flow measures – Evolution and nature



» Local Storage Requirement - Taxonomy



Local Storage Requirement – Evolution and type





QUANTIFYING THE ECONOMIC IMPACT OF THE DATA REGULATION

» Understanding the economic implications can help policy makers weigh the existing trade-offs

- Although measures generally restrict transfers of **personal data**, OECD research suggests that firms may not be able to easily separate personal from non-personal data so the measures will have a broader reach.
- The use of international data by businesses is endemic:
 - **Coordinating GVCs** relies on data transfers (fro production, coordination of processes, HR management, accountancy, traceability...).
 - Data enabled digital solutions can **help increase productivity** and reduce supplier search costs;
 - Data can help **deliver new services previously hard to trade** (i.e. medical diagnostic services , accountancy etc.)
 - Medical research organisations **researching** cures for diseases require analysing personal health records to identify cures (i.e. Cancer Research).
 - Data transfers can be **particularly important for SMEs and firms in developing countries** which are more constrained in the internationalisation processes.
- But quantification of the impact is hard. No data on data, little knowledge of how companies value data or how restrictive measures are. It is an ongoing exercise.

» Quantification (ongoing)

- Dearth of statistics and importance of inter-linkage (input) effects favours use of ex-ante modelling techniques **Computable General Equilibrium** models.
- **Data sector is split** from GTAP database
- Cross-border flow restrictions:
 - Impose **compliance cost** (ad-valorem- akin to iceberg costs) related to;
 - I. Splitting personal and non-personal data. Cost will depend on importance of personal information and costs of splitting.
 - II. Compliance associated to meeting the grounds of the conditional flow restriction.
- Storage restriction:
 - Cost increase **modelled as modified local content requirement**. Input-cost mark-up to be satisfied by the domestic market.

» Simulations

- Scenario 1: Measuring the **impact of current measures**
 - Measures identified (over 100) to be added collectively.
- Scenario 2: Measuring the impact of **data autarky**
 - To obtain an upper bound to compare other scenarios. Hypothetical exercise to highlight possible impact of continued proliferation..
- Scenario 3: A **new policy environment**
 - Attempt to model what adopting a common international agreement on use of data might be and costs associated to not adopting this standard.
- Scenarios are **tentative**.

OECD Ministerial on the Digital Economy Cancun, Mexico 21-23 June




2016 MINISTERIAL MEETING
THE DIGITAL ECONOMY:
INNOVATION, GROWTH
AND SOCIAL PROSPERITY



INTERNET
OPENNESS AND
INNOVATION



TRUST IN THE
DIGITAL ECONOMY



BUILDING GLOBAL
CONNECTIVITY



JOBS AND SKILLS
IN THE DIGITAL
ECONOMY

- Cancún marks another pivotal point in the evolution of the digital economy, one in which the economy is in fact becoming fully digital.
- Ministers from OECD and partner countries, international organisations, business, labour, civil society and the Internet technical community will meet to discuss better policies for Internet openness and global data flows, convergence, IoT, trust and digital risk management, and new jobs & skills.
- These discussions will consider the trade-offs, complementarities and possible unintended consequences of policy actions.

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Difficulty of separating personal and non-personal data (percent of responses)

