# Free Flow of Data and its Impact on the Digital Economy

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**DECODE Symposium 2018** 

**CCCB** 

16 October 2018

#### **Data-Driven Economy (DDE)**

Data can play different roles in the digital economy

## Intrinsic to commercial transactions

- A need for free flow of data, including on a cross-border basis (this is the "fifth freedom" of commerce)
- Addressed in trade agreements such as the Trans-Pacific Partnership or USMCA

### Intangible capital asset

- Big data trains **artificial intelligence** (AI) and enables the creation of machine knowledge capital
- Incompatible with "free movement" in the sense of "uncompensated movement"

## Infrastructure for a digitalized economy

- Government data: tax and banking, education and health data
- Must be strictly safeguarded; diametric opposition to the "cloud" model for business

#### **Economics of DDE**

#### Powerful economies of scale

- Quality of predictions improves with quantity of data
- High fixed cost of maintaining AI expertise

#### Economies of scope

- Sharing data across applications in multiproduct firms

#### Knowledge externalities

Global vs. local externalities

#### Network externalities

- Positive feedback loop

#### Pervasive information asymmetries

- Business model based on exploitation of information asymmetry

#### Replicator economics

- Machine knowledge capital can be expanded at near-zero marginal cost and distributed globally with near-frictionless ease
- Digital products replicable and non-rival

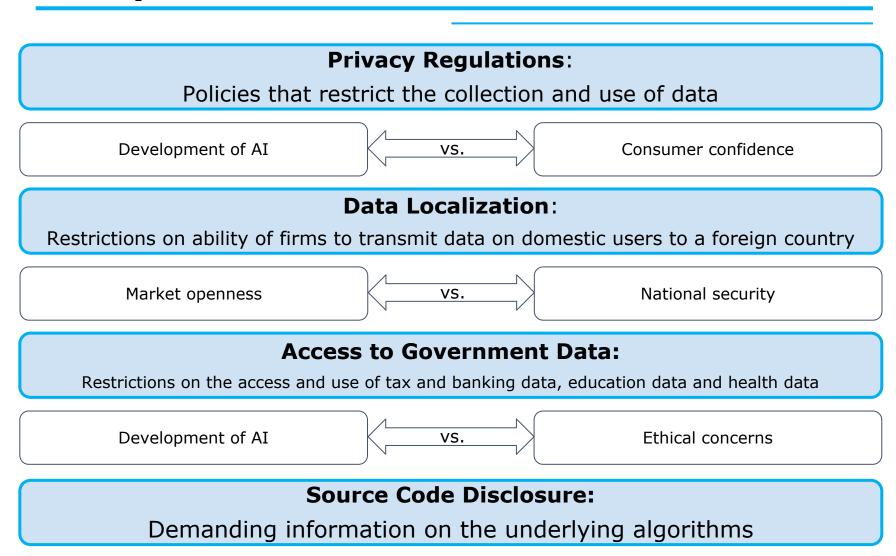
#### **Conceptual Differences in Data Treatment**

Issue	US Approach	EU Approach
Market structure and strategy	<ul> <li>Large first mover advantage</li> <li>Naturally seeks maximum openness to exploit the benefits and lock in the competitive advantage of technological giants</li> </ul>	- Emphasis on <b>minimising the adjustment costs</b> and risks of the digital transformation
Domestic regulatory approach	<ul> <li>No federal legislation         regulating the collection and use         of personal data</li> <li>Diverse state regulations,         industry "best practices," and         various private standards</li> </ul>	<ul> <li>Clear guidelines for the member states on the protection and use of personal information</li> <li>General Data Protection Regulation</li> </ul>
International trade agreements	<ul> <li>Obligates parties to allow cross-border data flows and does not provide for strong privacy protection</li> </ul>	- Silent on data localization, emphasis on privacy

• Disguised protectionism vs. legitimate public policy objectives

#### **Policy Battlefield**

Intellectual property rights



VS.

Transparency, critical infrastructure

#### **Conclusion**

 Data can play different roles in the digital economy, in some instances data should flow freely across borders, while in others data transfer should be limited

Q: What are the ways to distinguish and regulate these different roles?

Certain features of the data-driven economy create the conditions for the market failure

Q: Do these features create a qualitatively new type of market failure?

 Market structures define the differences in conceptual understanding of the data flow conditions

Q: How to align the incentives of the major players?

These conceptual differences translate into diverse policy responses

Q: What is the role of international governance?