

Data protection & competitiveness: assessing the economic costs

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Outline

- ❖ The importance of free cross-border data flows
 - ❖ What, why and for whom has the internet done?
- ❖ The economic impact of data flow restrictions
 - ❖ Why important for all firms?
 - ❖ Channels through which data flows have impact
- ❖ Conclusion
 - ❖ Final policy implications of data flow restrictions

Importance of cross-border data flows

- ❖ **The importance of free cross-border data flows**
- ❖ The economic impact of data flow restrictions
- ❖ Laws, methodology & results
- ❖ Conclusion

Importance of cross-border data flows

- ❖ The Internet has transformed international trade:
 - ❖ **E-commerce:** and the digitalisation of products: books, music, movies, taxis, medical equipment etc. are increasingly supplied digitally
 - ❖ **Servification:** global commerce and manufacturing is increasingly dependent on services, in large part thanks to the Internet and ICT
 - ❖ **Global value chains:** data services / ICT “glues” fragmented production lines across countries; GVCs specifically important in Asian region.

Importance of cross-border data flows

- ❖ Both of these developments are driving growth
- ❖ **E-commerce**
 - ❖ Korea “standout ecommerce market” (Borderfree report)
 - ❖ Indonesia to boom in the next two years (Redwing report)
 - ❖ Vietnam has huge untapped potential
- ❖ **Servification**
 - ❖ +/- half of services trade is facilitated by ICT (UNCTAD, 2009)
 - ❖ Data accounts for 4–31% of production input in services
 - ❖ Services & internet tool for development
- ❖ **Global value chains:** input trade; tariffs still valuable?

The economic impact of data flow restrictions

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The economic impact of data flow restrictions

- ❖ Recent proliferation of data restrictions across countries
 - ❖ Dev'd & dev'ing; recent news; impact on economy (SMEs)
- ❖ Data localization / data storage locally wider effects
 - ❖ ≠ internet companies: finance, retail, manufacturing, logistics
 - ❖ Regulatory hurdles leads to productivity losses (TFP)
- ❖ Businesses processes rely on access to personal data
 - ❖ Business models, HR, headquarter services, marketing
- ❖ Technical data vs. personal data hard to distinguish
 - ❖ Cloud computing; “Big-data”; “Internet-of-things”

The economic impact of data flow restrictions

Sector	Intensity of data services use
<i>Communications</i>	31.8
<i>Business / ICT services</i>	6.8
<i>Financial services</i>	5.0
<i>Machinery</i>	4.9
<i>Other consumer services</i>	4.8
<i>Other business services</i>	4.0
<i>Distribution</i>	3.7
<i>Transport</i>	3.2
<i>Chemicals</i>	0.8

Four channels of data restrictions

- ❖ **Price increases:** domestic data services providers faced with increased costs, firms are required to store and process data locally
- ❖ **Trade barrier:** external data service providers faced with an additional trade barrier against data processing and internet services.
- ❖ **Investment channel:** Indonesian exporters face higher input costs due to the regulation, they suffer a comparative disadvantage, less attractive to foreign investment (FDI)
- ❖ **R&D channel:** the effectiveness of R&D is affected to the extent that product development relies on customer and market data, crucial for innovations in services and goods!

Four channels of data restrictions

- ❖ In short, who are hurt?
 - ❖ Domestic producers / exporters: their exports become less competitive, due to increased production costs, in effect a productivity loss (TFP)
 - ❖ Consumers: price increases lead to a direct welfare loss for consumers consuming end-goods; lower investment leads to job losses.
 - ❖ Foreign service providers: incur higher production costs through required IT capacity expansion and face extra regulatory hurdles to market access.

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- ❖ The importance of free cross-border data flows
- ❖ The economic impact of data flow restrictions
- ❖ **Laws, methodology & results**
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- ❖ Indonesia: ITE law and GR82
- ❖ Vietnam: Decree 72
- ❖ Korea: PIPA & Partial data localisation in financial services
- ❖ Map out most important barriers that have an effect

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- ❖ Quantifies the costs of data flow restrictions by using different models:
 - ❖ Analysing of data services intensity across all sectors of a typical economy such as Indonesia, Korea or Vietnam
 - ❖ Introducing price increases and TFP losses to domestic economy to estimate productivity impact of regulation
 - ❖ Estimating economic impact on domestic GDP, and trade and investment flows for an economy
 - ❖ By taking stock of IDN/ KOR/ VNM position in world economy

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	GDP	Investment	Exports
<i>Korea</i>	-1.1%	-3.6%	-0.3%
<i>Indonesia</i>	-0.7%	-2.6%	-0.5%
<i>Vietnam</i>	-1.7%	-3.1%	-1.7%

Conclusion

- ❖ The Internet and cross-border data flows are rapidly transforming global trade, while driving economic growth
- ❖ Data flows will be of paramount importance to growth trajectory in next few years
- ❖ Restrictive regulation would heavily impact the domestic economy by decreasing productivity, hampering exports and discouraging investment
- ❖ Designing data protection regulation in a way that does not impede cross-border data flows will be crucial to maintain competitiveness, in search of common policy through out ASEAN?