

Workshop on E-Commerce Ministry of Economy, Turkey

Hosuk Lee-Makiyama, director

ecipe.org | @leemakiyama | hosuk.lee-makiyama@ecipe.org

ECIPE | EUROPEAN CENTRE
FOR INTERNATIONAL
POLITICAL ECONOMY

Concept of 'digital economy'

- * Data/telecommunication
- * Cross border data flows
 - *ICT enabled delivery of services*
 - *Data generated and transmitted by goods*
- * Over-the-top (OTT) services
- * E-commerce
- * Computer related services (CRS), consultancy services
- * Digital products

Increasing importance of cross-border data flows

- * E-commerce alone \$1tn turnover; 3 times growth rate of China
- * Half of services exports enabled by ICT
 - *Practically replacing mode 1 & 2*
 - *Reducing investment requirements*
 - *Also goods via servification*
- * Internet responsible for one-fifth (21%) of GDP growth in developed economies in the last five years

Data dependency

- * With 4 to 31% of services inputs being 'data'
 - *Exceeds inputs from energy*
 - *Barriers affect also manufacturing via productivity losses in financial, retail, logistics, communications*
 - *Dynamic effect via price increases, trade barriers, factor productivity losses, investment and R&D losses*
- * Considerable difference in data-center costs
 - *57% more expensive in Brazil*
 - *Economy of scale vs latency*

Data input intensity in production

GTAP sector	Sector description	Data processing intensity
communication	Post and Telecommunication services	0.318
obsict	Other Business and ICT services	0.069
fininsurance	Financial and Insurance services	0.050
machinery	Machinery and Electronic equipment	0.049
oconsumer	Other Consumer services	0.048
oservices	Public services, dwellings	0.040
distribution	Trade and Distribution services	0.037
water	Water and other Utility services	0.034
transport	Transport services	0.032
construction	Construction	0.024
othermanuf	Manufactures nec.	0.024
fabmetals	Metal products	0.020
nonmetmin	Mineral products nec.	0.014
lumberpaper	Wood and Paper products	0.014
energy	Coal, Petroleum and Gas production	0.011
transequip	Motor vehicles and parts	0.008
chemicals	Chemicals, Rubber and Plastic Products	0.008
bevtextcloth	Beverages/tobacco products; Clothing and leather products	0.007
metals	Ferrous metals and Metals nec.	0.007
primagrother	Primary agricultural products	0.007
procfoods	Meat, Vegetable oils, Dairy, Sugar and Food products nec.	0.006

Source: Author's calculations using BEA

Digital barriers

- * Often internal, domestic discrimination against digital delivery
- * Rather than a obvious case of non-national treatment
- * Implicitly cover commercial and non-commercial activities
- * Opaque regulations
 - *Guidelines, circulars to unwritten practices*
- * Elements of anti-competitive behavior
 - *Incumbents in telecom sector*
 - *Standard essential patents (SEPs)*
- * Often a 'hard' sensitivity
 - *Privacy; national security concerns*
 - *Crisis and jobs narrative*
- * Non elastic or ad-valorem; weakest chain

Interconnection

- * Anti-competitive practices
 - *Bitpipe, VoIP, VPN*
 - *Net neutrality, zeroing*
- * Interconnection, termination fees?
 - *WCIT proposals for new ITU ITRs*

Data privacy regulation

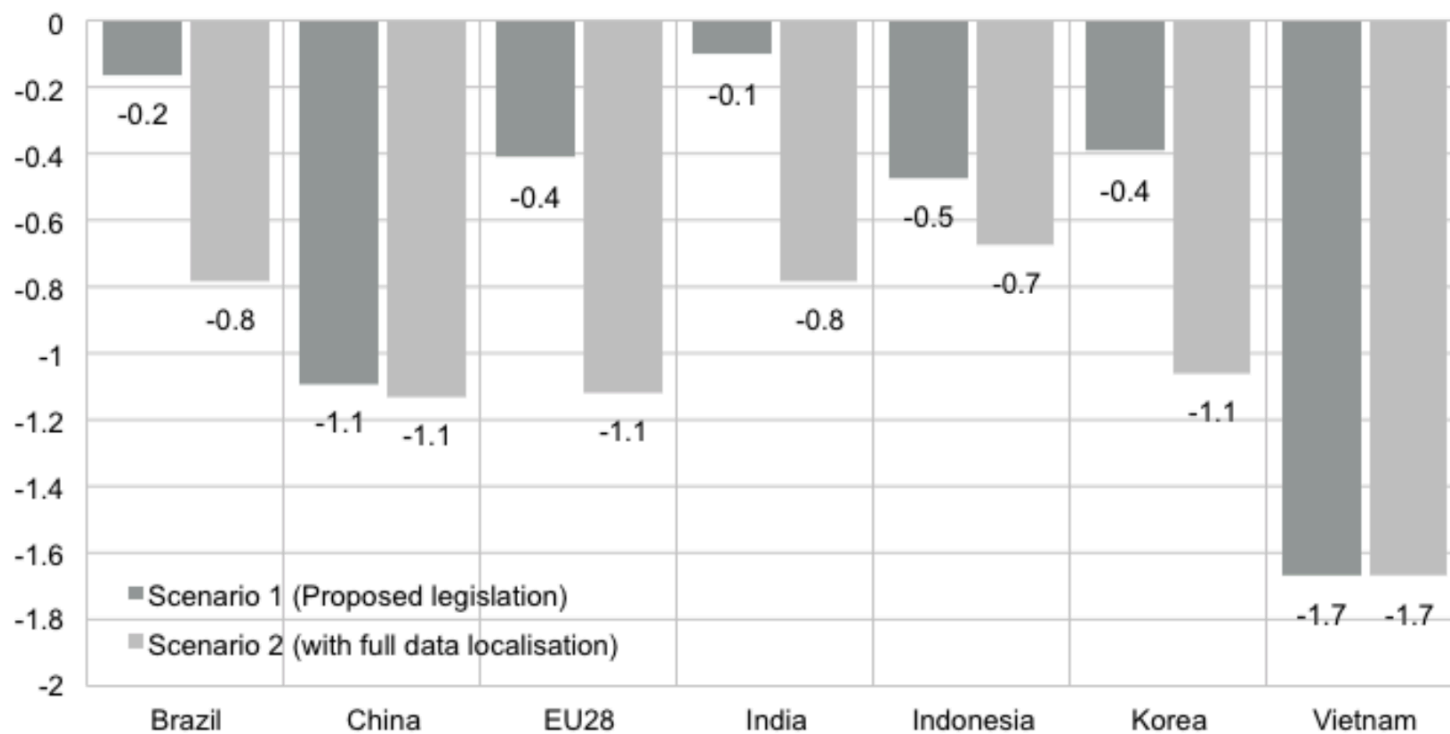
	Brazil	China	EU28	India	Indonesia	Korea	Vietnam
Data localisation requirement	No	Yes	No	Partial	Yes	Partial	Yes
Consent required for data collection	Yes	Yes	Yes	Yes	Yes	Yes	No
Consent required for transfer to third parties	Yes	Yes	No	Yes	No	Yes	No
Right to review	No	No	Yes	Yes	Yes	Yes	No
Right to be forgotten	Yes	Yes	Yes	No	No	Yes	Yes
Breach notification	No	Yes	Yes	No	Yes	Yes	No
Impact assessment	No	Yes	Yes	No	No	No	No
Data privacy officers	No	No	Yes	No	No	Yes	No
Sanctions for non-compliance	Yes	Yes	Yes	Yes	Yes	Yes	No
Government access required	Yes	No	No	Yes	No	No	Yes
Data retention requirement	Yes	No	No	Yes	No	No	Yes

Data localization requirement

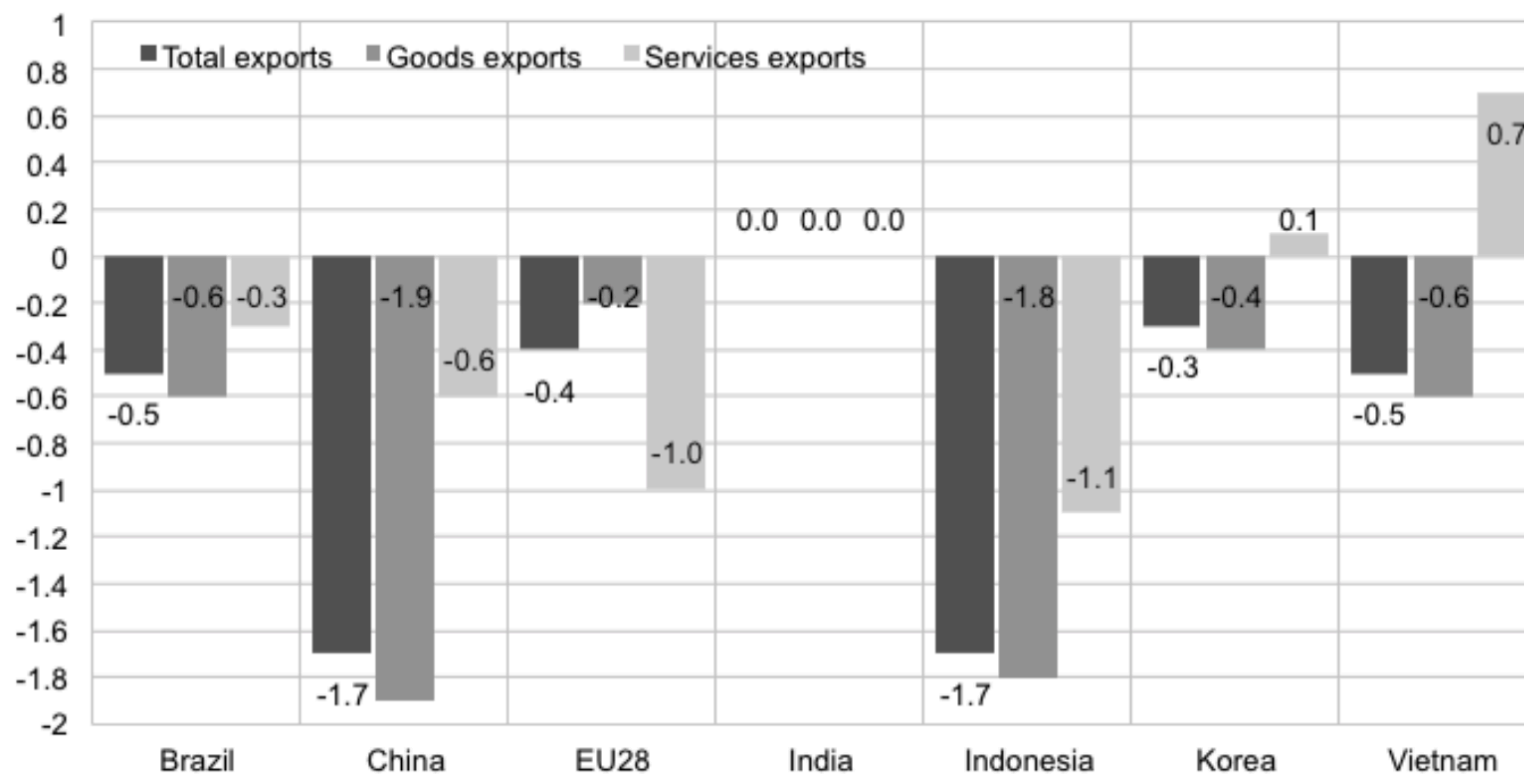
* Examples

- Brazil: *Marco da Civil, Brazil (article 12 withdrawn)*;
- China:
 - Resolution relating to Strengthening the Protection of Information on the Internet;
 - Standardization Administration and the General Administration of Quality Supervision, Inspection, and Quarantine ;
 - Notice to Urge Banking Financial Institutions to Protect Personal Financial Information;
 - MIIT ban on 'collection of data without a purpose'
- European Union: General Data Privacy Regulation ("by effect")
- Indonesia: *EIT Law, government regulation 82*
- Korea: *Personal information protection act; prohibition of outsourcing of financial information*
- Vietnam: *Decree 72*
- Russia: Executive Order 2014

Effects on GDP (%)



Effects on exports (%)



Security regulations

- * Regulation based approach vs risk based approach
- * 'Non-international' cyber security standards
- * Product screening
 - *Proposals in China, the US on mainframes*
- * Encryption technology mandates
 - *WAPI wi-fi encryption standard use obligatory in China*
 - *Despite existence of functionally equivalent and internationally accepted standard IEEE 802.11i*
 - *Ban, backdoor or escrows on encryption technologies*

Content access, censorship

- * Legal ban
 - *Online gambling case*
 - *Yahoo LICRA case*
- * Network barriers to digital content delivery:
 - *Religious, political and commercial blocking*
 - *Great Firewall of China; Golden Shield*
 - *'All countries censor'; Child pornography, IPR violations*
 - *Filtering requirement*
 - Online content (e-commerce, news provision, audiovisuals)
 - Search engines (previews, outright blocks)
 - Mapping
 - *Slowdowns*

Next step

* License to operate

- *Internet Content Provider (ICP license)*; China
- *Decree 72*; Vietnam
- WTO (GATS art XIV) compliance

Intellectual property

- * Disproportionate copyright enforcement?
 - *Fair use?*
- * Intermediary liability
 - *Liability for content outside provider's (ISP) control; caching, web platforms, services*
 - *Short notice and take down periods*
 - *Rule of law, strict liability (court order, means of appeal) for intermediaries*
 - *High sanctions*

Intellectual property rights

* Patents

- *Indigenous innovations*
- *Standard essential patents (SEPs)*; antitrust enforcement in the EU/US
- *Merger concessions (Nokia/Microsoft; Motorola/Google)*

E-commerce

- * Conflicts with off-line licensing requirements
 - *Conflicting with offline requirements; car-sharing vs taxis.*
- * Fulfilment
 - *Bans on free delivery for online retailers; France.*
 - *Holdup at border; taxation purposes.*
- * Online payment
 - *UnionPay monopoly; challenged in DSB*
 - *Restrictions on online payment intermediaries*

Investments & business mobility

- * Ownership restrictions

- *Foreign equity caps; joint-venture requirements*
- *De facto/de jure on telecoms; bindings in GATS*

- * Strategic industry or critical infrastructure designations

- *Ex. telecoms; United States; DanOne; Dailymotion/Yahoo; France*

- * Mode 4, business mobility

- *Intra-corporate transferees*
- *Global market-driven standards on qualifications*

Public procurement, local content requirement

- * Non-openness (foreign business forbidden or not invited to bid)
 - *Lack of binding liberalization in WTO GPA*
 - *Discrimination in the bidding process*
- * Security testing and nationality requirement
 - *Requirement to give up IPR, source codes and other rights in public procurement*
 - *Multilevel Protection Scheme (MLPS)*
- * Local content or supplier requirement in public procurement
 - *Local content requirement proposed in the private sector*
 - 50% local content in value requirement for OEMs (Nigeria)
 - Preferential Market Access Regulation (India)

Product standards, TBT

- * Discriminatory standards on goods common across the board
 - *Discrimination in product safety standards and certification for digital goods/services (processing time, application)*
 - *Local non-market standards where global standards exists*
 - *Non-participation of foreign firms in standard setting*
- * EMC/EMI in WTO
- * Mobile chargers
- * CCC

Fiscal & quantitative measures

- * Tariffs

- *At least additional 17% more coverage*
- *Trade defense, rules of origin*

- * Levies

- *Copyright levies on storage media; extended to laptops and mp3 players*
- *Reversed VAT sales rules, registry requirement 'web tax'; Italy*

- * Export restrictions

- * Corporate taxation

- *Base erosion and profit shifting (BEPS); OECD*

BEPS: non-existent problem?

- * OECD admits 'no evidence of base erosion'
- * No correlation between corporate and income taxes
- * Not a novelty introduced by the internet, but cross-border trade in services
- * 'Digital presence' – de facto abolishing mode 3

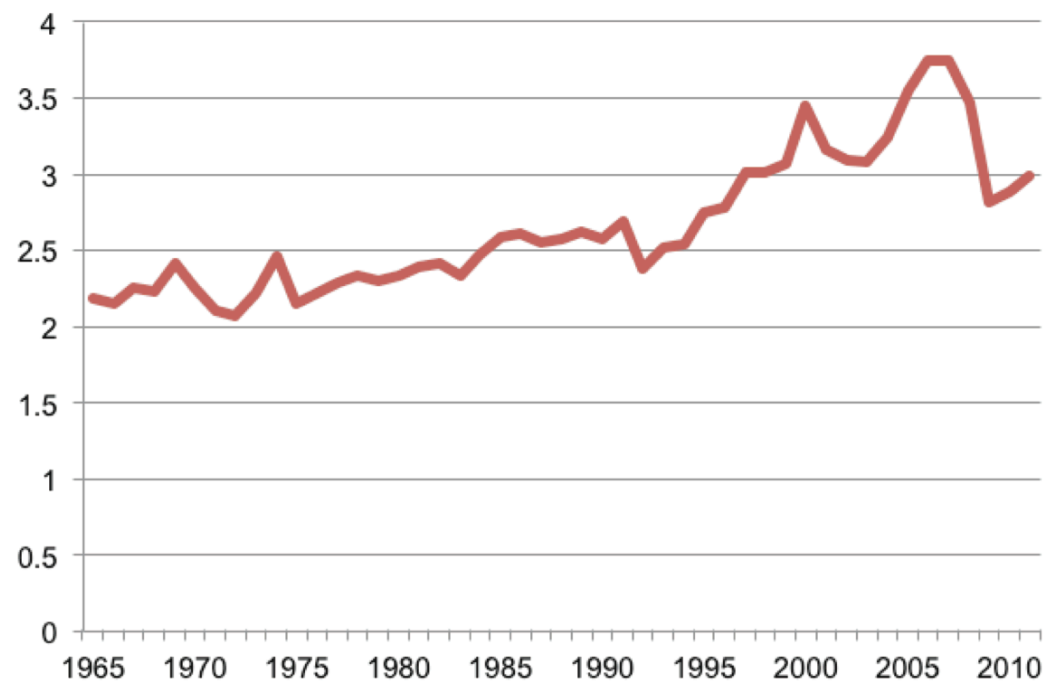
FIGURE 4. AVERAGE FIVE YEAR EFFECTIVE TAX RATES (ETRS) OF MAJOR EUROPEAN MNCs

Company	2009-2013	Company	2009-2013
UniCredit Group	126,73%	EADS	26,05%
ENI	60,11%	Volvo Group	25,94%
Carrefour	55,41%	Continental	25,93%
Facebook	53,92%	SAP	25,80%
Total	51,94%	Unilever	25,71%
Royal Dutch Shell	44,60%	E.ON	25,03%
Repsol YPF	40,38%	Bayer	24,95%
France Telecom	40,09%	Schneider Electric	24,03%
Saint-Gobain	38,12%	AXA Group	23,63%
ENEL	38,08%	Swedbank	23,48%
Aegon	37,73%	Daimler	21,99%
Amazon.com	37,39%	Schlumberger	21,34%
EDF	37,16%	Volkswagen Group	20,88%
BMW Group	36,58%	Renault	20,81%
Ericsson	32,77%	Heineken Holding	20,47%
GDF Suez	30,25%	Banco Santander	20,41%
Allianz	30,08%	Telefonica	20,31%
Yahoo	29,91%	TeliaSonera	20,13%
BNP Paribas	29,87%	Google	19,91%
Siemens	29,34%	Anheuser-Busch InBev	18,67%
BASF	28,40%	Sanofi	17,96%
RWE Group	28,17%	Ebay	16,32%
L'Oreal Group	27,63%	Deutsche Post	14,05%
ING Group	26,35%	Société Générale	11,86%
Apple	26,34%	BBVA-Banco Bilbao Vizcaya	5,69%
Danone	26,27%	Munich Re	5,41%

Source: Company annual reports 2009-2013, Ycharts.com

Corporate tax revenues in OECD

FIGURE 1. CORPORATE INCOME TAX REVENUE AS % OF GDP (OECD COUNTRIES, 1965-2011)



Source: OECD, 2013.

Fiscal measures (cont'd)

- * State subsidies
 - *Direct support, semiconductor race of the 1970s*
- * Moving towards discriminatory tax credits, R&D funding
- * Export credits
 - *Threat of the first ex officio CVD case against China on telecom equipment*
 - *OECD agreement; US/China negotiations*

ECIPE-DTE: Digital Trade Estimates

- * Mapping barriers to digital trade in over 60 countries
 - *Near all TPP, TISA and EU FTA counterparts*
 - *All measures catalogued and listed*
- * Raising awareness for barriers to digital trade; creating a solid tool for trade negotiators to identify priorities
- * A restrictiveness index (DTRi)

W(h)ither the *digital* Europe?

Europe's legislative packages

- * From Digital Agenda 2020
- * Connected Continent, 2013-2015
 - *Roaming ban*
 - *Fixed line Spectrum harmonisation*
 - *Net neutrality*
- * General Data Privacy Regulation (GDPR), 2013
- * Digital Single Market (DSM), 2015-
- * Review of the *entire* telecom framework, 2016?-

Connected Continent

- * A ban on roaming charges or mandatory basic roaming allowances
 - *Introduction of price caps*
- * Spectrum harmonization abandoned
 - *Pascal Lamy report on spectrum usage*
- * Net neutrality
 - *Competition policy vs legislation*
 - *Exceptions*
 - Cyber security?
 - Legal obligations (illegal content, IPR violations)?
 - 'Traffic management' and network congestion?

General Data Privacy Regulation

- * Horizontal treatment of all data types
 - *Applying to all data controller/processor or subjects in EU*
 - *Extraterritorial application*
- * Harmonized enforcement; One stop shop
- * Explicit consent
- * International transfers
 - *Adequacy ruling, i.e. equivalent*
 - *Binding corporate rules or contract clauses*
- * Data protection by design and default
- * DPIA, breach notification, and sanctions (2% global turnover)
- * Right to be forgotten

Assumptions behind the DSM

- * Fragmentation factors
- * Platform 'abuse' or 'dominance'
- * Concerns of non-copyright related violations
- * Privacy, security and hate speech: Precautionary principle?
- * "0.5% increase in GDP"

Digital Single Market

- * Jurisdiction?
 - *Jurisdiction one stop shop; 'home option' – whose home?*
- * Legal harmonization?
 - *Copyright, Audiovisuals*
 - *VAT*
- * Access issues
 - *Data localization?*
 - *Geo-blocking*
- * Competition
 - *Platform neutrality and transparency*
- * Other legislative acts
 - *Cloud regulation & cyber security guidelines*
 - *Data privacy*

External agreements

- * Model text in Korea, Singapore, CETA
 - *IP chapter: Direct transposition of e-commerce directive*
 - *Free flow of data for financial services (uni/bi-directional)*
 - *GATS XIV exceptions*
- * TTIP
 - *Safe Harbor negotiations*
- * TISA
 - *Exceptions*
- * Other FTAs?
 - *Japan*

Determinants for EU trade policy

- * An entirely new dynamic between COM/EUMS/EP
- * Member States' policy objectives
 - *EU demandeurship of TTIP*
 - *Sensitivities, expressed in TTIP; EP positions*
- * Internal sequencing
 - *GDPR vs TTIP*
 - *DSM*
- * Internal hierarchy/portfolio division between external trade, industry, justice, intelligence?

Digital trade policy

- * Internet – more than Google, Facebook & Amazon
 - *E-commerce still exceeds car manufacturing in GDP contribution*
- * Hapless post-war model of EU industrial policy
 - *Fostering national champions*
 - *Picking winners through public investment*
 - *Emphasis on export-led manufacturing*
 - *Business environment missing*
- * Productivity aspects
 - *Constant labor productivity gap against the US ~10%*
 - *Attributed to better use of ICT*

United States

- * Delinking security, trade
 - *Bi-partisan support for industry stance on cyber security*
 - *China policy, US-China BIT*
 - *No WTO cases raised against online censorship; IPOs, Alibaba.com*
 - *Network equipment*
- * Privacy continues to be a commercial/contractual issue
- * Net neutrality
 - *FCC proposal of Chairman Tom Wheeler*
 - *Reclassification of internet services to telecommunication operators under Title II*

US Trade Policy

- * Priority on TPP
 - *Geopolitical imperative*
 - *Business priority – growth potentials, market access value*
 - *“21st century standards”*
- * Less urgency on TTIP
 - *Business lacking interest*
 - *Europe sufficiently open, or asks are beyond redlines*
 - *Other means to address concern in DSM/GDPR?*
 - *Sequencing of the negotiations – from TPP, TISA to TTIP*
- * Emphasis on data localization; cross-border data flows

China

* “Secure and controllable”

- *detailed action plans requiring Chinese banks to ensure that 75% of their ICT products are “secure and controllable” by 2019.*
- *Foreign business unable to meet criteria unless they surrender key technologies to Chinese authorities*
- *Source code, encryption algorithms, increase substantially their manufacturing and research facilities in China, and implement Chinese standards*
- *Concerns for back doors and vulnerabilities*

Chinese telecom markets

- * World's largest 4G deployment
- * Four major MNOs are SOEs
- * Tier-1 cities more 'online' than Europe
- * 'Secure and controllable' – expanded to telecoms
 - *Security testing on critical software and hardware*
 - *Mandatory security commitment with SOEs*
 - *Telecom industry must implement "national cybersecurity review regime", which targets both foreign and local ICT products and services for security risks.*

China's trade policy objectives

- * Services accounting for 43% GDP
 - *En par with Cambodia, Laos*
 - *Mostly retail related services, construction*
- * Employment imperative
 - *Less than 40% of employment coming from services*
 - *20 million new jobs must be created annually*
- * Insufficient capital and technology inflows from ASEAN and SARs/Taiwan
 - *Technological glass ceiling*
 - *Mofcom planning to expand services to 20% of trade*

Chinese trade policy

- * Question not if China opens up
 - *But when, where and to whom.*
 - *East & West strategy – CJK, EU, TISA*
 - *US-China BIT, FTAs with NZ/Australia/CH*
- * Unilateral reforms, FTZs
 - *Wholly-owned e-commerce*
 - *Lifting of censorship on Facebook?*

The Asia-Pacific

* Korea

- *Online identification requirement*
- *Content access issues: Online filtering, national security on DPRK*
- *'The Interview', attacks on credit institutions, 'defamation' of Pres. Park*
- *TPP; China bilateral; CJK*

* Japan

- *Increasingly offensive interests on services and investments*
- *TPP; EU-Japan FTA*

* Australia

- *TPP*
- *EU PNRs*
- *Huawei*

Using trade as a remedy

- * No California effect
 - *14% of EU services trade with adequate countries*
- * Few international standards
 - *Different views on legal prescription*
 - *Council of Europe Cybercrime convention (51 countries)*
- * Proliferation on MLATs but mutual legal assistance not working
 - *Dual criminality, different views on safeguards and proportionality*
 - *DOJ, Microsoft, Ireland*
- * Localization or extraterritoriality
 - *Trade agreements used to address localization or extraterritoriality issues*

Geopolitics of cross-border data flows

- * Brazil, Russia, India not part of any geometry that would force it to open up
 - *Different reasons for their sensitivities*
- * Data flows likely to remain a political sensitivity for foreseeable time
 - *Both commercial and security reasons*
 - *The real pivot is the German shift in attitudes*
- * Digital barriers leverage for intelligence co-operation
- * Pillars of economic governance