

The new Asian growth dynamics: lessons for Europe



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The 'new' Asian growth dynamics, 1: Contextual base



The 'Global Knowledge-based Economy'

- production *and* knowledge based (*integration* of values)

Global sourcing of 'technology'

global knowledge bases – 'third wave' since 1990s

Role of 'open-door' policies , e.g. India; China etc. joining WTO

but not passively liberalizing – trade and FDI for knowledge accumulation

'Value networks' replacing linear 'chains'

knowledge involves much more than 'information' – networked basis

subsequent recomposition of firms' innovation systems

shift of absorptive capacity to intermediate countries – generative capacity?

The 'new' Asian growth dynamics, 2: Technology base

Heralding convergences of technologies with markets

Refocus from supply (technology) to demand (applications)

from high-tech to high value-added

new complexity of interactions based around 'informatization', e.g. indigenous standards

cross-sectoral R&D to incorporate ICT in all sectors including services etc.

Shift of emphasis from Electronics to ICTs – e-paradigm and beyond

(1) the *ICT production* sector creates, makes and distributes ICT appliances and equipment – declining in Singapore since 2000, Taiwan from price-cost squeeze

(2) the *information content* production sector creates, makes and distributes information contents and services,

(3) the *ICT network infrastructure* provides for connectivity, and

(4) the *informatization* component, i.e. the deployment and usage of ICT goods and infrastructures (Wong, 2005)

Digital convergence implies growing interdependencies among all of these,

New services vs. infrastructure vs. drivers in Korea

New services	Infrastructure	Product Drivers
WiBro (mobile internet)	BcN (Broadband convergence Network)	Telecommunication Multimedia products
DMB (Digital Multimedia Broadcasting)	USN (U-Sensor Network)	Digital TV products
Home Network Service	IPv6 (new internet protocol)	Home network products
Telematics Services		IT SoC (System on Chip)
RFID (Radio Frequency Identification)		Network-oriented PCs
W-CDMA (for video telecommunication)		Embedded software
DTV (Digital Television)		Digital content
VoIP (internet telephony)		Telematics products e.g. GPS
		AI robots

The 'new' Asian growth dynamics, 3: Geographical base

Rise of China and India and responses by others

a new Triad to replace US/EU/Japan – overlooked in Lisbon strategy
effects of scale and market power in very large countries, ~20% and 17% of world
able to set the economic, technical and political rules of the game
huge middle-class markets now driving growth – seeking 'modernity'

Regional sub-systems of innovation

core industrial districts are refocusing on knowledge bases
alignment problems of social divides – regional divergence and convergence

Refocusing of remaining countries

choices including low-wage competition, developing market niches, informatization
strategies, 'upgrading'
new forms of interdependency – intra-industry, intra-regional trade, migration (TW)

The 'new' Asian growth dynamics, 4: Political economy base

Collaboration with competition – reinterpreting 'liberalisation'

global production/knowledge networks

A range of political systems appear 'successful'

generally powerful role for the state – financial instruments etc. (Korea)

strict regulation by government in Singapore – government-linked corporations

but neglect of social-environmental issues - migration and unemployment

External developments

integration into global networks rather than export promotion etc.

offshoring of components, assembly and services (supply chains)

global offshoring of functions, including technology and design, standards (2-way)

new roles for E & S Asian companies, e.g. entrepreneurial firms in India

The 'new' Asian growth dynamics, 5: Policy change

Mobilizing and energizing the knowledge base

the new E-M-U vision (Electronics / Mobile / Ubiquitous)

U-society: anyone / anytime / anywhere can use any device or service with security

"Unlike cyber-Korea or e-Korea, u-Korea is planned to build up a totally new country in technologies and culture" – IT839 strategy

Interactions within government

joined-up U-policy in theory – internal alignment e.g. through ministry links
more chaotic in practice – 'sound' macroeconomic management etc.

Interactions between states and markets – regulatory framework

states and markets rather than states versus markets

institutions and IPRs – market-making













arenas for conflict (e.g. top-down vs. bottom-up) met by standards, task forces

external realignment – regional trade agreements


lack of interaction with academia (except Singapore?)

science parks, software parks, development zones, innovation incubators etc.

Evolution of policy in Korea: policy learning driven by technological and organizational convergence

Prepare for ubiquitous network society		IT 839 Strategy (2004-2007)	
Maximise ability of all citizens to use ICTs		E-Korea Vision (2002-2006)	
Vision of creative knowledge-based society		Cyber Korea 21 (1999-2002)	
Attain world-class informatization levels by 2010		Basic Informatization Promotion Plan (1996-2000)	
National information superhighway		Korea Information Infrastructure Initiative (1995-005)	
Administration, defence, public security, finance & education		National basic Information System (1987-1996)	
Focus on manufacturing		Measures to nurture IT industry (1985-1987)	

Lessons for Europe, 1: Contextual base



Beat it or join it?

The threat – global competition in production and knowledge
restructuring the ‘new international division of labour’
anxieties about EU job losses from Asian offshoring

The opportunity – global collaboration in production and knowledge
facilitating the spread of global value networks

- limited role of EU in educational provision for Asia (exporting students)
- scope for (two-way) trades in services and functions
- scope for content and applications

realigning the global value networks – integrative capacities
complementary countries (large and small) and levels of development
developing the ‘new agenda for innovation’

Lessons for Europe, 2: Technology base



Revising the Lisbon agenda

EU needs to give serious consideration to the new E-M-U model in technology

- shift emphasis from supply to demand drivers

- shift emphasis from high-tech sectors to economic systems at large

- use of informatization (e-paradigm) to improve social conditions – ‘mosaic society’

Inherently strong economic and cultural base in Europe but limited support from governments etc.

- content based activities - challenges from Hollywood, Bollywood, etc.

Despite support for market-based approaches demands and infrastructures are largely left to look after themselves

- importance of speed, quality, price, etc. in broadband (Fransman)

Focus on dynamic capabilities and mastering complex technologies

Lessons for Europe, 3: Geographical base

Global catching-up (and 'forging ahead') overlooked in the Lisbon agenda

rethinking the 'Triad'

need to differentiate 'developing countries' – local specialization

Embedding regional systems

alignment issues and cohesion issues

regional capabilities – absorptive and generative capacities

Specialization vs integration within the EU

seeking technological convergence but market divergence

utilizing global drivers

Can the EU offer a viable alternative to the USA as a partner?

lagging in education provision, from low funding, overcrowding, inflexibility

reform of applied science a priority

Lessons for Europe, 4: Political economy base



Is the liberalization agenda too reactive and passive?

role for market-making as well as market compliance – ‘organized markets’

Need for closer integration of technology policy and economic policy

Maastricht agenda inherently negates expansion – ‘old’ EMU

Weak ‘national systems of innovation’ in some new member states

‘weakest link’ problems - undermining of role of governments

need for alignment to overcome systemic network failures

External ‘open methods of coordination’ e.g. IPRs

trade flows and knowledge flows – organizing the EU’s ‘internal market’

What can the recent Asian experience teach us?

importance of consensual *vision*, often despite political differences

Lessons for Europe, 5: Policy base

Adoption of new E-M-U model for technology involves setting targets and recruiting active instruments

need for a sense of purpose – provision of infrastructure

spend more or spend smarter on R&D?

from R&D to 'the new agenda for innovation'

rejecting old classifications of sectors (services etc.), high/low tech, value chains etc.

bringing in dynamic capabilities (e.g. looking ahead), systems and alignment, 'sustainability'

Internal alignment through joined-up policy-making

cohesion and active role of SMEs, citizens

maintaining the western system of social welfare – use ICTs to achieve?

proactive role of government procurement (cf. China, India)

External alignment through internationalist focus

active rather than passive role in spreading ubiquity – 'catching-up' in middle-income countries

role of international and supranational cooperation