Knowledge Economies: A Global Perspective

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Two complementary insights

- Quantitative: WBI K4D Benchmarking
- Qualitative: Socio-cultural perspectives

- From “intellectual capital” to “mental capital”?

Framework for KE:
Four Key Functional Areas (WBI)

- Economic and institutional regime that provides incentives for the efficient use of knowledge and the flourishing of entrepreneurship
- Educated, creative and skilled people
- Dynamic information infrastructure
- Effective national innovation system

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WBI/KAM Methodology

- KAM: 80 structural/qualitative variables to benchmark performance on 4 pillars
- Variables normalized from 0 (worst) to 10 (best) for 128 countries
- Benchmarking based on ranking not on absolute values
- **www.worldbank.org/gdln/kam.htm**
- Basic scorecard for 14 variables at two points in time, 1995 and 2003 (most recent)
- Aggregate knowledge economy index (KEI)

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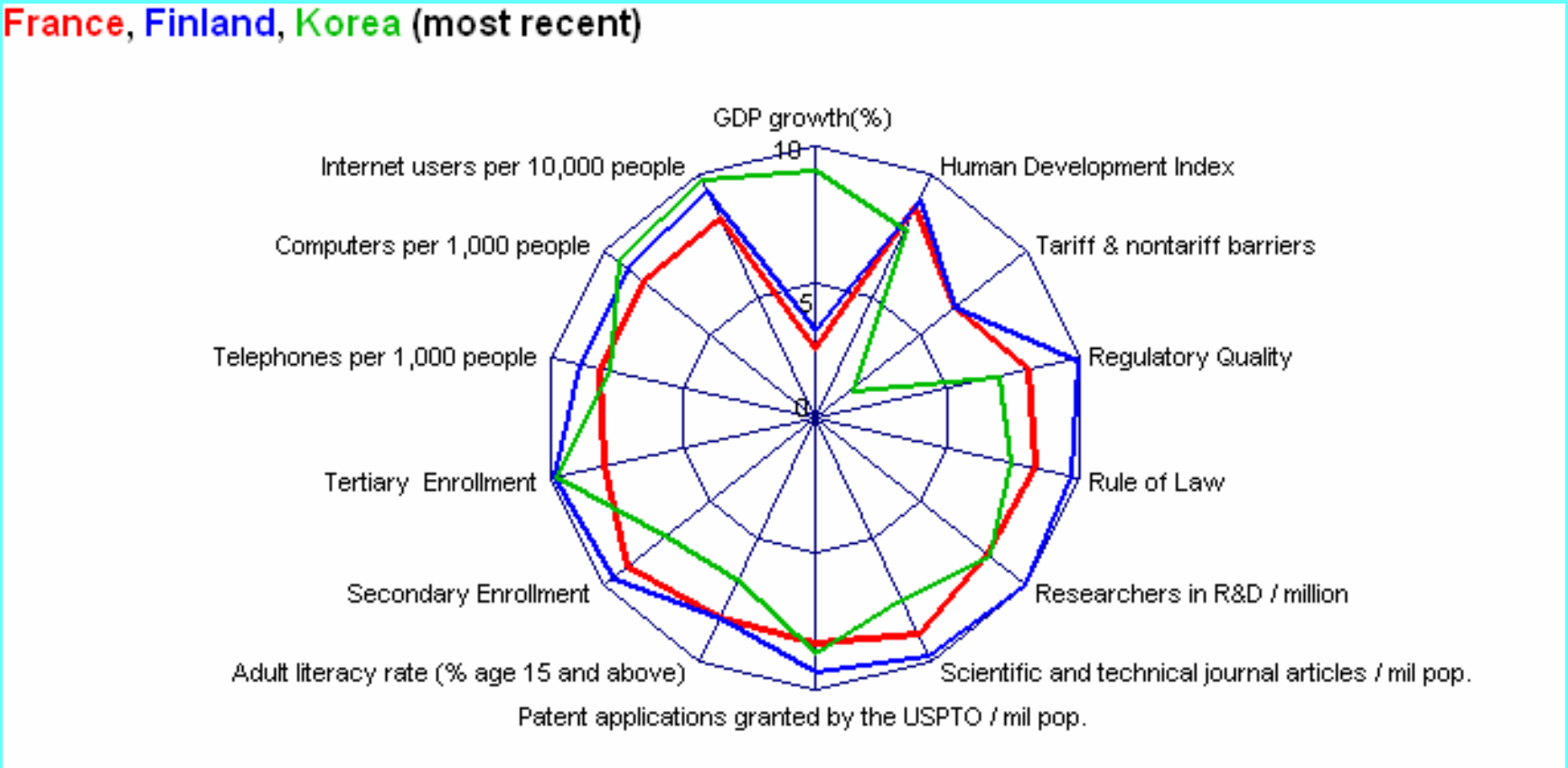
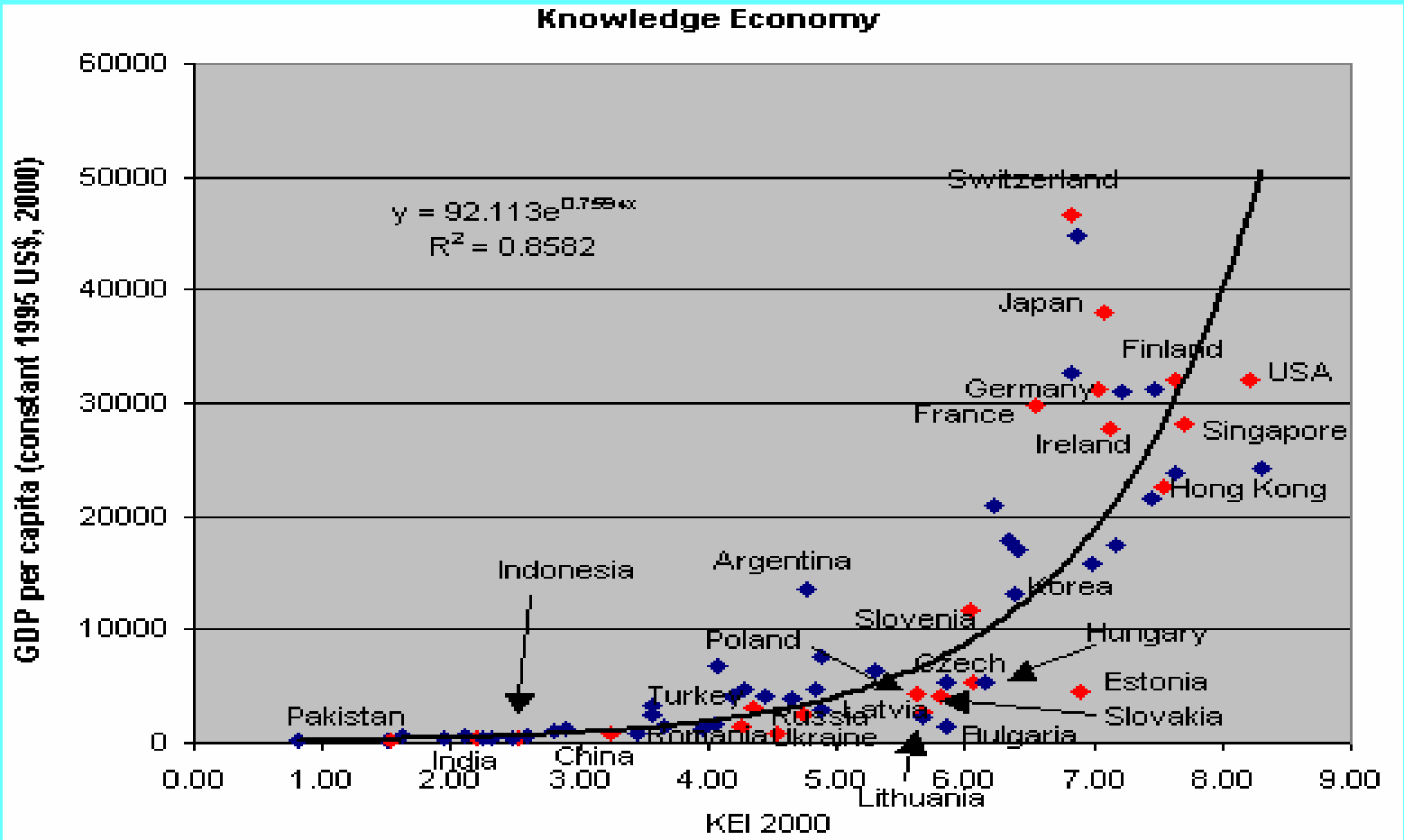
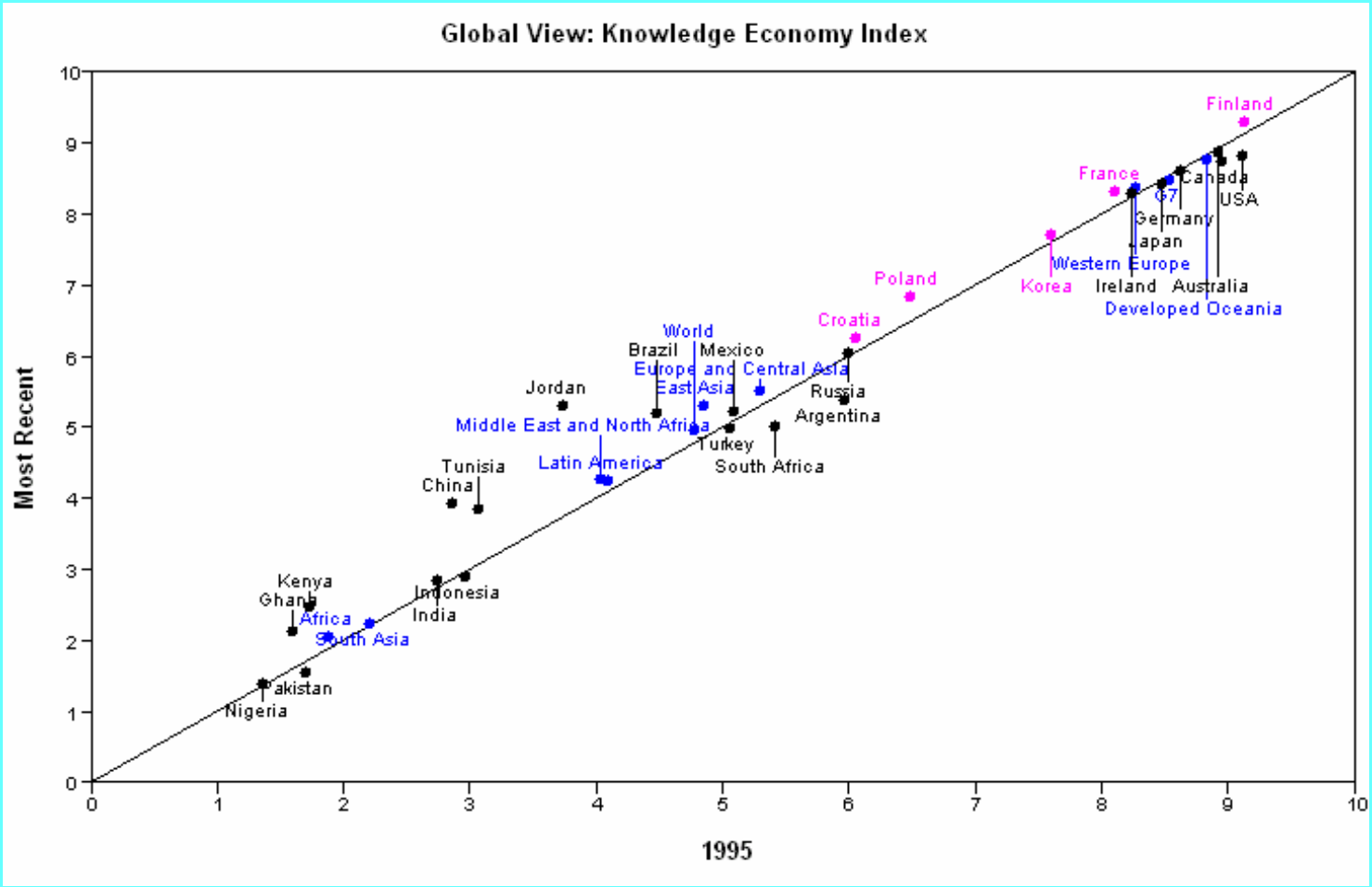
KAM Basic Scorecard
France, Finland, Korea



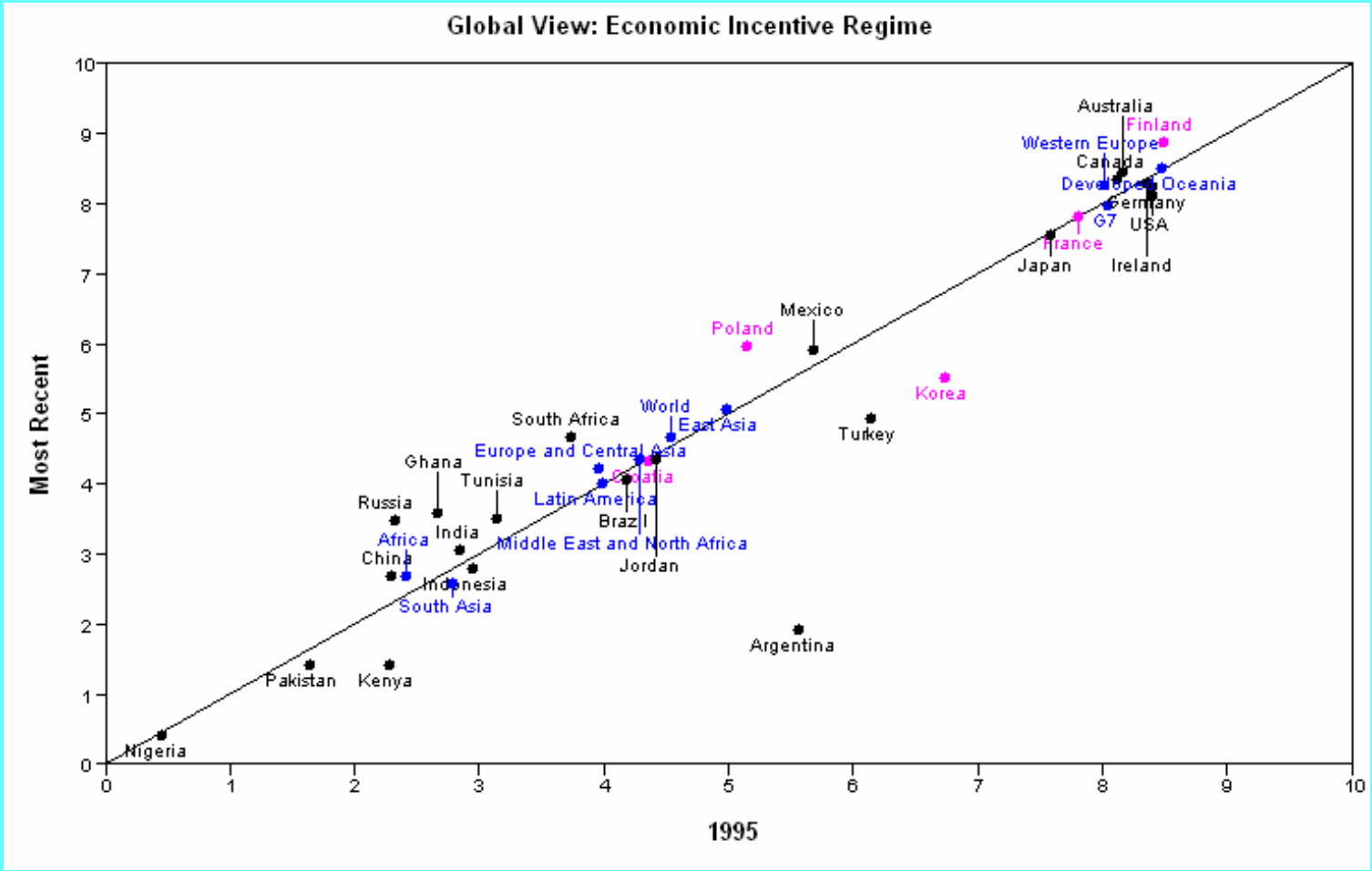
Strong correlation between GDP per capita and knowledge economy



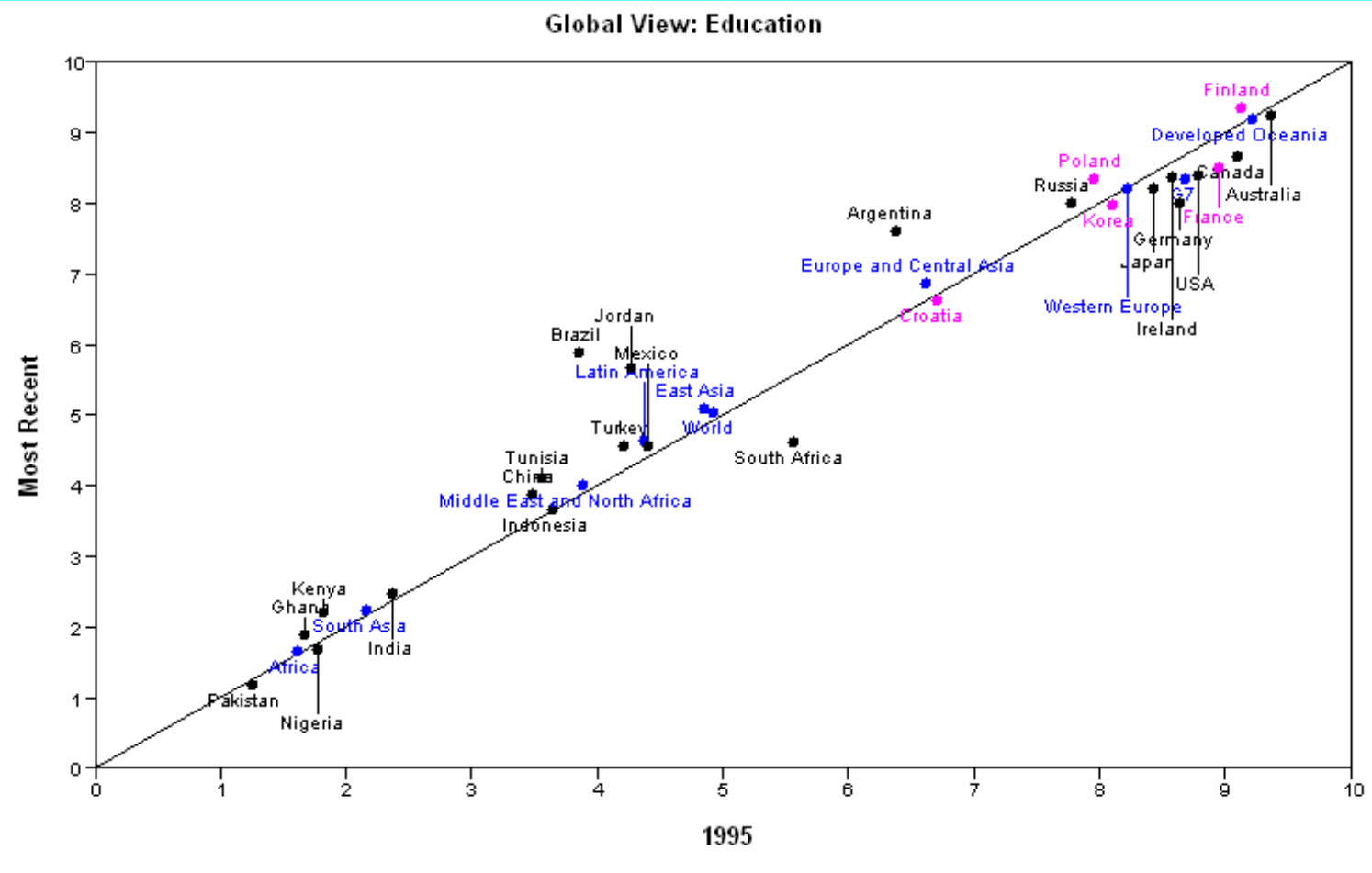
KAM Global Knowledge Economy Positioning



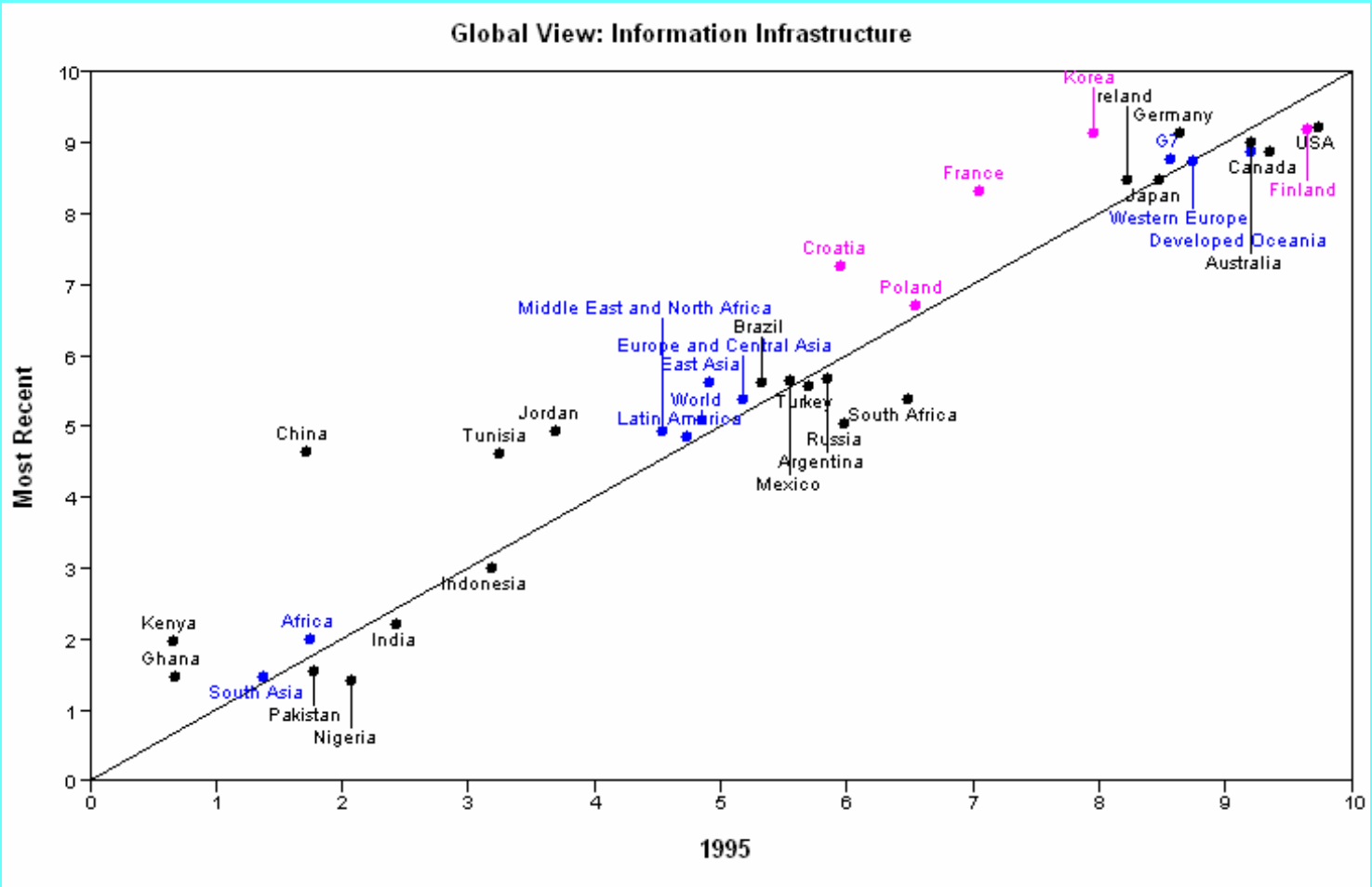
EIR Positioning



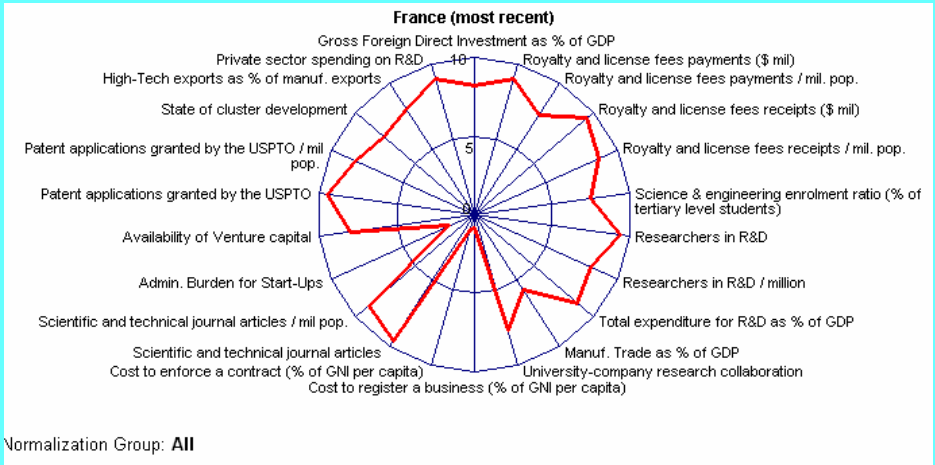
Education Positioning



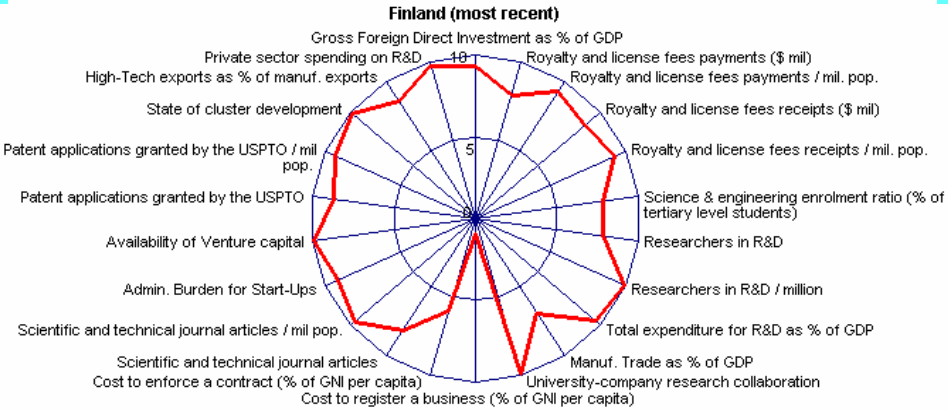
ICT Positioning



KAM Innovation Scorecard
France and Finland



Normalization Group: **All**

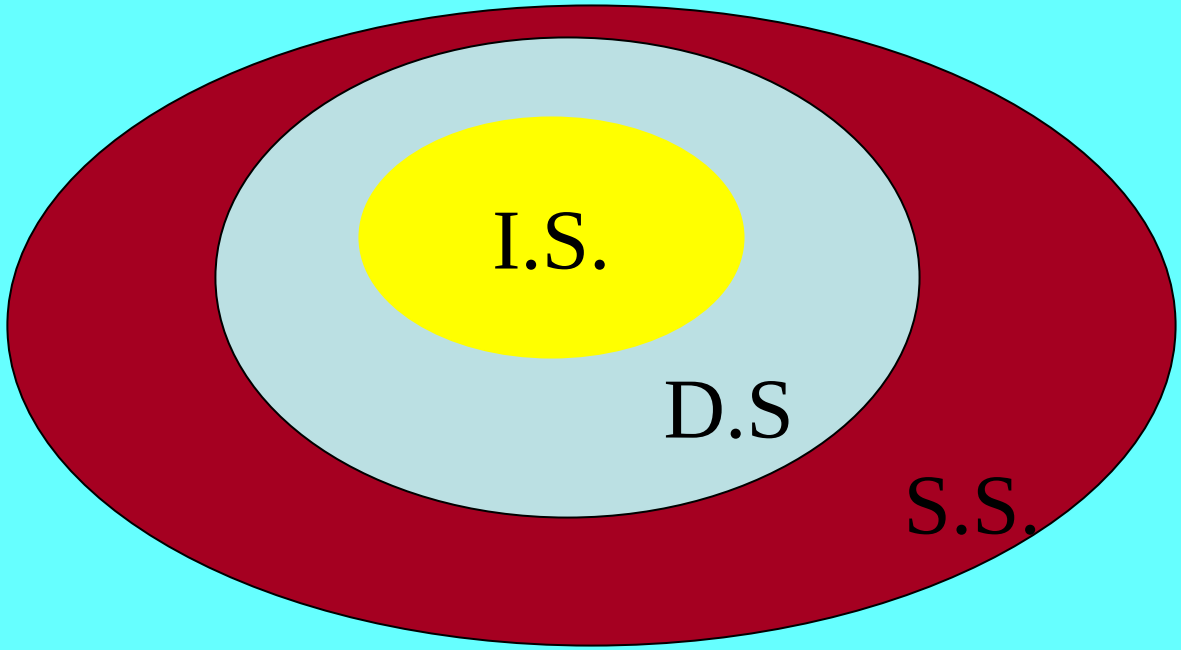


Normalization Group: **All**

Socio-cultural lens

- Three major areas: West as source of scientific progress, Far East as leader in application in production systems, South as laggard
- Put country performances in anthropological context: West/East comparisons

INNOVATION, DEVELOPMENT, SOCIETAL SYSTEMS



East-West Behavioral Contrasts

Western distanciation	Eastern immersion
Science separate from technology	Science and technology as a single notion
State separate from society	State as part of society
Individualistic exploration of the unknown	Collective adoption of the known

East-West Comparisons of Ethos/Cultural systems

- Distancing from reality
- Alphabetical language
- Transcendent religions
- Nuclear family
- Individualist societies

- Immerging into reality
- Ideographic language
- Immanent religions
- Enlarged family
- Communitarian societies

West – East Asia Innovation climates – Key contrasts

- Importance of science-based innovations
- Technology leaders (radical innovations…)
- Public/private system with “rule of law”
- Stock exchange bubble-induced recession, durable slowdown

- Technology/production-driven innovations
- Technology followers (FDI, licenses)
- Connection-based system (Guangi)
- Financial crisis (induced by connection-based economy)

Western profiles and development systems

	Anglo-Saxon	Latin-Mediterranean	Rhine-German
Ethos	Exposed individualism.	Protected individualism.	Co-operative individualism.
Industry	High tech/ res. nat	State based high tech	Medium size industry
Education	Elitist, in-equalitarian. Concrete	Democratic, but in-equalitarian. Abstract	Dual (school-enterprise)
Research	Broad	Math/phys specialization	Eng. Specialization.
Finance	Stock exchange/ venture cap	Bank	Bank/industry

East Asian Innovation Profiles (stylized/simplified)

North (Japan, Korea)	Centre ("Chinas")	South (Indon-Malay)
Large firms as drivers	SMEs as drivers	Mix
Few FDI, selected open.	Large FDI; role of diasporas	(Very) large FDI, broad openness
Bank supported innovation	Equity funded innovation	State funded innovation
Manufacturers (industry)	Processors (trade)	Builders (construction)
Plans	Pragmatism	Visions

The Island factor

- Finland, Taiwan, Ireland, Israel, Korea, and…other success stories: what do they have in common?
- They are islands, either geographically or culturally speaking, and they have gone under serious pressures (crisis, threats, etc).

The Island factor (II)

- This situation has given them a unique sense of identity with a feeling of urgency
- Hence a genuine capability to mobilize their inner resources (both human and financial) and to take advantage of external inputs (knowledge inputs in particular).

The Island Factor (III)

- So creating a sense of island under pressure is key as a successful policy drive for development and growth

- This applies not only at the national level, but also at the infra national level – regions, cities, as well as the supra national level – Europe for instance.

The Finland's success stories: an island, under pressure, drawing upon two cultures

- Most competitive nation (WEF)
- Ranked 1st in education (OECD), governance (WB), innovation (UNDP), etc
- Exceptional pragmatism and communitarian sense
- Strong crisis in the early 1990s (after crumbling of URSS)
- A cultural lone wolf, made of both Western and Asian cultures (B. Lewis)
- An "advanced primitive society"!

Conclusion

- From intellectual capital to mental capital
- Need to develop, deepen both quantitative analysis and qualitative approaches
- Think with long term policies to work on social capital and cultural bases
- Analytical and political challenges!

Annex

- KE work at World Bank Institute
- KE work in other parts of the Bank

Annex -- Knowledge Economy work at the World Bank (WBI)

- World Development Report 1998/99: “Using Knowledge for Development”
- WBI K4D program: Development Strategies with Knowledge and Innovation-related Policies at the core
  - Country studies (Korea, China, and a few others in the pipeline), lighter country assessments
  - Policy fora (China, India, Brazil, ASEAN countries, Maghreb) and conferences with WB Regions
  - Focused work on selected aspects (notably innovation, diasporas)

Annex -- KE work within the World Bank

- Regional Conferences with WBI support (ECA, MENA, AFR forthcoming)
- Studies in selected countries (e. g. Turkey, Lithuania, Tunisia)
- Follow on to WBI work within WB Regions (KE unit in Europe and Central Asia), interested in (lending) projects – KE projects beginning in Turkey and Romania
- Use of GDLN (video conference network)

Thank you!

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http://www.worldbank.org/wbi/knowledgefordevelopment/