

KNOWLEDGE NETWORKS AND MARKETS:

FOSTERING THE CIRCULATION OF IDEAS TO SUPPORT INNOVATION

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BACKGROUND:

- Ministerial Council of OECD, May 28, 2010:
“We will (...) develop knowledge networks and markets with effective protection of intellectual property rights”.

OECD Interest in KNM: the project was initiated mid-2009, following in-depth investigation of emerging knowledge markets in biotech; a steering group of external experts advises the OECD; a preliminary report is currently under discussion.

This presentation = intermediate results, still under discussion
=> no OECD stamp yet.

KNOWLEDGE CIRCULATION AS A KEY DETERMINANT OF INNOVATION

Innovation and productivity depend on access to knowledge.

Circulation of knowledge allows:

- new inventions (recombination);
- division of innovative labour;
- avoiding undue duplications;
- direct competition between inventors;
- broader use (diffusion) of inventions.

BUT: knowledge is non rival and not always easy to make excludable => circulation might reduce private value, hence deterring investment in invention in the first place.

KNM

Why is this challenge currently re-activated?

ICT (internet), globalisation => knowledge is circulating far more than before; the cost/benefit balance of knowledge circulation is shifting; new mechanisms for circulating knowledge are emerging or changing scale; open innovation modes are expanding.

= *A new world where invention activities are distributed and interconnected*

=> **Knowledge networks and markets** are the infrastructure that governs the circulation of knowledge, the nervous system of this new world.

A VARIETY OF KNM

Based on the type of knowledge involved and the underlying business model, here are three main types of KNM:

- IP marketplaces: trading and aggregating mechanisms for IPR
= patent markets, brokers, pools, funds, etc.
- Collaborative innovation: coordinate the joint production of new knowledge among separate entities = joint research (university/industry partnerships, innovation eco-systems/ clusters), R&D outsourcing, R&D crowdsourcing, customer innovation, open source communities
- Knowledge platforms: circulate existing knowledge, usually on the internet = experts networks and markets, aggregators (databases, Google Books), wikis, search engines.

POLICY CHALLENGES (1)

How can government encourage the emergence and expansion of KNM?

- Public investment in IT.
- IPR policies: balancing incentives and ease of access = at *national*, but also at *global* level.
- Public research policies: incentivising universities/ researchers both to share and to commercialise; making universities the *hubs* of the knowledge economy.
- Cluster policies (local, virtual)
- Setting up/using KNM for addressing societal and global challenges (environment, health, poverty)

POLICY CHALLENGES (2)

How can government ensure that KNM work effectively? (avoid mis-use)

- Competition policies (collaborative innovation, licensing, patent funds).
- IPR policies: quality of patents = novelty, disclosure (avoid marketplaces to become highways for trolls).
- Taxation policy: avoid the use of KNM for tax evasion purposes.
- International cooperation is needed.

A research agenda on KNM

Major policy questions include:

- Motivation to participate or not?
- IPR policies: copyright, patents etc.?
- The impact of KNM on geography (local development)?
- Metrics?

THANK YOU!

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