Building an enterprise-centred innovation system

Ken Warwick
Chair, OECD CIIE
Deputy Chief Economic Adviser
UK Department for Business, Enterprise and Regulatory Reform
Themes

• Enterprise and innovation policy framework
• Key policy issues
• Highlights of the work of the CIIE
Enterprise and innovation policy

- Often considered as two separate areas of policy, but they have much in common

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<thead>
<tr>
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<th>Innovation policy</th>
<th>Enterprise policy</th>
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<tbody>
<tr>
<td>Exploit research base</td>
<td>✓</td>
<td>✓</td>
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<td>Business support</td>
<td>✓</td>
<td>✓</td>
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<td>Tax credits</td>
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<td>Promote access to Debt and Equity finance</td>
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<tr>
<td>Promotion of behavioural change (Culture)</td>
<td>✓</td>
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<td>Education</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Regulation (inc IP)</td>
<td>✓</td>
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The innovation/enterprise environment:

**Innovation**

**Framework conditions**
- General business conditions
- Ease of firm creation
- Regulation (including IP)
- Public receptiveness to technology
- Availability of finance
- Incentives for innovation/enterprise

**Knowledge exchange & exploitation**
- Ease of co-operation/collaboration (B2B, B2KI)
- Transit of information flows
- Innovation infrastructure (metrology, standards)

**Demand for innovation**
- Return on investment (potential & actual)
- Business attitude and capacity
- Responsiveness of public services

**Enterprise**

**Framework conditions**
- General business conditions
- Ease of start-up and exit
- Better Regulation
- Availability of finance
- Access to markets
- Culture (risk/failure v opportunity)

**Knowledge exchange & exploitation**
- Personal networks
- Work experience
- Education (inc enterprise education)
- Role models
- Migration

**Demand for enterprise**
- Need for independence/control
- Business ideas
- Opportunity entrepreneurship
- Necessity entrepreneurship
- Public services – social enterprises
Innovation policy has multiple dimensions

Opportunities:
- Public procurement
- Regulations

Enablers:
- Intellectual property framework
- Measurement system
- Standards

Advice and support for Business:
- Best practice Programmes
- Support for Developing new Technology
- Help accessing Finance
- R&D Tax Credit

Business innovation

Building blocks of innovation: a supportive climate
- Macroeconomic stability
- Competition policy
- Education and training policy
- Physical and IT infrastructure
Key policy issues: Frameworks for competition and regulation

- Theoretical arguments complex: competition provides spur to innovate, but erodes rewards from innovation
- Arguments difficult to test empirically, in practice likely to differ from one market to another
- Competition policy needs to be alive to need to innovate
- Case-by-case approach likely to be most fruitful
- Goal-based regulation can provide incentives to innovate (e.g. EU New Approach Directives).
Key policy issues: Management of publicly-owned sector

- Public services and public enterprises can face different incentives to innovate and opportunities
- UK studies of “hidden innovation” in public services show ability to innovate can be affected by:
  - Broader legal framework within which the services operate (i.e. laws may prevent certain forms of innovation)
  - Importance of engaging with both frontline staff and users of services
Key policy issues: Intellectual property framework

- IP framework shapes incentives to innovate
- Relationship complicated; policy needs to strike a balance between protection of investments and diffusion of knowledge
- Both the legal content and the enforcement of IP regulation affect behaviour
- IP is sometimes a factor in decisions on location of investment
Key policy issues: Links between universities and business

- Degree of interaction between businesses and universities important influence on exploitation of R&D
- Universities and firms have different cultures and face different incentives
- Number of policy approaches aim to build relationships:
  - Regulation (US, Bayh-Dole)
  - Capacity-building (UK, Higher Education Innovation fund)
  - Stimulation of demand (Netherlands, innovation voucher pilot)
Highlights of work by the OECD Committee on Industry, Innovation and Entrepreneurship (CIIE)

Ken Warwick
Chairman

Beijing, 27 August 2007
Ongoing work at CIIE

1. Changing nature of manufacturing
2. Global value chains
3. Globalisation and innovation in the business service sector
4. Intellectual assets and value creation
5. Software innovation
6. The Bologna process
Changing nature of manufacturing

• **Global manufacturing output is increasing**
  – Even faster growth in manufacturing trade
  – Global integration of manufacturing is rising

• **Declining share** of manufacturing in OECD
  – Increasing value added but steady fall in employment (especially textiles and metal working industries).
  – High-tech manufacturing also affected; but OECD countries continue to innovate strongly
  – Manufacturing employment falling in most non-OECD

• **Hard to distinguish** manufacturing from services
  – Growing share of service-related jobs in manufacturing
  – Interaction complexity between the two sectors is growing
Global value chains

- Character of *globalisation is changing*
  - Physical fragmentation of the production process
  - Offshoring of many services enabled through technology

- This means *new challenges*
  - Competition is growing
  - SMEs face particular strong pressures

- How to *move up the value chain*?
  - Facilitate innovation and entrepreneurship
  - Develop human capital and new economic activities
  - Create flexible production, labour and finance structures
  - Help people adjust to changes
Globalisation and innovation in the business service sector

- **Growing outsourcing and offshoring** of business services

- **Positive economy-wide productivity effects**
  - Rising efficiency of business service inputs
  - Move from “closed” to “open” innovation paradigm
  - Firm-level studies confirm positive spill-over effects

- Need to create the **right business environment**
  - Trade and investment liberalisation
  - Streamline standards and regulations
  - Stimulate innovation through IPR regimes
  - Reliable measurement and reporting of intellectual assets
Intellectual assets and value creation

- Shift towards *innovation-driven economy*

- Intellectual assets: *sources of economic growth*
  - Economic potential and spill-over of R&D
  - Human capital key driver of GDP growth
  - Productivity growth from software and ICT more broadly

- *Sustained value creation* through intellectual assets management
  - Frameworks conditions for creation of intellectual assets
  - Role of capital markets
  - Measures and disclosure of intellectual assets
  - Diffusion of knowledge
Software innovation

- **Project objective:** What are the factors that drive innovation in the software sector?

- **Module 1:** Innovation in software industry
  - Factors that promote innovation
  - The innovation process: how it differs from other sectors

- **Module 2:** R&D and market environment
  - Current market characteristics
  - Link between R&D and innovation

- **Module 3:** Users’ perspective (security & access)
  - The role of socio-economic infrastructures
The Bologna process

- **Initiated in 2000**, at the OECD ministerial-level international conference in Bologna, Italy
  - Objective: Foster the entrepreneurial agenda and SME competitiveness at the global level.

- **Main themes**
  - Bring guidance to governments to help SMEs meet challenges and reap benefits of globalisation.
  - Improve dialogue and co-operation on SME-issues

- **Moving forward**
  - 2nd ministerial-level SME conference in Turkey, 2004
  - Foster entrepreneurship and SMEs as drivers of economic growth
Thank you very much