

Global Perspectives on Innovation Policy

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The Information Technology and Innovation Foundation (ITIF) is a Washington, D.C.-based think tank at the cutting edge of designing innovation policies and exploring how innovation will boost economic growth and improve quality of life. ITIF focuses on:

- Innovation “verticals”: energy, Internet and IT transformation, life sciences, manufacturing, and telecommunications
- Innovation “horizontal”: trade, tax, talent, and technology policy
- “Innovation economics” as alternative to mainstream economics.

■ Today's Presentation

1

■ What is Innovation?

2

■ Why is Innovation Important to Countries?

3

■ How is the Process of Innovation Changing?

4

■ Principles for Effective Innovation Policy

5

■ Global Innovation Policy Best Practices

■ What is Innovation?

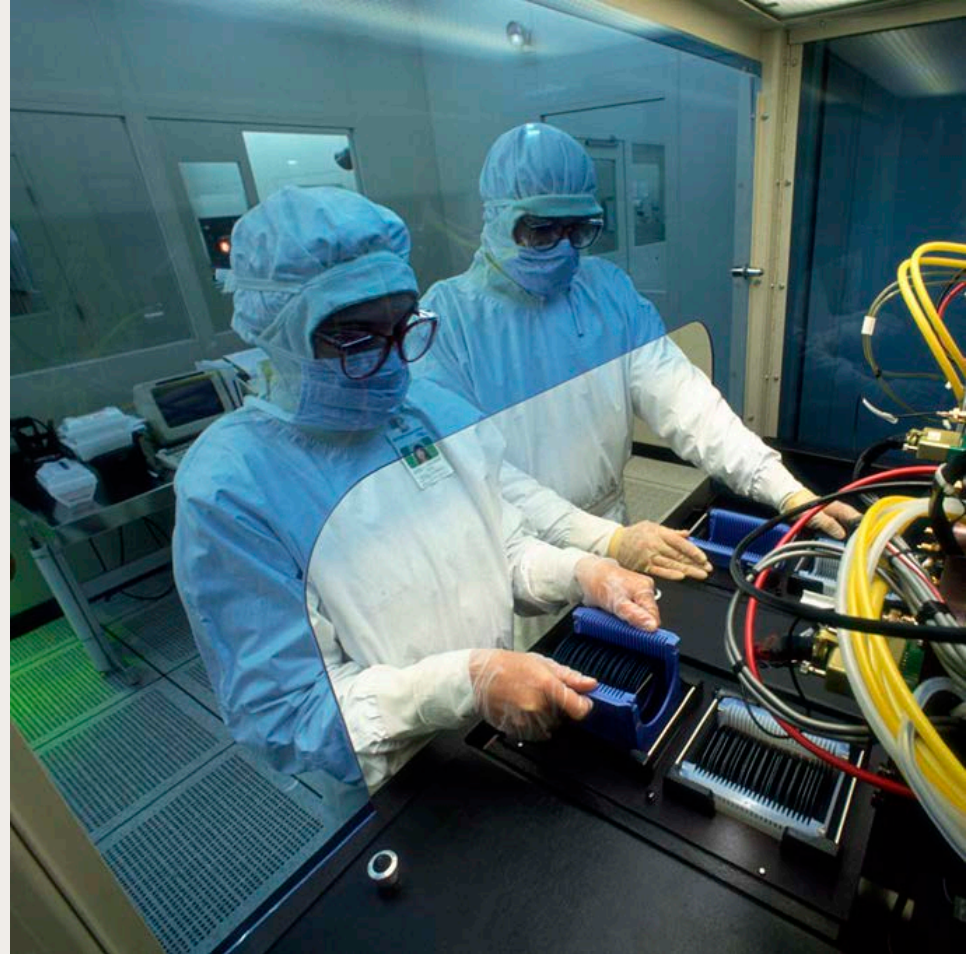
To innovate is...
to challenge and change
the status quo to
enhance the customer's
experience and bring
new value to them.



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■ Innovation is...

**the development
of advanced
cutting-edge new
technologies.**



- but it is also ...

**embedding
traditional
products with
advanced
technologies,**



■ And...

**putting in
place new
production
processes**



■ And...

**developing
new business
models.**



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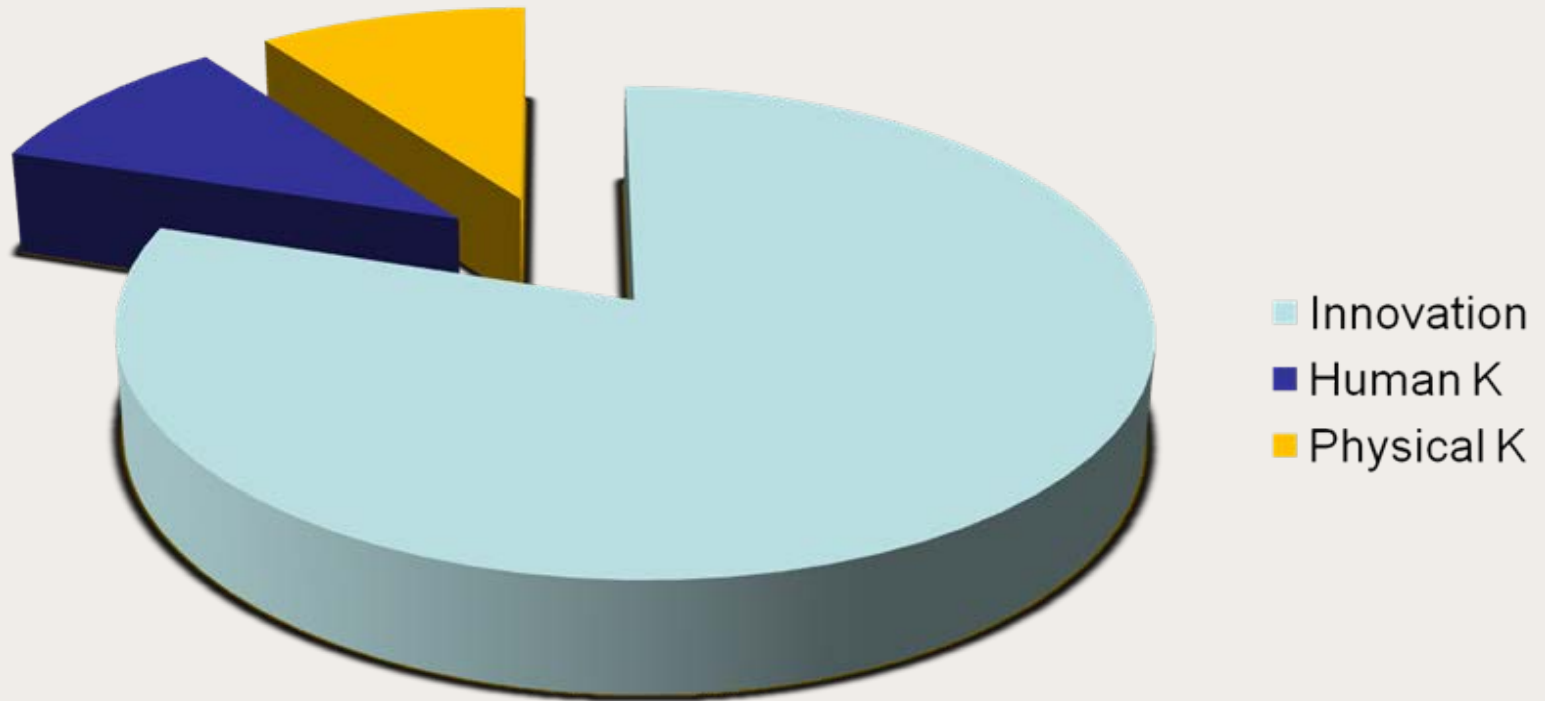
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■ Global Innovation Policy Best Practices

■ Innovation Drives Growth



- It is a Key Driver of Productivity Growth

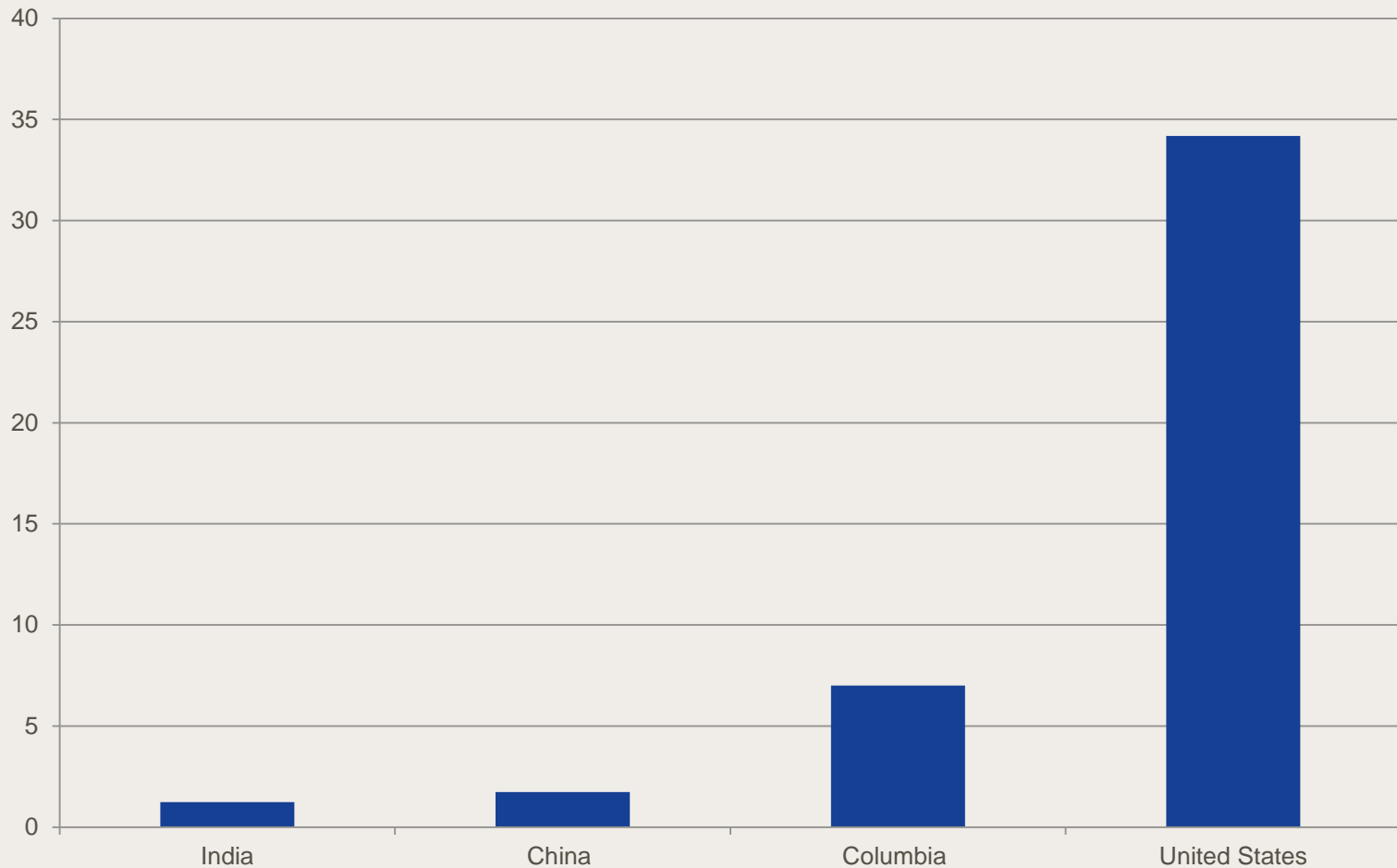


It Provides Comparative Advantage, Especially

- Over Low-Wage Nations



■ And Columbia is **Not** the Low-Wage Producer



Manufacturing hourly compensation costs in USD (2009). Source: U.S. Bureau of Labor Statistics

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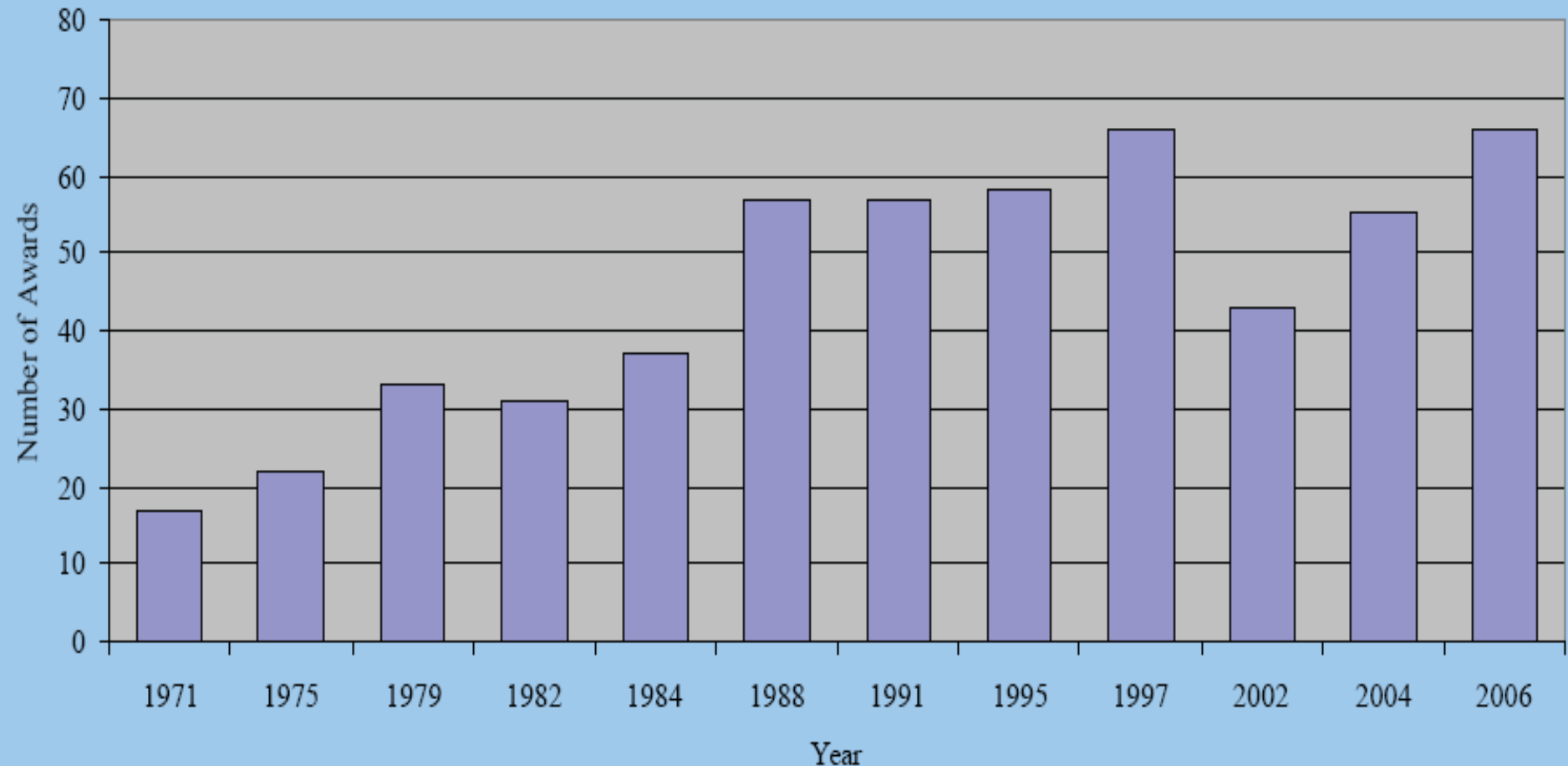
■ Principles for Effective Innovation Policy

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■ 1) The new innovation system is more collaborative

Figure 5: Innovation Awards to Interorganizational Collaborations



Source: Fred Block and Michael Keller, "Where Do Innovations Come From? Transformations in the U.S. National Innovation System, 1970-2006, (ITIF, 2008).

- 2) IT is Enabling Business Model Disruption

**by enabling
new business
models.**



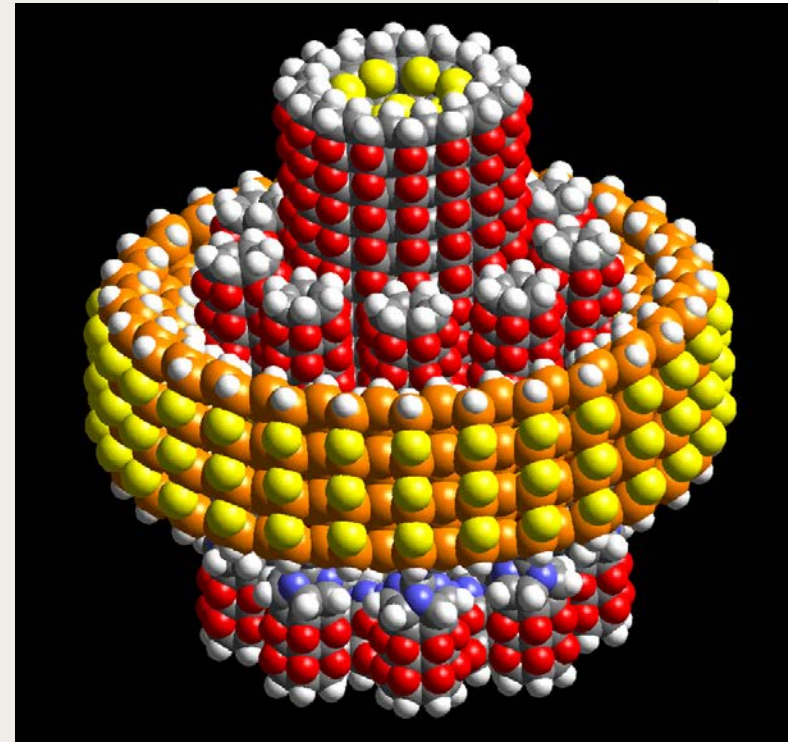
■ 3) Service-Based Innovation is Becoming More Important



■ 4) Data is the New Innovation Platform



■ 5) The Next Wave Will Likely be Nano-IT-Bio



6) More Competition from Countries Seeking ■ to Win Through “Good” Innovation Policies



■ 7) But Also Competition from “Bad” or “Ugly” Innovation Strategies



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How to Succeed in Innovation?:

■ It's Hard, but Not Complicated.

- Need firms that have incentives to innovate, take risks and invest for the long term.
- Firms need to be able to obtain adequate rewards from it.
- Are not restricted by the state.
- Are supported by the state with high skilled workers, investment in S&T, and infrastructure (physical, digital and infratechnology).
- Have access to global markets.

■ Principles for Effective Innovation Policies

- Focus on innovation, not just sci-tech.

■ Innovation is More than Sci-Tech Product Development

		Phase of Development				
Type of Innovation		Conception	Research & Development	Transfer	Production/ Deployment	Usage
	Products					
	Services					
	Production process					
	Organizational models					
	Business models					

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- Focus on innovation, not just sci-tech.
- Specialize in areas of unique competitive strength.

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- Focus on innovation, not just sci-tech.
- Specialize in areas of unique competitive strength.
- Don't forget innovation in all sectors and diffusion as well as development.

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■ Tax Policies to Drive Innovation

- ✓ Patent boxes (Belgium, France, Netherlands, UK)
- ✓ Refundable R&D tax credits (France, Norway, Australia)
- ✓ Collaborative R&D tax credits (Korea, FR, JP, Spain, UK)
- ✓ R&D tax credits to services industries; (Australia, Denmark, Finland, Netherlands, Norway)
- ✓ Generous R&D tax credits (e.g., France, India)
- ✓ Knowledge tax credits

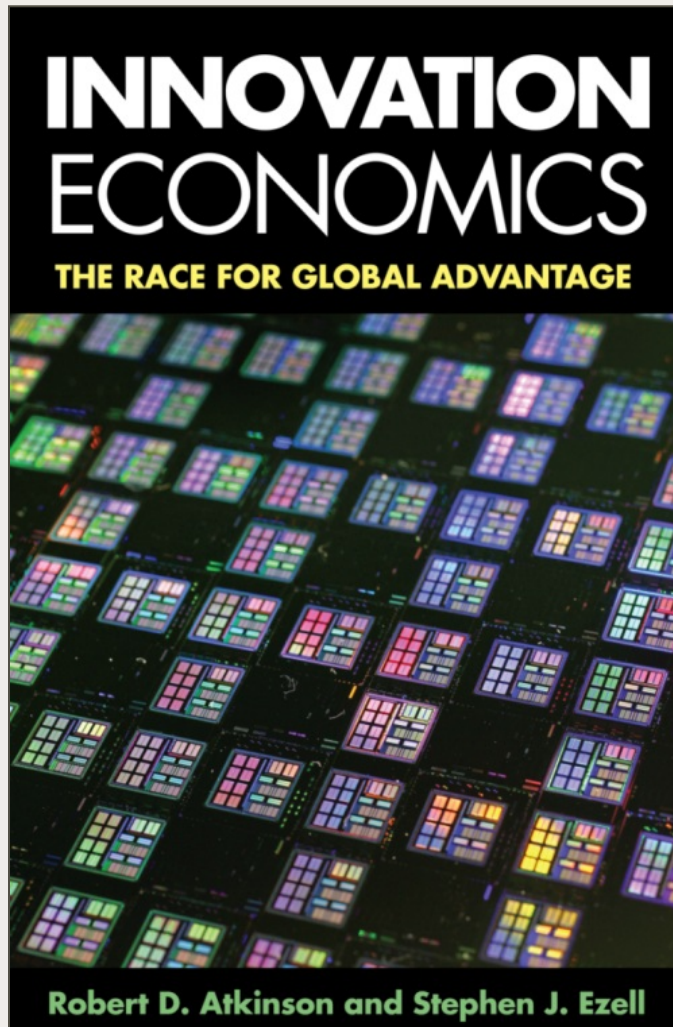
■ University Policies

- ✓ Innovation vouchers (Austria, Canada, Germany, Netherlands)
- ✓ Accountability for results (Finland and Sweden)
- ✓ Industry-University Centers (Germany, Taiwan, U.S.)
- ✓ Industry-Aligned R&D (U.C. San Diego)
- ✓ Specialized Colleges (Olin College)
- ✓ Cluster-based Higher Ed (Montreal's Pharma Tech program)
- ✓ Entrepreneurial Education (U.S.)
- ✓ Professional Masters' Degrees (U.S.)
- ✓ Industrial Ph.D. program (Denmark, Brandenburg, Alberta)

■ General Innovation Policies

- ✓ Design assistance (UK, Ontario).
- ✓ “On the spot” web registration for new firms (Portugal, Chile).
- ✓ Apprenticeships (Germany, Switzerland)
- ✓ Equity in new start ups in incubators (Taiwan)

 www.globalinnovationrace.com



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Muchas Gracias

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