



# Hudson Institute Initiative on Future Innovation: *An Overview*

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# Hudson Institute

- n Founded by Herman Kahn, 1961
- n Future and market-oriented policy research that promotes security, prosperity, and freedom
- n Specializing in integrated research—strategy, international affairs, economics, demographics, and technology
- n Unconventional and strategic

# Hudson Policy Achievements

- n *“Thinking about the Unthinkable” (1961)*
- n *Rise of Asia (1962)*
- n *Civil defense (early 1960s)*
- n *Workforce 2000 (1987)*
- n *Revolution in Military Affairs (1988)*
- n *Wisconsin Works welfare reform (1994)*
- n *U.S.-Japan-India trilateral relations (2005)*
- n *Privatization of Development Assistance (2006)*

# Innovation Agenda

- n Review of academic literature and current debates
- n Outreach to advisory board and industry leaders
- n Original research and workshops
- n Public conferences
- n Briefings, publications, op-eds

# Preliminary Findings

- n Slowing pace of technological innovation--outside IT, energy
- n But IT, energy innovations have large, wide-ranging potential
- n Cost inflation, declining productivity in education
- n Decline in new-business formation
- n Increased uncertainty throughout business community
- n Strong support for government support for basic research—  
but questions over productivity of grant-making methods
- n “Status quo bias” in public and private sectors inhibits  
practical deployment of new science and technology

# Innovation Drivers and Barriers

## Drivers:

- n Democratic values
- n Free enterprise
- n Entrepreneurial culture
- n Openness to new ideas
- n Excellence in education
- n Competitive finance, IP
- n Good government:
  - n Sound public finance
  - n Support basic research and "innovation infrastructure"
  - n Wide berth to private markets

## Barriers:

- n Mental complacency
- n Educated incompetence
- n Entrenched bureaucracy (private and public)
- n Status-quo bias
- n Government barriers:
  - FDA (new drugs, devices)
  - FCC (spectrum)
  - Immigration
  - Politicized finance
  - Tax, regulatory policies that punish risk-taking



# Innovation and the US Economy

- n Technological innovation a key source of economic growth and social progress throughout our history
- n Economic performance poor since 2008 financial collapse
- n Per capita GDP, median income, and total factor productivity had grown more slowly since 1970s
- n Two schools of thought:
  - n Pessimists—future pace of technological innovation and economic growth will be slower than 1800-1970 norms
  - n Optimists—future pace of innovation unknowable; IT and energy innovations likely to spur innovation in many other fields

# Premises and Heuristics

- n Government has legitimate, important role in innovation
- n Successful policies of other nations may not be good for US
- n Don't suppress global diffusion of US innovations (except for national security)
- n Innovation policy is separate from trade policy
- n Government should specialize in promoting:
  - Major advances in pure ideas, natural discovery, physical invention
  - Rapid deployment of new ideas and technologies
  - Overcoming status-quo bias and political-bureaucratic resistance to innovation
  - Public and private finance for genuine investment, not consumption



# Research Topics

1. *Technological Innovation and Economic Growth*
2. *American Accomplishment Today*
3. *Innovation in Higher Education: Technology, Institutions and Finance*
4. *Three Opportunities for Dramatically Accelerated Innovation—Wireless Communications, Air Transportation, and Medical Drugs and Devices*
5. *Innovation and Entrepreneurship*
6. *Real Crowdsourcing: Information and Prediction Markets*
7. *Clearing the Path from Ideas to Applications*
8. *Financing Innovation*
9. *Government Support for Science and Technology*
10. *Politics versus Science in Energy Innovation*

# Advisory Board

- n Marie-Josée Kravis, Hudson Institute
- n Eric Schmidt, Google
- n George Scangos, Biogen-IDEC
- n Peter Thiel, PayPal/Facebook
- n Marc Tessier-Lavigne, Rockefeller U.
- n Paul Singer, Elliott Management
- n Craig Mundie, Microsoft
- n Ray Johnson, Lockheed Martin

# Project Staff

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n **Tevi Troy, Senior Fellow** – FDA specialist; former Deputy Secretary, Health and Human Services

n **David Tell, Senior Fellow** – Editor; former White House speechwriter and former editorial editor, *The Weekly Standard*