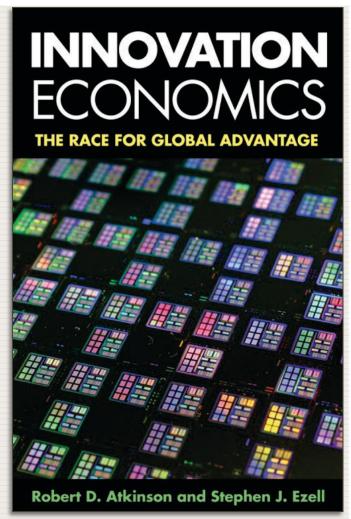


INNOVATION
ECONOMICS:
THE RACE FOR
GLOBAL
ADVANTAGE

#### **Rob Atkinson**

The Information Technology and Innovation Foundation



## Today's Presentation

- What's the Diagnosis?
- What's the Cause?
- What's the Solution?
- 4 Overcoming the Hurdles
- Getting Inspired to Win





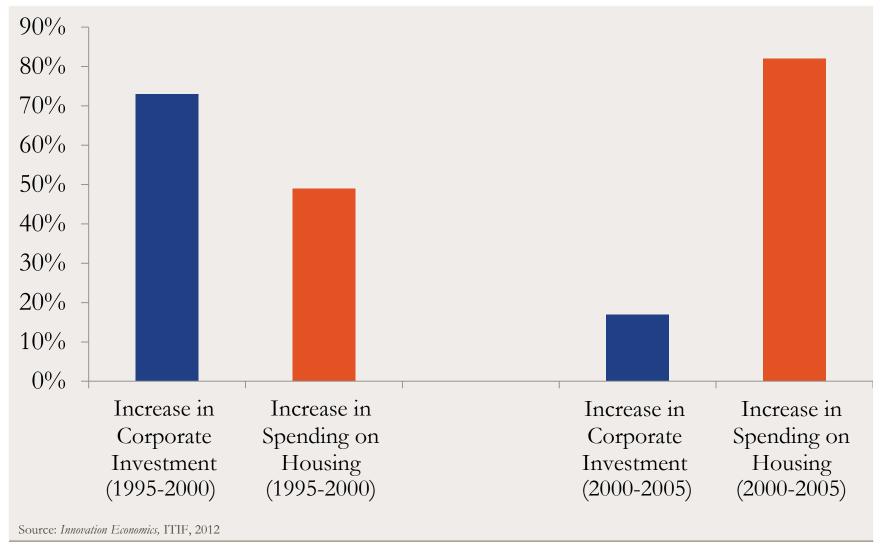
## The Well of Investment Dried Up



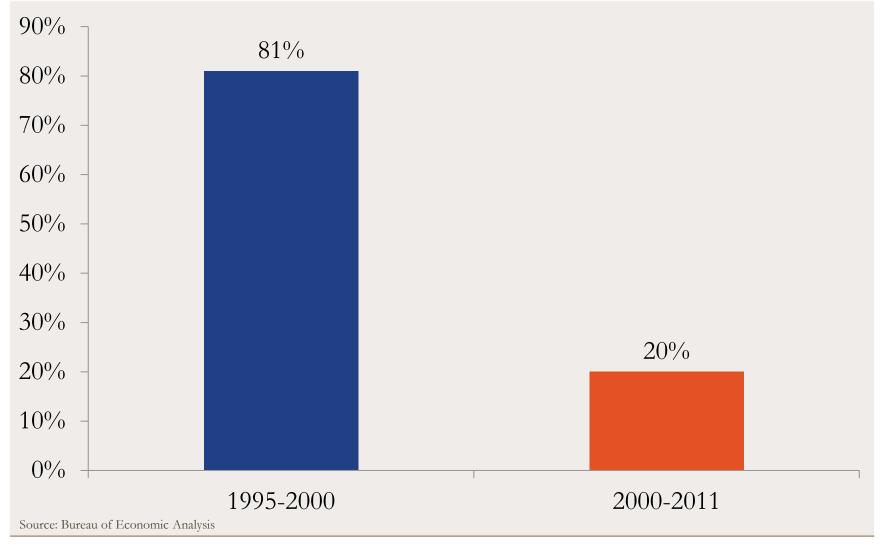
### As We Went From Making Things to Making Money



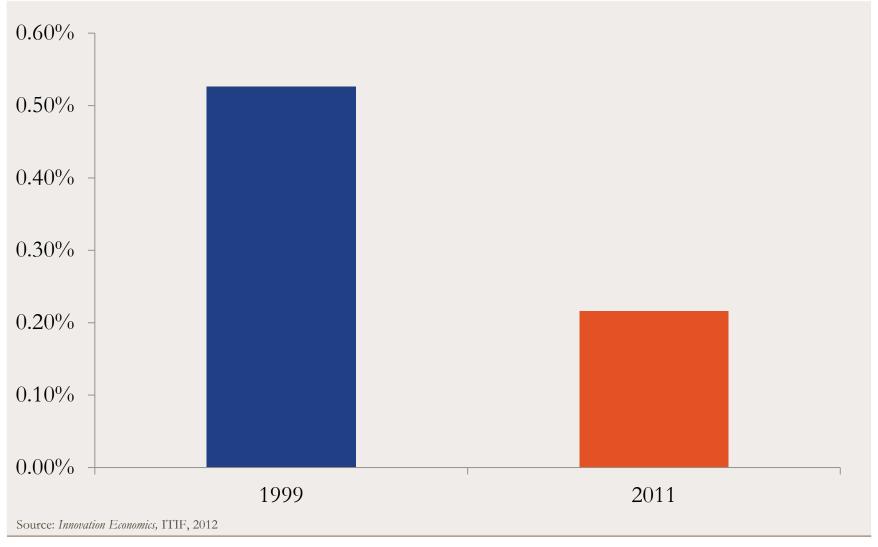
### Investment Fell, Housing Boomed



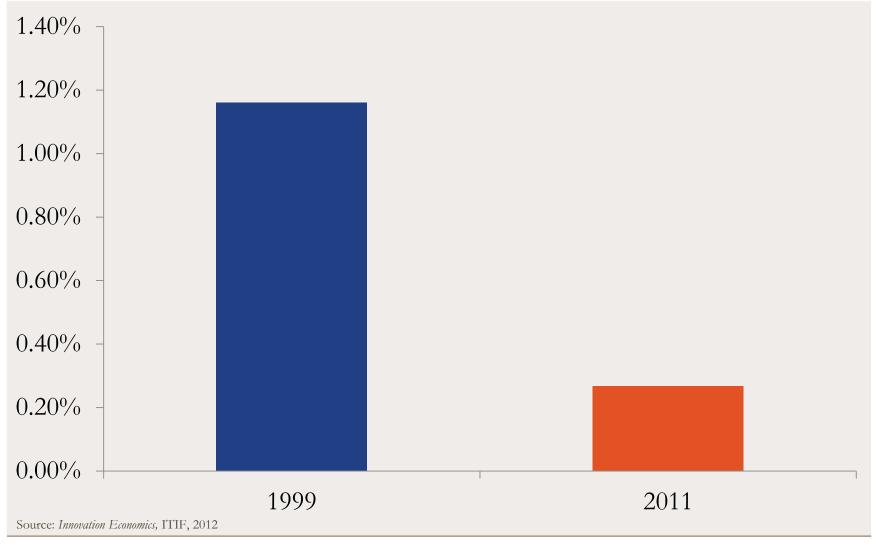
# Growth in Private Investment in Equipment & Software Has Been Stagnant



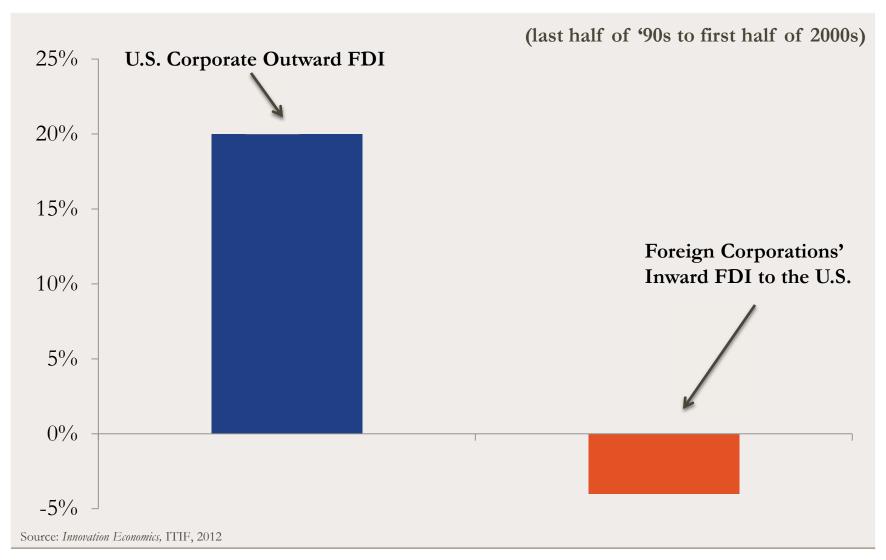
### Venture Capital Shrank (Share of GDP)



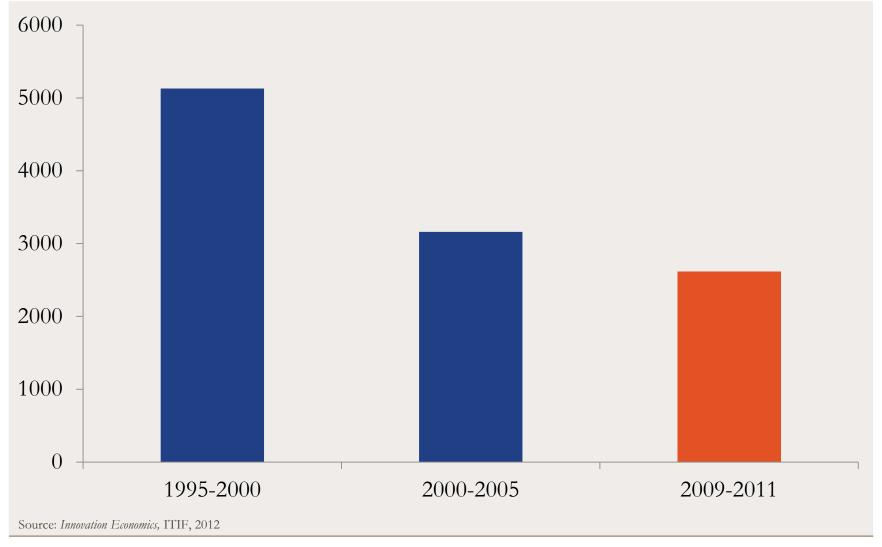
## ■ IPOs Shrank (as a Share of GDP)



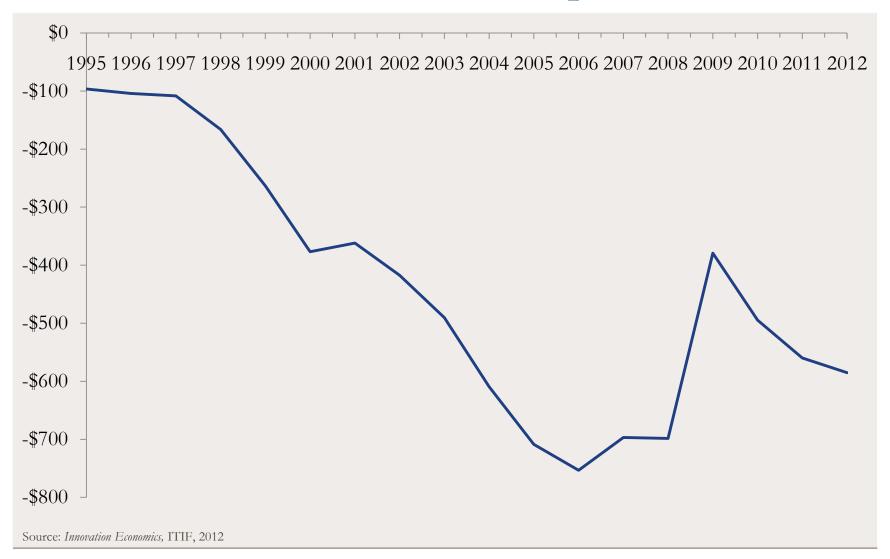
### Outward FDI Grew, Inward FDI Shrank



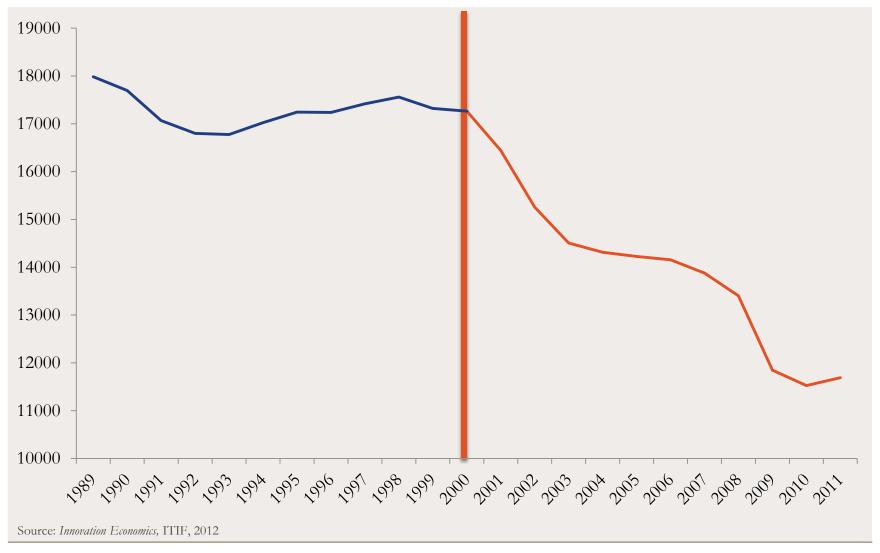
# Major U.S. Industrial Manufacturing Relocations and Significant Expansions Shrank



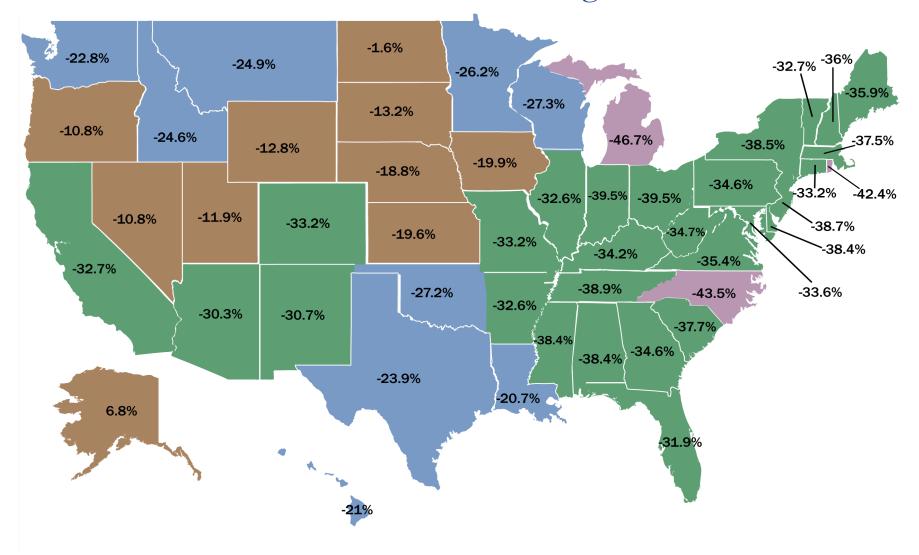
## As the U.S. Trade Deficit Exploded



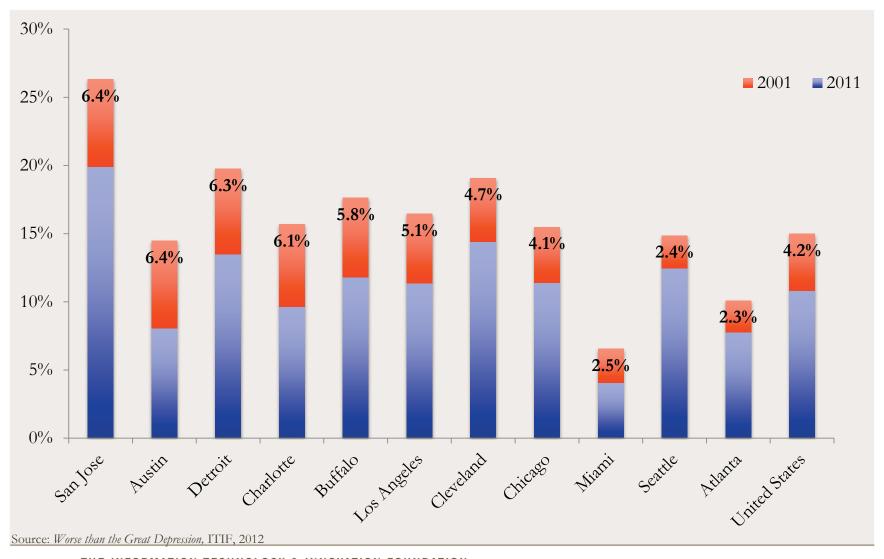
### And Manufacturing Employment Crumbled



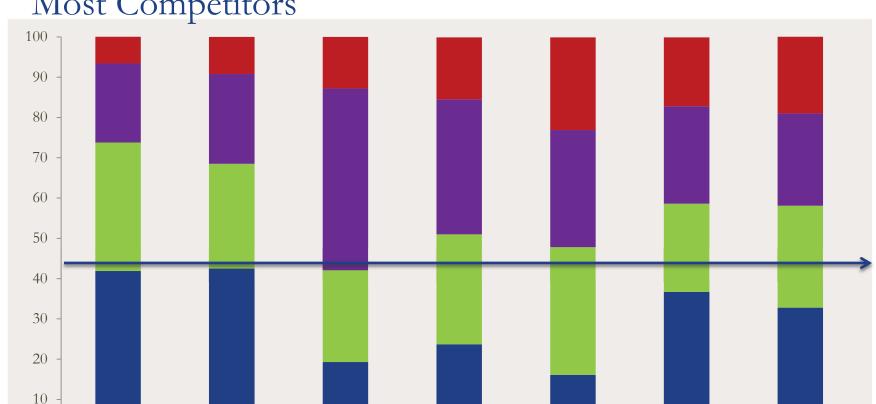
### All States But One had Manufacturing Losses, 2000-2010



### Most Metropolitan Areas Saw Manufacturing Job Losses



As a Result, U.S. Manufacturing is Less High-Tech Than Most Competitors



■ Low-technology ■ Medium-low technology ■ Medium-high technology ■ High-technology

Japan

Korea

United

Kingdom

 $Source: \textit{International Benchmarking of Countries' Policies and Programs Supporting SME Manufacturers, ITIF, 2011. Data from OECD. \\$ 

Germany

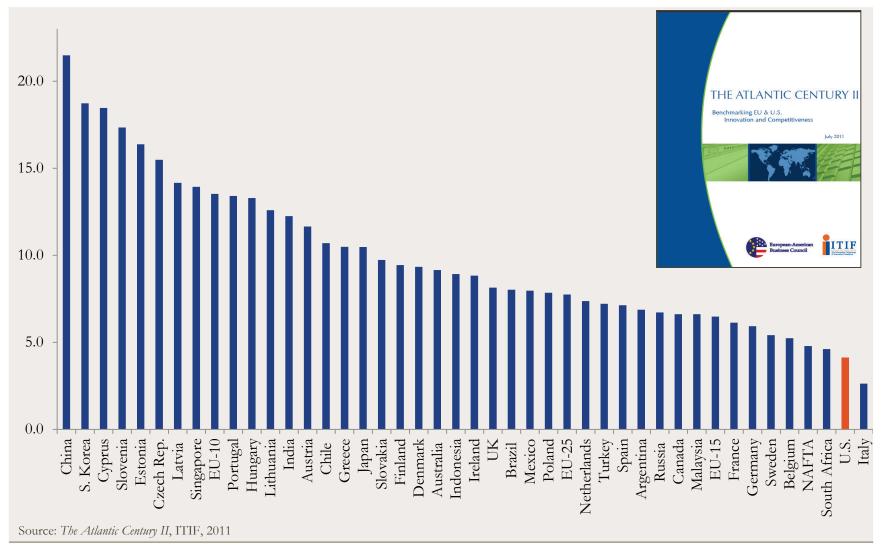
Canada

0

Australia

**United States** 

### ■ U.S. Lags Behind in Innovation Progress (2000-2011)



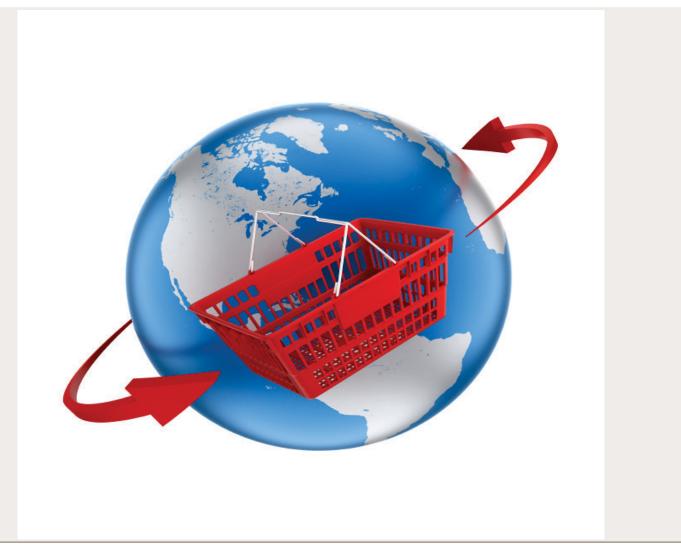
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## Companies Went From Shopping the States...



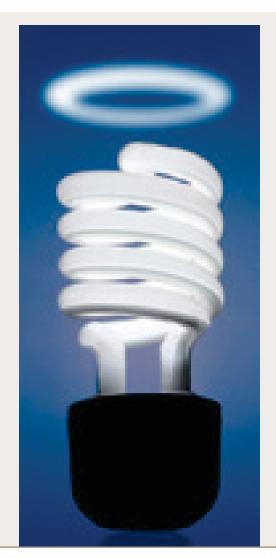
## ...To Shopping the World



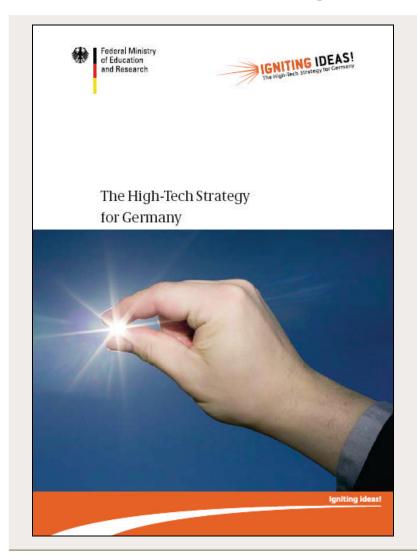
## U.S.-Headquartered Manufacturing Foreign Capital Investment Doubled as Share of U.S. Investment



# Other Countries Sought to Win Through "Good" Innovation Policies



### They Have Strategies to Help Innovation Succeed



## SCIENCE AND TECHNOLOGY BASIC PLAN

(Provisional translation)

MARCH 28, 2006

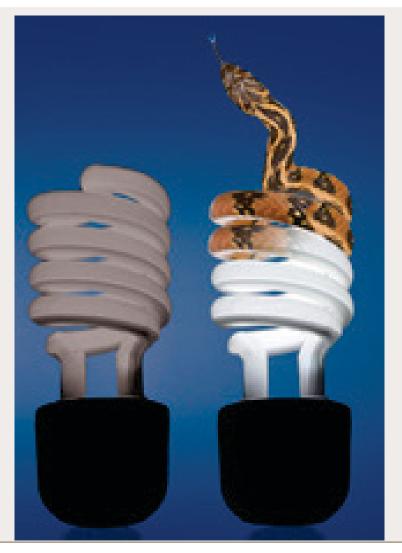
GOVERNMENT OF JAPAN

### Select Nations with Innovation Strategies

- China
- Denmark
- Finland
- Germany
- India
- Ireland
- Japan
- Korea
- Netherlands

- Norway
- Portugal
- South Africa
- Sweden
- Taiwan
- Thailand
- United Kingdom
- Uruguay
- United States

## But Also "Bad" or "Ugly" Ones



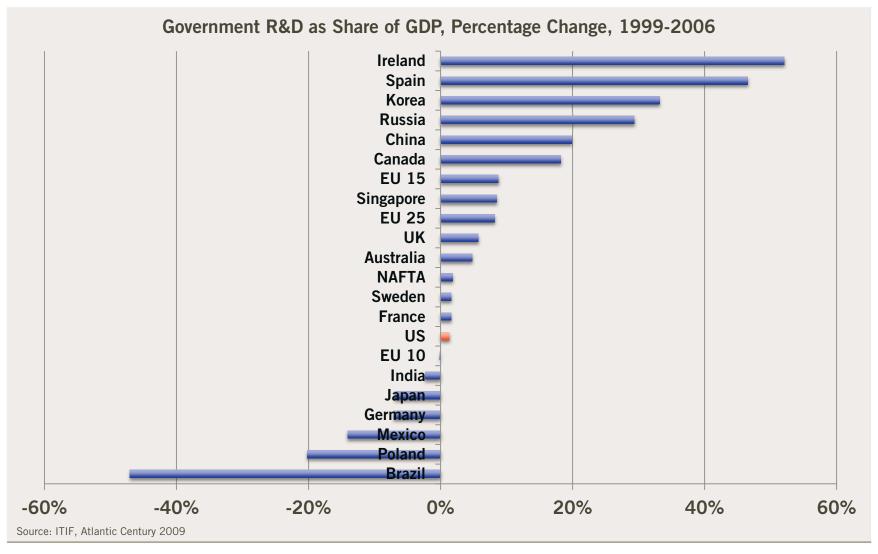
## • While the U.S. Failed to Respond



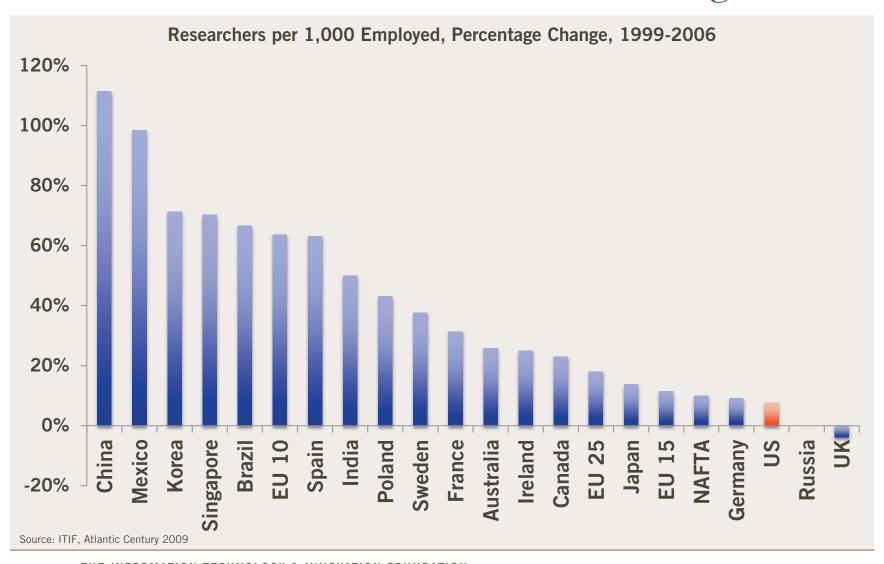
#### U.S. Now a Less Attractive Location for Investment

- Highest corporate tax rate in the OECD
- Lagging high-skill immigration policy
- Faltering education system (23<sup>rd</sup> in science education)
- Inadequate physical infrastructure (23<sup>rd</sup> in quality of infrastructure)
- Insufficiently deployed advanced IT application platforms (e.g., smart grid, health IT, etc.)
- Relatively increasing regulatory burden

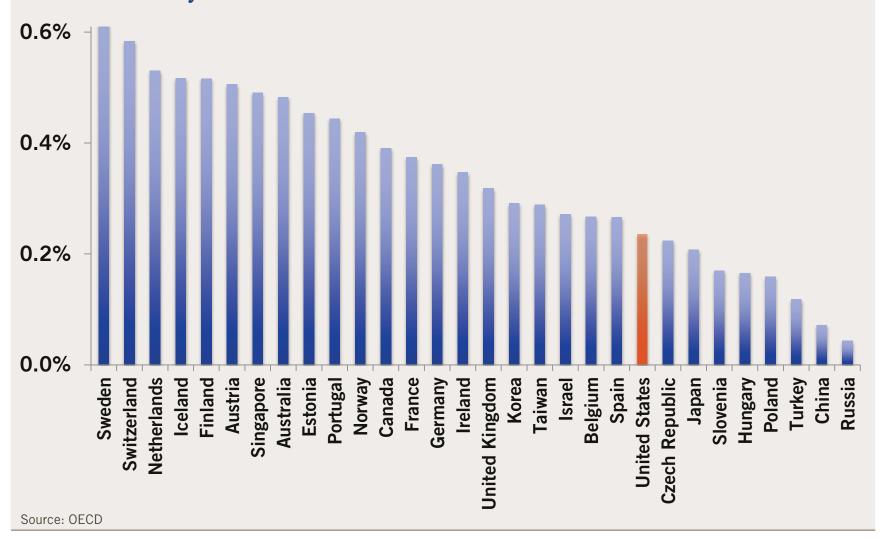
### ■ Growth in U.S. Federal R&D Investment Stagnate



### As Has Growth in U.S. Scientists and Engineers



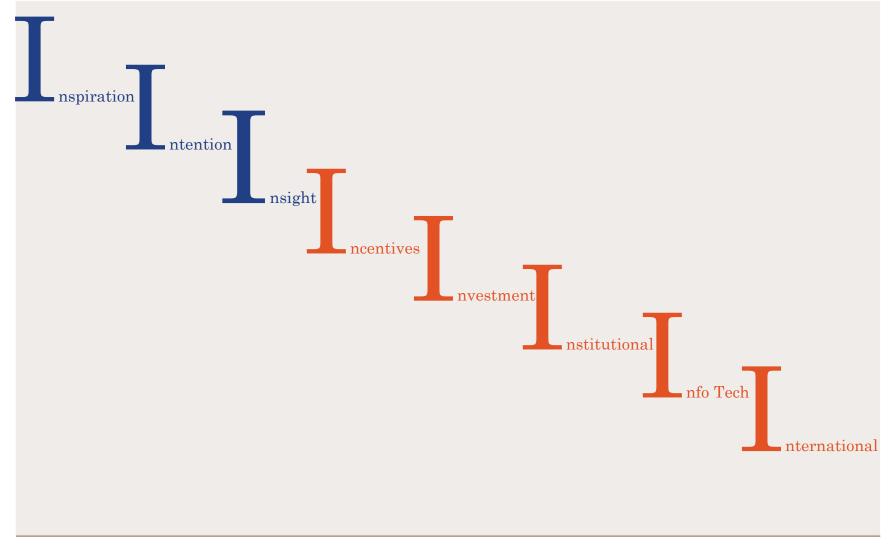
U.S. Ranks 22<sup>nd</sup> in Government Funding for University Research as Share of GDP



## Today's Presentation

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## Apply the 8 "I's" of Innovation Policy



## Inspiration



## Intention



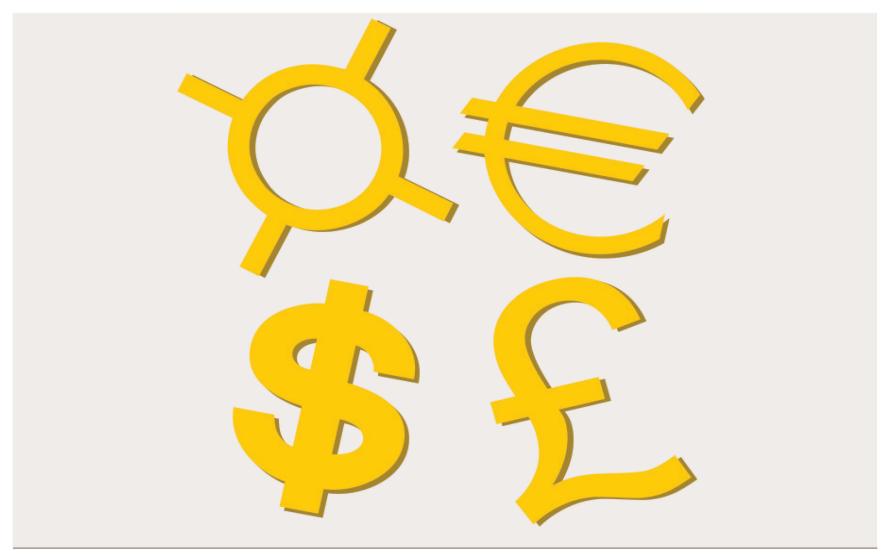
## Insight: the U.S. is Falling Behind



# Incentives

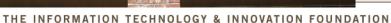


# Investment

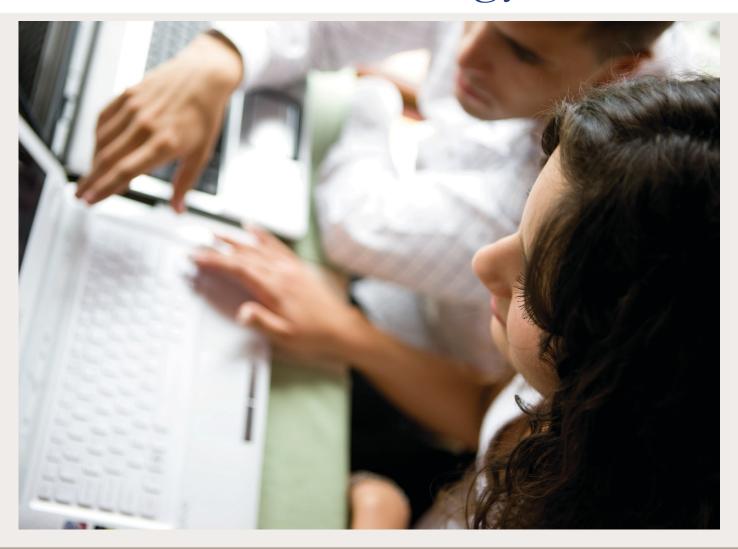


# Institutional Innovation





# Information Technology



# International



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#### A Failed Washington Economic Consensus

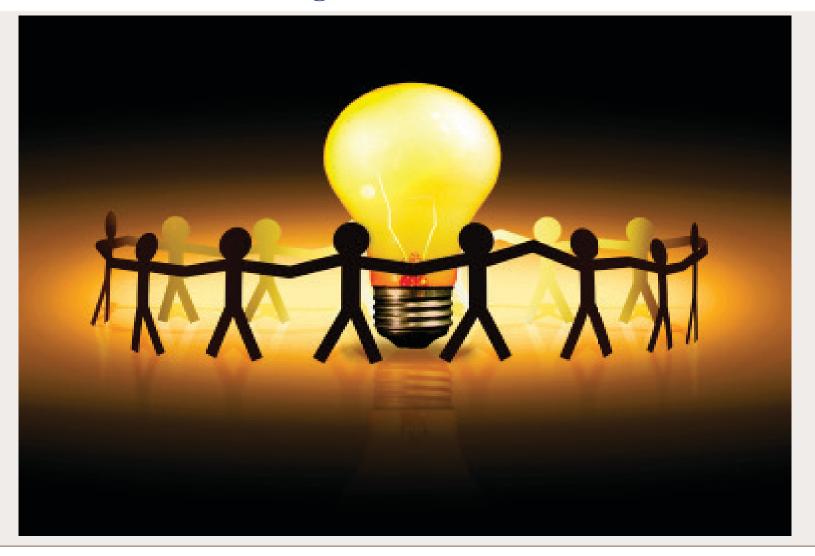




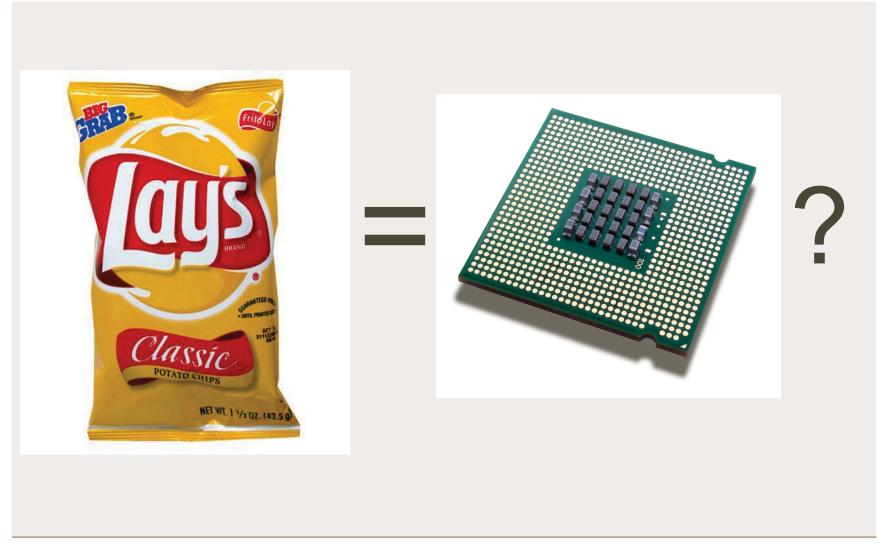




#### We Need a Washington Innovation Consensus



■ We Need to Recognize that Manufacturing and Tech are Special



#### And Overcome Innovation & Competitiveness

Policy Getting Caught Up in Partisan Conflict

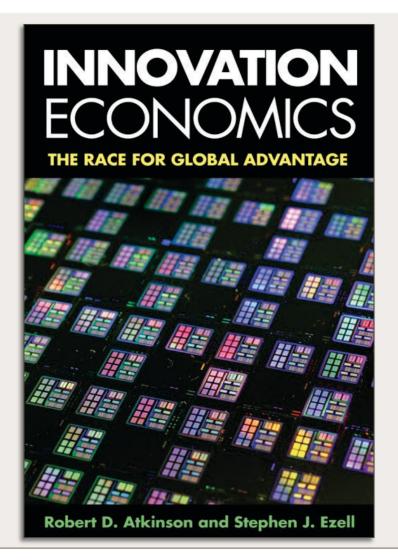


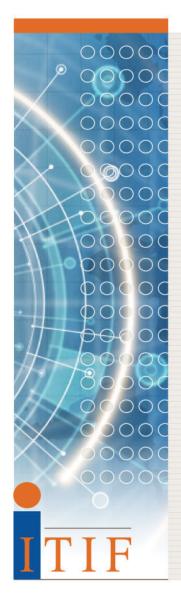
# Today's Presentation

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#### Your Voice Needs to Be Heard







# Thank You

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