

# Reshaping Regional Economic Development: Clusters and Regional Strategy



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This presentation draws on ideas from Professor Porter's articles and books, in particular, [The Competitive Advantage of Nations](#) (The Free Press, 1990), "Building the Microeconomic Foundations of Competitiveness," in [The Global Competitiveness Report](#) (World Economic Forum), "Clusters and the New Competitive Agenda for Companies and Governments" in [On Competition](#) (Harvard Business School Press, 2008), "[Creating Shared Value](#)" (Harvard Business Review, Jan 2011), the [Social Progress Index Report](#) (Social Progress Imperative) and ongoing related research. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of Michael E. Porter. For further materials, see the website of the Institute for Strategy and Competitiveness ([www.isc.hbs.edu](http://www.isc.hbs.edu)), FSG ([www.fsg.org](http://www.fsg.org)) and the Social Progress Imperative ([www.socialprogressimperative.org](http://www.socialprogressimperative.org)).

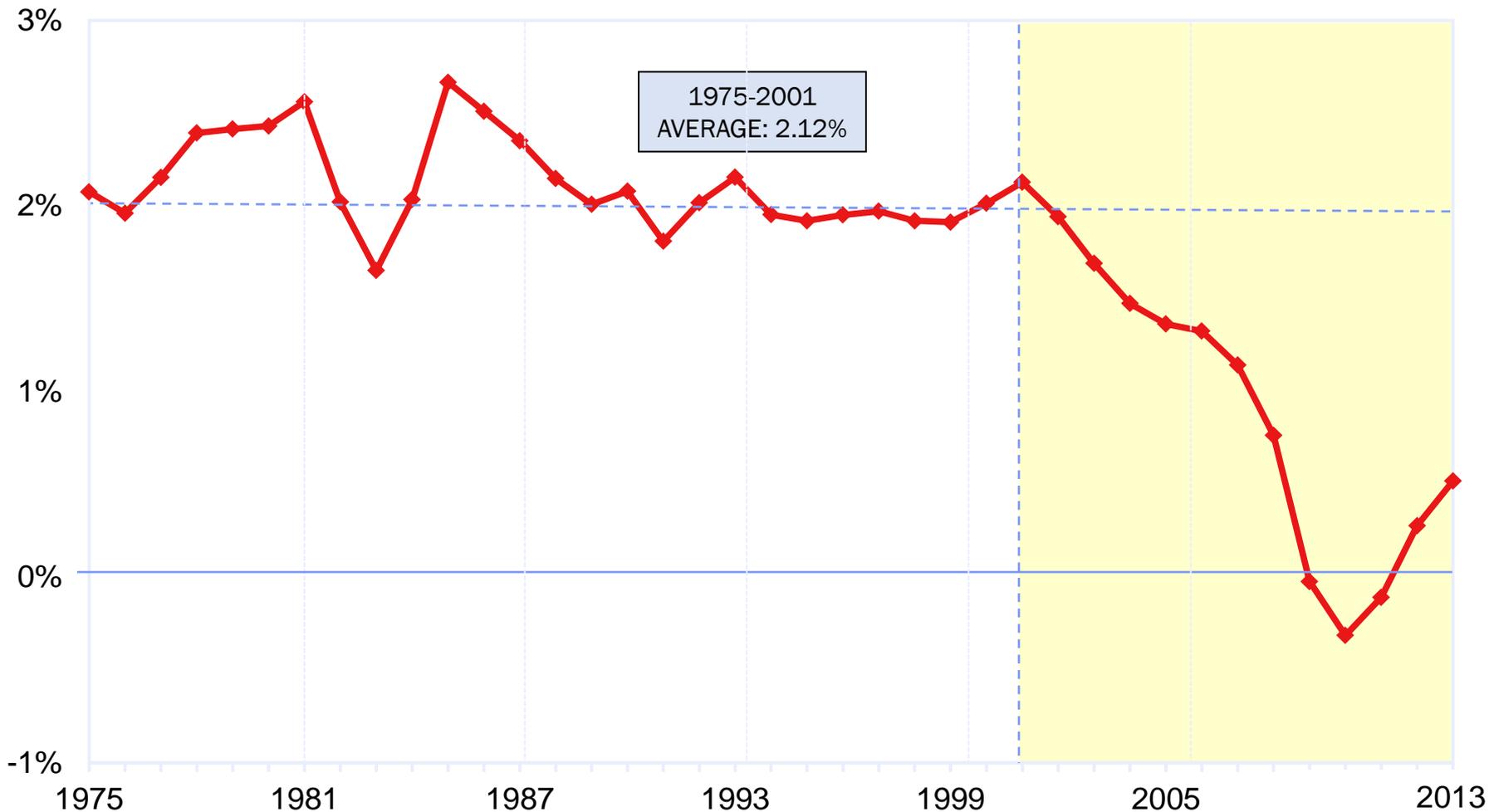
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# The Challenge

- The US economy is **slowly emerging** from the deepest crisis we have experienced in a generation
- However, the trajectory of the U.S. economy was already **disturbing** well before 2008 and the long term trend is continuing
- The **Midwest** is no exception

# Disturbing Trends

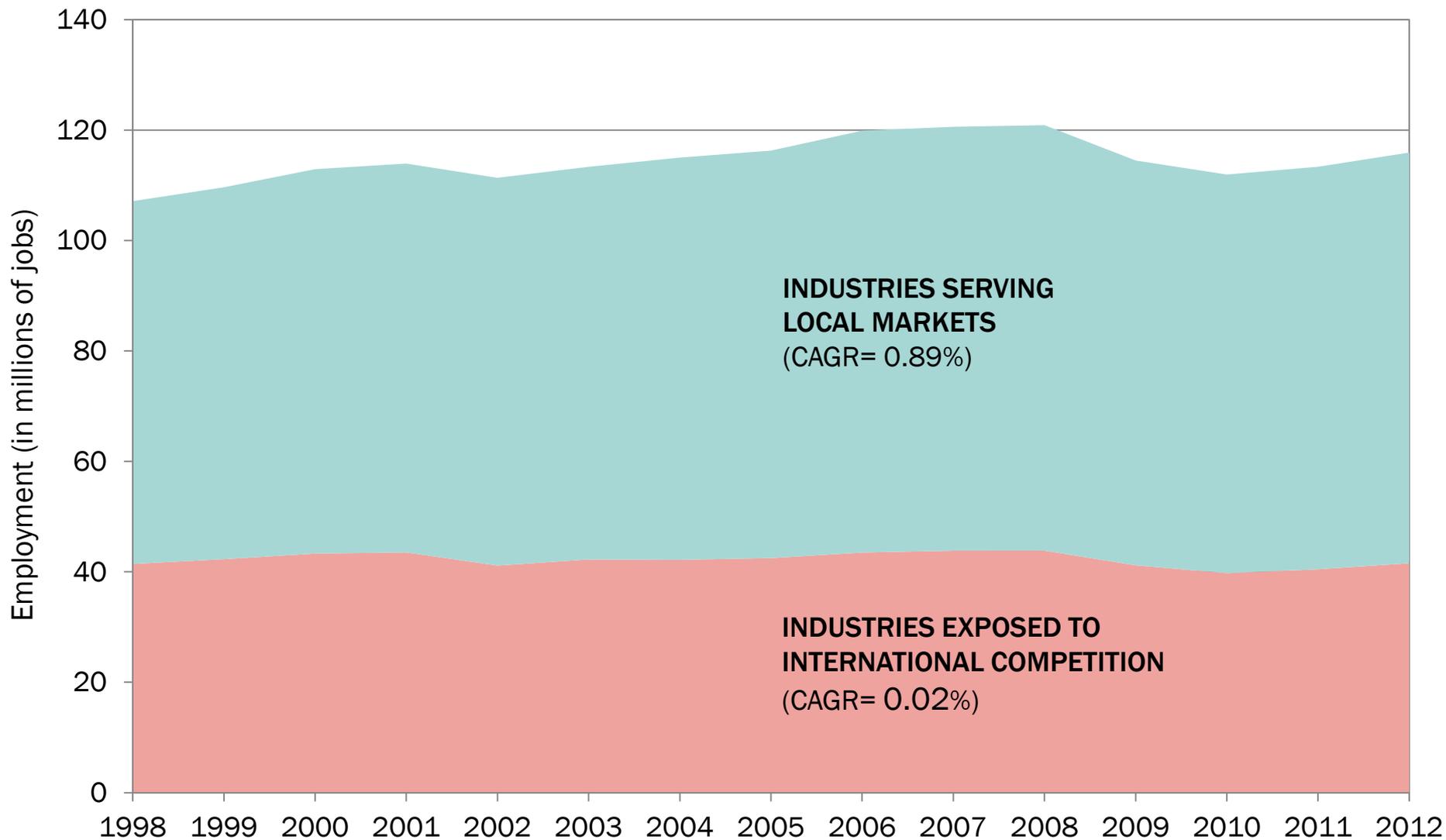
## Rolling 10-year Compound Annual Growth Rate in Total Number of U.S. Private Nonfarm Employees, 1975-2013



Source: Bureau of Labor Statistics, Current Employment Statistics survey; author's calculations.

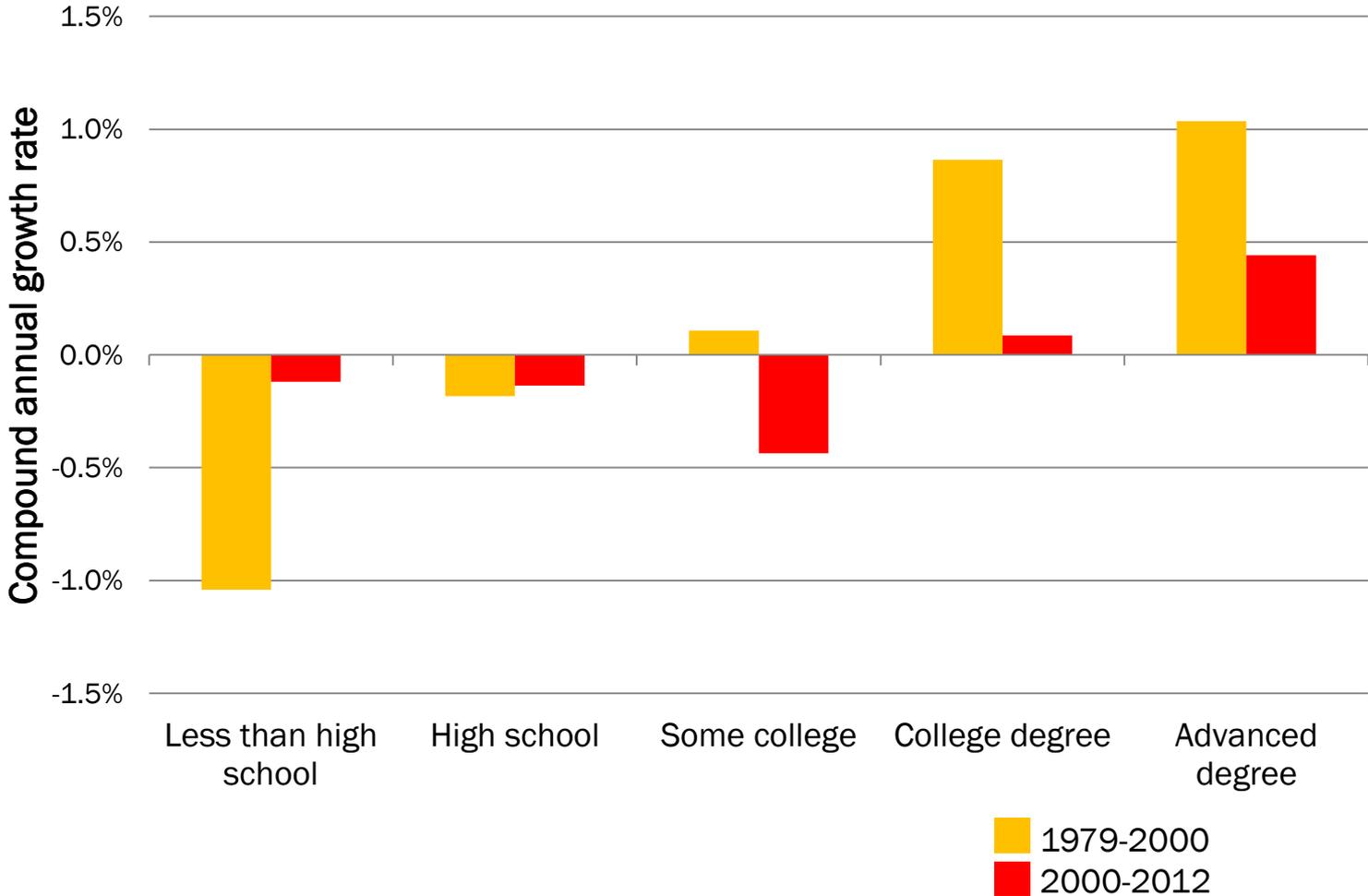
# Disturbing Trends

## Private, Nonfarm Employment by Type of Industry



Source: Prof. Michael E. Porter, Harvard Business School; U.S. Cluster Mapping 2014 Benchmark Definitions (Delgado-Porter-Stern 2013), Richard Bryden, Project Director.

# Real Hourly Wage Growth by Educational Attainment 1979-2000 Versus 2000-2012

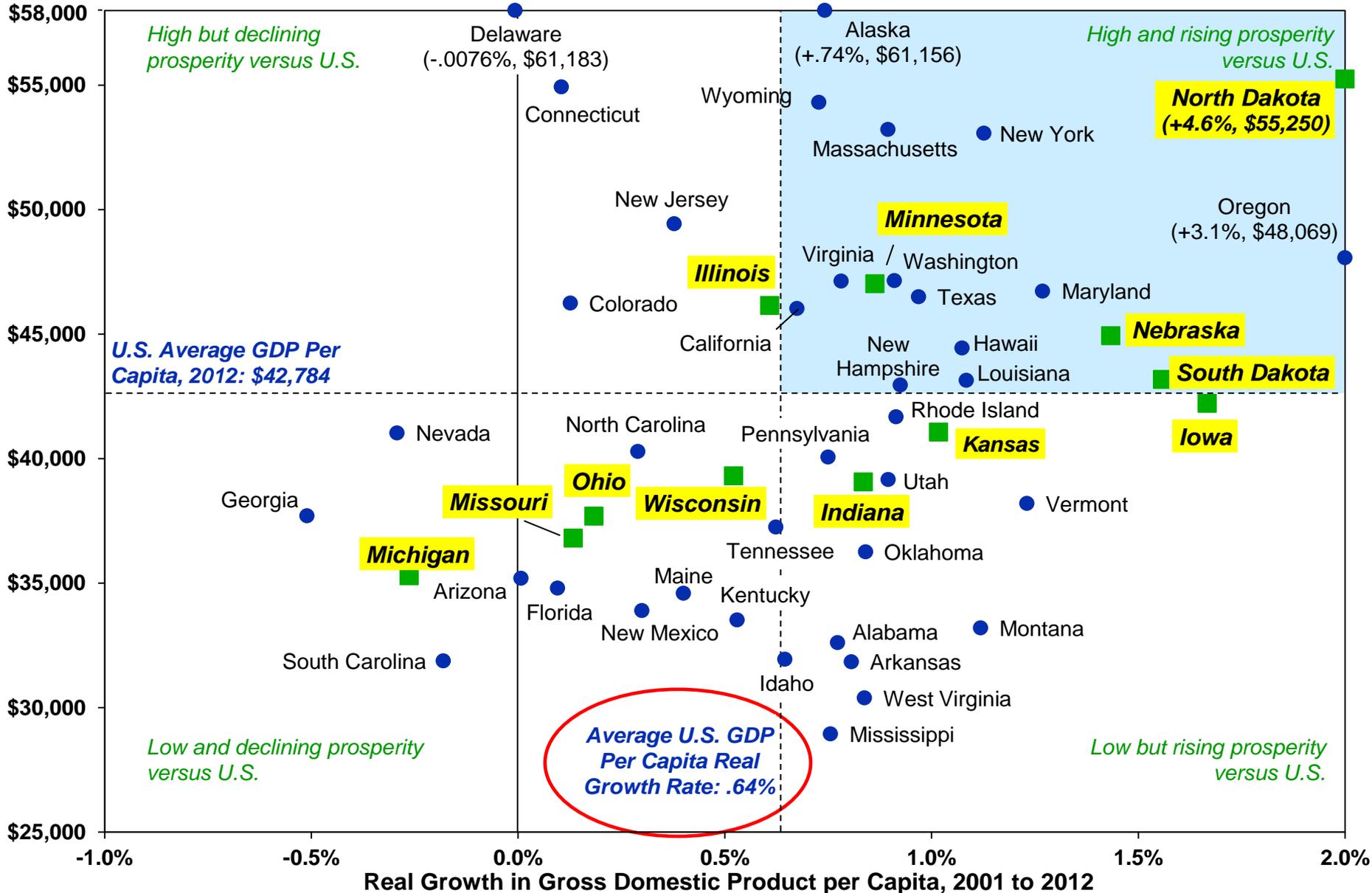


Source: Economic Policy Institute, "A Decade of Flat Wages," August 2013. Based on Current Population Survey.

# Prosperity Performance of U.S. States

2001-2012

Real GDP per Capita, 2012



Source: BEA. Notes: GDP in real 2005 dollars. Growth rate is calculated as compound annual growth rate.

# Regional Economic Development: Prevailing Approaches

## “Open for Business”

- Improve the general business environment



- Attempt to match the policies of peers
- Long lists of areas for improvement, with limited progress
- Table stakes

## “Big Game Hunting”

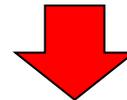
- Compete aggressively for plants and new investments



- Zero Sum
- “Winner’s curse”
- High cost, low return unless address underlying weaknesses
- Neglects the existing base

## “The Next Big Thing”

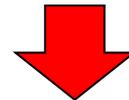
- Enter new high tech/ high growth industries



- Many competing for the same industries – e.g. biotech, ‘creative class’
- Very few regions have the assets to succeed in them

## “Build it and They Will Come”

- Invest in large infrastructure/ industrial zone projects



- Rarely offer a strong advantage versus other regions
- Generic infrastructure will not offset lack of skills, other weaknesses, and absence of related businesses

# Towards a New Economic Development Model

- Traditional approaches to economic development are **not working**
- We must **reshape** the approach to economic development in the U.S. based on a deeper understanding of the drivers of competitiveness in the modern global economy



## The New Direction

- Focus on **competitiveness**, not job creation per se
- **Cluster-based**, reflecting the core drivers of jobs and wages
- **Build on existing and potential strengths**, versus rely on reducing weakness
- Develop an overall **strategy** rather than a list of actions
- **Prioritized** and **sequenced**, not treating all weaknesses equally
- **Data driven**, not political or based on wishful thinking

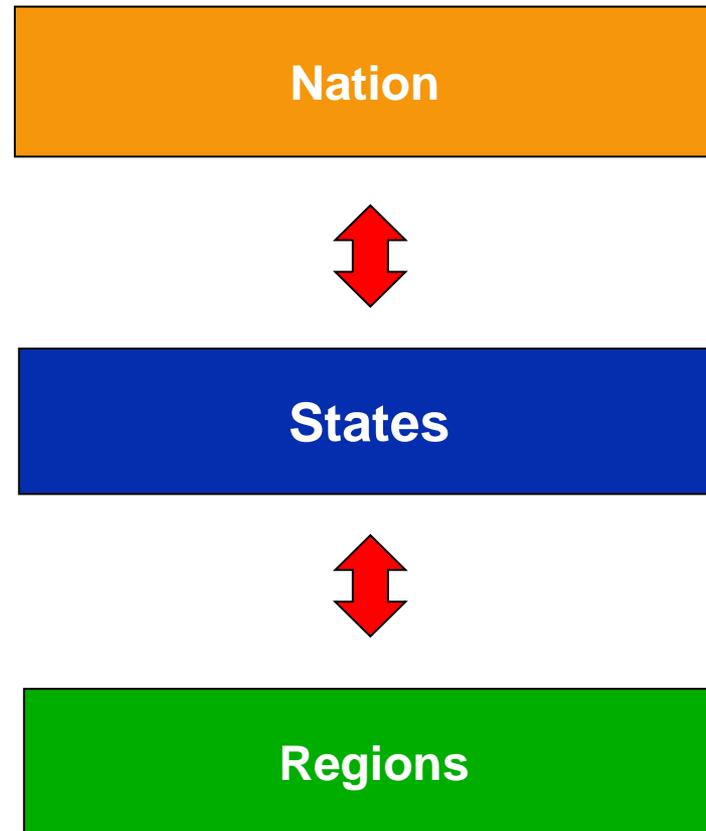
# What is Competitiveness?

A nation or region is competitive to the extent that firms operating there are able to **compete successfully** in the regional and global economy while maintaining or improving **wages and living standards** for the average citizen



- Competitiveness depends on the **long-run productivity** and efficiency of a location as a place to do business
  - The productivity of existing firms and workers
  - The ability to achieve high participation of citizens in the workforce
- Competitiveness is **not**:
  - Low wages
  - A weak currency
  - Jobs per se

# Defining the Geographic Unit for Competitiveness



- Regions are **essential economic units** for competitiveness

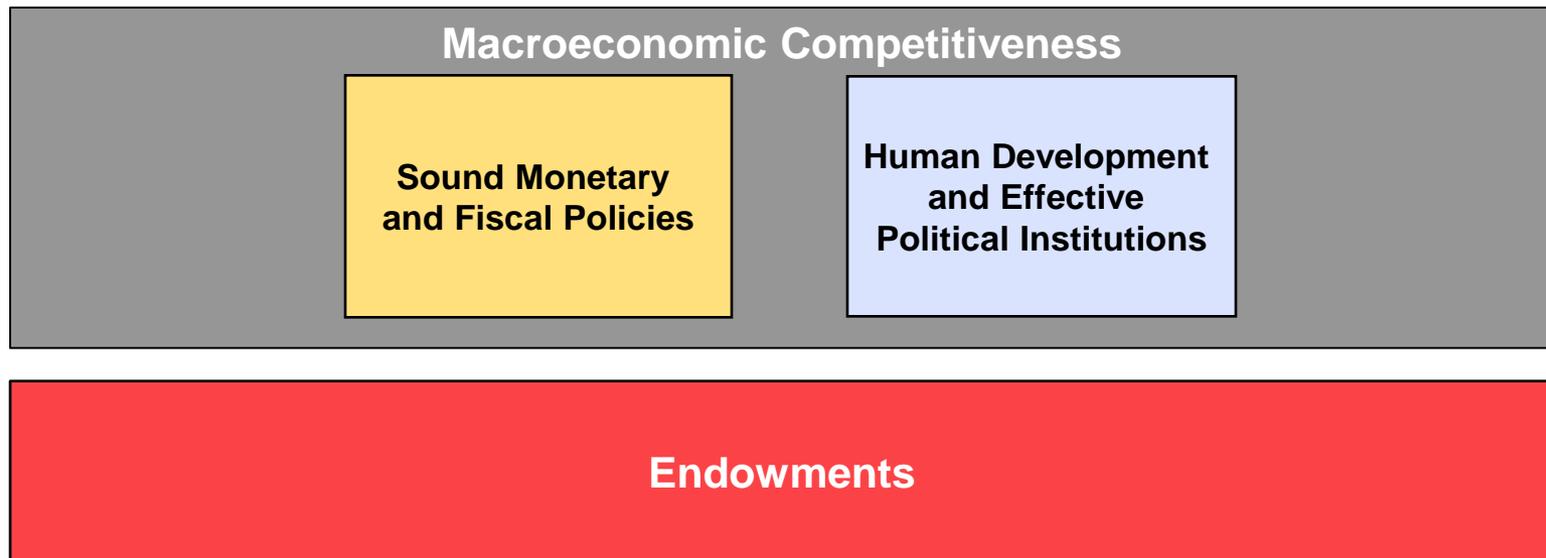
# What Determines Competitiveness?



## Endowments

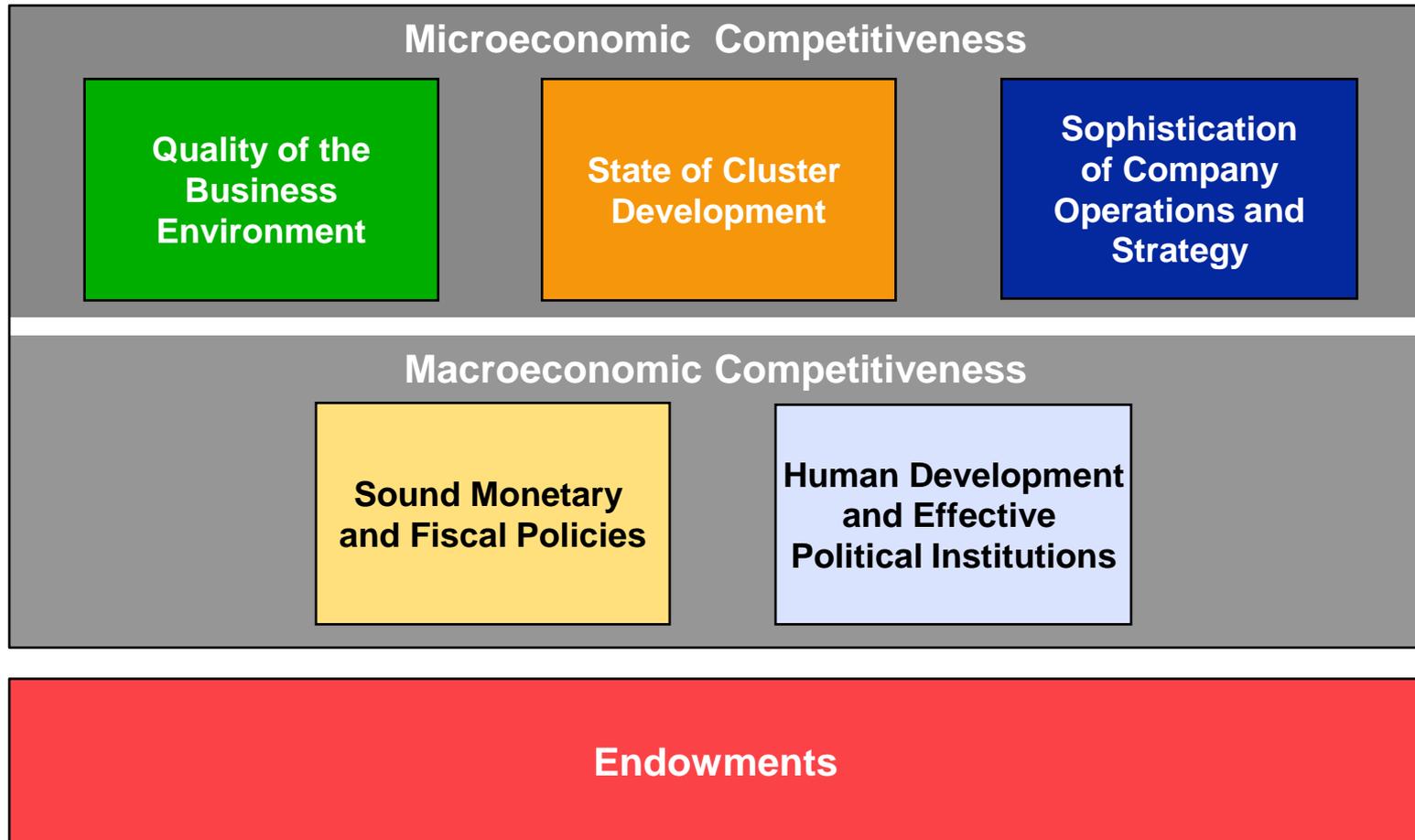
- Endowments, including **natural resources**, **geographical location**, **population**, and **land area**, create a foundation for prosperity, but true prosperity arises from **productivity in the use of endowments**

# What Determines Competitiveness?



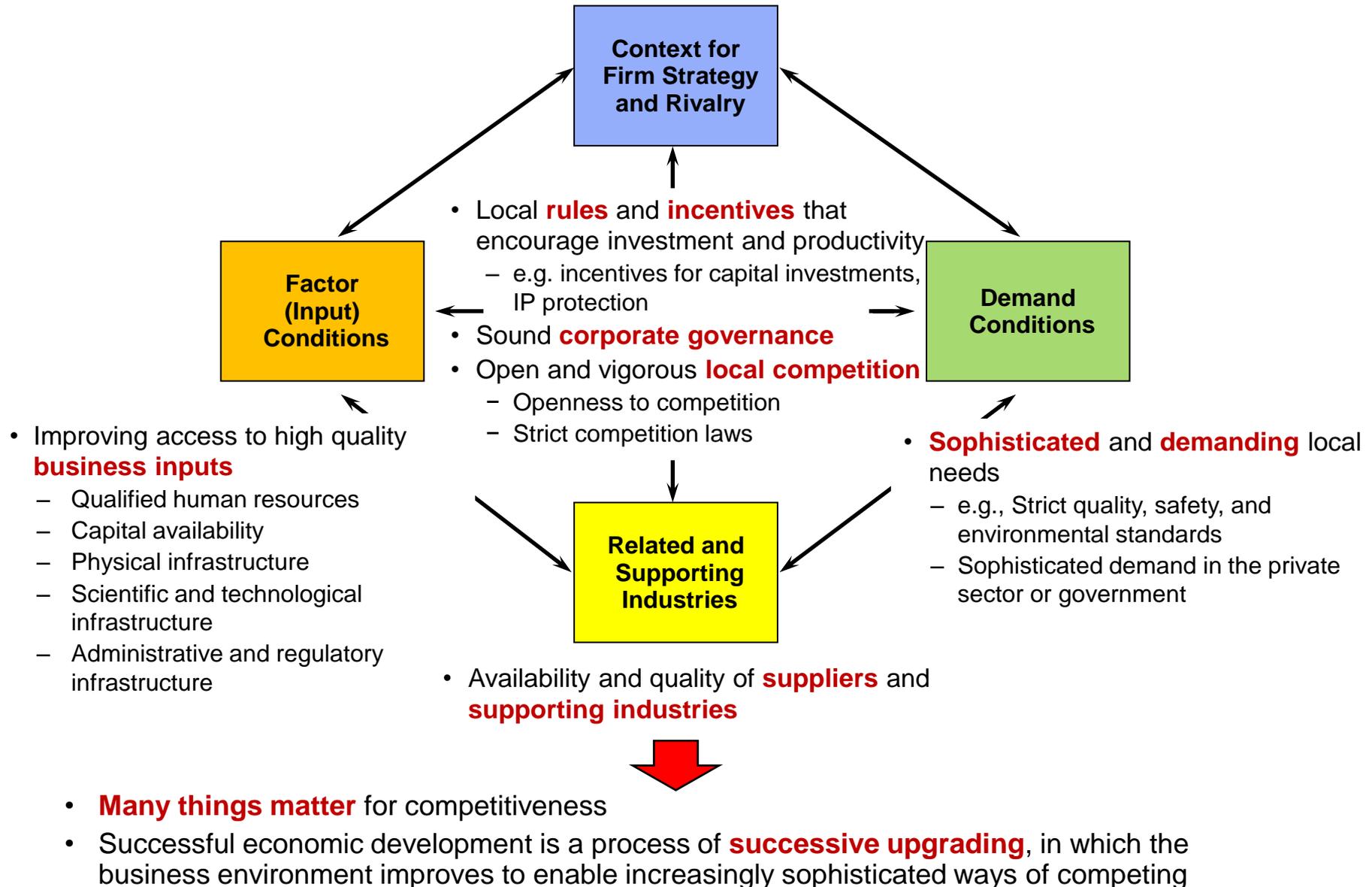
- Macroeconomic competitiveness sets the **economy-wide** context for productivity to emerge, but is **not sufficient** to ensure productivity
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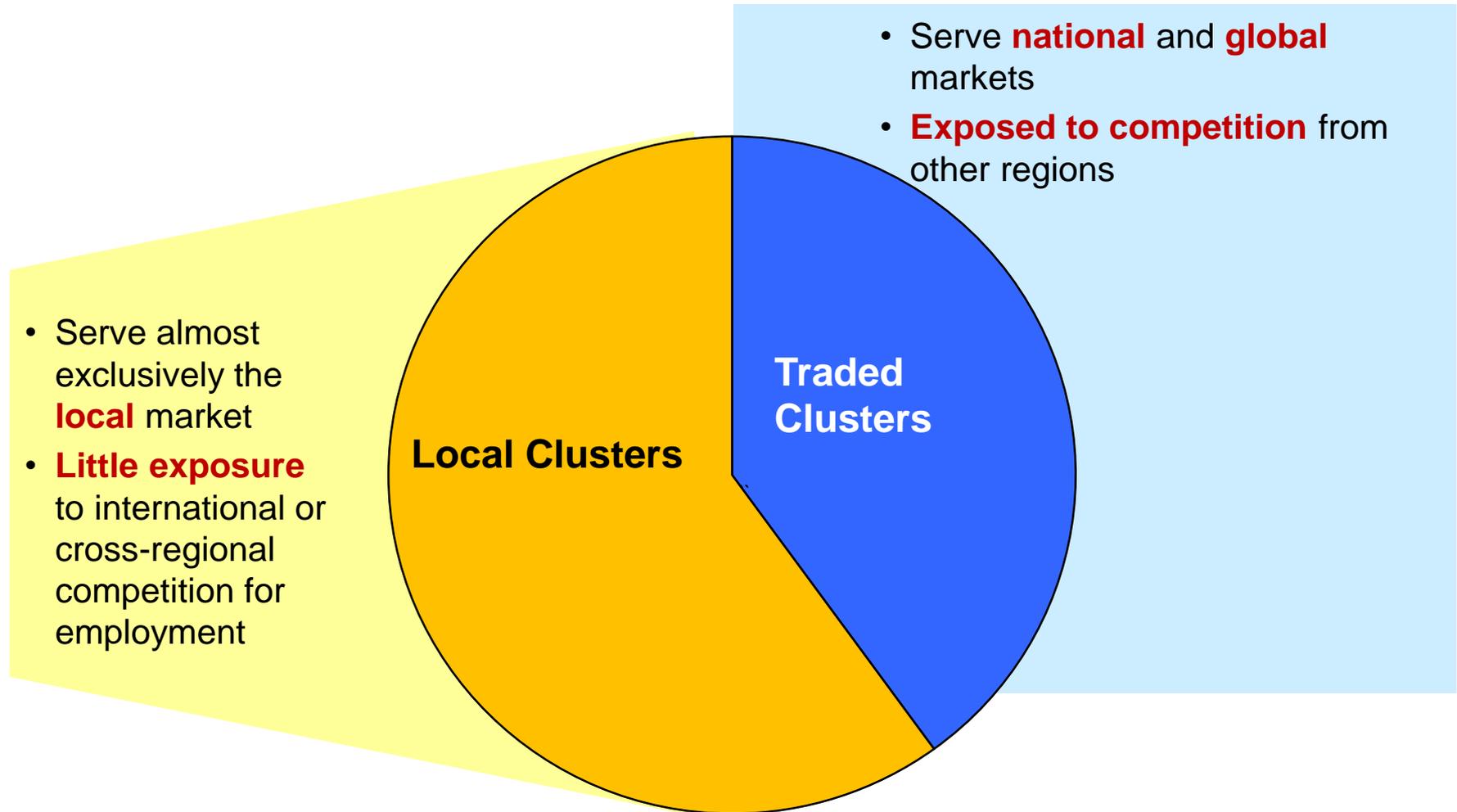


- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition** revealed at the level of firms, clusters, and regions
- Macroeconomic competitiveness sets the **economy-wide** context for productivity to emerge, but is **not sufficient** to ensure productivity
- Endowments, including **natural resources**, **geographical location**, **population**, and **land area**, create a foundation for prosperity, but true prosperity arises from **productivity in the use of endowments**

# Improving the Quality of the Business Environment



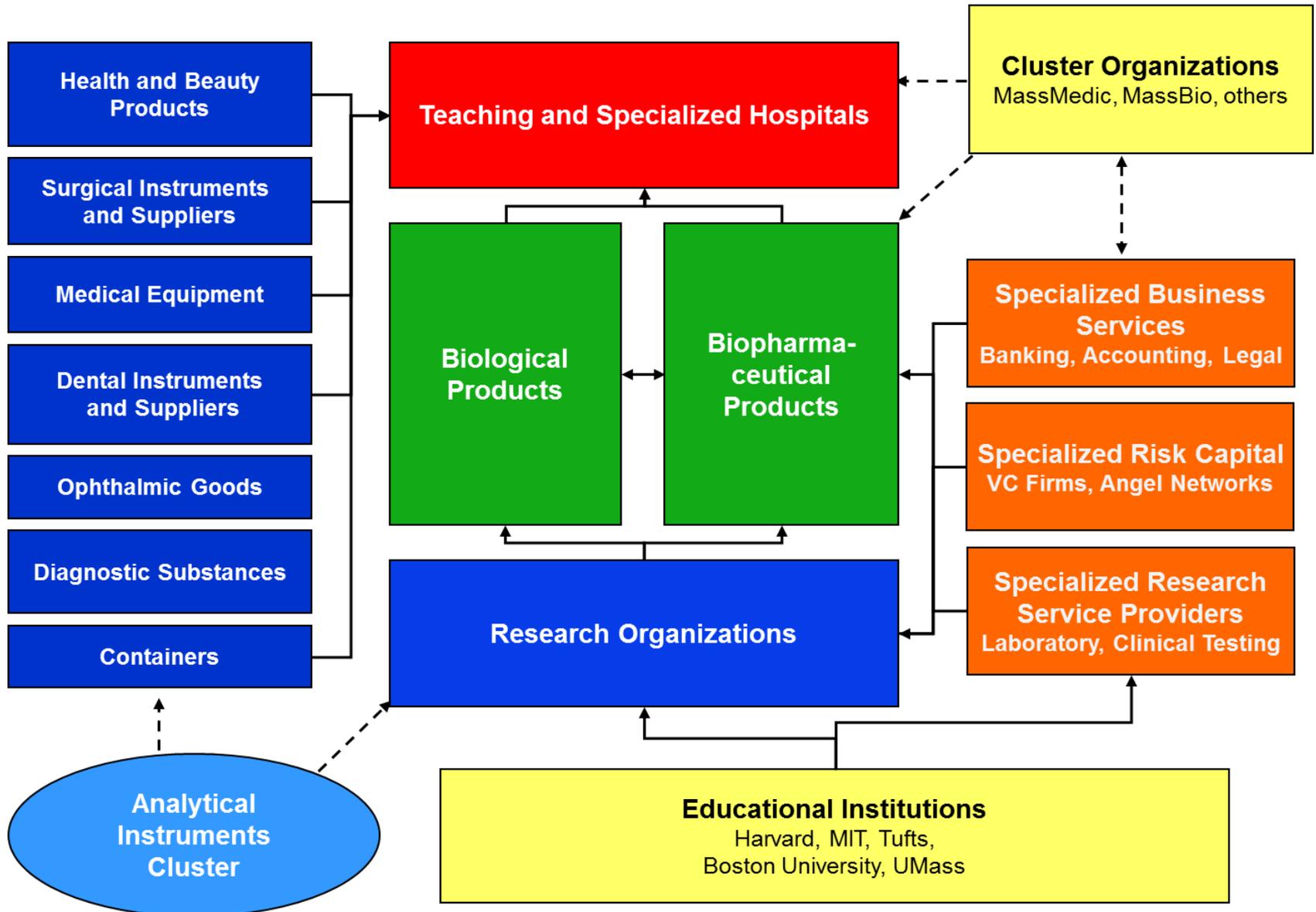
# The Composition of Regional Economies



Note: Cluster data includes all private, non-agricultural employment.  
Source: Michael E. Porter, Economic Performance of Regions, Regional Studies (2003); Updated via Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School (2008)

# Clusters and Competitiveness

## Massachusetts Life Sciences



# Institutions for Collaboration

## Selected Massachusetts Organizations, Life Sciences

### Life Sciences Industry Associations

- Massachusetts Biotechnology Council
- Massachusetts Medical Device Industry Council
- Massachusetts Hospital Association

### General Industry Associations

- Associated Industries of Massachusetts
- Greater Boston Chamber of Commerce
- High Tech Council of Massachusetts

### Economic Development Initiatives

- Massachusetts Technology Collaborative
- Mass Biomedical Initiatives
- Mass Development
- Massachusetts Alliance for Economic Development

### University Initiatives

- Harvard Biomedical Community
- MIT Enterprise Forum
- Biotech Club at Harvard Medical School
- Technology Transfer offices

### Informal networks

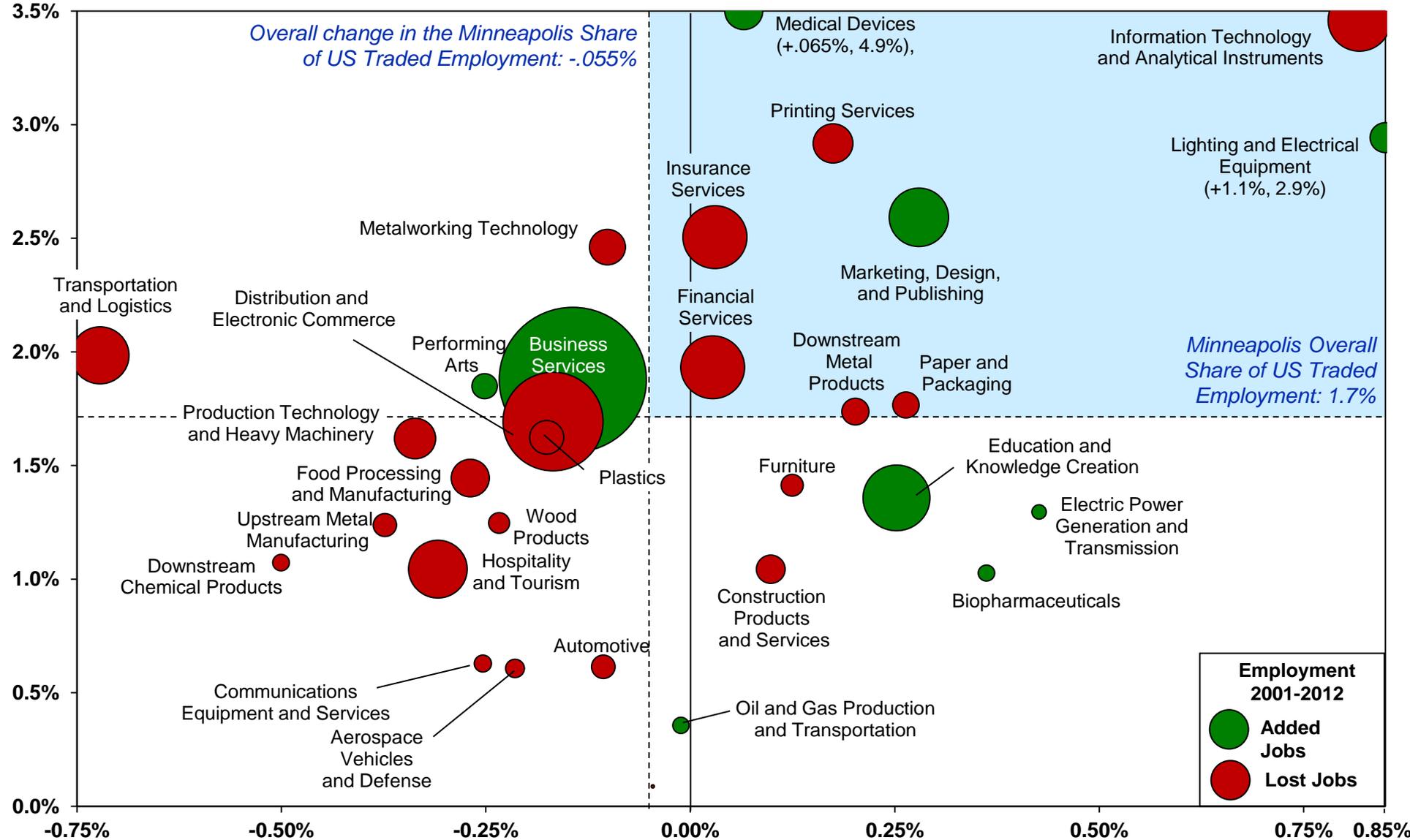
- Company alumni groups
- Venture capital community
- University alumni groups

### Joint Research Initiatives

- New England Healthcare Institute
- Whitehead Institute For Biomedical Research
- Center for Integration of Medicine and Innovative Technology (CIMIT)

# Traded Cluster Composition of the Minneapolis Economy

Minneapolis Share of National Employment  
2001-2012



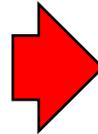
Change in Minneapolis Share of National Employment 2001-2012

Employees 15,000 =

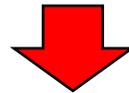
# Strong Traded Clusters Drive Regional Performance

## Research Findings

- Presence of **strong clusters**
- **Breadth** of industries within each cluster

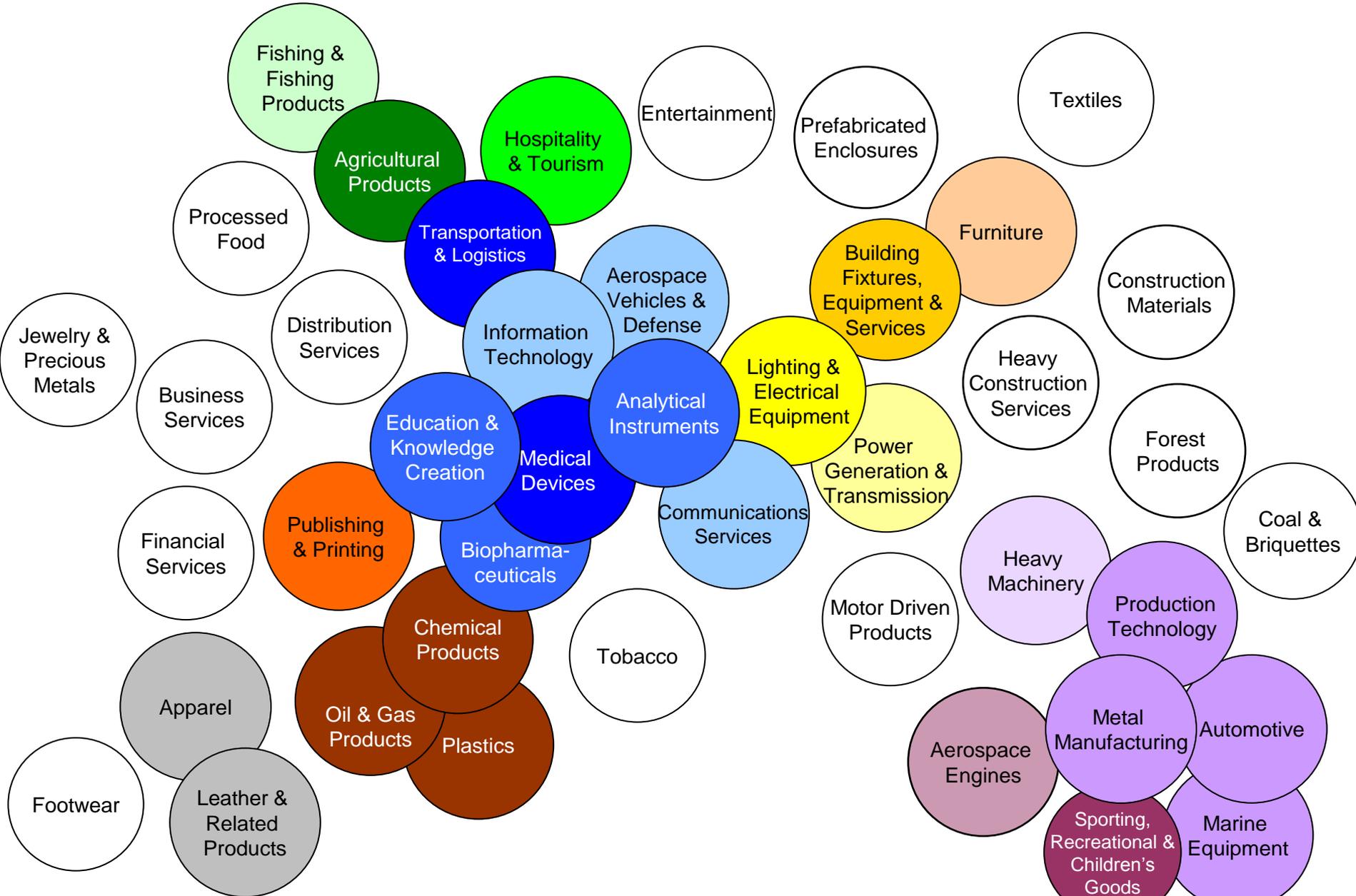


- **Job** growth
- Higher **wages**
- Higher **patenting** rates
- Greater **new business** formation, growth and survival
- **Resilience** in downturns



- Build on the region's **existing** and **emerging** clusters rather than chase hot fields

# Related Clusters and Economic Diversification

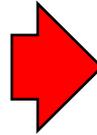


Note: Clusters with overlapping borders or identical shading have at least 20% overlap (by number of industries) in both directions.

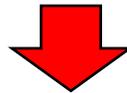
# Strong Traded Clusters Drive Regional Performance

## Research Findings

- Presence of **strong clusters**
- **Breadth** of industries within each cluster
- Strength in **related clusters**
- Presence of a region's clusters in **neighboring regions**



- **Job** growth
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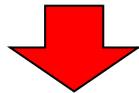


- Build on the region's **existing** and **emerging** clusters rather than chase hot fields
- Economic diversification usually occurs **within clusters** and **across related clusters**

# What is an Economic Strategy?

## Policy Improvement

- Implementing **best practices** in each policy area



- There are a **huge number** of policy areas that matter
- No region or country can (or should try to) make **progress in all areas** simultaneously

## Economic Strategy

- An overall agenda for creating a **more competitive and distinctive position** for a country or region, based on its particular circumstances

# Developing a Regional Economic Strategy

## Regional Value Proposition

- What is a **distinctive competitive position** for the region given its location, legacy, existing strengths, and potential strengths?
  - What unique advantages as a business location?
  - For what types of activities and clusters?
  - What roles in the surrounding regions, countries, and the global economy?

## Developing Unique Strengths

- What **elements of the business environment** can be unique strengths relative to peers/neighbors?
- What **existing and emerging clusters** can be built upon?

## Achieving and Maintaining Parity with Peers

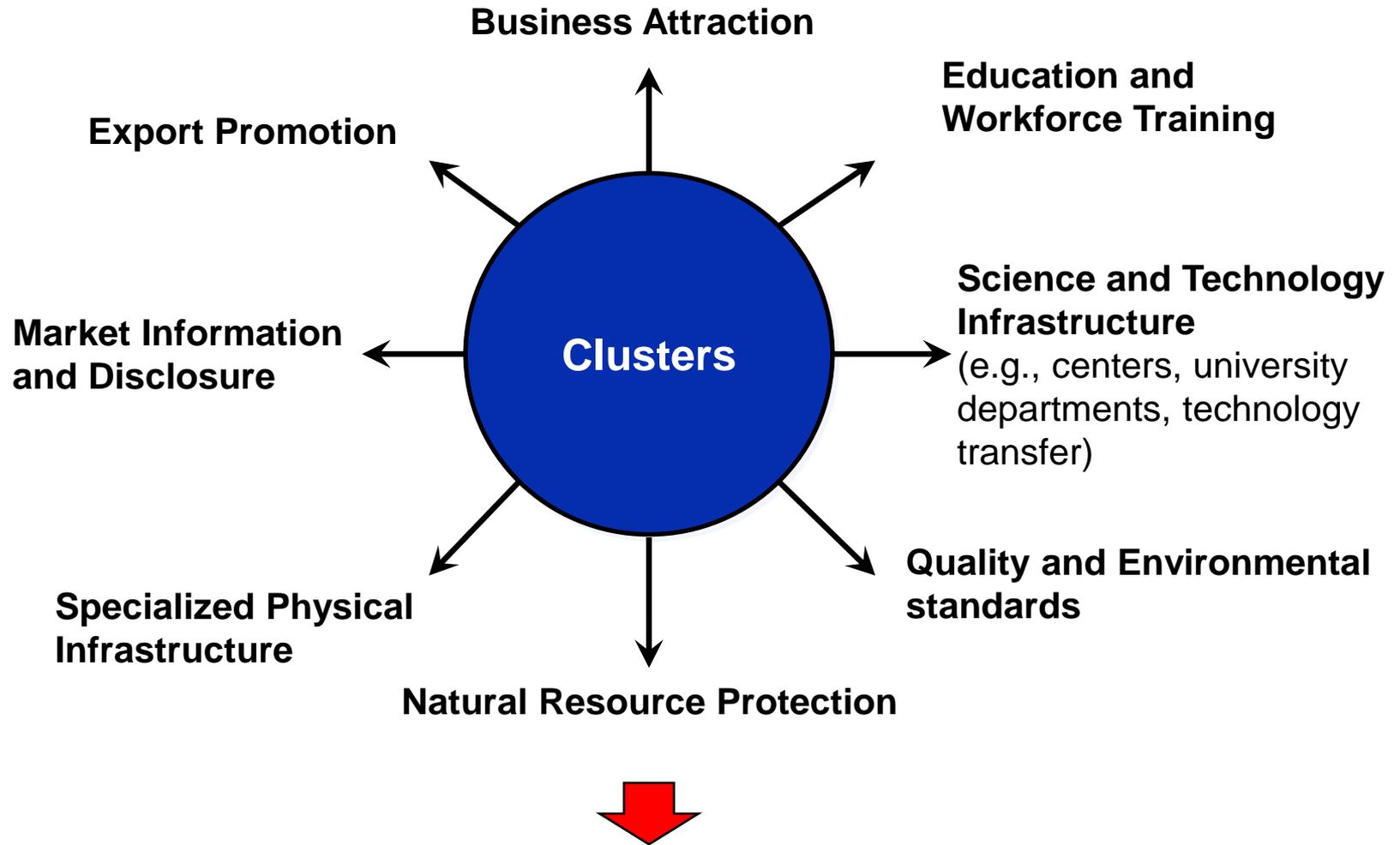
- What **weaknesses** must be addressed to remove key constraints and achieve parity with peer locations?

- **Priorities** and **sequencing** are fundamental to successful economic development

# Clusters as a Tool for Economic Policy

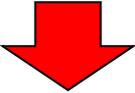
- **Leverages** the power of spillovers and linkages to drive rapid economic development
- A vehicle for policies and investments that strengthen **multiple related firms/institutions** simultaneously
- Enhances the efficiency and effectiveness of **traditional economic policy** areas, such as training, R&D, export promotion, FDI attraction, etc.

# Organize Public Policy around Clusters

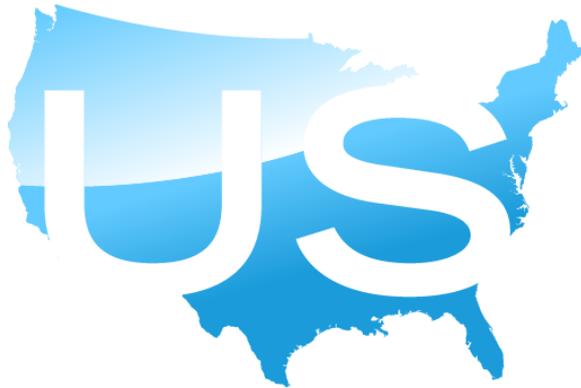


- Clusters provide a framework for **organizing the implementation** of many public policies and public investments directed at economic development

# Clusters as a Tool for Economic Policy

- Leverage the power of **spillovers** and **linkages** to drive rapid economic development
  - A vehicle for policies and investments that strengthen **multiple related firms/institutions** simultaneously
  - Enhances the efficiency and effectiveness of **traditional economic policy** areas, such as training, R&D, export promotion, FDI attraction, etc.
  - A forum for **collaboration** between the private sector, trade associations, government, educational, and research institutions
    - A **mechanism** for **constructive** business-government dialog
  - Brings together **firms of all sizes**, including SME's
  - Clusters initiatives are a powerful private/public vehicle to identify and get alignment on **problems** and **action recommendations**
  - Cluster upgrading fosters **greater** and **more sophisticated** competition rather than distorting the market
- 
- Sound cluster policy addresses **all existing and emerging clusters**, and does not pick winners

# U.S. Cluster Mapping



## CLUSTER MAPPING

- National economic initiative based at HBS and sponsored by the U.S. Department of Commerce's Economic Development Administration. To help drive better regional economic strategy, the interactive website provides data to:
  - Help **regions** understand their current competitiveness and sources of potential differentiation
  - Help **clusters** assess their competitive position and highlight areas for potential growth
  - Help **Institutions for Collaboration** engage with peers within and beyond their home region and cluster

