

Reshaping Regional Economic Development: Clusters and Regional Strategy



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Harvard Business School

*U.S. Cluster Mapping Launch Event
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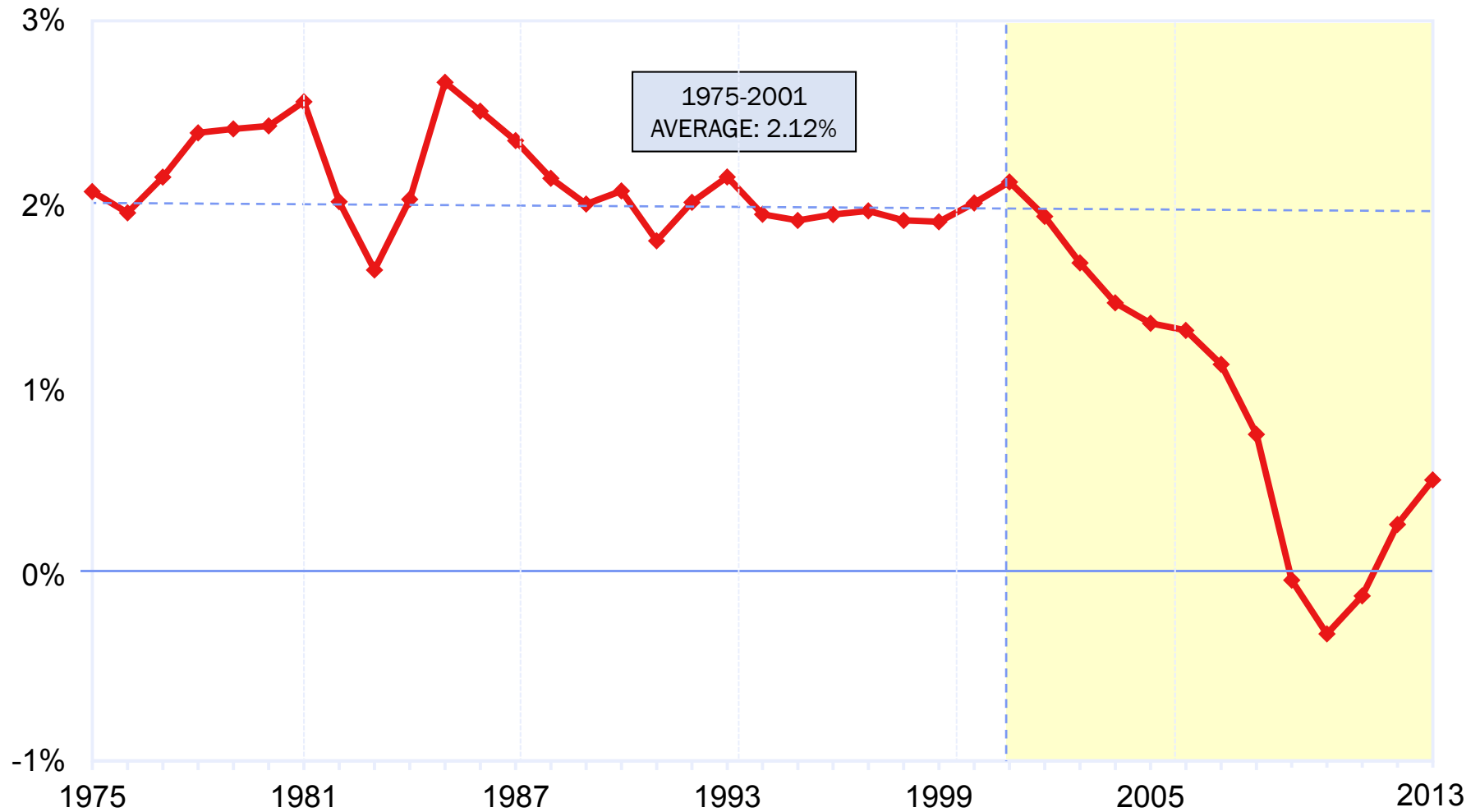
This presentation draws on ideas from Professor Porter's articles and books, in particular, [The Competitive Advantage of Nations](#) (The Free Press, 1990), "Building the Microeconomic Foundations of Competitiveness," in [The Global Competitiveness Report](#) (World Economic Forum), "Clusters and the 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), FSG (www.fsg.org) and the Social Progress Imperative (www.socialprogressimperative.org).

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

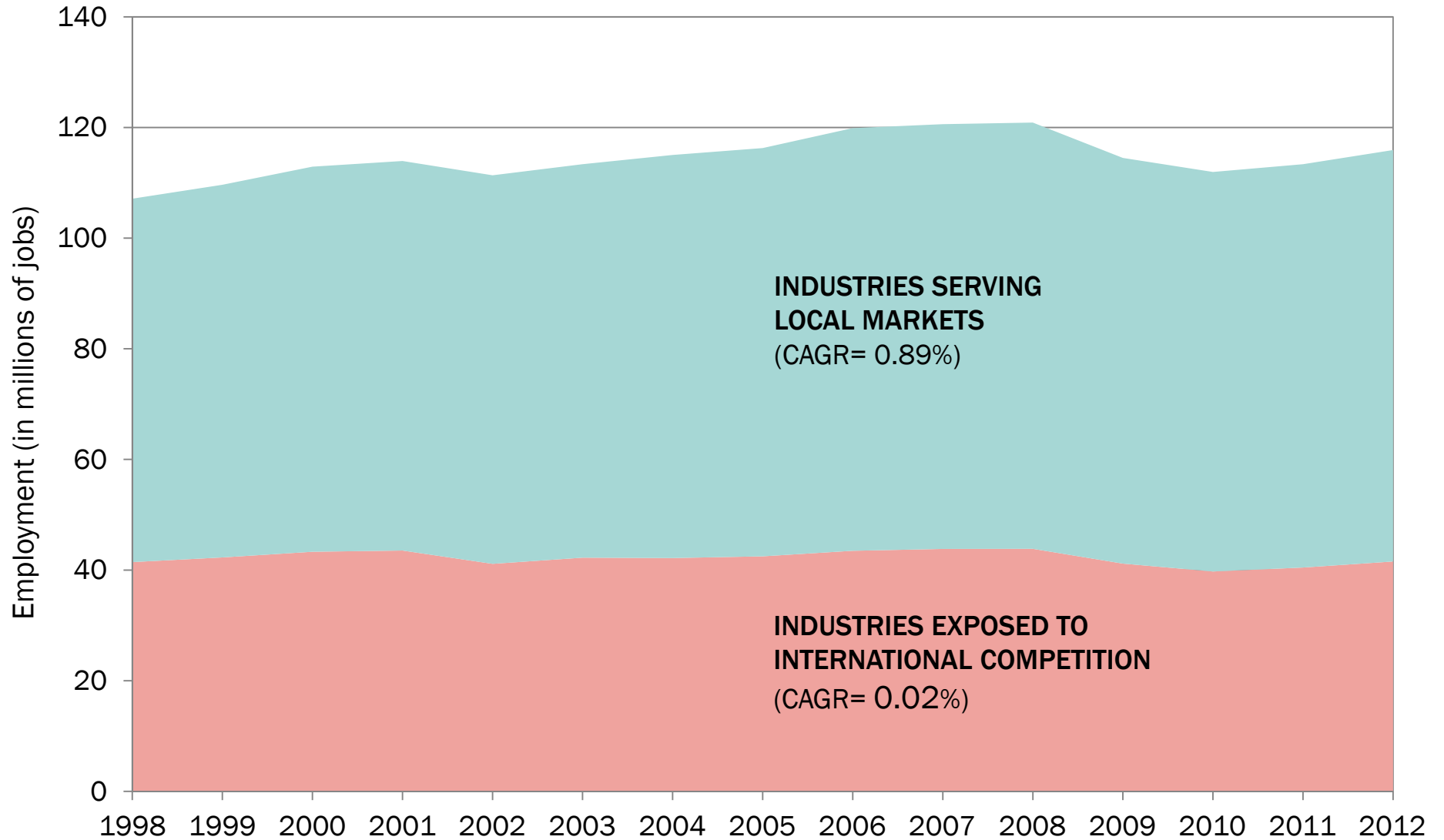
Rolling 10-year Compound Annual Growth Rate in Total Number of U.S. Private Nonfarm Employees, 1975-2013



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

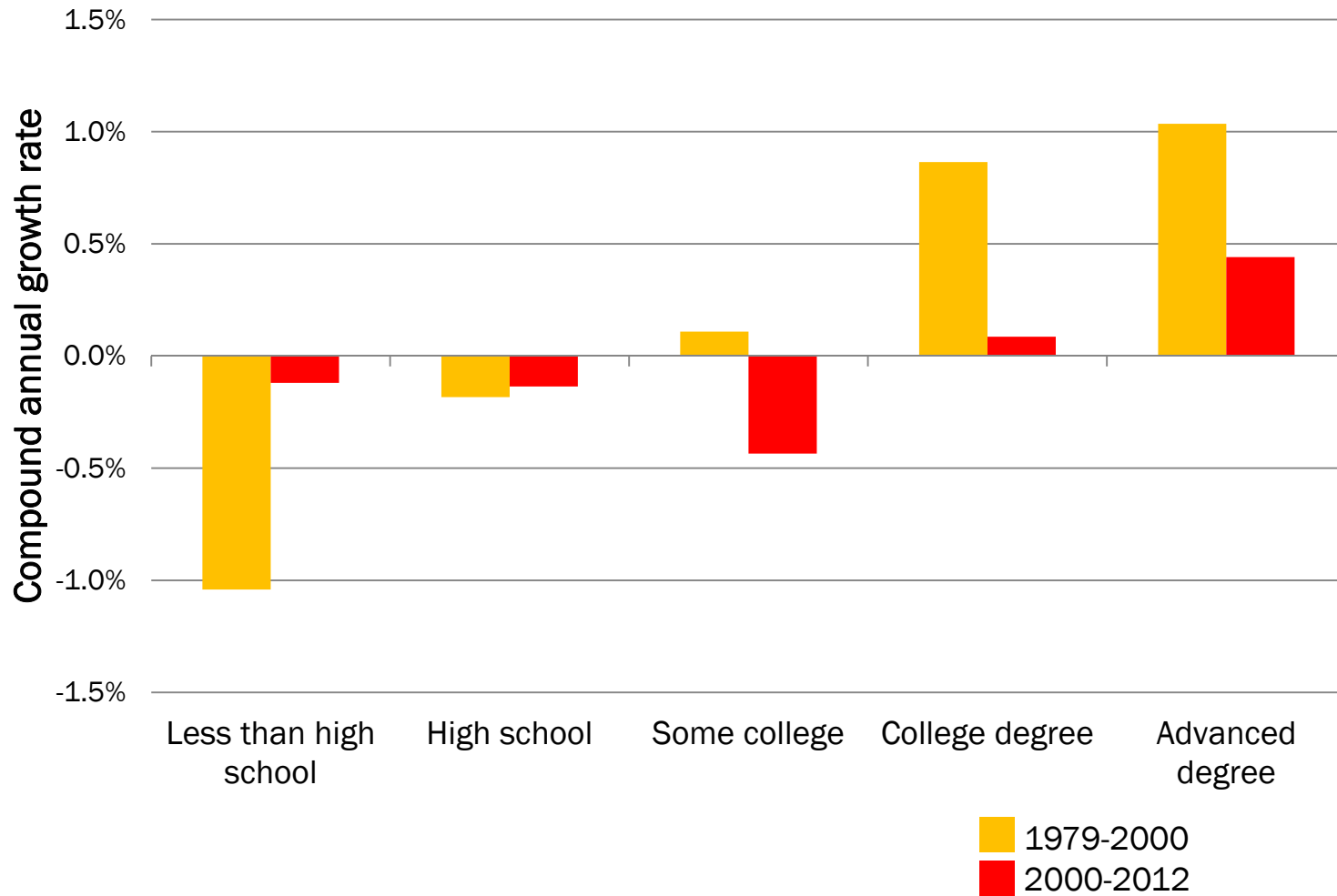
Disturbing Trends

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

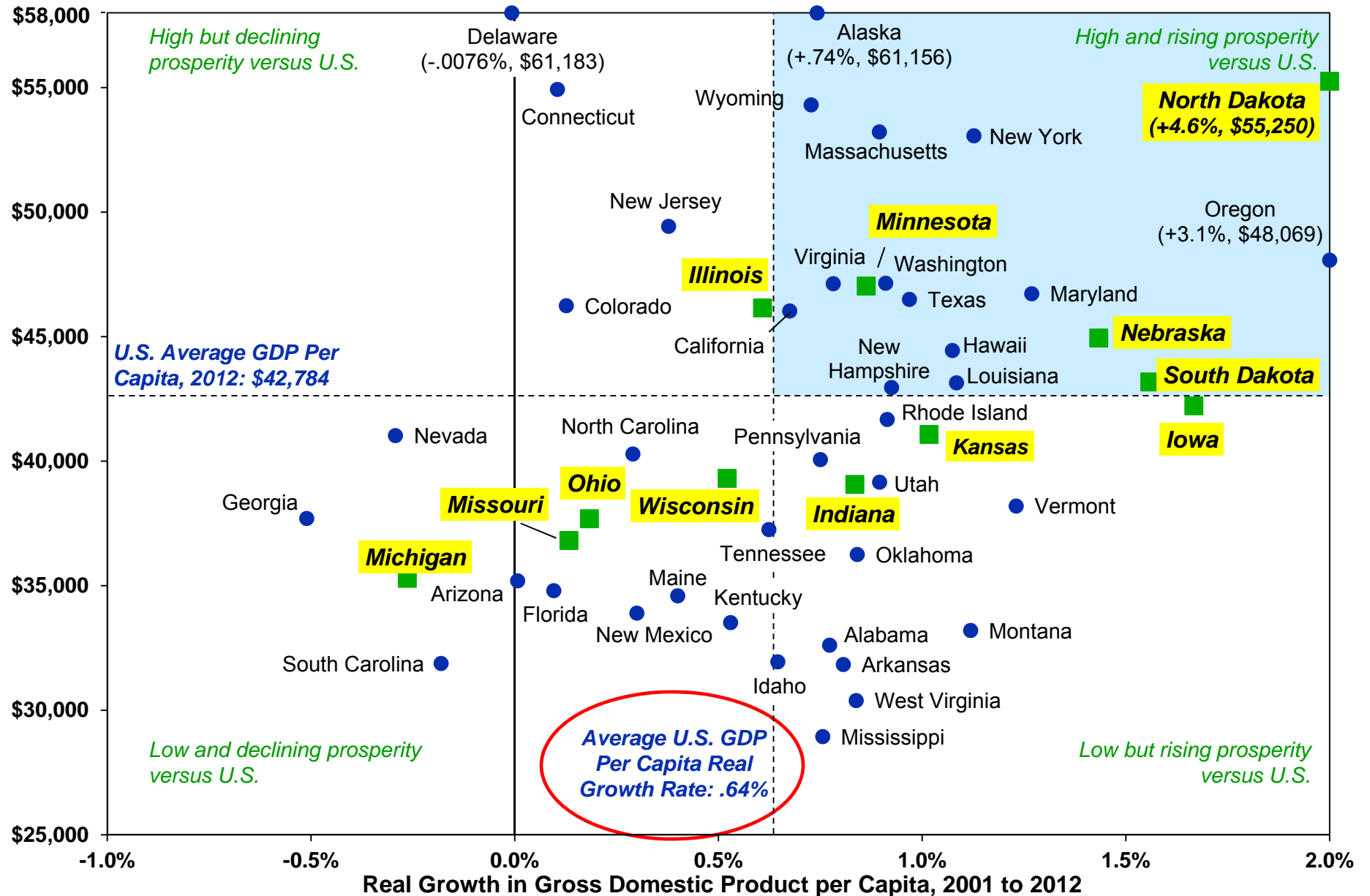


Source: Economic Policy Institute, "A Decade of Flat Wages," August 2013. Based on Current Population Survey.

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”

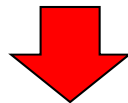
- Improve the general business environment



- 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”

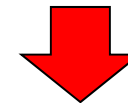
- Enter new high tech/ high growth industries



- 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

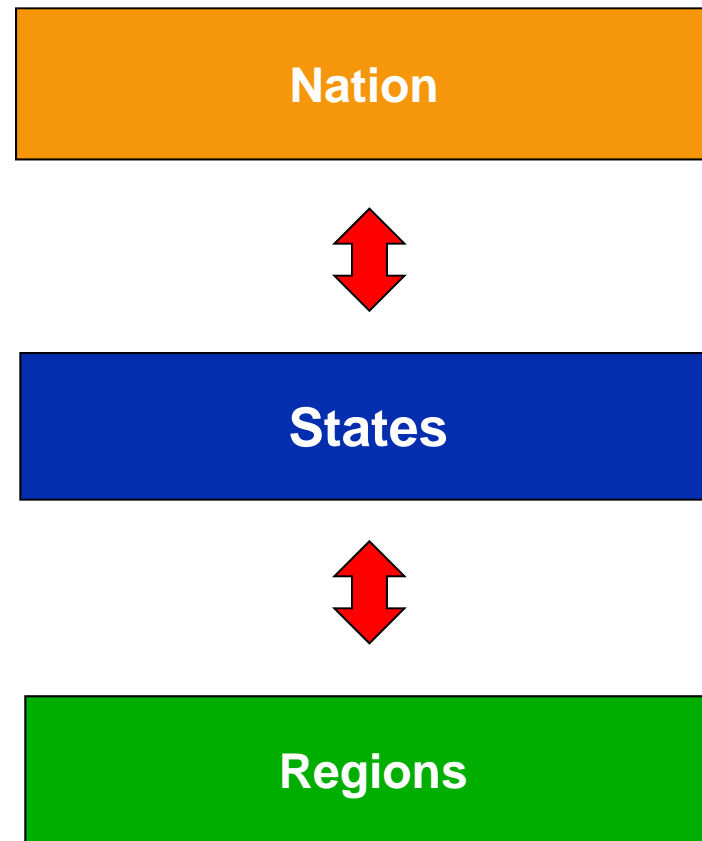
What is Competitiveness?

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



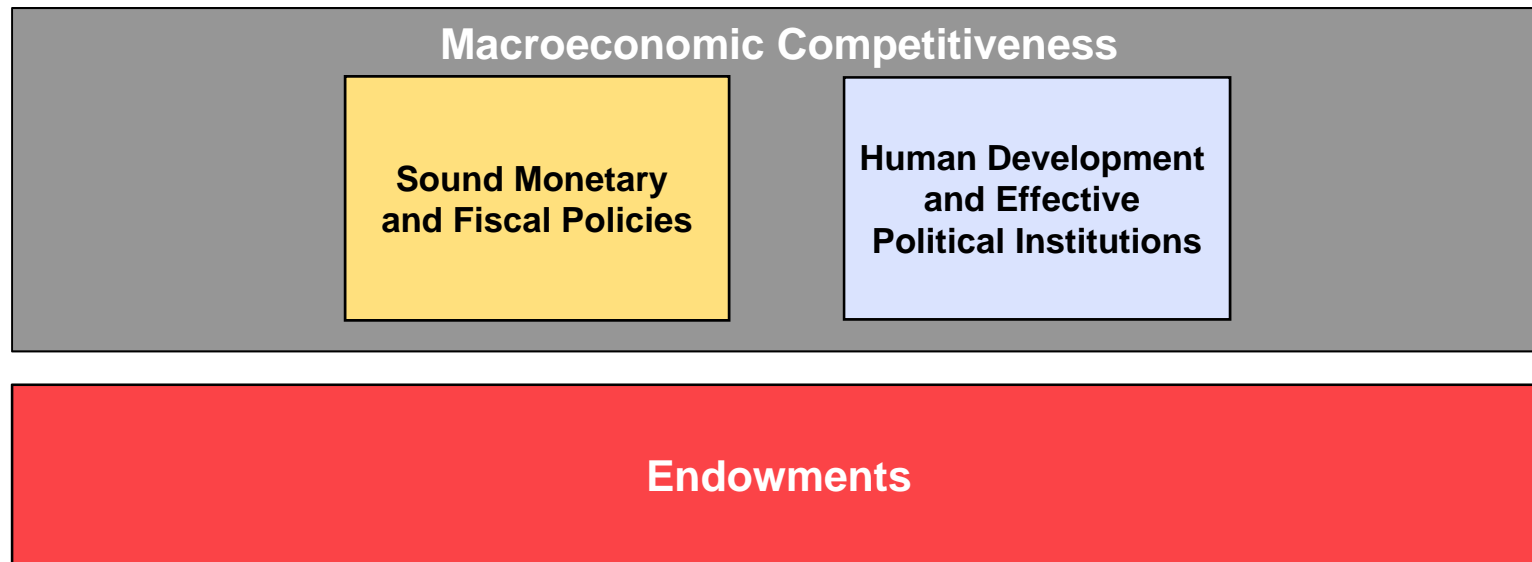
- Regions are **essential economic units** for competitiveness

What Determines Competitiveness?

Endowments

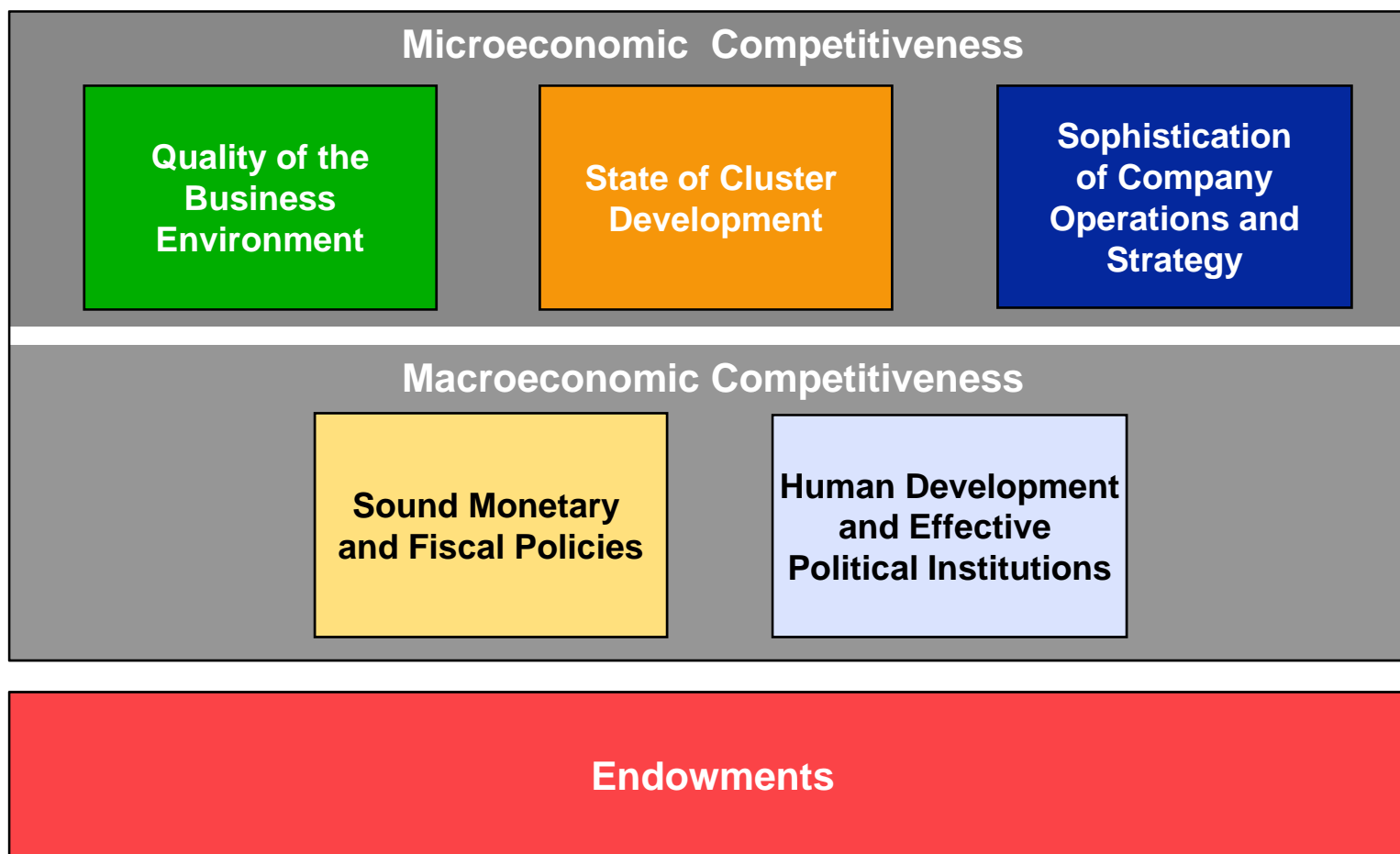
- Endowments, including **natural resources**, **geographical location**, **population**, and **land area**, create a foundation for prosperity, but true prosperity arises from **productivity in the use of endowments**

What Determines Competitiveness?



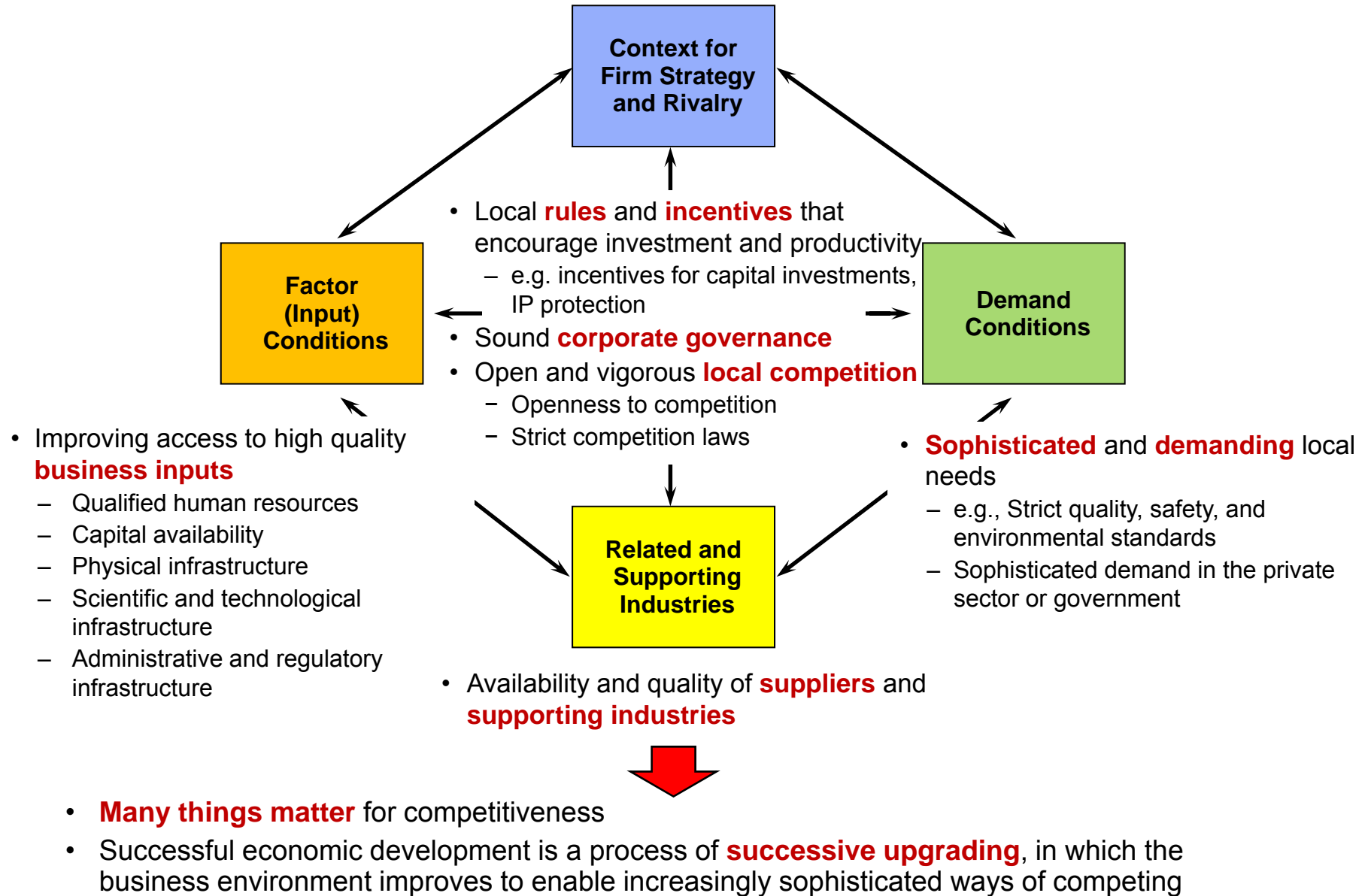
- Macroeconomic competitiveness sets the **economy-wide** context for productivity to emerge, but is **not sufficient** to ensure productivity
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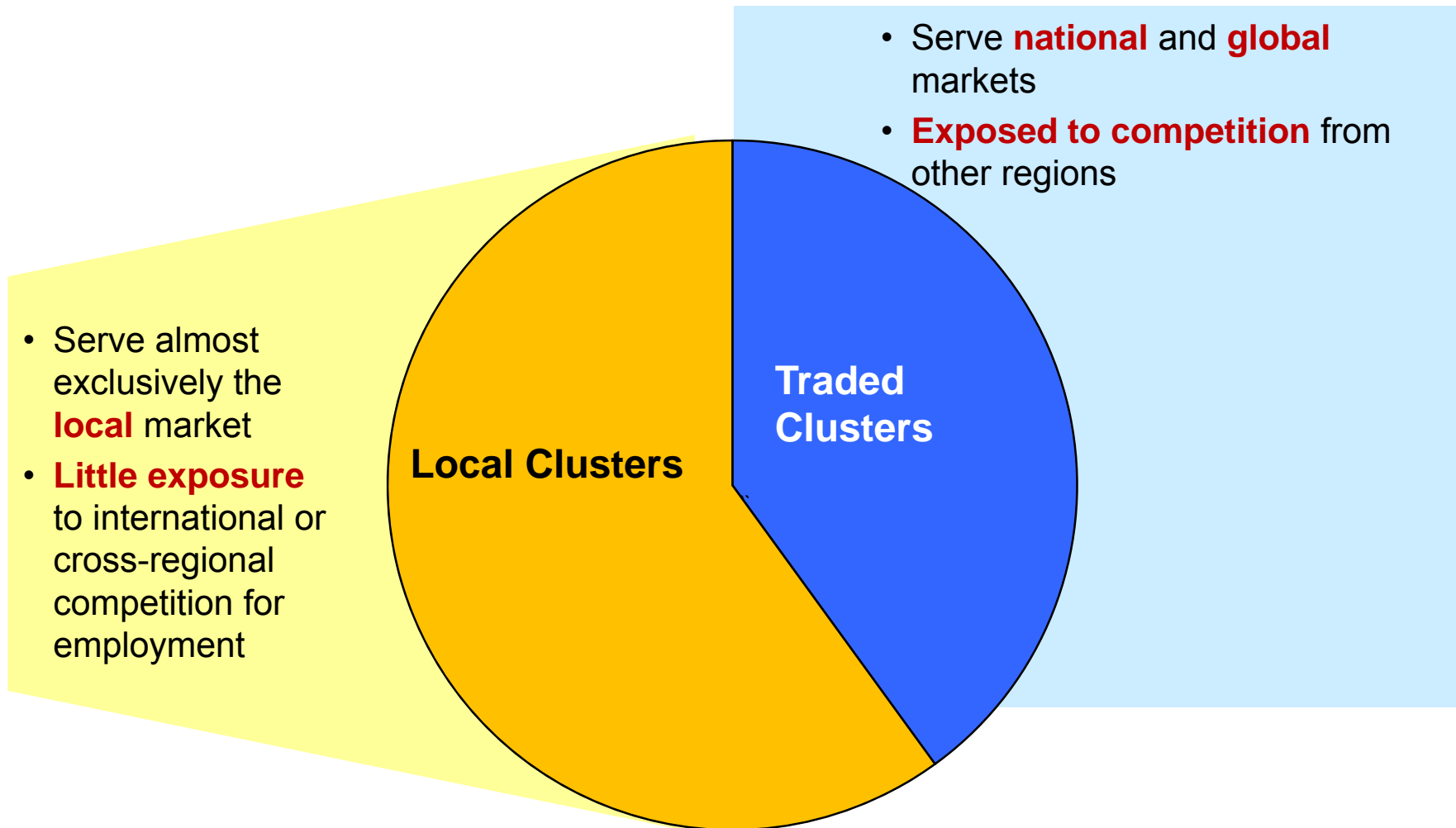


- Productivity ultimately depends on improving the **microeconomic capability** of the economy and the **sophistication of local competition** revealed at the level of firms, clusters, and regions
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- Endowments, including **natural resources**, **geographical 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

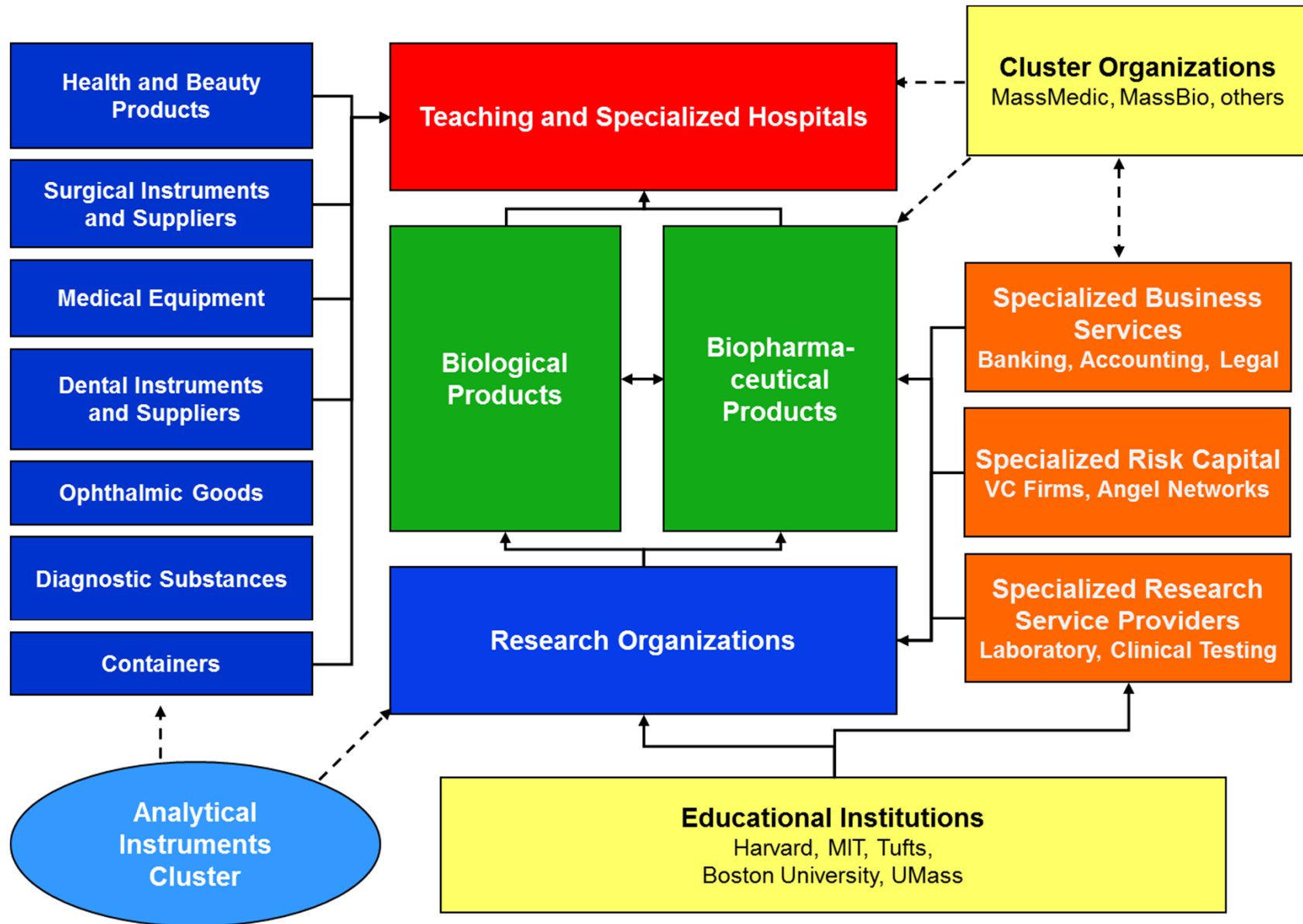


Note: Cluster data includes all private, non-agricultural employment.

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

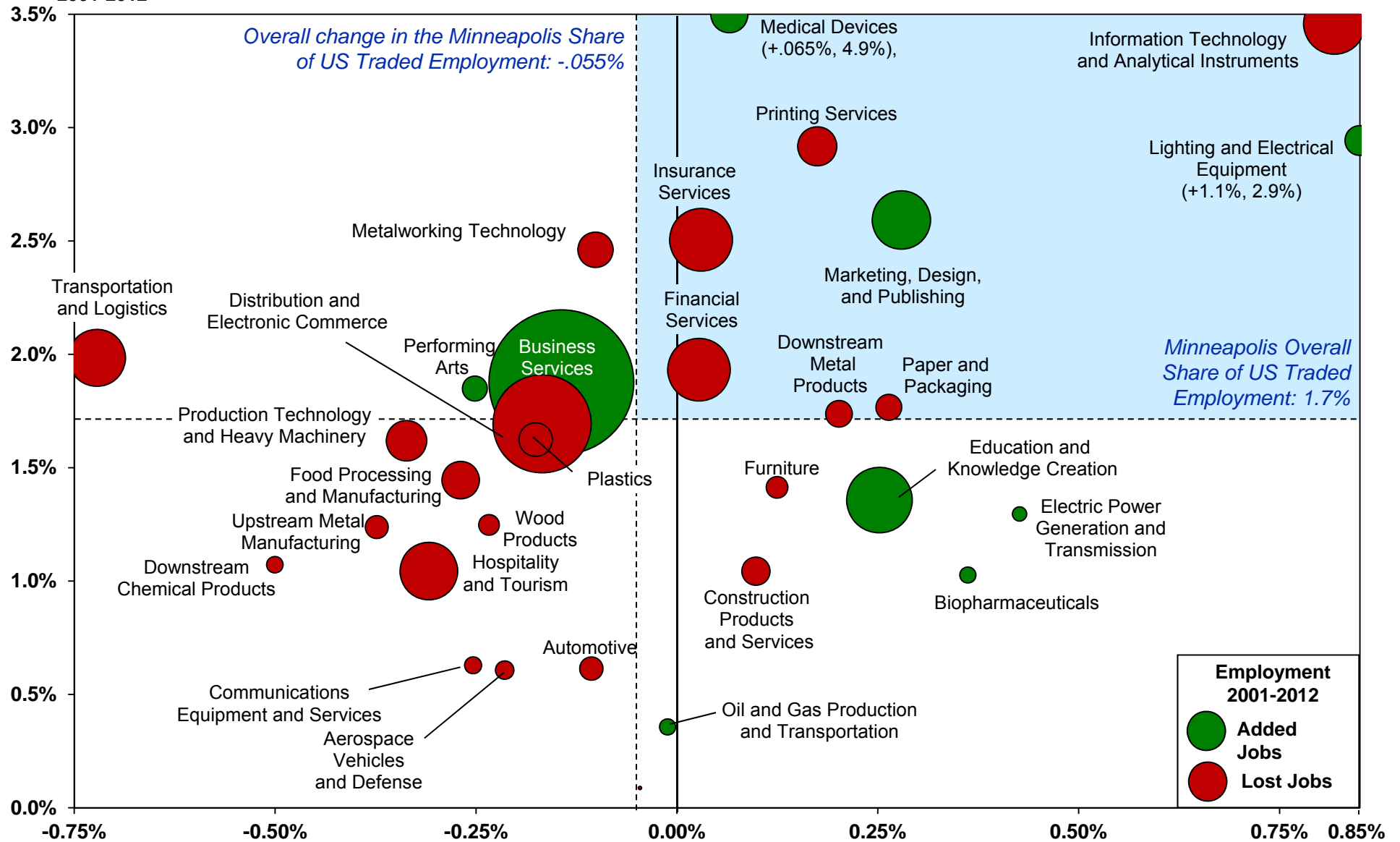
- Company alumni groups
- Venture capital community
- University alumni groups

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 =

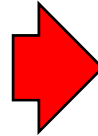
Source: Prof. Michael E. Porter, Harvard Business School; U.S. Cluster Mapping 2014 Benchmark Definitions (Delgado-Porter-Stern 2013), Richard Bryden, Project Director.

20140929—US Cluster Mapping Launch Event—FINAL FOR POSTING

Strong Traded Clusters Drive Regional Performance

Research Findings

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



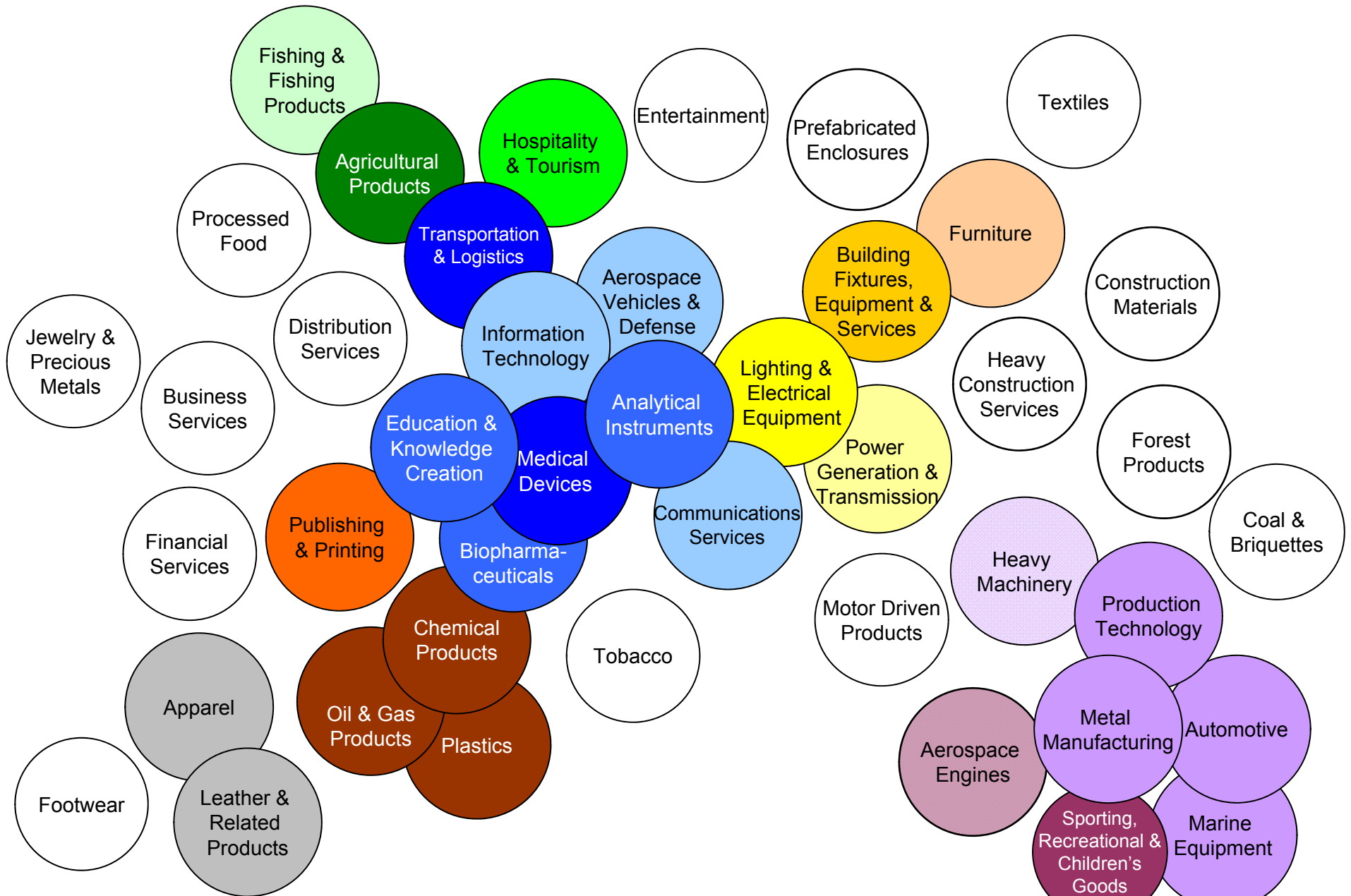
- **Job** growth
- Higher **wages**
- Higher **patenting** rates
- Greater **new business** formation, growth and survival
- **Resilience** in downturns



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

Source: "Cluster and Entrepreneurship" by Mercedes Delgado, Michael E. Porter, and Scott Stern (2010); "The Economic Performance of Regions" by Michael E. Porter (2003); "Clusters, Convergence, and Economic Performance" by Mercedes Delgado, Michael E. Porter, and Scott Stern (2014)

Related Clusters and Economic Diversification

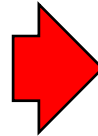


Note: Clusters with overlapping borders or identical shading have at least 20% overlap (by number of industries) in both directions.

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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- Greater **new business** formation, growth and survival
- **Resilience** in downturns



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

Source: "Cluster and Entrepreneurship" by Mercedes Delgado, Michael E. Porter, and Scott Stern (2010); "The Economic Performance of Regions" by Michael E. Porter (2003)

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

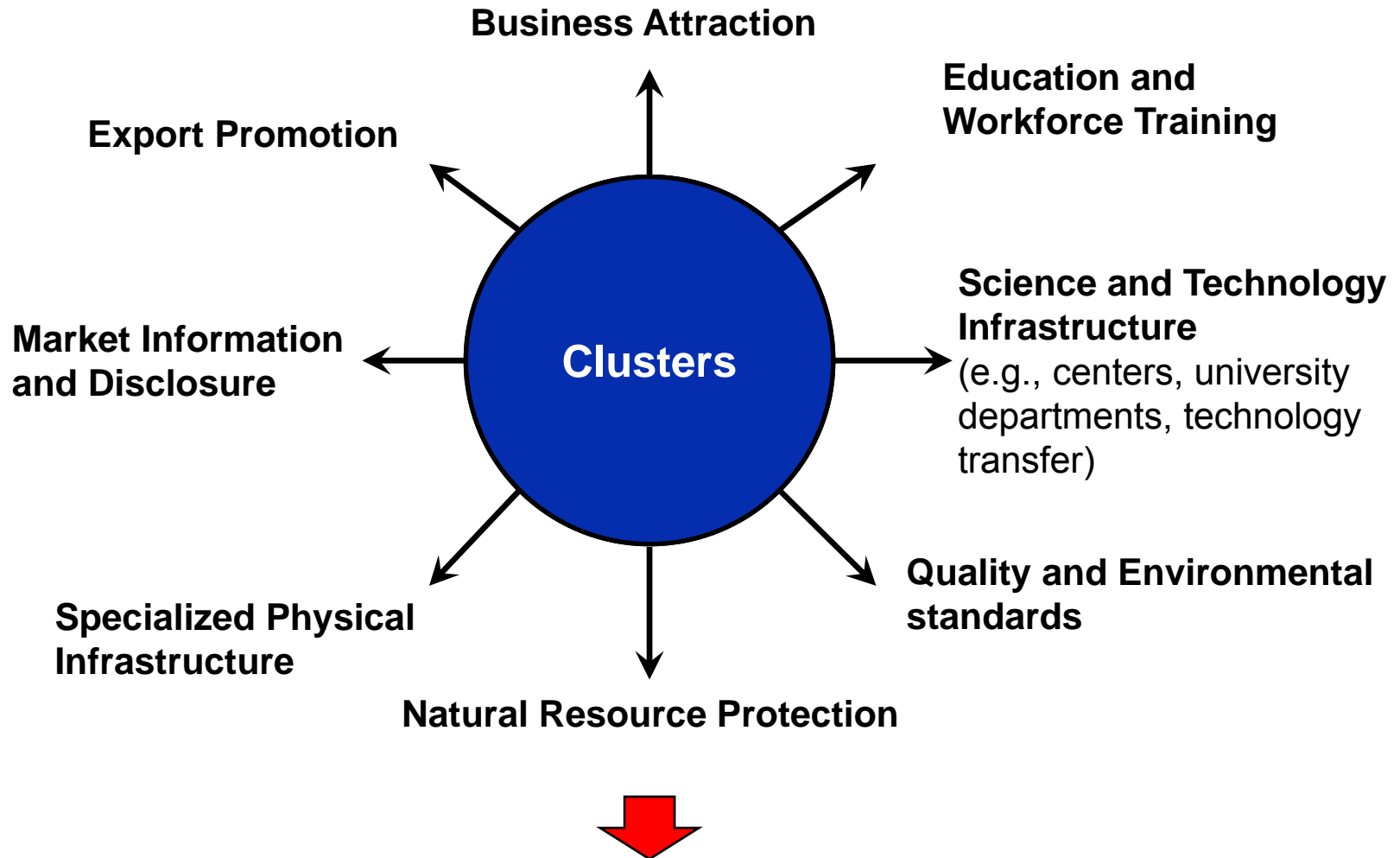
- What **weaknesses** must be addressed to remove key constraints and achieve parity with peer locations?

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

Clusters as a Tool for Economic Development


- **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

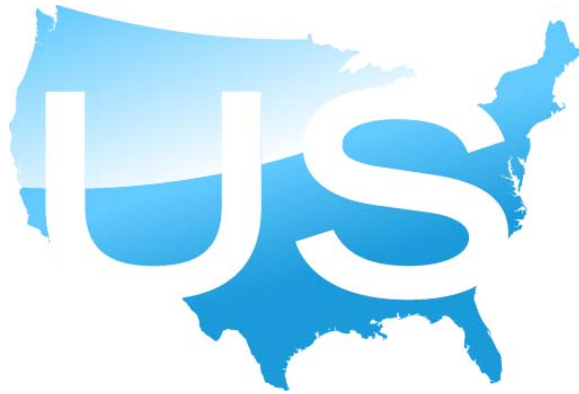


- Clusters provide a framework for **organizing the implementation** of many public policies and public investments directed at economic development

Clusters as a Tool for Economic Policy

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 - 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

