

Massachusetts Competitiveness

State, Cluster and Regional Performance

Professor Michael E. Porter
Institute for Strategy and Competitiveness
Harvard Business School

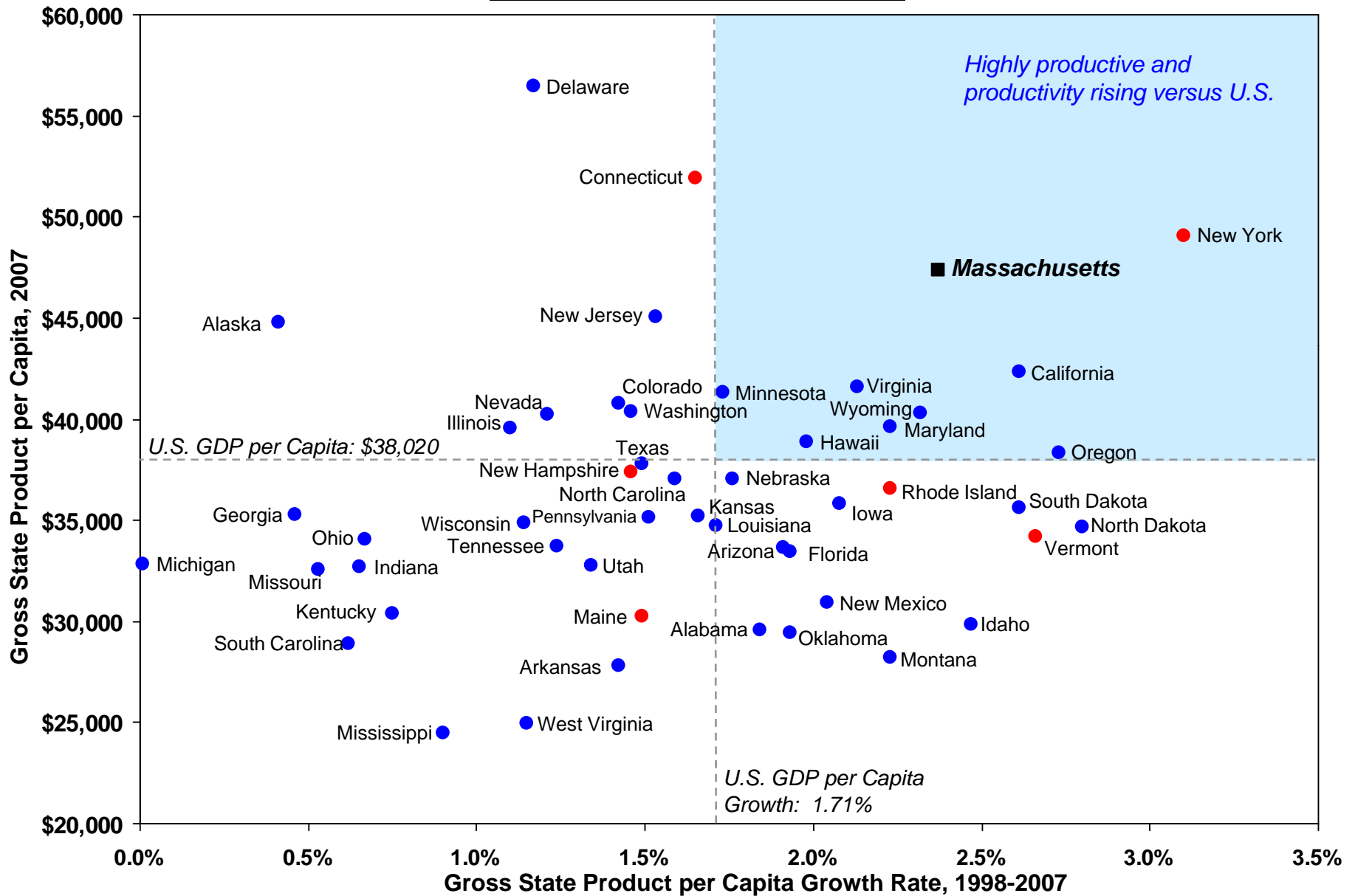
*Prepared for the Governor of Massachusetts
September 16, 2008*

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Information from the Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Additional material collected by Alexander Muggah, Research Associate.

State Comparisons

Economic Productivity

U.S. States, 1998-2007

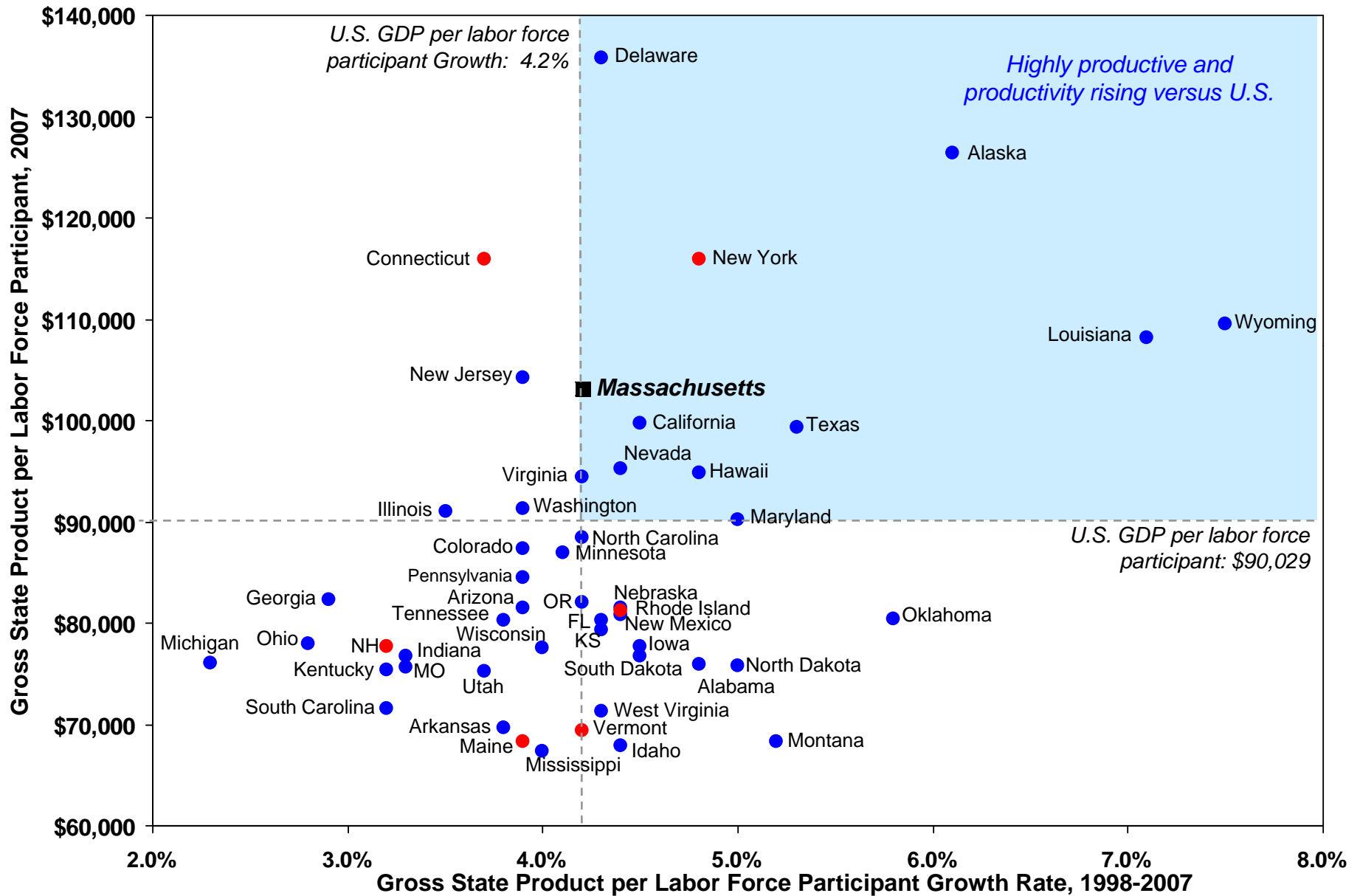


Source: Bureau of Economic Analysis. Growth calculated using compound annual growth rates. Gross state product figures in 2000 chained US dollars.

Notes: District of Columbia: \$124,363, %3.09. Growth rate calculated as compound annual growth rate (CAGR).

Economic Productivity

U.S. States, 1998-2007

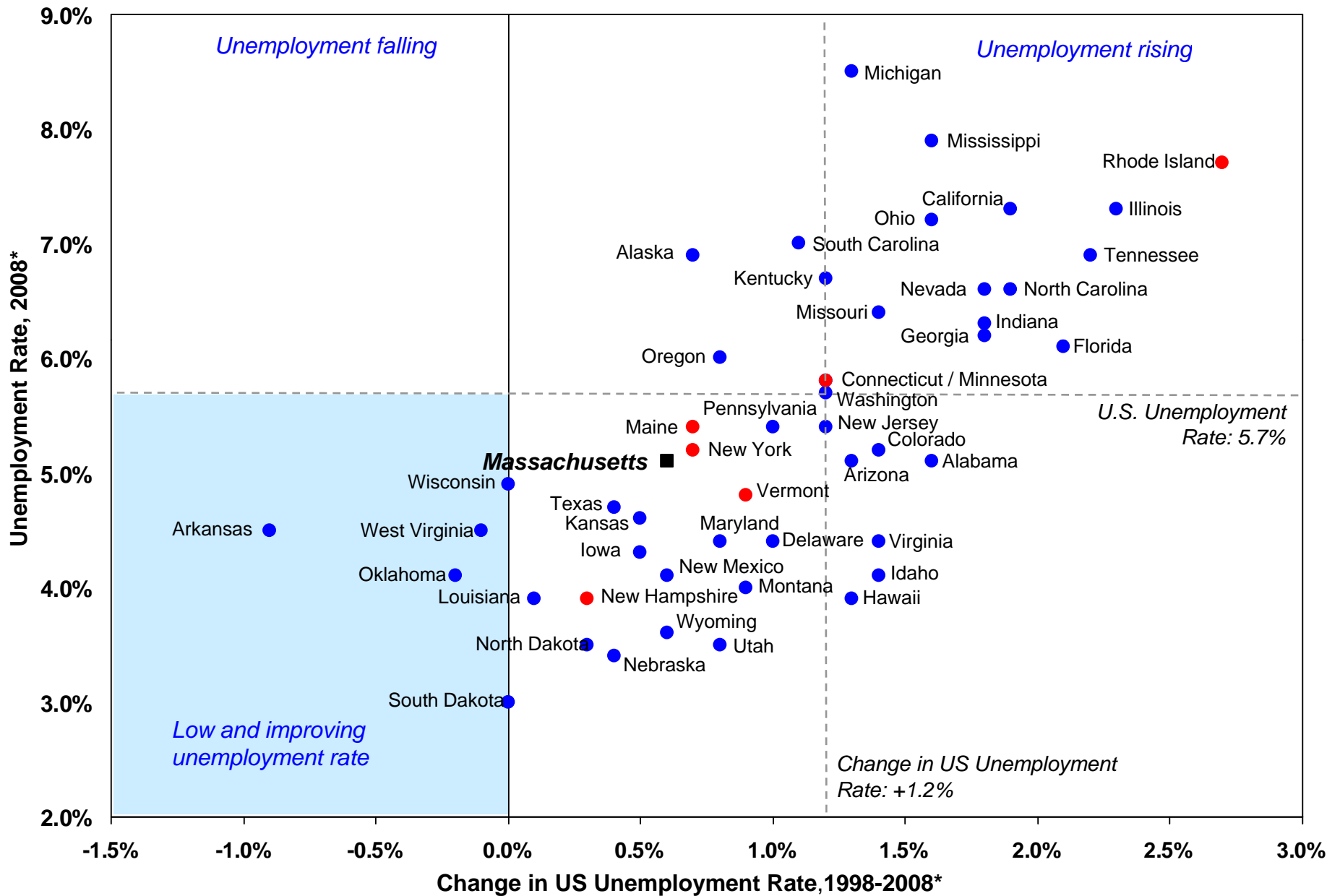


Source: Bureau of Economic Analysis. Growth calculated using compound annual growth rates. Gross state product figures in 2000 chained US dollars.

Notes: District of Columbia: \$288,176, %5.6. Growth rate calculated as compound annual growth rate (CAGR).

Unemployment Rate

U.S. States, 1998-2008*

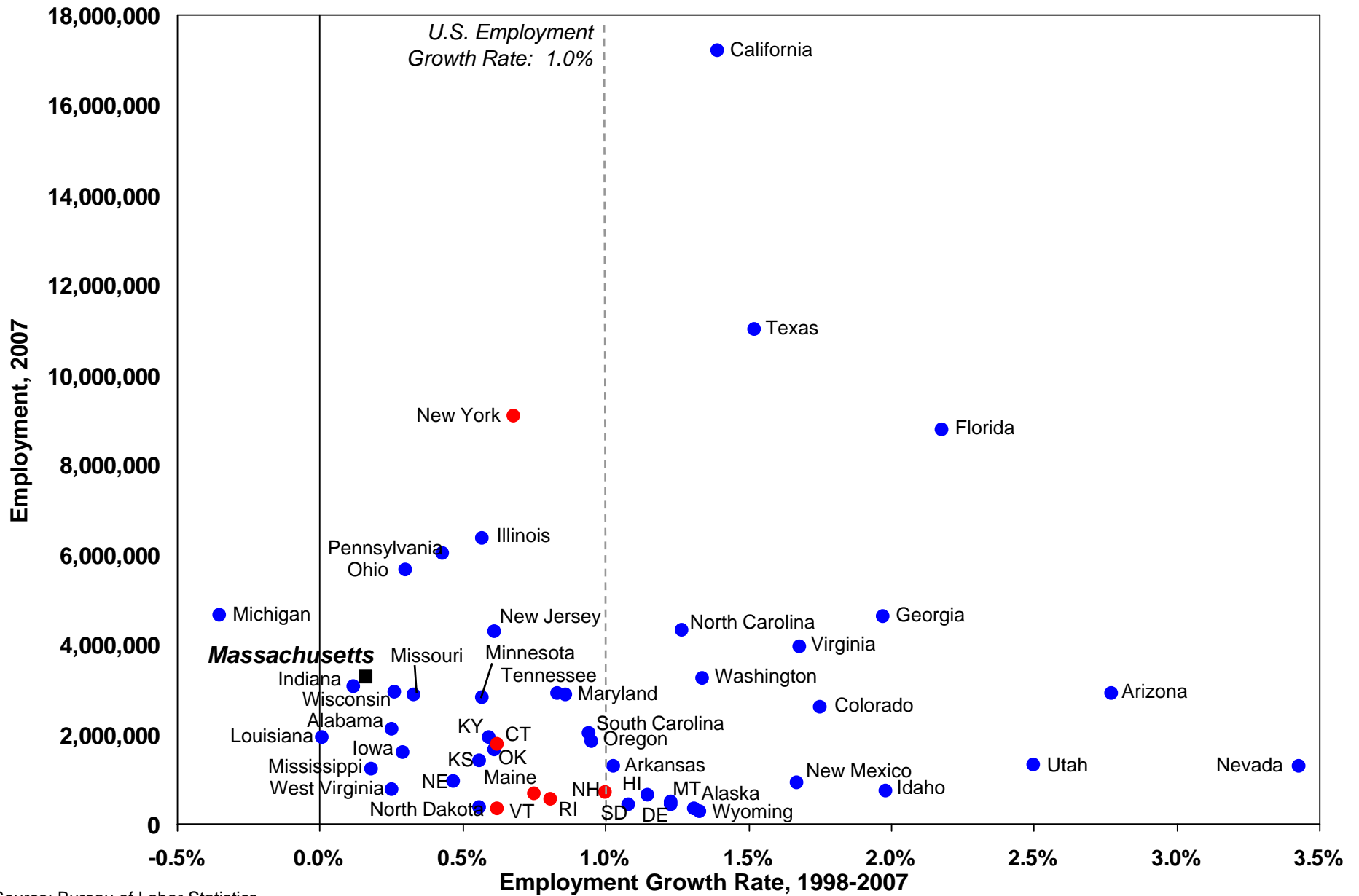


Source: Bureau of Labor Statistics *seasonally adjusted figures, July 2008

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Employment Growth

U.S. States, 1998-2007



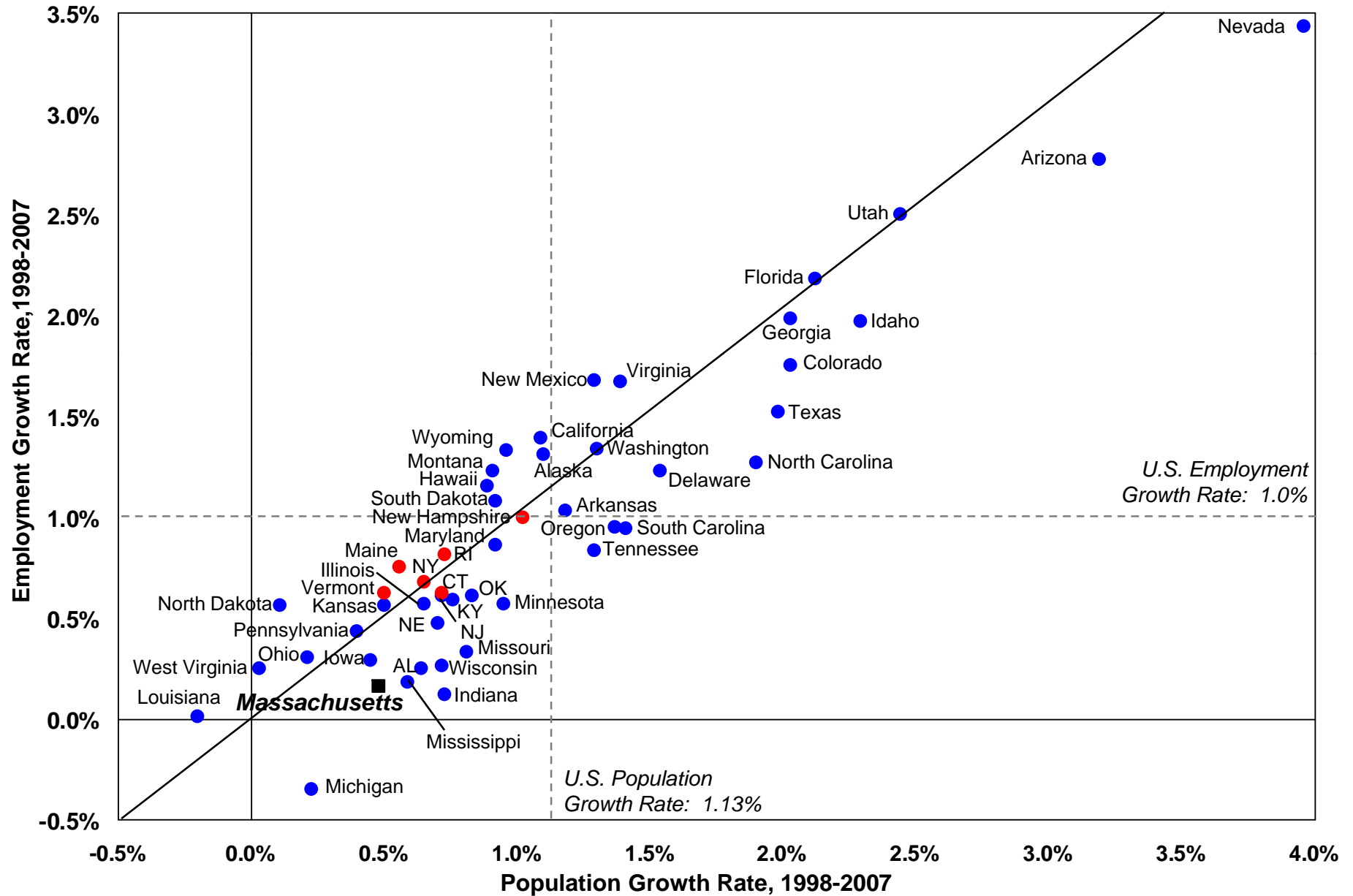
Source: Bureau of Labor Statistics.

Note: Growth rate calculated as compound annual growth rate (CAGR).

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Population Growth and Employment Growth

U.S. States, 1998-2007



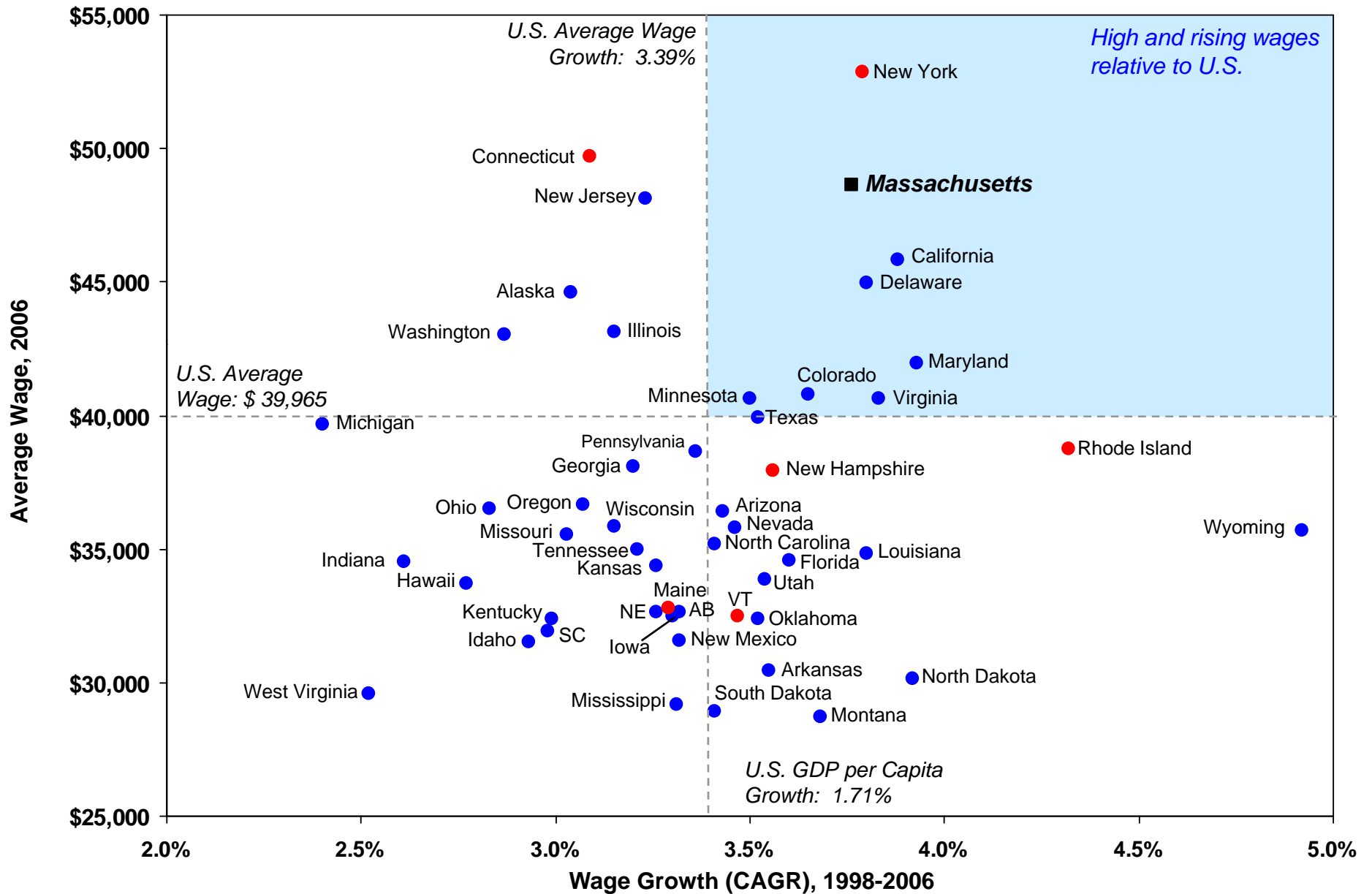
Note: Growth rates calculated as compound annual growth rate (CAGR).

Source: Census; Bureau of Labor Statistics.

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Average Wage

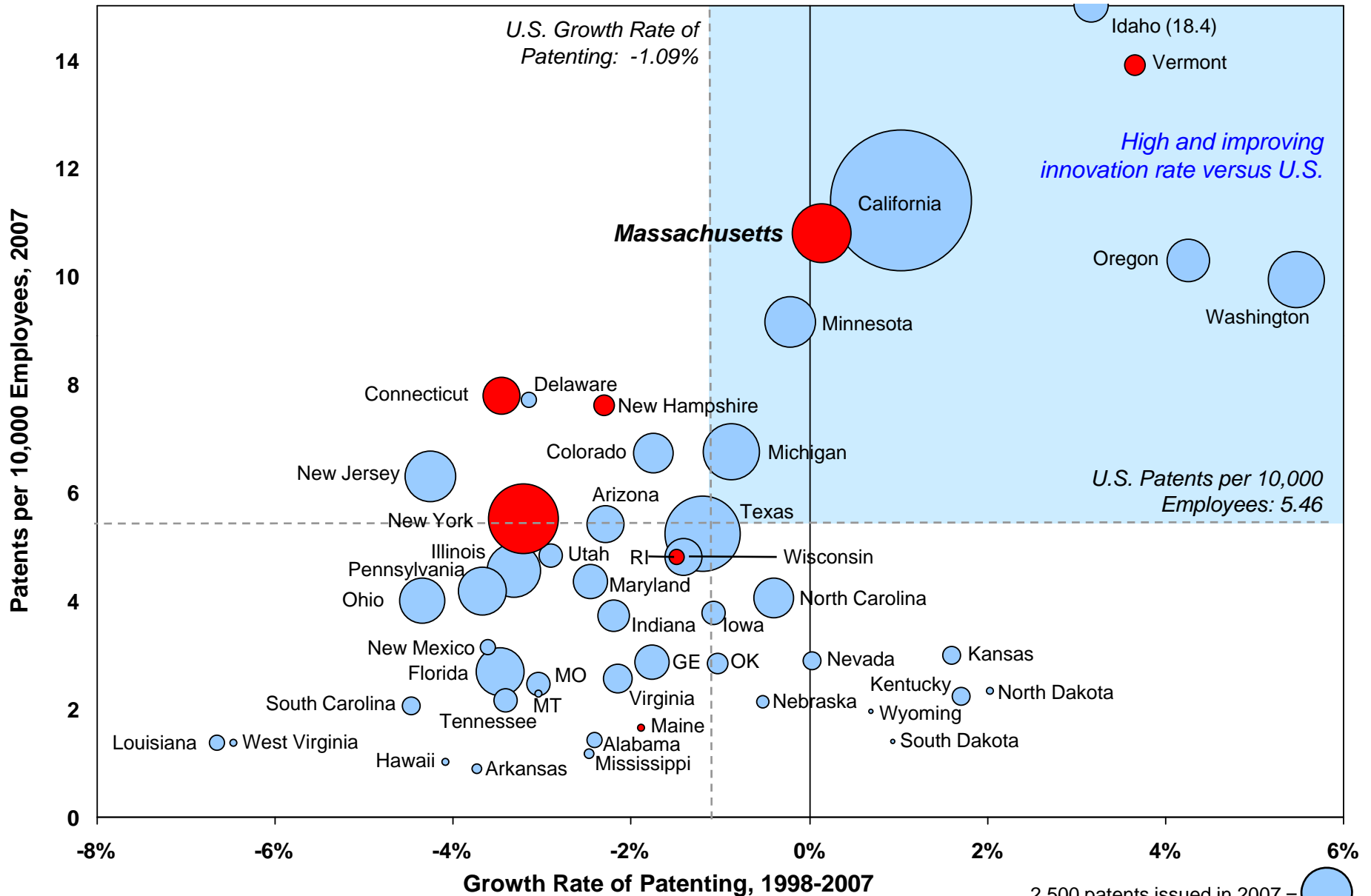
U.S. States, 1998-2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Innovation Rate

U.S. States, 1998-2006



Source: USPTO, Bureau of Labor Statistics. Note: Growth rate calculated as compound annual growth rate (CAGR).
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Massachusetts Economic and Cluster Performance

Overall Economic Performance Indicators

Massachusetts

Economic Performance

Employment, 2006

- in Massachusetts: 3,044,080 (rank 13)
- % of US: 2.54%

Employment growth, annual rate, 1998 to 2006

- in Massachusetts: 0.50% (rank 46)
- in the US: 1.30%

Gross State Product per capita, 2007

- in Massachusetts: \$47,351 (rank 5)
- in the US: \$38,020
- Massachusetts % above US: 24.5%

Average wage, 2006

- in Massachusetts: \$48,647 (rank 4)
- in the US: \$39,965
- Massachusetts % above US: 21.7%

Growth in Real Gross State Product per capita, annual rate, 1998-2007

- in Massachusetts: 2.37% (rank 9)
- in the US: 1.71%

Wage growth, annual rate, 1998 to 2006

- in Massachusetts: 3.76% (rank 11)
- in the US: 3.39%

Share of Employment in Traded Clusters, 2006

- in Massachusetts: 32.1% (rank 4)
- in the US: 27.4%

Change in Share of Employment in Traded Clusters, 1998 to 2006

- in Massachusetts: -2.36% (rank 34)
- in the US: -2.14%

Innovation Output

Patents per 10,000 employees, 2006

- in Massachusetts: 13.18 (rank 6)
- in the US: 7.48

Growth in total patents, annual rate, 1998 to 2006

- in Massachusetts: 2.04% (rank 13)
- in the US: 1.42%

Traded establishment formation, annual rate, 1998 to 2006

- in Massachusetts: 0.55% (rank 49)
- in the US: 2.10%

Total establishment formation, annual rate, 1998 to 2006

- in Massachusetts: 0.55% (rank 38)
- in the US: 1.14%

Demographic Profile

Population, 2006

- in Massachusetts: 6,434,389 (rank 13)
- % of US: 2.15%

Population growth, annual rate, 1998 to 2006

- in Massachusetts: 0.52% (rank 43)
- in the US: 1.15%

Labor Force Participation, 2006

- in Massachusetts: 67.1% (rank 27)
- In the US: 66.2%

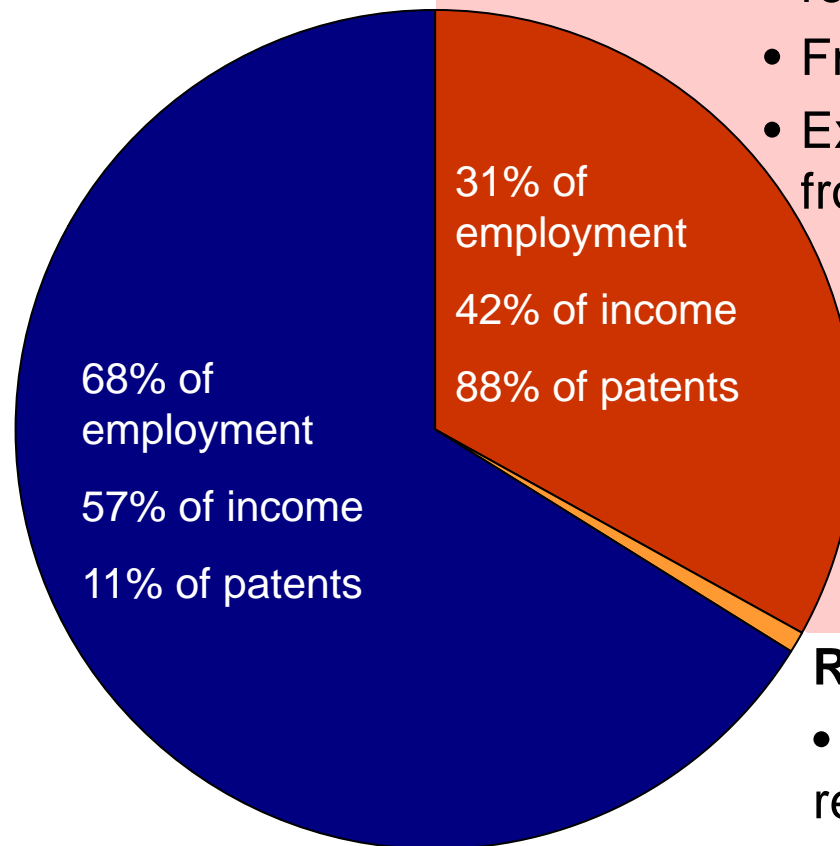
Note: Ranks are among the 50 US states plus the District of Columbia. Growth calculated using compound annual growth rates. Gross state product figures in 2000 chained US dollars.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Composition of Regional Economies, United States

Local Clusters

- Serve almost exclusively the local market
- Not exposed to cross-regional competition for employment



Traded Clusters

- Serve markets in other regions and countries
- Free to choose location
- Exposed to competition from other regions

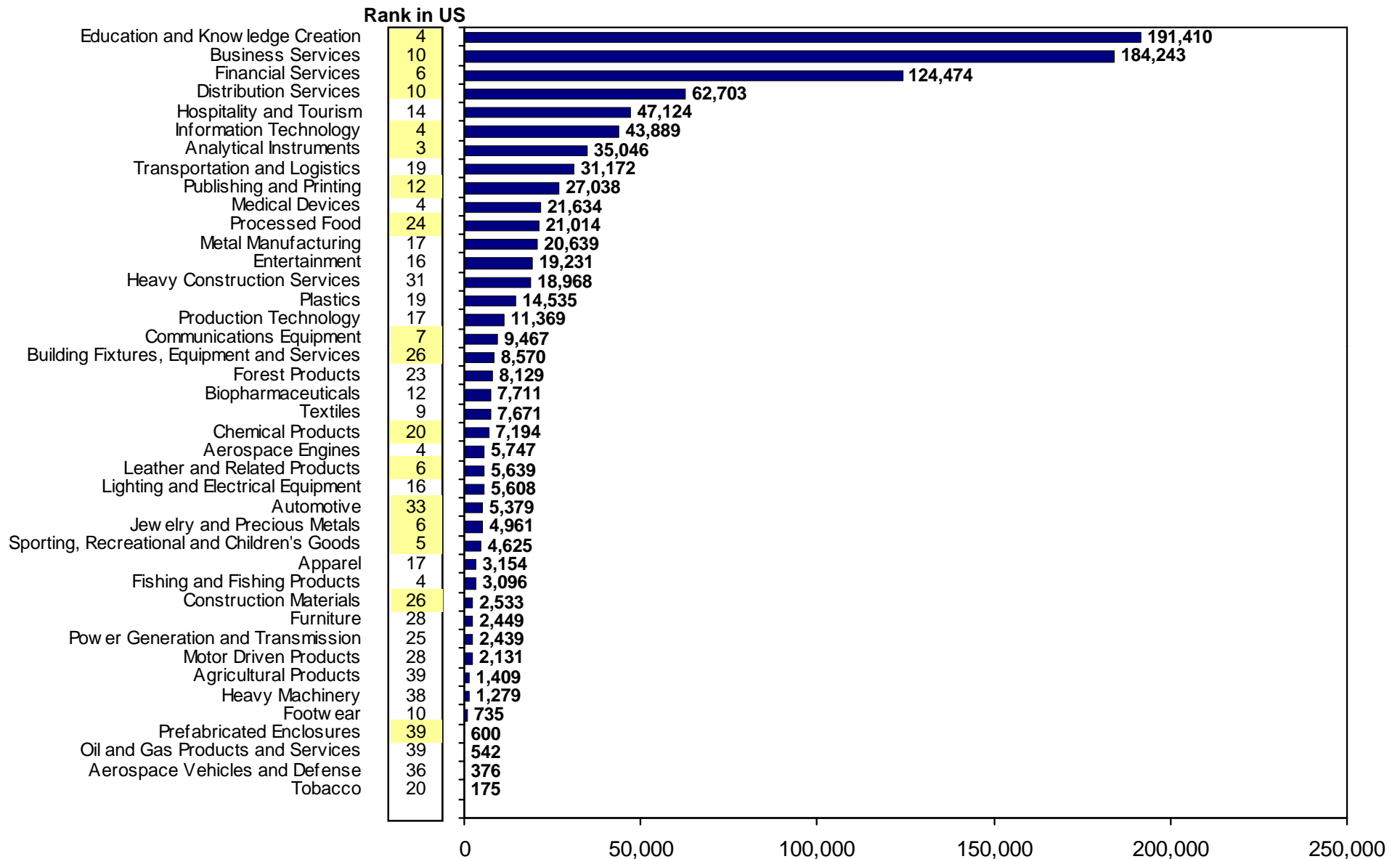
Resource-based Clusters

- Location determined by resource availability
- 1% of income, employment, and patents in the U.S.

Source: Michael E. Porter, Economic Performance of Regions, Regional Science (2004), Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Massachusetts Employment

Traded Clusters, 2006



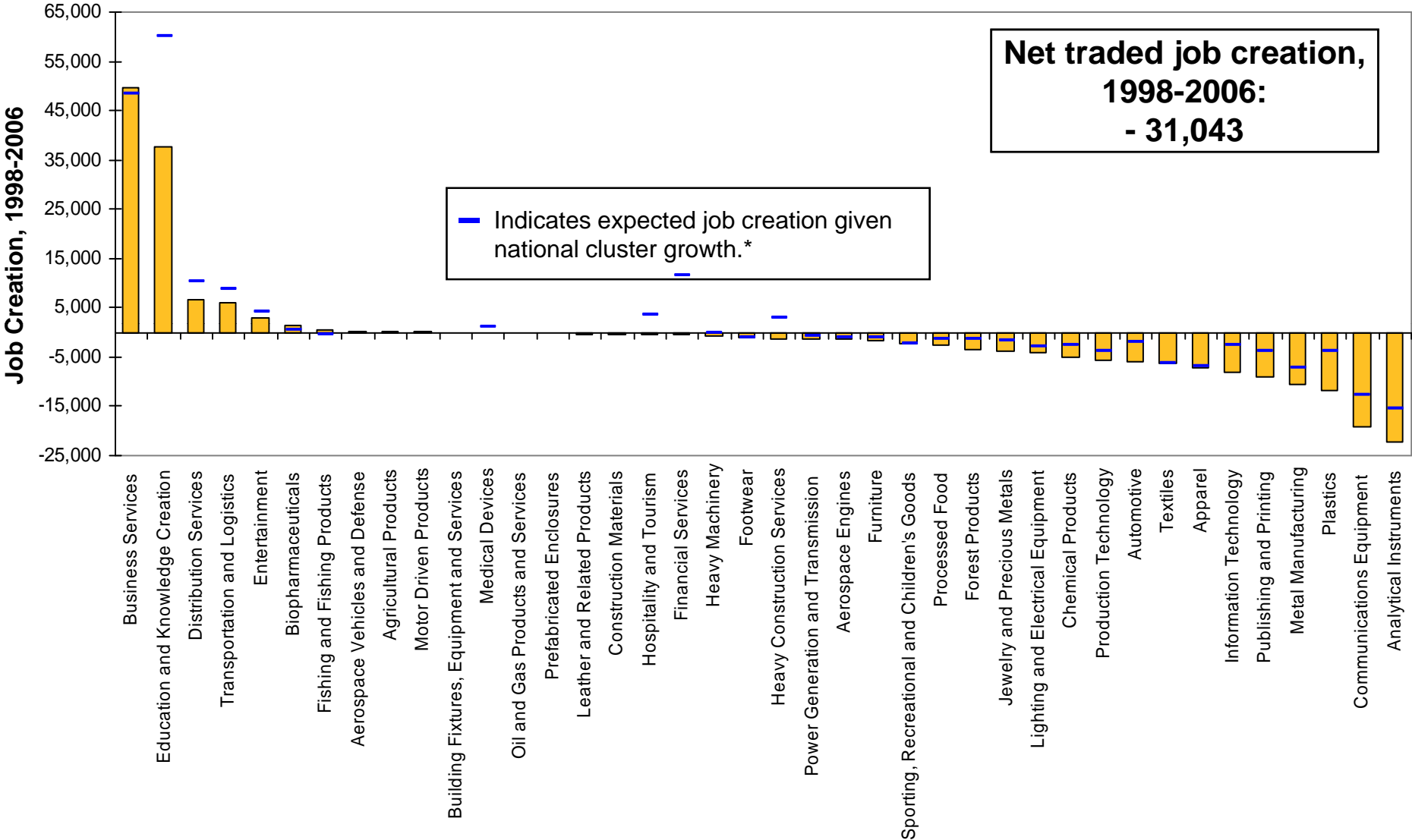
Note: Ranks are among the 50 US states plus the District of Columbia.

Massachusetts overall employment rank = 13.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Massachusetts Job Creation

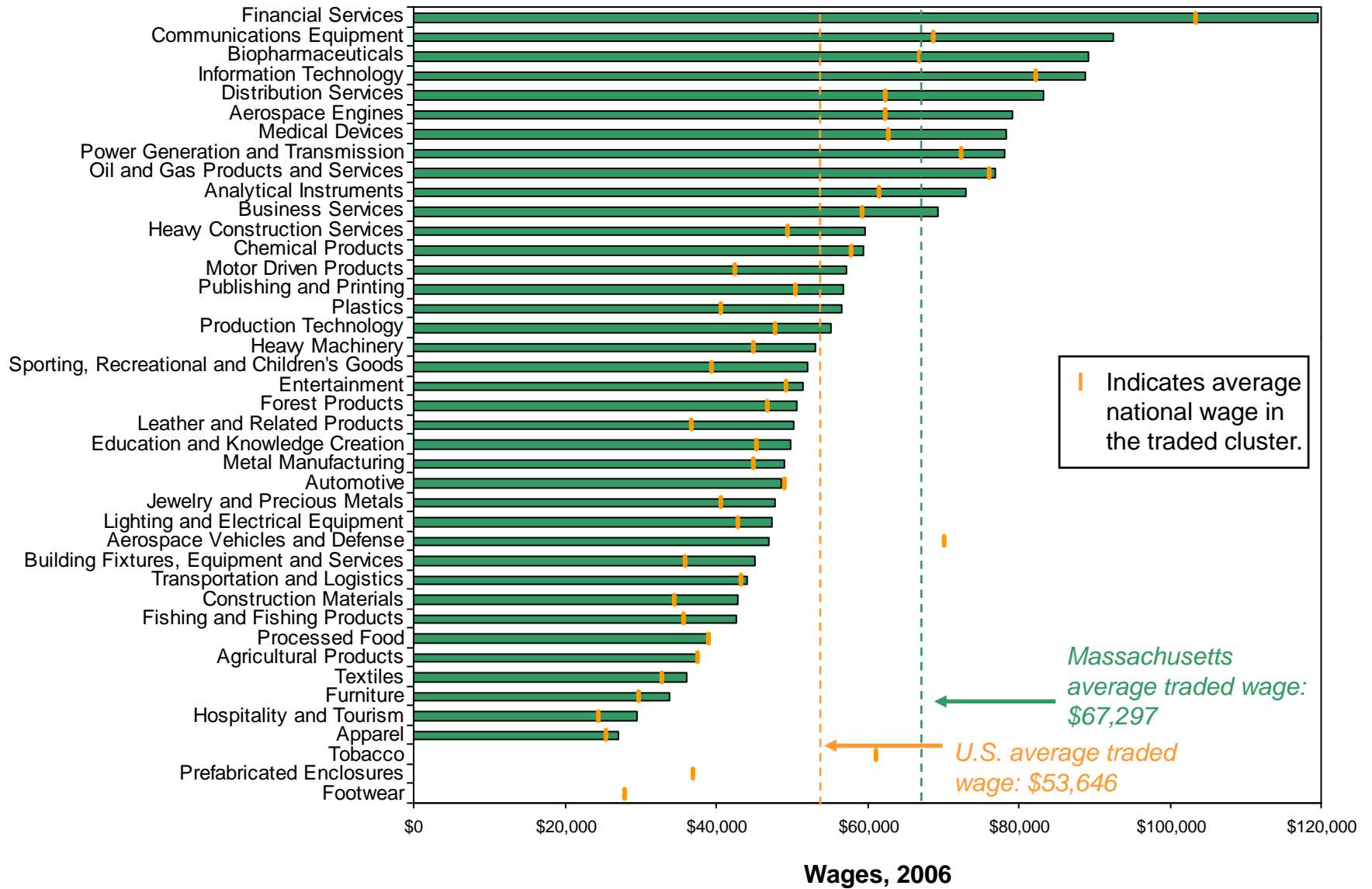
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in Massachusetts, if it matched national benchmarks, would be +69,164
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Massachusetts Wages

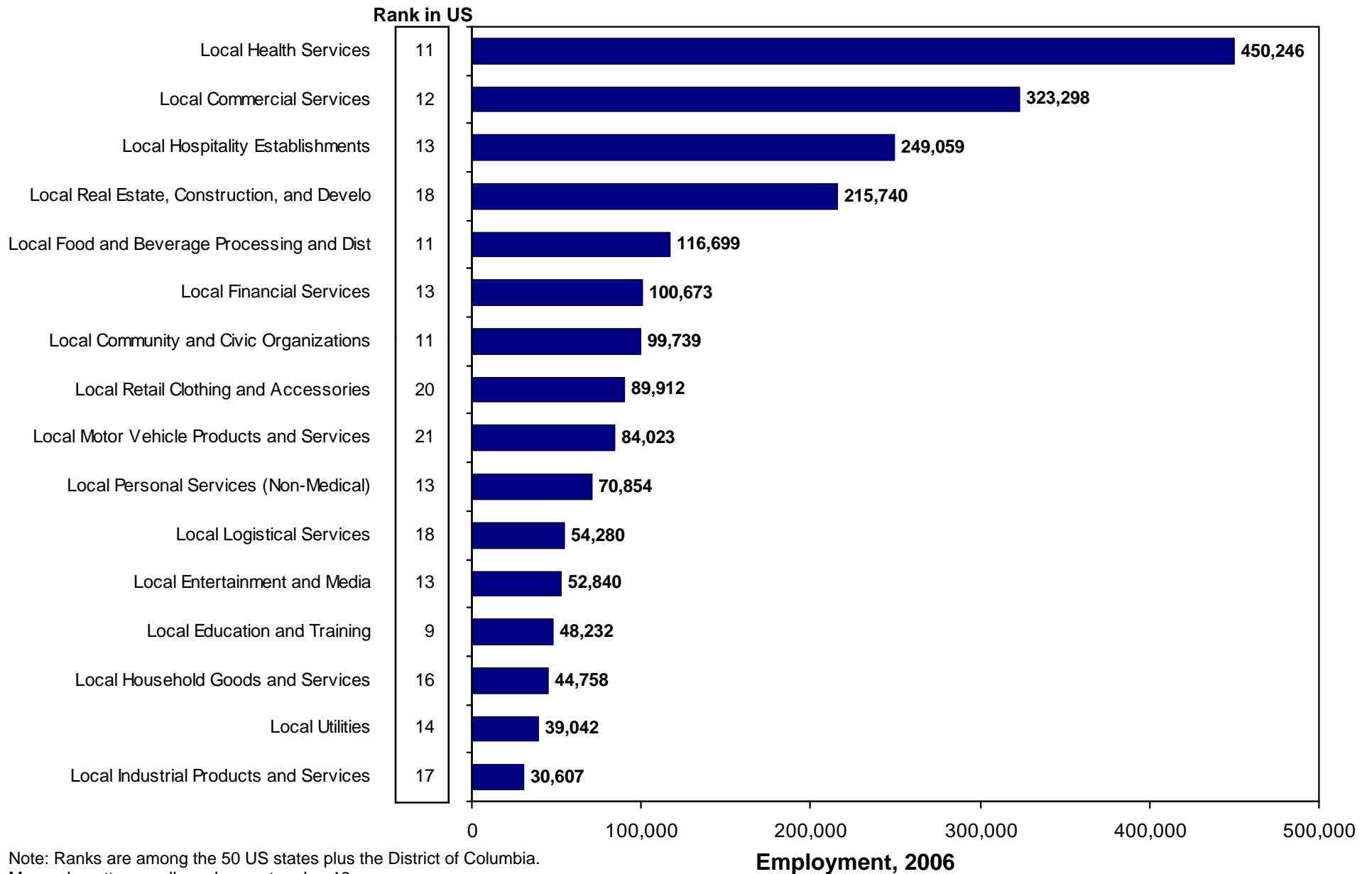
Traded Clusters vs. National Benchmarks



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Massachusetts Employment

Local Clusters, 2006



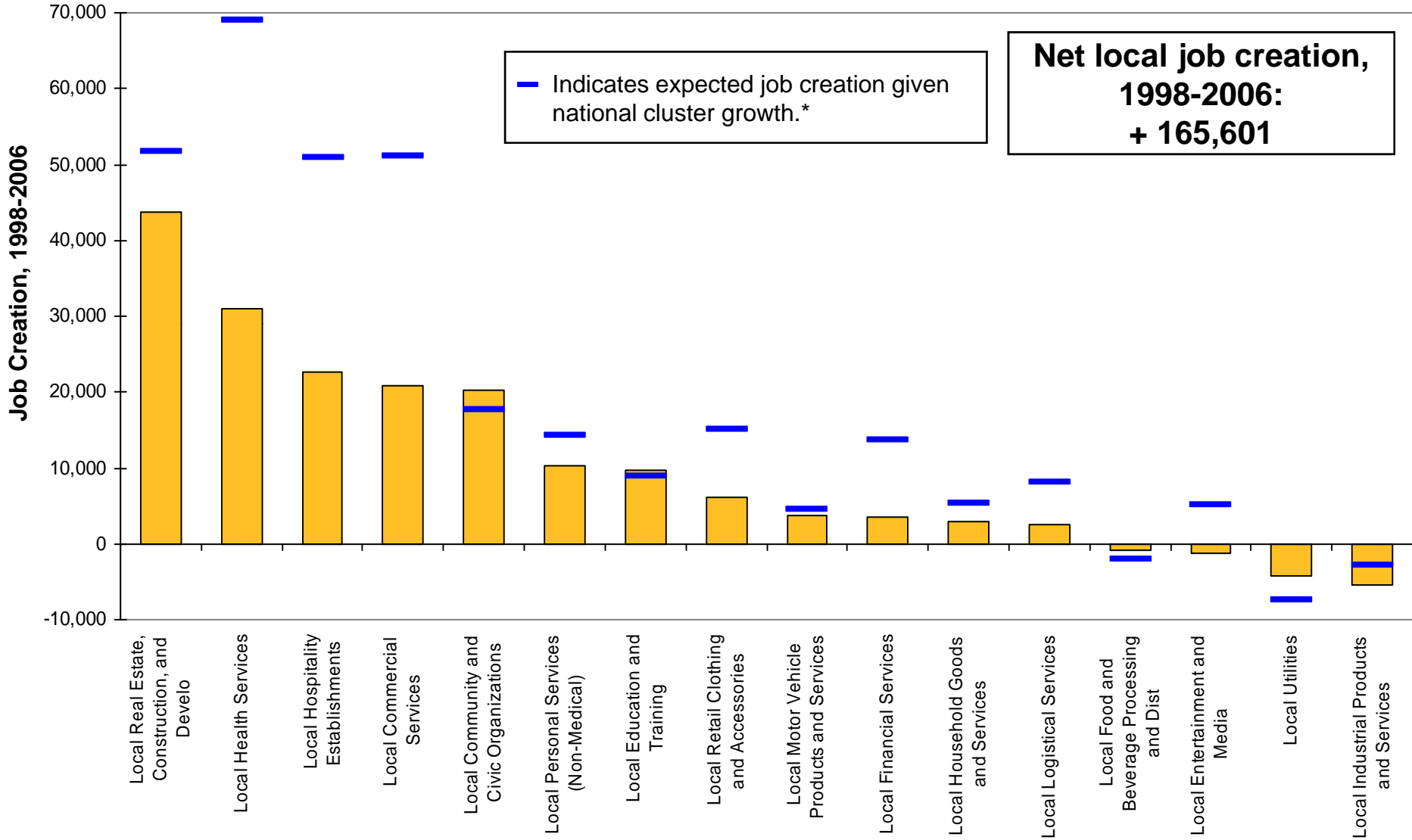
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Massachusetts overall employment rank = 13.

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Massachusetts Job Creation

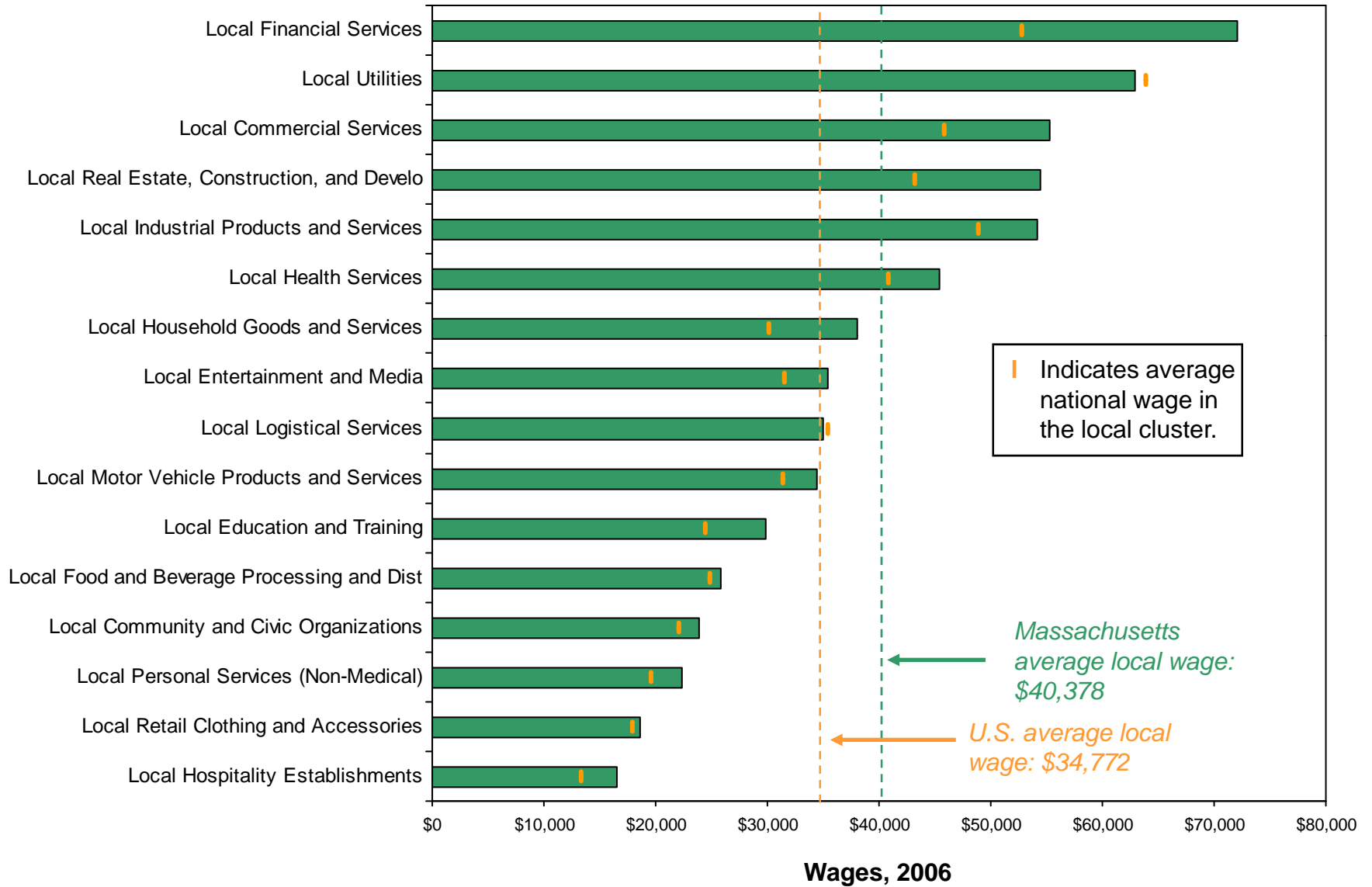
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall local job creation in Massachusetts, if it matched national benchmarks, would be +303,104
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Massachusetts Wages

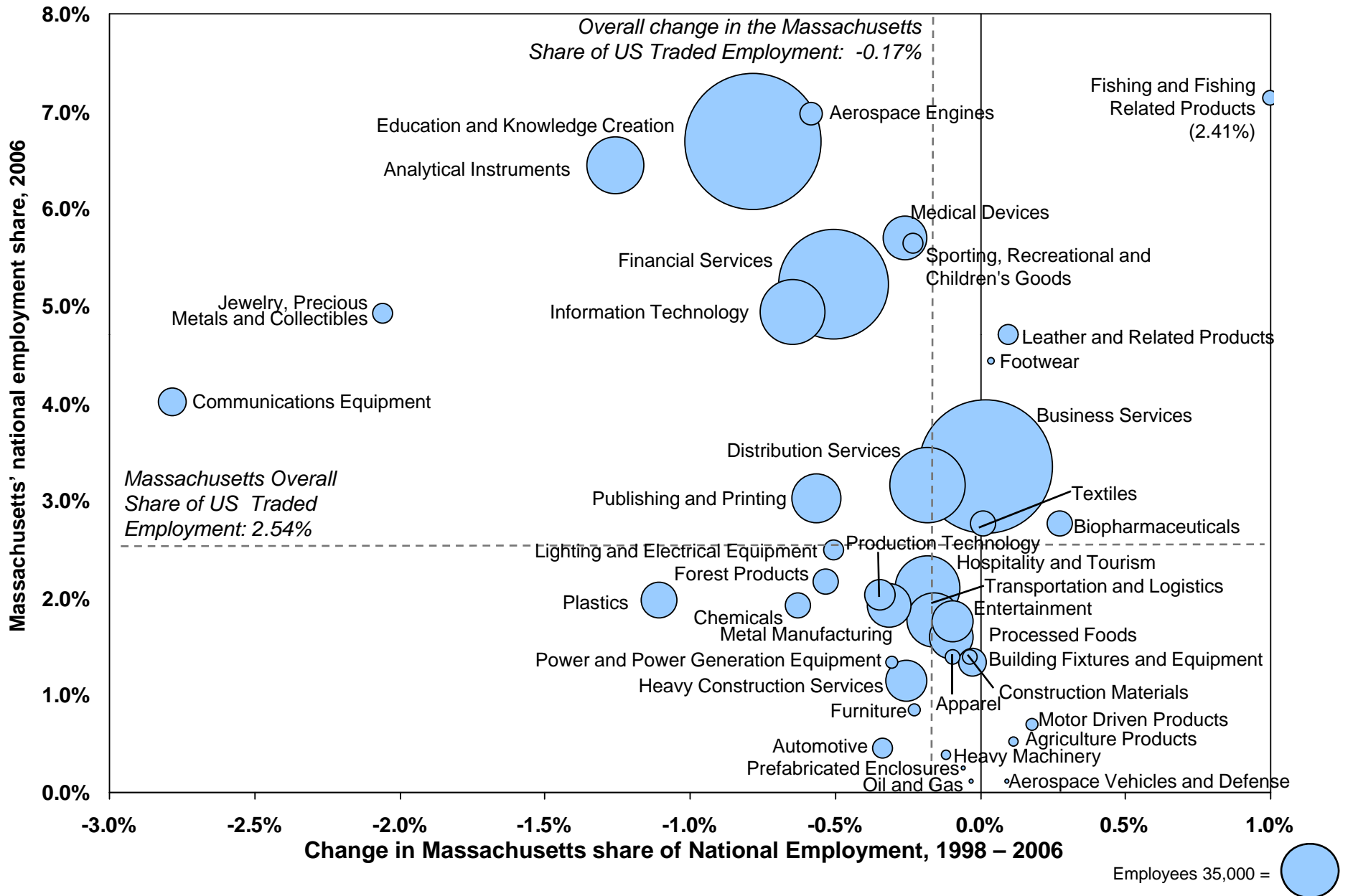
Local Clusters vs. National Benchmarks



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Massachusetts

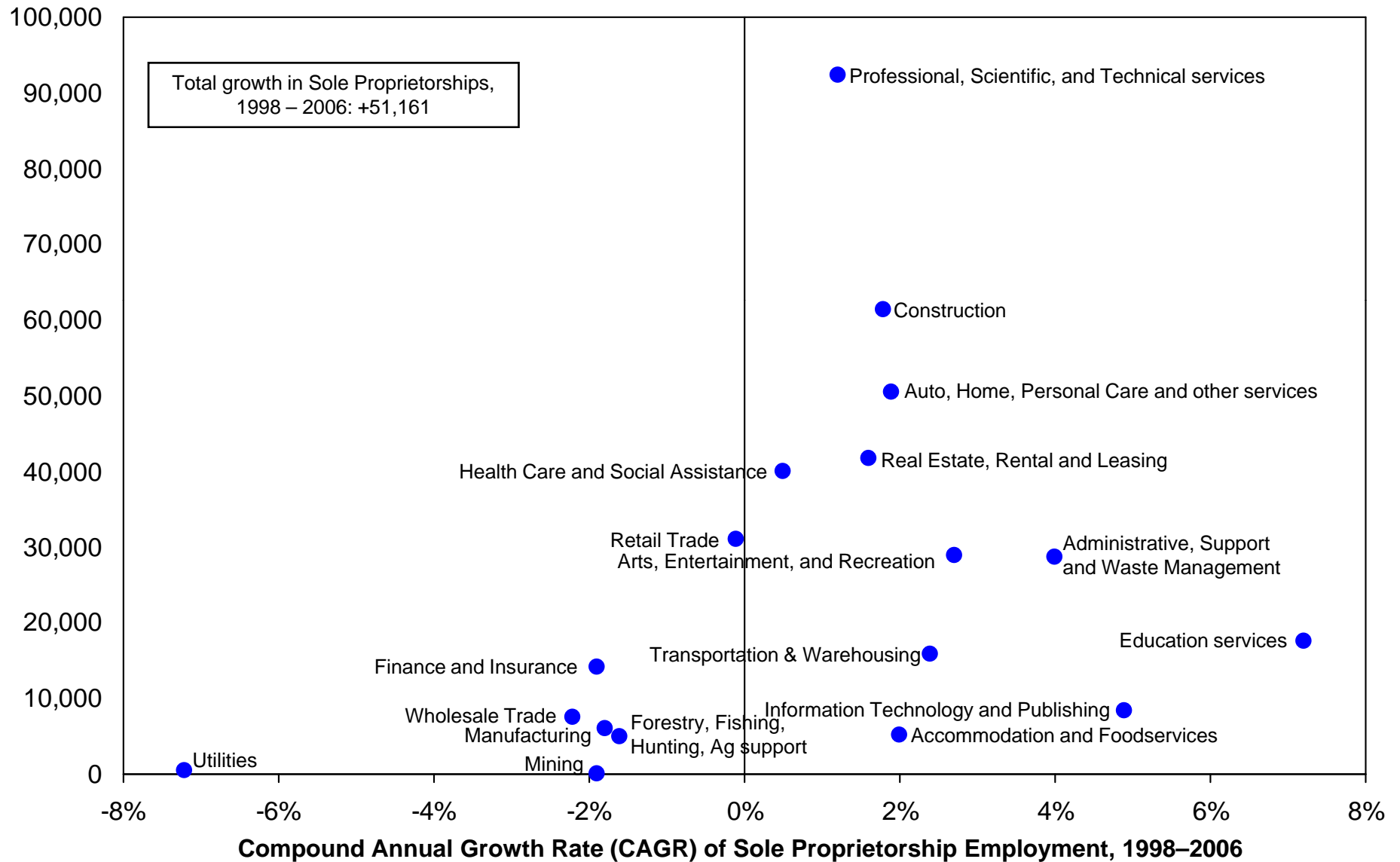
Specialization by Traded Cluster, 1998-2006



Sole Proprietorship Employment and Growth

Massachusetts

Sole Proprietorship
Establishments 2006

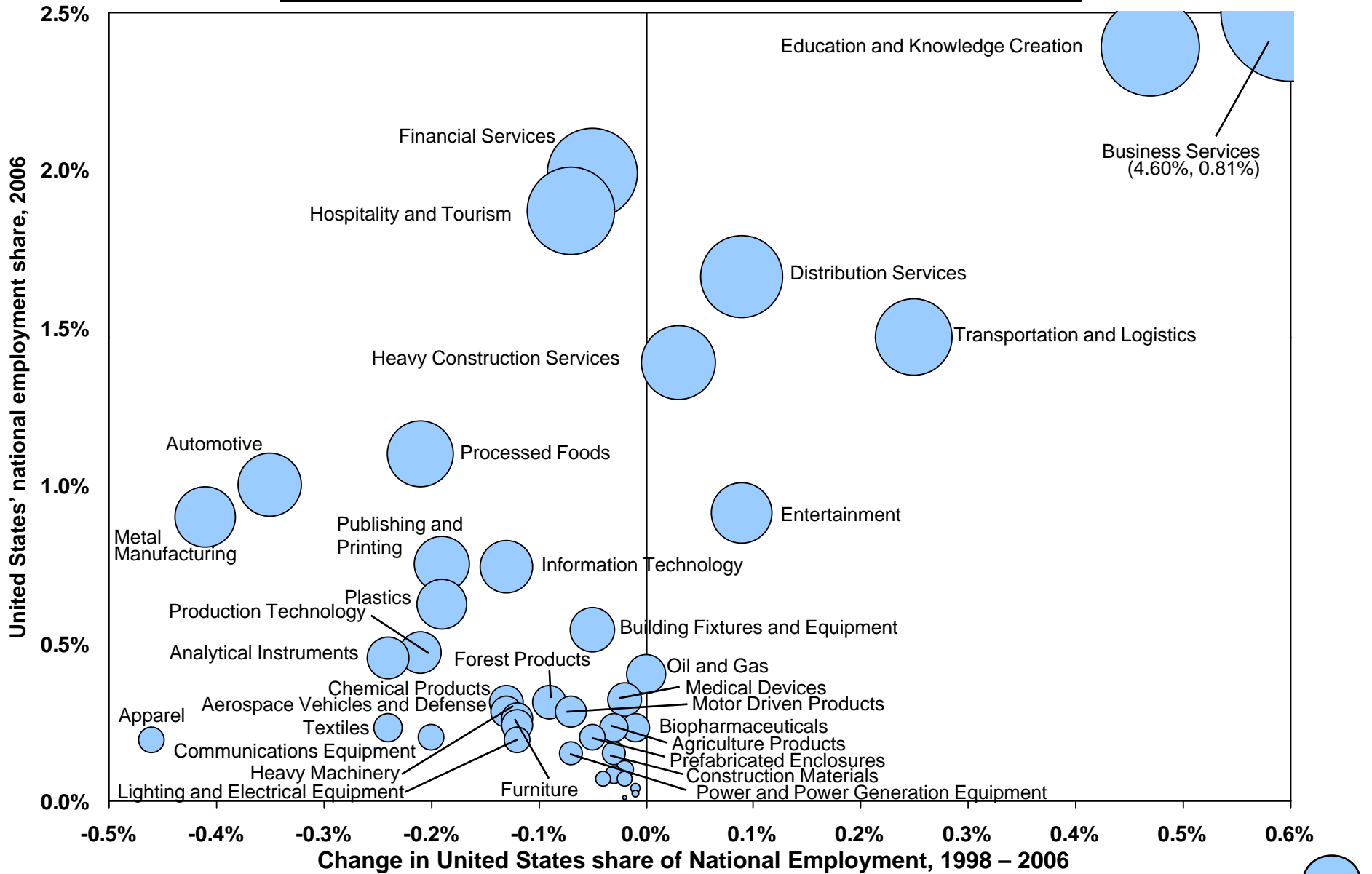


Source: U.S. Census Bureau, Nonemployer Statistics

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United States

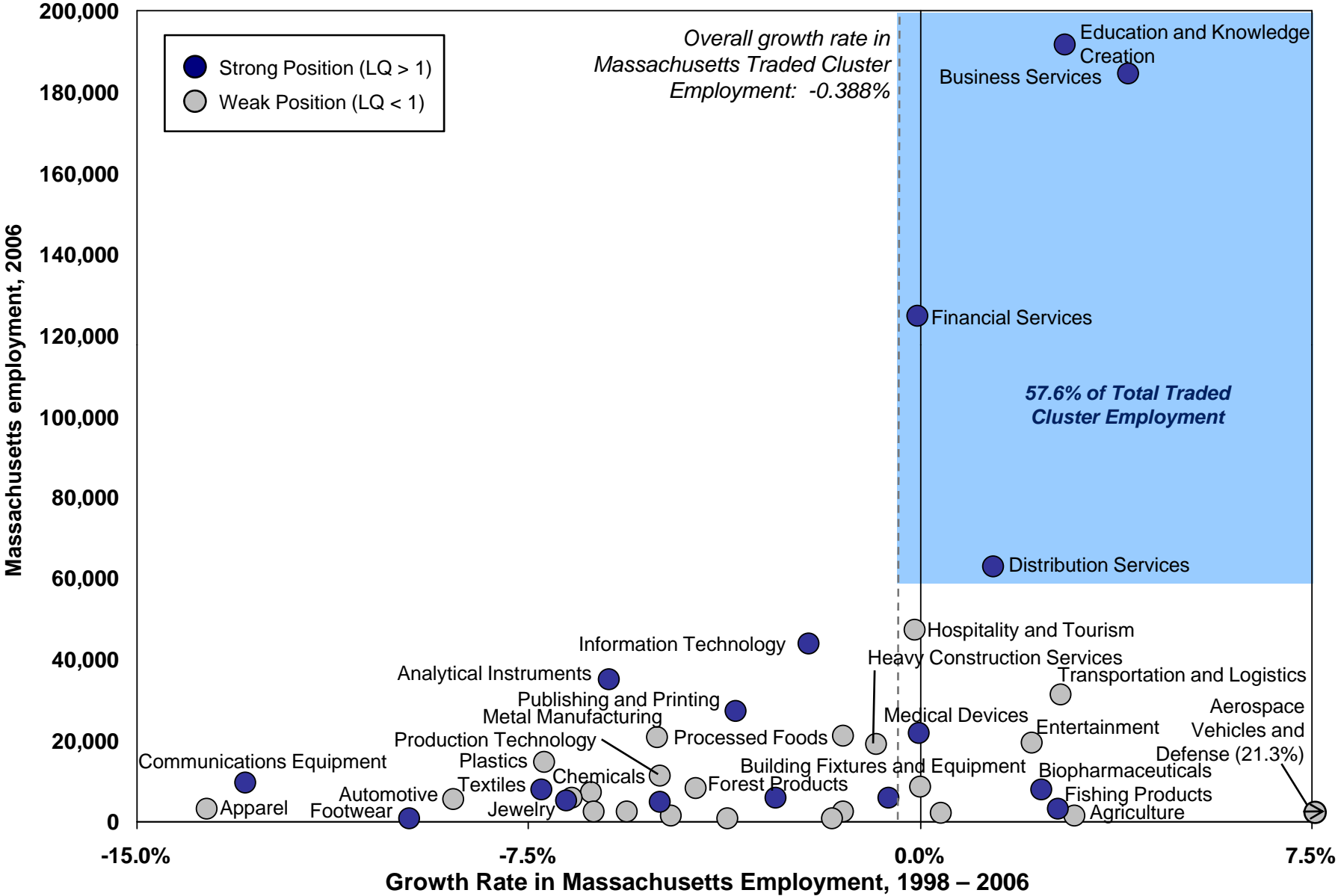
Specialization by Traded Cluster, 1998-2006



Source: Prof. Michael E. Porter, International Cluster Competitiveness Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. Underlying data drawn from the UN Commodity Trade Statistics Database and the IMF BOP statistics.
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Massachusetts

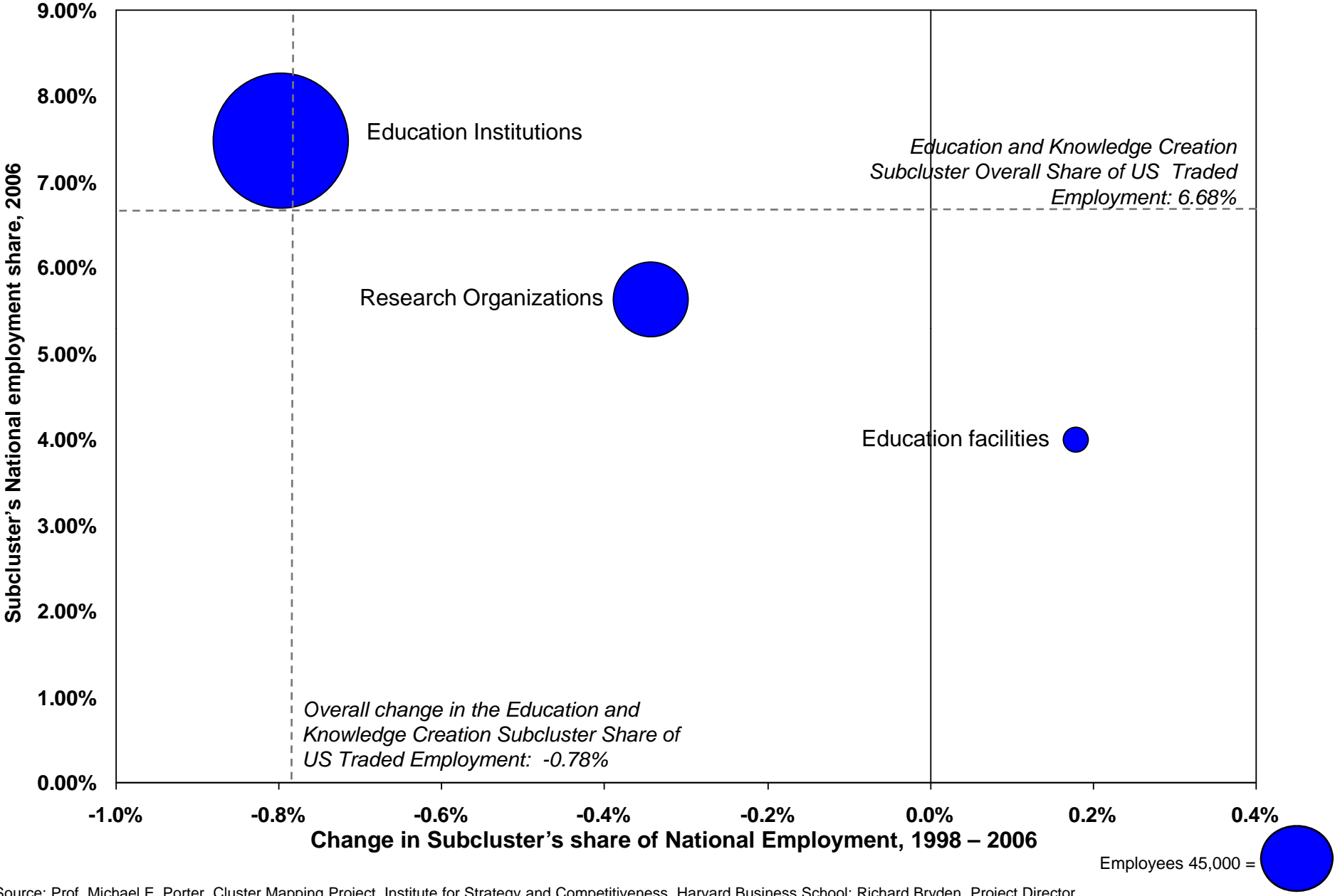
Growth in Large Clusters, 1998-2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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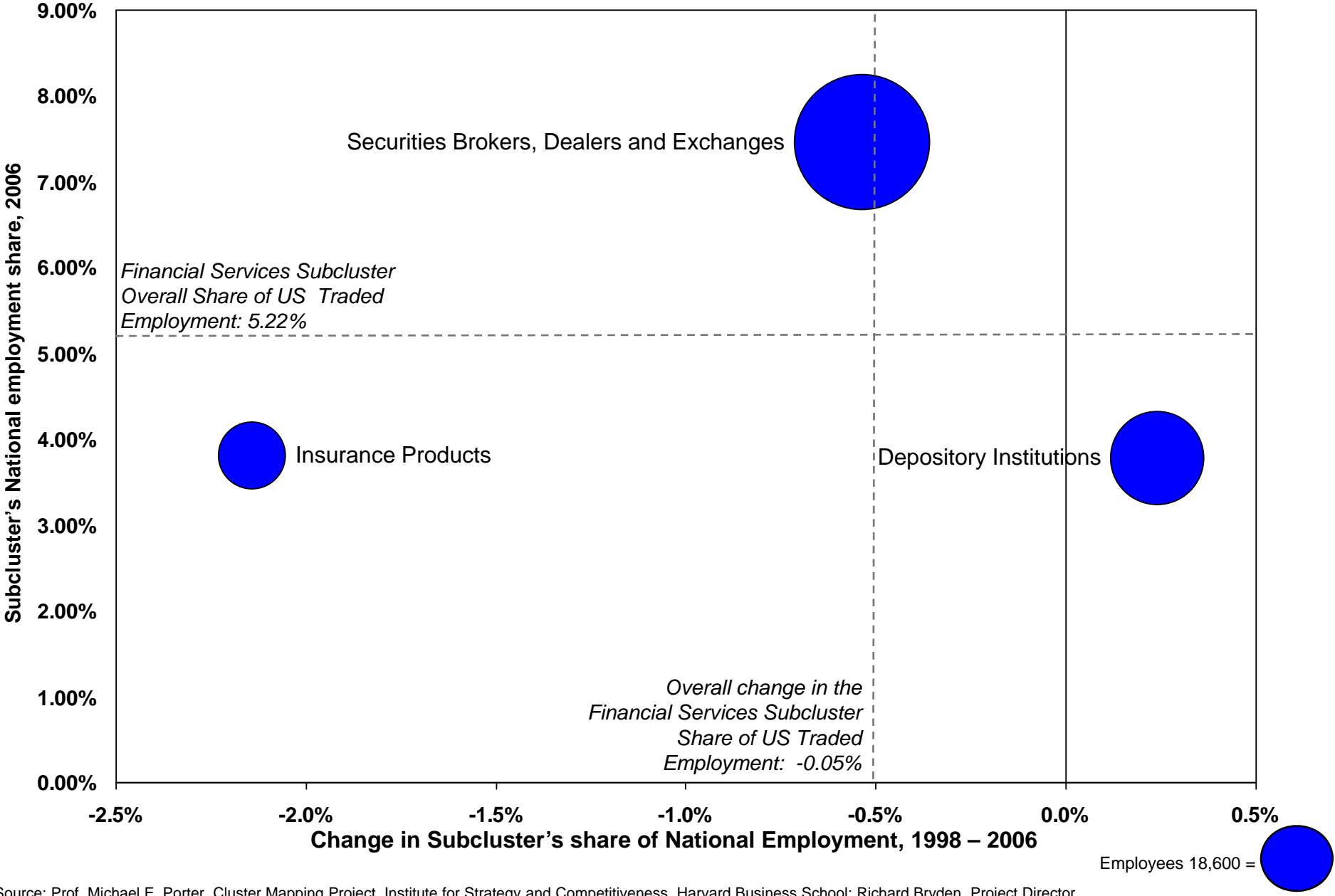
Massachusetts Employment by Subcluster

Education and Knowledge Creation, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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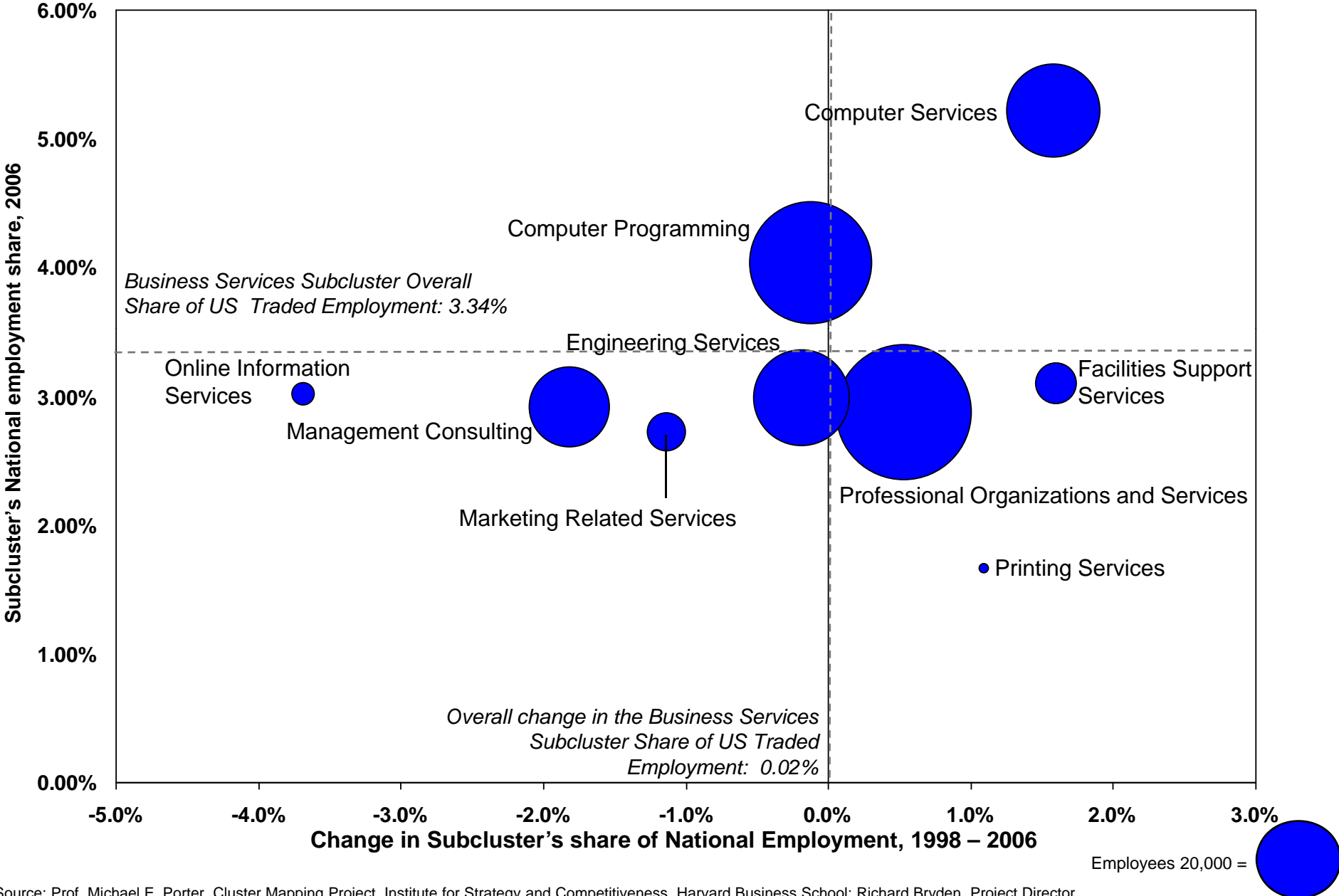
Massachusetts Employment by Subcluster Financial Services, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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Massachusetts Employment by Subcluster

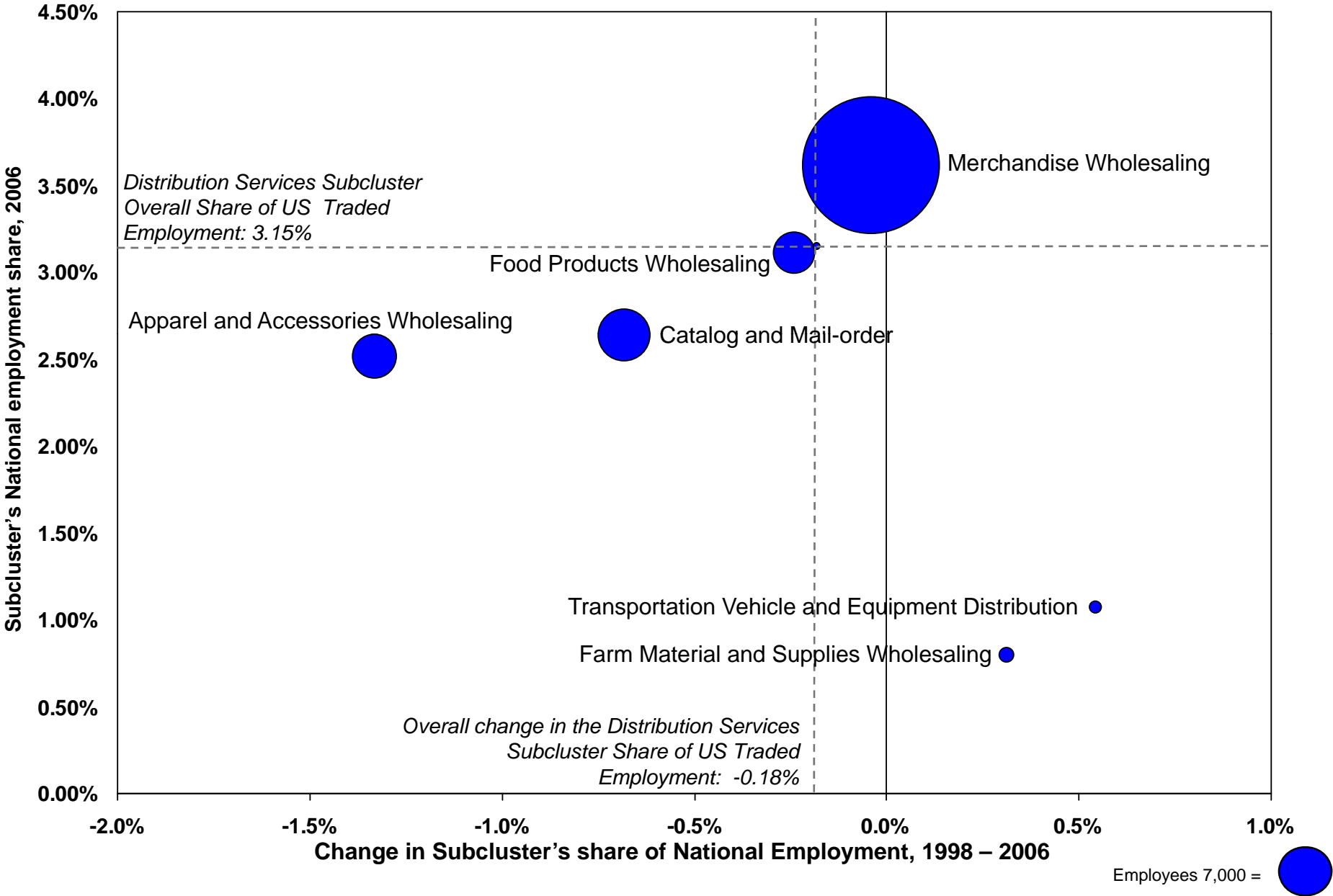
Business Services, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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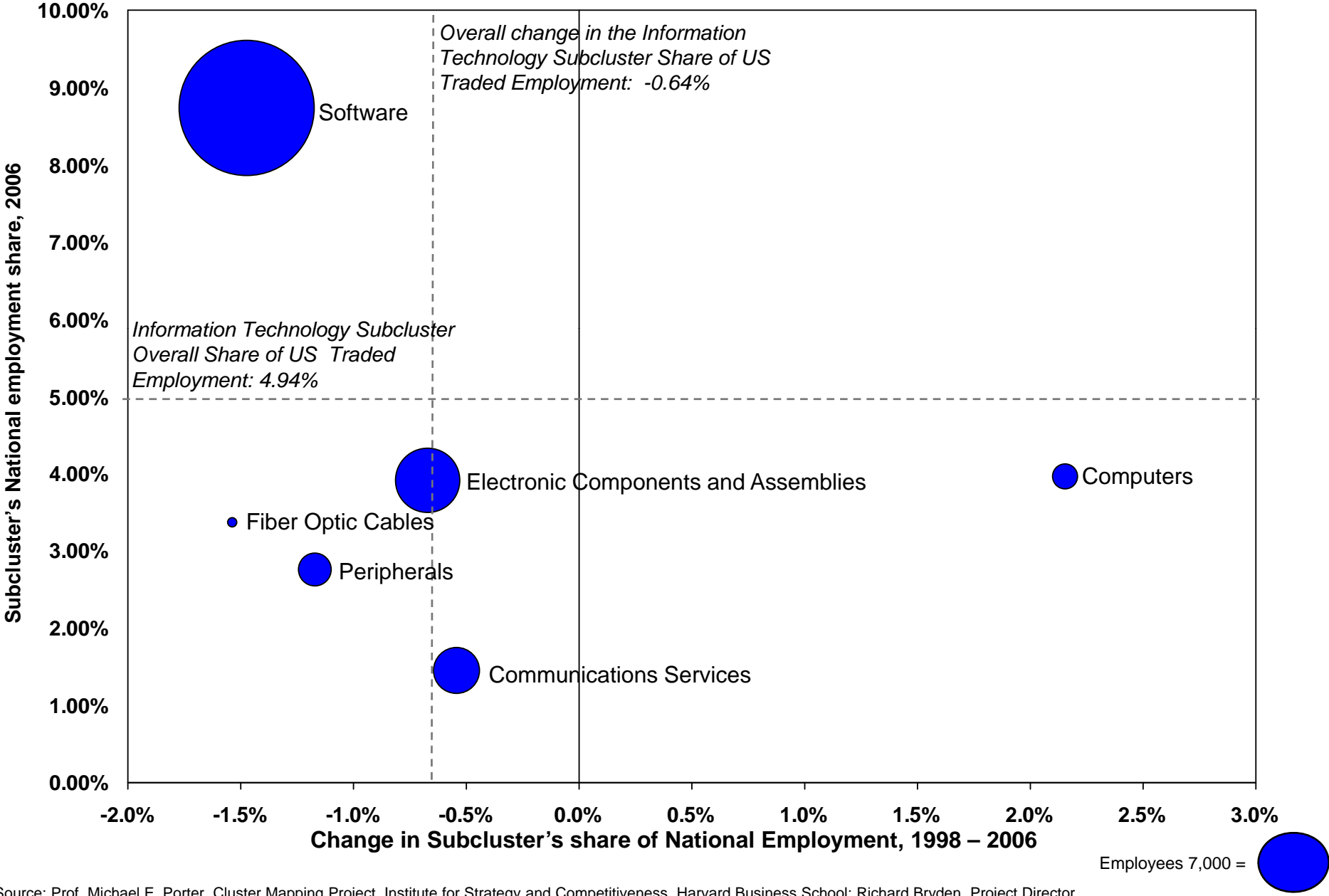
Massachusetts Employment by Subcluster

Distribution Services, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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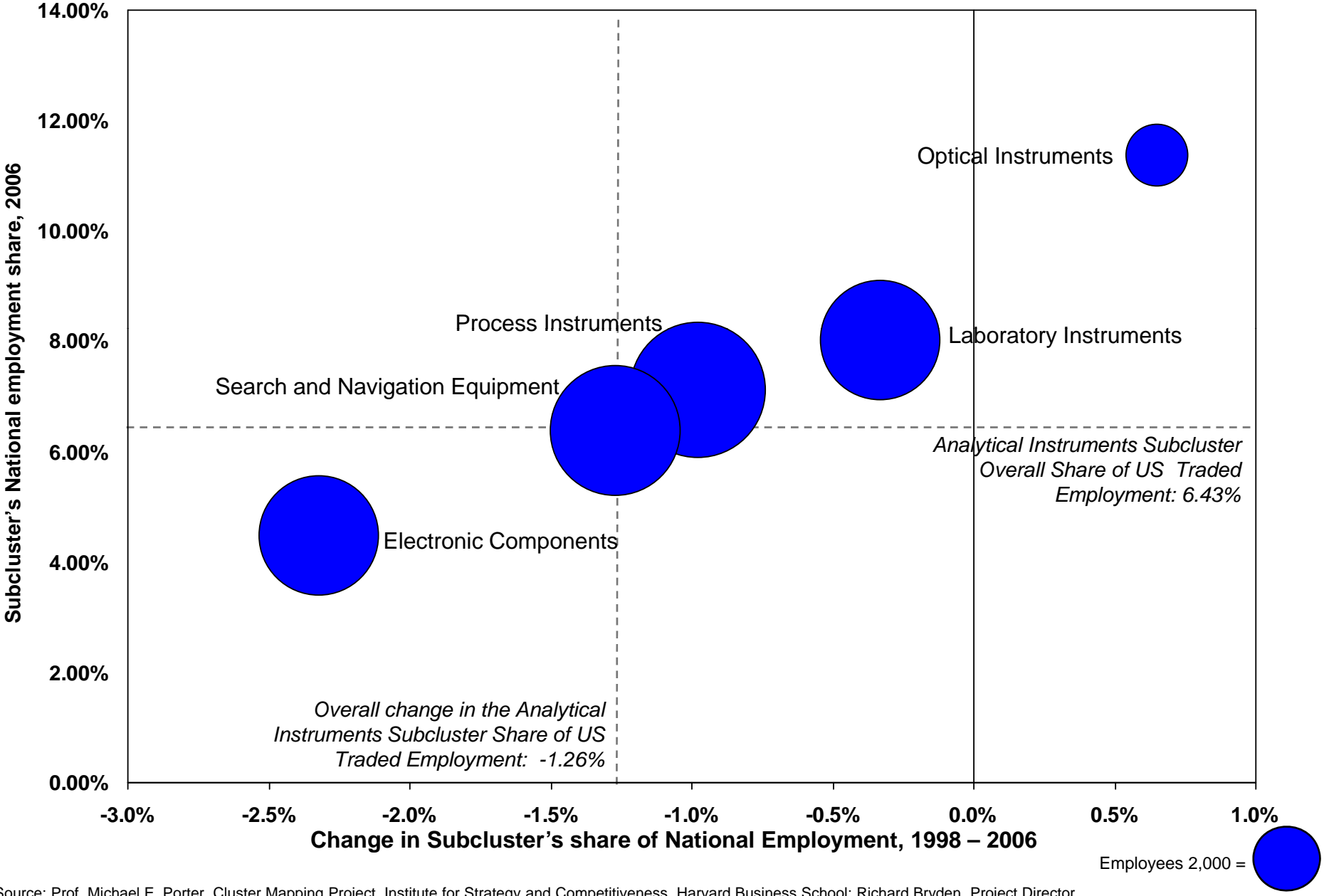
Massachusetts Employment by Subcluster Information Technology, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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Massachusetts Employment by Subcluster

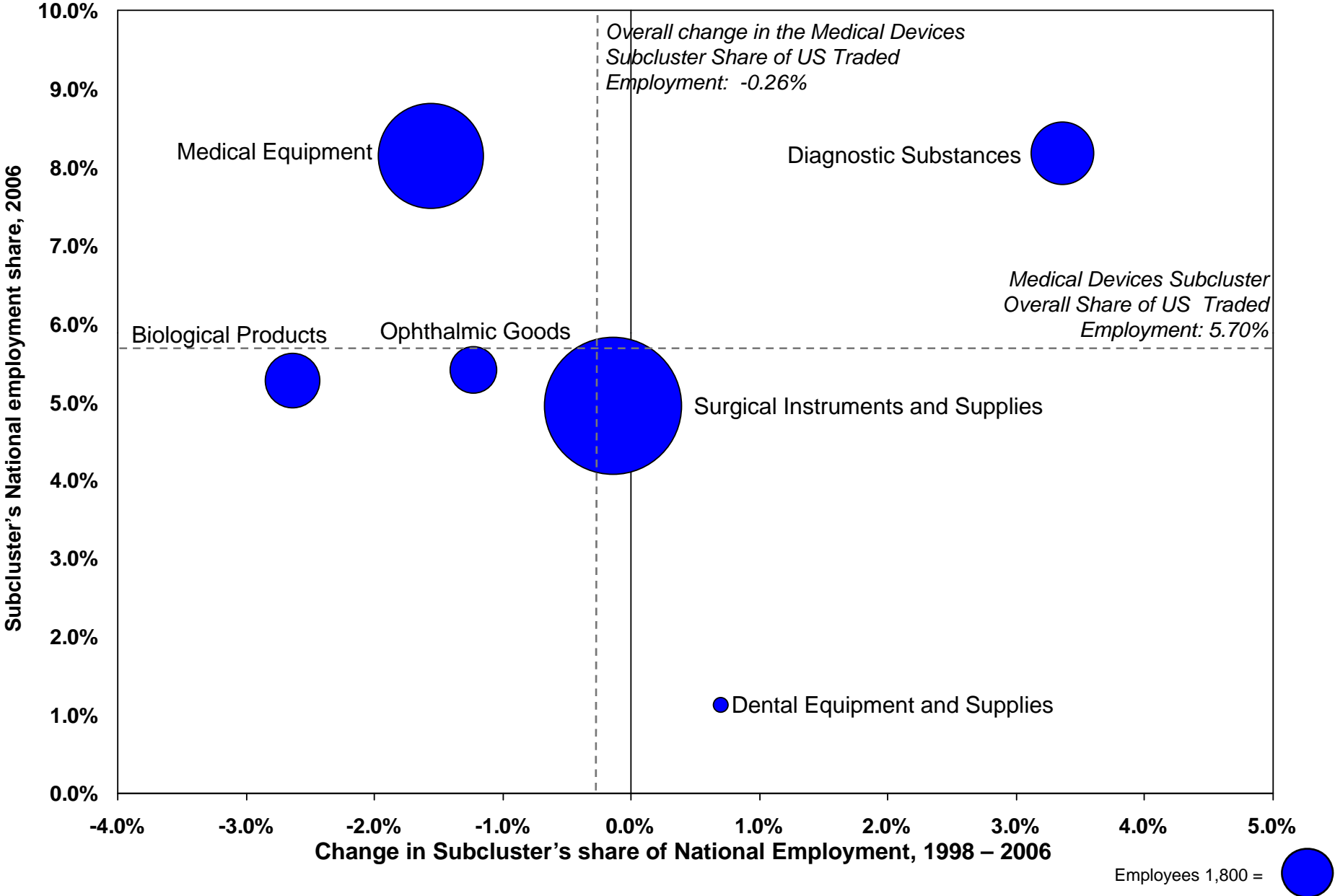
Analytical Instruments, 1998 - 2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
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Massachusetts Employment by Subcluster

Medical Devices, 1998 - 2006

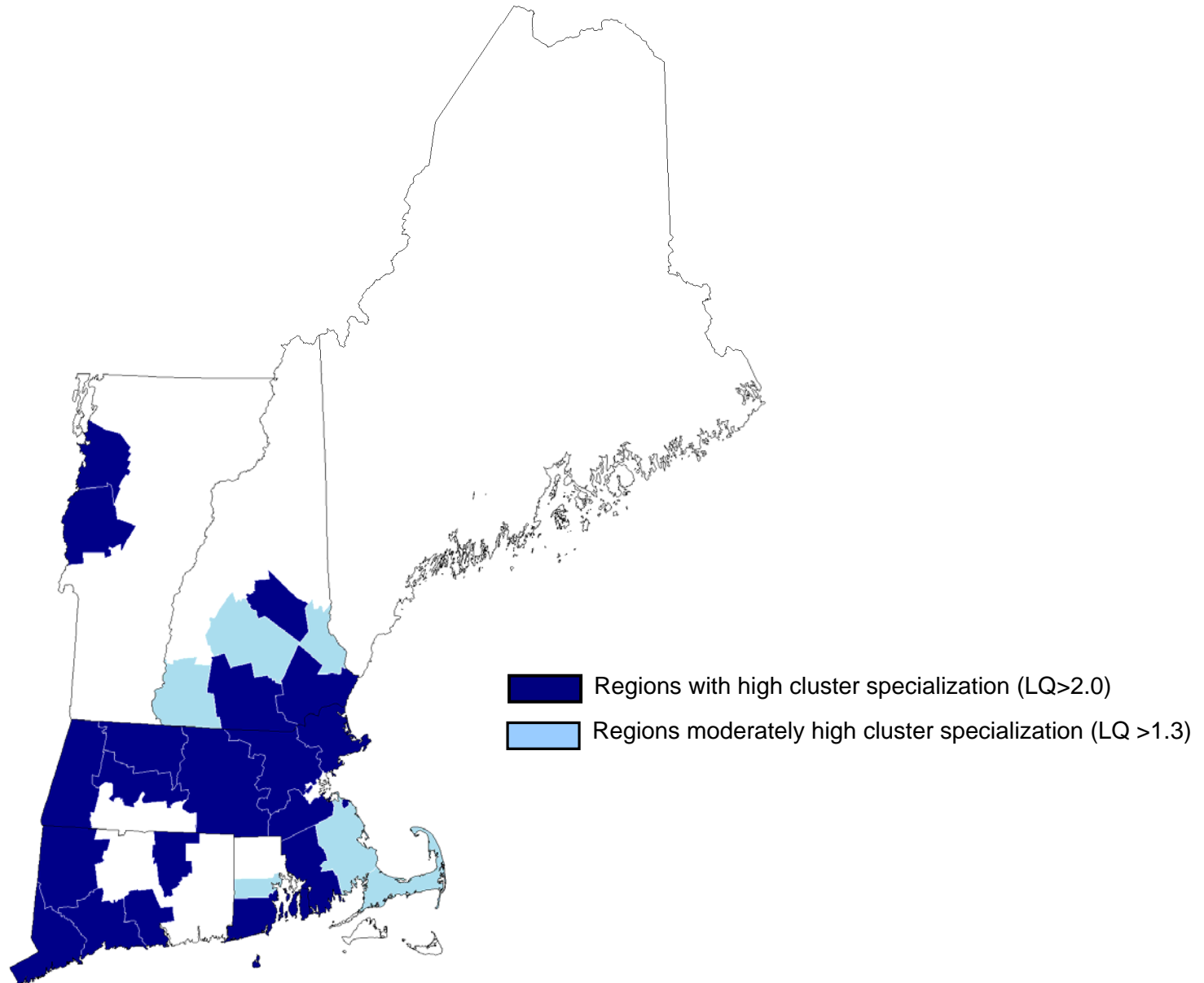


Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director. September 2008 – MA Governor

Distribution of Cluster Strength in New England

Analytical Instruments Cluster

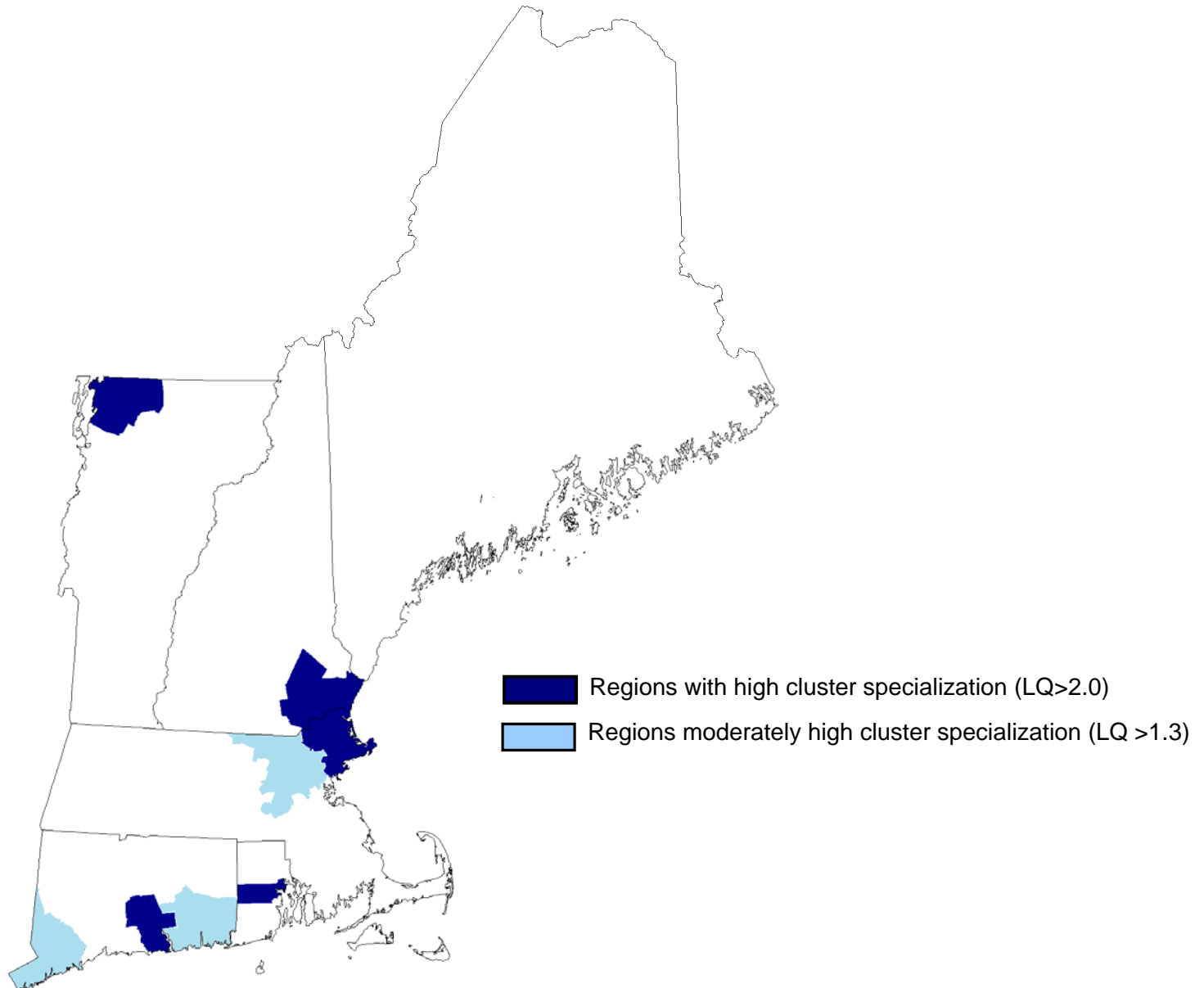
Employment Specialization in New England Counties, 2006



Counties with less than 200 employment in the cluster are excluded.
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Biopharmaceuticals Cluster

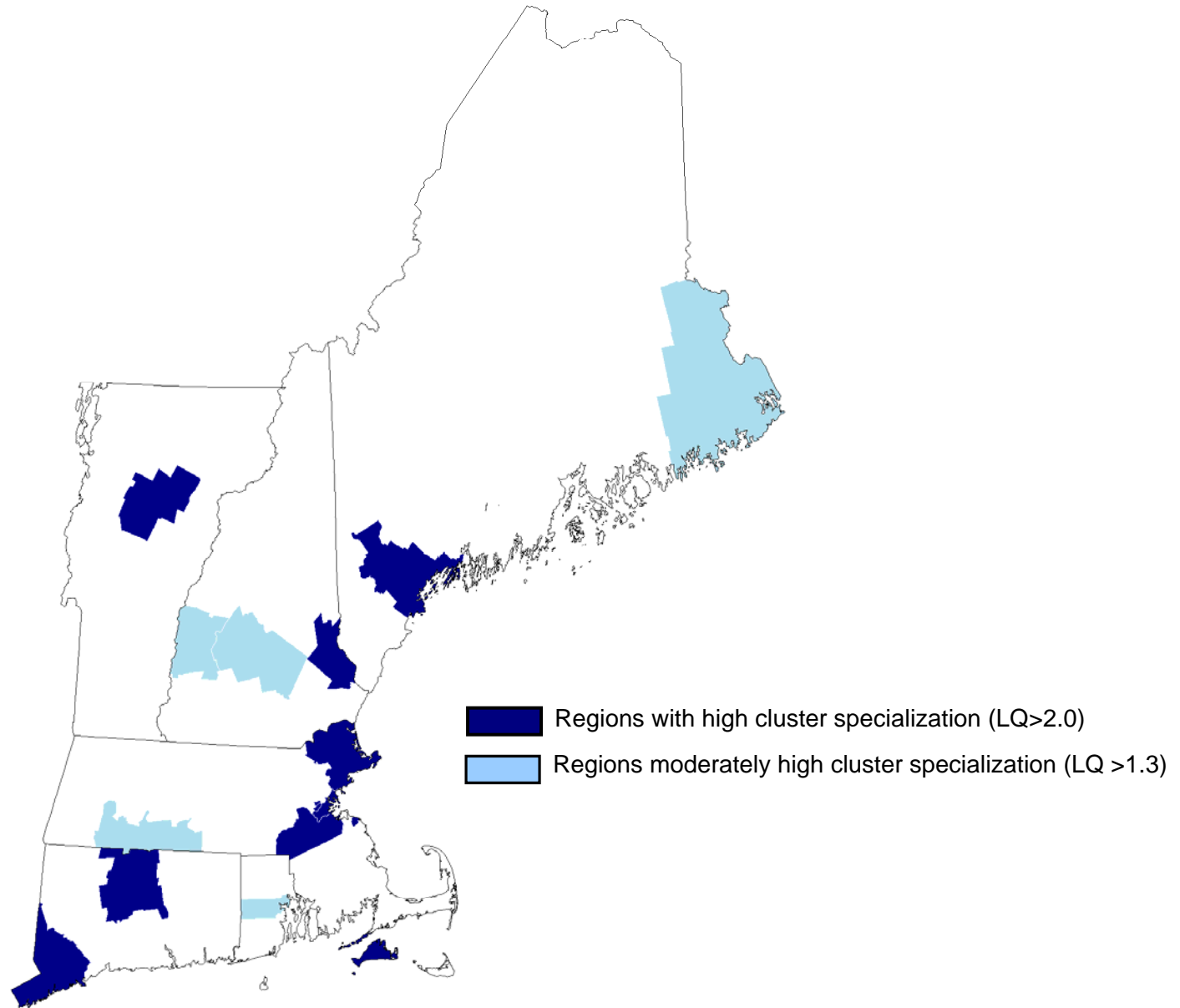
Employment Specialization in New England Counties, 2006



Counties with less than 200 employment in the cluster are excluded.
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Financial Services Cluster

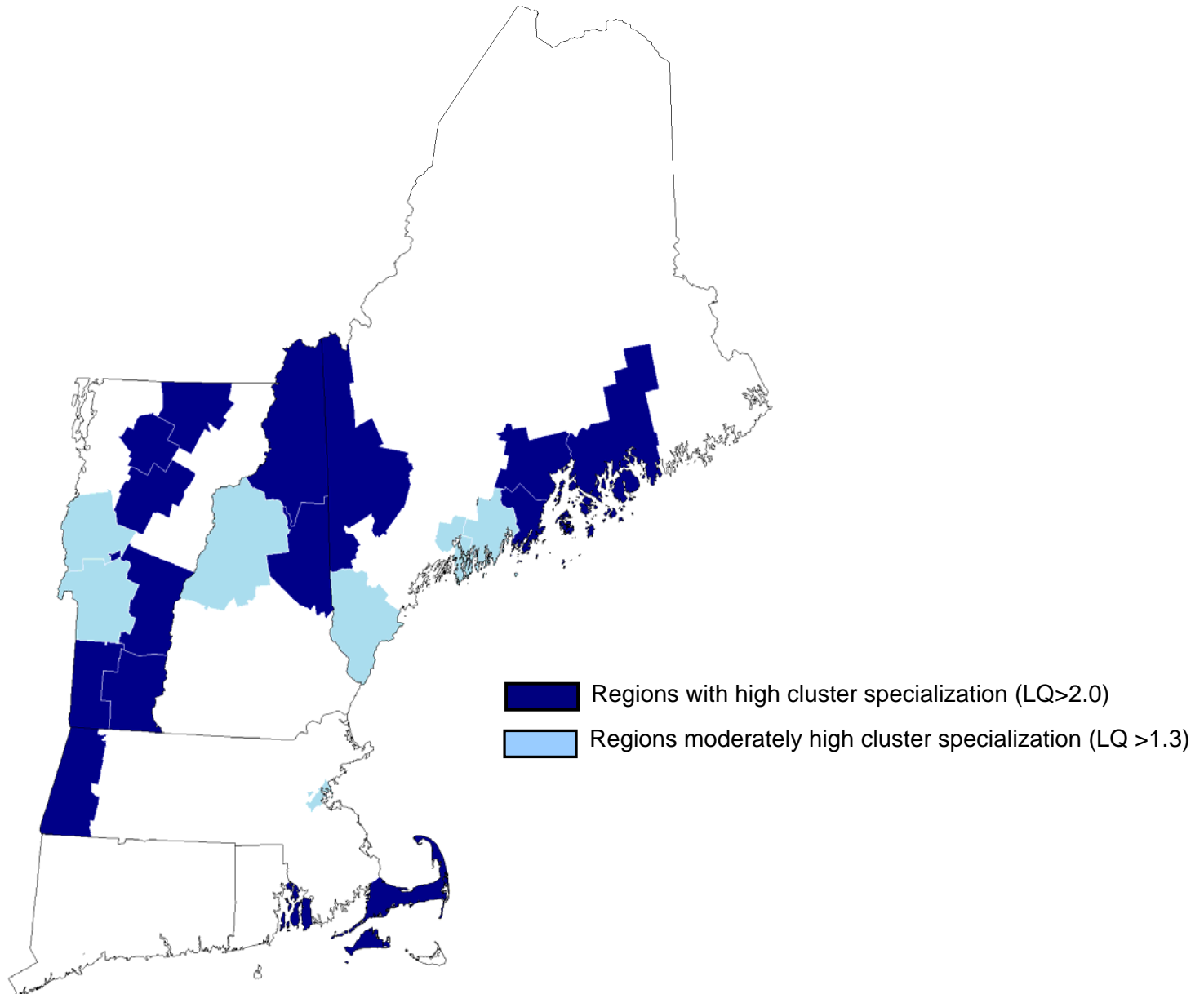
Employment Specialization in New England Counties, 2006



Counties with less than 200 employment in the cluster are excluded.
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Hospitality and Tourism Cluster

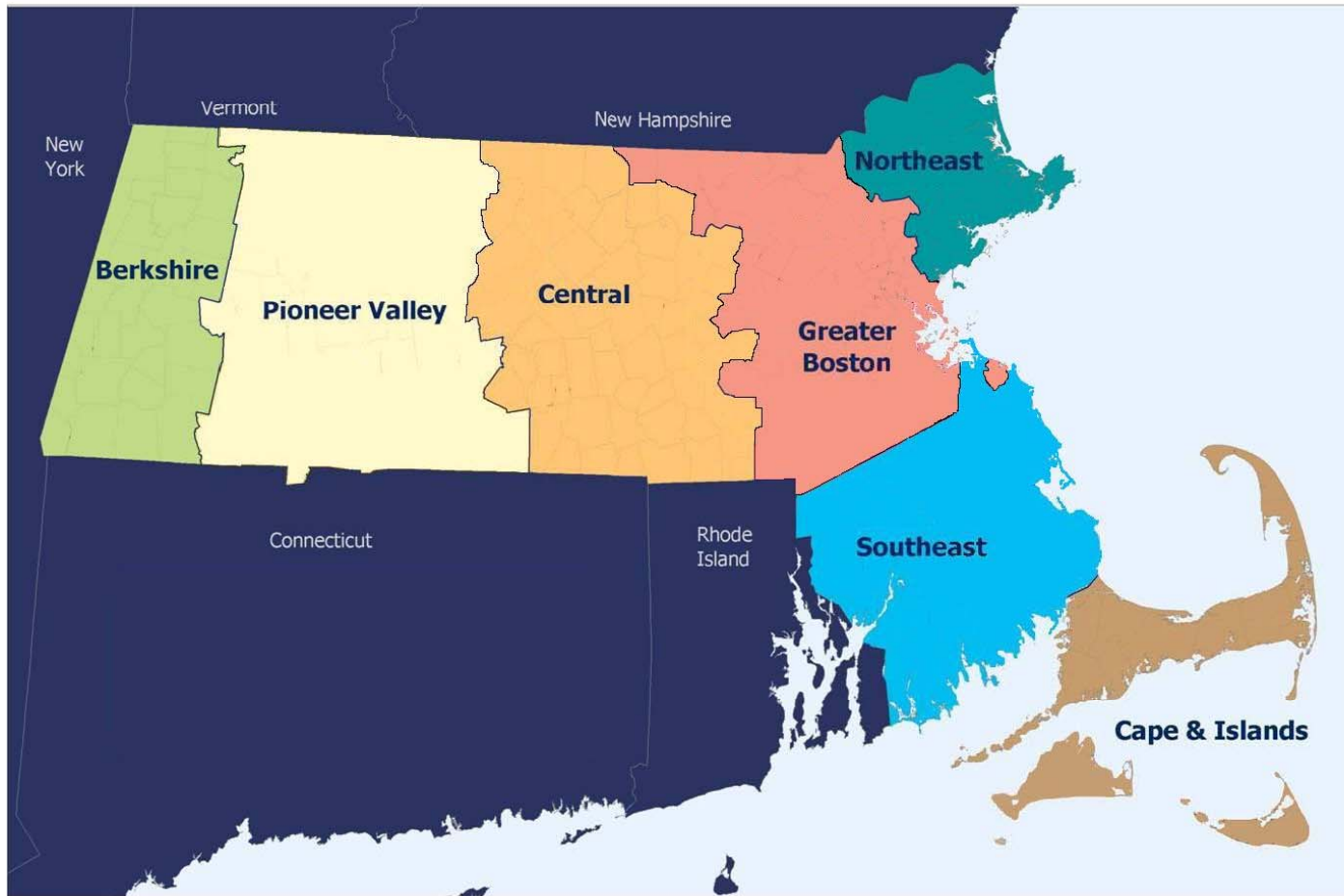
Employment Specialization in New England Counties, 2006



Counties with less than 200 employment in the cluster are excluded.
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Massachusetts Regional Comparisons

Massachusetts Regions



Region

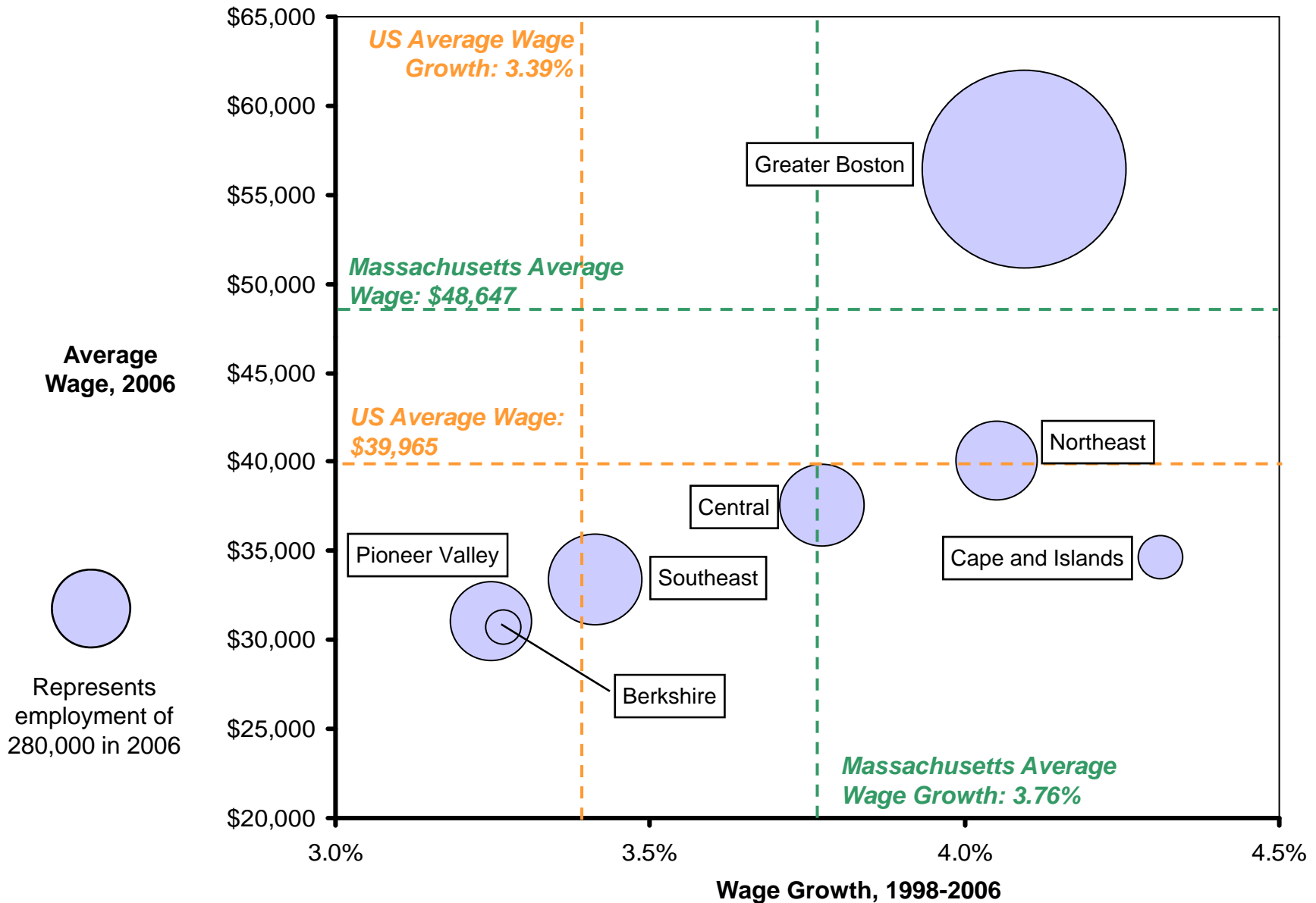
Berkshire
 Pioneer Valley
 Central
 Northeast
 Greater Boston
 Southeast
 Cape and Islands

Counties

Berkshire
 Franklin, Hampshire, Hampden
 Worcester
 Essex
 Middlesex, Suffolk, Norfolk
 Plymouth, Suffolk
 Barnstable, Dukes, Nantucket

Comparative Performance of Regions

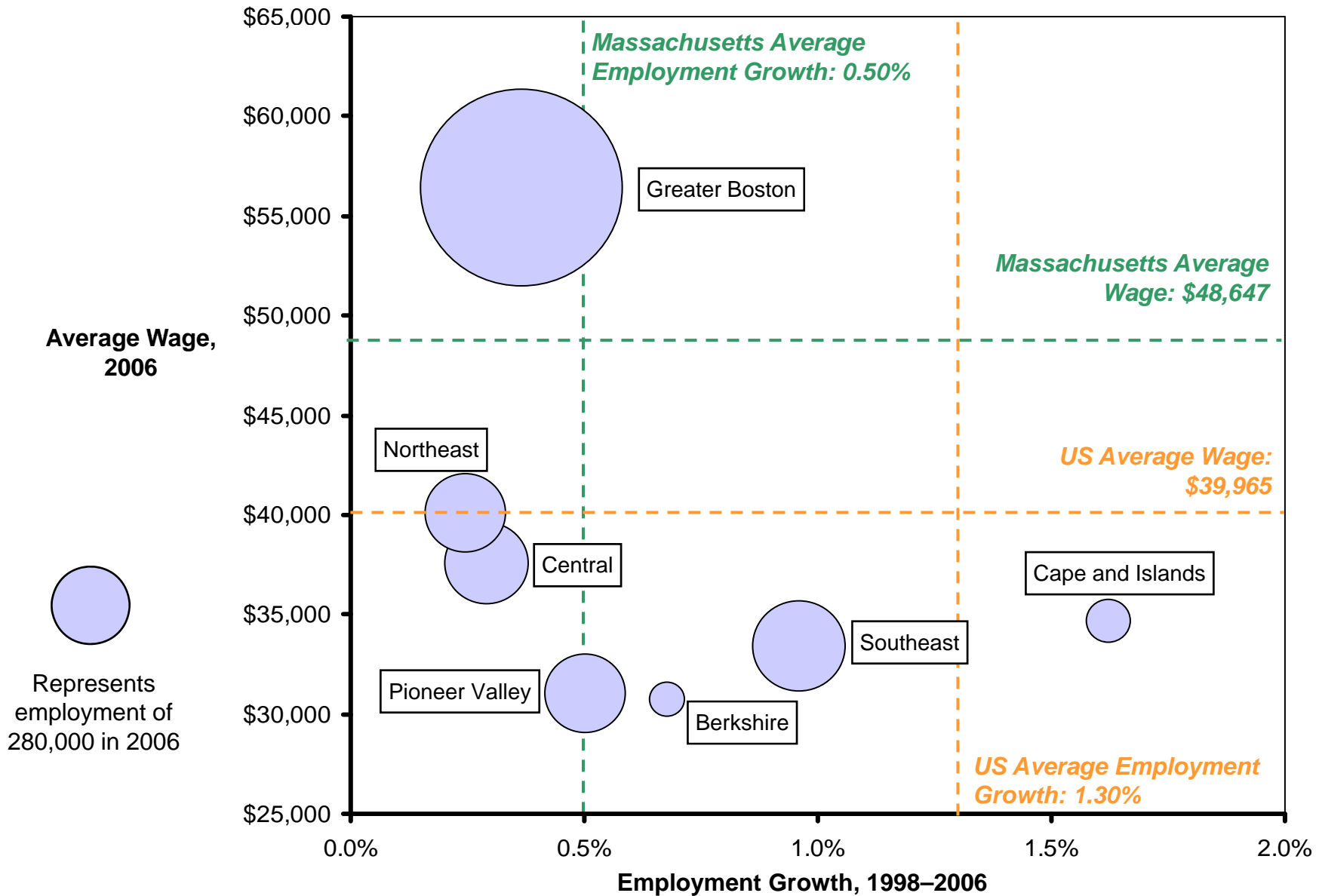
Wage Growth and Wages



Data: private, non-agricultural employment. Note: Growth is calculated using compound annual growth rates (CAGR)
 Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School
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Comparative Performance of Regions

Average Wage and Employment Growth



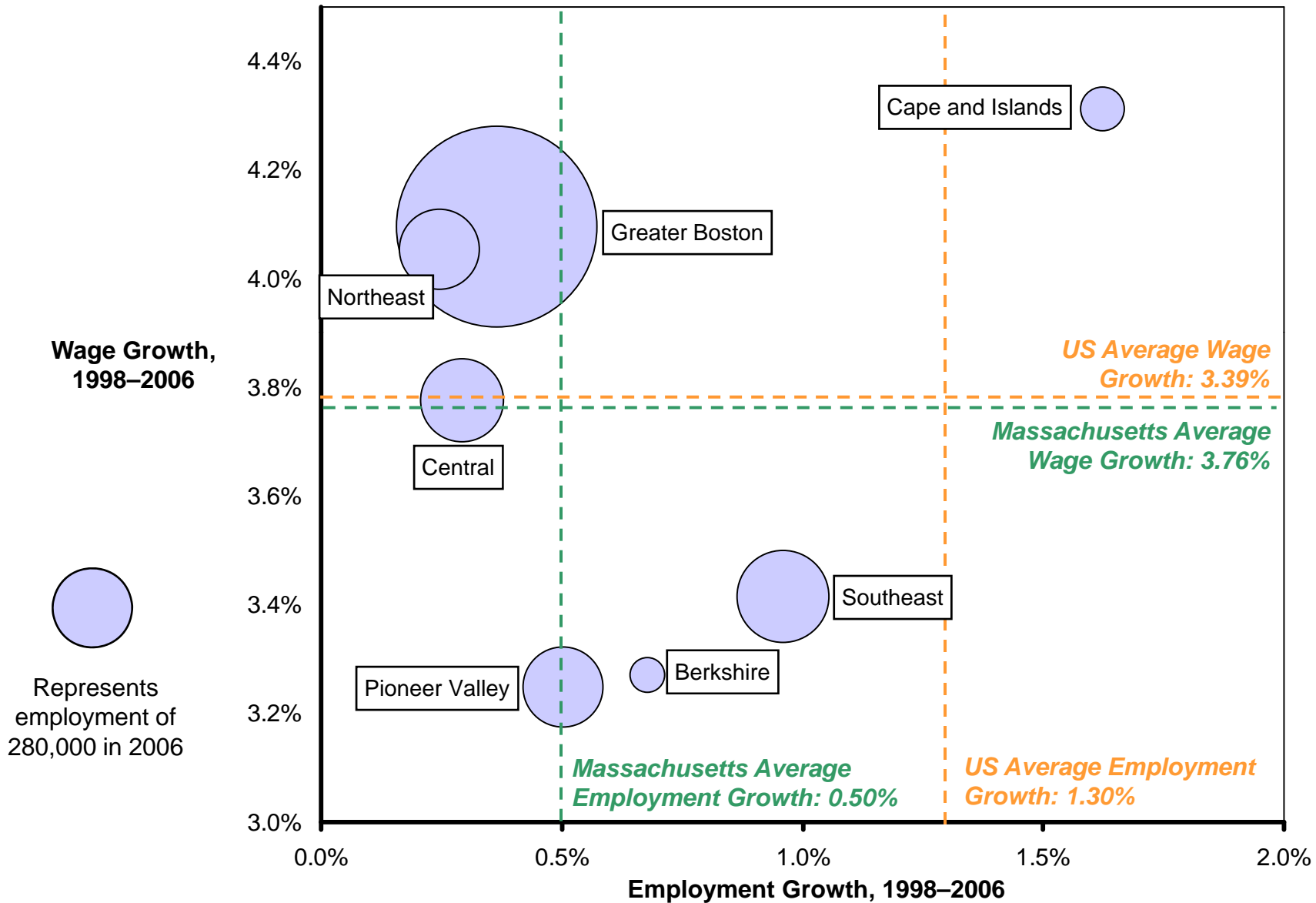
Data: private, non-agricultural employment. Note: Growth is calculated using compound annual growth rates (CAGR)

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

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Comparative Performance of Regions

Wage Growth and Employment Growth



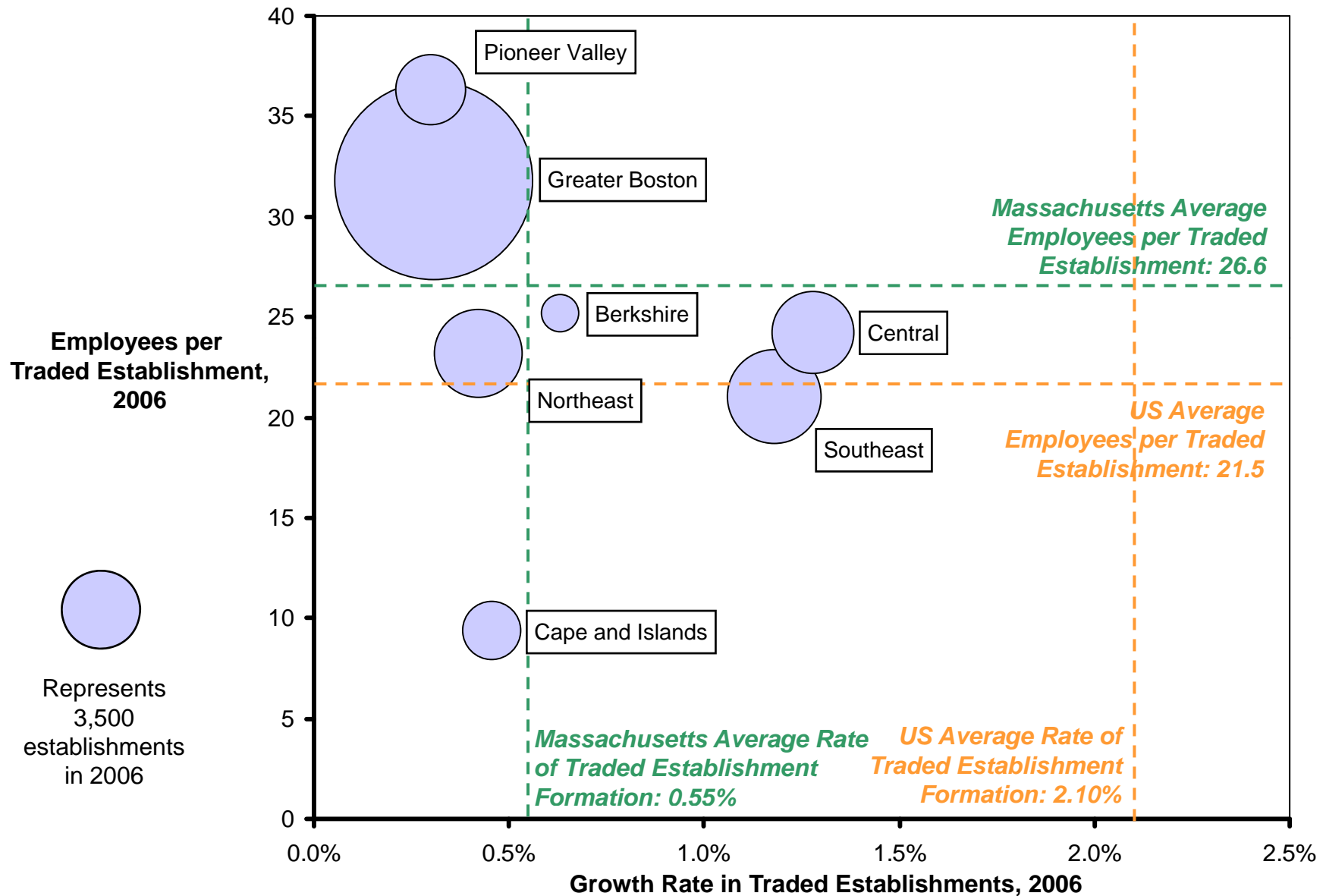
Data: private, non-agricultural employment. Note: Growth is calculated using compound annual growth rates (CAGR)

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

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Comparative Performance of Regions

Establishment Formation in Traded Clusters



Data: private, non-agricultural employment. Note: Growth is calculated using compound annual growth rates (CAGR)

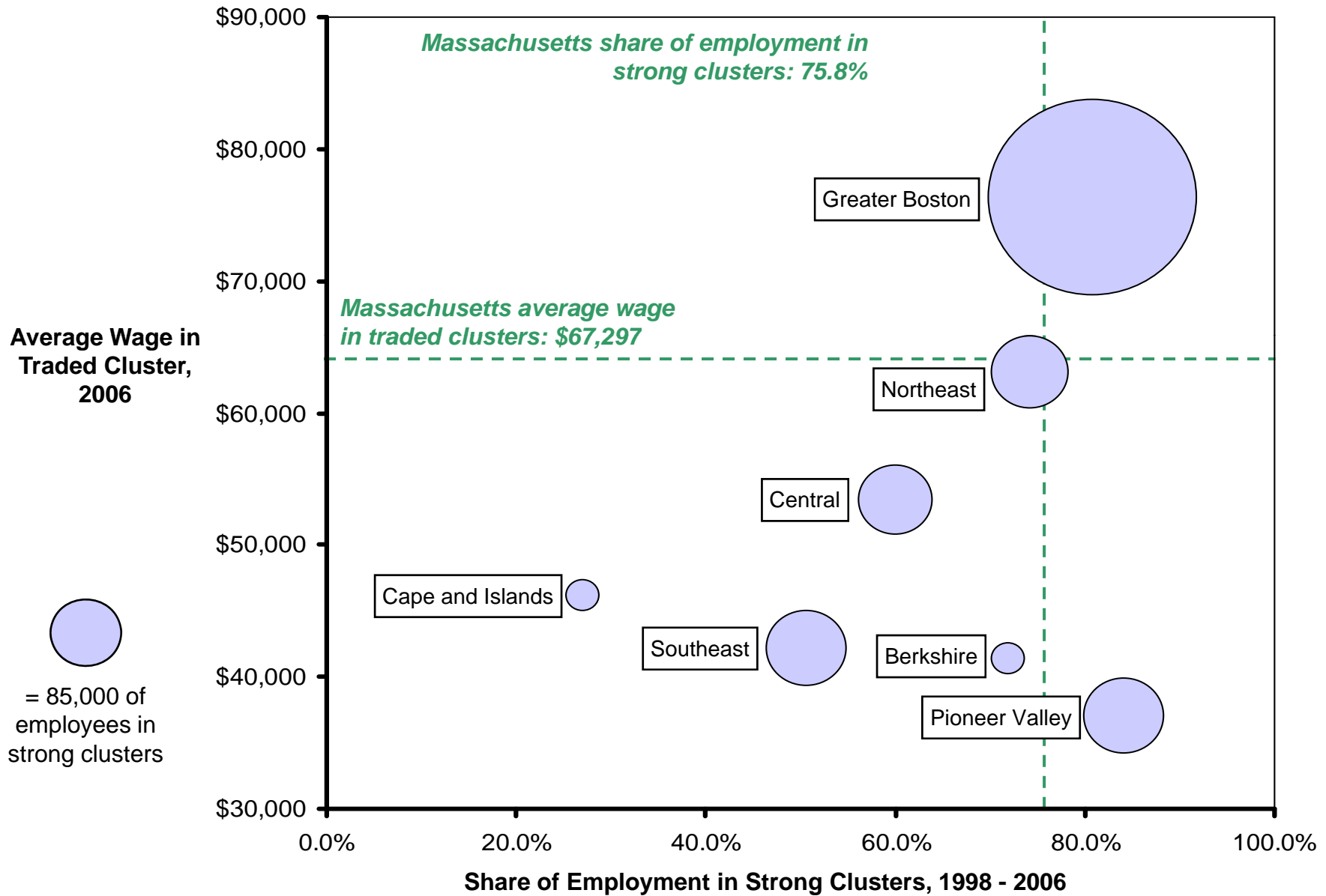
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

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Percentage of Traded Employment in Strong Clusters, 2006

	Massachusetts	Berkshire Region	Pioneer Valley	Central	Northeast	Greater Boston	Southeast	Cape and Islands
Region's share of US traded cluster employment	3.0%	0.06%	0.28%	0.26%	0.27%	1.91%	0.28%	0.05%
Average wage in Traded Cluster	\$67,296	\$41,397	\$37,012	\$53,356	\$63,080	\$76,319	\$42,147	\$46,196
Number of strong clusters,	17	10	19	19	18	11	17	5
Total number of clusters	41	35	39	40	40	40	40	32
Employment in strong traded clusters	740,089	13,579	78,577	50,919	66,232	506,336	46,726	4,706
Total Employment in traded clusters	976,108	18,893	93,308	84,848	89,289	626,739	92,088	17,345
Share of employment in strong cluster	75.8%	71.9%	84.2%	60.0%	74.2%	80.8%	50.7%	27.1%

Percentage of Traded Employment in Strong Clusters

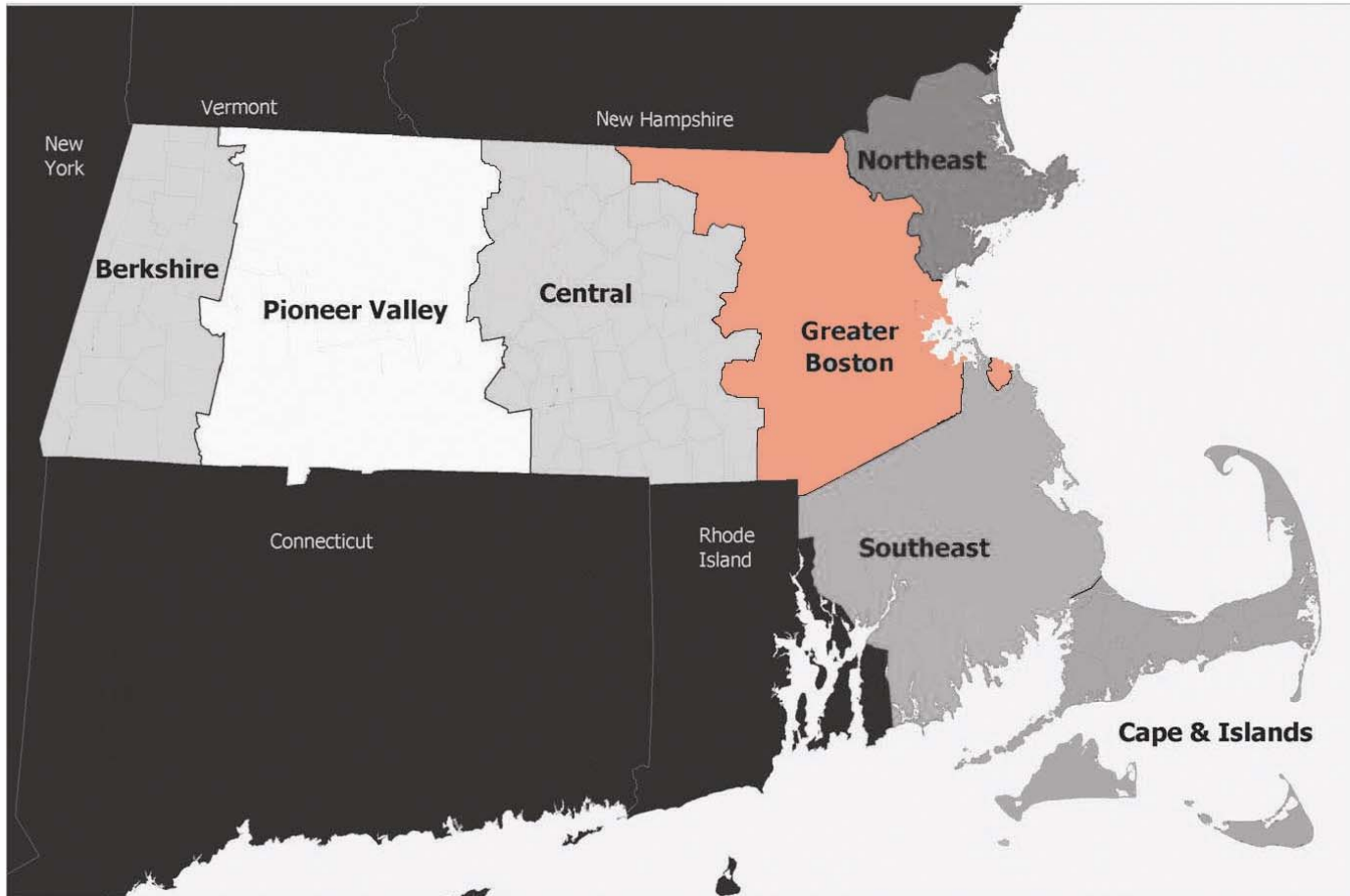


Data: private, non-agricultural employment.

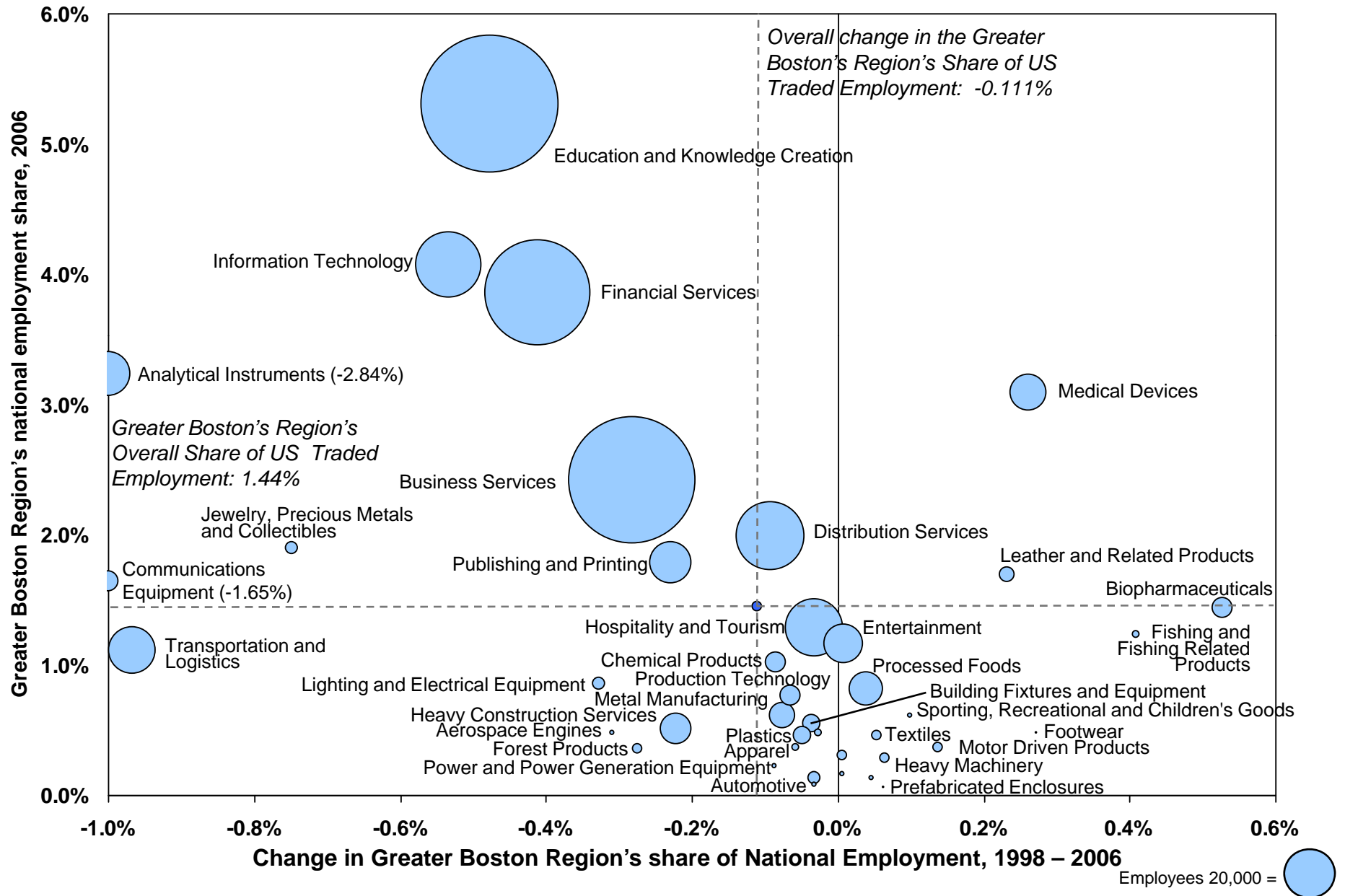
Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

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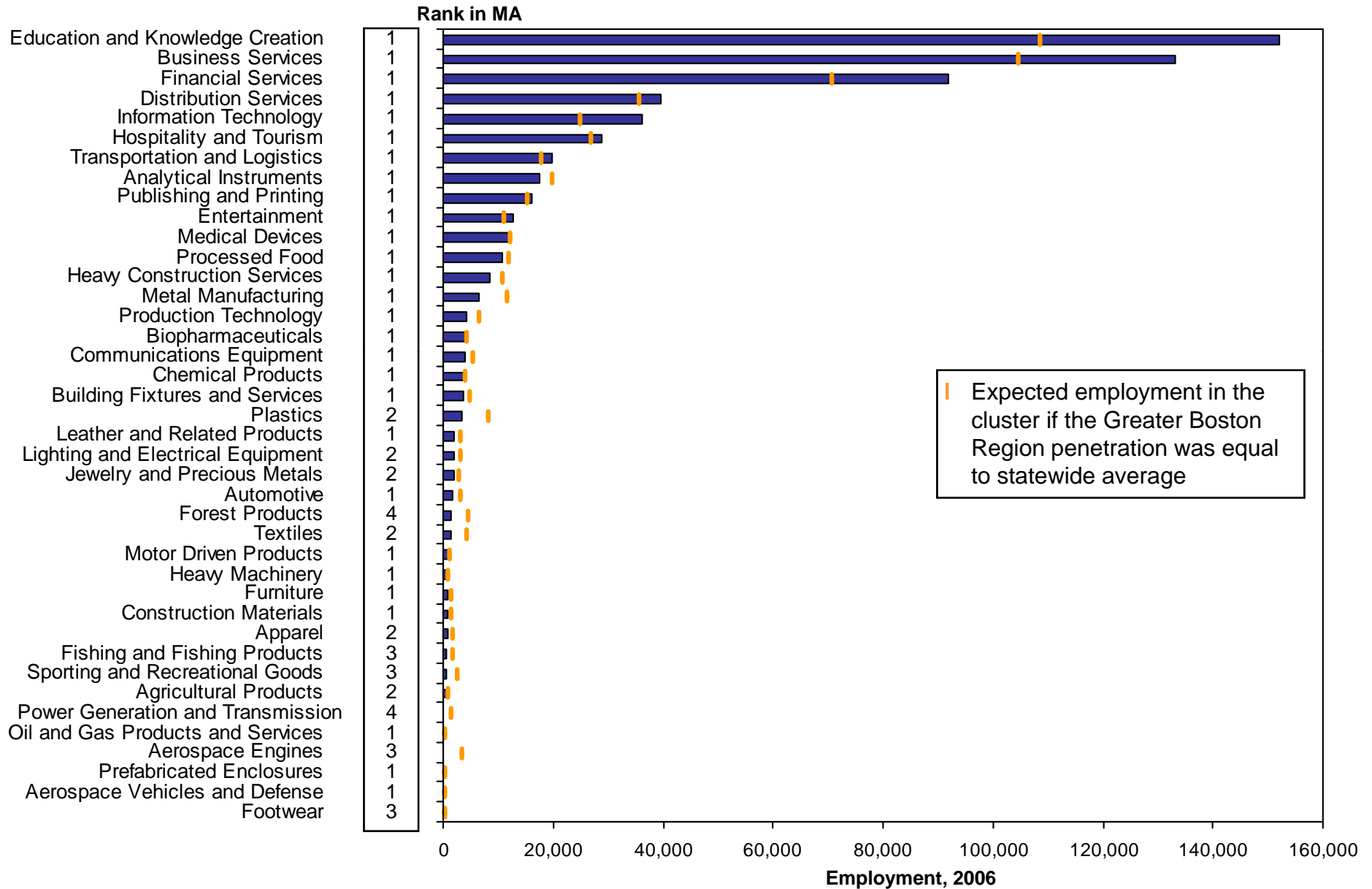
Greater Boston Region



Greater Boston Region Specialization by Traded Cluster, 1998-2006



Greater Boston Region Employment Traded Clusters

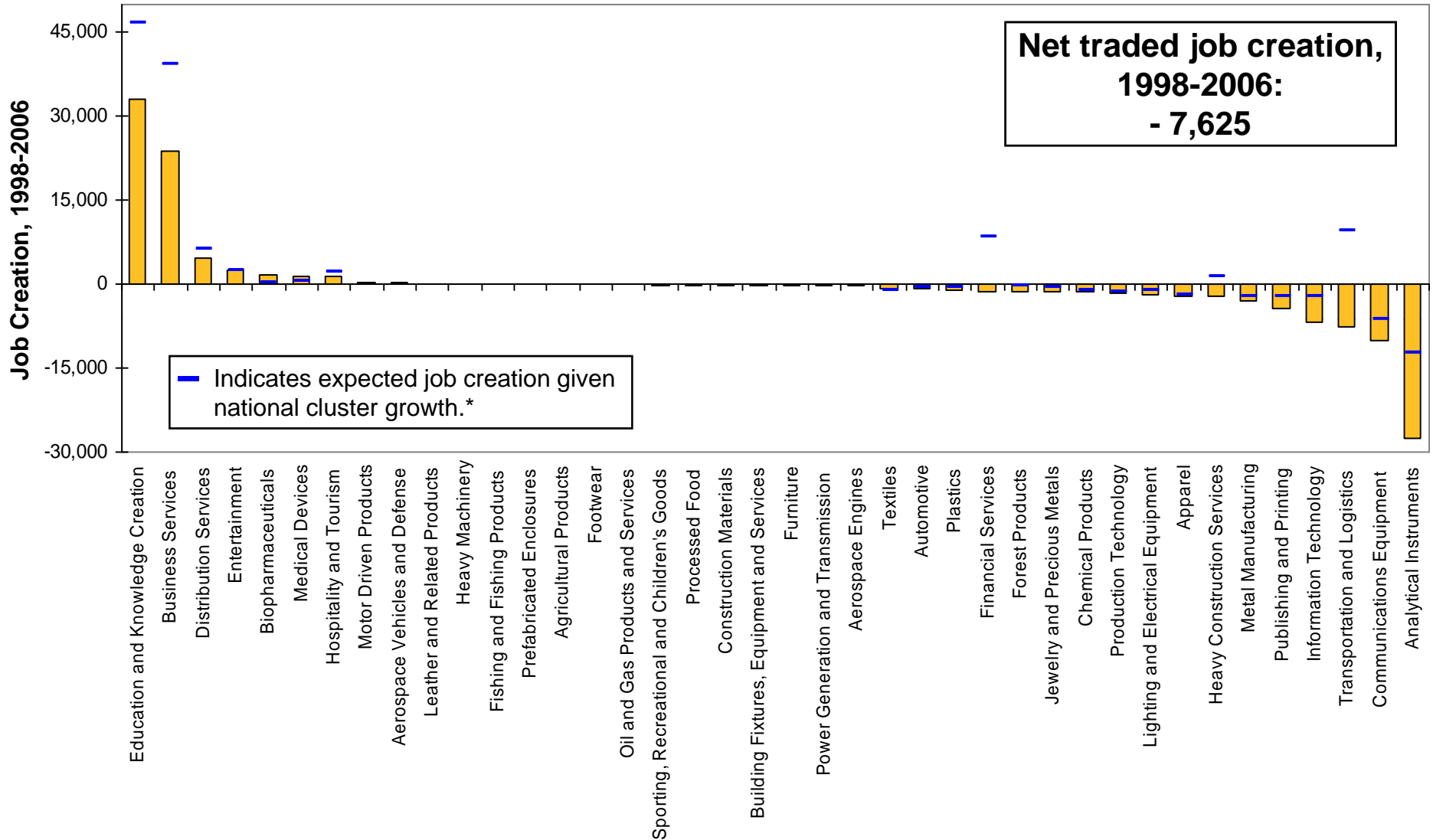


|- Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Greater Boston Region Job Creation

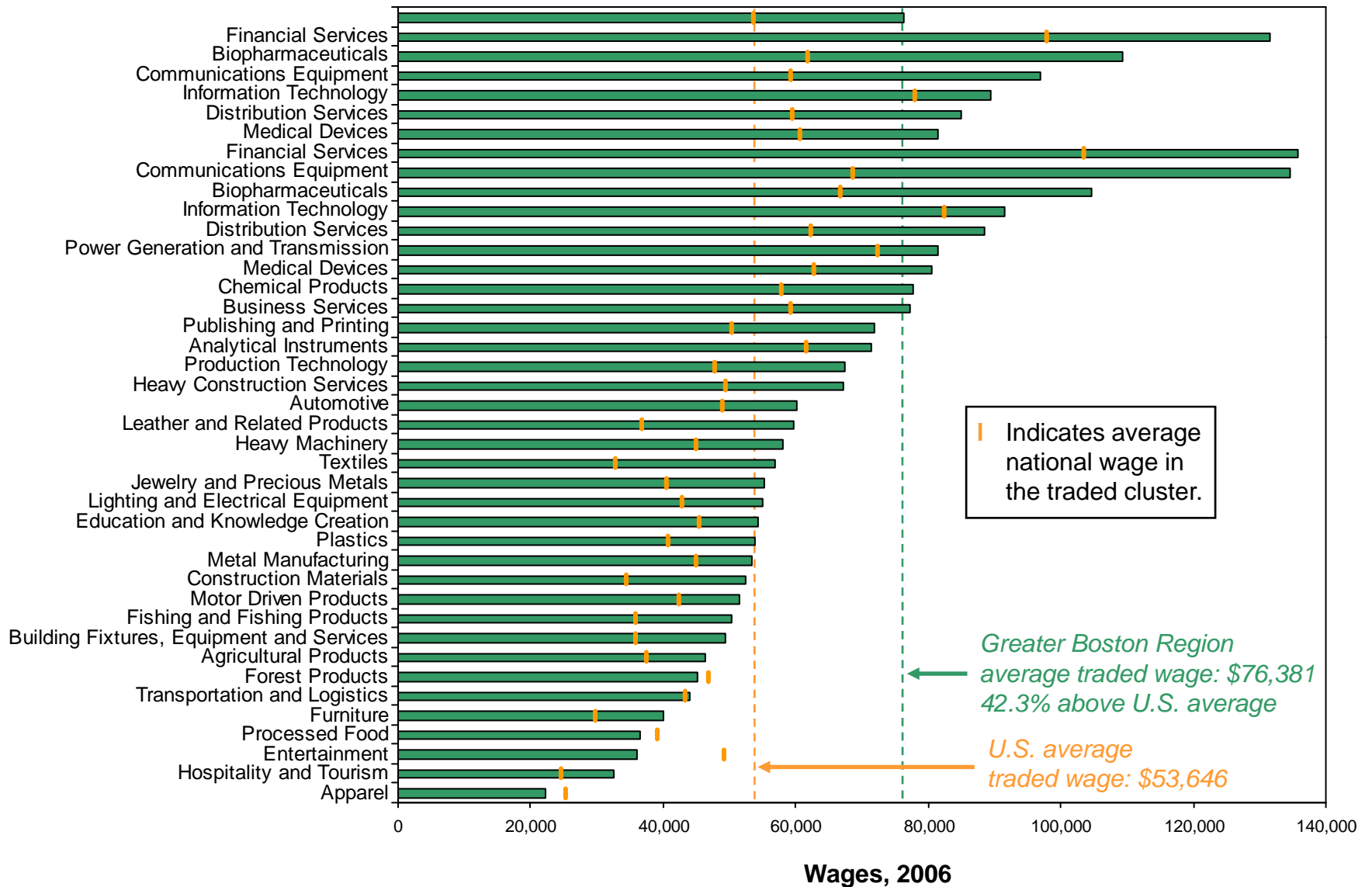
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +81,907
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Greater Boston Region Wages

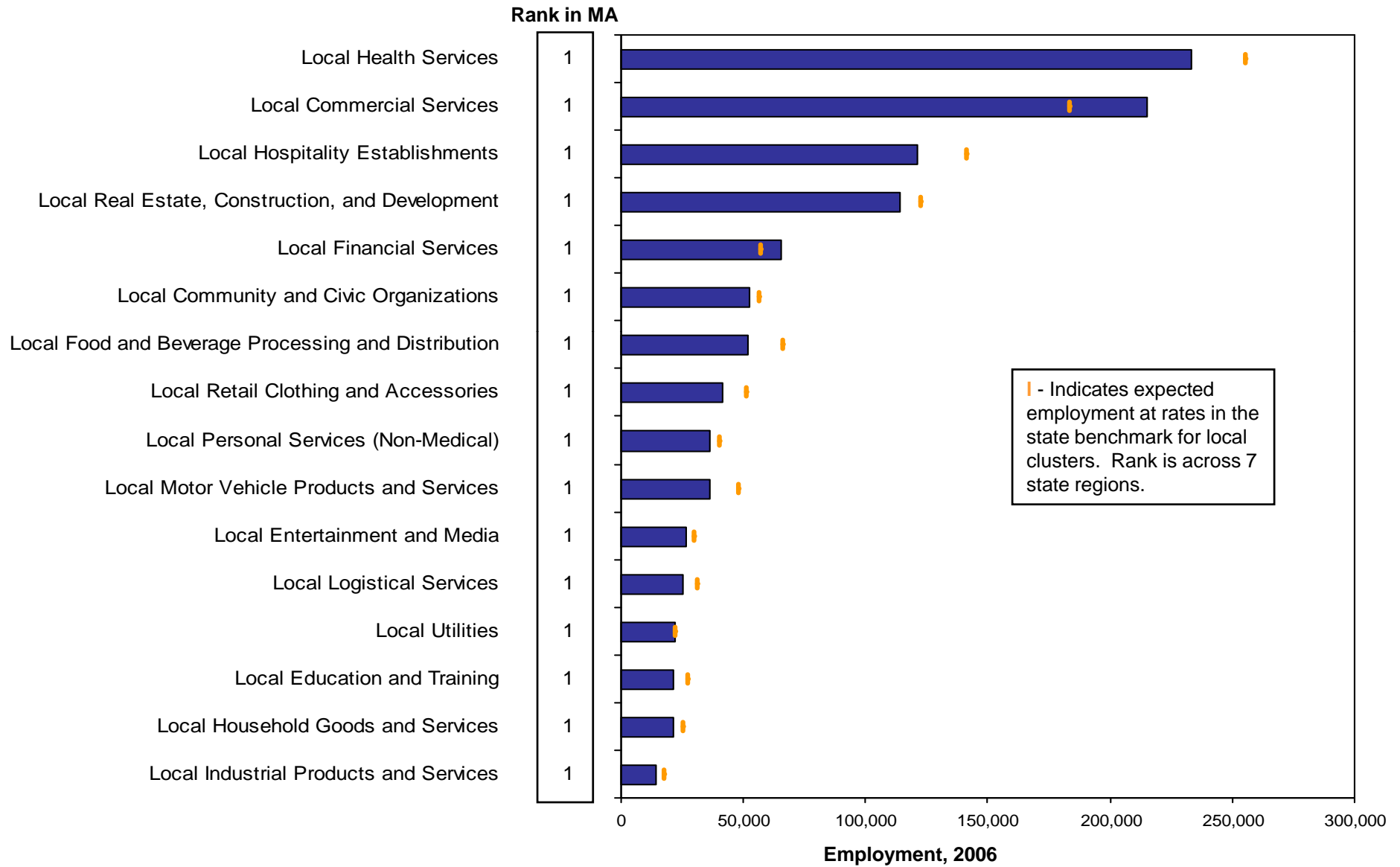
Traded Clusters vs. National Benchmarks



Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

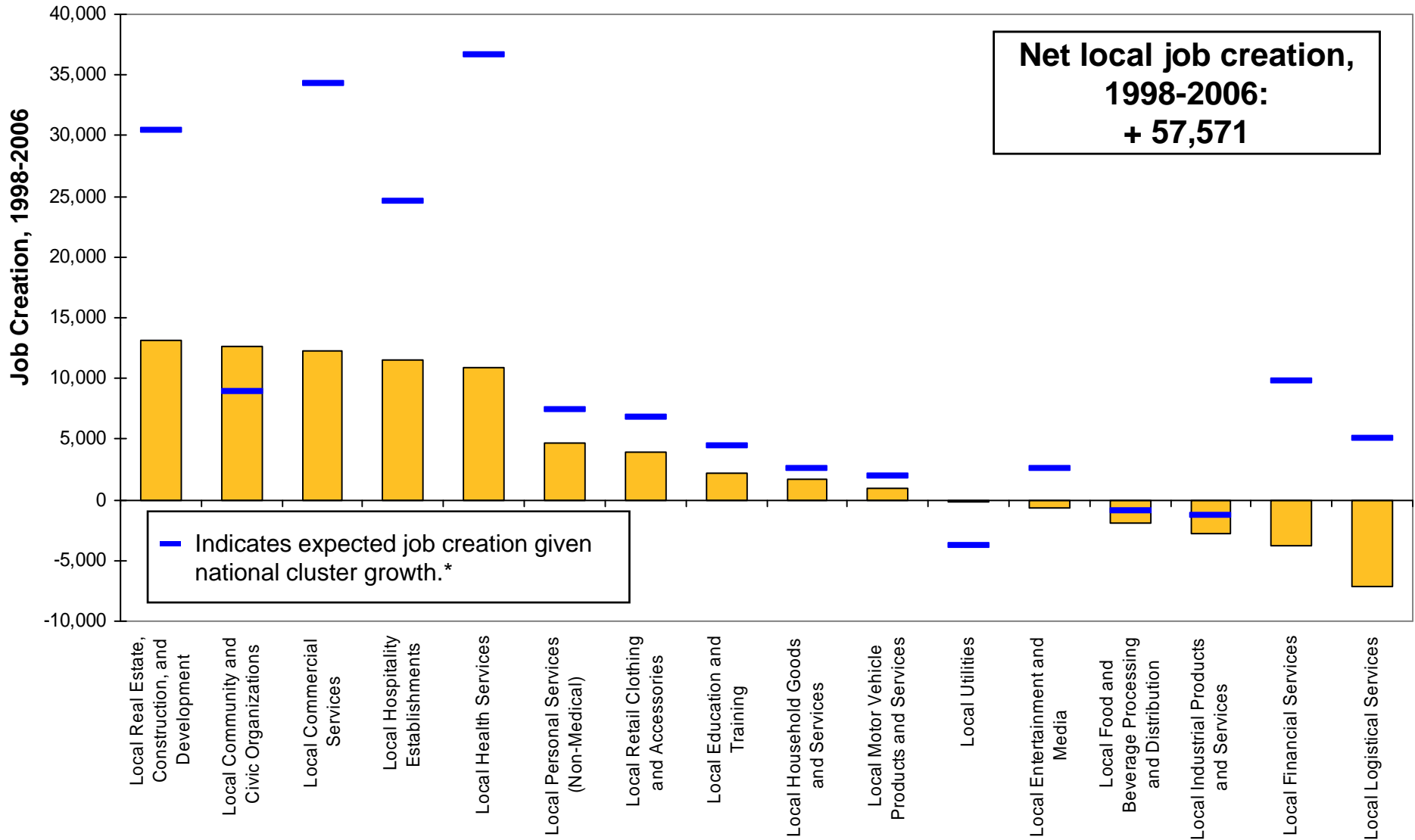
Greater Boston Region Employment Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Greater Boston Region Job Creation

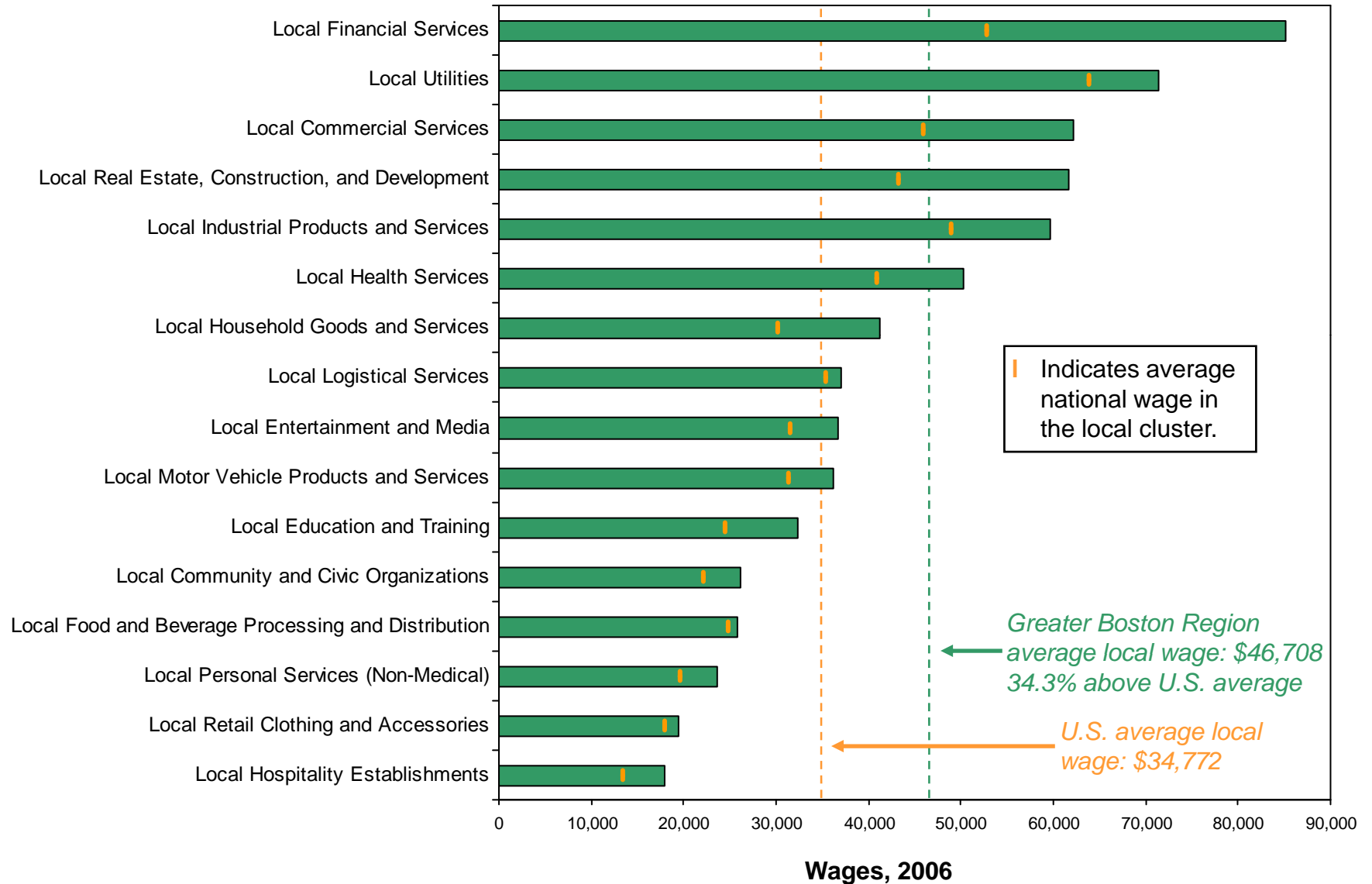
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +169,253. Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

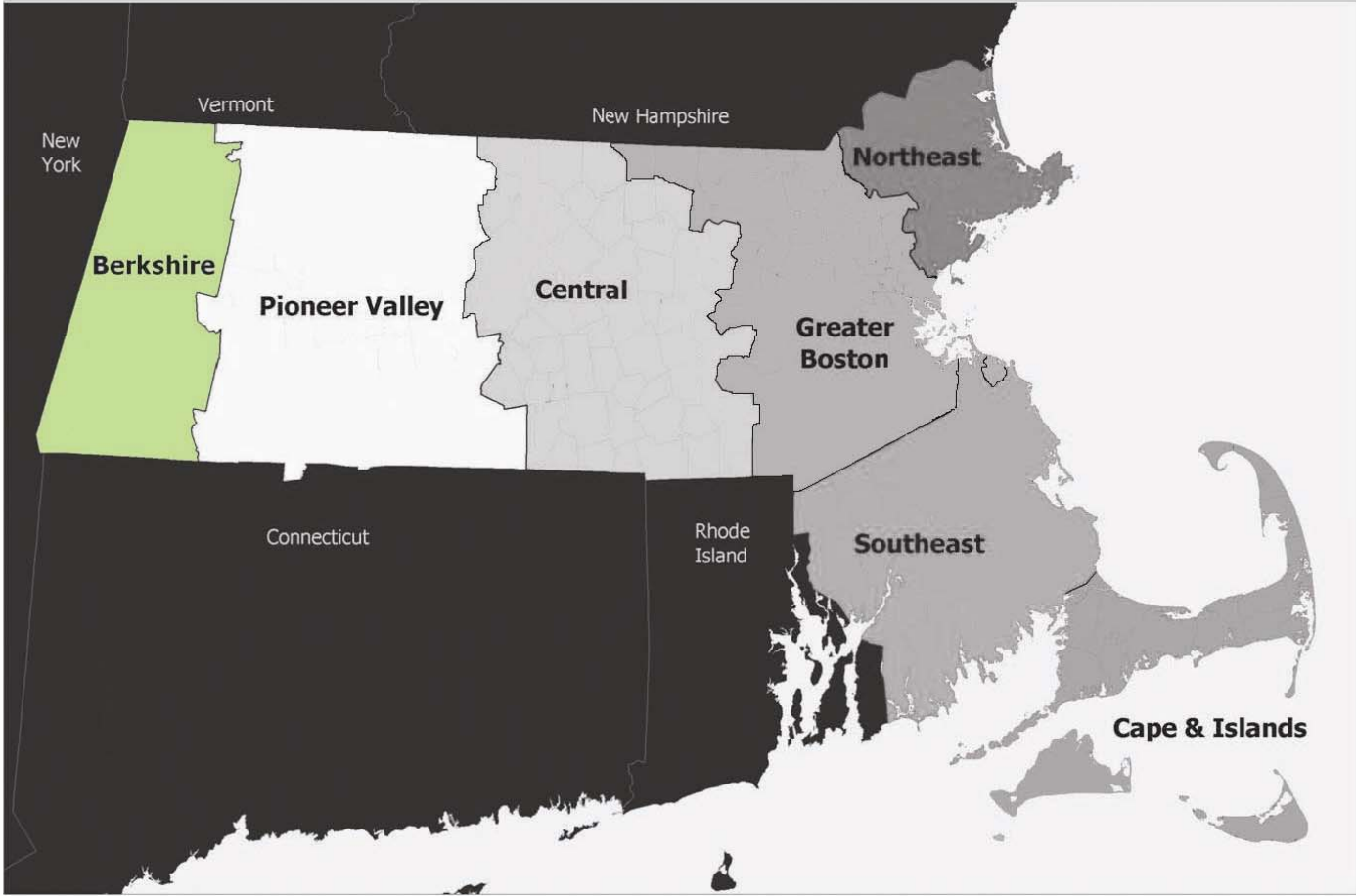
Greater Boston Region Wages

Local Clusters vs. National Benchmarks



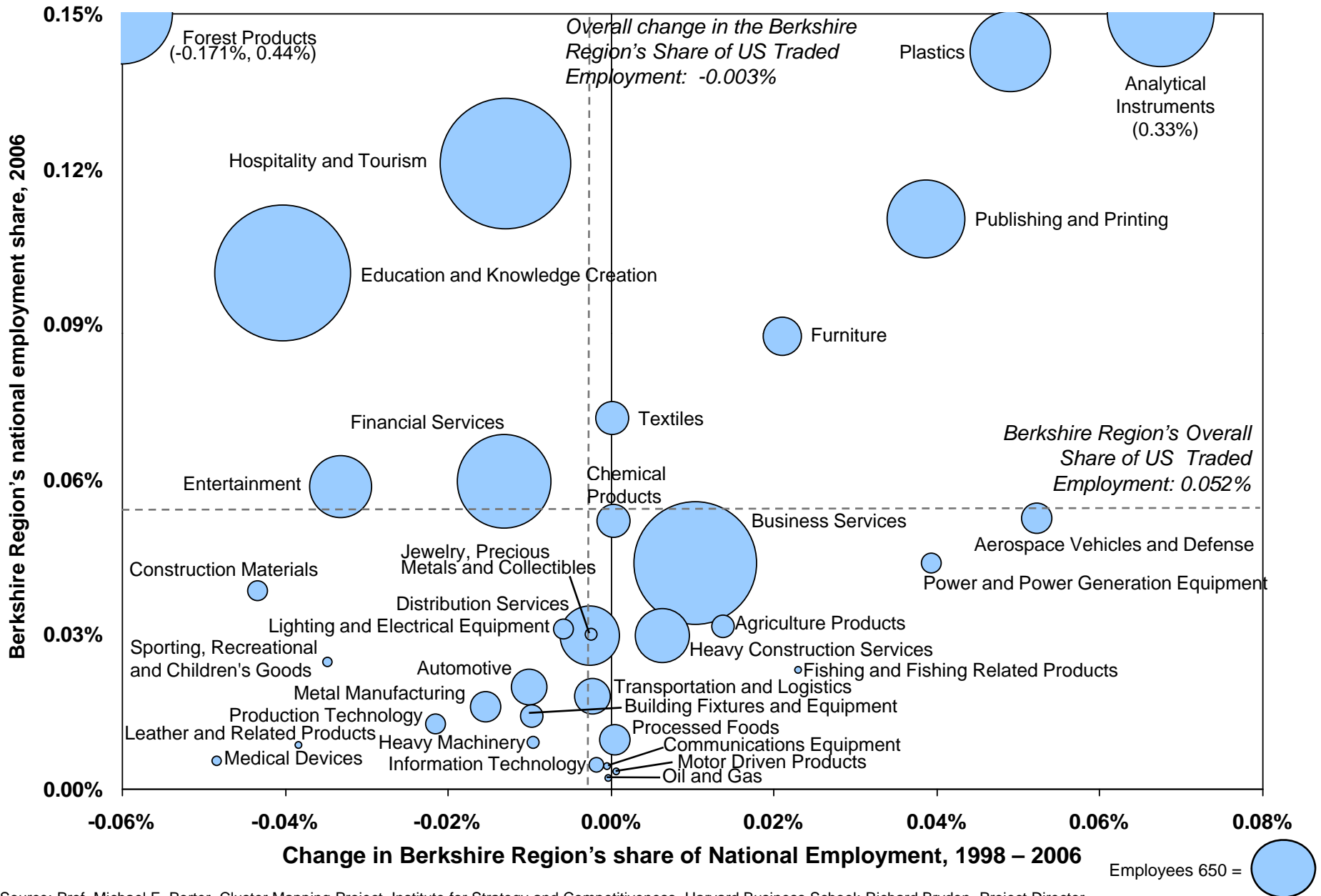
Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Berkshire Region

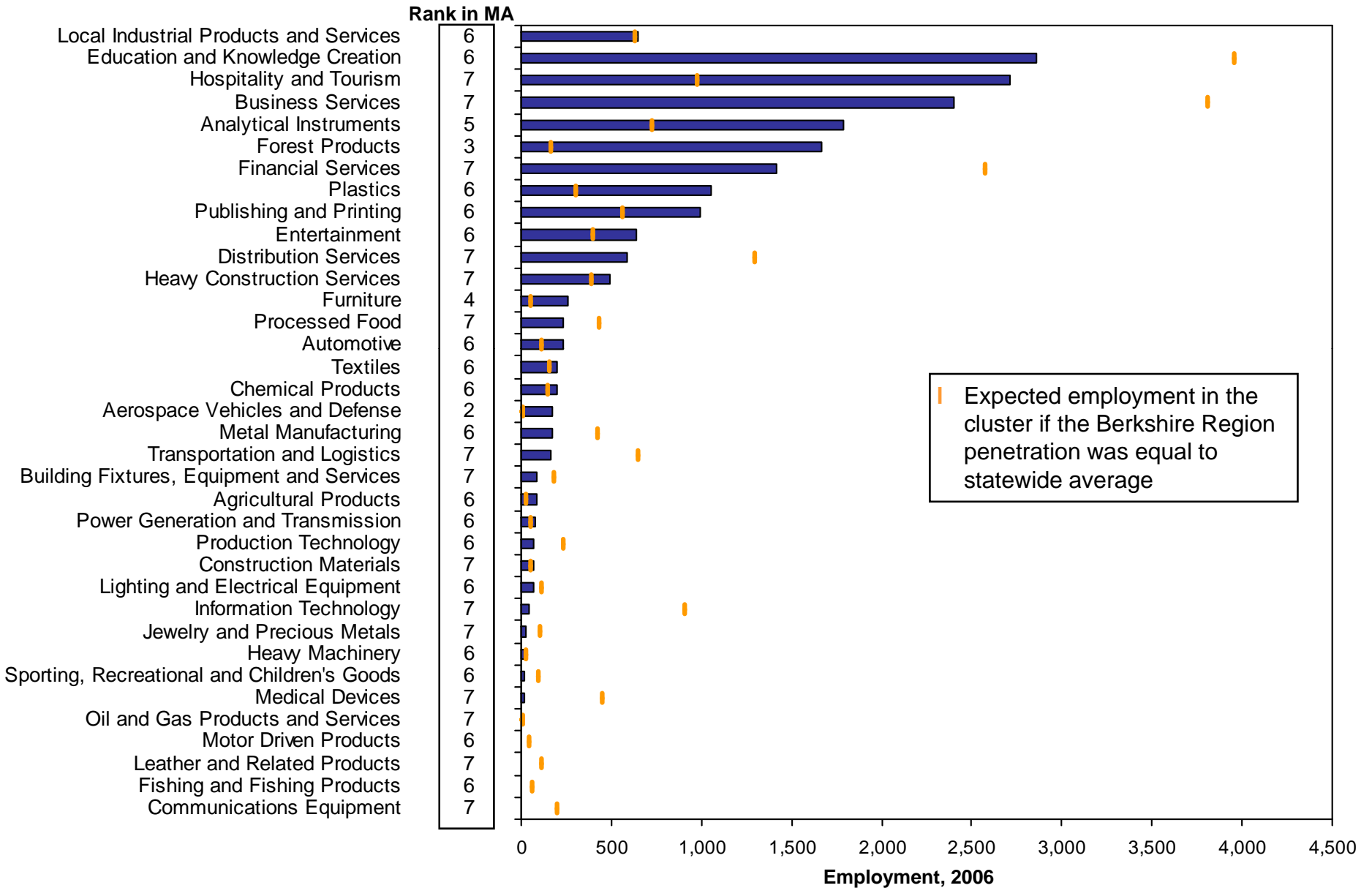


Note: Berkshire Region = Berkshire County

Berkshire Region Specialization by Traded Cluster, 1998-2006



Berkshire Region Employment Traded Clusters

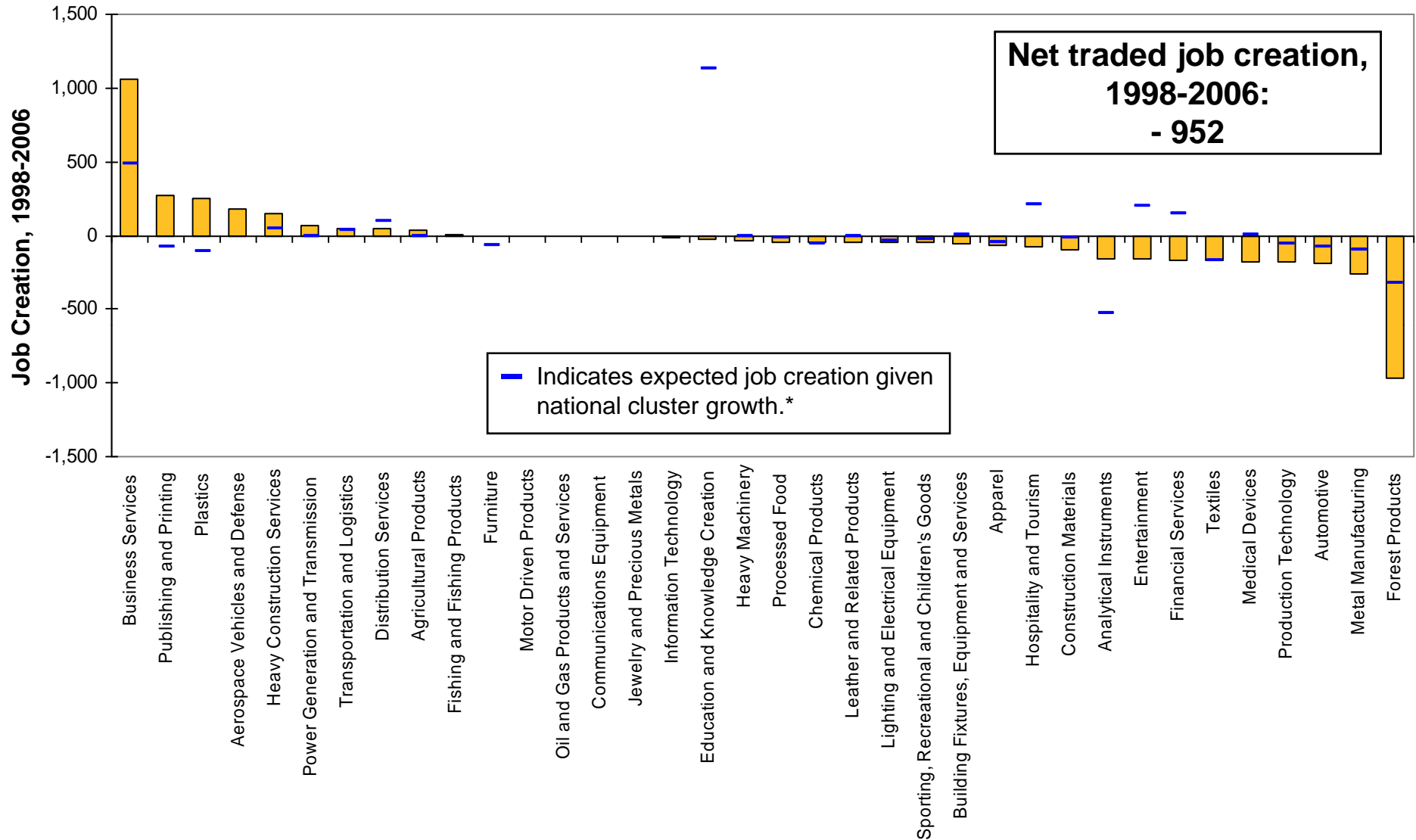


I - Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Berkshire Region Job Creation

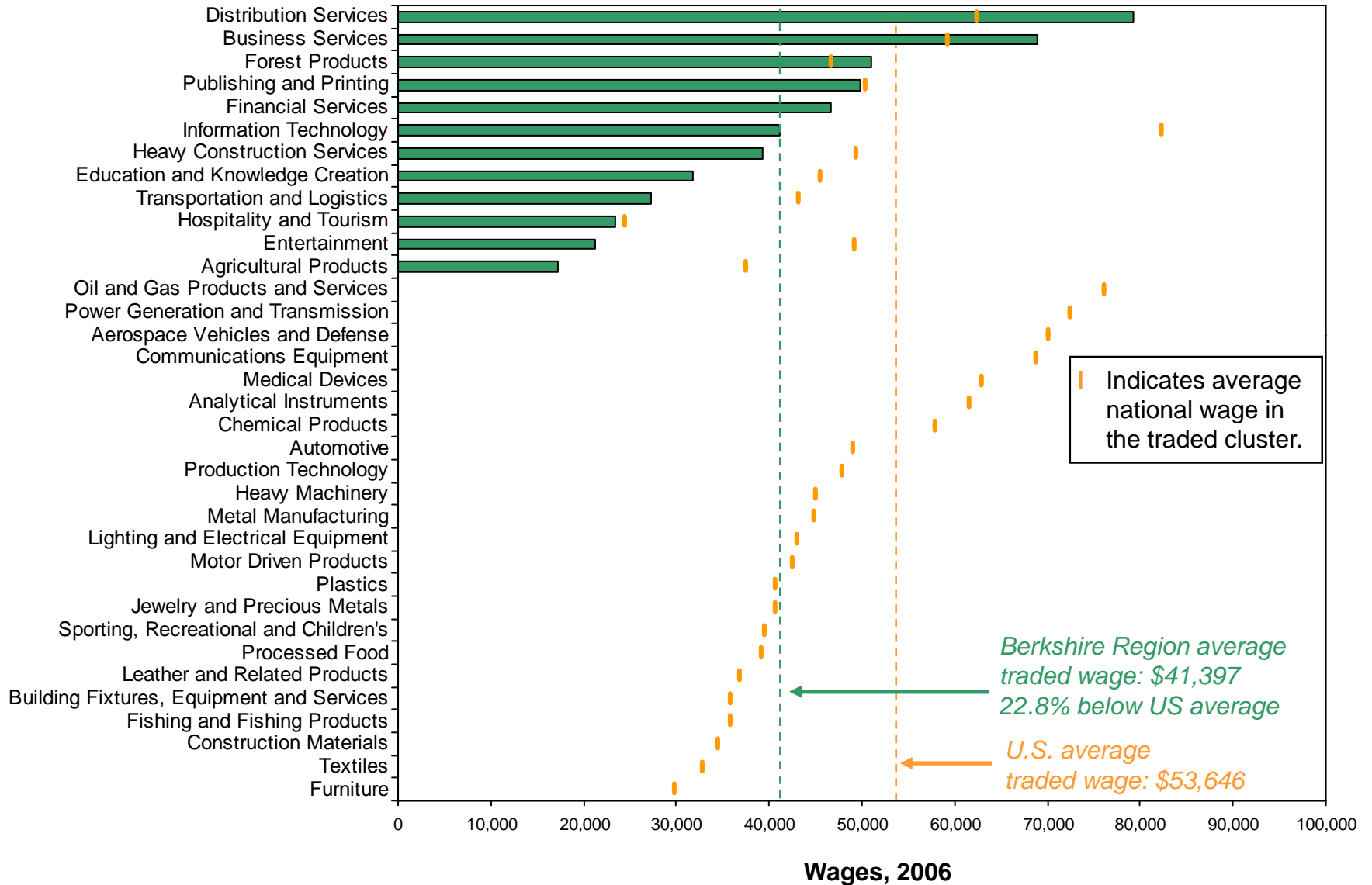
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +650.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Berkshire Region Wages

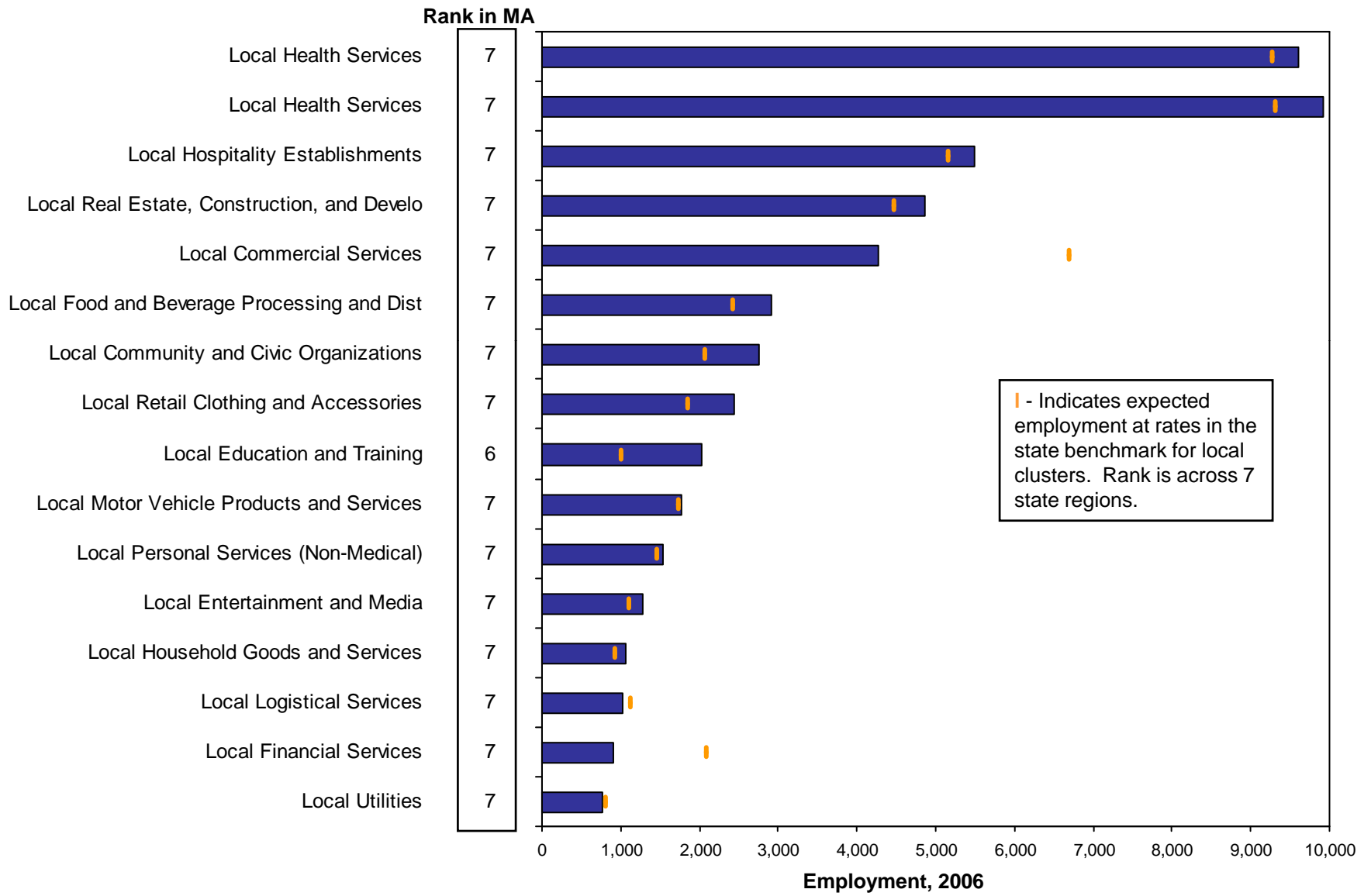
Traded Clusters vs. National Benchmarks



Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

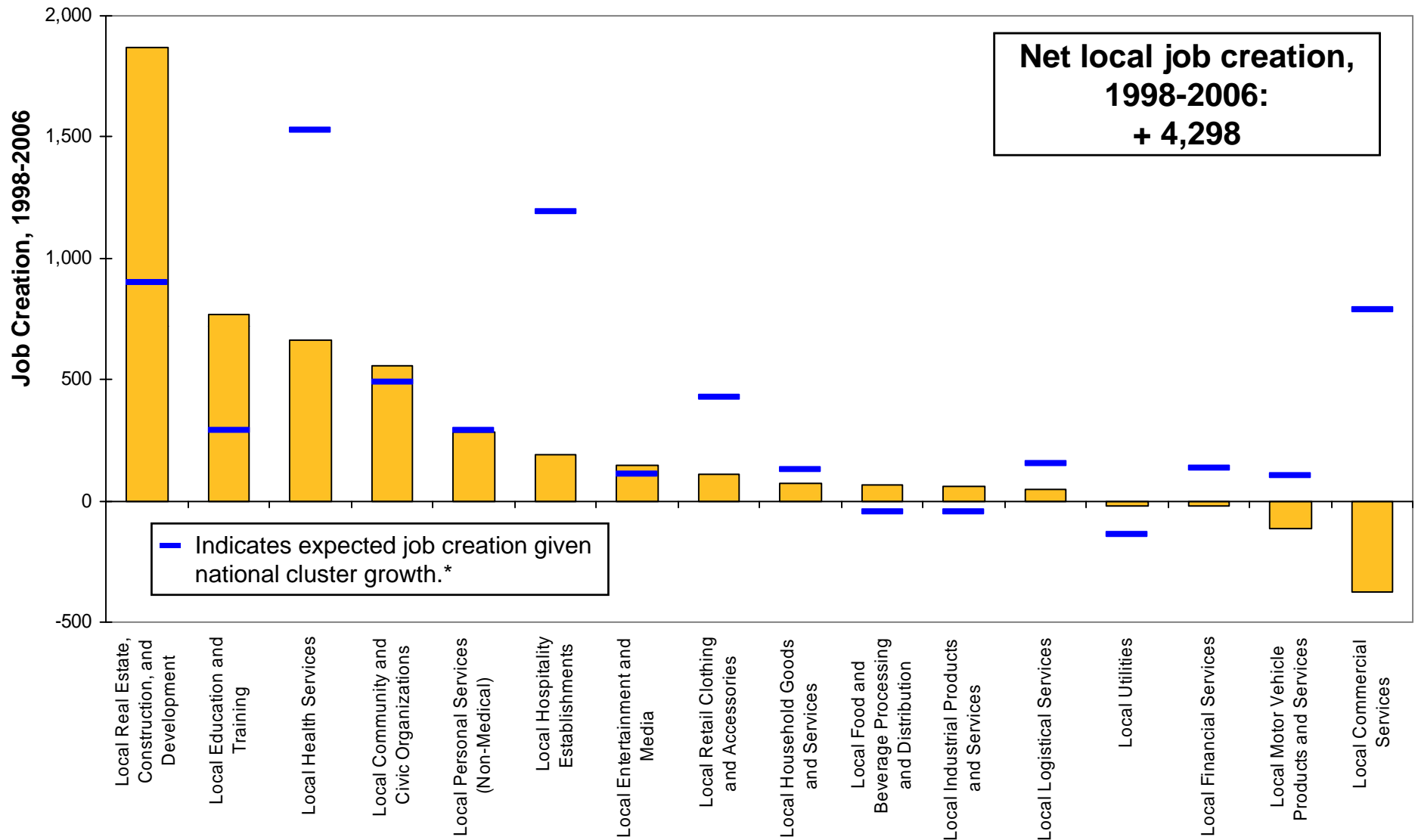
Berkshire Region Employment Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Berkshire Region Job Creation

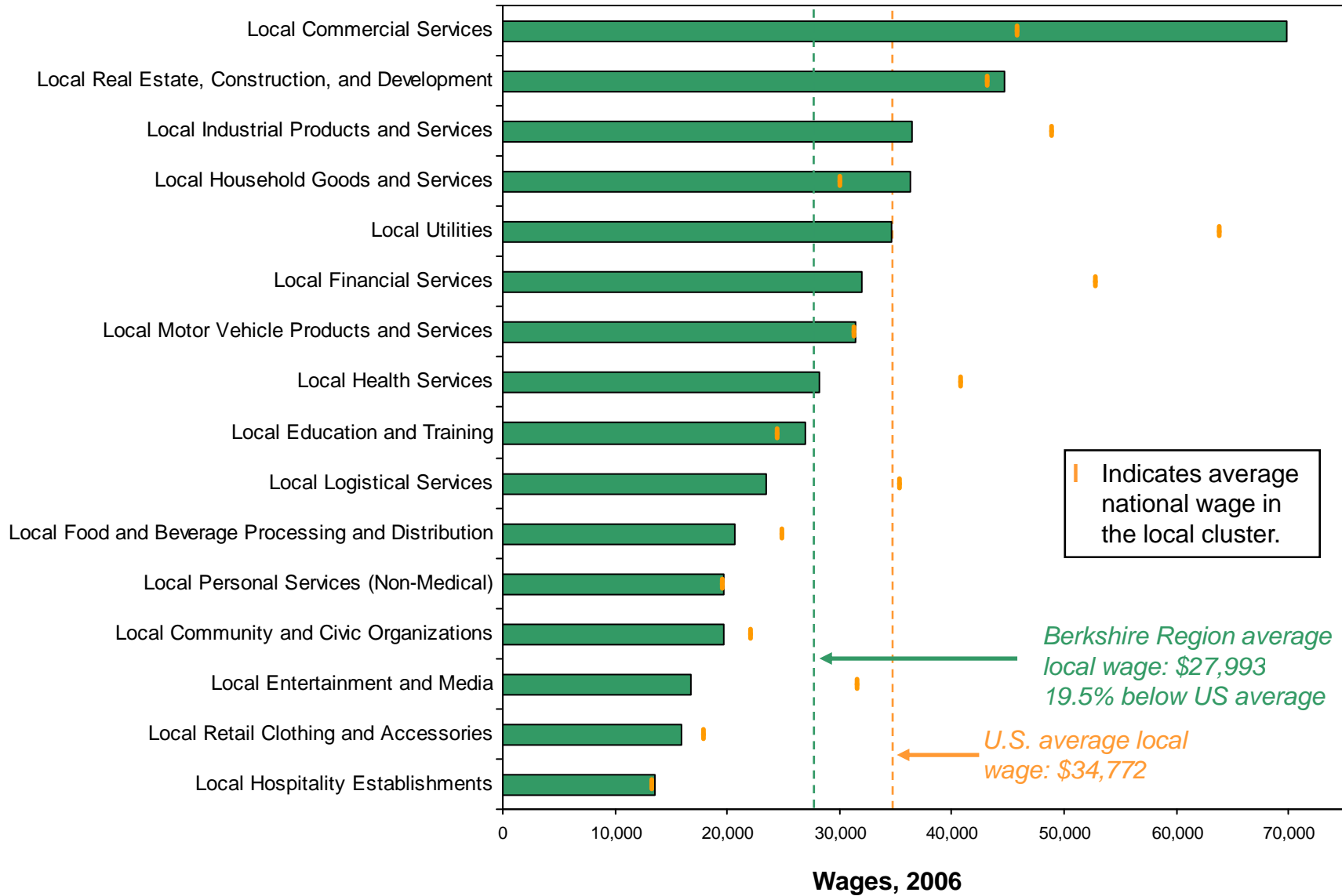
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +6,288.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

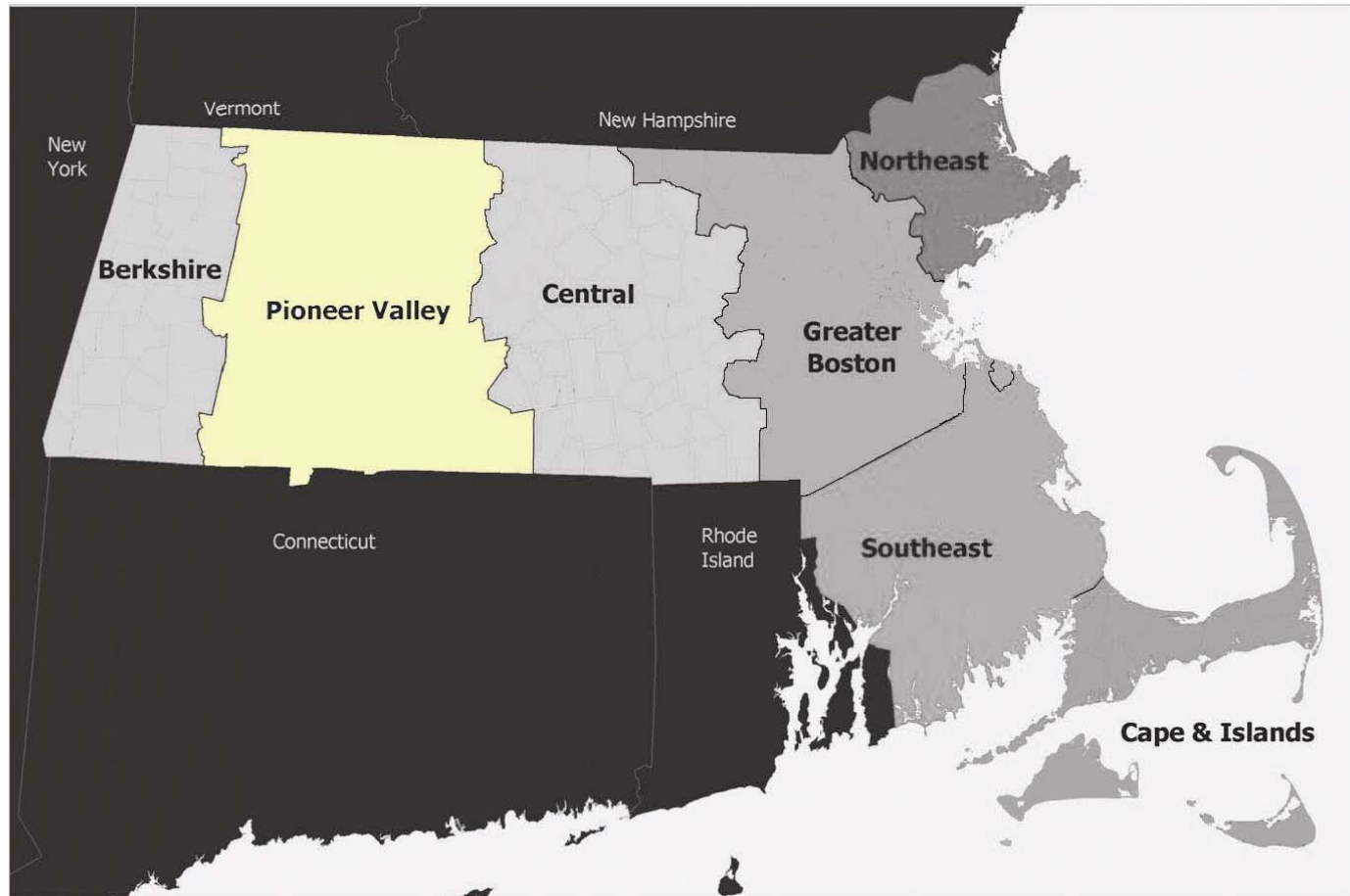
Berkshire Region Wages

Local Clusters vs. National Benchmarks

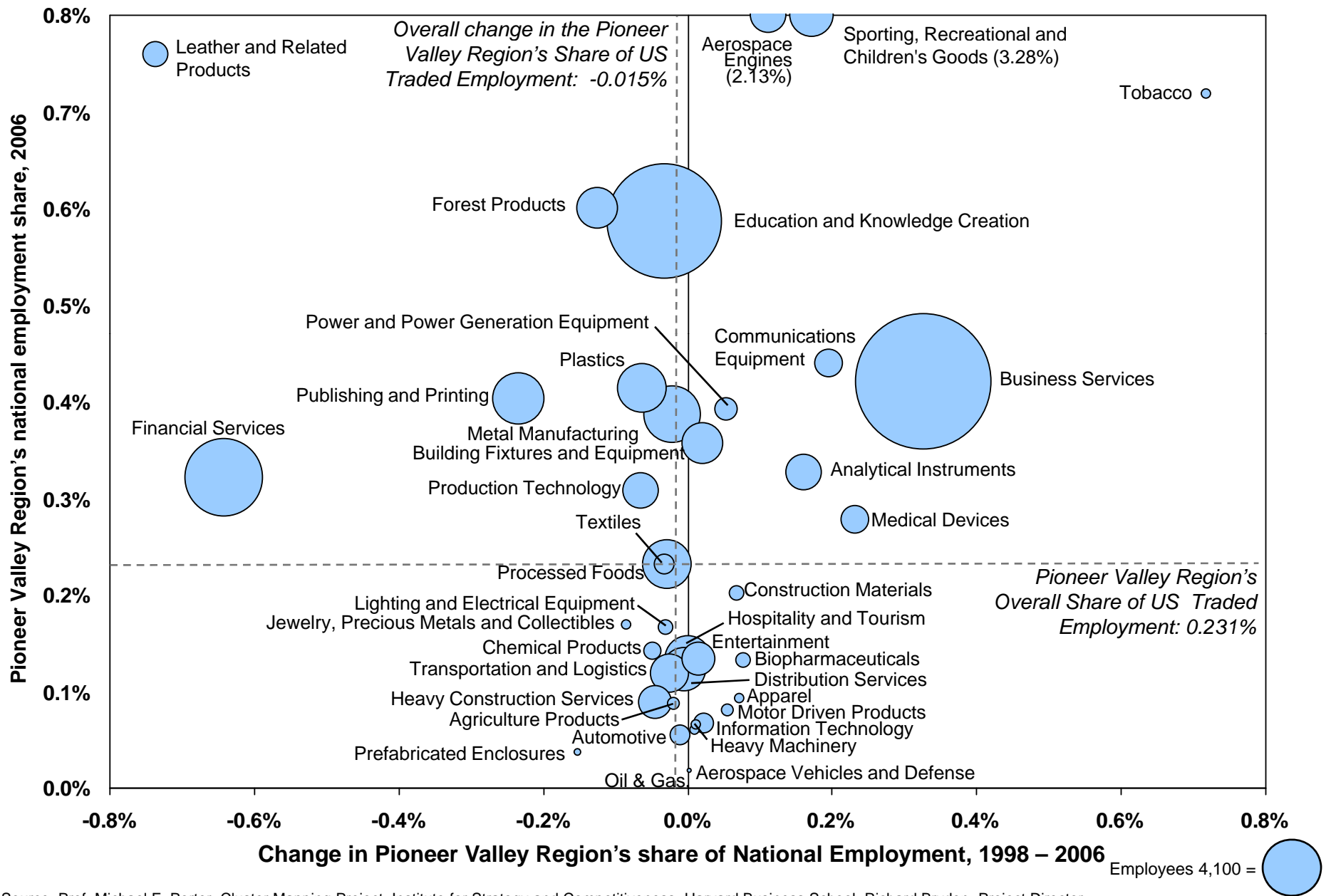


Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

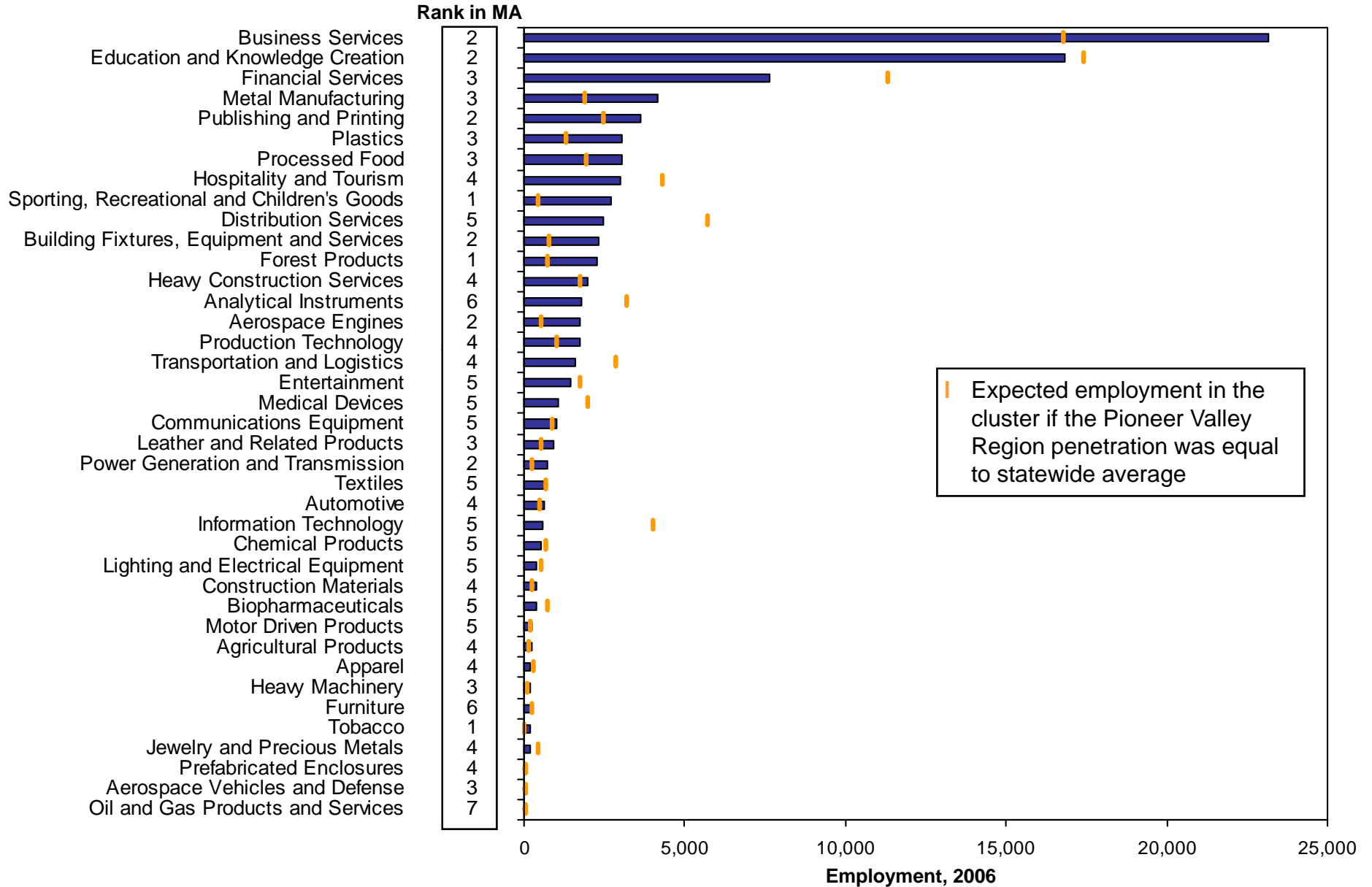
Pioneer Valley Region



Pioneer Valley Region Specialization by Traded Cluster, 1998-2006



Pioneer Valley Region Employment Traded Clusters

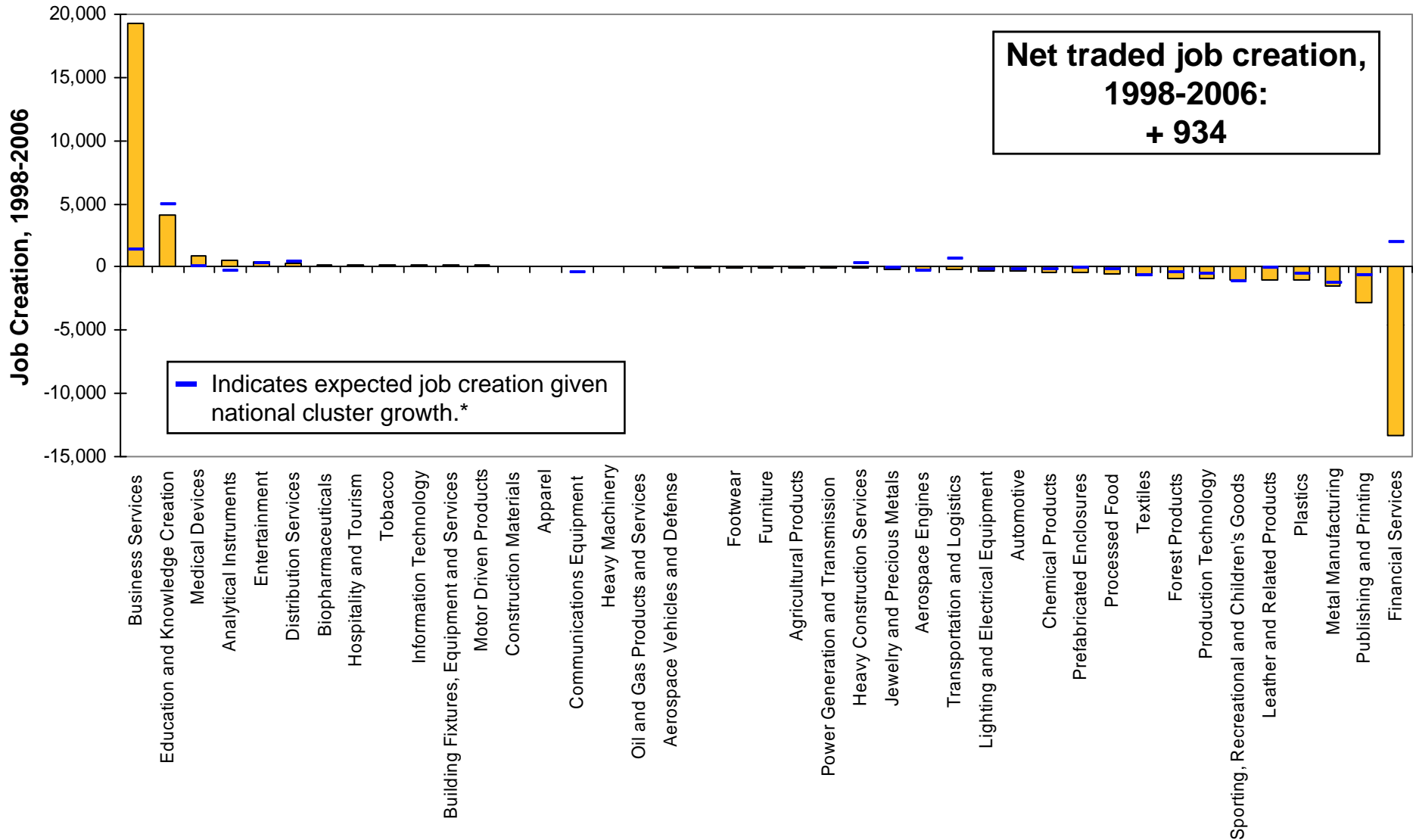


| - Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Pioneer Valley Region Job Creation

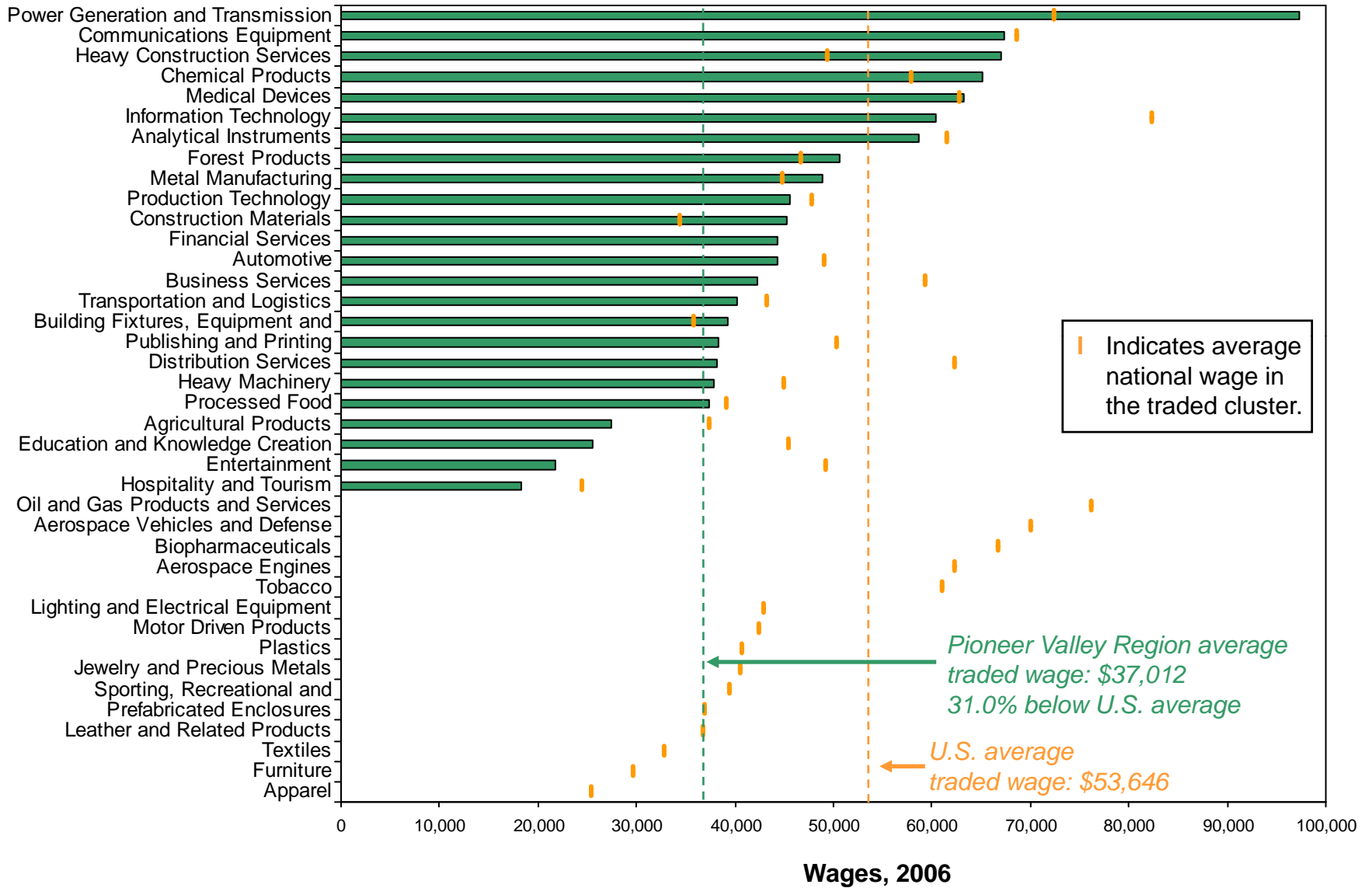
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +2,336
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Pioneer Valley Region Wages

Traded Clusters vs. National Benchmarks

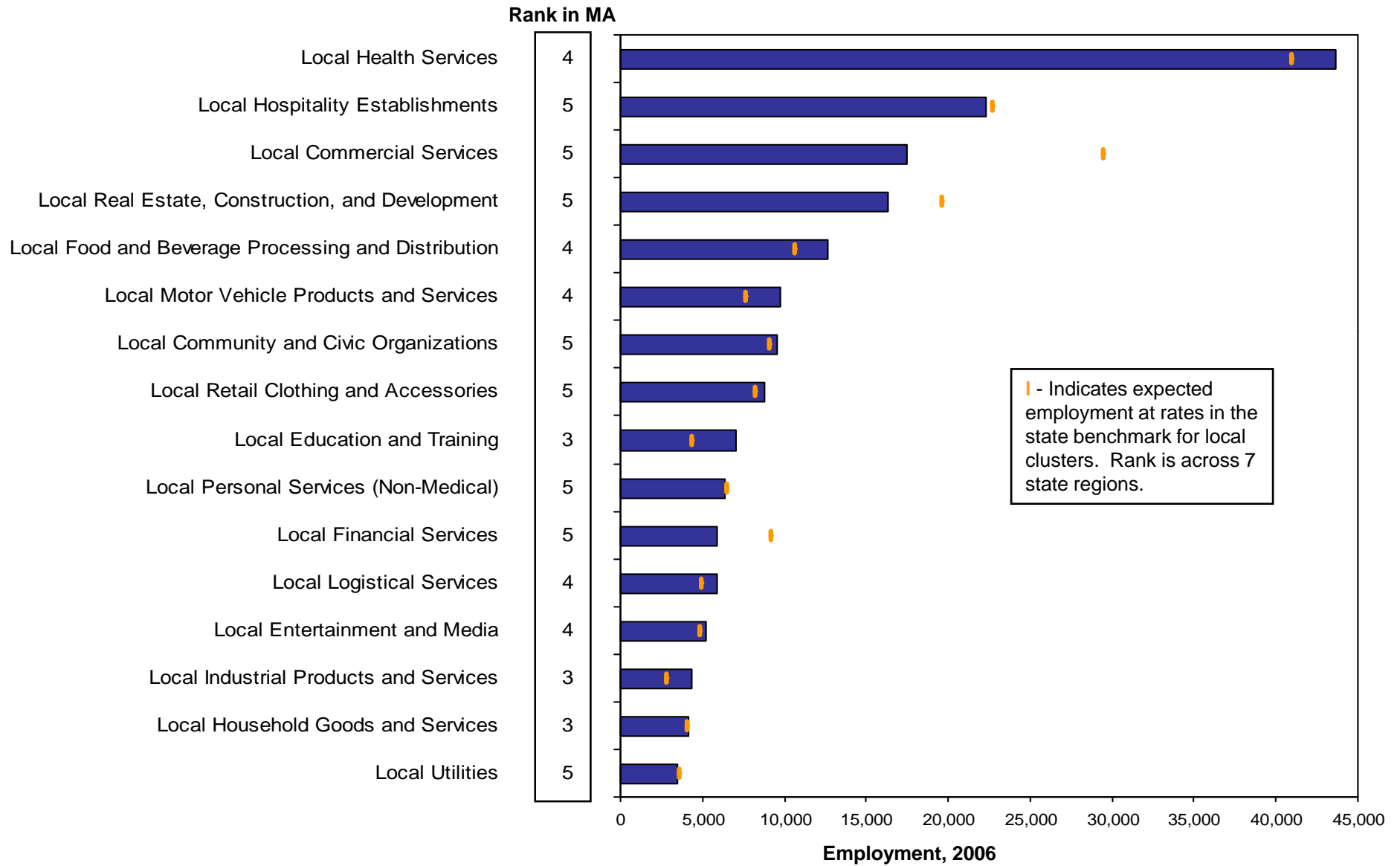


Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Pioneer Valley Region Employment

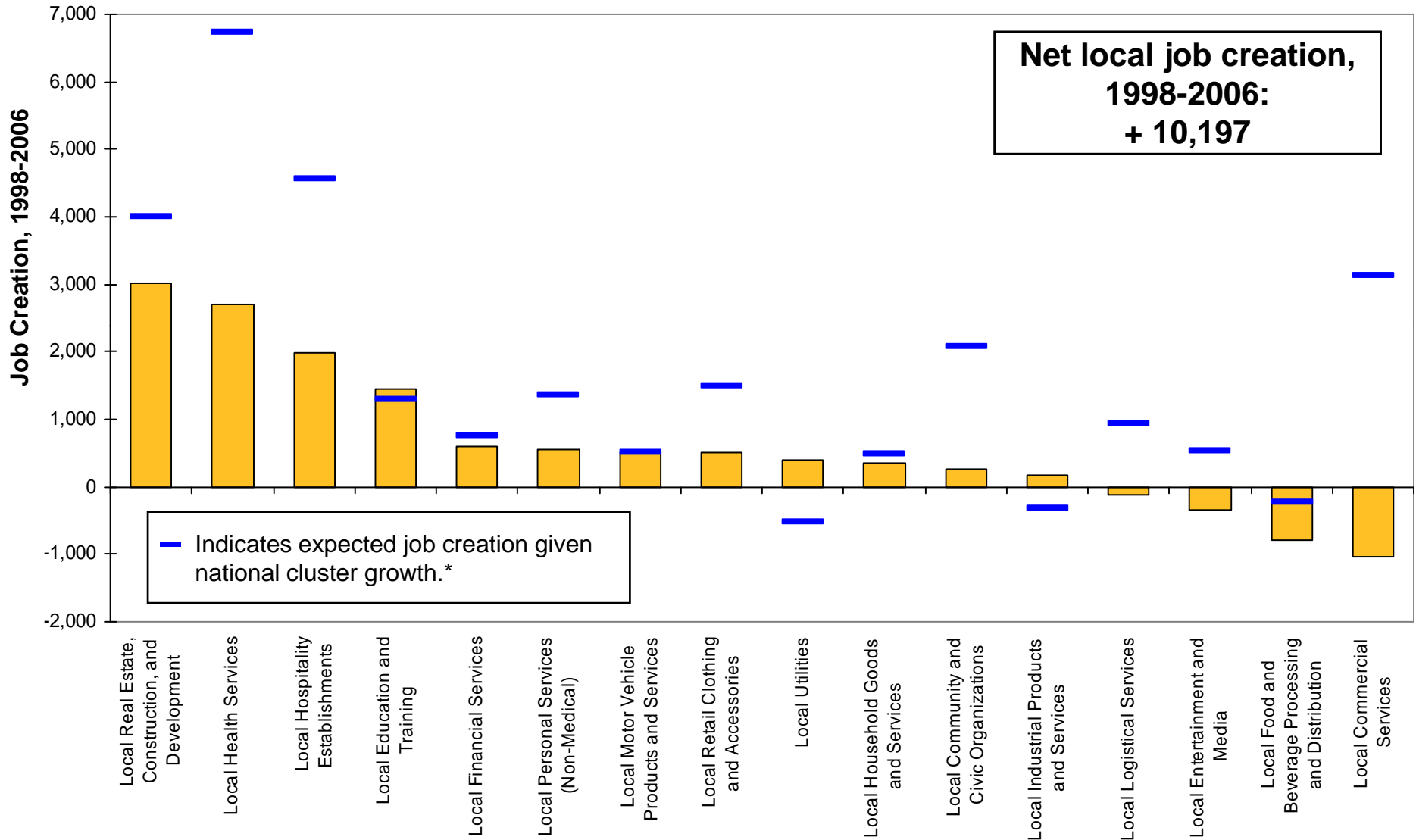
Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Pioneer Valley Region Job Creation

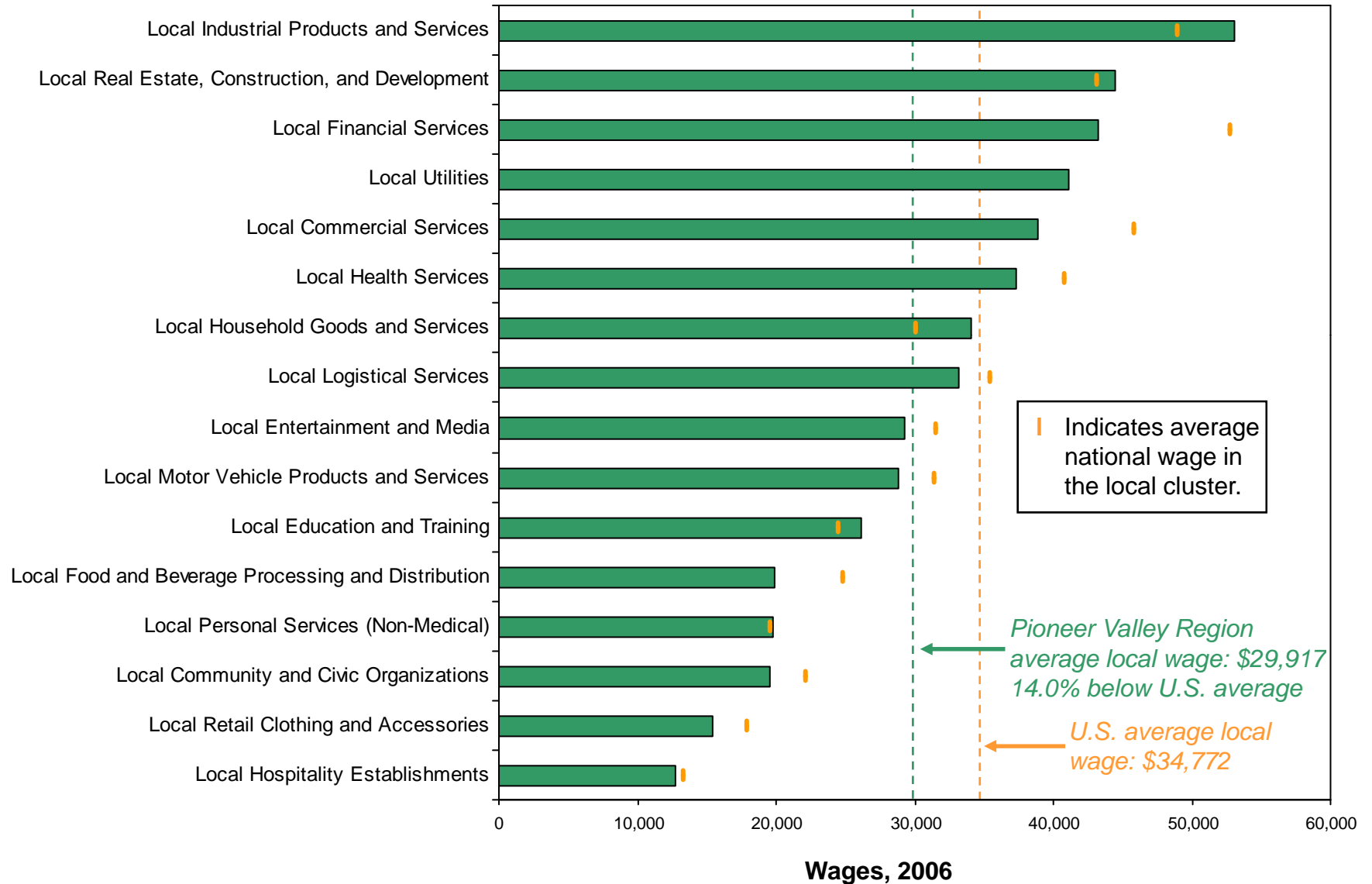
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +26,775.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

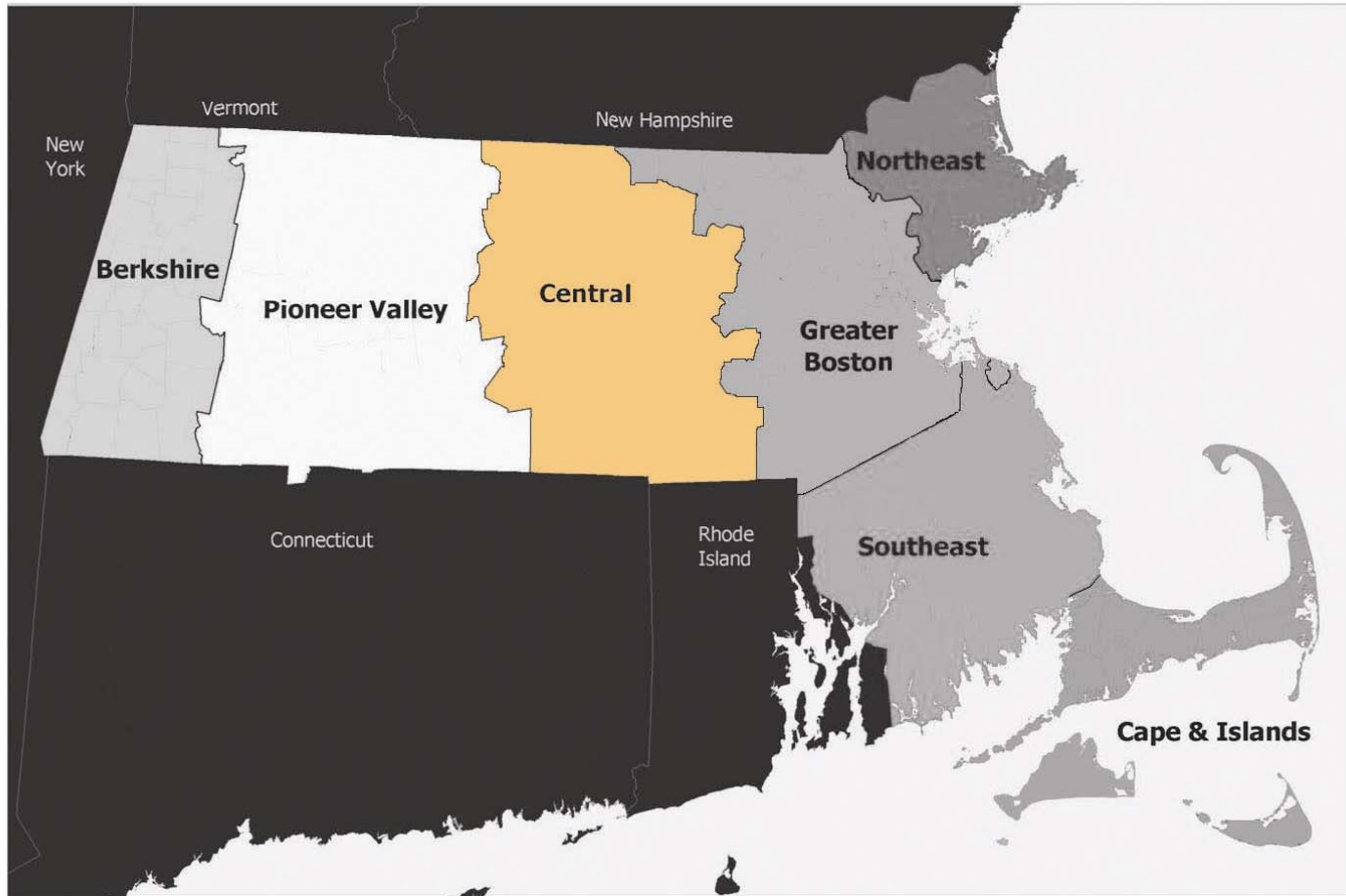
Pioneer Valley Region Wages

Local Clusters vs. National Benchmarks



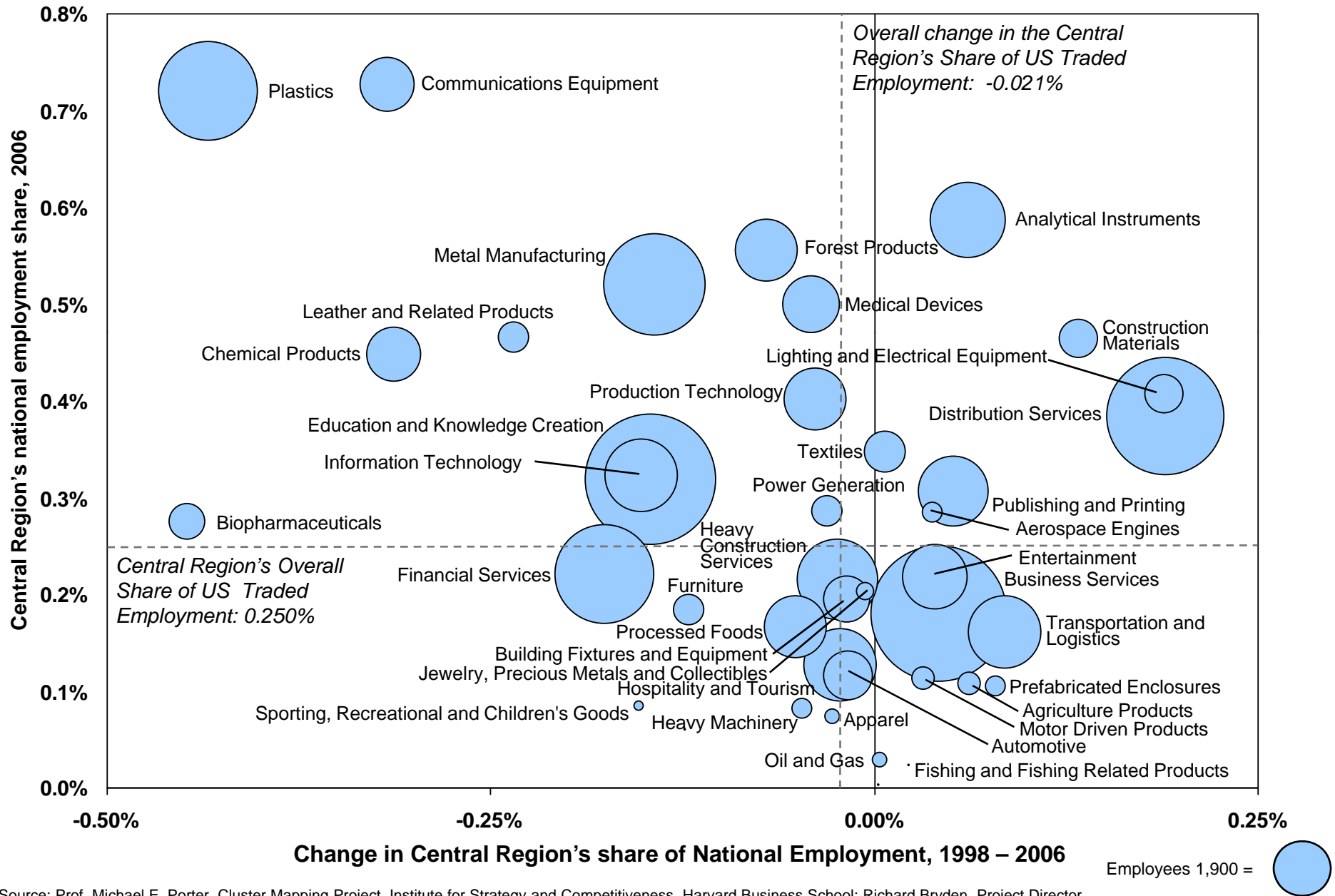
Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Central Region

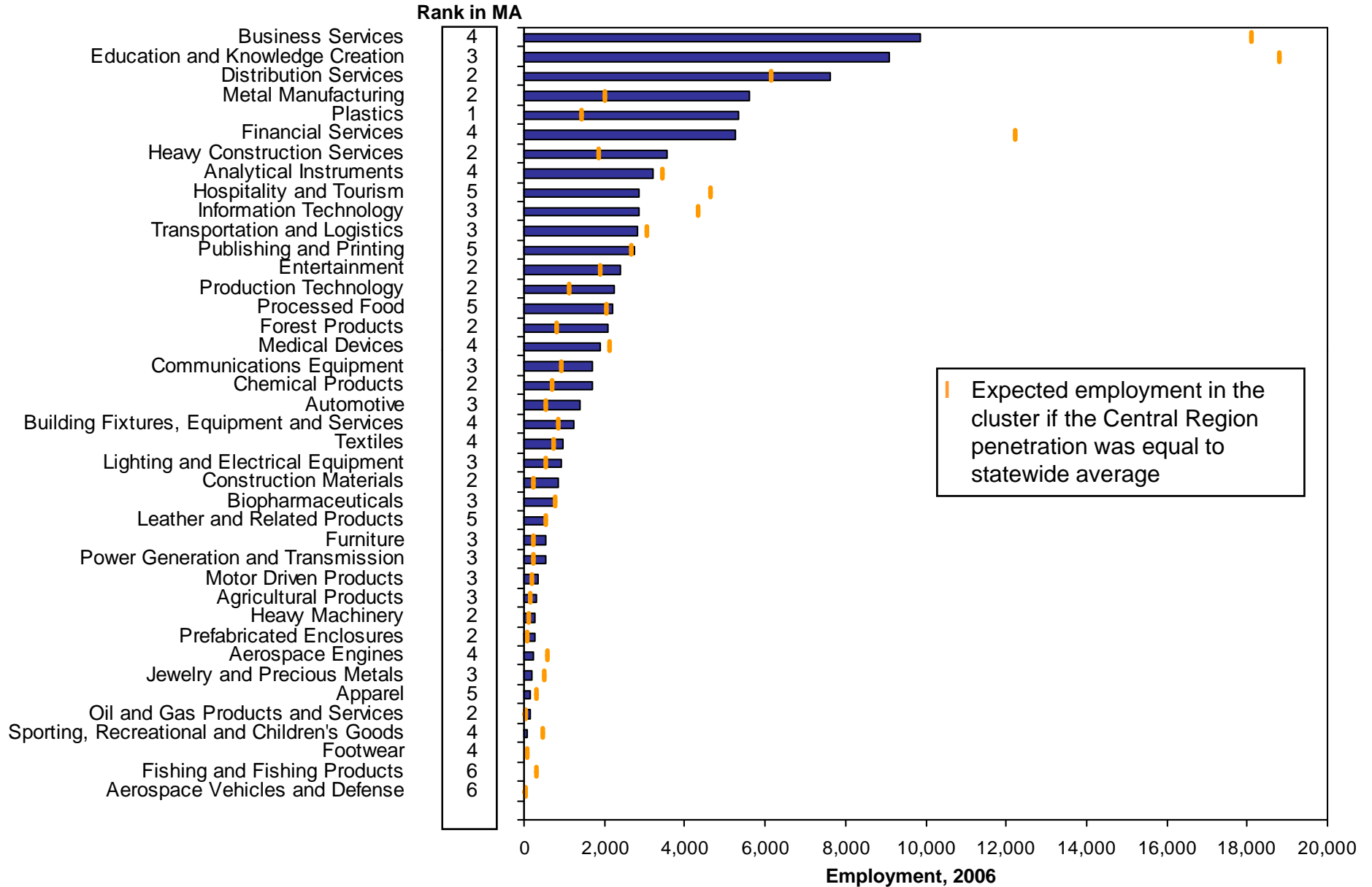


Central Region

Specialization by Traded Cluster, 1998-2006



Central Region Employment Traded Clusters

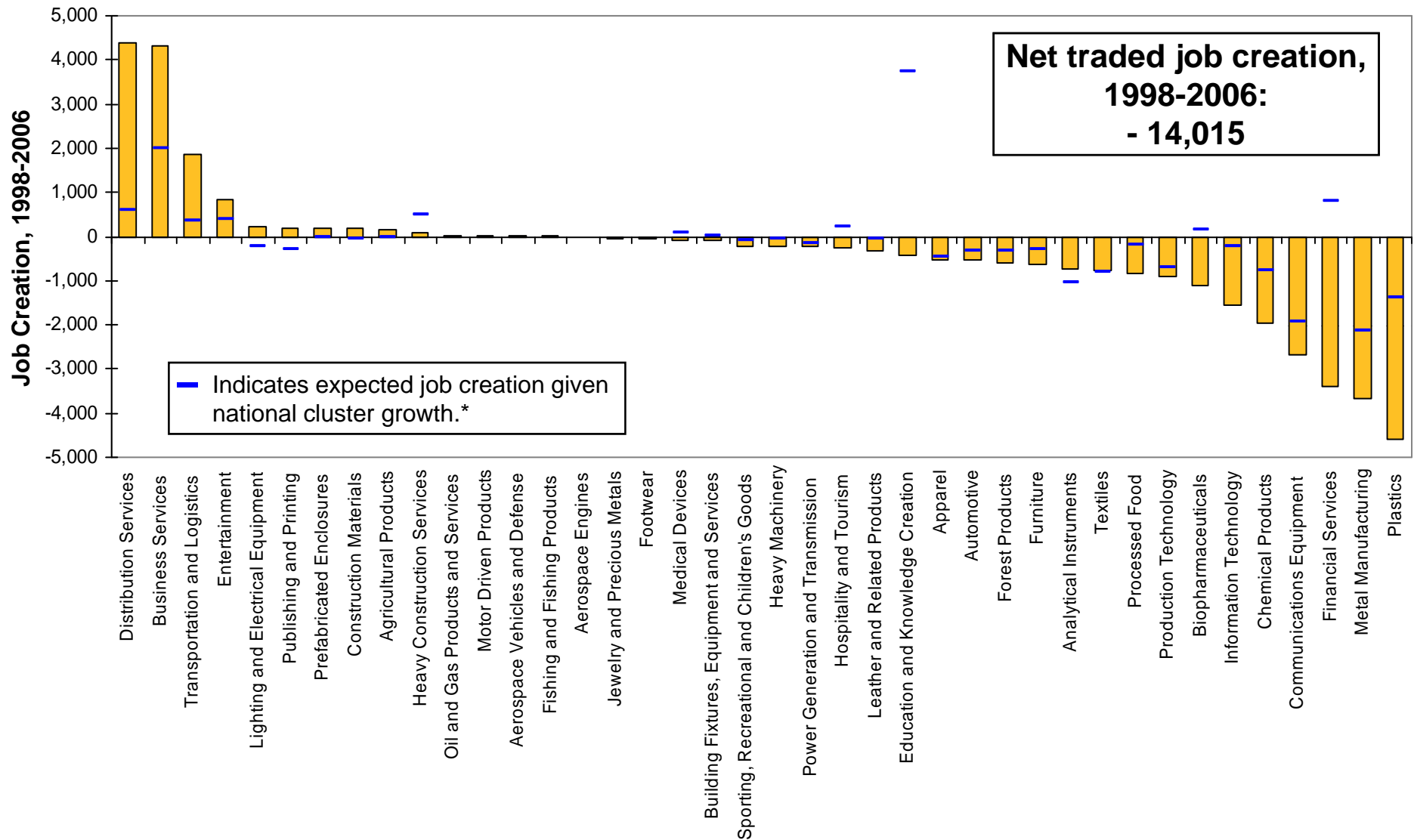


| - Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Central Region Job Creation

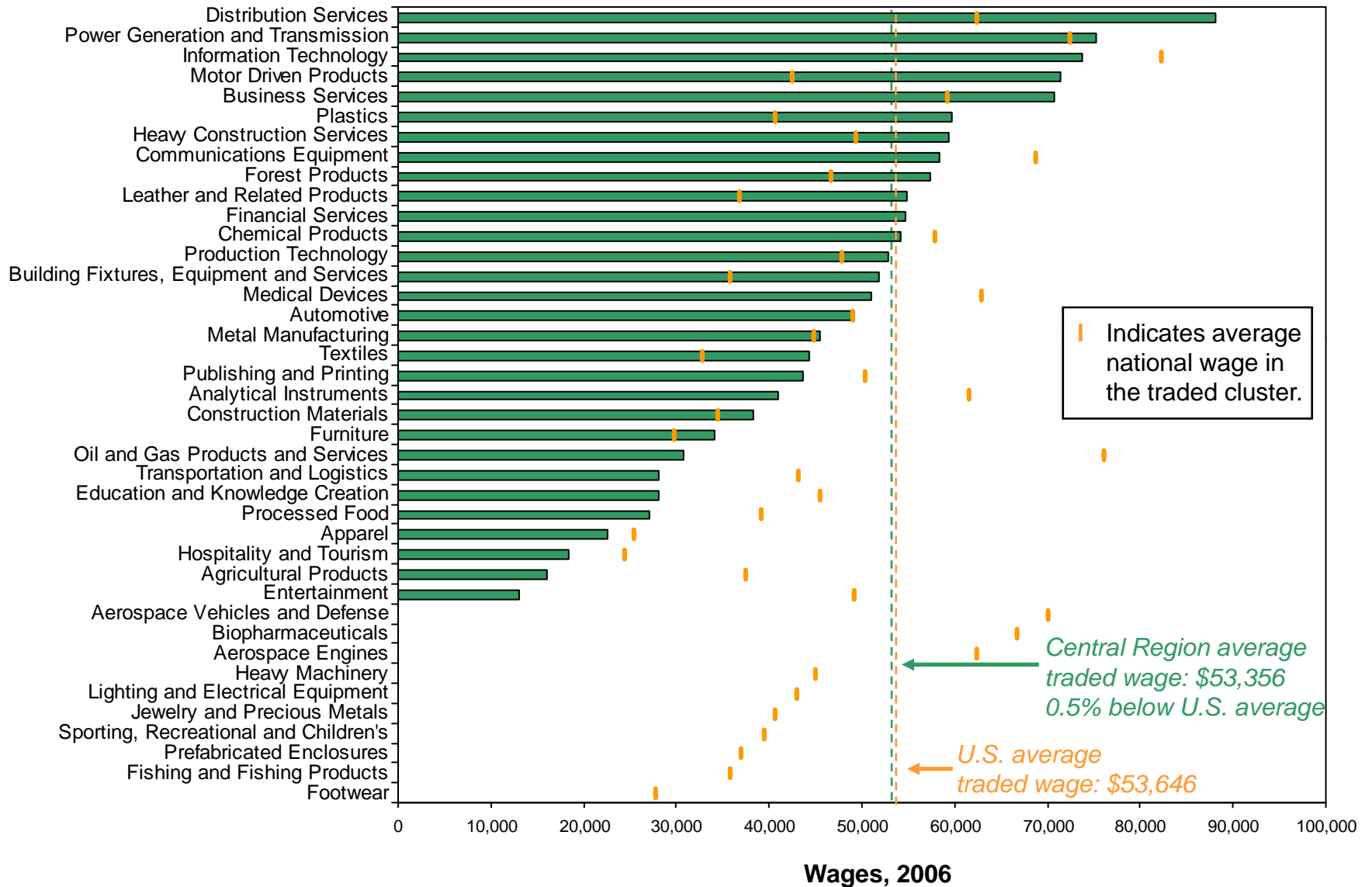
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be -2,836
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Central Region Wages

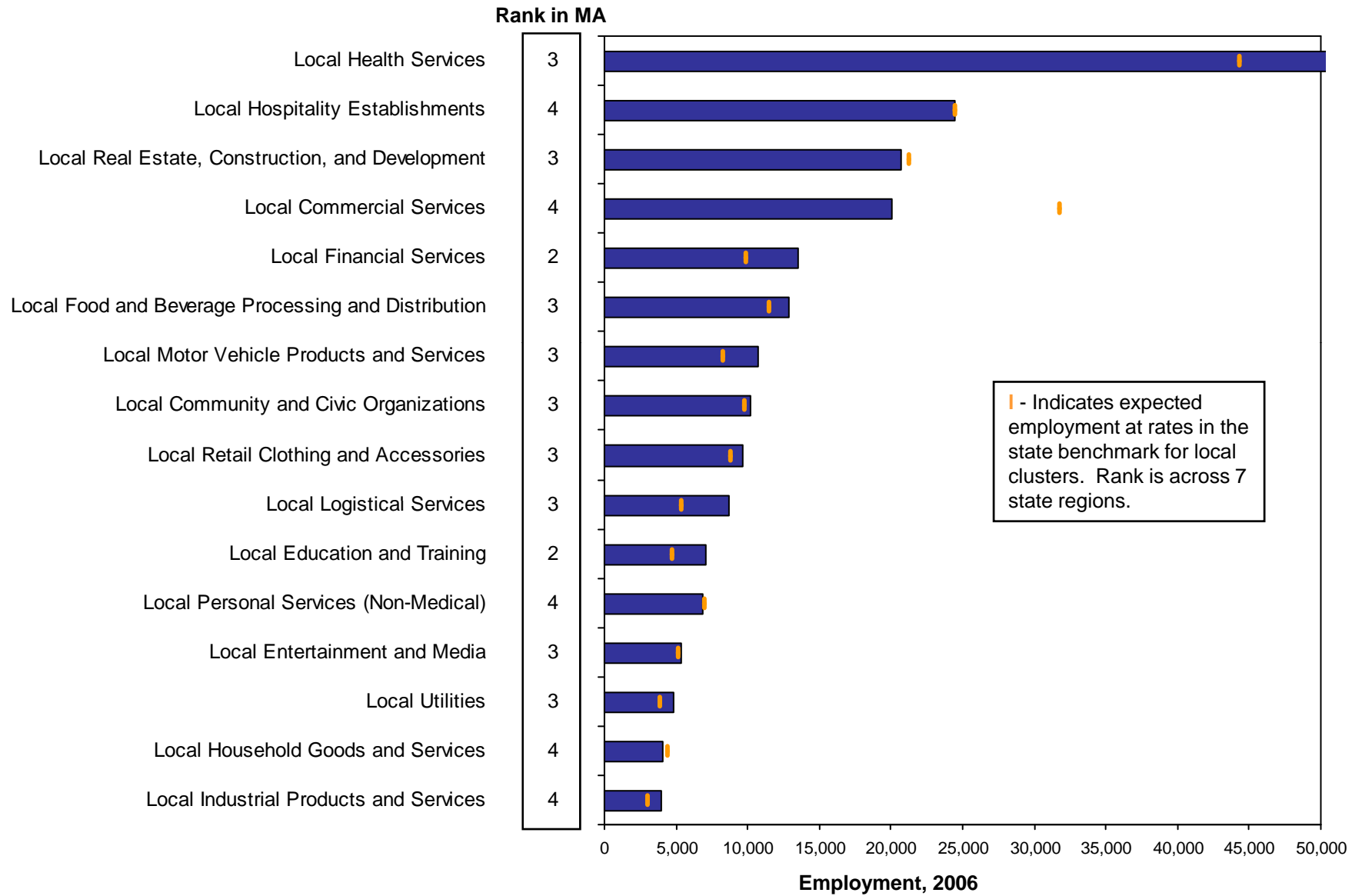
Traded Clusters vs. National Benchmarks



Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

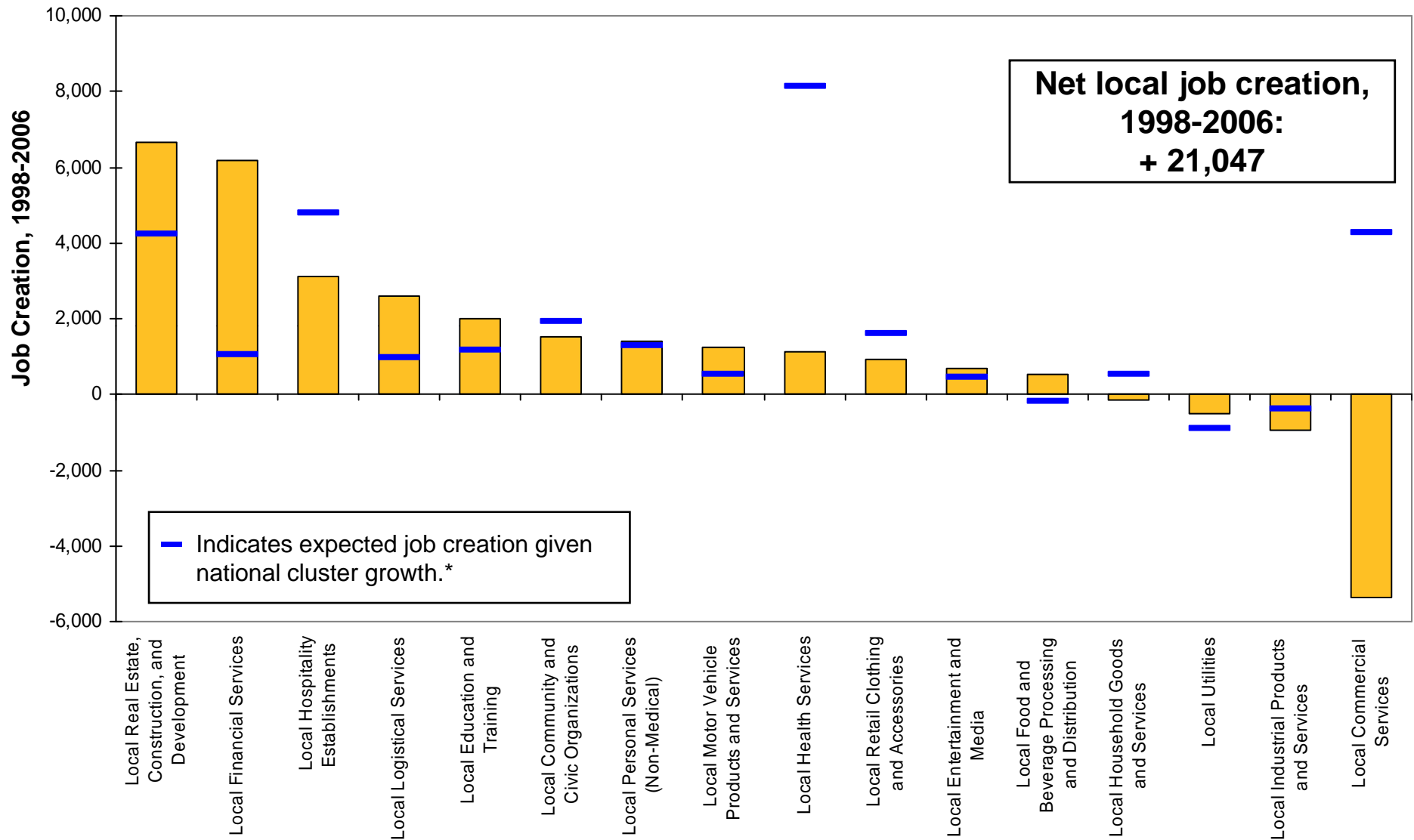
Central Region Employment Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Central Region Job Creation

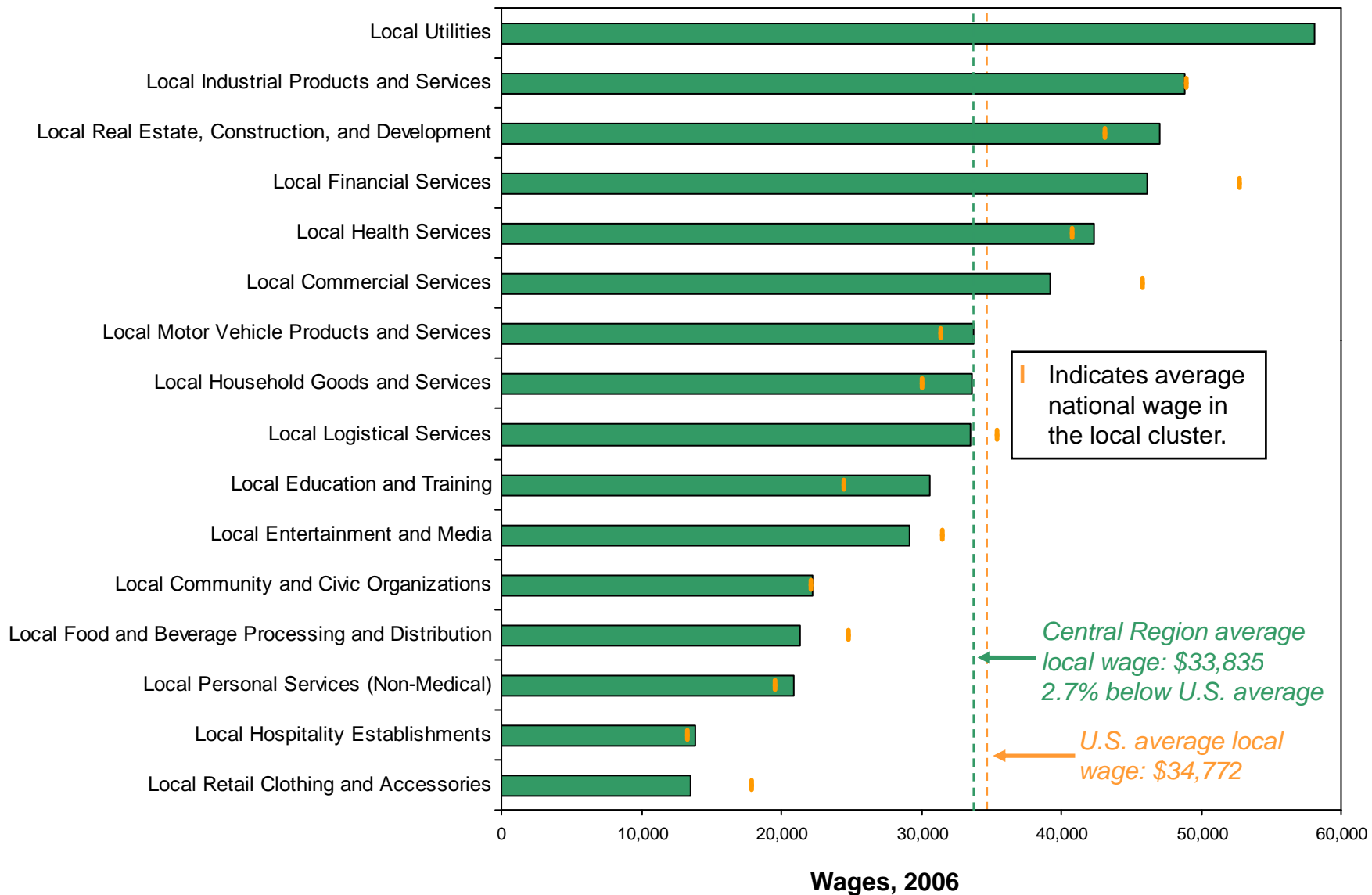
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +29,402.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

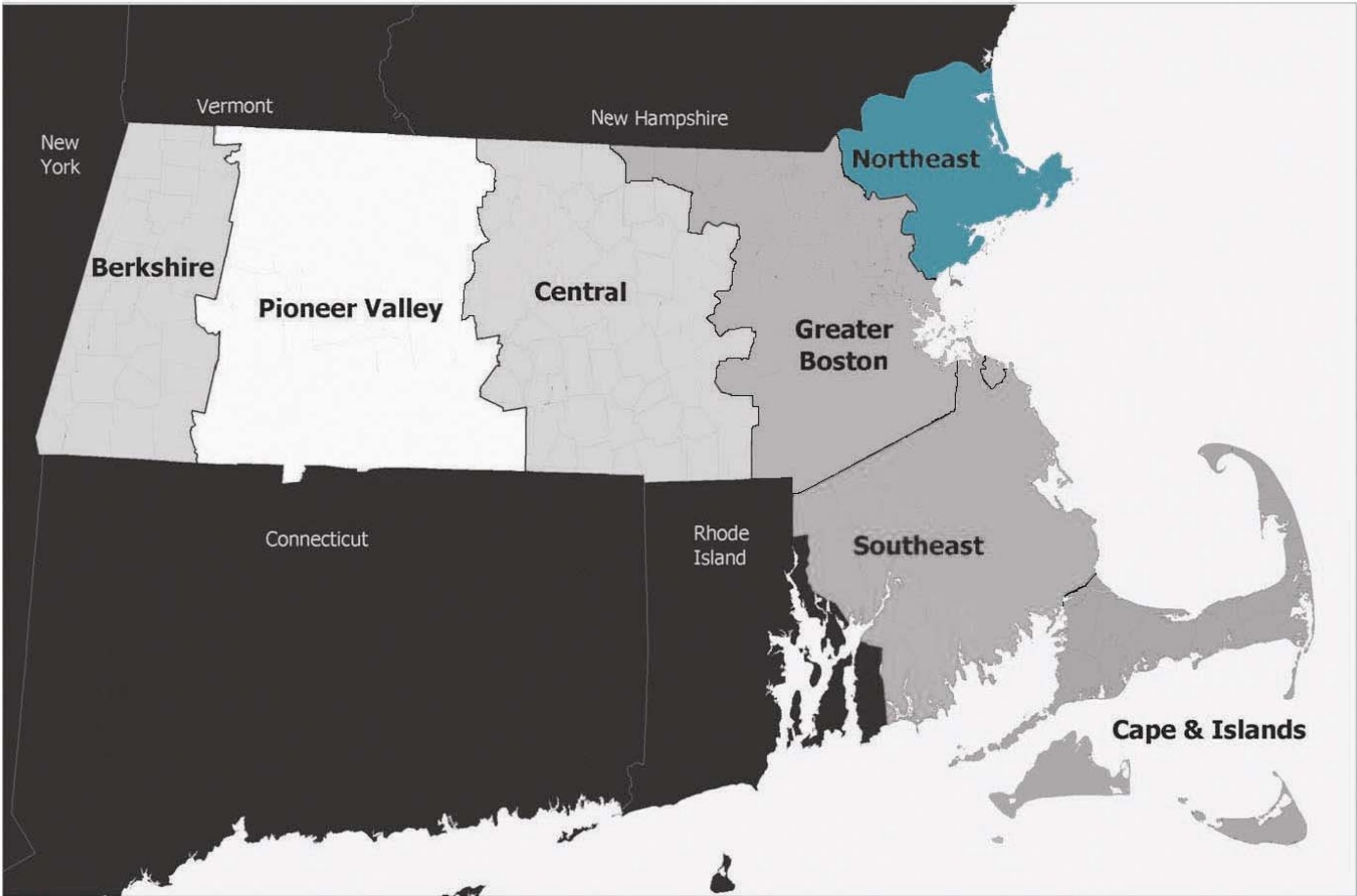
Central Region Wages

Local Clusters vs. National Benchmarks



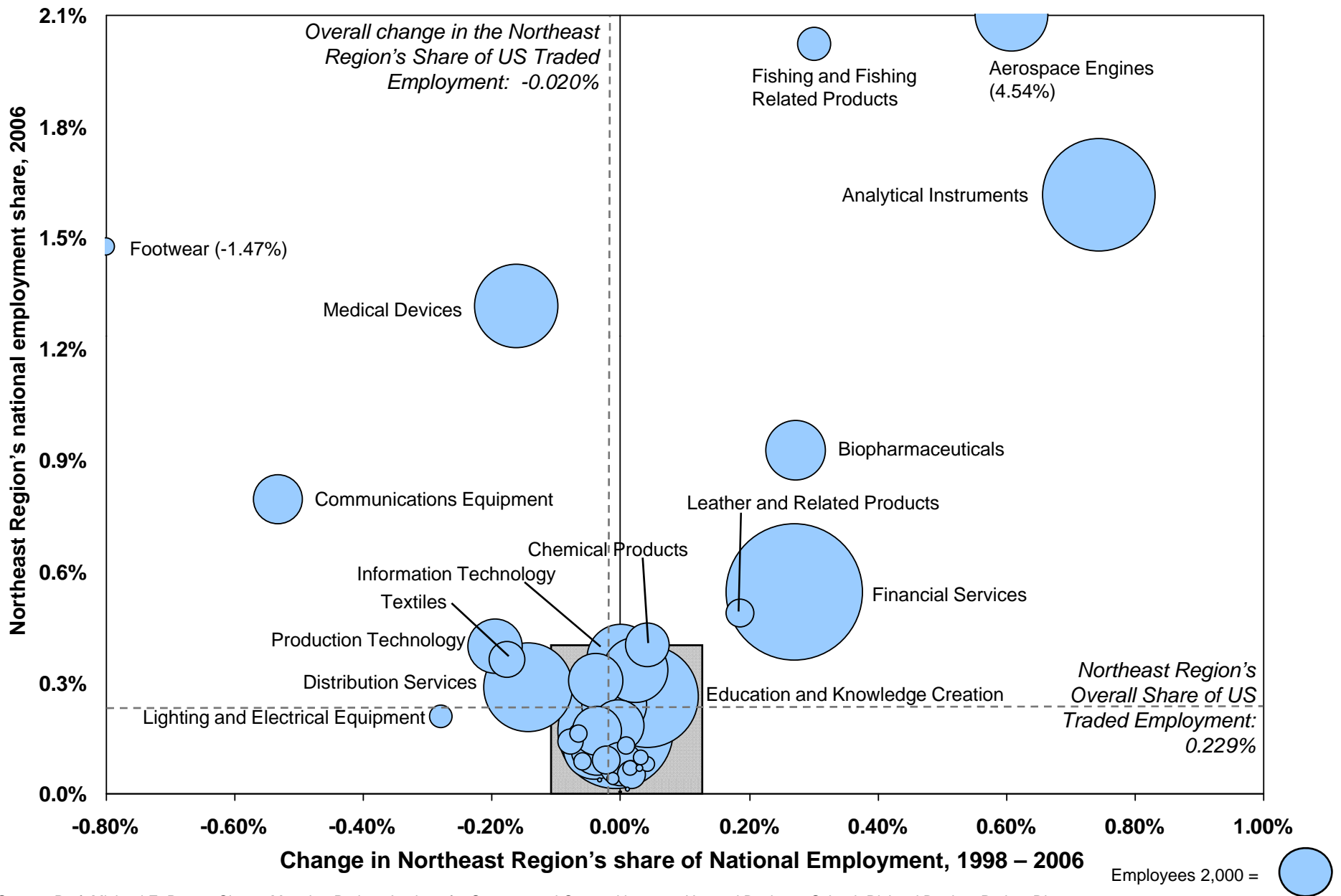
Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Northeast Region



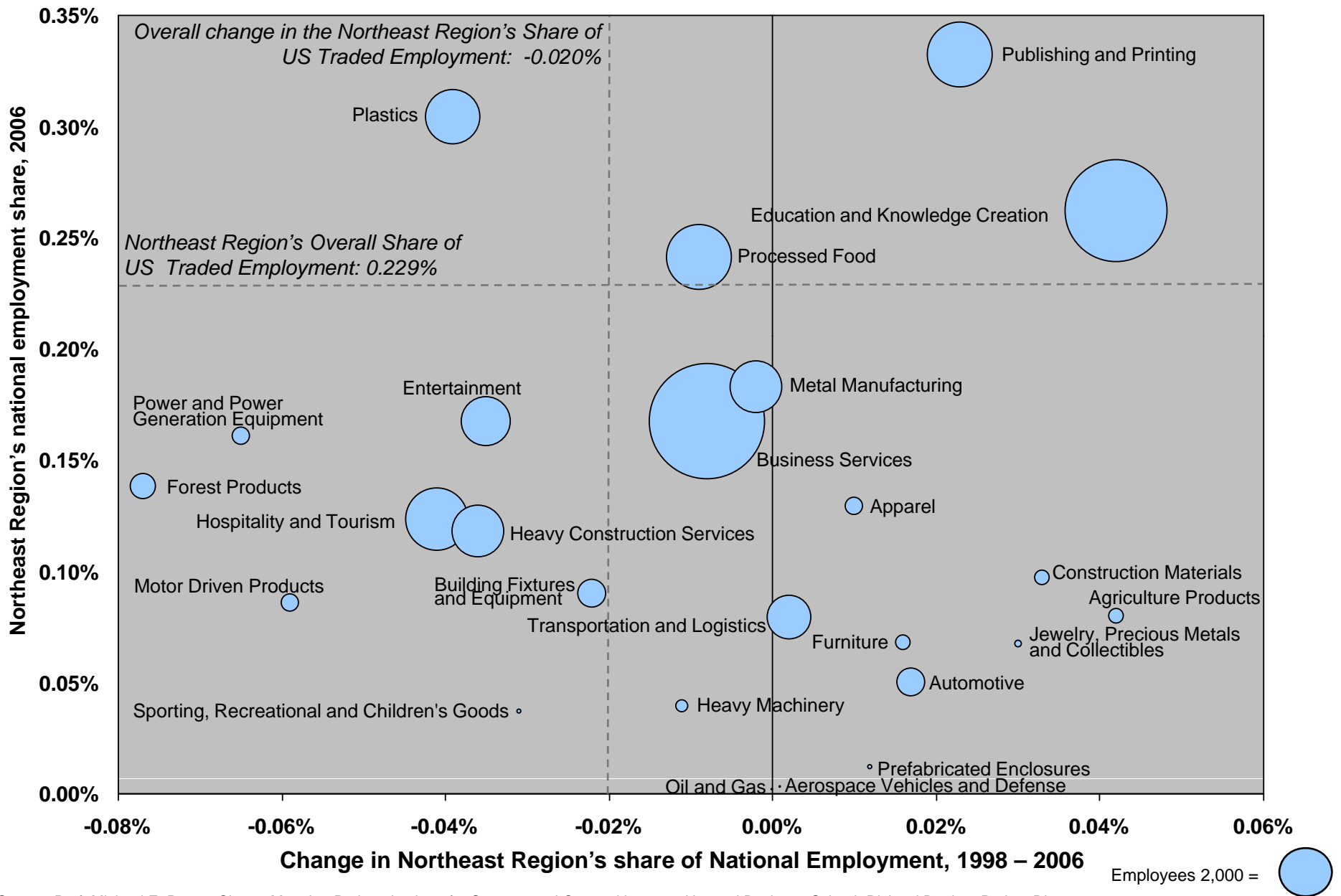
Northeast Region

Specialization by Traded Cluster, 1998-2006

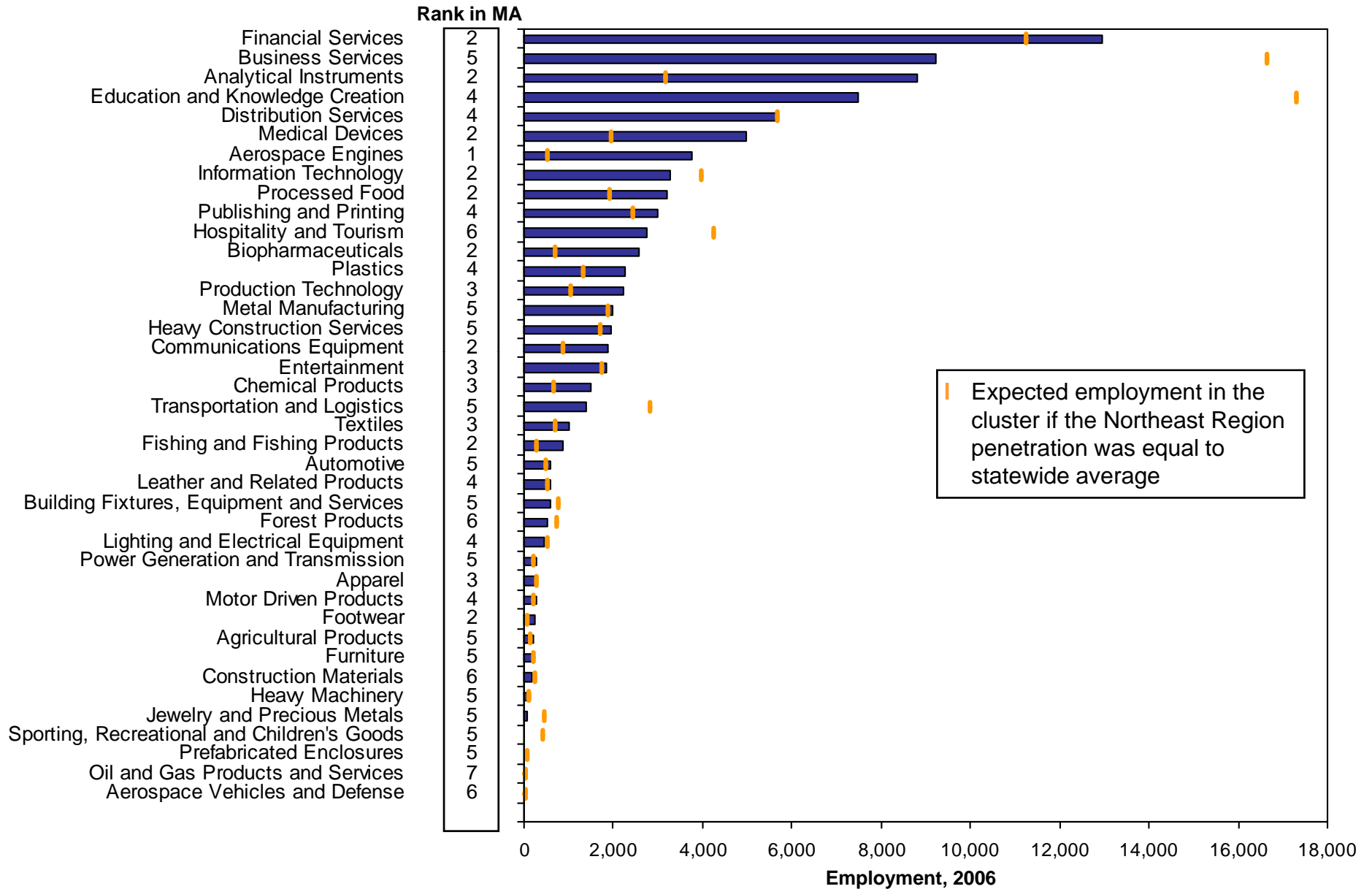


Northeast Region

Specialization by Traded Cluster, 1998-2006



Northeast Region Employment Traded Clusters

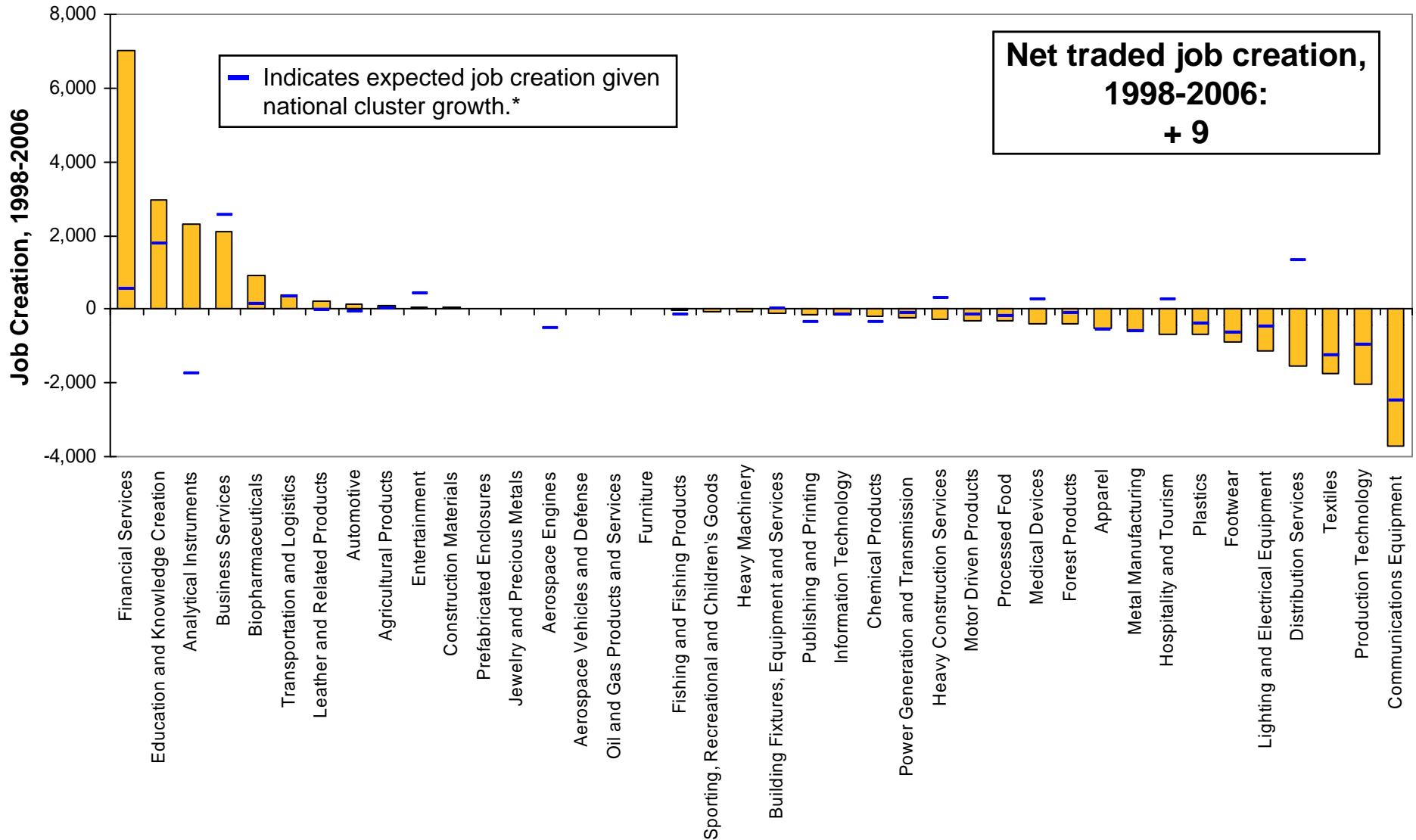


|- Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Northeast Region Job Creation

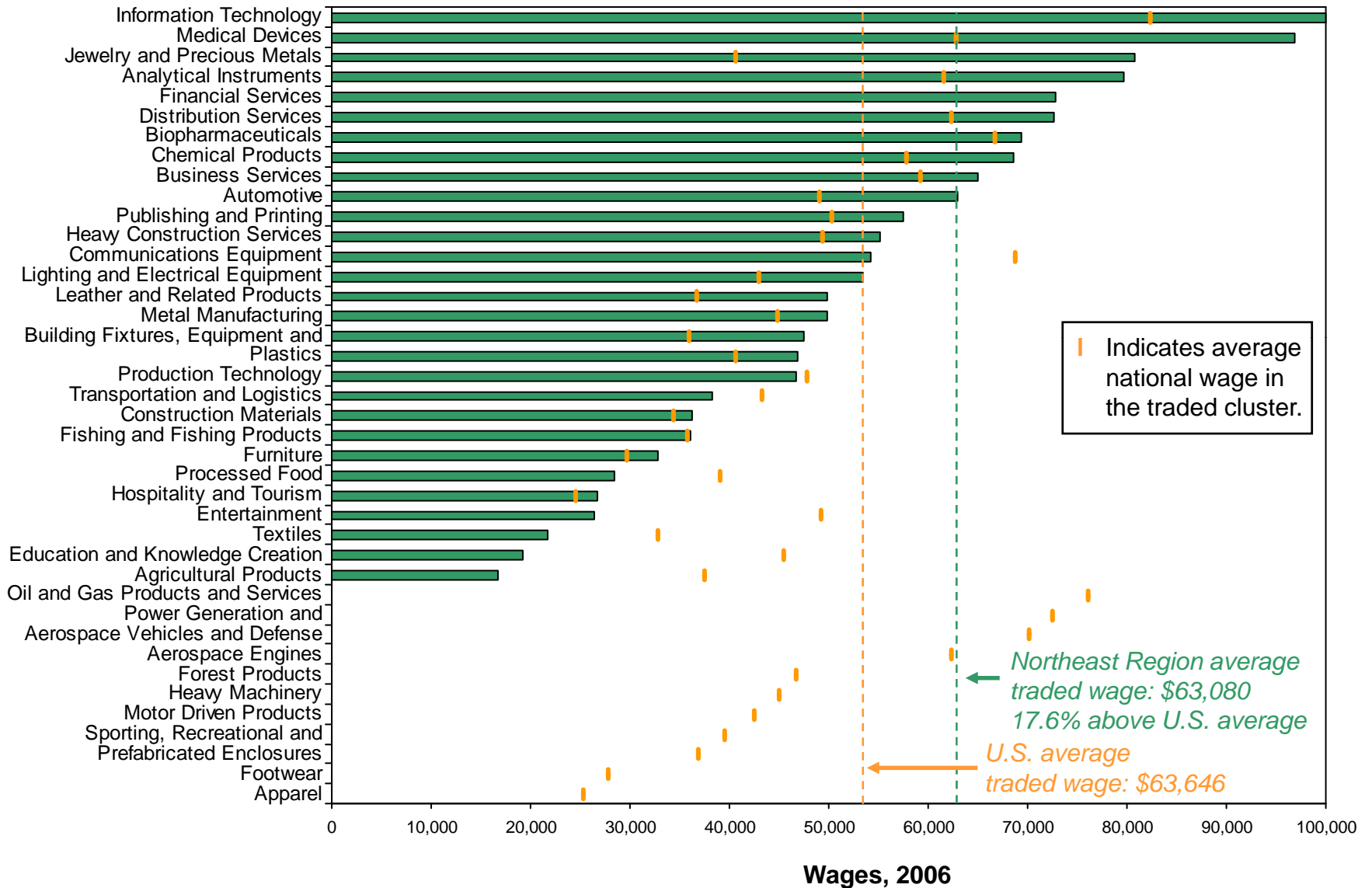
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be -3,477
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Northeast Region Wages

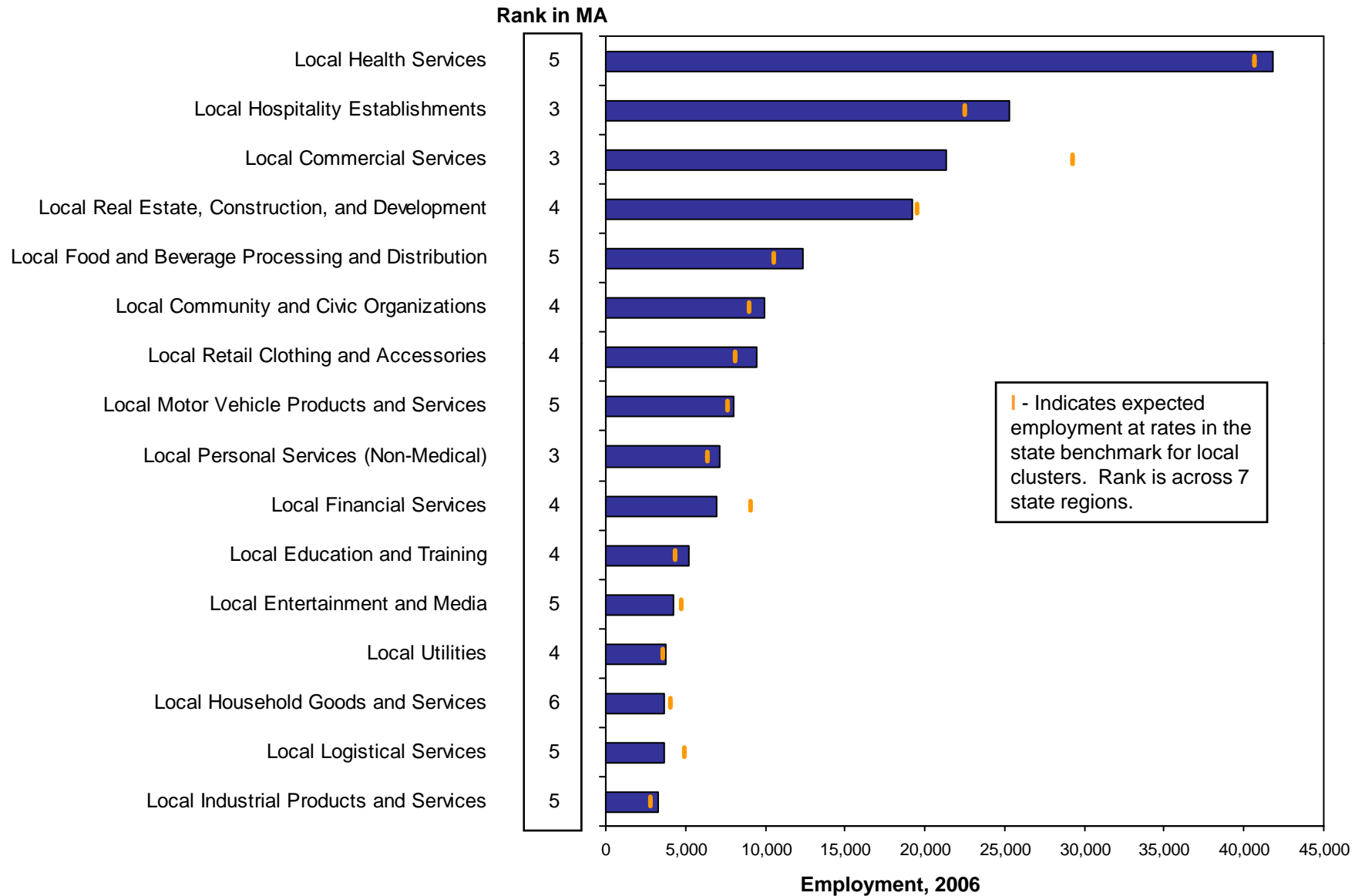
Traded Clusters vs. National Benchmarks



Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

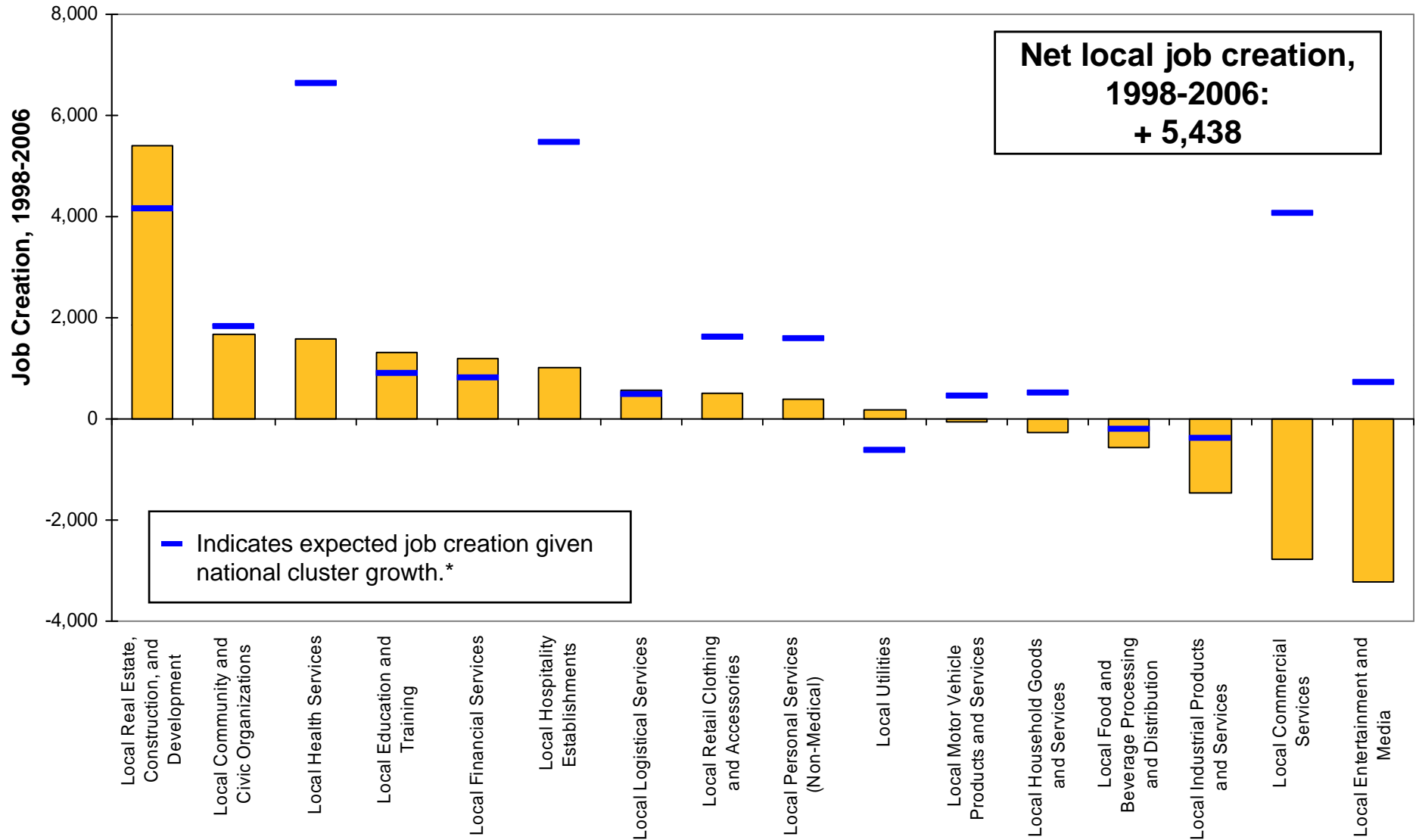
Northeast Region Employment Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Northeast Region Job Creation

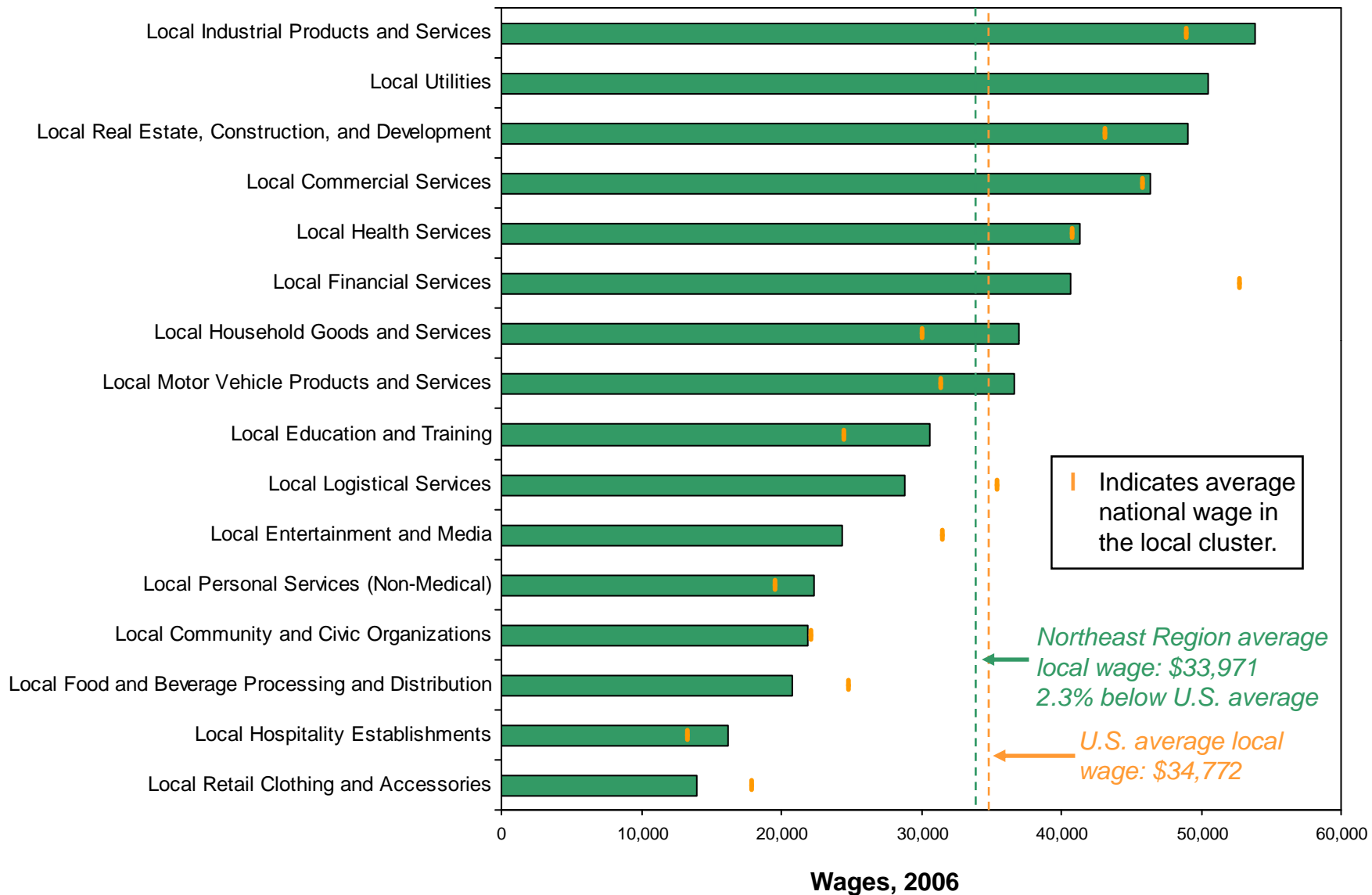
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +27,984.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

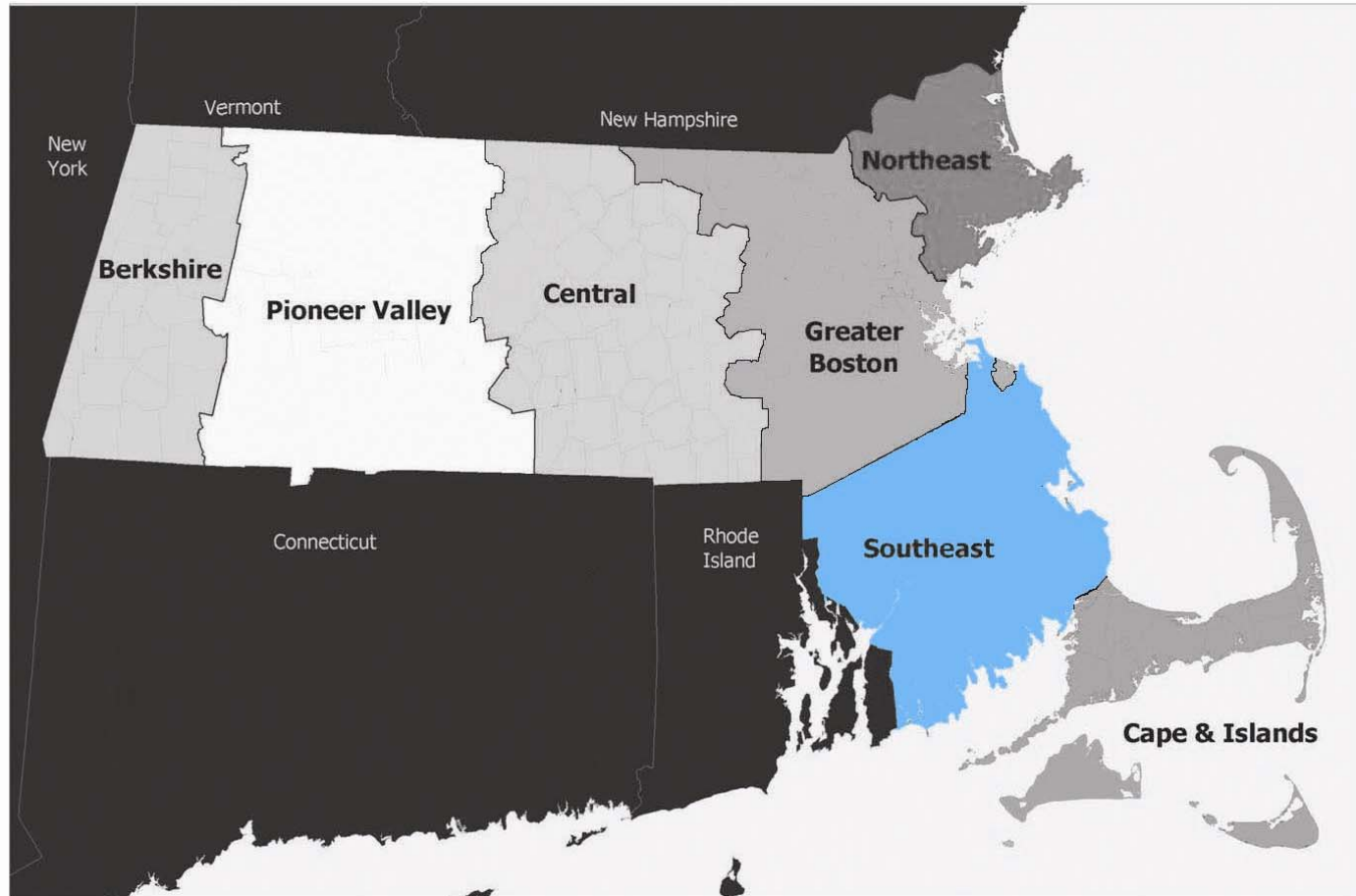
Northeast Region Wages

Local Clusters vs. National Benchmarks

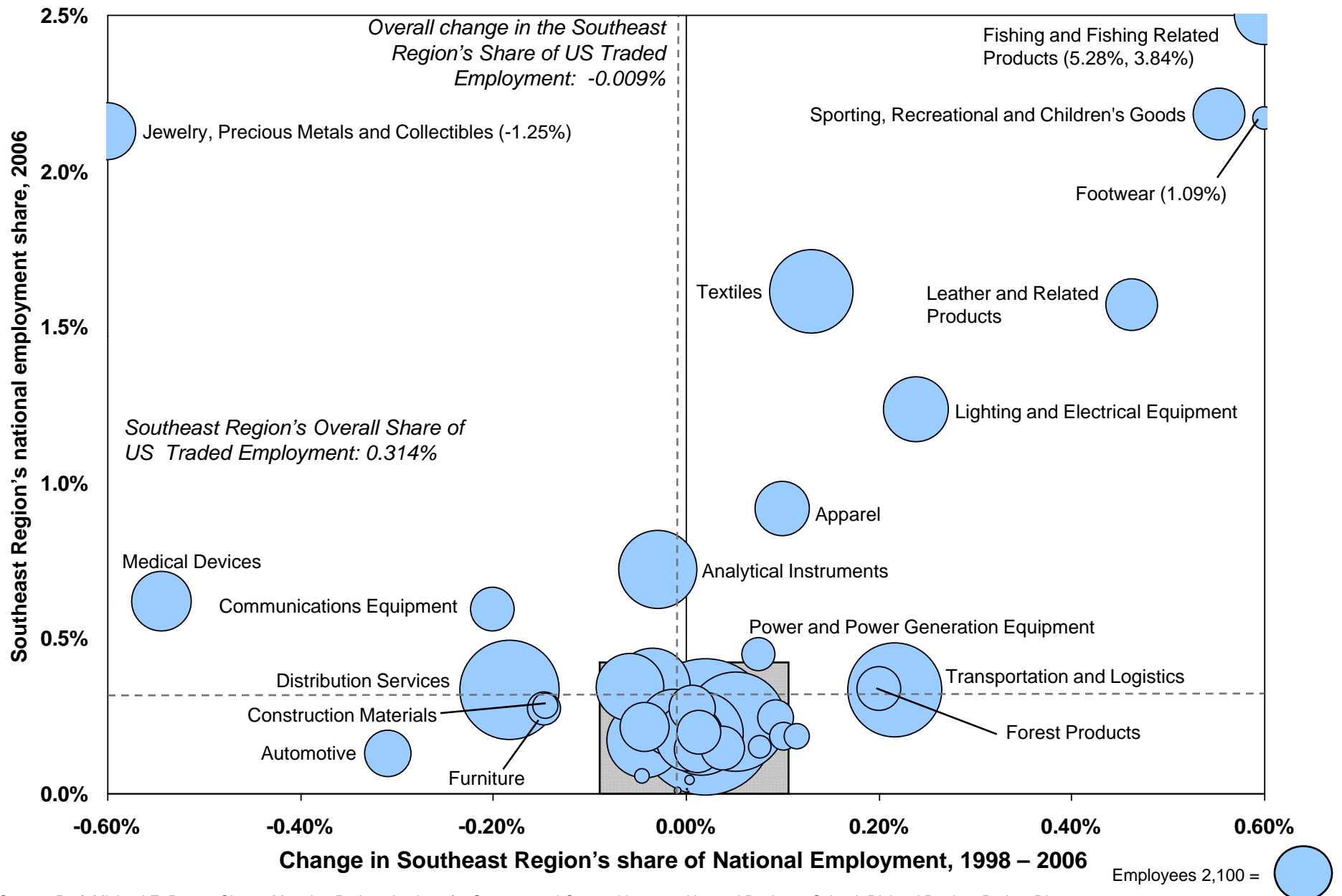


Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

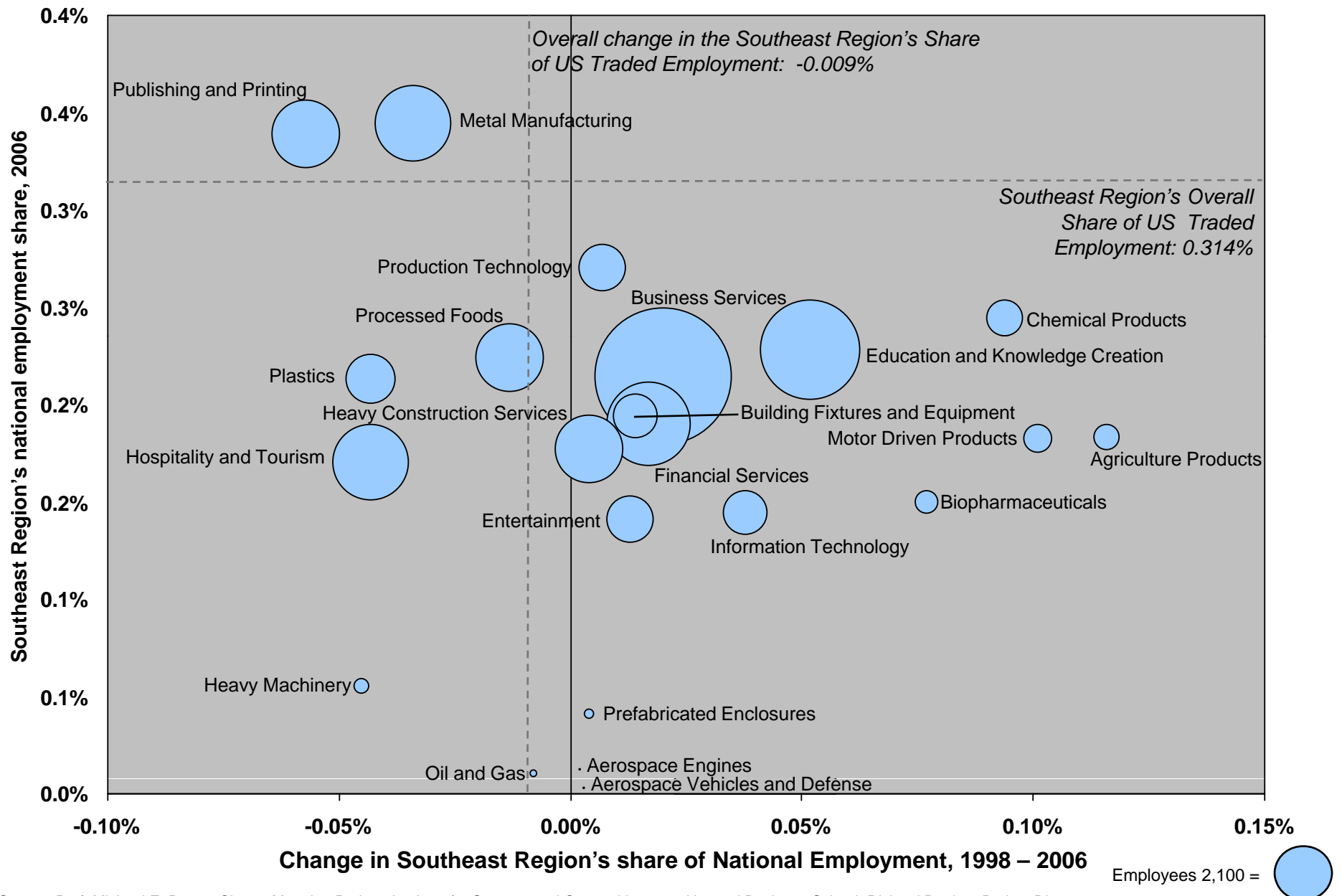
Southeast Region



Southeast Region Specialization by Traded Cluster, 1998-2006

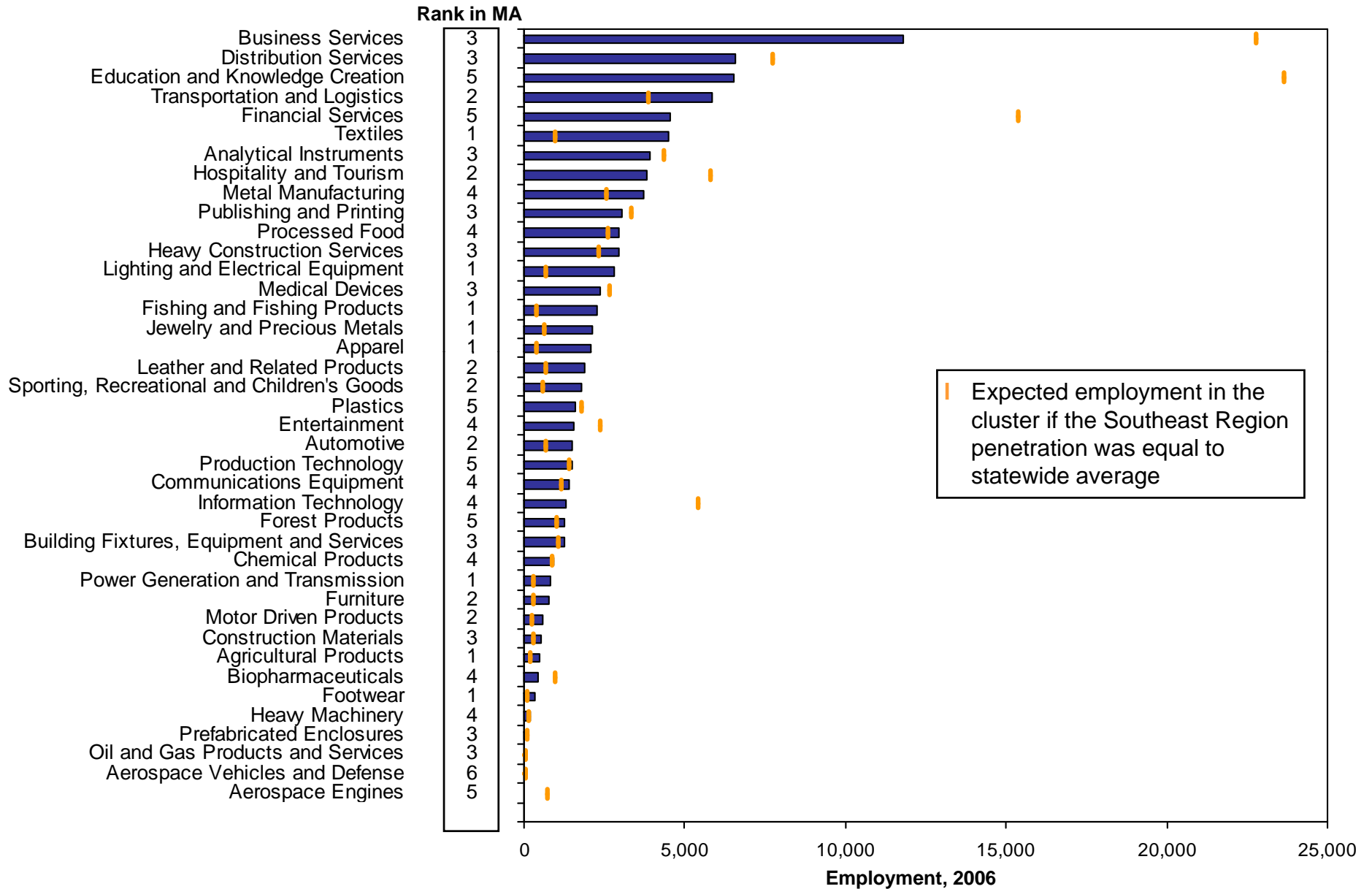


Southeast Region Specialization by Traded Cluster, 1998-2006



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
September 2008 – MA Governor

Southeast Region Employment Traded Clusters

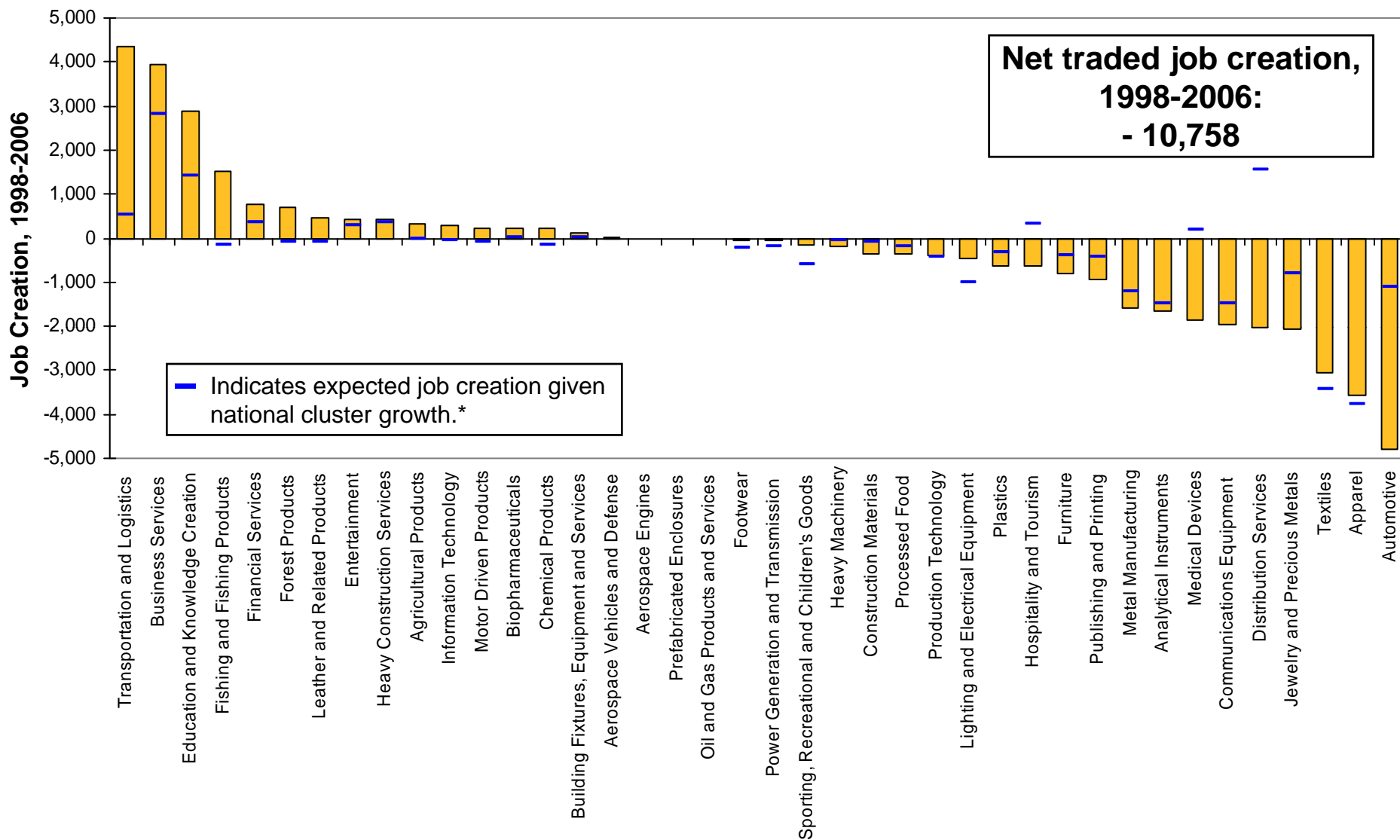


█ - Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Southeast Region Job Creation

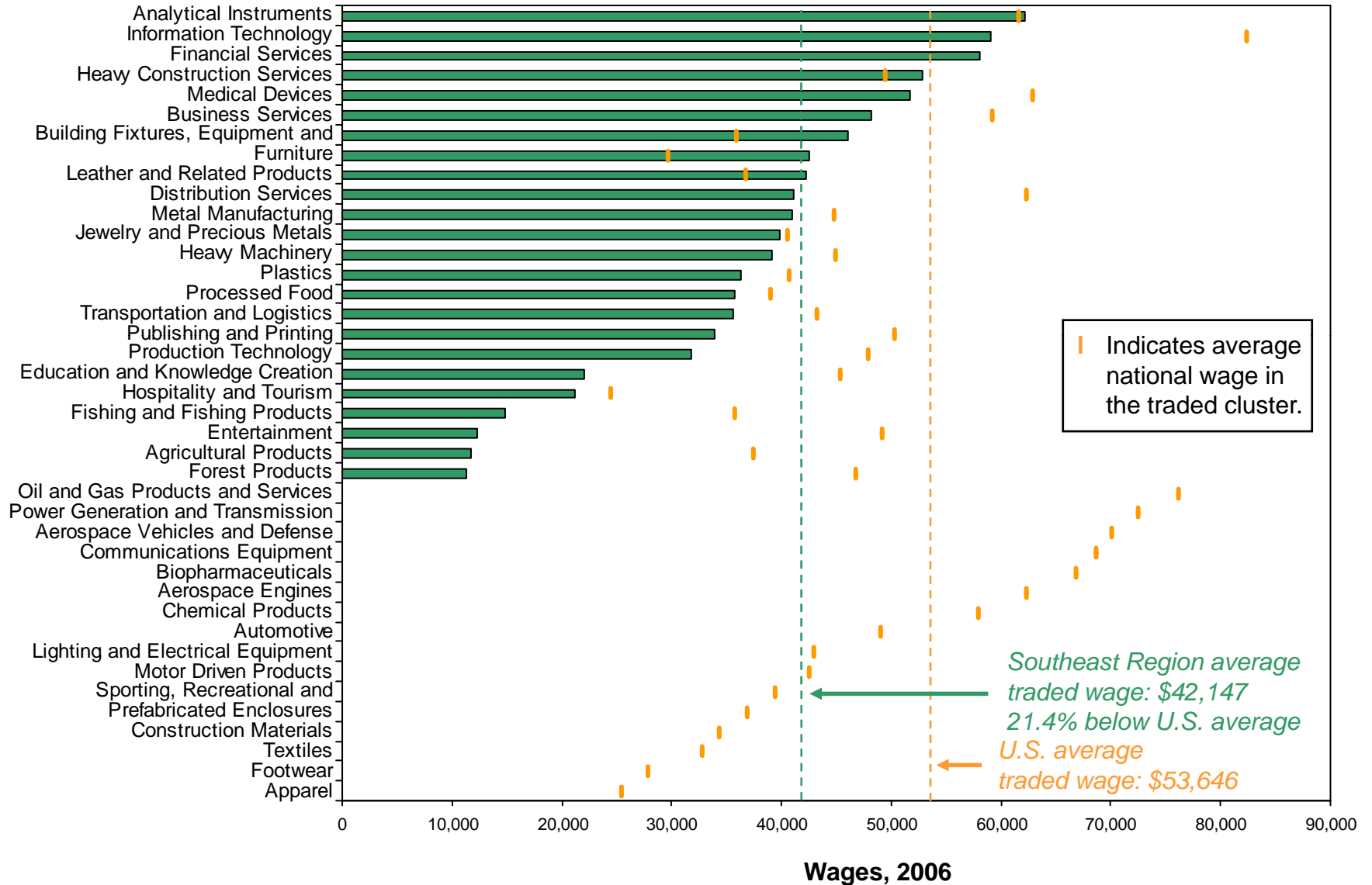
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be -9,892
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Southeast Region Wages

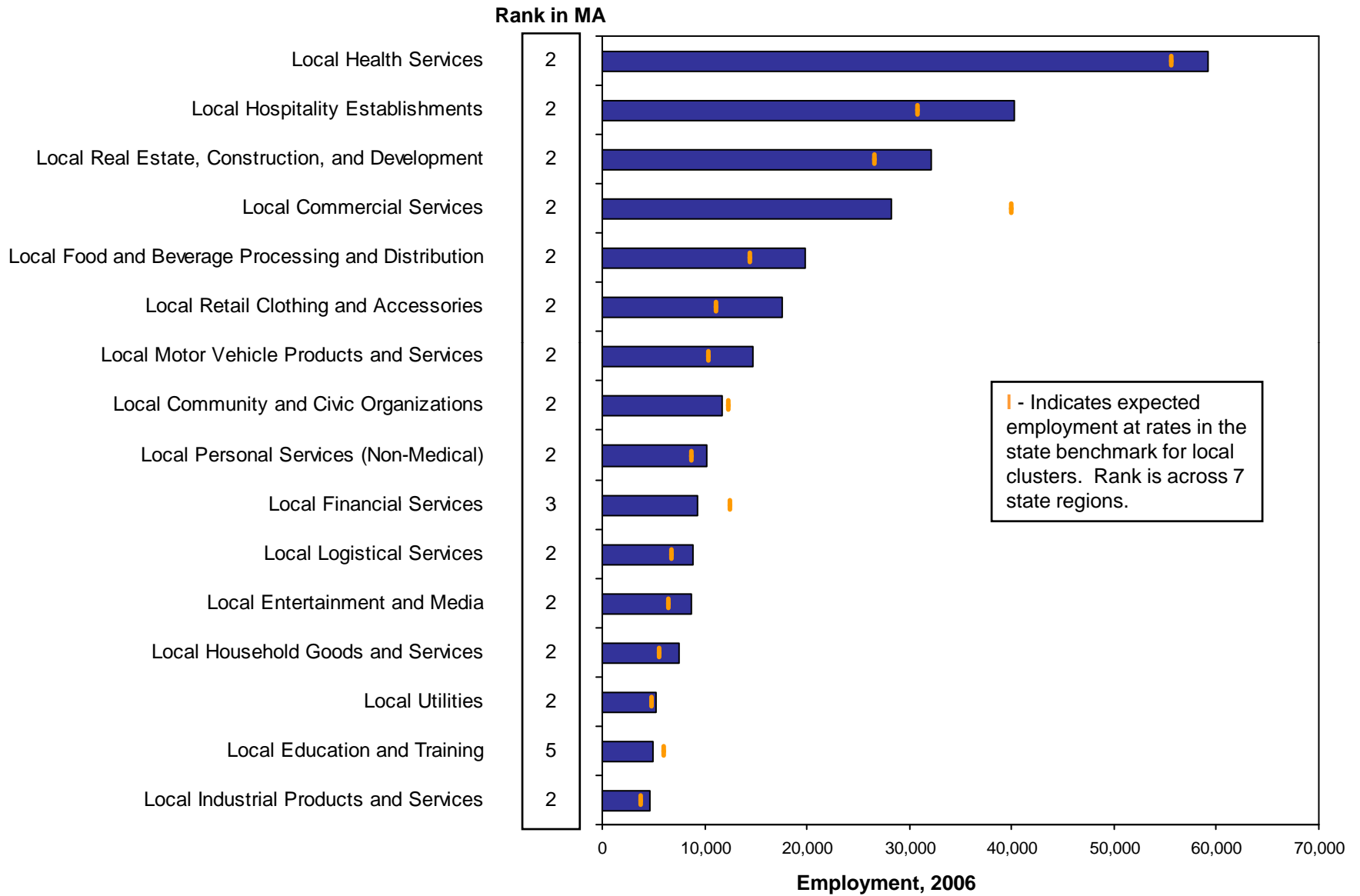
Traded Clusters vs. National Benchmarks



Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

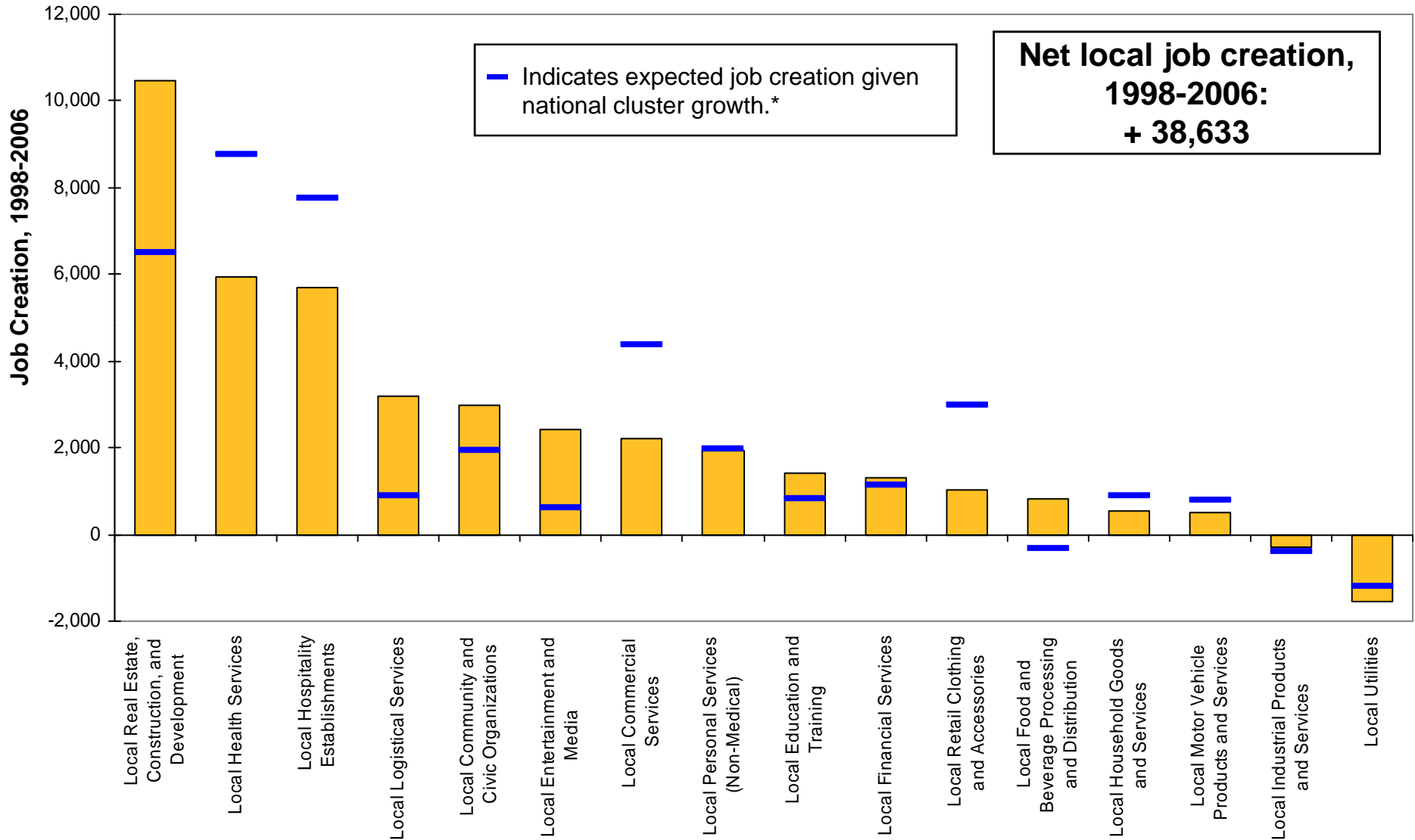
Southeast Region Employment Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Southeast Region Job Creation

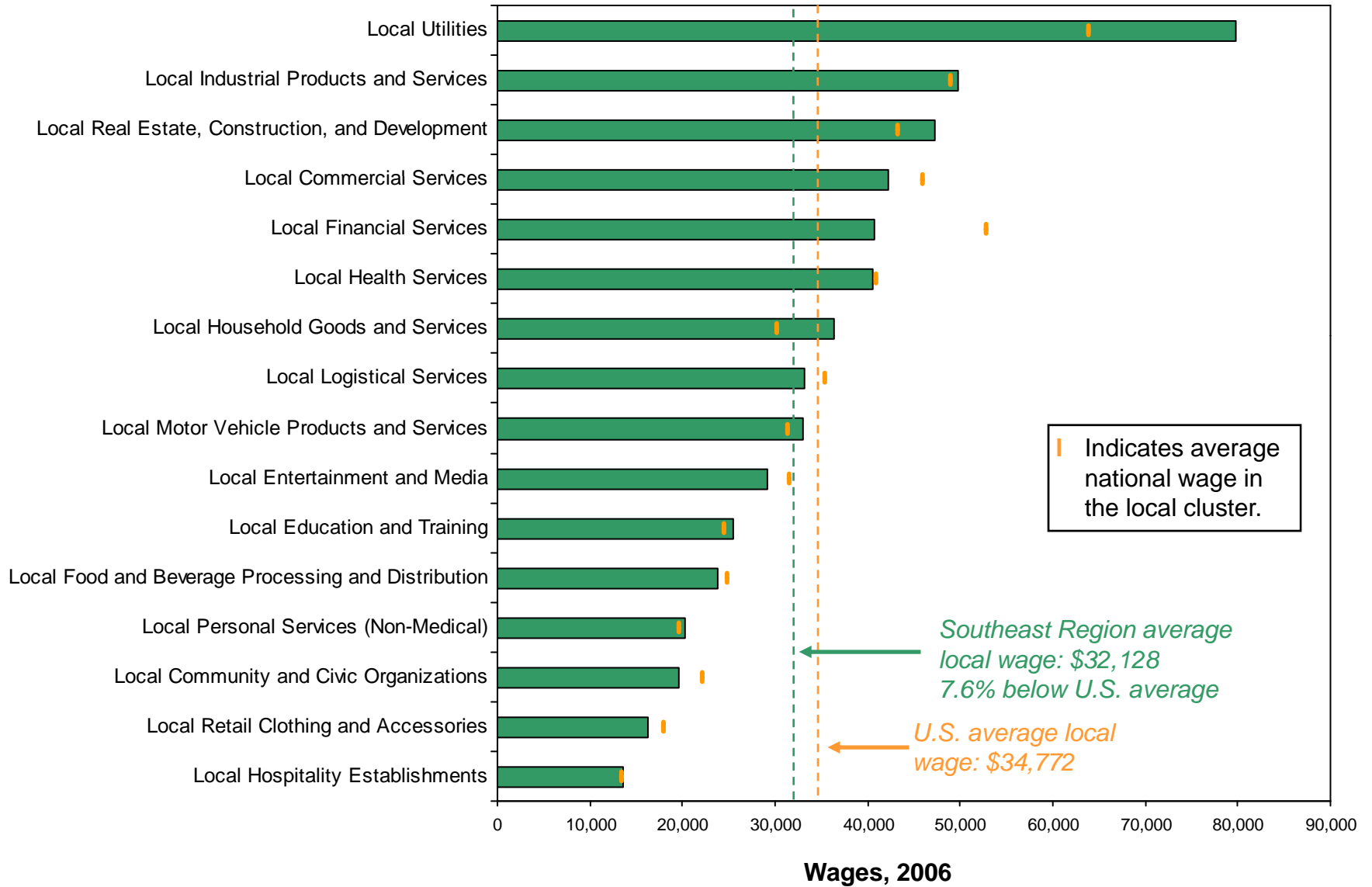
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +37,520.
Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

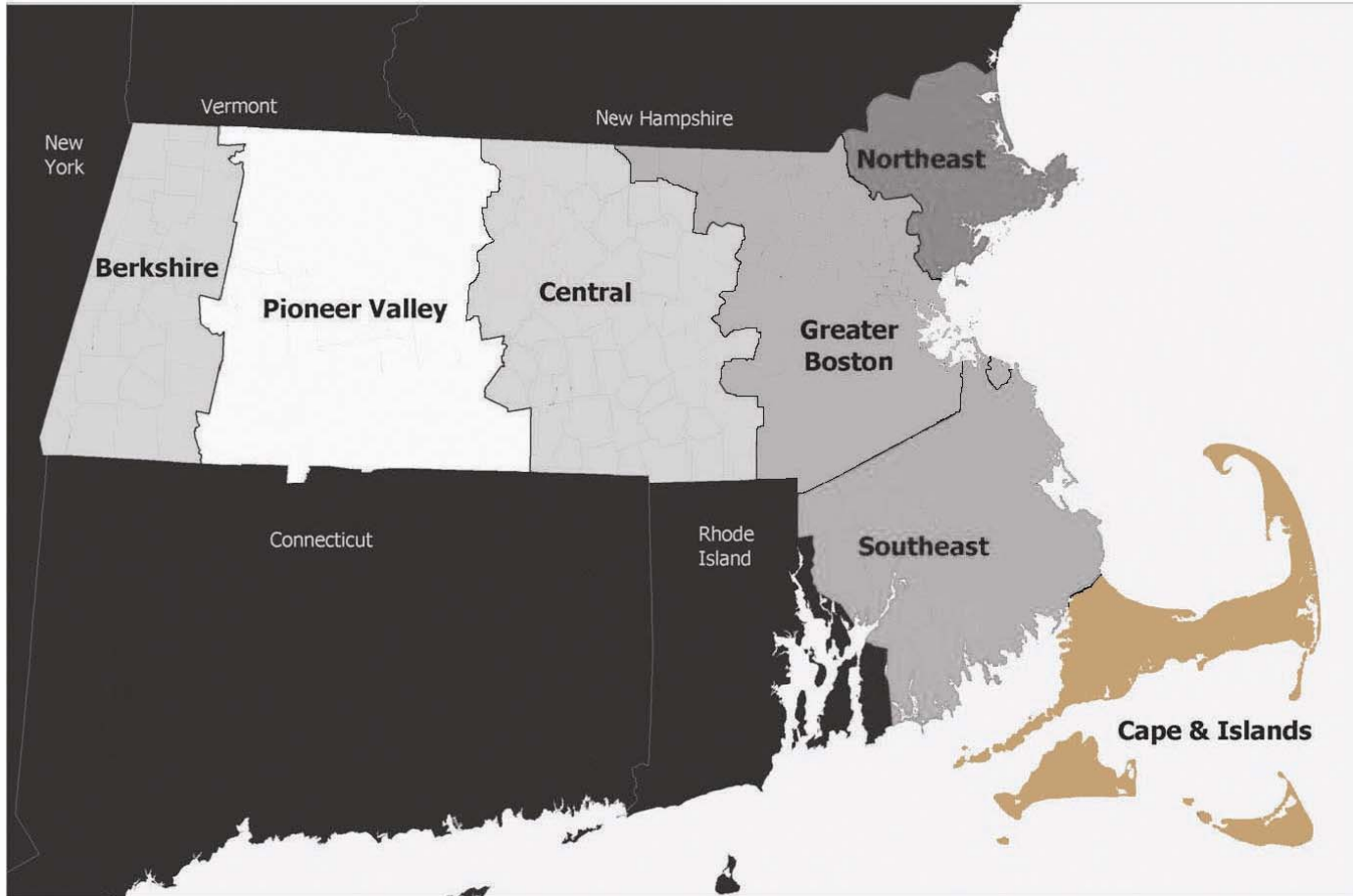
Southeast Region Wages

Local Clusters vs. National Benchmarks

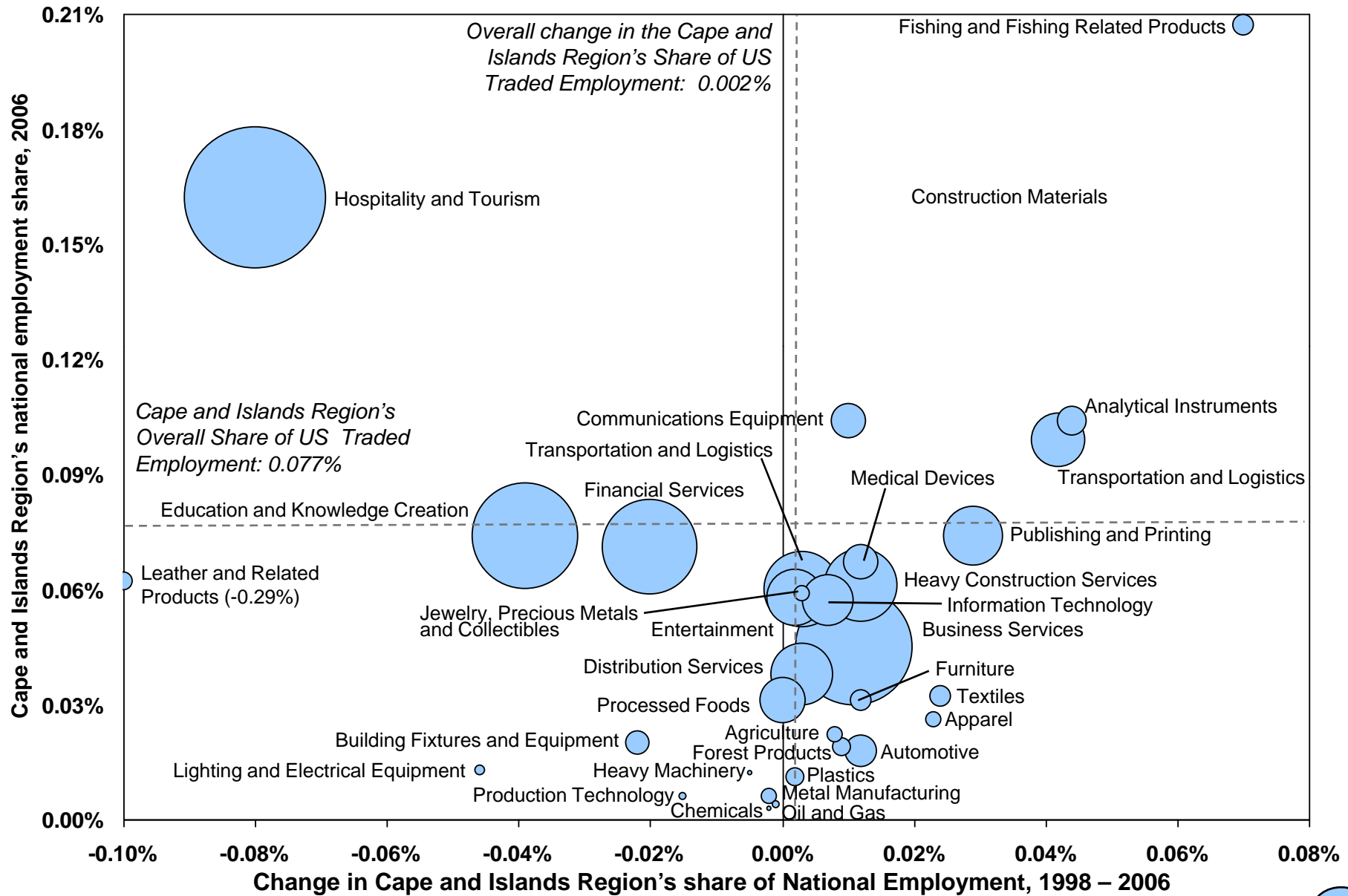


Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Cape and Islands Region



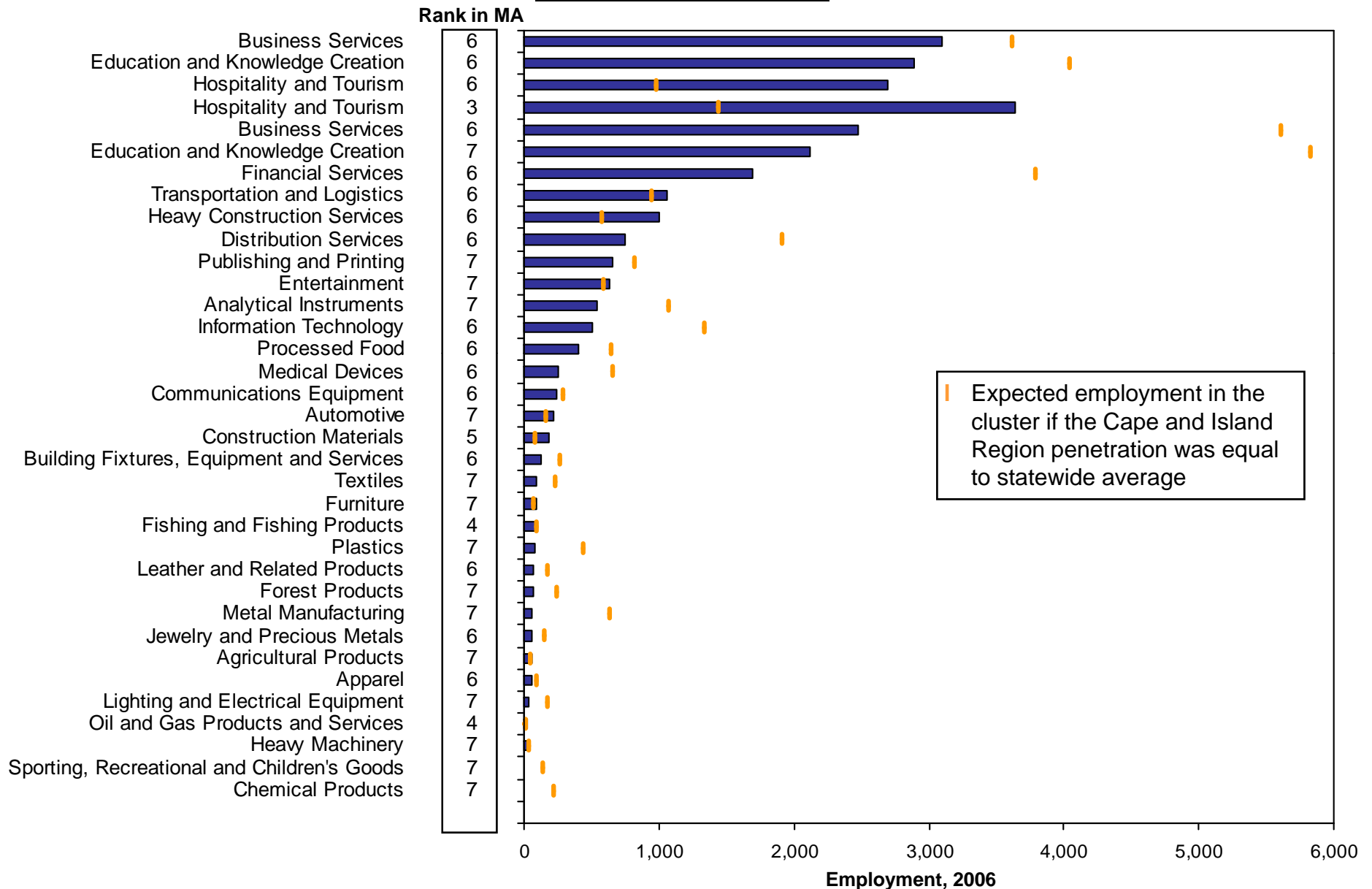
Cape and Islands Region Specialization by Traded Cluster, 1998-2006



Employees 660 =

Cape and Islands Region Employment

Traded Clusters

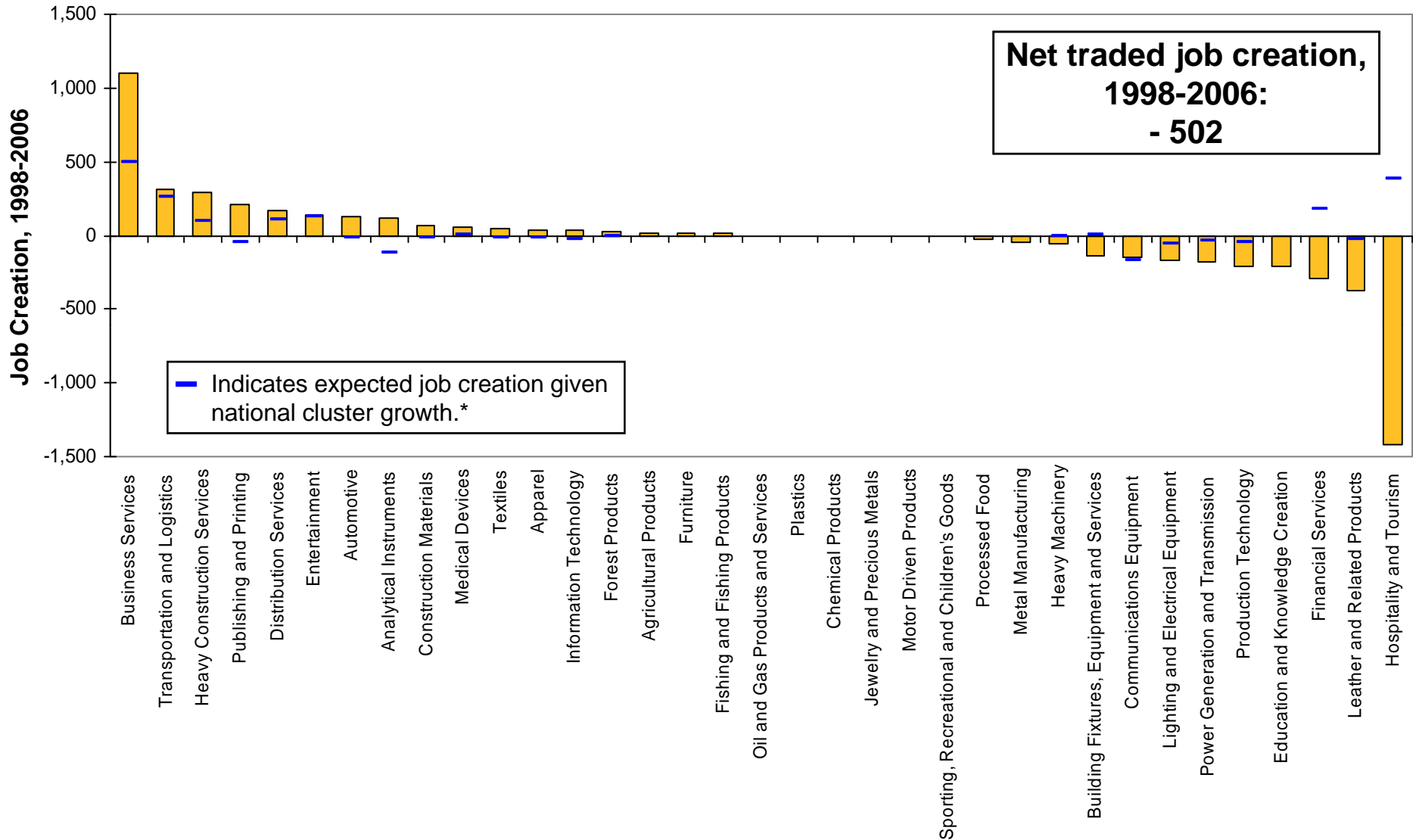


| - Indicates expected employment at rates in the **state benchmark** for traded clusters. Rank is across 7 state regions.

Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Cape and Islands Region Job Creation

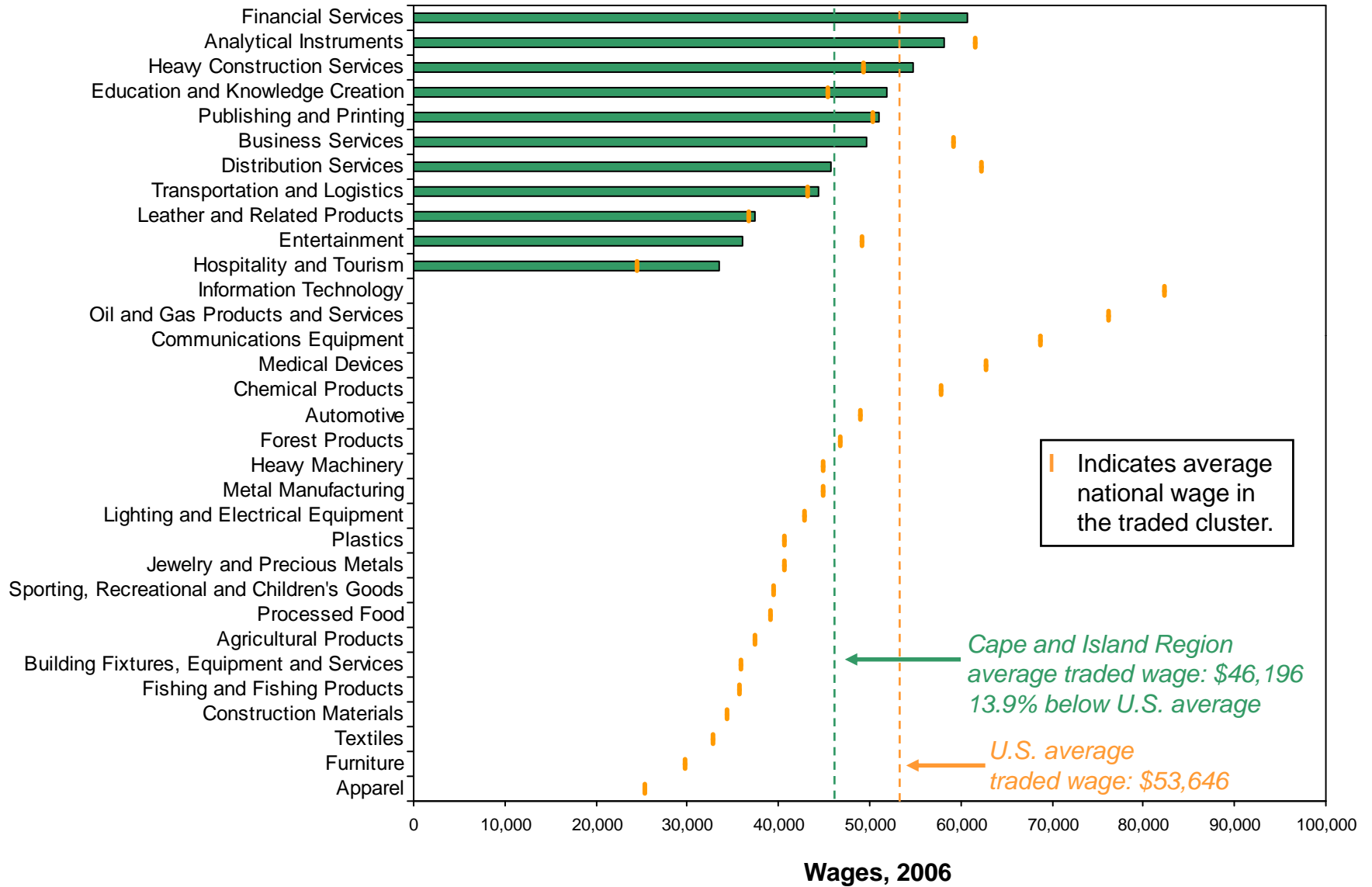
Traded Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +1,853
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Cape and Island Region Wages

Traded Clusters vs. National Benchmarks

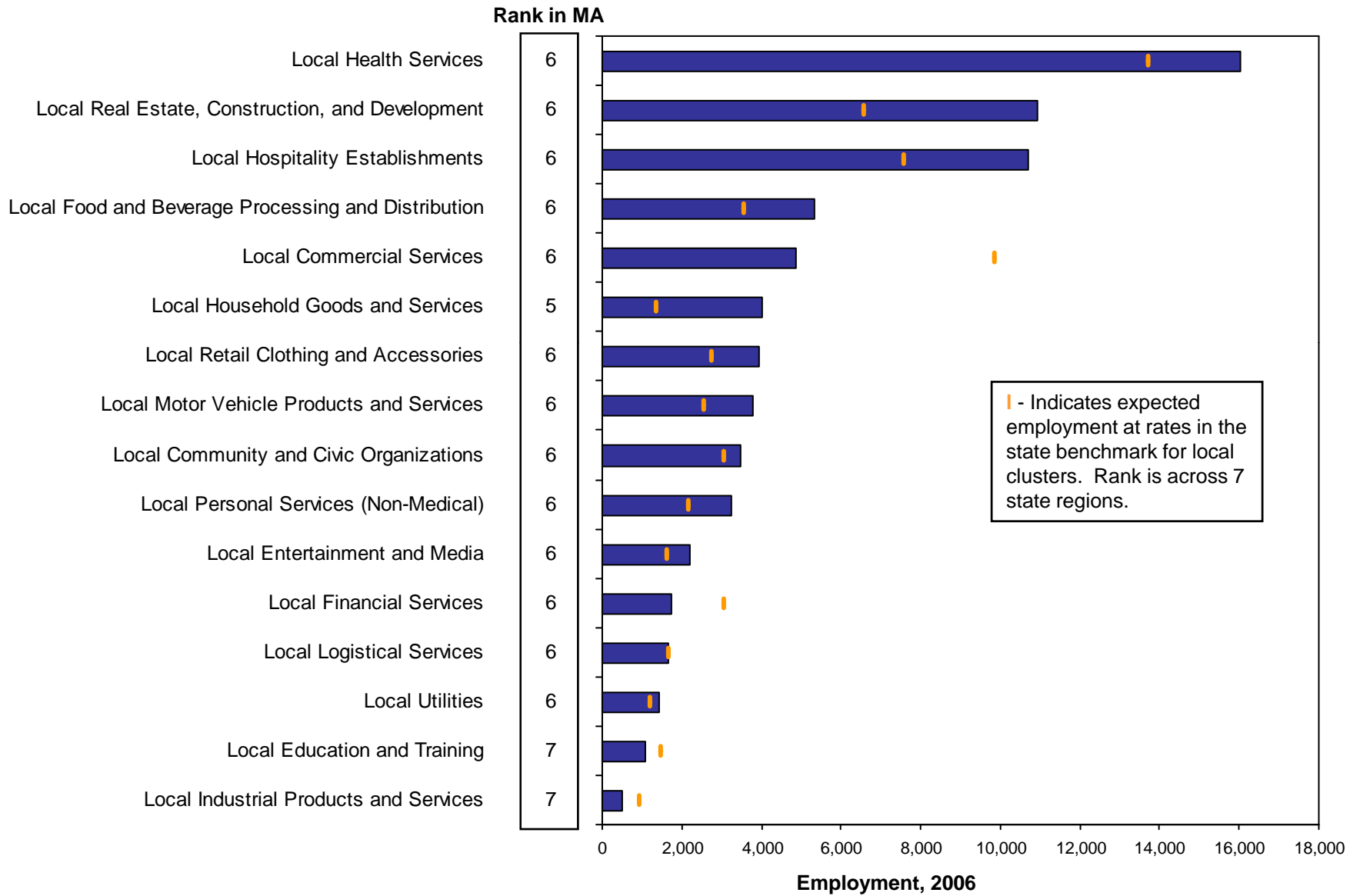


Note: Wages are not available in all clusters due to data suppression to protect confidentiality.

Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Cape and Islands Region Employment

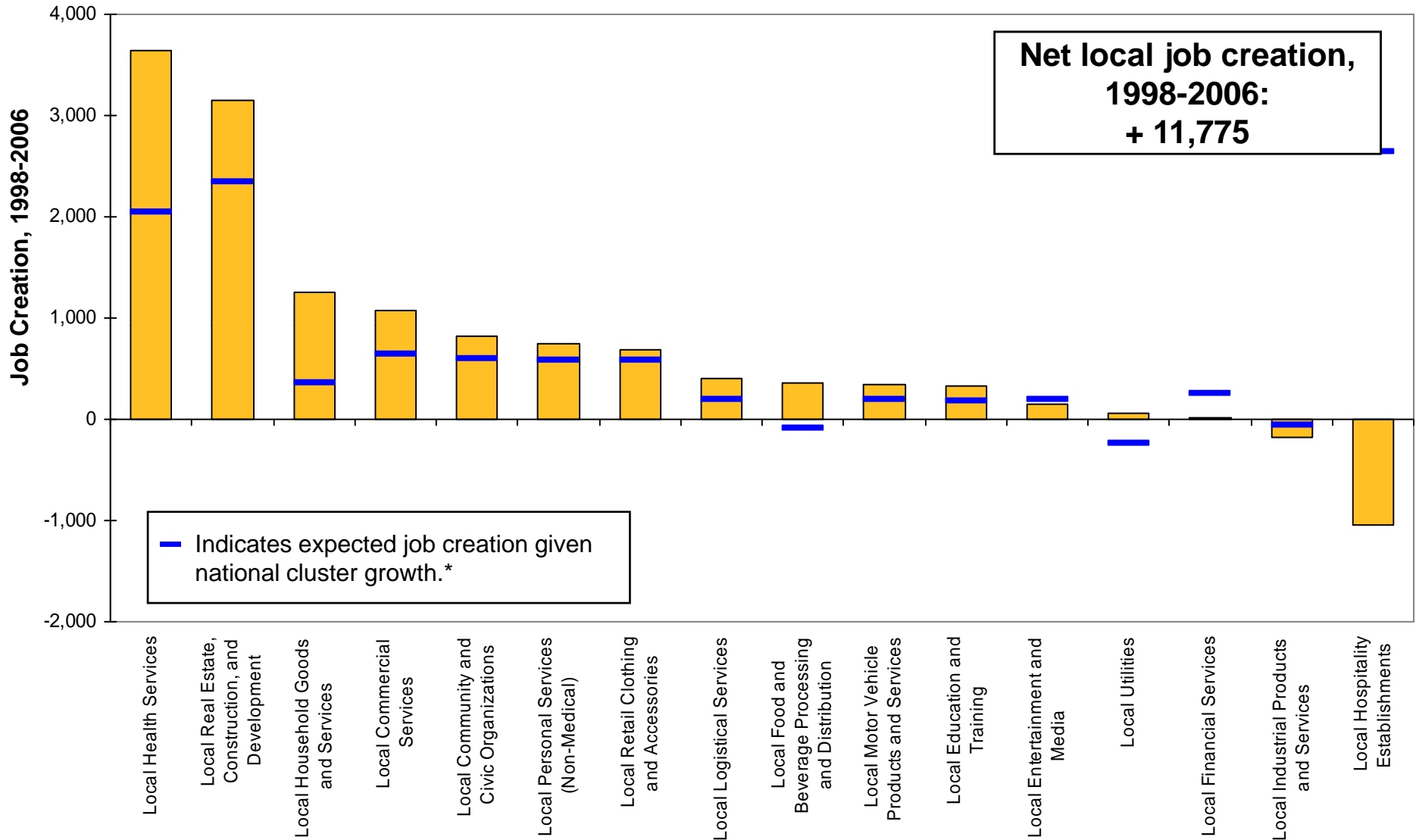
Local Clusters



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

Cape and Islands Region Job Creation

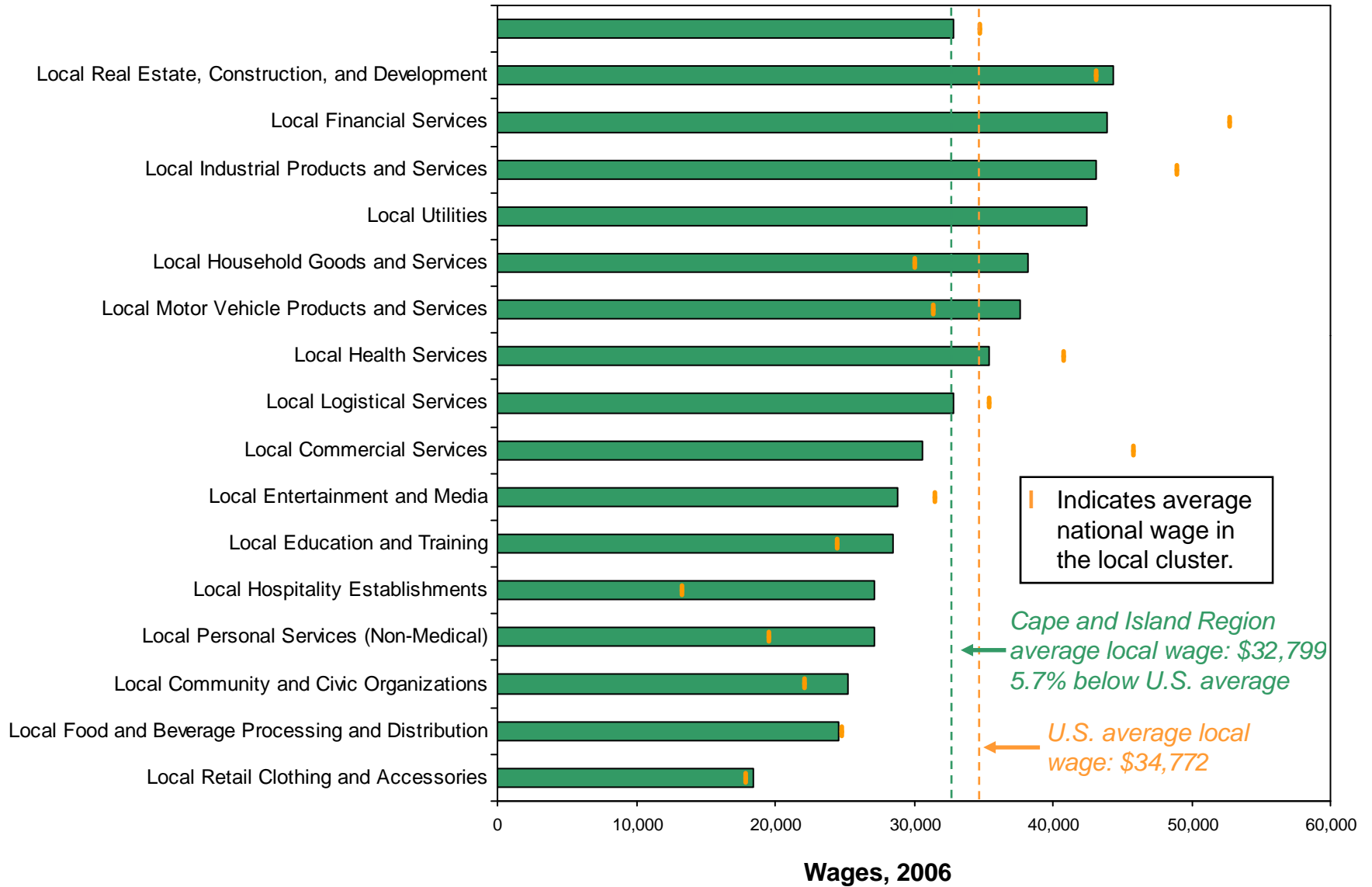
Local Clusters, 1998-2006



* Percent change in national benchmark times starting regional employment. Overall traded job creation in this region, if it matched national benchmarks, would be +10,415.
 Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.

Cape and Island Region Wages

Local Clusters vs. National Benchmarks



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.