

FocusMaine

Sectors: trends, obstacles and opportunities

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Agriculture (Food & Beverage Manufacturing)

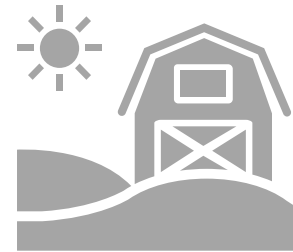


Food & Beverage Manufacturing

Just under 8,000 jobs in 2021

Over \$380 million in wages annually in 2021,
averaging about \$48,000 annual salary

About 1,200 jobs added since 2015



Agriculture & crop cultivation

\$667 million in sales in 2017

96% of farms in Maine are family farms, and 27%
sell directly to consumers

9.3% of farm producers are under 35 years old;
31.6% are over 65

Aquaculture



410 jobs in 2021

Has more than doubled since 2015, adding 230 jobs



Average annual salary about \$51,000

About \$21 million in total wages in 2021



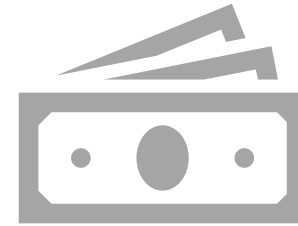
Accounted for almost 10% of total value of agricultural products sold in 2017

BioPharma



About 10,000 jobs in 2021

Has added about 3,400 jobs since 2015
Pharmaceutical and medicine manufacturing,
the largest subsector, accounted for just over
3,500 jobs in 2021

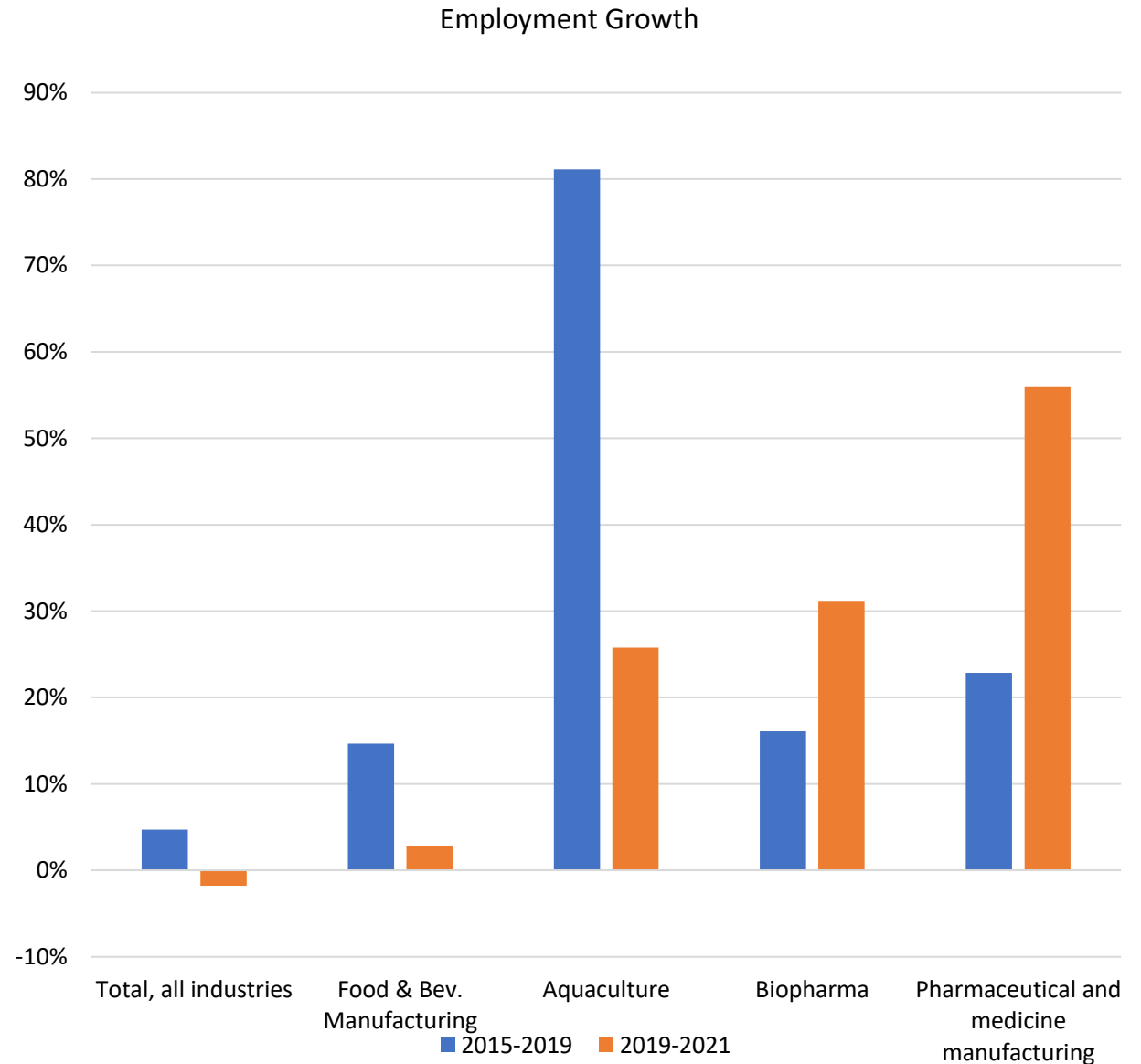


Average annual pay of \$82,632

Contributed a total \$827 million of wages in
Maine in 2021

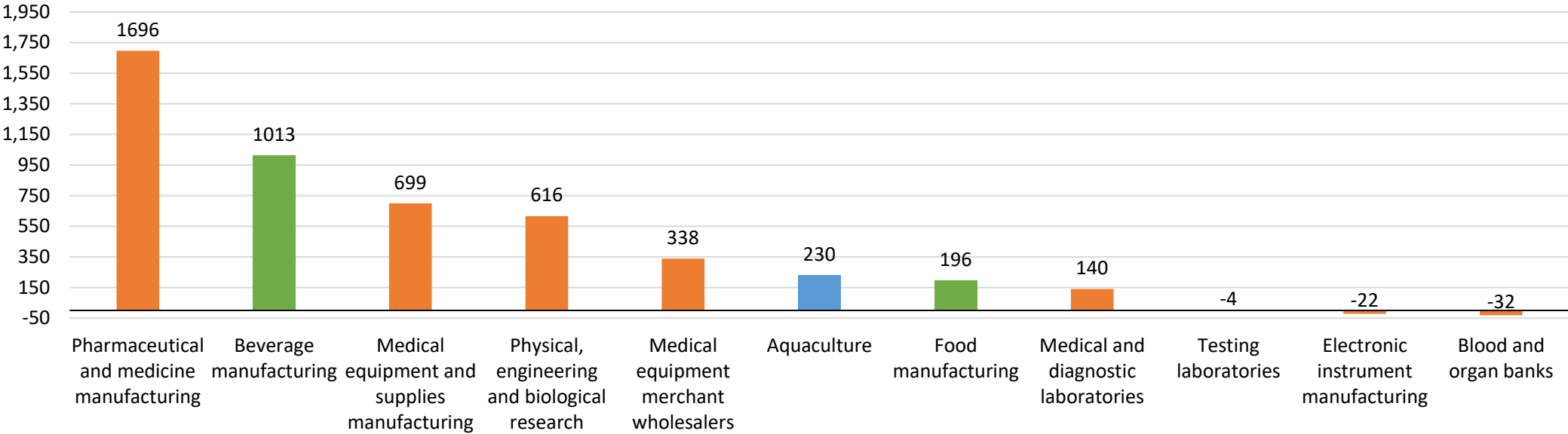
Growth in FocusMaine sectors outpaces Maine's overall economy

- BioPharma has grown the fastest, at over 30% in the last two years
 - Pharmaceutical and medicine manufacturing is a major contributor



Pharmaceutical & medical manufacturing, beverage manufacturing among top subsectors for job growth

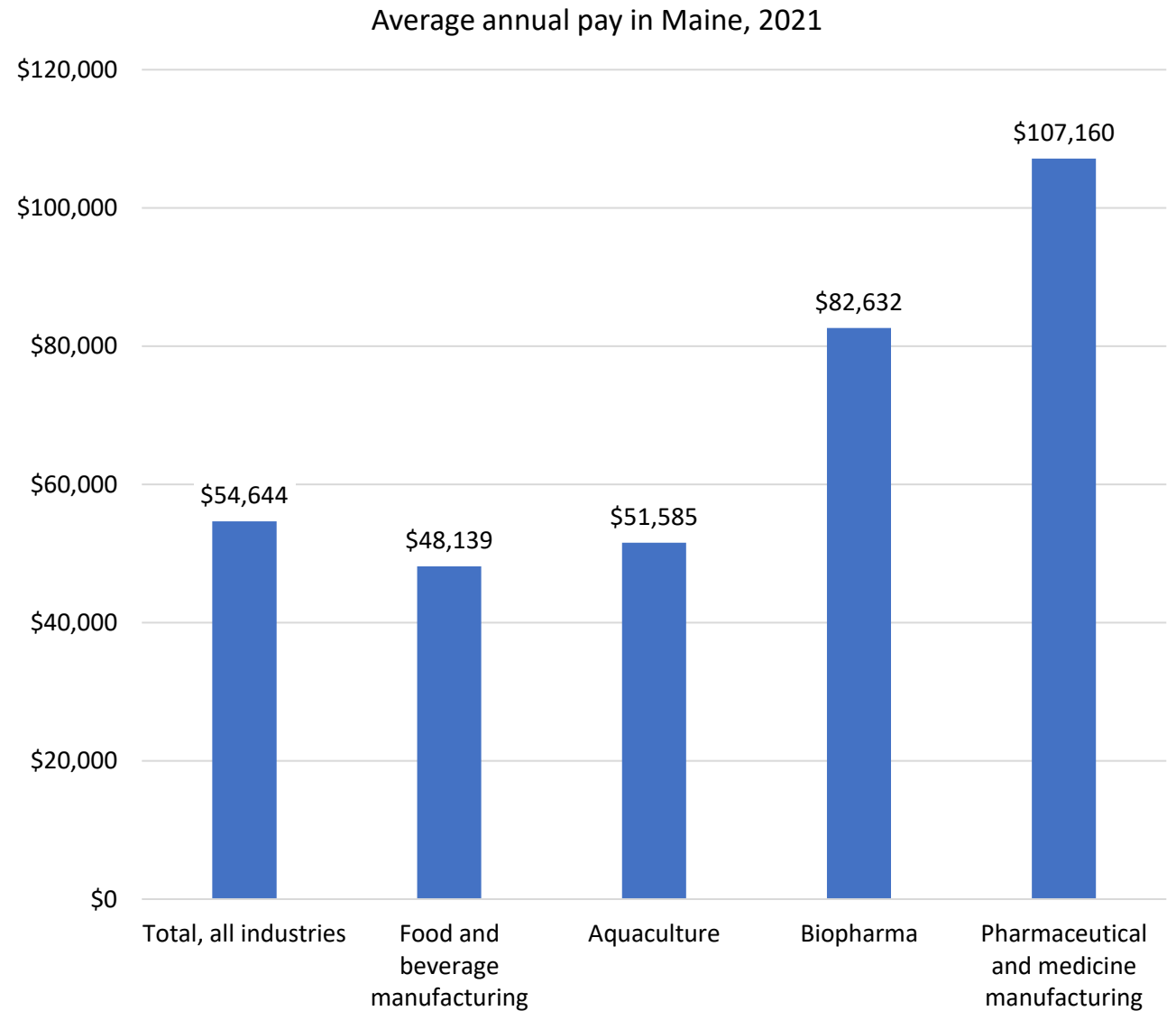
Job growth in FocusMaine Subsectors, 2015-2021



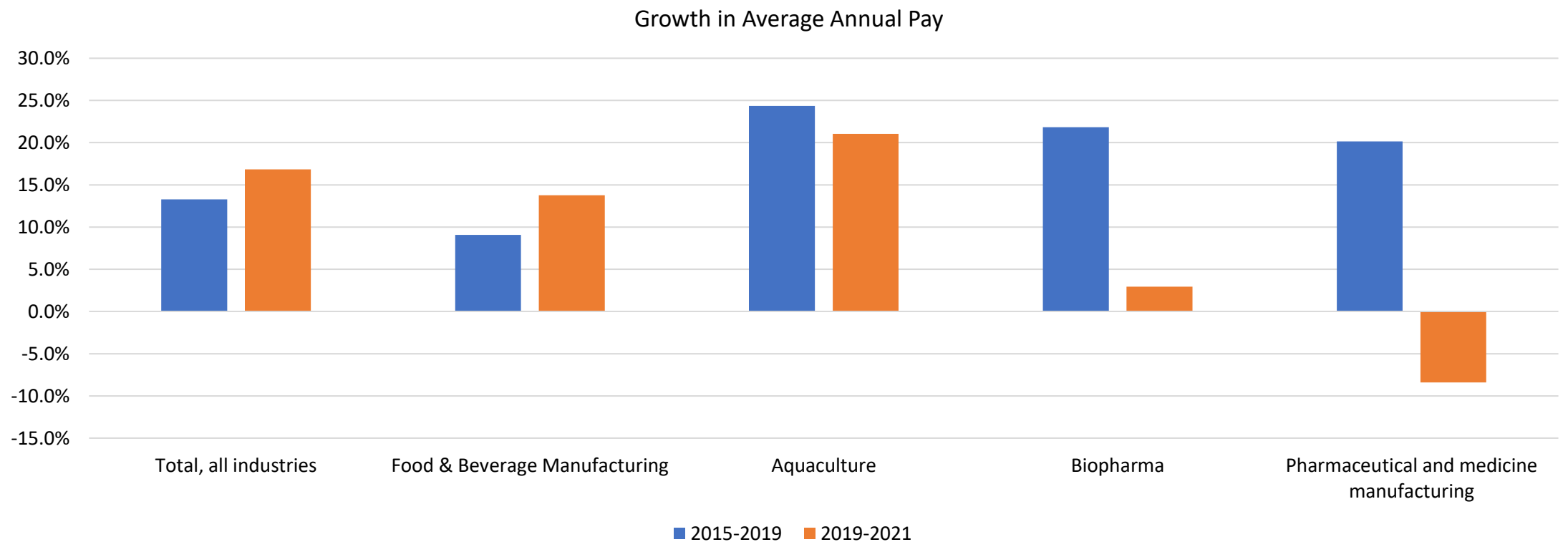
Source: U.S. Bureau of Labor Statistics, QCEW

■ Food & Bev. Manufacturing
 ■ Aquaculture
 ■ BioPharma

Biopharma,
pharmaceutical
and medicine
manufacturing
outpace
average pay
statewide



Pay growth in Biopharma and Aquaculture outpace overall growth pre-pandemic; food and beverage mfg. lags behind



Top occupations in FocusMaine sectors

BioPharma

- Miscellaneous Assemblers & fabricators
- Biochemists and Biophysicists
- Inspectors, testers, sorters, samplers
- Natural Science Managers

Food & Beverage Manufacturing

- Packaging and filling machine operators and tenders
- Food cooking machine operators and tenders
- Meat, poultry, and fish cutters and trimmer

*Data for aquaculture not available

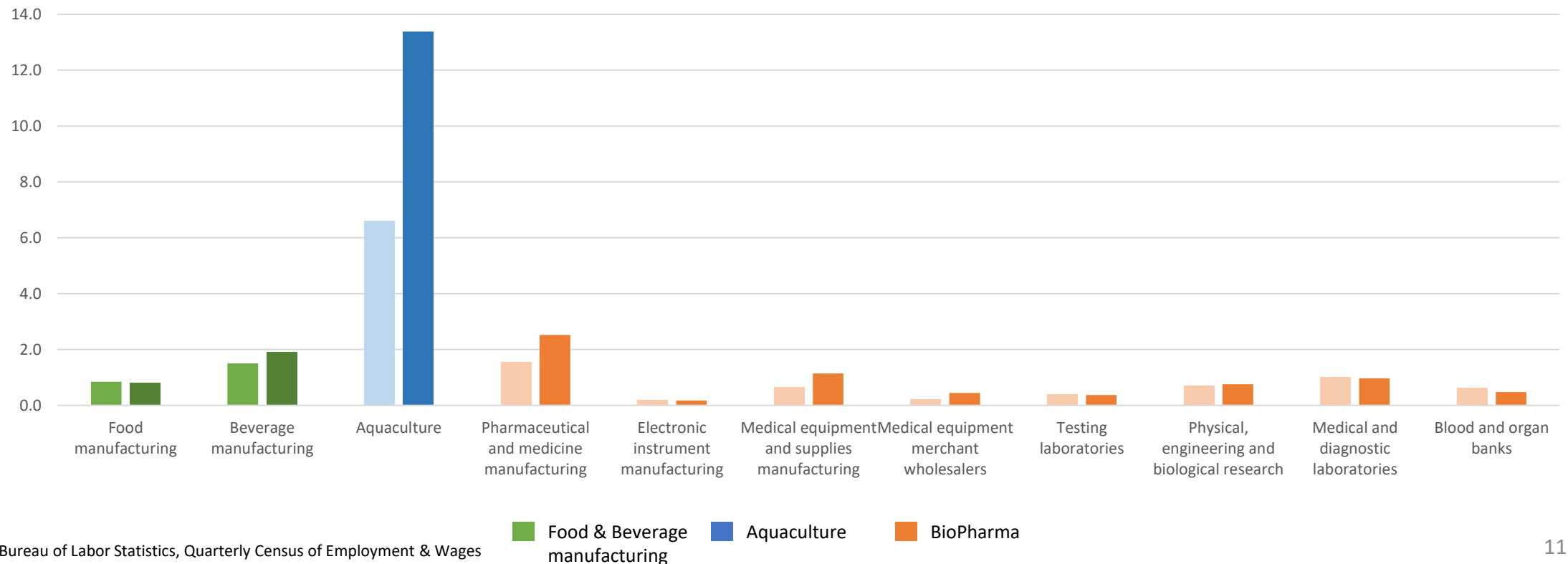
Location quotients

- Simple metric used to measure a region's industrial specialization
- Compares the concentration of an industry in Maine to the concentration of an industry in the U.S. economy
- Values over 1.0 indicate that the region has a high concentration or specialization in a sector
 - Values over 1.0 mean that Maine has a higher concentration of employment in industry X than the nation

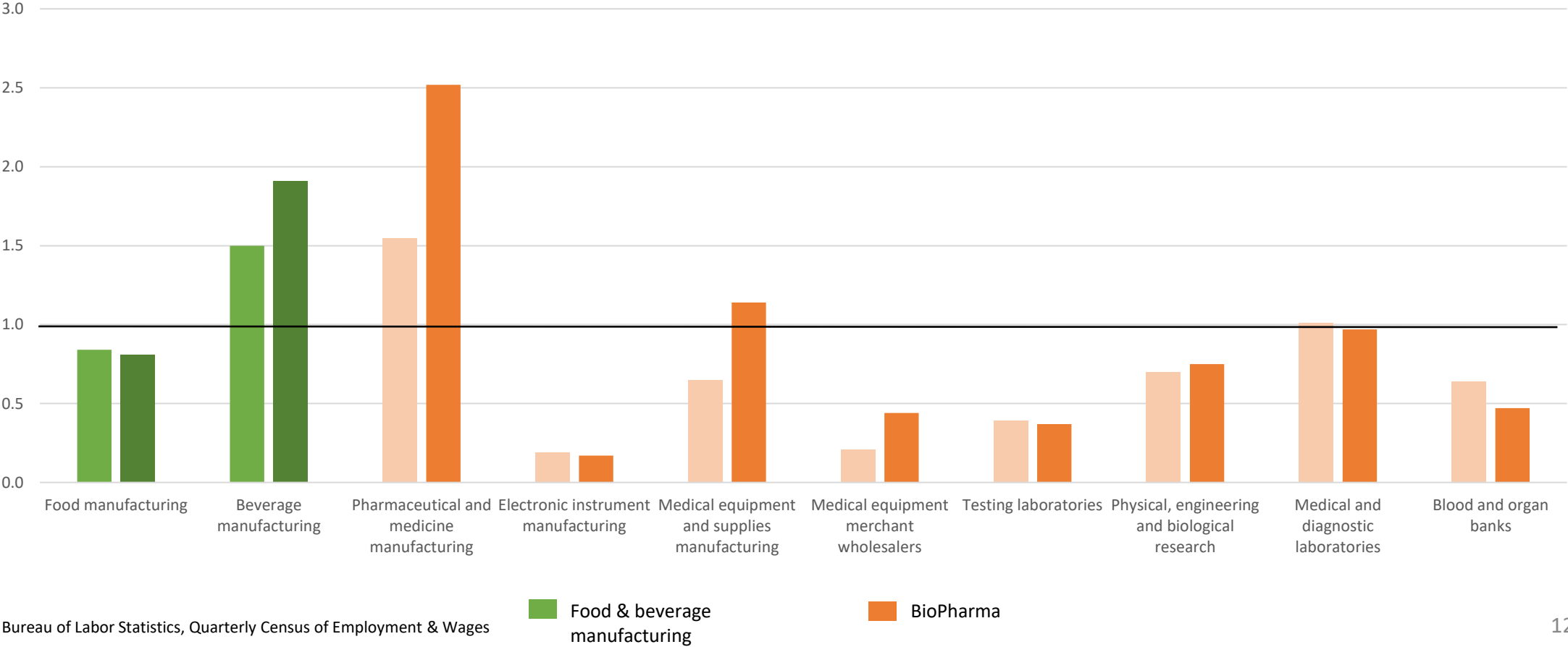
$$LQ = \frac{\text{industry employment in the region} / \text{total regional employment}}{\text{industry employment in the U.S.} / \text{total employment in the U.S.}}$$

LQs in Focus Maine Subsectors

Concentration by subsectors, 2015 compared to 2021



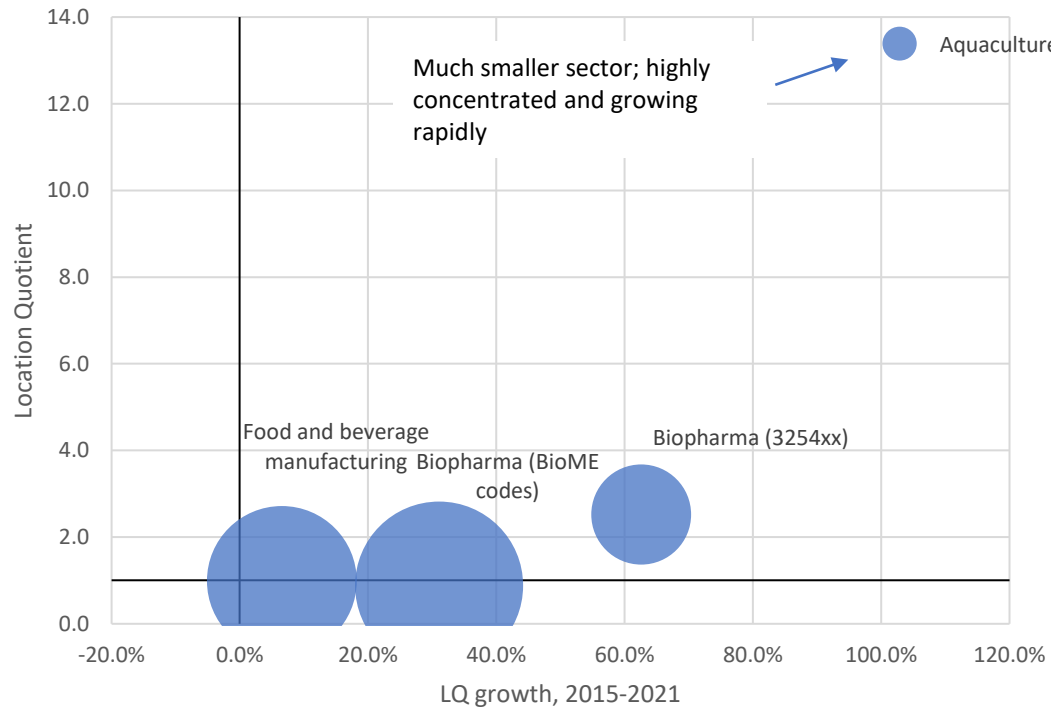
Concentration by subsectors (excluding Aquaculture for detail), 2015 compared to 2021



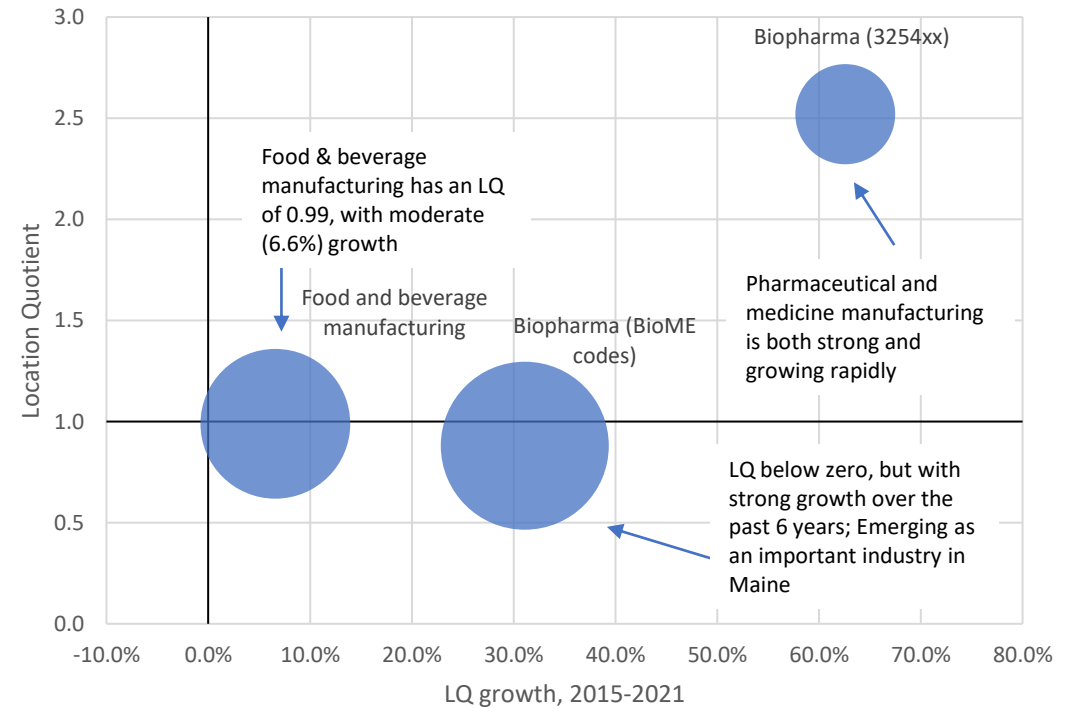
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages


All FocusMaine sectors have grown, though momentum varies

Employment Concentration



Employment Concentration (excl. aquaculture for detail)

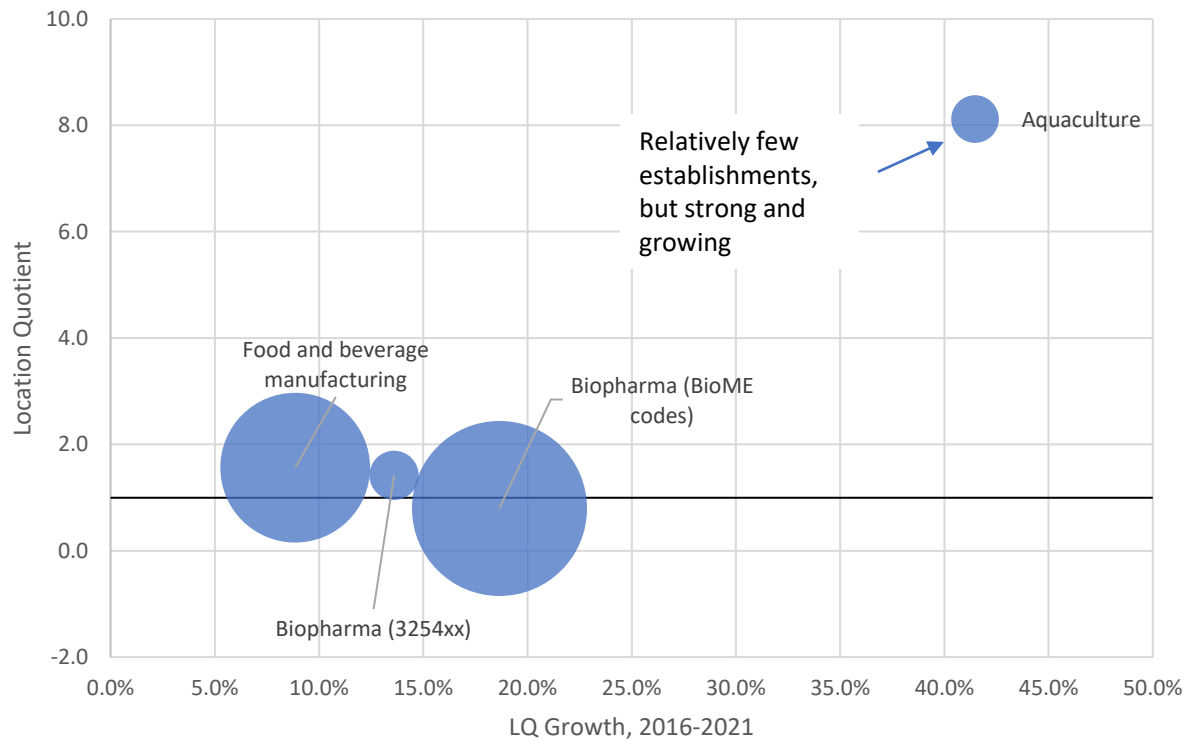


 Size of bubbles = employment

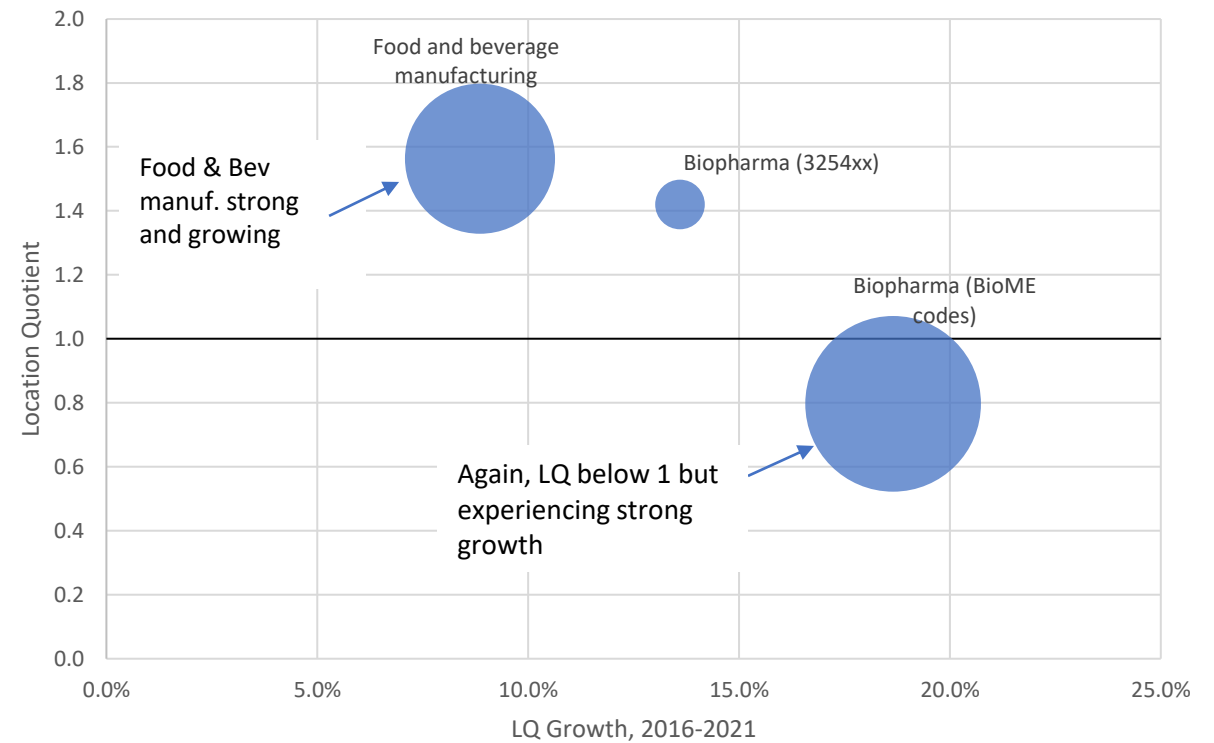
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages


Establishment concentration also shows a picture of growth

Establishment concentration



Establishment concentration (excl. aquaculture for detail)



 Size of bubbles = number of establishments

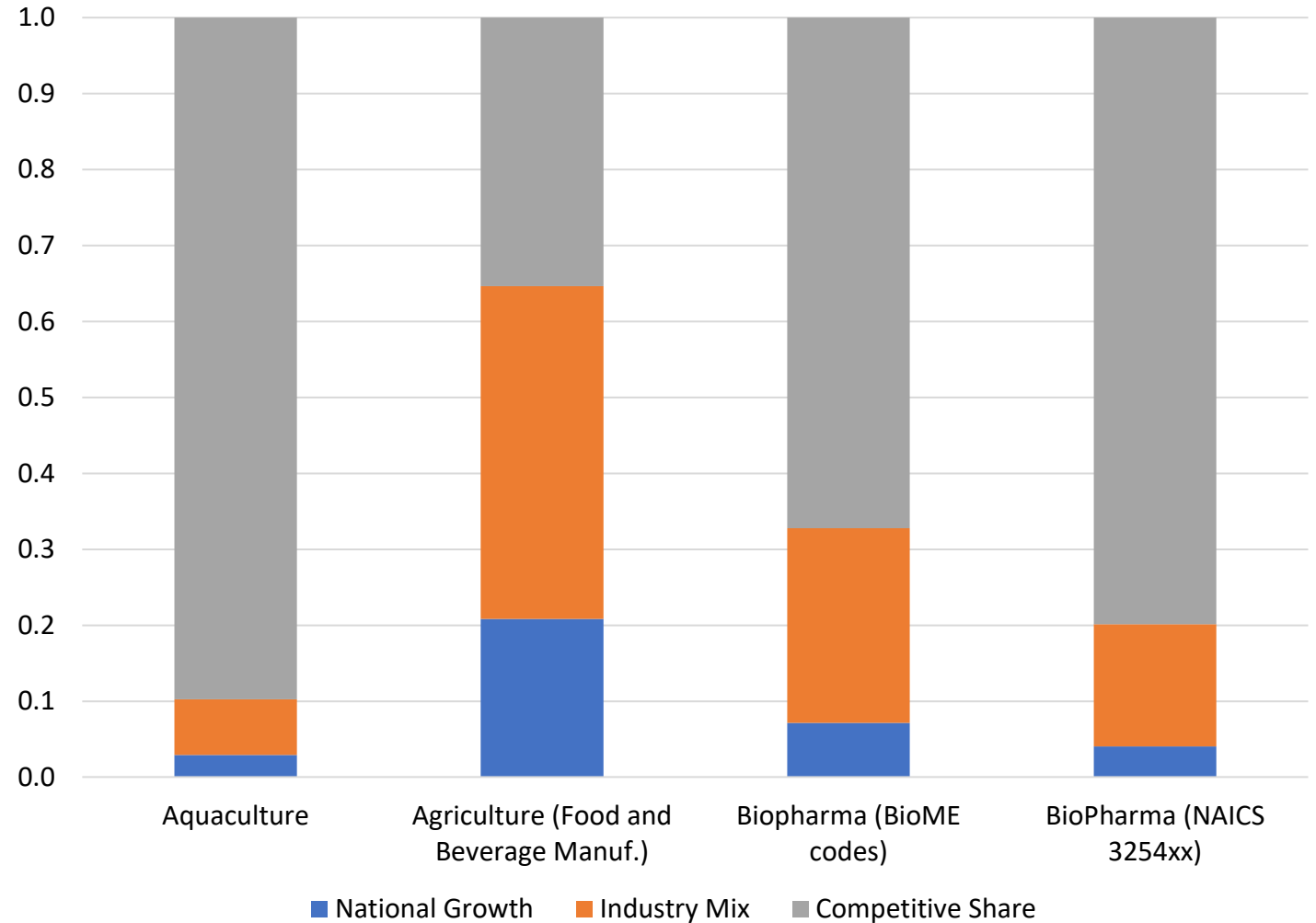
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages

Shift Share Analysis

- Helps identify competitive advantage in an industry by attributing growth to national, industrial, or regional forces
 - **National Growth:** Explains how much of the growth in the region is attributable to overall economic growth in the nation
 - **Industry Mix:** Explains how much of the growth is attributable to overall growth in the industry nationwide, indicating how much the industry out- or underperformed the economy as a whole nationwide
 - **Competitive Share:** Explains how much growth is attributable to the competitive advantage of a region. This piece represents how much the region out- or underperformed compared to national and industry growth

Maine has competitive advantage in all FocusMaine sectors; strongest in Aquaculture and Biopharma

Percent of employment growth attributable to each component, 2015-2021



Appendix: Sector Summary

| FocusMaine sector summary | 2021 | | |
|--|----------------|----------------|--------------------|
| | Establishments | Employment | Average Annual Pay |
| Total, all industries | 55,055 | 515,127 | 54,644 |
| Food and beverage manufacturing | 414 | 7,965 | 48,139 |
| Food manufacturing | 281 | 5,604 | 45,429 |
| Beverage manufacturing | 133 | 2,361 | 54,572 |
| Aquaculture | 42 | 410 | 51,585 |
| Biopharma | 552 | 10,005 | 82,632 |
| Pharmaceutical and medicine manufacturing | 45 | 3,546 | 107,160 |
| Electronic instrument manufacturing | 17 | 296 | 72,962 |
| Medical equipment and supplies manufacturing | 53 | 1,553 | 49,427 |
| Medical equipment merchant wholesalers | 195 | 513 | 136,473 |
| Testing laboratories | 48 | 270 | 53,297 |
| Research and development in the physical, engineering, and life sciences | 121 | 2,414 | 76,959 |
| Medical and diagnostic laboratories | 67 | 1,258 | 56,951 |
| Blood and organ banks | 6 | 155 | 42,313 |