

Females are a clear majority in high-growth industries and associated educational pipelines.

Gender imbalance is unsustainable in the current and projected economic and workforce environment.

Indiana University Bloomington

School of Informatics, Computing and Engineering

Vatsal Jatakia

Anurag Joshi

Roshith Raghavan

Olga Scrivner

Katy Borner

School of Public and Environmental Affairs

Livia Crim

David Lebhar

Kosali Simon

Coady Wing



Data

US Census Bureau: Quarterly Workforce Indicators

<https://www.census.gov/data/developers/data-sets/qwi.html>

Indiana Data Hub: Occupation Projections 2026

<https://hub.mph.in.gov/dataset/occupational-projections>

Indiana Data Hub: CIP-SOC Crosswalk

<https://hub.mph.in.gov/dataset/classification-of-instructional-programs-to-standard-occupation-codes-crosswalk>

Bureau of Labor Statistics: Labor Force Participation Rates (1950 – 2050)

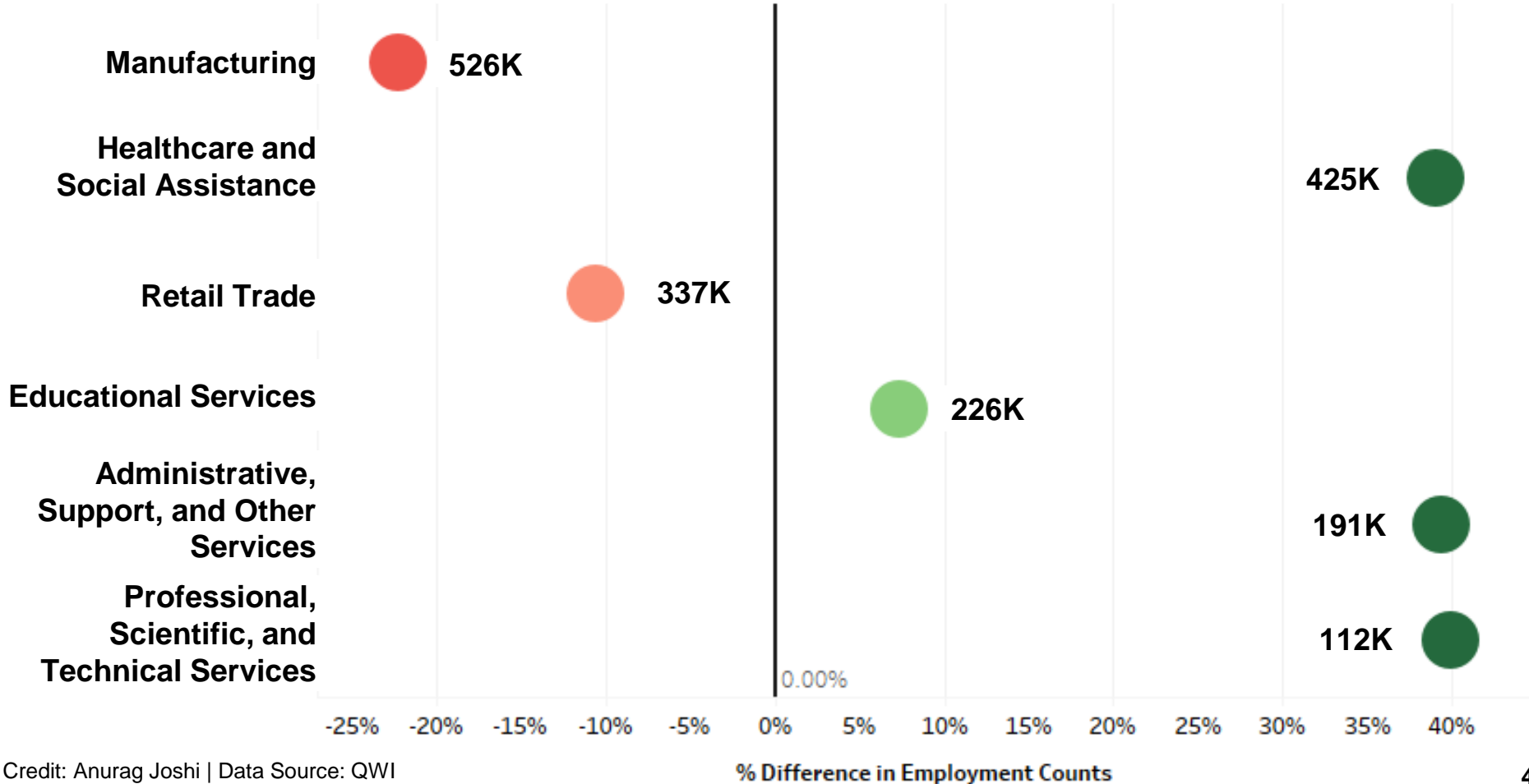
<https://www.bls.gov/opub/ted/2007/jan/wk2/art03.htm>

National Center for Education Statistics: Integrated Postsecondary Education Data System (IPEDS)

<https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx>

Which Indiana industries have experienced growth or decline over the last two decades?

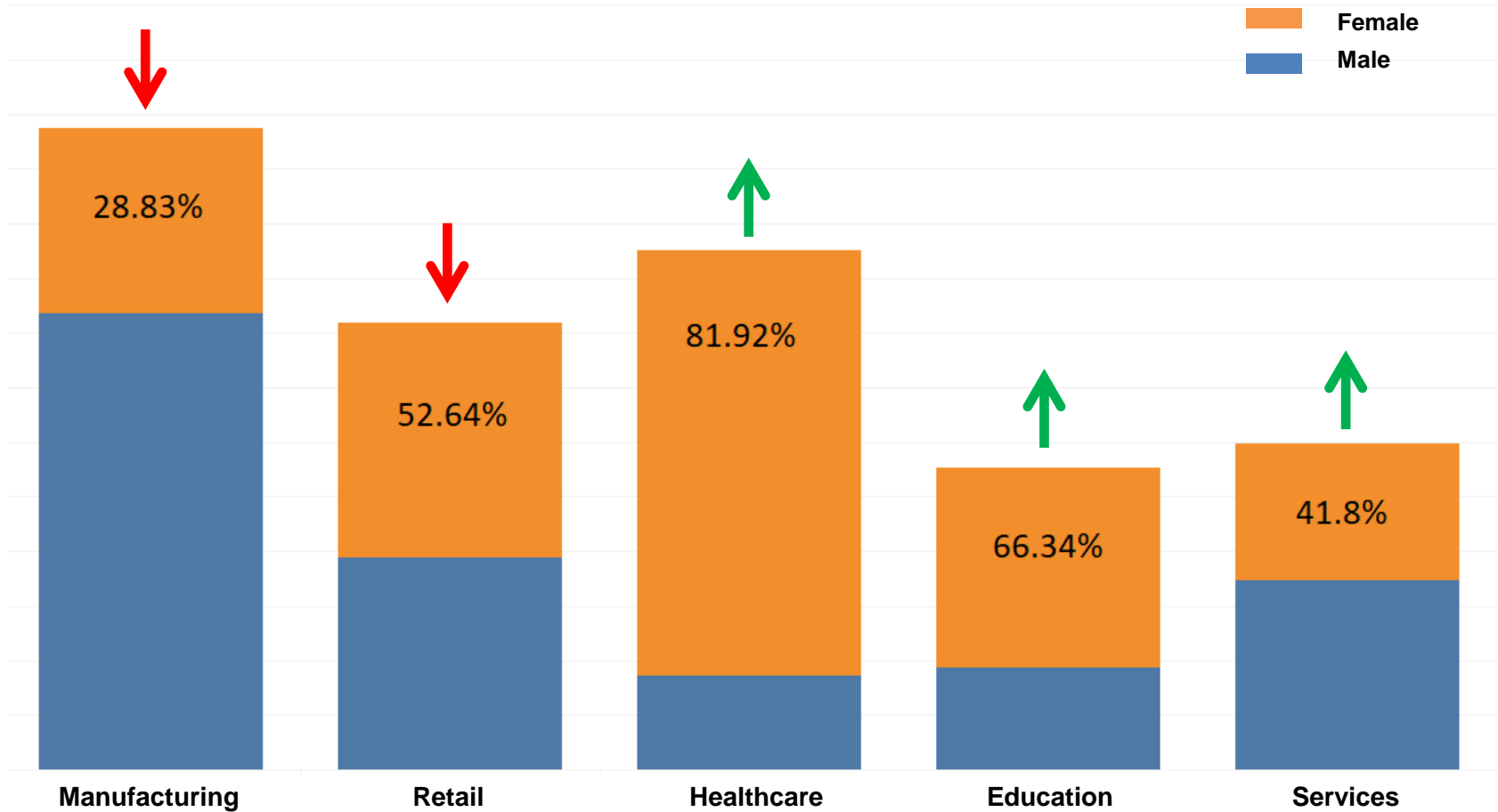
Percent Difference in Total Jobs in Indiana by Industry (1999 vs 2016)



Is there gender balance within these high-growth or high-decline industries?

No

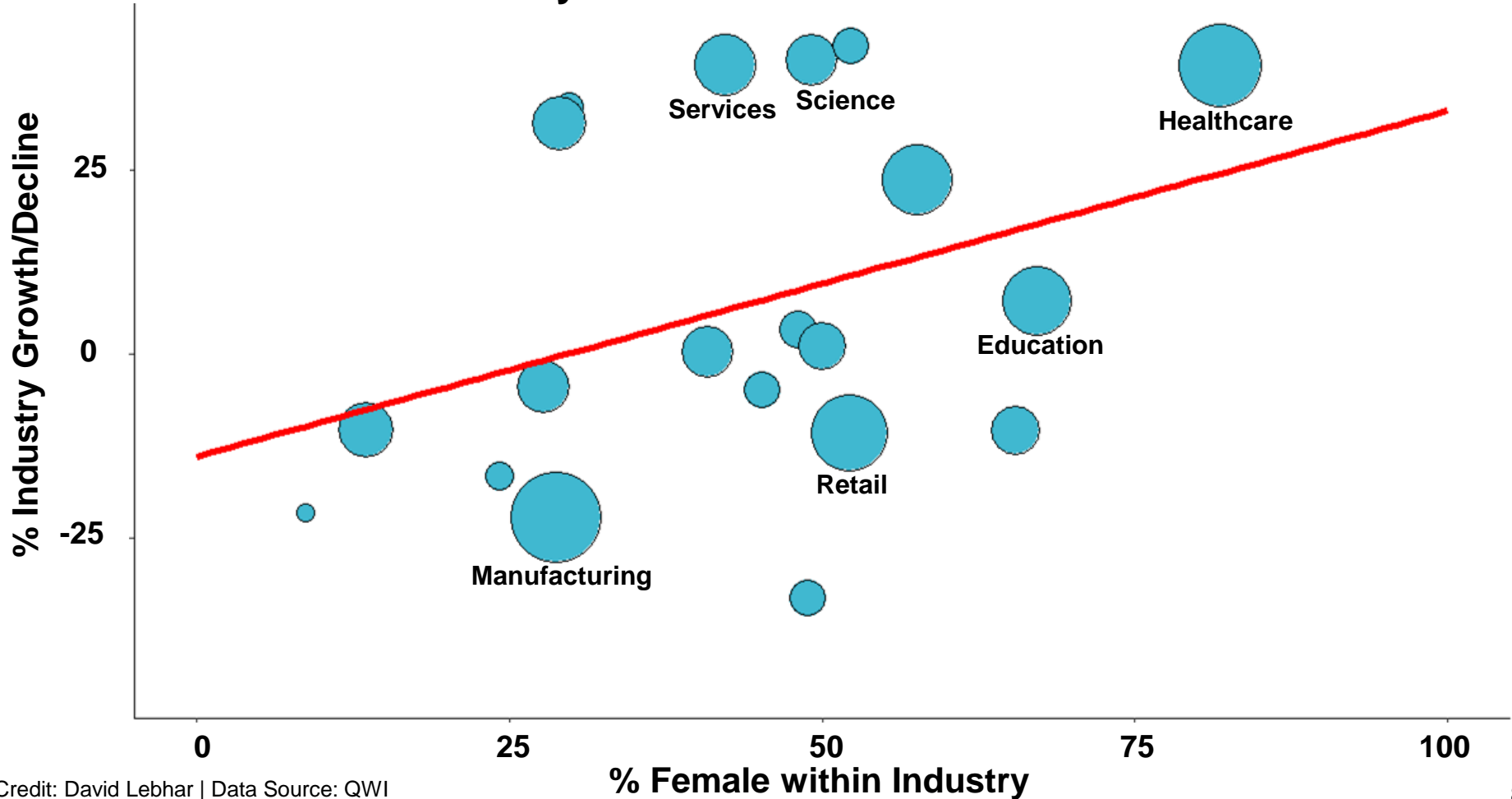
Percent Female within Industries (2016)



Is there a correlation between industry growth and the percent of females in each industry?

Yes

Correlation Between Industry Growth and Percent Female

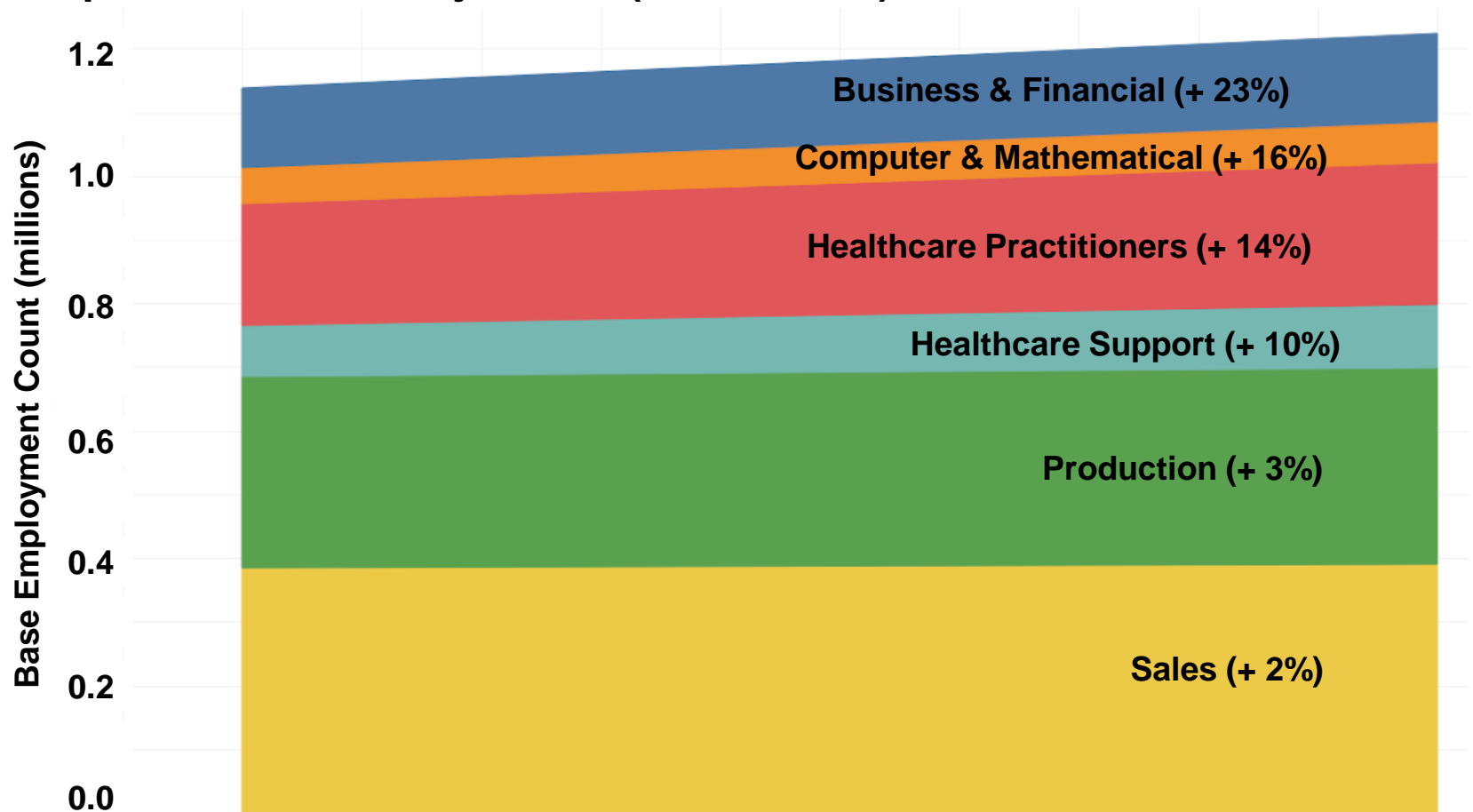


Why is this significant?

At least three reasons...

Occupation Growth Projections (2016 – 2026)

Credit: Vatsal Jatakia | Data Source: SOC Projections 2026



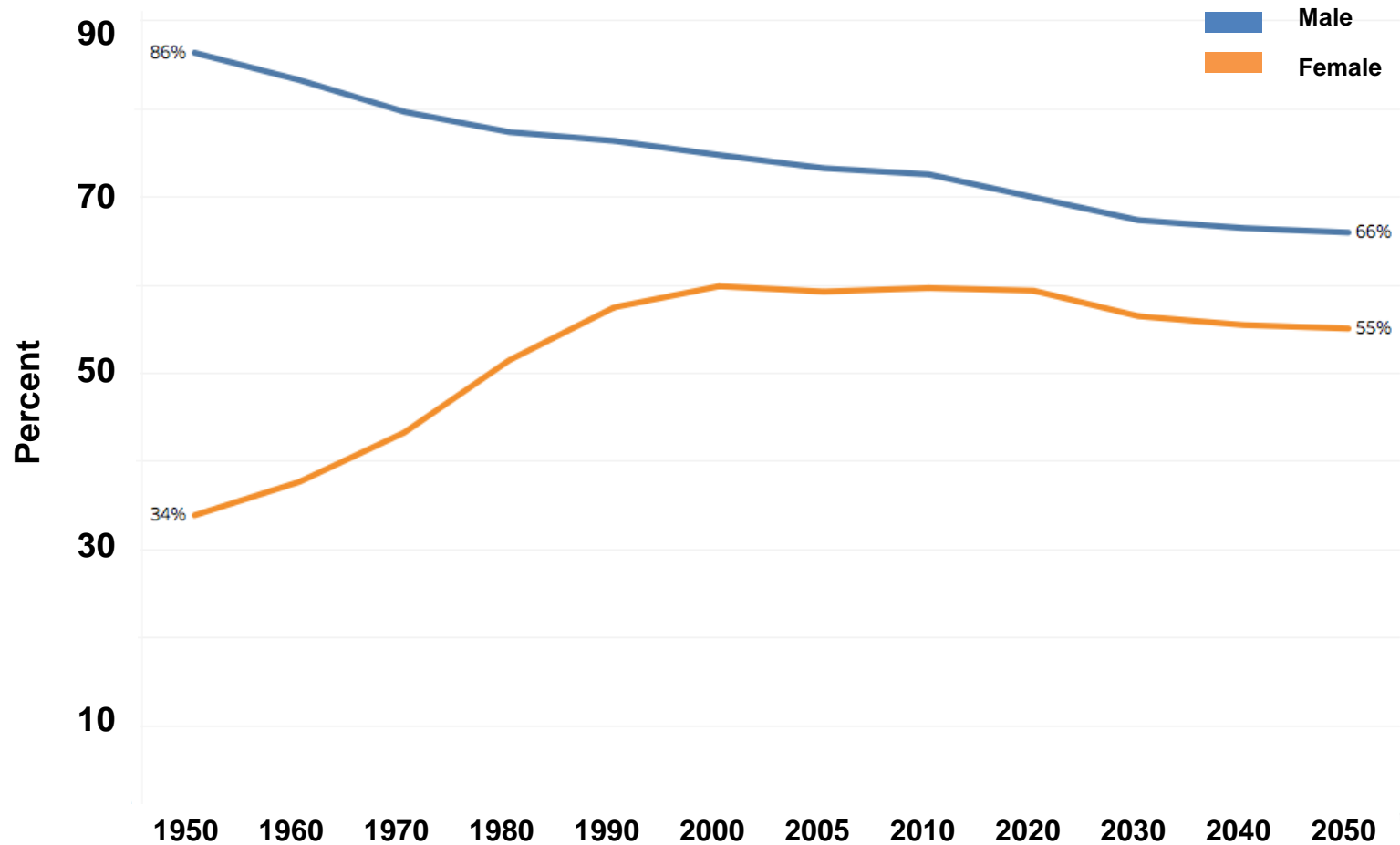
2016

2026

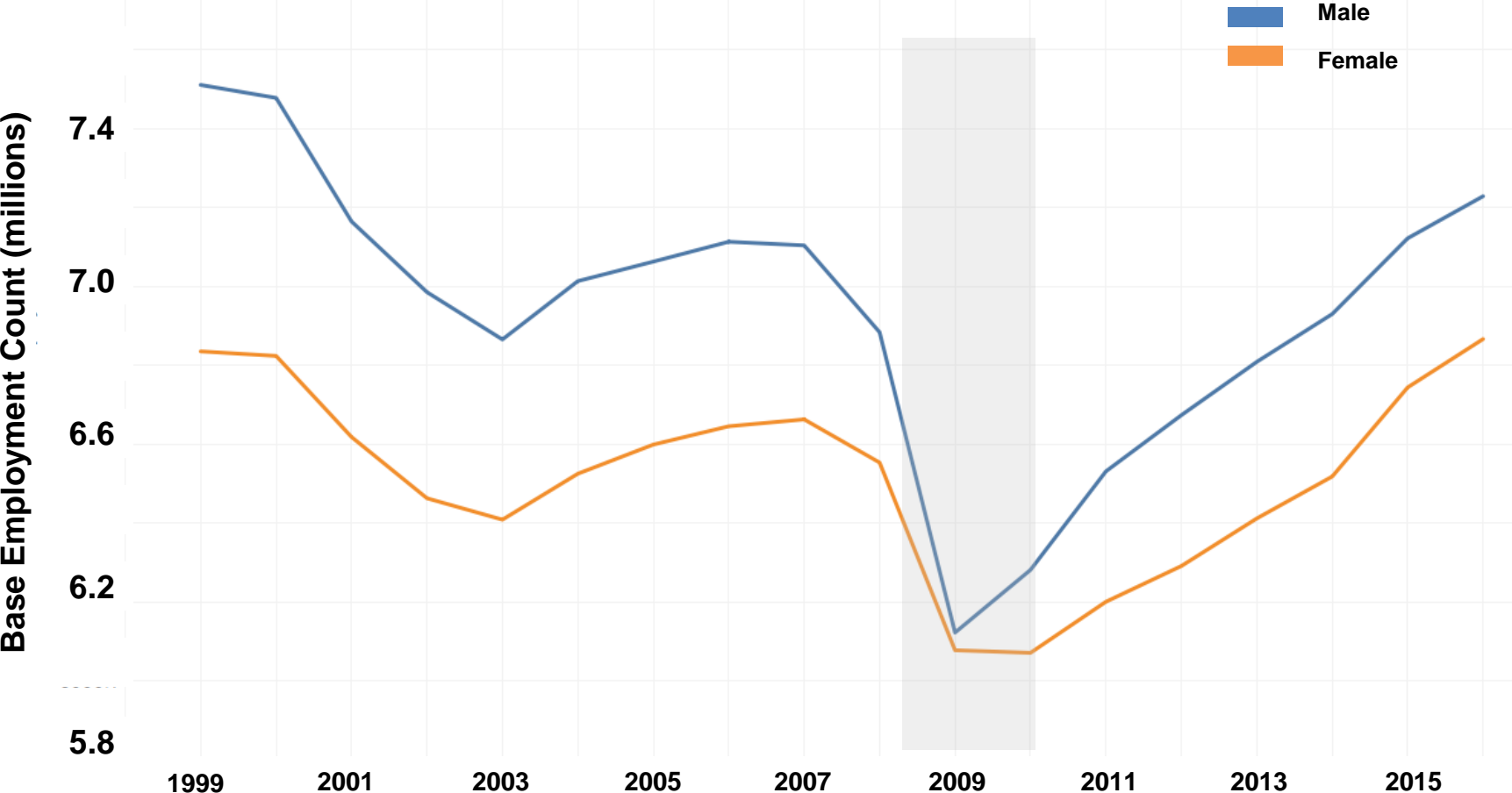
Civilian Labor Force Participation Rates by Sex

1950 - 2005 and Projected from 2010 - 2050

Credit: Livia Crim | Data Source: BLS



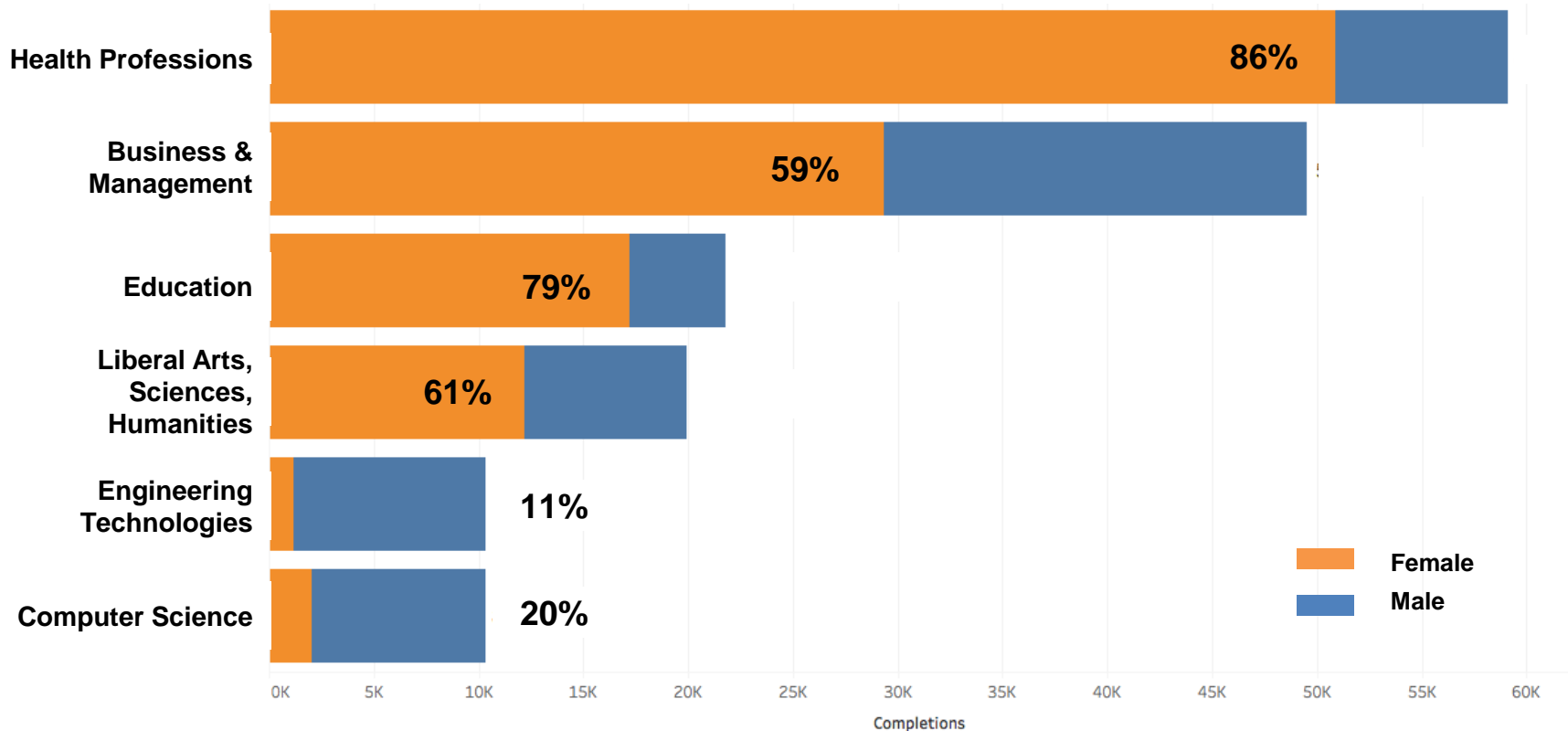
Employment by Sex in Indiana – All Industries (1999 – 2016)



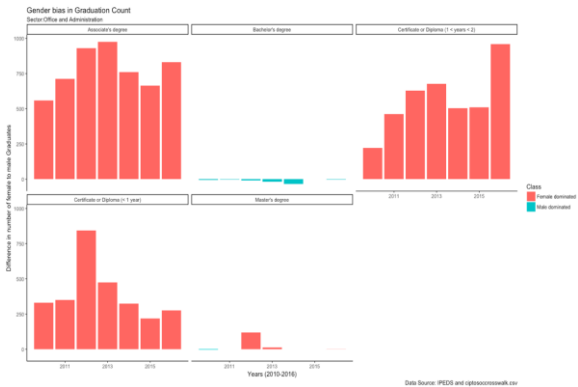
Is the education pipeline leading to better gender balance within high-growth industries?

No

Percent Female within Largest Fields of Study (Indiana 2016)



Mapping Education to Occupation (Indiana 2016)



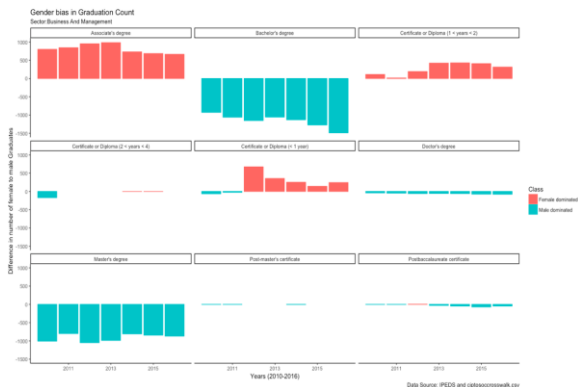
Office/Administration



Training/Library



Healthcare



Business & Management



Sales



Production Occupations

Key Findings & Future Research

- Females are a clear majority in high-growth occupations.
- Females are a clear majority in the current education pipeline leading to high-growth occupations.
- Gender imbalance is a significant issue in current and projected economic and workforce environment.
- Adult education and worker training programs may provide additional avenues into high-growth occupations, leading to gender balance – an area for further research.