

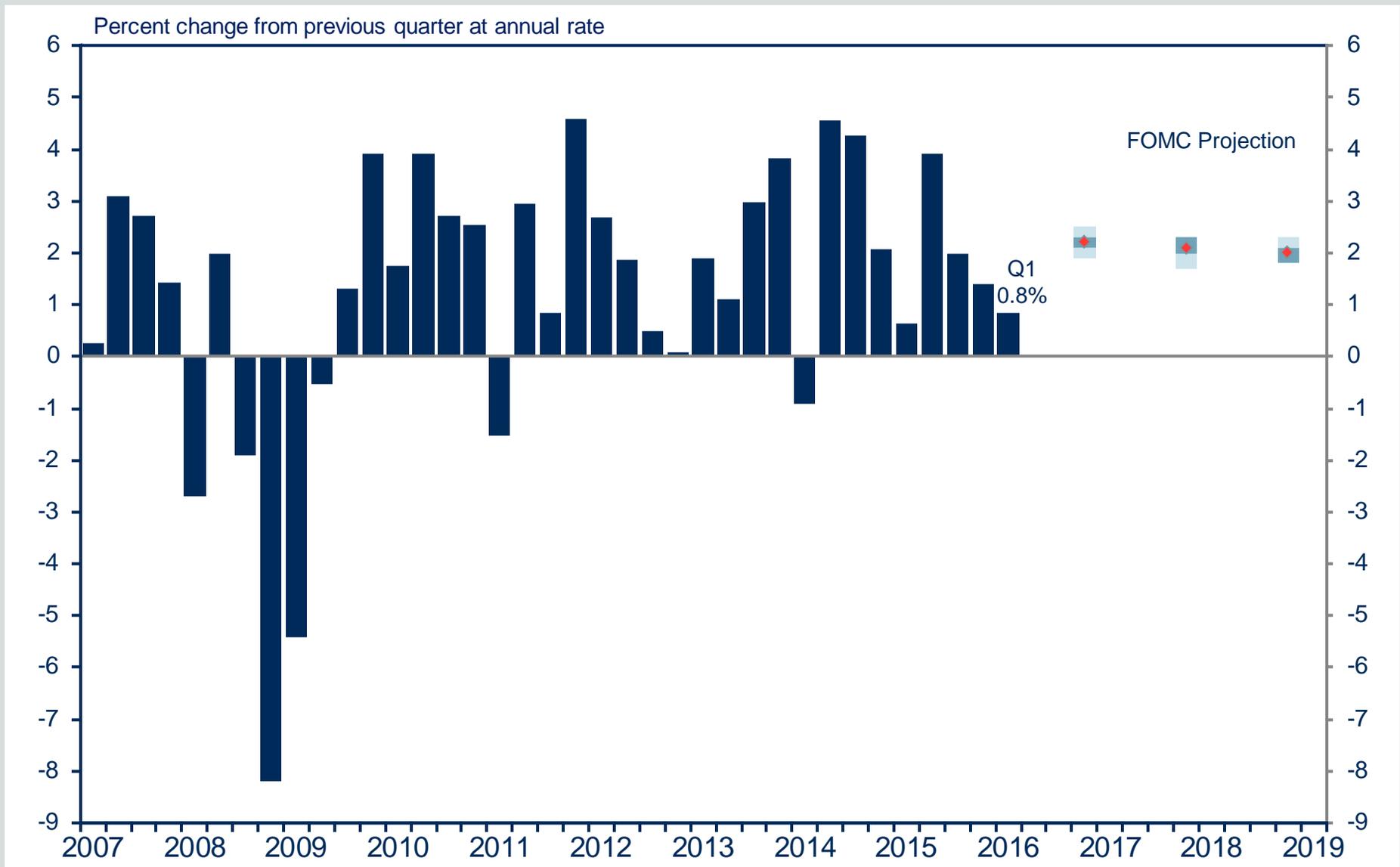


Timing Isn't Quite Everything: Informing Choices on Human Capital Investment and Job Availability

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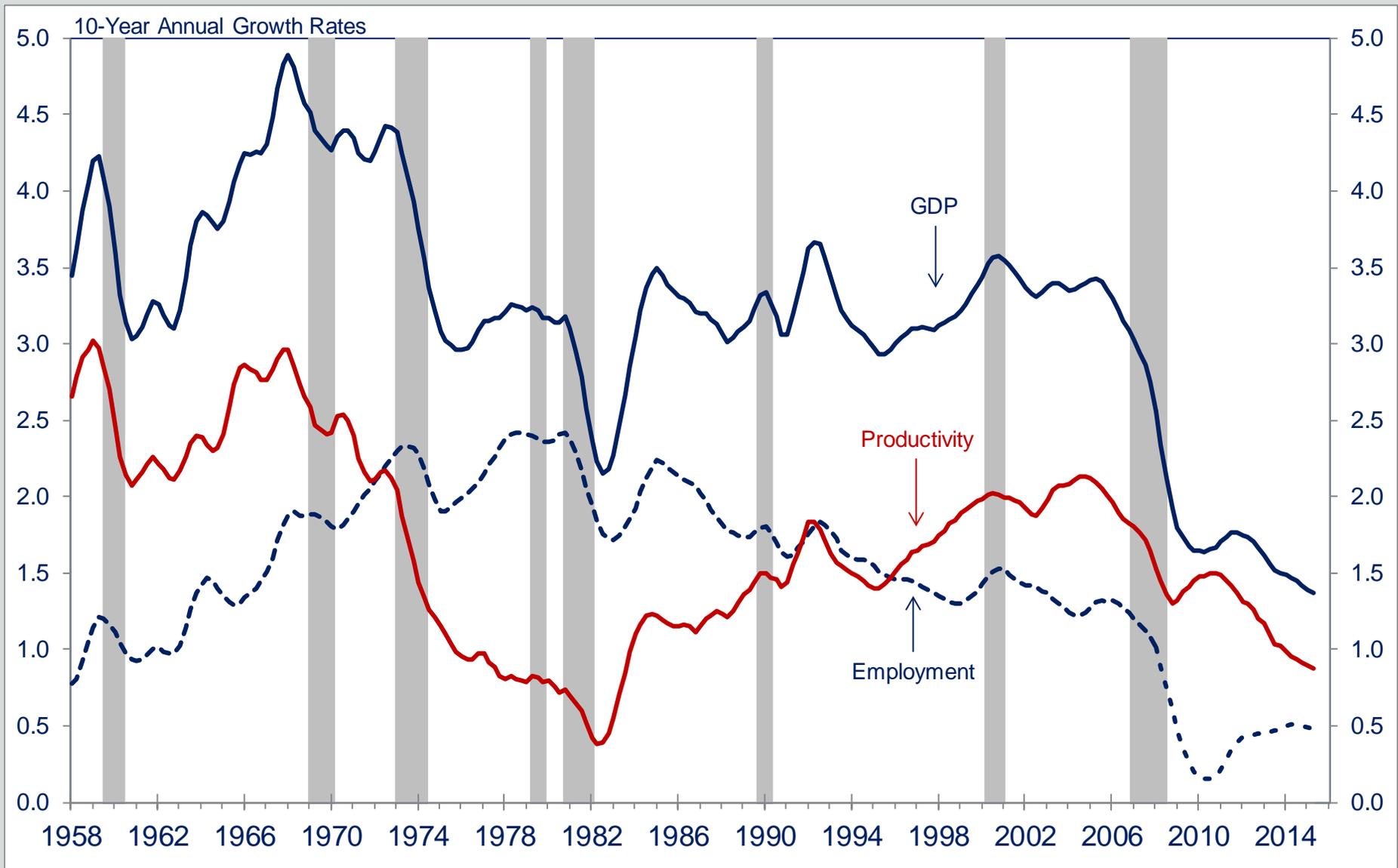
Real Gross Domestic Product



Note: Projection is the median, central tendency, and range from the March 2016 Summary of Economic Projections. Red dots indicate median projections. Projections of change in real gross domestic product (GDP) are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

Source: Bureau of Economic Analysis via Haver Analytics & Federal Reserve Board

Decomposition of Real GDP



Note: Productivity is calculated as real GDP per employee, from the Household Survey.

Source: Bureau of Economic Analysis and Bureau of Labor Statistics via Haver Analytics

Background

- Federal Reserve has a monetary policy mandate to promote maximum employment.
- This mandate has motivated the Richmond Fed to study long-run strategies to improve labor market outcomes for individuals.
- What can be done to:
 - improve nation's skills and *average* earnings?
 - workers' and young peoples' response to changing labor market conditions?
- That is, what can be done to *develop the workforce*?

Workforce Development (WD)

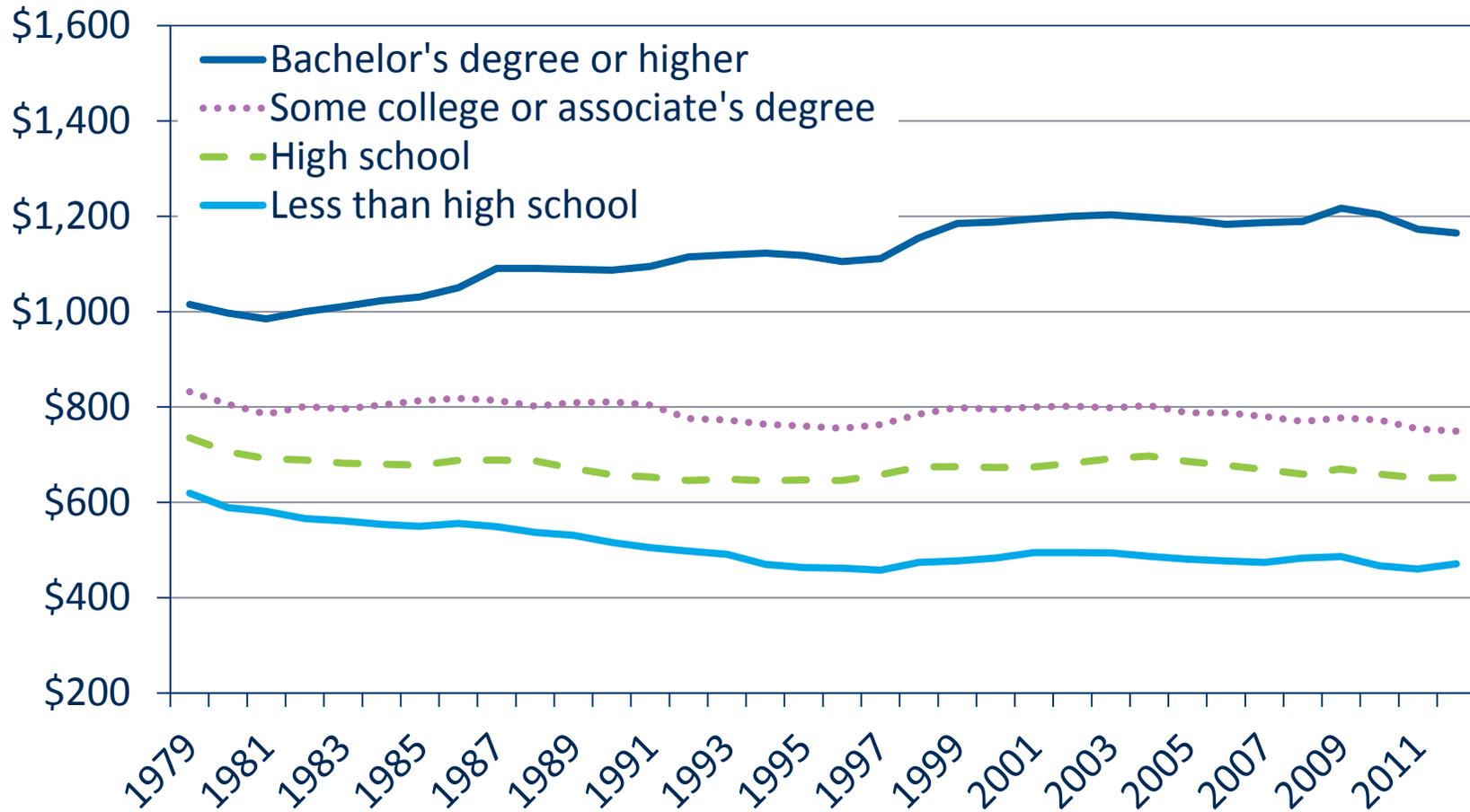
- WD has many dimensions:
 - The “coordination side” - Regional, state, or local efforts to coordinate schools, firms, and workers
 - The “adult workforce” side - Retraining and assisting with job search and matching
 - The “human capital” side - Focus is on individual-level decisions to invest in skills
- Today, I will focus on the role of mechanisms that can allow students and workers to more effectively acquire and analyze information about employment options as well as training and education opportunities. That is to “match” their skills to employment opportunities

Overview

- College completion typically leads to a positive labor market experience
- There are caveats:
 - Not everyone who enrolls in college completes
 - College may not be the best path for all students
 - We may be seeing a leveling-off in the college attainment rate
- Preparedness and good information are important for choosing the right path and succeeding
- Challenges faced by adult workforce efforts may be mitigated by targeting people when young

Higher Ed. Has Long Delivered Earnings Payoffs, Which Have Steadily Increased

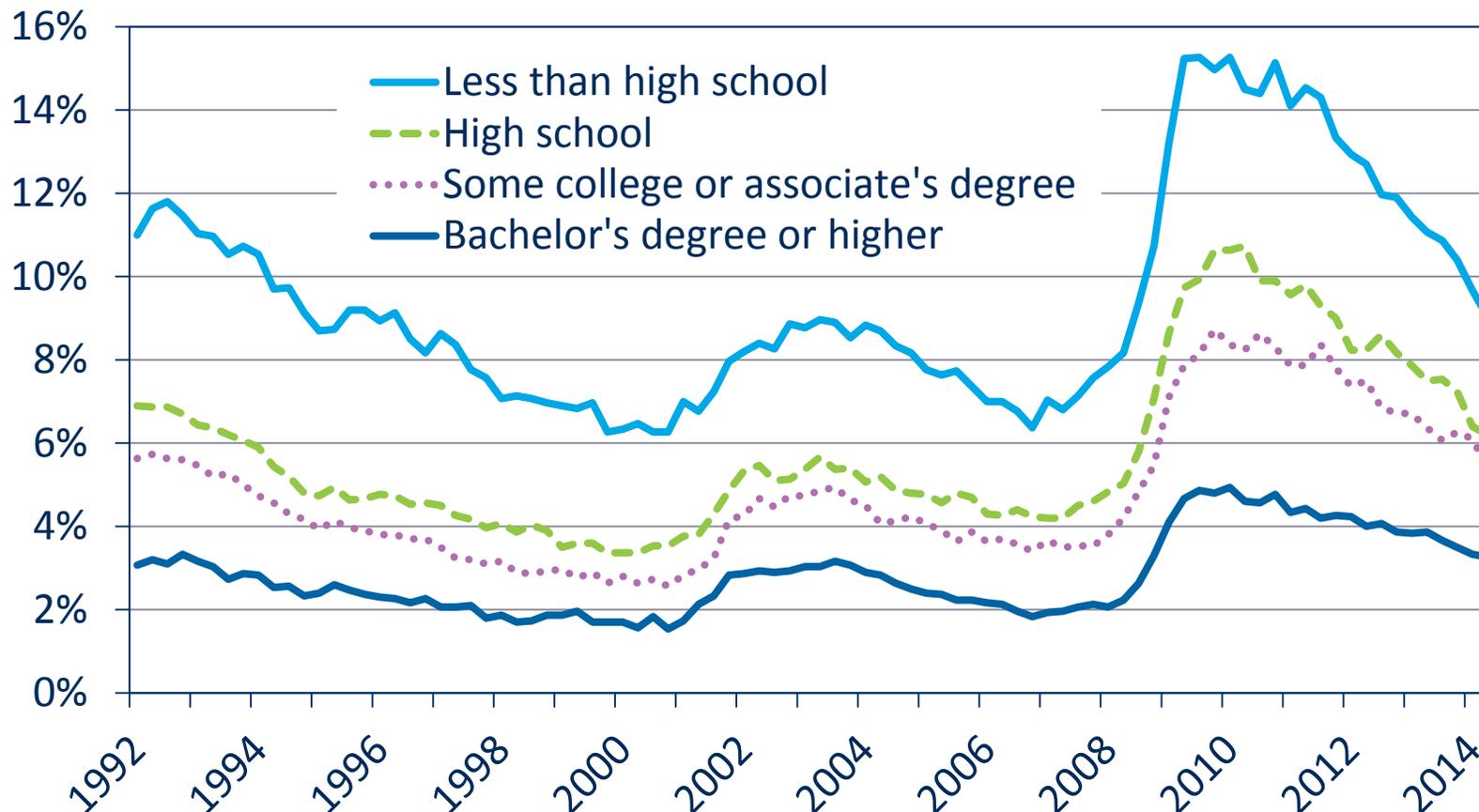
Median weekly earnings, workers 25 years and over (2012 constant dollars)



Source: Bureau of Labor Statistics

College Completion Has Long Inoculated Against Unemployment.

Unemployment rate, workers 25 years and over



Source: Bureau of Labor Statistics

Vocational Training and Jobs of Tomorrow

- Vocational education appears to make entry into the labor market easier.
- However, the specialized nature of these skills may limit their adaptability to new technologies.
- Rapid technological change may thus pose challenges later in life for workers who are trained narrowly in certain skills.

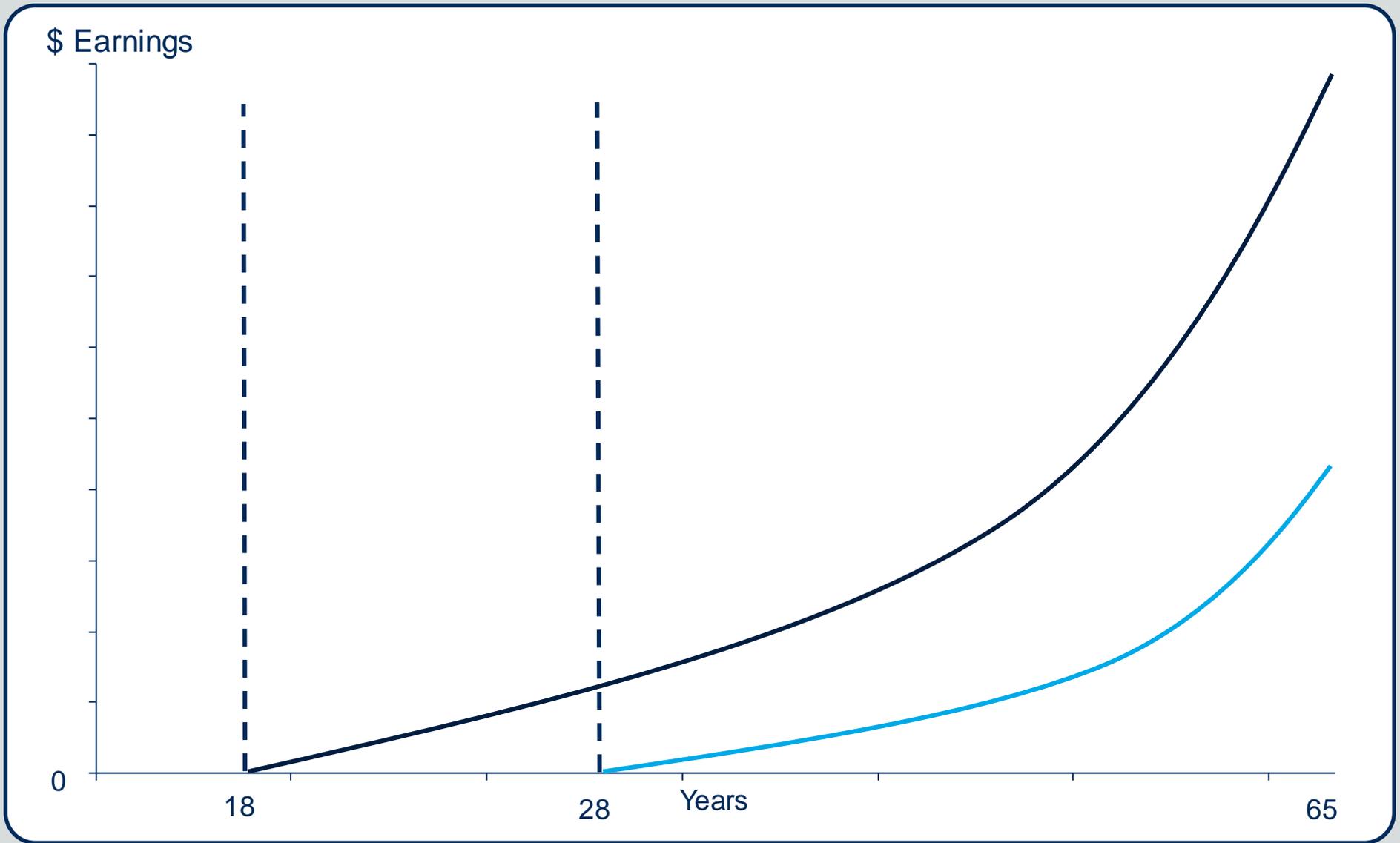
Adult Workforce Considerations

- Adult population that needs workforce training is usually highly “selected”.
- Numerous risks during working life:
 - Unemployment
 - Displacement (rare for long-tenured workers but very scarring when it does happen)
 - Occupational

The Human Capital “Lens”: Implications

- The future matters:
 - Small differences in decision effectiveness or timing can lead to big differences in outcomes.
 - Age matters for the benefits from training.

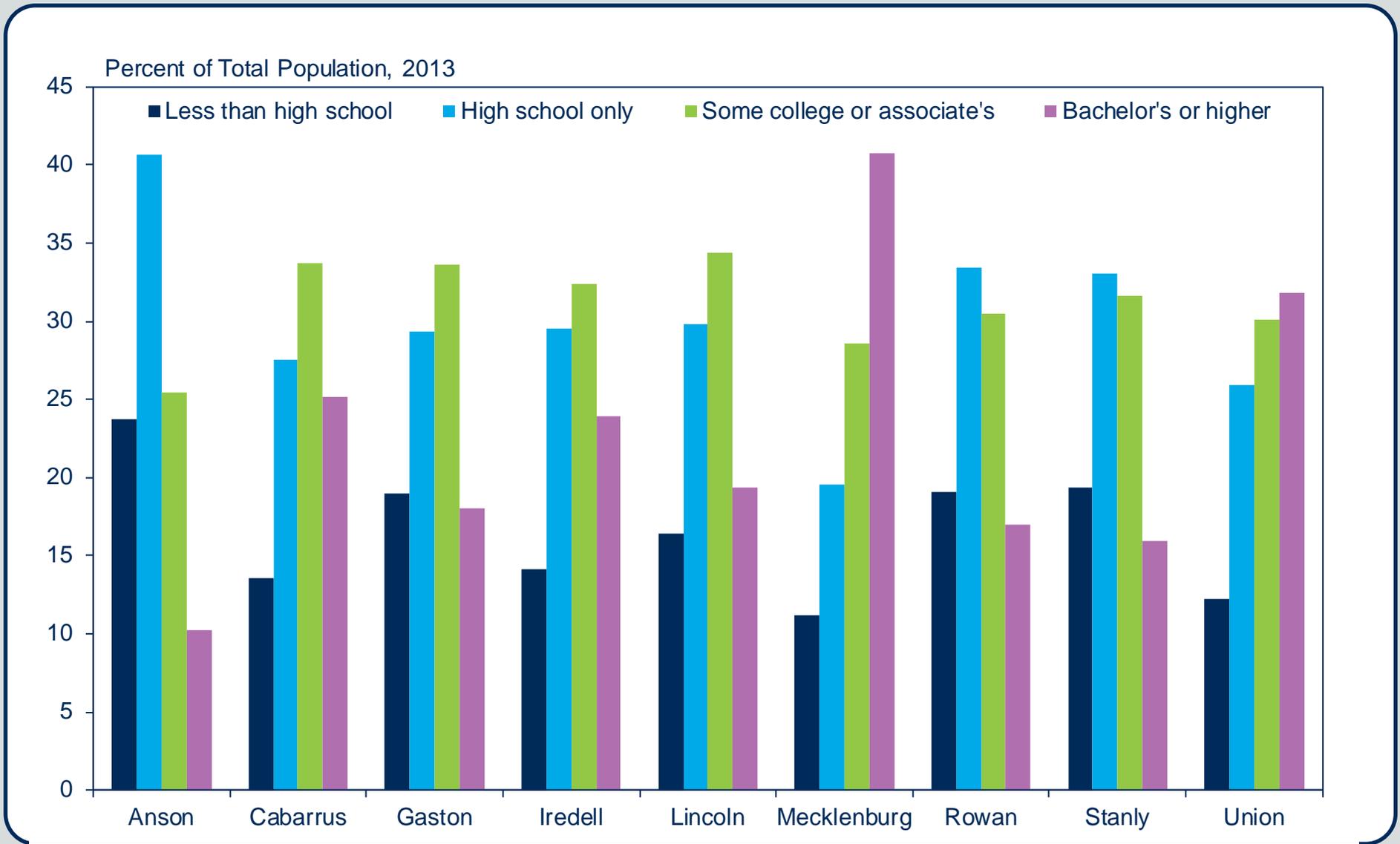
Earnings Path Starting Early in Life vs. Later in Life



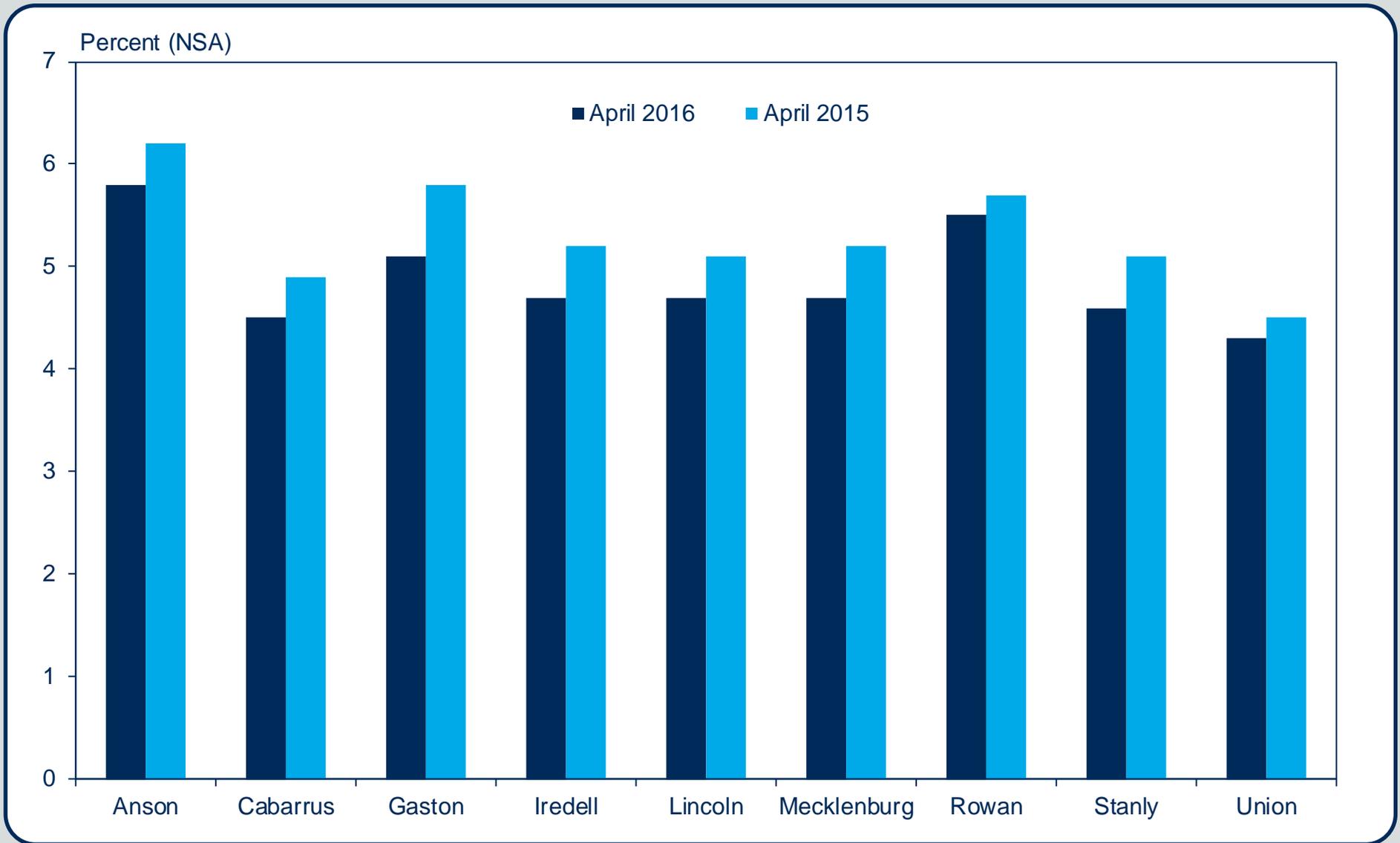
A Word About Training and Jobs

- All the preparation in the world can be wasted if employment opportunities are missed
- Knowing of job availability and matching skills availability is an essential link
- Lowering the cost of information about training, jobs, and the returns on human capital investment enhances the conversion of skills into production and the generation of earnings

Educational Attainment

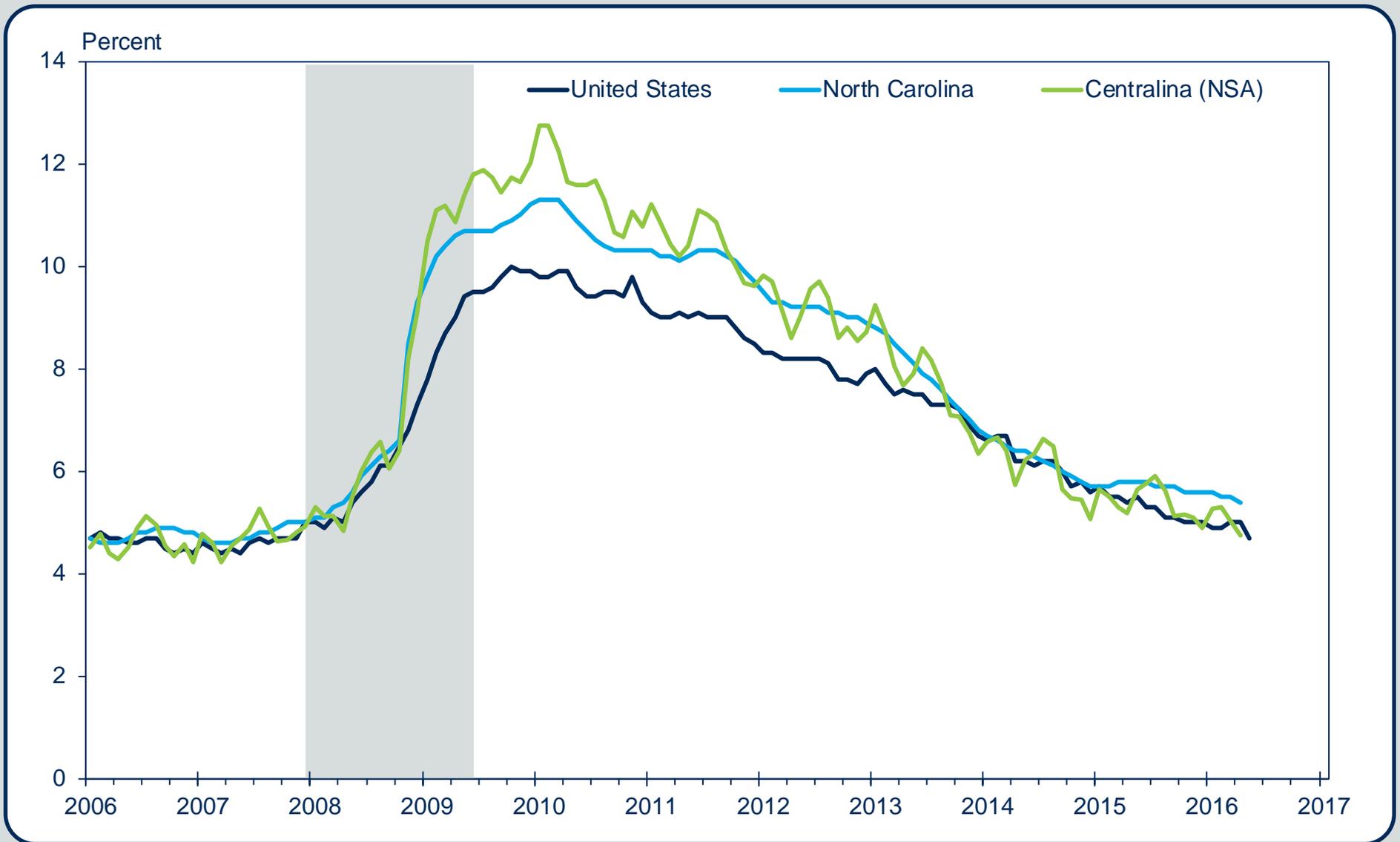


Unemployment Rates by County



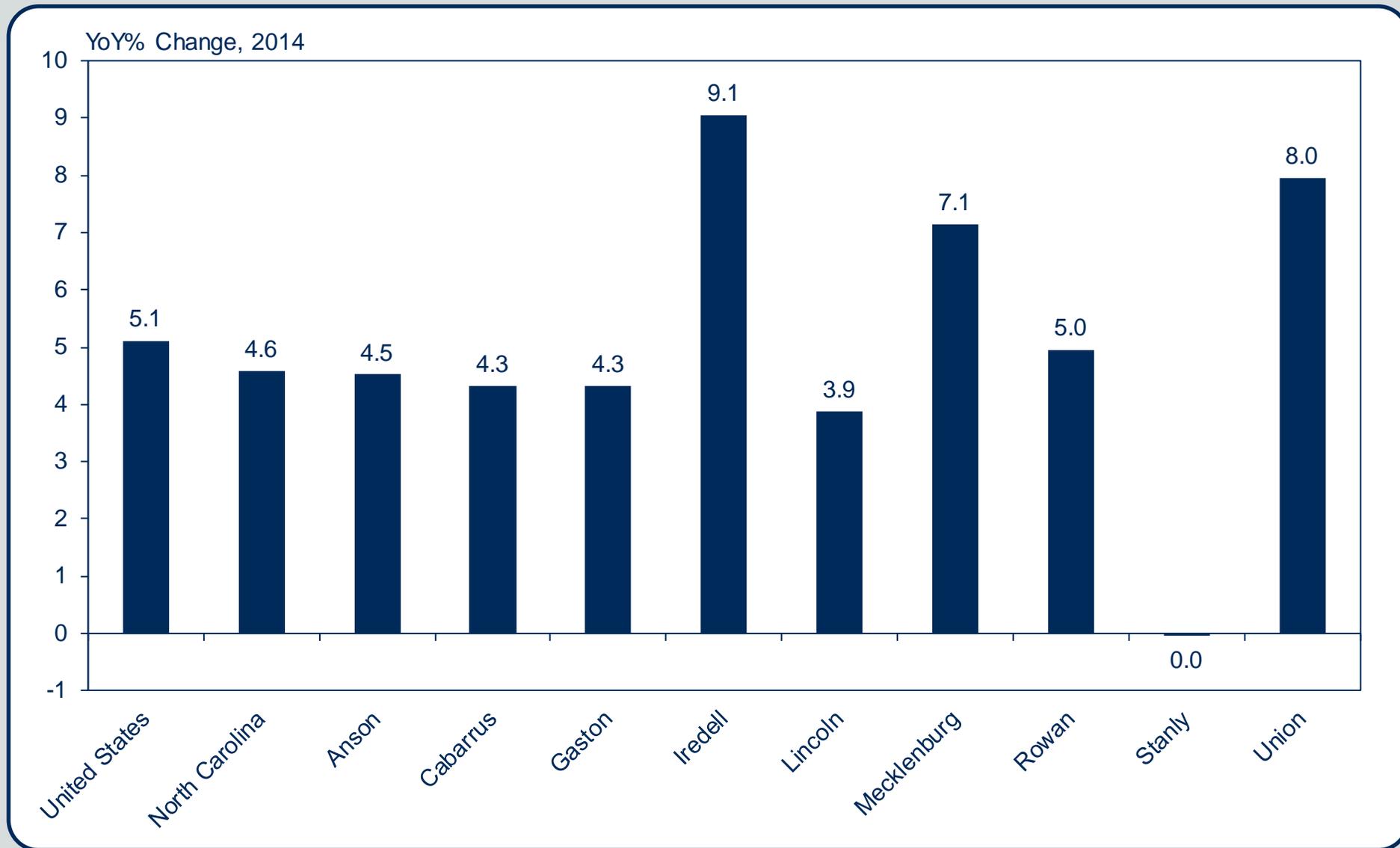
Source: Bureau of Labor Statistics via Haver Analytics

Unemployment Rates



Source: Bureau of Labor Statistics via Haver Analytics

Total Wages and Salaries Growth by Area



Concluding Remarks

- Slower economic growth partly reflects slower productivity growth
- To spur productivity (and innovative ideas) acquiring human capital that matches human ability likely helps
- Impediments to matching abilities to training/education lessens prospective innovations and gains in productivity
- And human capital is wasted if it is not employed
- Thus, mechanisms that lower the cost of acquiring and evaluating employment options and returns on human capital investment enhance innovation, economic production, and income