

Uncertain Futures?

Youth Attachment to the Labor Market in the United States and New England

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In the wake of the Great Recession, high unemployment and low labor force participation among youth are of concern.

- “Idle Youth Raises “Lost Generation” Fear.” *CBS News*, 11/27/09
- “The harm today’s youth unemployment is doing will be felt for decades, both by those affected and by society at large.” *The Economist*, 9/10/11
- “Why the U.S. Has a Worse Youth Unemployment Problem than Europe.” Peter Gumbel, *Time*, 11/5/12.
- “The Idled Young Americans.” David Leonhardt, *New York Times*, 5/3/13.
- “America’s Youth Unemployment Problem Could Cost \$18 Billion Over the Next Decade.” *The Huffington Post*, 5/20/13
- “Dire Youth Unemployment Growing Worse.” *Fox Business News*, 5/10/13.

What are the overall objectives of this research?

- Overall Goal: Promote and/or support better policy outcomes
- Interim Goals:
 - Produce a Foundational Paper: Contribute to the current policy debate by putting current trends into perspective and providing a regional focus.
 - Conduct Policy-Driven Research: Examine in detail the root causes of and possible solutions for youth labor force detachment.
 - Engage in Policy Development: Offer technical expertise or advice to ongoing policy activities throughout the region. Work with partners engaged in the field to advance policy recommendations.

What factors might be driving the recent decline in labor market attachment among youth?

- Recent studies have argued that the youth labor market has undergone structural changes in recent decades (Sum, Gillis, Khatiwada, and Palma, 2013).
 - Demand: Labor demand has shifted away from routine work and towards jobs that require technical skills or post-secondary training (Autor, Levy, and Murnane 2003; Acemoglu and Autor 2010).
 - Supply: Alternative sources of labor such as adult middle-skill workers or immigrants (Smith, 2011 and 2012) may be filling jobs traditionally held by youth.
- These structural changes may have been exacerbated by cyclical forces stemming from the Great Recession.
 - Structural factors represent a permanent realignment of employment across industries, such that displaced workers must update or gain new skills sets in order to become re-employed.
 - Cyclical factors typically encompass temporary and reversible changes in employment due to decreases in aggregate demand.

What are the Research Questions?

- To what extent has youth labor market attachment changed in recent decades, including changes in the share of youth that are idle/NEET?
- Are the recent changes in labor market attachment being driven by a particular demographic group, or are the changes more widespread across all youth?
- What impact have structural shifts in the economy across industries and occupations had on the youth labor market before the Great Recession?
- What role did the Great Recession play in reinforcing the long-term decline in youth labor market attachment?

What Contributions Does This Paper Make to the Existing Literature?

- Examine trends separately for two groups of youth that possess varying labor market and educational characteristics: individuals aged 16 to 19 years (“teens”) versus 20 to 24 year olds (“young adults”).
- Explore trends across gender, racial and ethnic groups—focusing on both levels and changes in labor market attachment over the past several decades.
- Assess trends in youth employment by occupation and industry in the period just prior to the Great Recession (2000 to 2006) separately from the cyclical impacts of the most recent downturn.
- Measure labor market attachment at points in time in the cross-sectional data as well as over the working lives of successive cohorts of youth.

What Data are Used in the Analysis?

- Examine annual trends in attachment for all youth combined
 - March Current Population Survey (CPS), 1976–2012
- Quantify discrete changes in attachment for demographic groups
 - 1980, 1990 and 2000 Decennial Census 5% Sample
 - American Community Survey (ACS)
 - 2005–2007 and 2009–2011 3-Year PUMS
- Measure shifts for top teen industries during the Great Recession
 - Bureau of Labor Statistics (BLS) Current Employment Statistics (CES), December 2007– April 2013

Putting Recent Trends in Perspective: To What Degree Has Youth Labor Market Attachment Changed in Recent Decades?

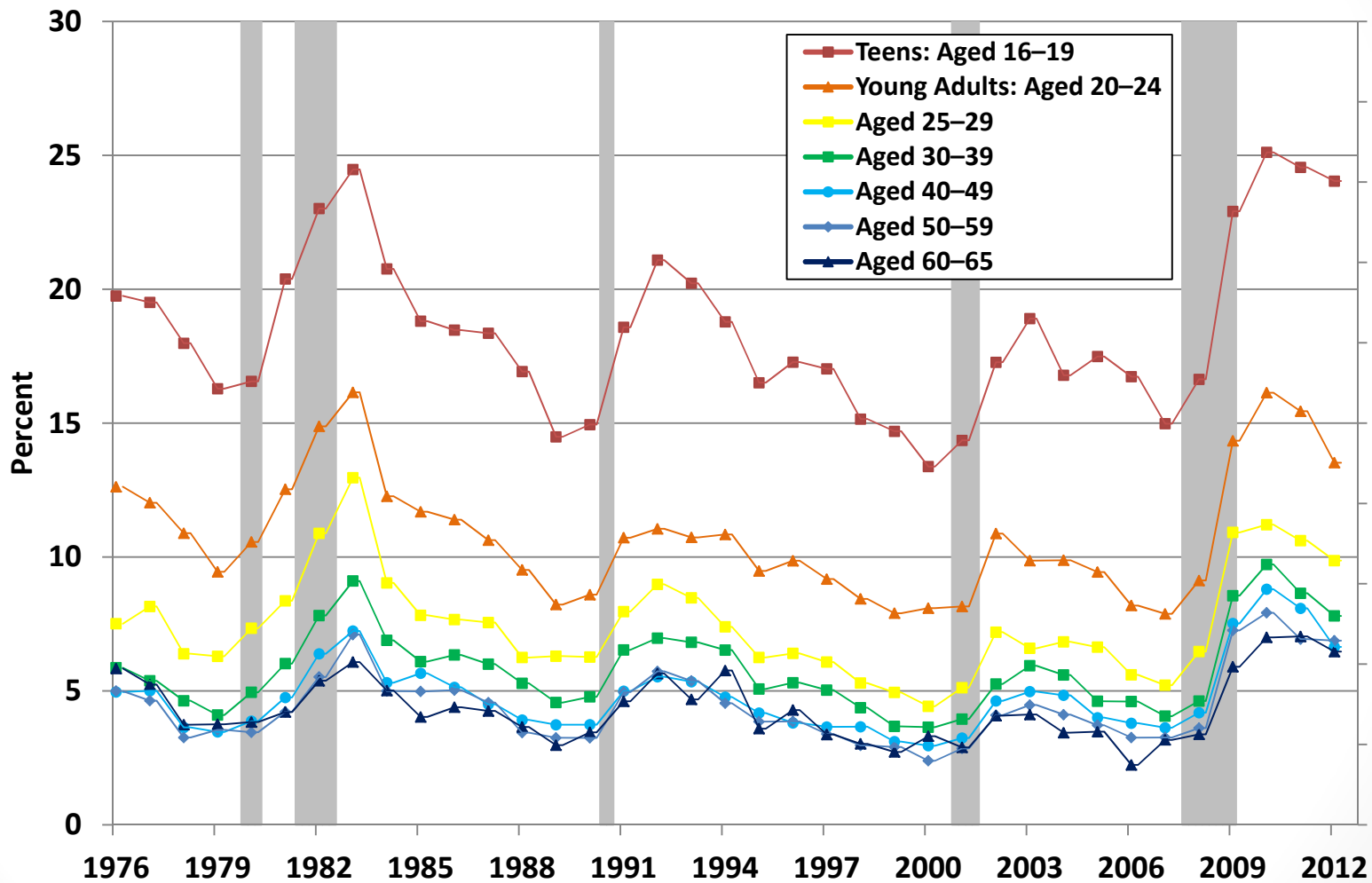
Hypothesis: American youth have become increasingly idle over time.

Findings:

- It is true that youth labor force attachment was **declining prior to the Great Recession**, but mostly for teens.
- Yet **school enrollment** also increased.
- As a result, the share of youth that is **idle has changed little** over time.

Unemployment Is Typically Higher for Youth Workers– Particularly during Recessions– in Part Due to Fewer Years of Experience and Shorter Tenure.

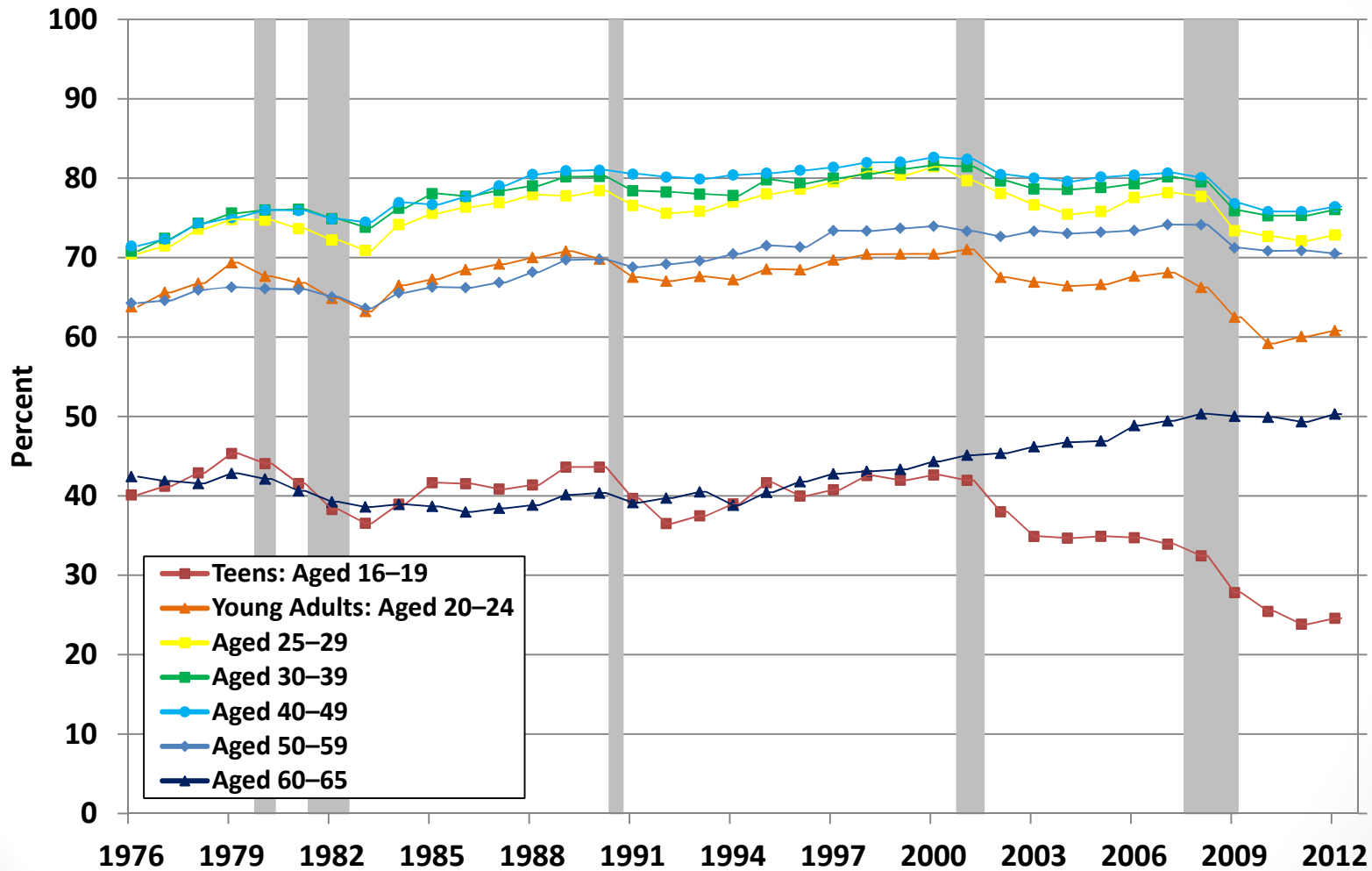
U.S. Unemployment Rate by Age Group, 1976–2012



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012.

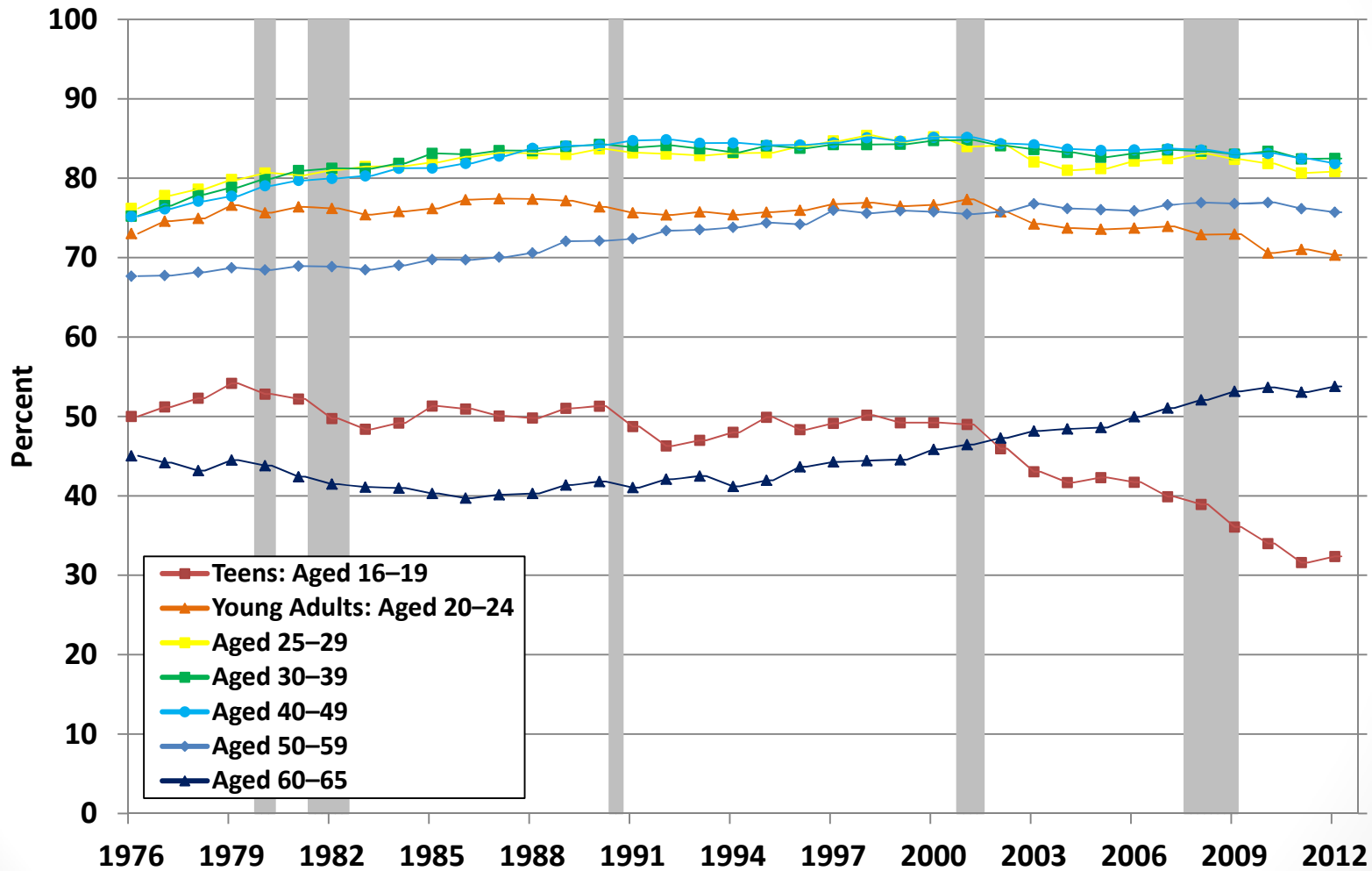
During the 2001 Recession, the Employment-to-Population Ratio Fell Sharply for Youth, Failing to Rebound to Its Earlier Cyclical Peak.

U.S. Employment-to-Population Ratio by Age Group, 1976–2012



Labor Force Participation Fell Sharply for Teens Prior to the Great Recession, but Was Fairly Steady for Young Adults during That Period.

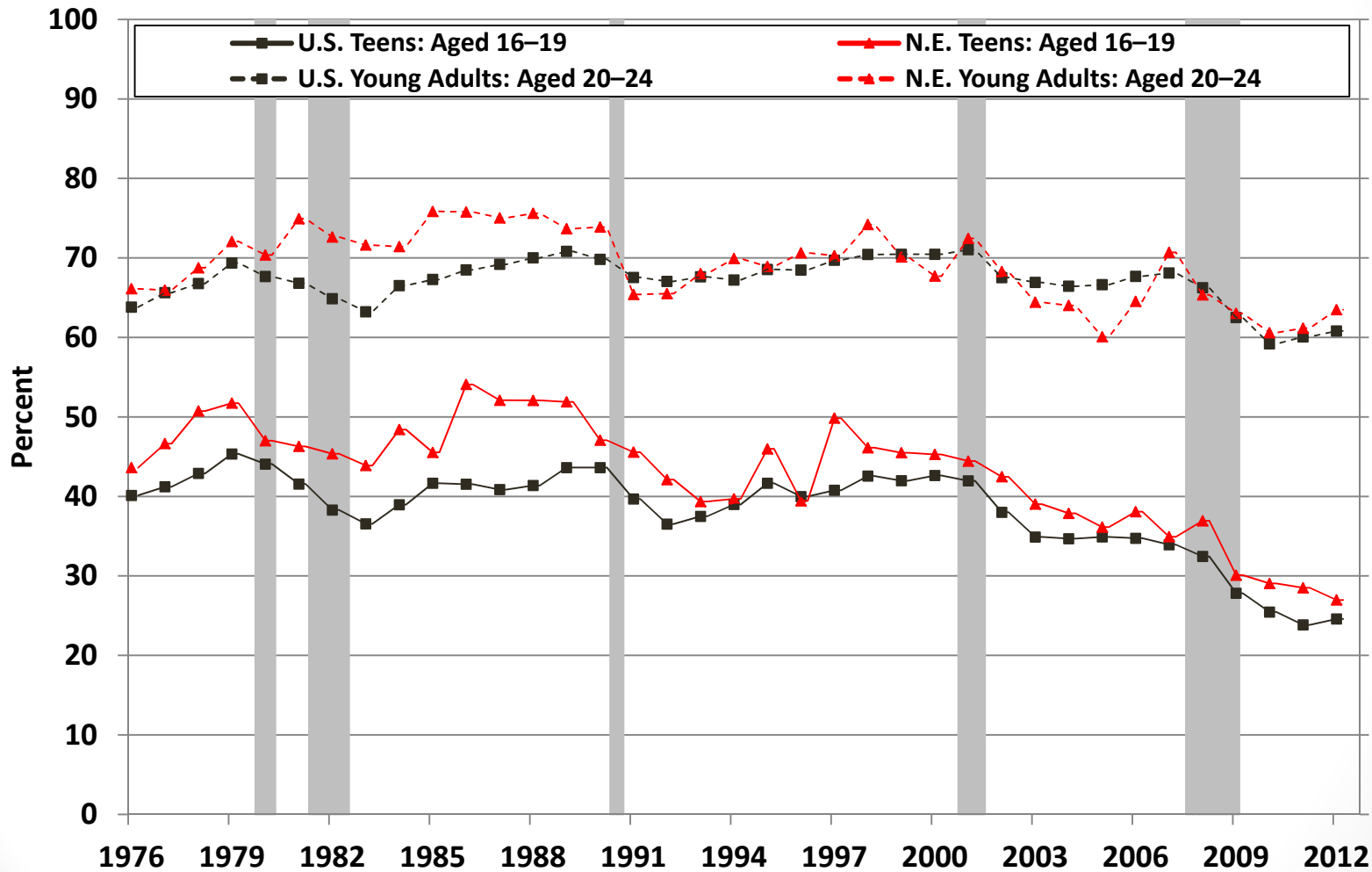
U.S. Labor Force Participation Rate by Age Group, 1976–2012



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976–2012.

A Similar Decline in Youth Labor Market Attachment Occurred in **New England**, Although the Timing and Size of the Decrease Vary Somewhat.

Youth Employment-to-Population Ratio, 1976–2012 United States vs. New England



Labor Market Attachment Fell Sharply for 16–19 Year Olds Even Prior to the Great Recession, but Was Fairly Steady for 20–24 Year Olds during That Period.

Changes in U.S. Youth Labor Market Attachment and School Enrollment

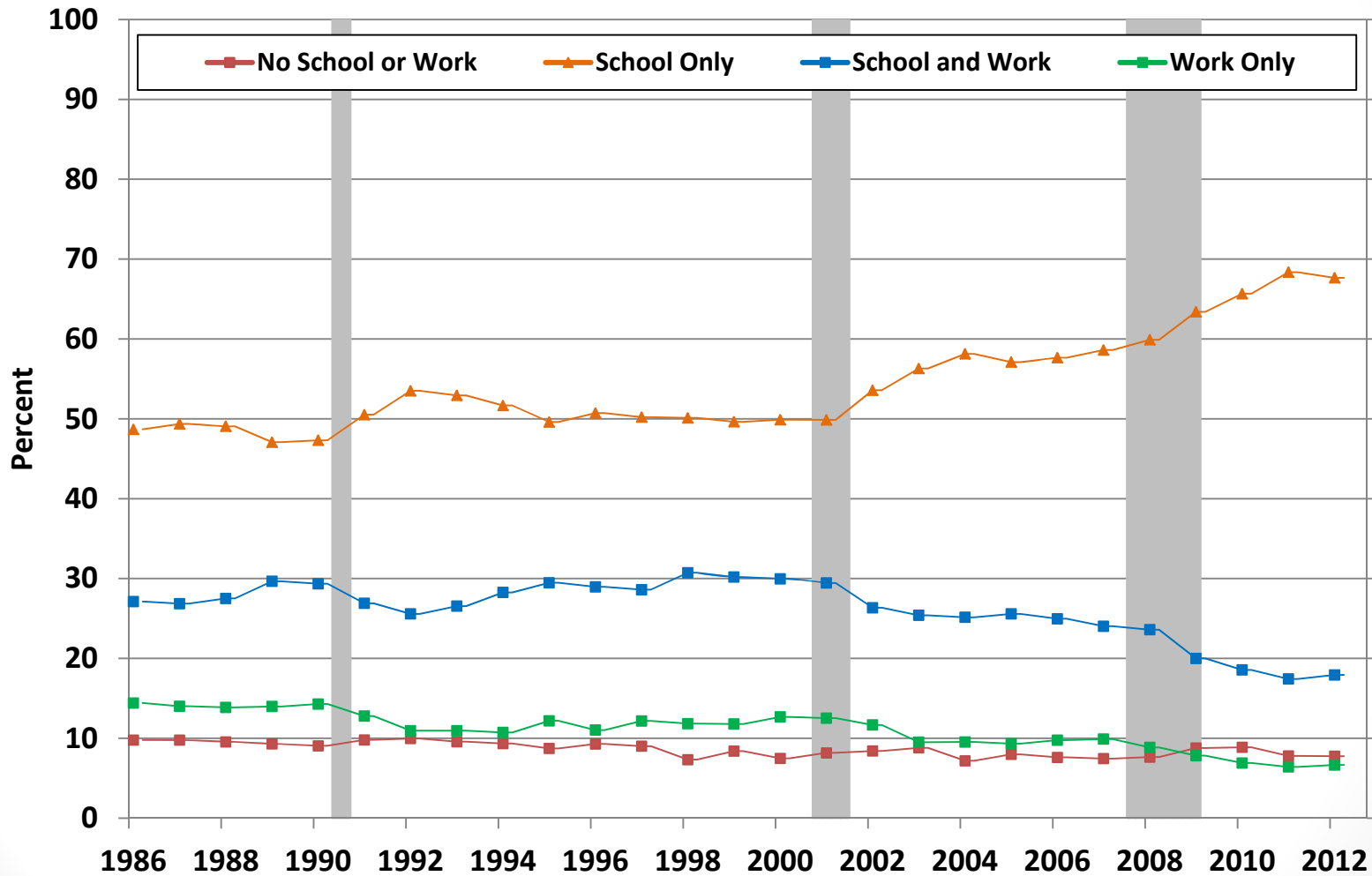
	2000	2006	2010	Percentage Point Difference	
				2000-2006	2006-2010
Employment-to-Population Ratio					
Teens: Aged 16-19 Years	41.2	35.4	27.5	-5.8	-7.9
Young Adults: Aged 20-24 Years	67.2	66.7	61.8	-0.5	-5.0
Labor Force Participation Rate					
Teens: Aged 16-19 Years	50.5	45.1	38.4	-5.4	-6.7
Young Adults: Aged 20-24 Years	74.9	75.2	73.8	0.3	-1.4
Unemployment Rate					
Teens: Aged 16-19 Years	18.4	21.4	28.4	3.0	7.0
Young Adults: Aged 20-24 Years	10.3	11.3	16.3	1.0	5.0
Share Enrolled in School					
Teens: Aged 16-19 Years	79.7	83.5	84.6	3.8	1.1
Young Adults: Aged 20-24 Years	35.5	40.0	42.3	4.5	2.4

Source: Authors' analysis of 2000 Decennial Census and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

Over Time, **Teens** Have Shifted Away from Combining Work And Schooling Towards Attending School Exclusively, but Idleness Has Not Increased.

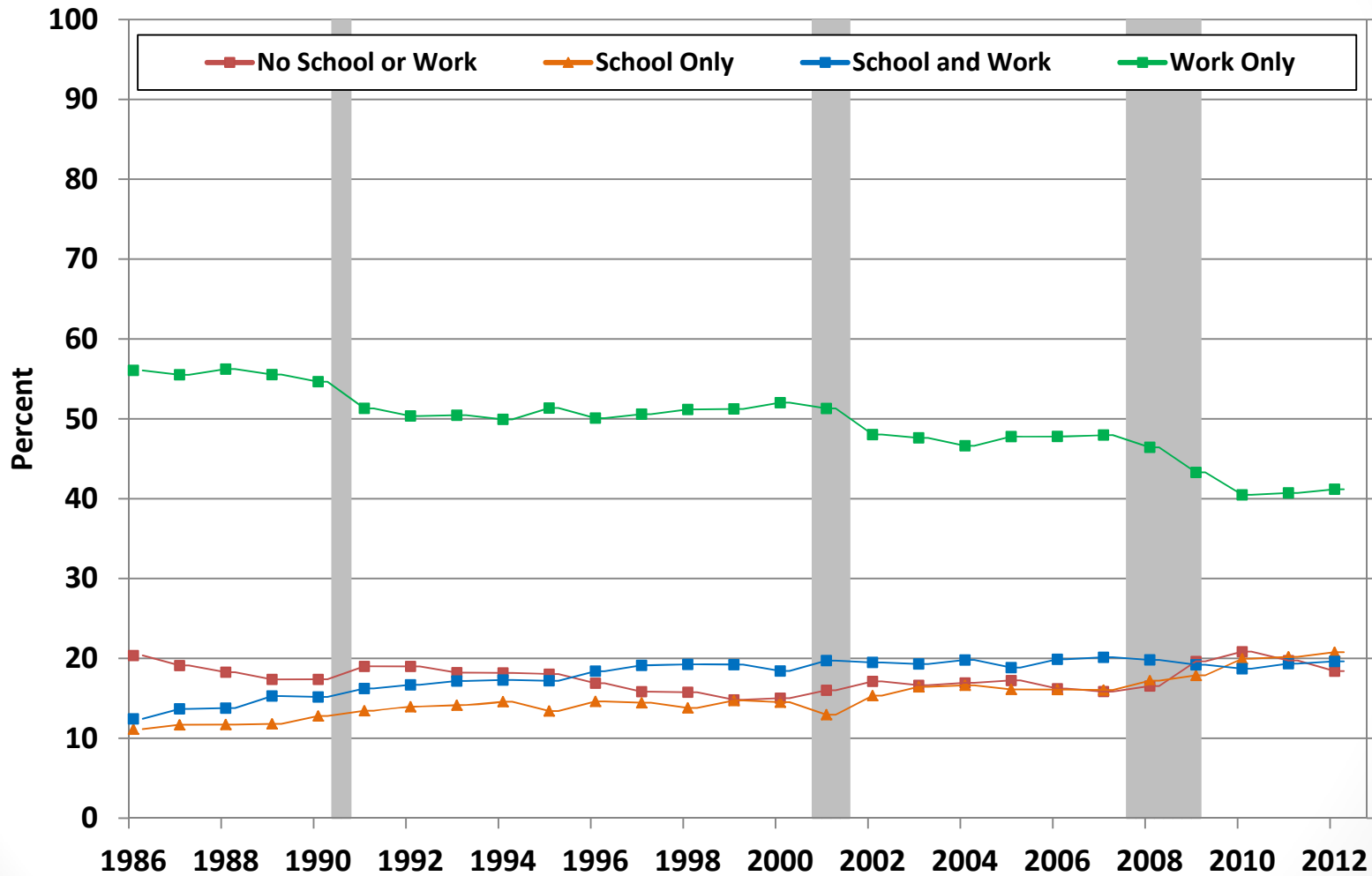
Trends among U.S. **Teens** Regarding Work, School, and Idleness, 1976–2012



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1986-2012.

Although **Young Adults** Have Shifted Away From Working Exclusively And Towards Attending School, There Is No Upward Trend in Idleness for This Group.

Trends among U.S. **Young Adults** Regarding Work, School, and Idleness, 1976–2012



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1986-2012.

Labor Market Attachment Fell Sharply for 16–19 Year Olds Even Prior to the Great Recession, but Was Fairly Steady for 20–24 Year Olds during That Period.

Changes in U.S. Youth Labor Market Attachment and School Enrollment

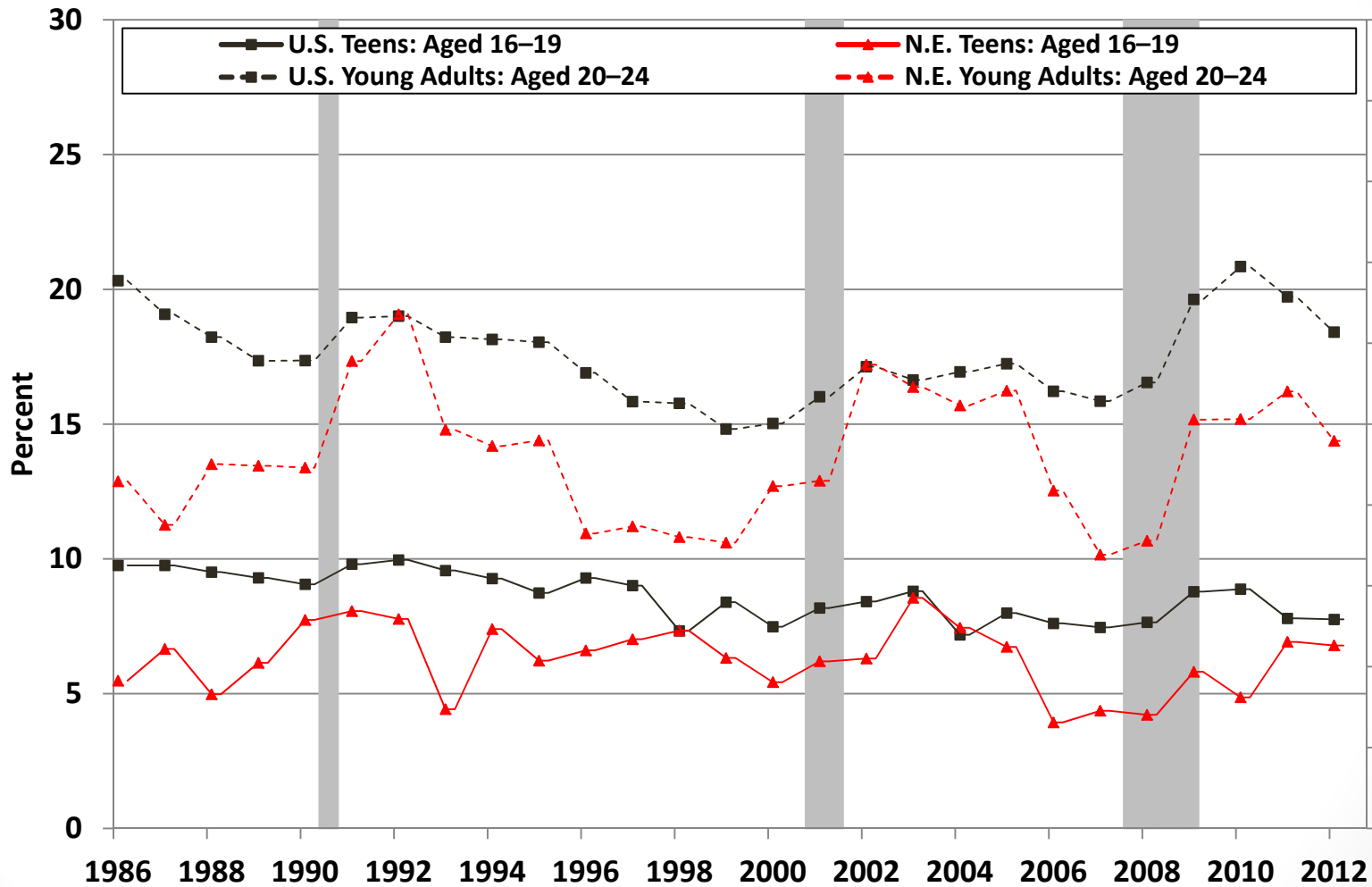
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Young Adults: Aged 20-24 Years	35.5	40.0	42.3	4.5	2.4
Share Not Enrolled in School , Not Working					
Teens: Aged 16-19 Years	9.0	7.9	8.7	-1.0	0.7
Young Adults: Aged 20-24 Years	18.7	17.2	19.4	-1.5	2.2

Source: Authors' analysis of 2000 Decennial Census and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

Idleness is typically lower in New England compared to the nation, although the gap generally narrows during recessions.

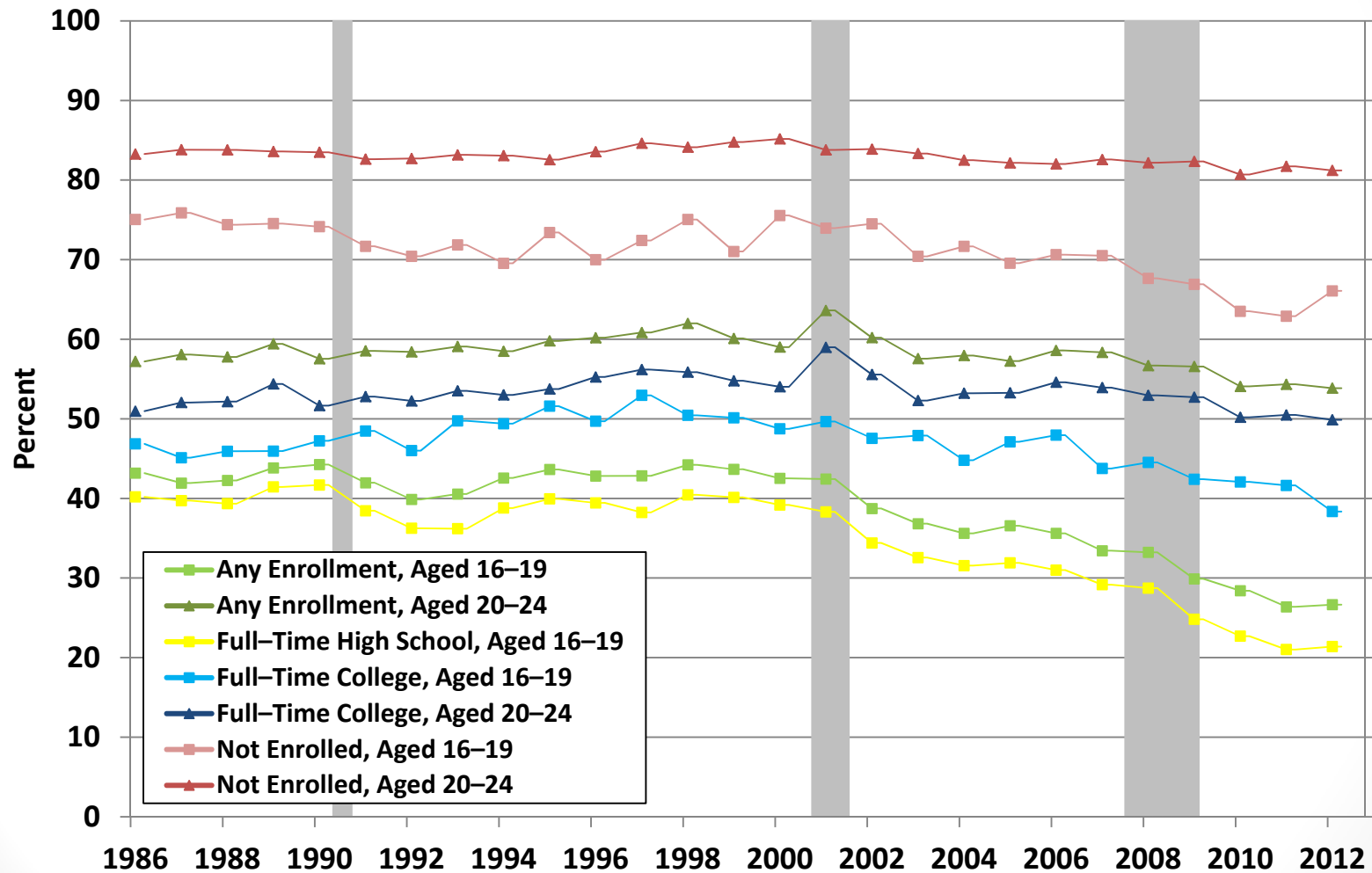
Idleness among Youth: Share Not Enrolled in School and Not Working, 1986–2012
United States vs. New England



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1986-2012.

Labor Force Participation among Youth Has Decreased **Regardless of School Enrollment**, Although More So for Those in School.

U.S. Youth Labor Force Participation Rate by School Enrollment



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1986-2012.

An Increasing Share of Youth Are Choosing to Attend School Rather Than Work. Yet the Share Reporting **Difficulty Entering the Labor Market Is Also Rising—Even Prior to the Great Recession.**

Changes in the Reasons for Labor Market Detachment among U.S. Youth

	Teens: Aged 16-19 Years			Young Adults: Aged 20-24 Years		
	2000	2006	2012	2000	2006	2012
Share Not in the Labor Force						
Wants a job	12.6	10.8	9.5	15.4	13.1	13.7
Does not Want a job	87.4	89.2	90.5	84.6	86.9	86.3
Reasons for Not Working Last Year						
Going to school	87.7	89.2	89.0	49.9	53.7	57.9
Could not find work	2.0	2.1	3.6	7.6	6.4	12.4
Taking care of home/family	5.4	4.6	3.2	26.8	25.3	16.9
Ill or disabled	2.0	2.0	2.2	7.2	7.9	7.8
Other	2.9	2.1	1.9	8.5	6.7	5.1
Reasons for Unemployment						
Entering Labor Force	22.3	36.8	54.8	5.6	7.6	16.2
Re-entering Labor Force	52.3	44.4	27.9	37.8	41.0	38.6
Job Loss	16.2	12.2	13.7	39.3	36.7	35.3
Left Job	9.3	6.6	3.7	17.3	14.7	9.8

Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 2000, 2006, and 2012.

Diagnosing the Problem: To What Degree Has Youth Labor Market Attachment Changed for Different Groups?

Hypothesis: Falling youth labor force participation is due to an increasing share of minorities who typically have lower levels of labor market attachment.

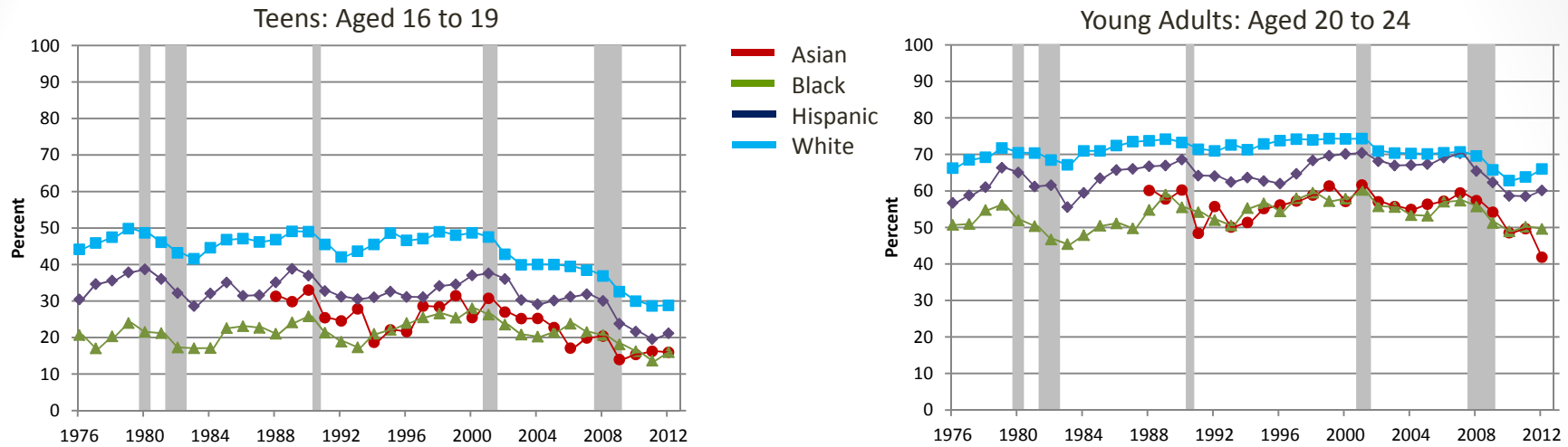
Findings:

- It is true that minorities have lower levels of labor force attachment.
- Yet decreasing labor force participation among youth is a **widespread phenomenon**.

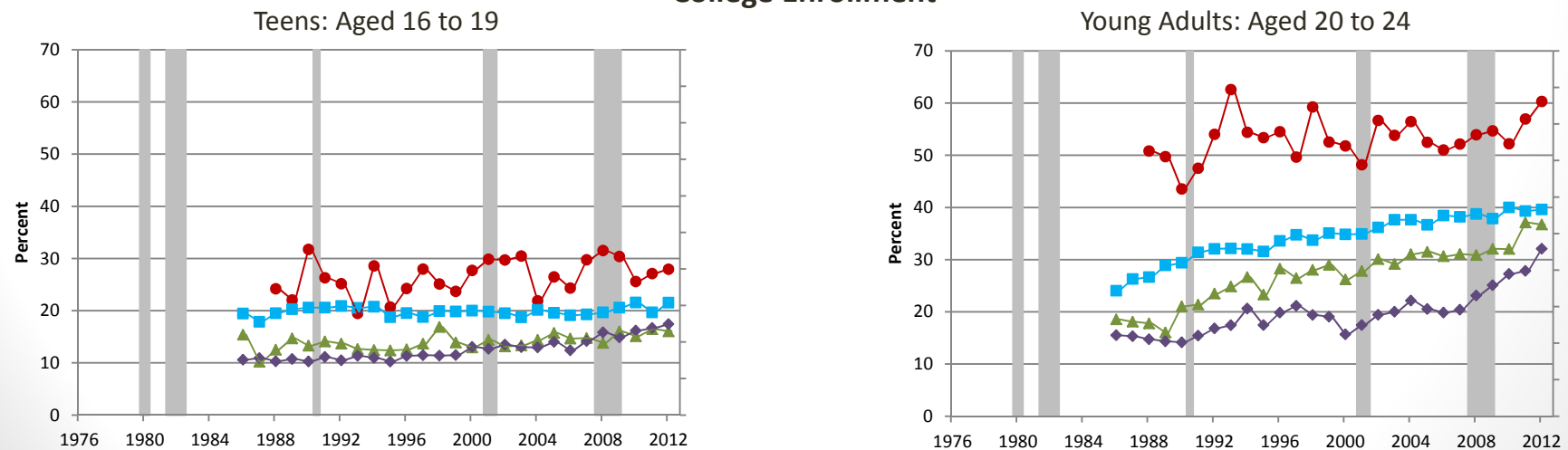
Minorities Have Lower Initial Levels of Labor Market Attachment. Yet Since 2000, Employment Has Fallen and College Enrollment Has Risen for All Groups.

Employment and College Enrollment among U.S. Youth by Race and Ethnicity, 1976–2012

Employment to Population Ratio



College Enrollment



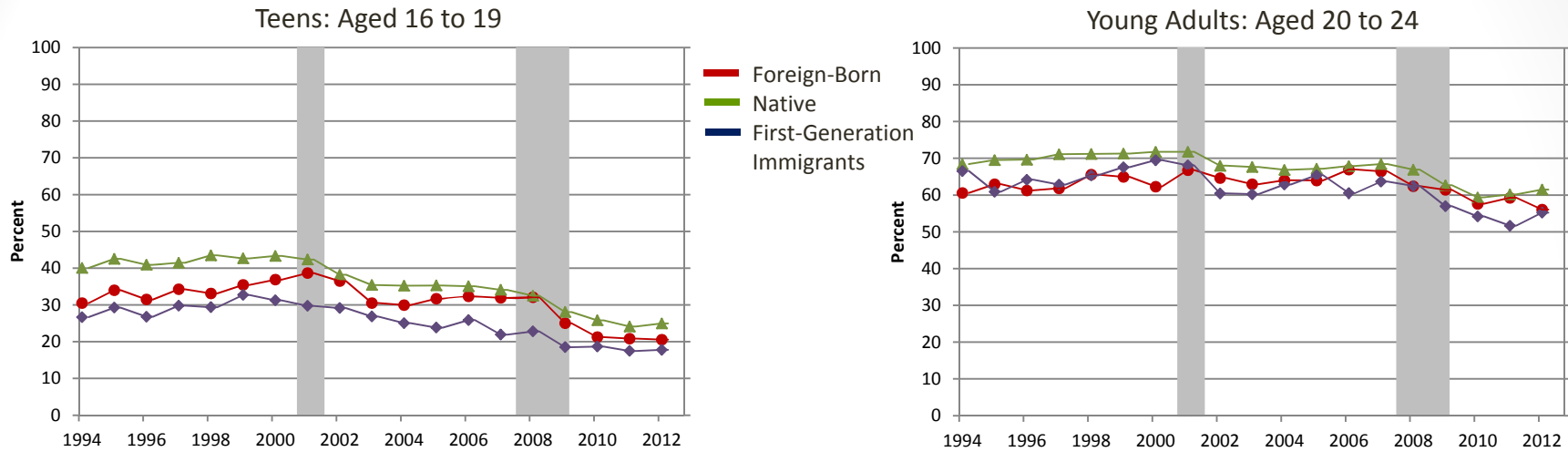
Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012

Note: CPS data on school enrollment not available prior to 1986. "Asian " race category not available prior to 1988.

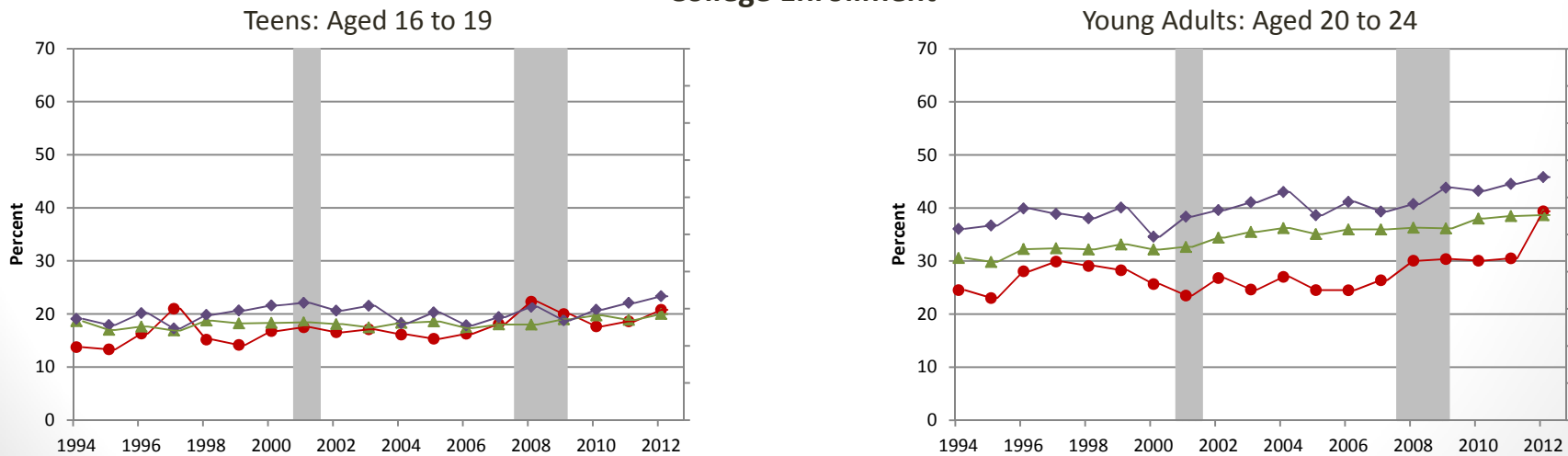
Since 2000, Foreign-Born Youth Have Seen Smaller Decreases in Employment and Larger Increase in College Enrollment, Narrowing the Gap with Natives.

Employment and College Enrollment among U.S. Youth by Nativity, 1994–2012

Employment to Population Ratio



College Enrollment



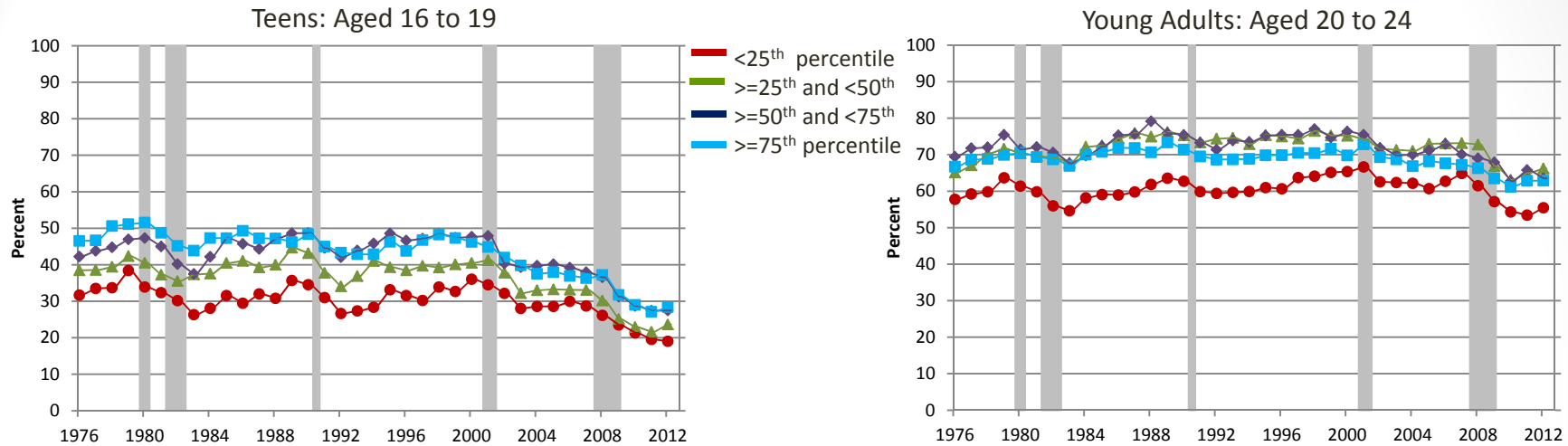
Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1994-2012

Note: CPS data on school enrollment not available prior to 1986. CPS data on nativity not available prior to 1994.

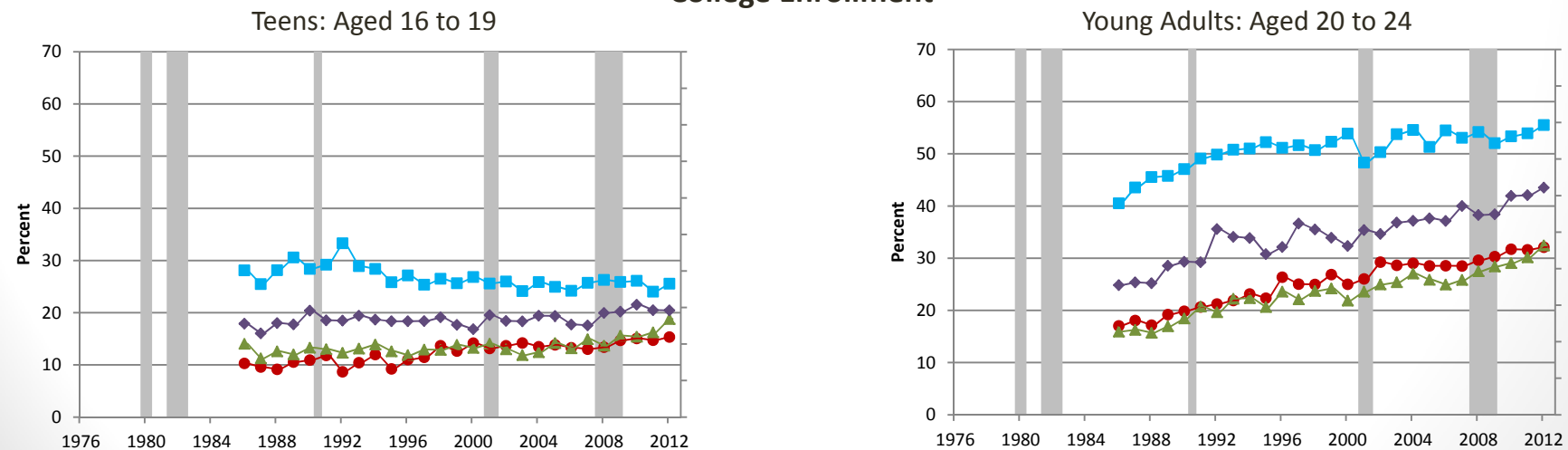
Despite Initial Differences, Trends in Employment and College Enrollment Were Fairly Similar Across Family Income Quartiles between 2000 and 2006.

Employment and College Enrollment among U.S. Youth by Family Income Quartile, 1976–2012

Employment to Population Ratio



College Enrollment



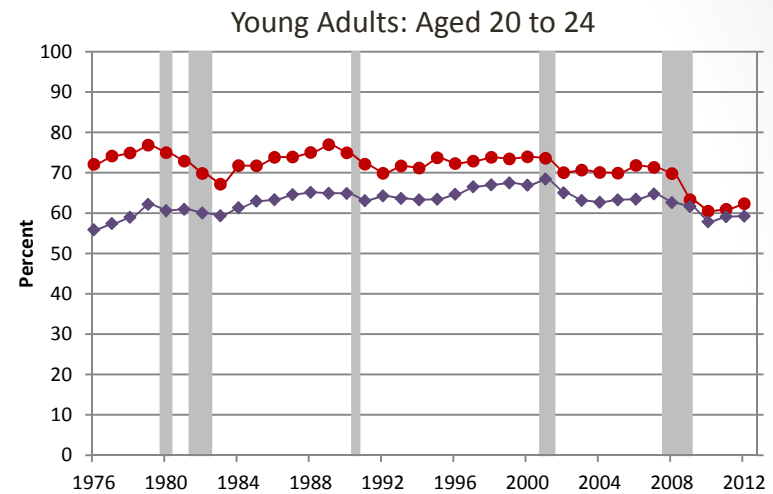
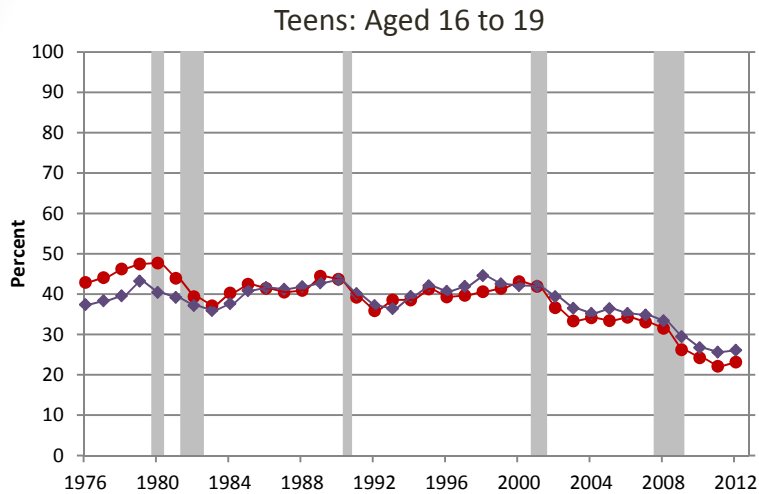
Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012

Note: CPS data on school enrollment not available prior to 1986.

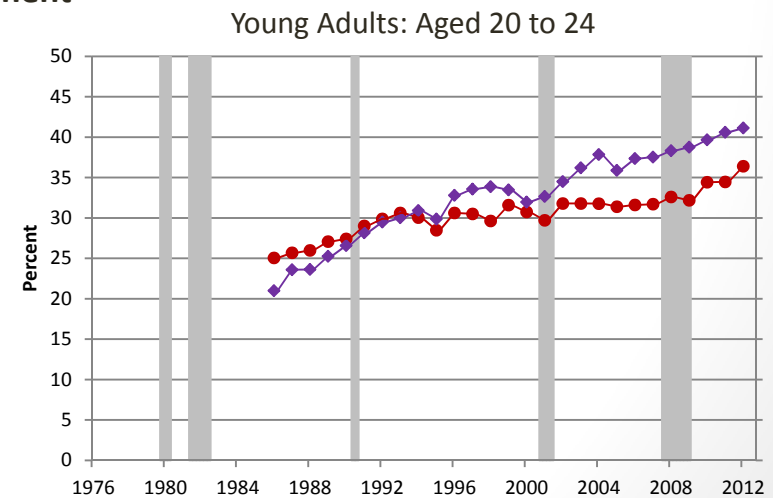
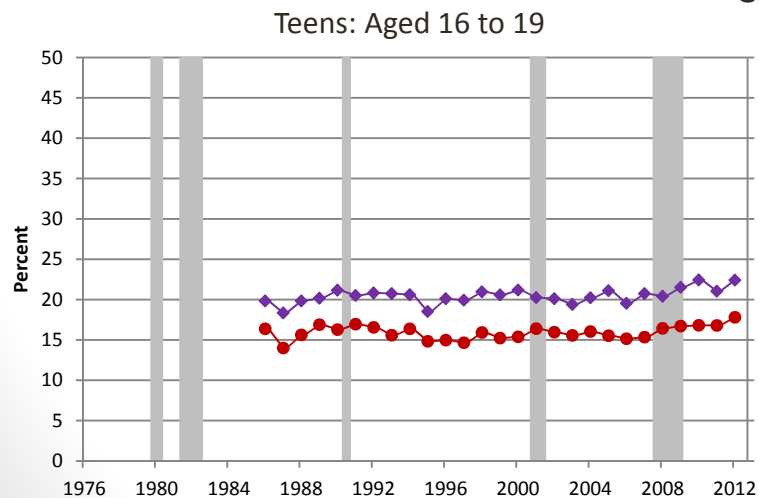
Labor force Attachment Decreased More for Males, While College Enrollment Increased More for Females—Particularly among Youth Aged 20 to 24.

Employment and College Enrollment among U.S. Youth by Gender, 1976–2012

Employment to Population Ratio



College Enrollment



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012

Note: CPS data on school enrollment not available prior to 1986.

More Detailed Breakdowns Reveal That Groups Undergoing the Greatest Labor Market Declines Experienced Slower Increases in School Enrollment.

Changes in Labor Market Measures for U.S. **Teens** by Demographic Group, 1990–2010

	Percent			Percentage Point Difference	
	2000	2006	2010	2000-2006	2006-2010
Employment to Population Ratio					
White native males	45.8	38.6	29.8	-7.1	-8.8
White native females	47.4	41.8	34.9	-5.6	-6.9
Black native males	26.2	21.9	16.0	-4.3	-5.9
Black native females	30.0	26.3	20.4	-3.8	-5.9
Hispanic males	39.9	35.0	25.0	-4.9	-10.0
Hispanic females	32.7	29.6	23.8	-3.2	-5.8
Share Enrolled in School					
White native males	81.4	84.5	85.1	3.1	0.6
White native females	83.6	87.4	88.1	3.8	0.7
Black native males	75.7	78.9	79.8	3.2	0.9
Black native females	79.0	82.3	83.9	3.3	1.5
Hispanic males	64.5	72.0	77.1	7.5	5.1
Hispanic females	71.9	78.1	81.8	6.2	3.7
Share Not Enrolled in School, Not Working					
White native males	6.2	6.1	7.5	-0.1	1.4
White native females	6.6	5.7	6.1	-0.9	0.4
Black native males	15.8	14.5	15.1	-1.3	0.6
Black native females	12.7	11.1	11.1	-1.6	-0.1
Hispanic males	14.1	10.7	11.4	-3.5	0.7
Hispanic females	16.7	12.9	11.3	-3.8	-1.5

Source: Authors' analysis of 2000 Decennial Census and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

Idleness among 20–24 Year Olds Increased Significantly for Most Groups during the Great Recession, but Only Increased for **Native White Males** Prior to That.

Changes in Labor Market Measures for U.S. **Young Adults** by Demographic Group, 1990–2010

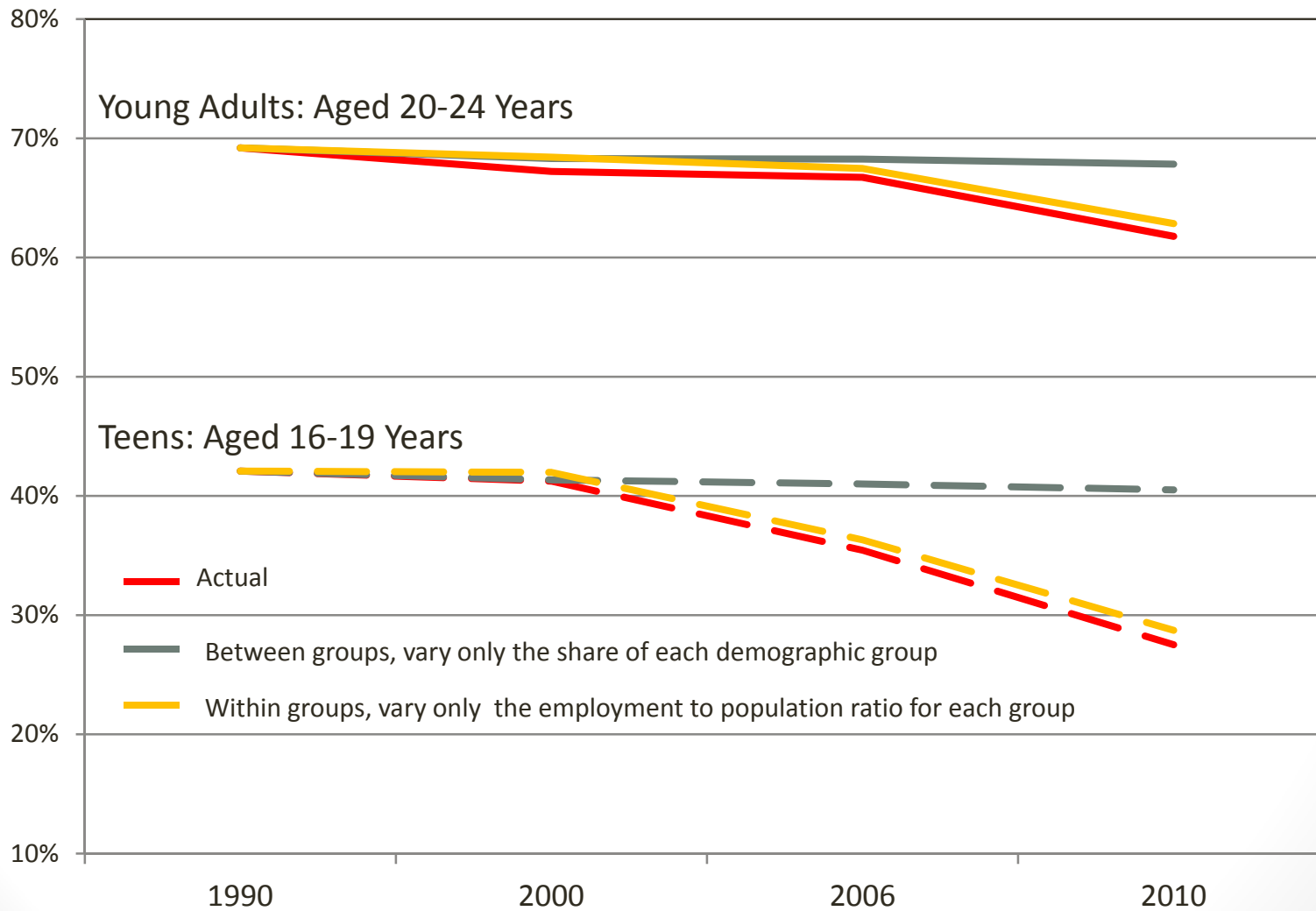
	Percent			Percentage Point Difference	
	2000	2006	2010	2000-2006	2006-2010
Employment to Population Ratio					
White native males	75.3	71.7	65.7	-3.6	-6.0
White native females	71.0	69.7	66.9	-1.3	-2.8
Black native males	49.9	51.8	44.9	1.9	-6.9
Black native females	57.2	57.8	53.4	0.6	-4.4
Hispanic males	68.6	74.5	67.1	6.0	-7.4
Hispanic females	52.5	57.5	56.7	5.0	-0.8
Share Enrolled in School					
White native males	35.7	40.0	41.3	4.3	1.3
White native females	39.6	46.3	48.5	6.7	2.2
Black native males	27.1	29.4	31.9	2.3	2.4
Black native females	32.9	37.5	42.6	4.5	5.1
Hispanic males	20.9	22.4	26.9	1.5	4.4
Hispanic females	27.5	32.3	36.2	4.8	3.9
Share Not Enrolled in School, Not Working					
White native males	11.1	12.2	15.8	1.1	3.7
White native females	15.6	14.4	15.0	-1.3	0.6
Black native males	35.3	33.1	37.1	-2.2	4.0
Black native females	28.3	25.8	26.0	-2.4	0.2
Hispanic males	23.0	16.6	20.8	-6.3	4.2
Hispanic females	36.4	29.9	27.9	-6.4	-2.1

Source: Authors' analysis of 2000 Decennial Census and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

Despite These Differences, Falling Youth Labor Market Attachment Is the Result of Changes **within** Demographic Groups, Not Changes in the Composition of the Youth Population.

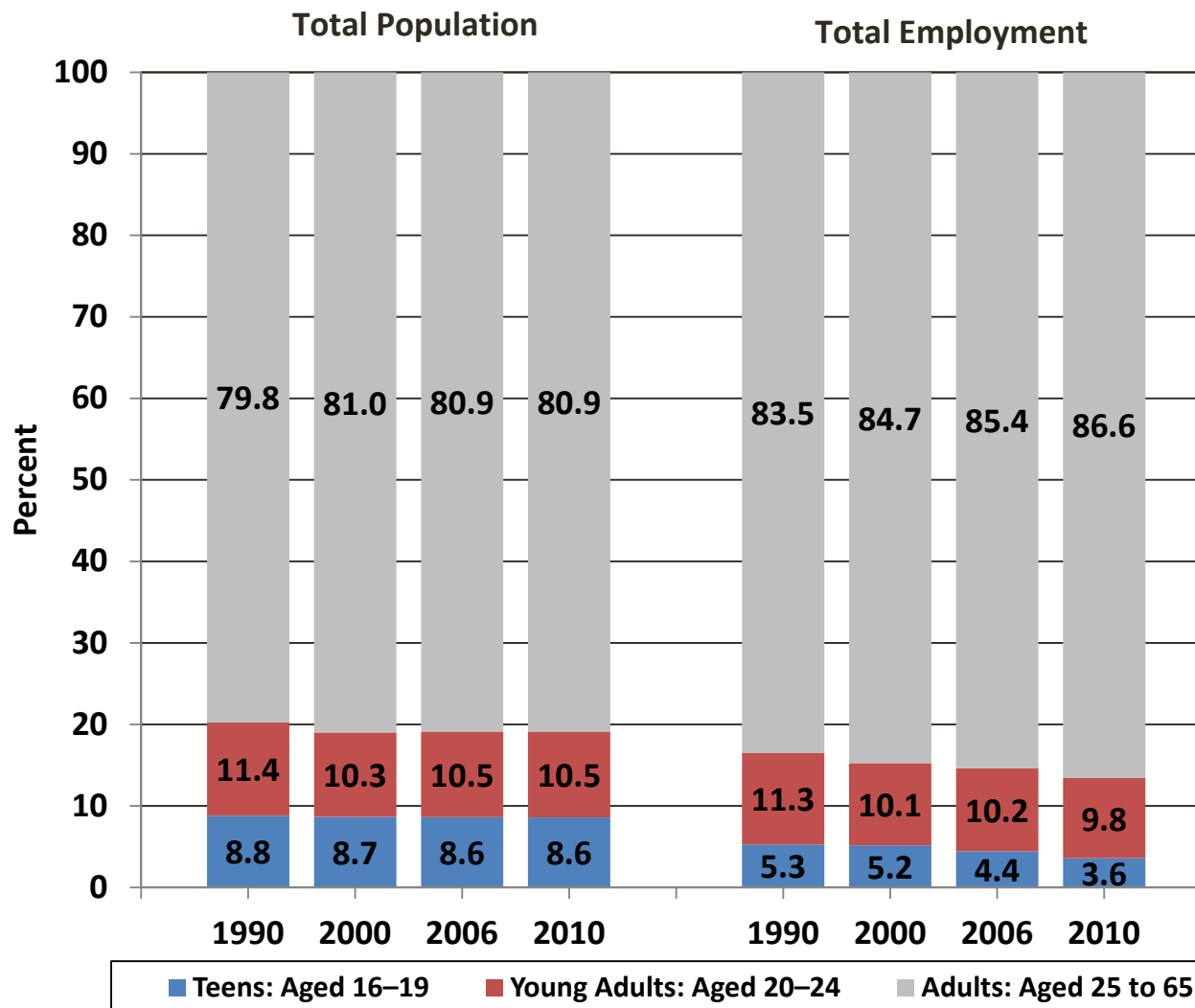
Shift Share Analysis of Change in Employment to Population Ratio for U.S. Youth, 1990–2010



Source: Authors' analysis of Decennial Census (1990; 2000) and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)
 Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

The Teen Employment Share Fell Disproportionately Relative to Their Population Share between 2000 and 2010

U.S. Population and Employment Shares by Age Group, 1990–2010



Source: Authors' analysis of Decennial Census (1990; 2000) and ACS 3-year (2005–2007; 2009–2011) Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 and 2010 are derived from the 2005–2007 and 2009–2011 ACS 3-year PUMS respectively.

Determining the Factors: How Have Shifts in Employment Across Industries and Occupations Affected Youth?

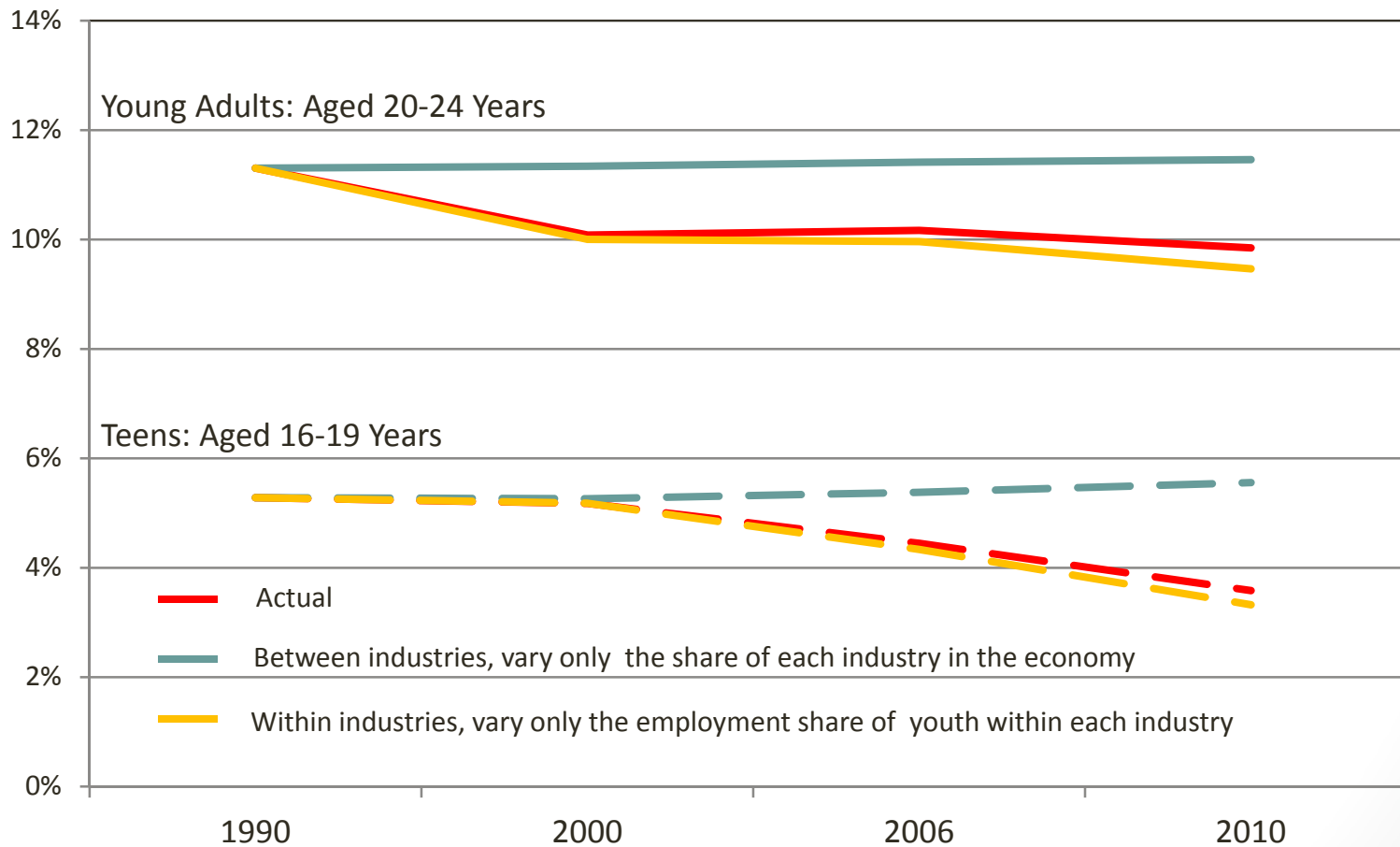
Hypothesis: Labor demand has shifted away from routine work and towards jobs that require technical skills or post-secondary training. Current education and workforce institutions have not provided youth with the relevant skills to obtain employment.

Findings:

- The overall decline in youth employment does not simply reflect the decline of large industry or occupation groups but rather a **shift away from employing youth** within most industries and occupations.
- It appears that the Great Recession, while having a negative impact on employment for all youth, has also **exacerbated these long-run structural trends** for 16-19 year olds.

The Decline in the Share of Employment for Youth Is Entirely due to Lower Employment of Youth Workers **within** Industries and Occupations Over Time— NOT Shifts across Industries and Occupations.

Industry Shift Share Analysis of U.S. Youth Employment Share, 1990–2010



Source: Authors' analysis of Decennial Census (1990; 2000) and ACS 3-year (2005-2007; 2009-2011) Public Use Microdata Samples (IPUMS-USA)
 Note: Reported values for 2006 and 2010 are derived from the 2005-2007 and 2009-2011 ACS 3-year PUMS respectively.

Among teens, industries that typically employ 16-19 year olds were largely growing during this period, not shrinking.

Industry Breakdown of U.S. **Teen** Employment, 2000–2006

	Percent of Teens Employed in 2000	Teen Share as a Percent of Total Employment		Percent Change in Employment 2000-2006	
		2000	2006	Teens	All Workers
All industries	100	5.2	4.4	-7.6	7.7
Top Teen Industries	86.7	7.3	6.2	-4.9	12.1
Teen share falling between 2000 and 2006	80.0	7.2	6.0	-7.5	12.3
Decreasing share of the economy	28.9	6.5	4.9	-25.3	-0.9
Increasing share of the economy	51.1	7.8	6.6	2.5	21.3
Teen share increasing between 2000 and 2006	6.6	8.9	10.3	26.4	8.7
Decreasing share of the economy	2.5	8.3	9.1	-7.4	-15.4
Increasing share of the economy	4.1	9.3	10.9	47.0	25.1

Source: Authors' analysis of 2000 Decennial Census and 2005-2007 ACS 3-year Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 are derived from the 2005-2007 ACS 3-year PUMS

In Contrast, Changes in Employment Shares for **20–24 Year Olds** Were More Similar to That for All Workers between 2000 and 2006.

Industry Breakdown of U.S. **Young Adult** Employment, 2000–2006

	Percent of Young Adults Employed in 2000	Young Adult Share as a Percent of Total Employment		Percent Change in Employment 2000-2006	
		2000	2006	Young Adults	All Workers
All industries	100	10.1	10.2	8.6	7.7
Top Young Adult Industries	83.2	11.0	11.2	12.7	11.2
Young Adult share falling between 2000 and 2006	44.6	9.5	8.8	2.8	10.8
Decreasing share of the economy	20.8	8.4	7.6	-10.0	-1.1
Increasing share of the economy	23.8	10.7	9.8	14.0	23.9
Young Adult share increasing between 2000 and 2006	38.6	13.7	15.2	24.2	11.8
Decreasing share of the economy	13.8	14.4	15.6	2.4	-5.7
Increasing share of the economy	24.8	13.3	15.1	36.4	20.8

Source: Authors' analysis of 2000 Decennial Census and 2005-2007 ACS 3-year Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 are derived from the 2005-2007 ACS 3-year PUMS

There are few industries where teens are an increasing share of employment, and where that industry is increasing as a share of the economy.

Detailed **Industry** Breakdown by Change in U.S. **Teen** Employment Share, 2000–2006

Industries with FALLING Youth Employment Share	Industries with RISING Youth Employment Share
DECREASING share of the economy	DECREASING share of the economy
Grocery stores Video tape rental Book and stationery stores Retail trade, n.s. Department stores Automotive repair and related services Business services, n.e.c. Agricultural production, livestock	Radio, TV, and computer stores Bowling centers Fishing, hunting, and trapping
INCREASING share of the economy	INCREASING share of the economy
Eating and drinking places Apparel and accessory stores, except shoe Drug stores Shoe stores Sporting goods, bicycles, and hobby stores Theaters and motion pictures Hotels and motels Nursing and personal care facilities Landscape and horticultural services Miscellaneous personal services Gasoline service stations Motor vehicle dealers Lumber and building material retailing	Miscellaneous entertainment and recreation services Museums, art galleries, and zoos Lodging places, except hotels and motels Private households Miscellaneous professional and related services Miscellaneous vehicle dealers

Source: Authors' analysis of 2000 Decennial Census and 2005-2007 ACS 3-year Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 are derived from the 2005-2007 ACS 3-year PUMS

These trends are observed even within detailed **occupation** categories.

Detailed Occupation Breakdown by Change in U.S. Teen Employment Share, 2000–2006

Occupations with FALLING Youth Employment Share	Occupations with RISING Youth Employment Share
DECREASING share of the economy	DECREASING share of the economy
Retail sales clerks	Ushers
Salespersons, n.e.c.	Engravers
General office clerks	Proofreaders
Bank tellers	Drilling and boring machine operators
Data entry keyers	
Kitchen workers	
Automobile mechanics	
Vehicle washers and equipment cleaners	
Assemblers of electrical equipment	
Machine operators, n.e.c.	
INCREASING share of the economy	INCREASING share of the economy
Cashiers	Recreation workers
Stock and inventory clerks	Guides
Receptionists	Sales demonstrators / promoters / models
File clerks	Athletes, sports instructors, and officials
Cooks, variously defined	Protective services, n.e.c.
Waiter/waitress	
Waiter's assistant	
Misc food prep workers	
Housekeepers, maids, butlers, stewards	
Janitors	
Gardeners and groundskeepers	
Laborers outside construction	
Construction laborers	
Carpenters	
Nursing aides, orderlies, and attendants	
Health aides, except nursing	
Farm workers	

Source: Authors' analysis of 2000 Decennial Census and 2005-2007 ACS 3-year Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 are derived from the 2005-2007 ACS 3-year PUMS

Surprisingly, Many 20–24 Year Olds Have Found Employment in Those Very Same Occupations That Have Shed 16–19 Year Olds.

Youth share FALLING between 2000 and 2006	Youth Employment Growth: Percent Change 2000-2006		Youth Share of Employment: Percentage Point Change 2000-2006	
	Teens	Young Adults	Teens	Young Adults
Occupations that are a DECREASING share of the economy				
Bank tellers	-19.8	20.1	-2.4	3.7
Garage and service station related occupations	-32.7	24.3	-9.6	4.0
Kitchen workers	-35.3	13.4	-9.9	4.5
Motion picture projectionists	-21.0	27.9	-7.3	7.0
Photographic process workers	-33.9	7.9	-2.5	5.7
Retail sales clerks	-17.3	17.1	-2.7	3.0
Occupations that are an INCREASING share of the economy				
Cashiers	4.0	34.9	-2.8	3.4
Cooks, variously defined	-12.1	25.6	-4.0	1.3
Dental laboratory and medical appliance technicians	-8.8	57.6	-1.8	2.4
Hotel clerks	-21.7	23.8	-4.1	2.5
Misc food prep workers	14.1	62.0	-4.0	3.9
Nursing aides, orderlies, and attendants	-3.0	43.1	-1.1	0.9
Parking lot attendants	5.7	41.4	-3.2	1.2
Personal service occupations, nec	36.4	76.5	-2.8	3.1
Waiter/waitress	2.1	36.8	-3.3	4.3

Source: Authors' analysis of 2000 Decennial Census and 2005-2007 ACS 3-year Public Use Microdata Samples (IPUMS-USA)

Note: Reported values for 2006 are derived from the 2005-2007 ACS 3-year PUMS

Relative to All Workers, It Appears That Youth Jobs Were Disproportionately Located in Industries Showing Structural Gains during the Great Recession Suggesting That Workers May Need to Acquire New Skills.

Share of U.S. Employment in Industries Undergoing Structural Versus Cyclical Changes during the Great Recession, 2007–2013

	Share of Peak Employment (percent) for:		
	All Workers	16-19 Year Olds	20-24 Year Olds
GREAT RECESSION			
Total Nonfarm Peak Employment	100.0	100.0	100.0
Procyclical Industries	19.6	19.0	21.5
Countercyclical Industries	30.3	18.5	21.4
Industries with Structural Loss	20.2	12.1	19.1
Industries with Structural Gain	29.9	50.4	38.0
Sum of structural changes	50.0	62.5	57.1

Assessing the Consequences: Do Low Levels of Labor Market Attachment Among Youth Persisted Over Their Careers?

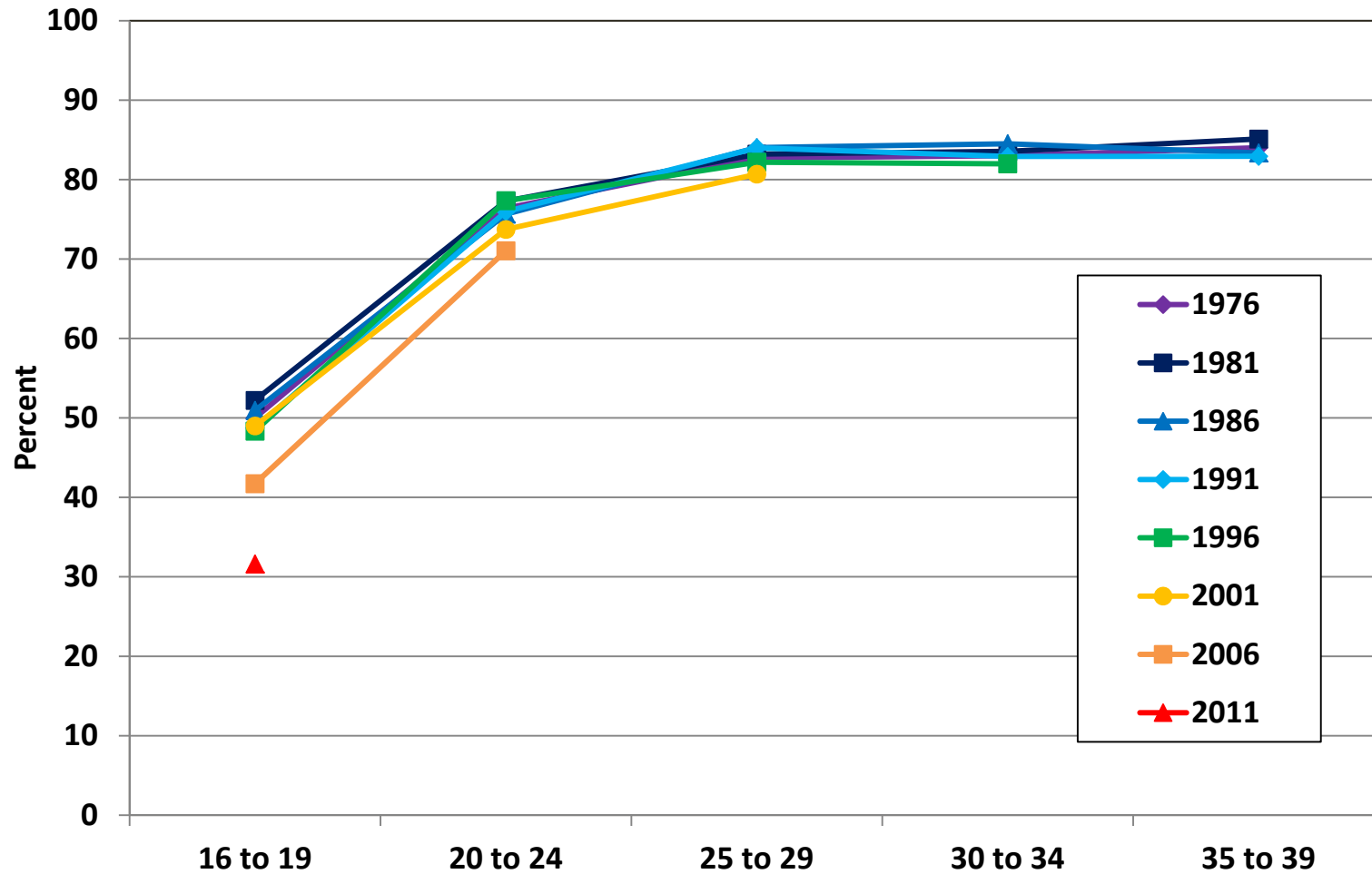
Hypothesis: Current youth are entering the labor market with lower levels of attachment that may persist over their lifetimes.

Findings:

- It is true that more recent cohorts are entering the labor force with lower labor force attachment and higher school enrollment compared to previous cohorts.
- Some, but not all, demographic groups appear to be **investing in their education** and simply delaying their entry into the labor market.
- Yet, **degree completion is low** at two-year institutions where enrollment has increased most rapidly.

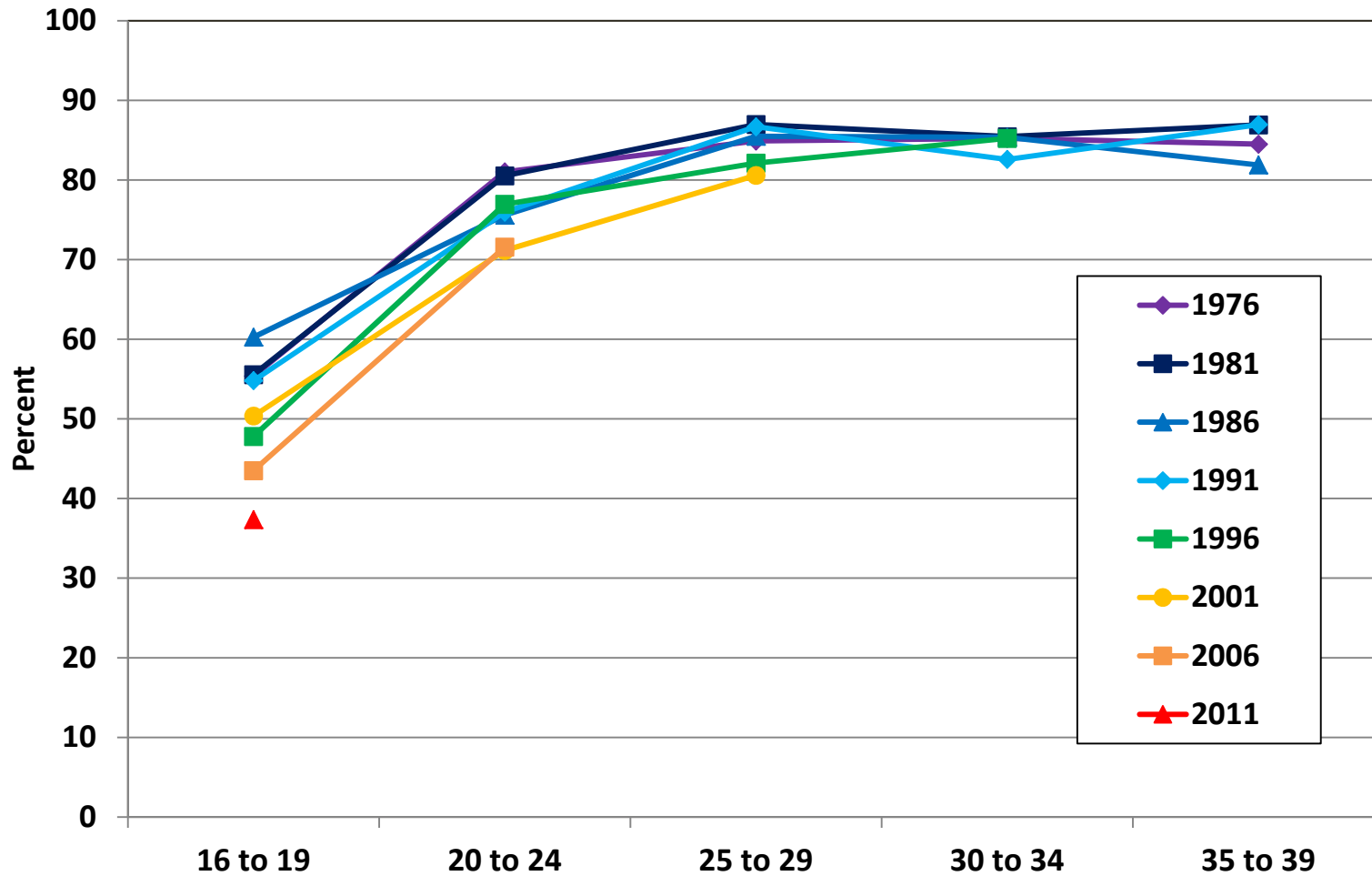
More Recent Cohorts Are Entering the Labor Force with Lower Levels of Participation Compared to Earlier Cohorts—Even Prior to the Great Recession.

Cohort Analysis of Labor Force Participation for U.S. Youth over Time



The Decrease in Labor Market Attachment Across Youth Cohorts Has Been Greater in **New England** and Began Earlier Relative to the U.S.

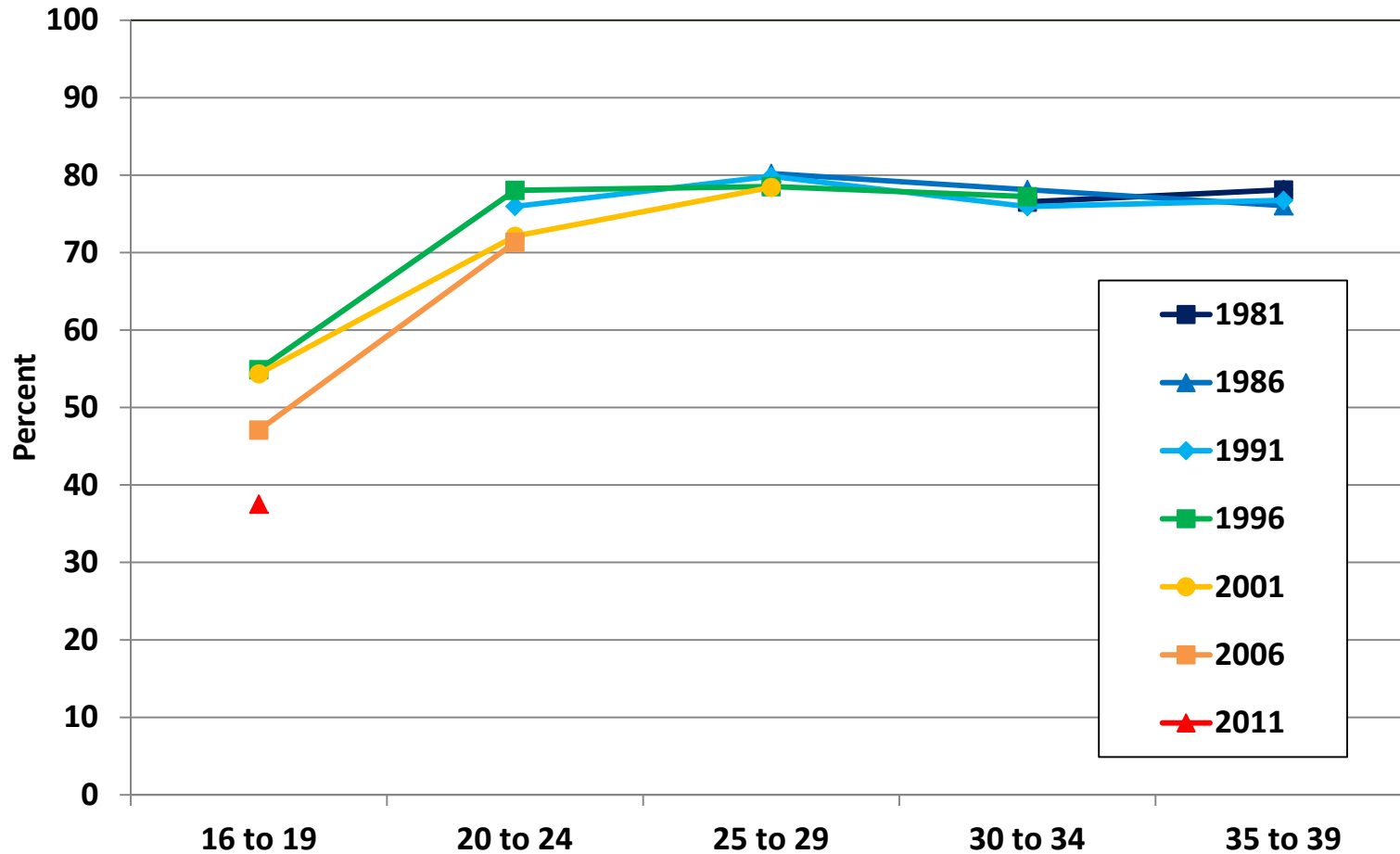
Cohort Analysis of Labor Force Participation for **New England** Youth over Time



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012
Note: CPS data on nativity not available prior to 1994

Demographic Groups with Sharp Increases in School Enrollment Appear To Be Investing in Education and Simply Delaying Entry into the Labor Market.

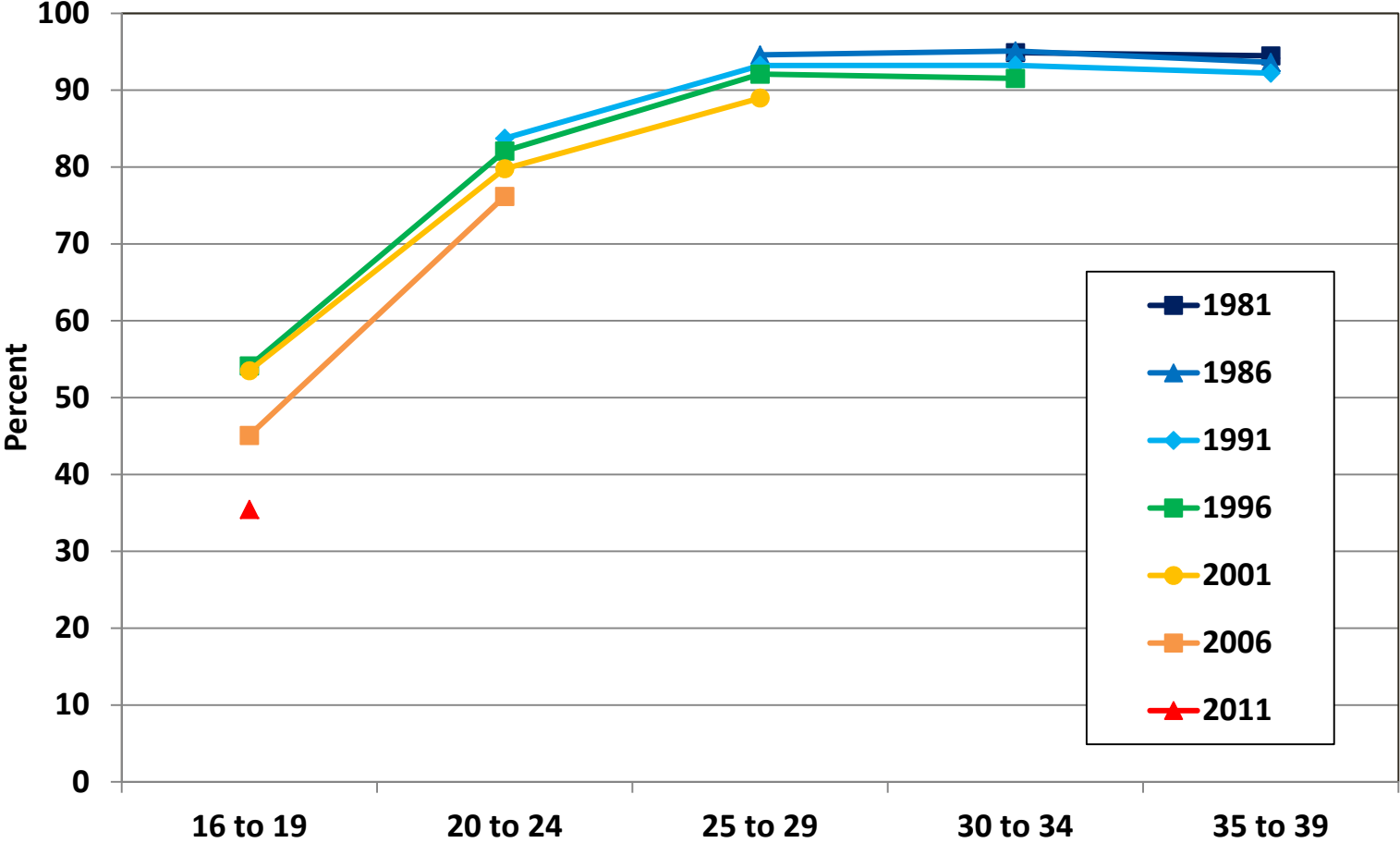
Cohort Analysis of Labor Force Participation for U.S. Youth over Time Native White Female



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012
Note: CPS data on nativity not available prior to 1994

Other Demographic Groups—Experiencing Slower Increases in Schooling— Appear to **Lag Behind** Earlier Cohorts As They Move through the Lifecycle.

Cohort Analysis of Labor Force Participation for U.S. Youth over Time Native White Male



Source: Authors' analysis of Current Population Survey Data (IPUMS-CPS), March 1976-2012
Note: CPS data on nativity not available prior to 1994

Conclusion: Future Uncertainty for America's Youth

- While all U.S. youth have been affected by the Great Recession, **teens experienced a decline in labor force attachment** even prior to the most recent downturn
- As a result of rising school enrollment, **youth did not become increasingly idle** prior to the Great Recession despite the sharp decrease in labor force attachment.
- The **shifting composition of the youth population** in the United States towards greater shares of minority, immigrant, and low-income groups does not account for the observed decline in youth labor market attachment since 2000
- The U.S. economy is **employing fewer teens within almost all industries and occupations**—whether these sectors are growing or declining as a share of total employment.
- The Great Recession appears to have **reinforced the pre-existing trends** that were observed among youth for the 2000 to 2006 period leading up to the recession.
- It remains to be seen whether the effects of this most recent and severe downturn will **persist as today's youth progress through their working lives.**

Discussion: Policy Implications

- One striking pattern that has emerged from these findings is the different labor market experiences of teens versus young adults. This result suggests that separate policy approaches are required to address the varying needs of these two groups.
 - For young adults, virtually all of the decrease in labor force attachment occurred during the Great Recession. Lost Generation?
 - For teens, it is not clear that the large and ongoing decline in labor force attachment will reverse itself as the economy continues to recover.
- Further research seems warranted to better understand the factors underlying the decline in labor force attachment among teens and ultimately inform policymakers as to the most effective course of action.
 - For some groups the observed decline in labor force attachment may simply reflect a temporary delay in entering the workforce while investing in additional human capital, although the success of that pathway is not guaranteed.
 - Of greater concern is the apparent difficulty that noncollege-bound youth have in transitioning to the labor market.