

Young Workers in Nonstandard Work Arrangements, 2005–2017

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Executive Summary

Nonstandard or alternative employment relations refer to employment by a temporary help agency or contract company or as an on-call worker or day laborer. We refer to these nonstandard employment relations (which involve an employer and employee) plus independent contracting collectively as nonstandard or alternative work arrangements in this report. Contingent workers are workers who do not expect their job to last or who report that their jobs are temporary. Contingent workers and workers in alternative work arrangements are measured separately. Both have become increasingly prominent in theoretical and policy thinking about how employment has changed in recent years in the United States and other postindustrial countries. The reason for that prominence is because of a subset of independent contractors, the gig worker. As this report clarifies, gig work is a type of independent contractor whose work is mediated by electronic platforms such as Uber, GrubHub, or TaskRabbit.

Information on the extent of nonstandard work arrangements, and how they have changed during the past several decades, has only recently been available. The May 2017 Contingent Worker Supplement (CWS) — conducted by the Bureau of Labor Statistics (BLS) 12 years after the last CWS and 22 years after the first — provides an opportunity to examine how contingent work and nonstandard work arrangements have changed over the last two-plus decades. In-depth analyses of these changes between 2005 and 2017 were provided in a report by Eileen Appelbaum, Arne Kalleberg, and Hye Jin Rho.¹ The report, "Nonstandard Work Arrangements and Older Americans, 2005-2017," was released jointly by the Center for Economic and Policy Research and the Economic Policy Institute. This report will build on the earlier analysis with special attention to how younger workers, ages 21 to 25, with a college degree and with less than a college degree, have fared.

Major Findings

- Total employment growth for young workers, ages 21-25, with a college degree was 36.3 percent, while employment growth for those without a degree was only 5.0 percent.²
- A majority of young workers, ages 21–25, with and without a college degree, are in standard work arrangements. Between 2005 and 2017, the share of young workers in standard work arrangements with a college degree increased from 94.1 to 95.4 percent. Contrary to

¹ Appelbaum, Kalleberg and Rho (2019).

² This figure was updated June 28, 2019. A previous version miscalculated the growth rate of total employment for young workers with a college degree (the growth rate was corrected from 3.6 percent to 36.3 percent).

common expectations, young workers are more likely to hold such jobs compared to the workforce as a whole.

- The share of young workers employed as independent contractors fell to 2.1 from 2.6 for college degree holders and fell to 2.7 from 3.1 percent for noncollege graduates. Gig economy workers are a subset of independent contractors.
- Young college educated workers are more likely than other workers to hold multiple jobs.
 The share with multiple jobs was higher in 2017 for both young independent contractors and contingent workers with college degrees.
- Young workers (both with and without college degrees) are more likely to be in contingent jobs than the overall workforce. While the share remained relatively constant since 2005, young college educated contingent workers in 2017 are more likely to be women. The share of women in contingent jobs rose to 8.2 from 6.3 between 2005 and 2017, while the share of men fell to 7.4 from 9.8 in the same period.
- Data from BLS show that only 1.0 percent of young workers engaged in electronically mediated (gig) work in May 2017. The sample size is too small to accurately analyze for any other trends.
- As expected, young workers with a college degree earn more on average than those without a degree. Between 2005 and 2017, young workers in traditional jobs with a college degree and working as independent contractors saw their real median weekly earnings decline from \$736 to \$720 and from \$871 to \$692, respectively. While noncollege grads experienced a modest increase in wages in traditional jobs, increasing from \$503 to \$526, earnings in independent contract work declined from \$629 to \$500, as well as contingent work, more generally, from \$503 to \$480.
- Young workers, both with and without a college degree, were more likely to have health
 insurance in 2017 than in 2005. However, younger workers with a degree experienced the
 most substantial improvement and were more likely in 2017 to have coverage than the
 workforce as a whole, while noncollege degree holders were less likely to have coverage by
 comparison.

Introduction

Nonstandard employment relations — that is, temporary help agency and contract company employment, and employment as an on-call worker or day laborer — as well as independent contracting have become increasingly prominent in both theoretical and policy thinking about how employment has changed in recent years in the United States and other postindustrial countries.³ Interest in, and theories of, nonstandard work arrangements have outrun empirical evidence based on representative data with consistent definitions and adequate measures over time. Information on the extent of nonstandard work arrangements, and how they have changed during the past several decades, has only recently been available.

A major source of consistent data on nonstandard and contingent work was the important program of data collection undertaken by the Bureau of Labor Statistics (BLS) in their Contingent Worker Supplement (CWS) to the February Current Population Survey (CPS) beginning in 1995 and replicated in 1997, 1999, 2001, 2005, and most recently, May 2017.⁴ Analysis of the earlier CWS data found that the employment shares of workers in nonstandard work arrangements were quite stable across all of the surveys from 1995 to 2005, with the share employed as independent contractors ranging from 6.3 to 7.4 percent, the on-call worker share ranging from 1.5 to 1.8 percent, the temporary help agency worker share ranging from 0.9 to 1.0 percent, and the contract company worker share ranging from 0.5 to 0.6 percent. In 2005, researchers at BLS found that, in all, 10.7 percent of workers were employed in these nonstandard work arrangements (Horrigan 2016).⁵

The May 2017 CWS — conducted 12 years after the last CWS and 22 years after the first — provides an opportunity to examine how nonstandard work arrangements have changed over the last two-plus decades. The years since 2005 encompass the Great Recession of 2007–2009, the period of the largest economic upheaval in the United States since the Great Depression of the 1930s. Comparing the

³ We refer to nonstandard employment relations (which involve an employer and employee) and independent contracting collectively as nonstandard work arrangements in this report. These work arrangements have also been referred to as alternative work arrangements (Polivka 1996); market-mediated arrangements (Abraham 1990); flexible staffing arrangements (Houseman 1997); atypical employment (Córdova 1986); and contingent work (Polivka and Nardone 1989; Barker and Christensen 1998). Nonstandard work arrangements depart from standard work arrangements in which it was generally expected that work would continue indefinitely and would be performed at the employer's place of business under the employer's direction. Standard work arrangements were the norm in the United States and many industrial nations for much of the twentieth century and were the basis of the framework within which labor law, collective bargaining, and social security systems developed. Macro and mezzo structural forces such as globalization, technological change, financialization, deregulation, union decline, and neoliberal political economic policies emerging in the United States in the 1970s and 1980s led to a shift in employment norms from standard to nonstandard work arrangements (e.g., Kalleberg 2000; 2011). Since then, there has been a rise in both nonstandard work arrangements and concerns about their impacts on individuals, families, organizations, and the broader society. 4 BLS (2018a).

⁵ BLS does not include day laborers in this total. Total employment in nonstandard work arrangements, including day laborers, was 10.9 percent in 2005.

results of the 2017 survey with those conducted in earlier years enables us to examine the extent to which the employment relationship and the experience of work in the lives of people and communities have changed. Despite the disruption of the financial crisis and the effects of trade and technology on the labor market between 2005 and 2017, the share of workers in standard work arrangements has been remarkably stable. This report focuses on young workers, ages 21–25, with and without a college degree between 2005 and 2017. The report helps to develop a concrete picture of what has changed for this cohort, which can inform a research and policy agenda that will improve their opportunities in the labor market.

TABLE 1

Share of College Graduates Aged 21-25 in Standard, Nonstandard, and Contingent Work Arrangements, 2005 and 2017

(thousands or percent)

21-25

	Ages 16+		College degree		Less than college degree	
	2005	2017	2005	2017	2005	2017
Total Employed (thousands)	138,952	153,331	2,523	3,440	10,907	11,449
Standard Work Arrangements (%)	89.1	89.9	94.1	95.4	91.7	93.5
Women	91.0	91.7	95.9	95.3	92.3	94.2
Men	87.5	88.3	91.5	95.5	91.3	93.0
Full-time status						
Full-time	83.1	83.1	85.2	83.7	72.2	69.2
Part-time	16.9	16.9	14.8	16.3	27.8	30.8
Jobholder status						
Single jobholders	94.2	95.0	93.5	91.5	94.0	95.0
Multiple jobholders	5.8	5.0	6.5	8.5	6.0	5.1
Nonstandard Work Arrangements (%)	10.9	10.1	5.9	4.6	8.3	6.5
Independent Contractors	7.4	6.9	2.6	2.1	3.1	2.7
On-call workers	1.8	1.7	1.2	1.1	2.9	2.0
Temp agency workers	0.9	0.9	1.6	0.8	1.3	1.5
Contract company workers	0.6	0.6	0.2	0.6	0.7	0.3
Contingent Workers (%)	4.1	3.8	7.7	7.8	7.1	6.2
Women	4.7	3.7	6.3	8.2	6.2	6.7
Men	3.2	3.2	9.8	7.4	7.7	5.8
Source and notes: Authors' analysis of CPS	CWS data					

⁶ As measured in the CWS during this period, trends in these nonstandard work arrangements thus appear to be relatively flat, except perhaps for independent contractors. This conclusion is somewhat misleading, however, as the main increases in temporary help agency employment and the other forms of nonstandard work are likely to have occurred before 1995. We should also keep in mind that the CWS links to the CPS and is a household survey of workers and thus almost certainly undercounts nonstandard work because it does not count a worker's second or third job (Mishel, Bernstein, and Allegretto 2007, 239).

Distribution and Trends in Standard and Nonstandard Work Arrangements

Table 1 shows total employment growth between 2005 and 2017 for all workers, ages 16+, and young workers ages 21–25 with and without a college degree. The first two columns indicate that total employment grew about 10 percent for the labor force overall, while employment growth for young workers without a college degree has been relatively less robust, 5.0 percent. Employment of young workers with a college degree, on the other hand, grew by 36.3 percent between 2005 and 2017.⁷ The divergence in growth between college grads and noncollege grads is quite stark, and indicates a young grads as a group have not only recovered from the recession, but they have been one of the largest beneficiaries of the current expansion.⁸

The relatively slow growth in employment for young workers, ages 21–25, can be largely explained by the slow recovery from the Great Recession. An examination of readily available data from BLS for the population ages 20–24 paints a clearer picture. In 2005, the unemployment rate for ages 20–24 was 8.8 percent for young workers. It peaked at 15.5 percent in 2010. By 2017, youth unemployment recovered to 7.4 percent. Similarly, the employment-to-population ratio, ages 20–24, declined to a 10-year low of 60.3 percent in 2010 (down from 68 percent in 2005). As of 2017, the ratio had only recovered to 66.1 percent — a 1.9 percent decline from 2005. As a result of fewer job opportunities during the recession, more young people went to or remained in school, precipitating a fall in the labor force participation rate from 74.6 percent in 2005 to a 10-year low of 70.5 percent in 2015. Young workers have only recently experienced gains from the recovery drawing more of them into the workforce, college graduates being the primary recipients of those opportunities. By 2017, the participation rate had increased to 71.3 percent.

Table 1 reports on the full-time and part-time status of young workers and on multiple job holdings of these workers. For the workforce as a whole, the share in full-time employment was the same in both 2005 and 2017, with 83.1 percent of workers in full-time jobs and 16.9 percent working part-time in both years. Young workers without a college degree are less likely than are workers overall to hold full-time jobs and more likely to work part-time. Part-time employment for these workers increased from 27.8 percent of noncollege degree holders in 2005 to 30.8 percent in 2017. The share of workers with a college degree employed part-time increased from 14.8 percent in 2005 to 16.3 percent in 2017, bringing their share of part-time employment in-line with the overall workforce.

⁷ See footnote 2

⁸ Workers ages 55-64 and 65+ also experience significant gains in employment growing by 46 percent and 92 percent, respectively, between 2005 and 2017 (Appelbaum et al. 2019).

With respect to multiple job holding, young workers with a college degree were more likely than other workers to hold multiple jobs. In 2017, 5.0 percent of the overall workforce held more than one job, as did 5.1 percent of noncollege grads. However, the share of young college grads with multiple jobs increased from 6.5 percent in 2005 to 8.5 percent in 2017.

A striking finding from Table 1 is that young workers, both with and without a college degree, were far more likely to be in standard work arrangements than the workforce overall — a finding that holds in both 2005 and 2017, and is stronger in 2017. Indeed, the share of young workers in nonstandard work arrangements has remained small, even declining slightly in most nonstandard categories between 2005 and 2017. Young workers as a share of independent contractors, a category that includes gig economy workers, declined from 2.6 to 2.1 for college graduates and from 3.1 to 2.7 for noncollege graduates.

Discussions of the changing nature of work driven by technology platforms have permeated the popular press and social media in recent years; particularly with regard to the rise of the so-called "gig economy." Gig workers, as they are often referred to, are a type of independent contractor whose work is mediated by technology platforms such as Uber, GrubHub, or TaskRabbit. These are short jobs or tasks that workers find through websites or apps, such as those above, which connect them with customers and/or arrange payment. In May 2017, BLS also added four questions to the Contingent Worker Supplement designed to measure electronically mediated work. The questions distinguish between jobs that are done in person (for example, driving people, delivering something, doing someone's household tasks or errands) and those that are done entirely online (for example, data entry, translating text, or graphic design). In contrast to the main body of the CWS, the questions on participation in the gig economy applied to the primary job, secondary job, or other supplementary work for pay. However, many respondents misunderstood the questions and answered "yes" when it was obvious that the reported work was not through a website or app that arranged for payment for the work. BLS evaluated all records with affirmative answers and recoded erroneous answers.

The cleaned data from BLS show the share of gig workers in 2017 is quite small — just 1 percent of the young workers, ages 21-25, were engaged in electronically mediated work as their primary, secondary, or supplementary job. The number of young workers with and without college degrees employed as gig workers is too small to analyze for other trends.

This result cuts against the general narrative that has been building over the past few years of a rapid rise in the share of workers in nonstandard work arrangements driven by technological innovations.¹⁰ It may be surprising that the digital native generations — commonly referred to as Millennials (born

⁹ BLS (2018b).

¹⁰ The World Bank (2019).

1981–1996) and Generation Z (born from 1997 onward) — have overwhelmingly opted for jobs with standard employment relations.¹¹

Table 1 also shows that young workers are more likely than workers overall to be in contingent jobs. The share of all workers in contingent work decreased from 4.1 to 3.8 percent between 2005 and 2017. For young workers with a college degree, the share in contingent work arrangements was virtually unchanged — 7.7 percent in 2005 and 7.8 percent in 2017. Young workers with less than a college degree saw their share of contingent jobs decline from 7.1 to 6.2 in the same period. However, these figures mask important gender differences among young workers in contingent work: the shares of women in contingent jobs increased while the shares of men decreased. Among those with a college degree, the share of women in contingent work increased from 6.3 percent in 2005 to 8.2 percent in 2017, while the share of men decreased from 9.8 to 7.4 percent between those two years. Workers without a college degree were less likely than were those with a college degree to hold contingent jobs: the share of these women in contingent jobs in 2017 was 6.7 percent, and the share of men was 5.8 percent.

We turn now to a more detailed examination of who holds independent contractors and contingent work arrangements for this relatively small sample of young workers.

Independent Contractors

As we saw in Table 1, younger workers are much less likely than are workers overall to be independent contractors. Perhaps more remarkable is the decline in the share of young workers who were independent contractors between 2005 and 2017, a decline that is more pronounced among college graduates than among those with less than a college degree. Who are the young workers employed as independent contractors?

¹¹ Millennial and Generation Z definitions were obtained from the Pew Research Center (Dimock 2019).

TABLE 2

Composition of Independent Contractors, 2005 and 2017

(percent)

21-25

	Ages 16+		College degree		Less than college degree	
	2005	2017	2005	2017	2005	2017
Gender	100.0	100.0	100.0	100.0	100.0	100.0
Female	35.3	35.8	55.5	51.3	36.7	39.0
Male	64.7	64.3	44.5	48.7	63.3	61.0
Race	100.0	100.0	100.0	100.0	100.0	100.0
White	80.0	70.9	88.4	100.0	76.4	62.1
Black	5.7	8.4	-	-	4.9	5.2
Hispanic	9.2	14.8	-	-	13.6	25.7
Asian	4.0	4.7	5.0	-	1.8	6.6
Full-time status	100.0	100.0	100.0	100.0	100.0	100.0
Full-time	74.8	70.5	48.3	74.0	72.1	52.0
Part-time	25.2	29.5	51.7	26.0	28.0	48.0
Jobholder status	100.0	100.0	100.0	100.0	100.0	100.0
Single jobholders	93.2	93.2	80.7	70.3	90.3	89.1
Multiple jobholders	6.8	6.9	19.4	29.7	9.7	10.9
Voluntarily Independent Contractor	88.3	82.3	89.4	74.1	88.5	78.0
Source and notes: Authors' analysis of CPS	S CWS data, 2	2005 and 201	17.			

Table 2 shows the demographic and labor market characteristics of the independent contractor workforce. In 2017 about half of the young college grads employed as independent contractors are men (51.3 percent) and about half are women (48.7 percent). For young workers with less than a college degree, men are far more likely to be independent contractors than are women — 61.0 and 39.0 percent, respectively. Sample sizes are too small in most race/ethnicity categories to analyze. However, we can see that among young noncollege graduates, the share of white workers employed as independent contractors declined from 76.4 percent in 2005 to 62.1 percent in 2017 while the share of Hispanic workers increased in that same period from 13.6 percent to 25.7 percent.

Among independent contractors overall, the share employed full-time declined from 74.8 to 70.5 percent between 2005 and 2017. However, for young workers, there has been a significant divergence in full- and part-time employment since 2005 based on education. Young workers with a college degree working as contractors were more likely to be full-time in 2017 than in 2005 (increasing from 48.3 to 74.0 percent), while those with less than a college degree were less likely to be full-time (decreasing from 72.1 to 52.0 percent). Young workers employed as independent contractors were also more likely to hold multiple jobs in 2017 than in 2005 (29.7 percent compared with 19.4 percent). The share of

young workers working voluntarily as independent contractors fell from 89.4 to 74.1 percent for college degree holders and from 88.5 to 78.0 percent for those without a college degree.

TABLE 3
Composition of Contingent Workers, 2005 and 2017

(percent)							
				21-	25		
	Ages	16+	College degree		Less than degr		
	2005	2017	2005	2017	2005	2017	
Gender	100.0	100.0	100.0	100.0	100.0	100.0	
Female	48.9	47.3	47.6	60.1	39.5	48.6	
Male	51.1	52.7	52.4	39.9	60.5	51.4	
Race	100.0	100.0	100.0	100.0	100.0	100.0	
White	60.2	55.8	77.1	73.2	59.2	58.0	
Black	11.2	12.2	12.3	11.6	8.0	11.4	
Hispanic	20.8	22.2	5.0	6.8	27.4	20.9	
Asian	6.5	8.5	5.6	8.4	3.2	8.0	
Full-time status	100.0	100.0	100.0	100.0	100.0	100.0	
Full-time	59.8	59.2	44.9	54.5	52.6	43.5	
Part-time	40.2	40.8	55.1	45.5	47.4	56.5	
Jobholder status	100.0	100.0	100.0	100.0	100.0	100.0	
Single jobholders	93.8	93.6	90.4	86.6	96.2	90.6	
Multiple jobholders	6.2	6.4	9.7	13.4	3.8	9.5	
Source and notes: Authors'	analysis of	CPS CWS	data, 2005 a	and 2017.			

Contingent Workers

Table 3 shows the composition of contingent workers by demographic and labor market characteristics. For the workforce as a whole, men and women are about equally likely to hold contingent jobs. The share of women decreased slightly in 2017 compared to 2005. The story is different for young workers, however. Young contingent workers were more likely to be female in 2017, with their share increasing substantially between 2005 and 2017 — from 47.6 to 60.1 percent for college graduates and from 39.5 to 48.6 percent for noncollege degree holders. Young college degree holders are more likely to be working full-time in 2017 than 2005 (54.5 percent compared with 44.9 percent) and young workers with less than college degree more likely to be part-time in 2017 than 2005 (56.5 percent compared to 47.4 percent).

TABLE 4

TRIBLE 7						
Median weekly earnings, Full-time Worke	ers, 2005 a	nd 2017				
(2017 dollars)						
		2005			2017	
_	10th	50th	90th	10th	50th	90th
		(median)			(median)	
All, 16+						
Workers in Traditional Arrangements	290.4	755.0	2,274.6	400.0	865.4	2,111.1
Independent Contractors	290.4	880.8	2,516.6	320.0	846.2	2,500.0
Contingent Workers	264.2	604.0	1,560.3	350.0	680.0	1,788.5
21–25 (college degree)						
Workers in Traditional Arrangements	377.5	736.1	1,330.9	437.5	720.0	1,384.0
Independent Contractors	251.7	871.1	1,283.4	200.0	692.3	1,538.5
Contingent Workers	276.8	488.2	880.8	365.4	520.0	1,000.0
21-25 (less than college degree)						
Workers in Traditional Arrangements	308.3	503.3	1,064.7	320.0	525.6	980.0
Independent Contractors	290.4	629.1	1,497.4	346.2	500.0	961.5
Contingent Workers	251.7	503.3	1,209.9	296.0	480.0	1,153.9
Source and notes: Authors' analysis of CPS C	WS data, 2	005 and 2017				

Young Workers and Job Quality

Earnings

Table 4 presents the median weekly earnings (as well earnings at the 10th and 90th percentiles) in both 2005 and 2017 (in 2017 dollars) for three categories of workers — full-time workers in traditional, or standard, working relations, independent contractors, and contingent workers. Earnings are reported for the workforce as a whole and for younger workers (ages 21-25) with and without a college degree. Median weekly earnings of young college graduates in traditional jobs were \$720 in 2017, down from \$736 a week 12 years earlier. Median weekly earnings of young workers without a college degree were far lower at \$526 in 2017, up a modest \$23 a week (57 cents an hour) over 12 years.

Young workers with a college degree earn nearly as much as do workers overall when employed in traditional and independent contractor arrangements, while young contingent workers earn less. As expected, young workers with a college degree earn more than those without in both traditional and independent contractor jobs. However, among the highest paid young workers (at the 90th percentile), young contingent workers with less than a college degree fared better in 2005 relative to workers in

traditional arrangements and better in 2017 relative to both traditional and independent contracting arrangements.

TABLE 5

(percent)						
	Health Insurance		Retirement Plan		Unionization Rate	
	2005	2017	2005	2017	2005	2017
All, 16+						
Workers in Tradtional Arrangements	80.0	84.0	47.7	46.3	10.7	12.1
Independent Contractors	69.4	75.4	1.9	2.3	2.7	3.2
Contingent Workers	59.1	73.4	12.4	18.4	9.6	9.2
21–25 (college degree)						
Workers in Tradtional Arrangements	81.8	88.4	37.8	46.5	6.6	11.3
Independent Contractors	37.6	98.6	0.0	0.0	0.0	0.0
Contingent Workers	61.9	86.8	4.0	11.1	6.2	7.2
21–25 (less than college degree)						
Workers in Tradtional Arrangements	60.3	73.0	20.9	19.4	4.3	7.0
Independent Contractors	38.3	59.4	0.0	0.0	4.4	5.5
Contingent Workers	49.5	73.0	2.3	6.7	5.7	5.8

Source and notes: Authors' analysis of CPS CWS data, 2005 and 2017. Health insurance refers to insurance from any source. Retirement plan refers to participation in an employer-sponsored plan.

Benefits

Table 5 looks at differences in health insurance and employer-sponsored retirement benefits, for all workers and for young workers, in standard work arrangements, independent contractors, and contingent workers. A higher percentage of all workers and of young workers had health insurance in 2017 than in 2005, likely as a result of the Affordable Care Act (ACA). The ACA permits young workers to remain on their parents' insurance until age 26. Young workers with a college degree were more likely to have health care coverage relative to the workforce as a whole, while those with less than a college degree were less likely. Nearly all young independent contractors with a college degree had health insurance, the highest percentage of all the demographic groups.

Table 5 also provides information on whether workers participated in employer-sponsored pension plans. Unsurprisingly, workers, both as a whole and in the younger cohort, in traditional work arrangements were more likely than other categories to have employer-provided pension plans. The percentage of the workforce as a whole participating in employer-sponsored pensions or retirement plans was little changed between 2005 and 2017 at about 47 percent. Young workers with a college degree employed in traditional working arrangements were more likely to have pension benefits in

2017 than in 2005, (46.5 percent compared to 37.9 percent). A smaller share of young workers without a college degree – about 20 percent – had pension benefits in both 2005 and 2017.

Lastly, Table 5 also includes information on union membership for workers overall and for young workers in our three categories of working arrangements. Unionization is also a dimension of job quality as union members tend to have better protections and a greater voice in the workplace. In the past few decades, there has been a steady decline in union membership. However, Table 5 indicates unionization rates have increased for workers overall (increasing from 10.7 to 12.1 percent) between 2005 and 2017. In 2005, young workers were less likely to be in a union, registering 6.6 percent for those with a degree and 4.3 percent for those without a college degree. Young workers' unionization rates have improved substantially, nearly doubling since 2005, to 11.3 percent for college degree holders and 7.0 percent for those with less than a college degree in 2017.

Conclusion

The much-hyped growth of the gig economy cannot be found in the 2017 survey of nonstandard work arrangements. Even young workers, often referred to as digital natives and expected to seek out work that is mediated by electronic platforms, overwhelmingly opted for employment in traditional jobs. Of greater concern is the high share of part-time work among young workers without a college degree – nearly a third of whom hold such jobs. Low pay and lack of access to health insurance and pension benefits for these young workers is also an issue. The typical young worker with less than a college degree earned \$13 an hour in 2017, an increase of just 57 cents an hour since 2005. These workers were also less likely than other workers to have health insurance or an employer-sponsored retirement plan. While young workers with a college degree fare better in the labor market than do those who lack a degree, their situation is not all rosy. The typical college graduate employed full-time earned \$18 an hour in 2017, down 40 cents an hour compared to 2005. Less than half had a pension plan. Most pressing are the problems of low wages, lack of benefits, and less than full-time hours for all workers without a college degree, but especially young workers without a college degree. These are the labor market policy issues that should be on the table.

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Data Appendix

All data used in this report are from the CEPR extract of the Contingent Worker Supplement (CWS), a supplement to the February 2005 and May 2017 monthly Current Population Survey (CPS).

Questions are only asked about a person's main job, and any household member 15 years of age or older can respond for other household member. BLS determines whether a job is contingent based on three definitions. Throughout this report, we present information on the broadest "contingent worker" definition, which includes wage and salary workers who do not expect their jobs to last, including those who have been in their jobs for a year or more and expect to continue for a year or more. The definition excludes self-employed or independent contractors who have been in their jobs for more than a year or expect to continue for more than a year.

We define young college graduates as those between ages of 21 and 25 with a bachelor's degree and without an advanced degree. While this is a small subset of the population, we determined that it still informs us about the patterns of nonstandard work for young workers today that would otherwise be unavailable. While we also discuss results from new BLS questions on "electronically mediated work", the sample size for young workers is too small to accurately analyze any patterns.

Constant 2017 dollars calculated using the CPI-U-RS, https://www.bls.gov/cpi/research-series/allitems.pdf. All programs and log files are available on request.