

The workweek of part-time workers

Etienne Lalé *

ABSTRACT. Data on weekly work schedules indicate the coexistence of two groups of part-time workers. The first group represents about 40 percent of part-time employment and comprises those who work a few hours every day of the workweek, mostly during standard business hours. The other group contains workers with either variable weekly schedules or hours concentrated on two or three days of the week, and are more likely to work at night and/or on weekends. These less desirable work conditions are worth worrying about as part-time employment in the U.S. remains elevated several years after the Great Recession.

In the first quarter of 2015, 18.2 percent of workers in the United States were employed on part-time contracts. The corresponding figure was 16.6 percent just before the Great Recession, and 19.5 percent in the last quarter of 2009 when part-time employment reached its highest level. Part-time work – defined as less than 35 hours per week – is pervasive in the U.S. labor market, and yet little is known about the actual work schedules of part-timers. Inspection of data from the Work Schedules Supplements of the Current Population Survey (CPS) reveals a substantial amount of diversity in the workweeks of part-timers, and shows that many experience less favorable employment conditions.

Our goal of this note is to organize the information on weekly work schedules contained in the CPS into

a portrait of the typical workweeks of part-time workers. This description helps establish a typology of part-time employment and understand the work conditions associated with it.

Part-time employment is paramount to our understanding of the labor market. At the macroeconomic level, part-time work is a key margin of employment adjustment over the business cycle. As documented by Borowczyk-Martins and Lalé [3], most of the fall in hours per worker during the Great Recession is explained by the burst of part-time employment, and is in turn responsible for a sizable amount of economic slack. At the individual level, part-time employment is typically associated with a wage penalty, which adds to the reduction in total earned income. Studies by Lettau [6], Aaronson and French [1] and Hirsch [5] all report a significant decrease in hourly wages – which can be as large as 25 percent – that is attributable to part-time work. A further negative effect is that part-time workers typically have lower access to benefits such as health insurance, retirement and leave benefits [2]. In fact, one of the provision of the Affordable Care Act is to extend health coverage to employees working 30 or more hours per week at large employers.

The distribution of weekly hours worked

To get a first grip on the diversity of employment experiences associated with part-time work, Figure 1 shows the distribution of usual hours worked weekly among single jobholders.¹ The distribution has many peaks

¹Multiple jobholders are excluded throughout to facilitate the discussion. See accompanying box on data and sample disposition.

*Address: Department of Economics, University of Bristol, 8 Woodland Road, Bristol BS8 1TN, United Kingdom – Phone: +44(0)117 331 7912 – E-mail: etiennelale@bristol.ac.uk

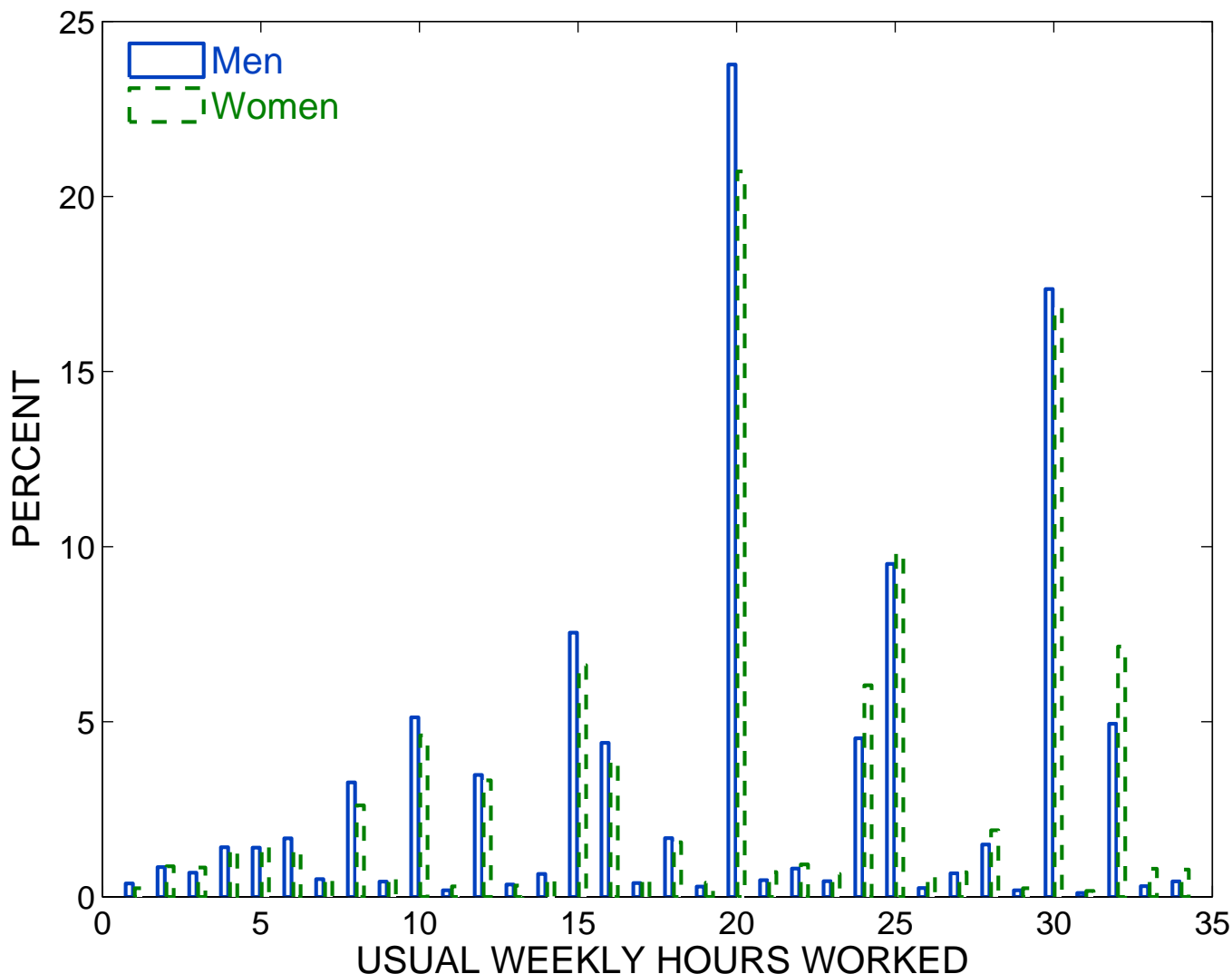


Figure 1. Distribution of usual weekly hours among part-time workers, men (solid) and women (dashed) CPS data; Working-age individuals who work part-time and currently hold only one job.

which are worth commenting on. Indeed, we observe peaks at intervals divisible by five, as well as peaks at 24 and 32 hours, both of which are divisible by eight. These patterns are interesting in that they suggest either long workweeks or long working days concentrated on a few days of the week. By contrast, the distribution of weekly hours among full-time workers (not reported) shows one dominant form of employment, namely 5 days of 8 hours each.²

Figure 1 is also informative as to gender differences

tions used in the analysis.

²In full-time employment, 65 percent of individuals report 40 hours worked weekly. 90 percent of these workers report that they usually work five days per week.

in part-time employment. Women are two times more likely than men to be employed on part-time contracts (see Figure 2). In part-time employment, women are more likely to work 32 hours weekly whereas men are more likely to work 20 hours weekly. As a result, the average of hours worked weekly is slightly higher among female part-timers. The pattern is reversed in full-time employment because a large number of men report working more than 40 hours.

A framework to analyze weekly hours

The motivation for investigating the workweek of part-time workers comes from a popular distinction in

macroeconomics between the intensive and extensive use of labor resources. Loosely speaking, it is likely inefficient to work 18 hours on a single day and none during the rest of the week; a better work-life balance could be achieved by working, say, 9 hours on two days or 6 hours on three days. At the opposite extreme, working 3 hours on six days may be inefficient too due to, for instance, time spent commuting to work.

Adapted to the context of the present study, this distinction suggests the following breakdown:

$$\text{Weekly hours} = \underbrace{\text{Hours per day}}_{\text{Intensive margin}} \times \underbrace{\text{Days per week}}_{\text{Extensive margin}}$$

This formulation is useful because of the terminology used in it, and also because it likely performs better than the notion of total weekly hours in capturing actual employment experiences.

Days per week and weekly hours worked

Table 1 reports a set of statistics that characterize the role of the extensive margin (days per week) in explaining the distribution of weekly hours worked by part-timers. The table selects those weekly hours at which a peak can be observed in Figure 1; that is, 10, 15, 20, 24, 25, 30 and 32 weekly hours.

To begin with, a low number of weekly hours is typically associated with a low number of days worked per week. About 40 percent of individuals who report 10 (resp. 15) hours per week usually work 5 hours per day twice (resp. three times) a week. This figure is perhaps lower than expected because, as observed in the table, a significant proportion of workers report having long workweeks despite working only 10 or 15 hours weekly. That is, between 25 and 35 percent of workers report five days of work per week that are un-intensive in terms of hours per day.

In the middle of the distribution (20, 24 and 25 weekly hours), two patterns seem to emerge. On the

Table 1. Days per week at selected weekly hours

	Men	Women
Bottom of the distribution		
10 hours weekly, 2 days	37.4	40.8
10 hours weekly, 5 days	24.1	24.1
15 hours weekly, 3 days	40.0	33.6
15 hours weekly, 5 days	29.8	34.2
Middle of the distribution		
20 hours weekly, 2 days	20.7	21.6
20 hours weekly, 3 days	20.7	22.8
20 hours weekly, 5 days	43.5	43.0
24 hours weekly, 2 days	52.5	58.6
24 hours weekly, 3 days	18.2	16.7
24 hours weekly, 5 days	12.9	12.2
25 hours weekly, 2 days	14.1	13.1
25 hours weekly, 3 days	20.7	20.6
25 hours weekly, 5 days	53.5	56.6
Top of the distribution		
30 hours weekly, 4 days	18.9	21.0
30 hours weekly, 5 days	59.8	63.0
32 hours weekly, 4 days	48.3	53.1
32 hours weekly, 5 days	39.9	37.4

NOTE: CPS data; working-age individuals who work part-time and currently hold only one job. Each row displays, for the corresponding sex category, the fraction of workers reporting the stated number of days among those working the stated number of weekly hours. All entries are reported in percent.

one hand, a large number of part-timers reports working five days per week, with the amount of hours per day compatible with spending half the day on the job (4 or 5 hours). The other category contains workers with a large number of hours concentrated on two or three days of the week only – those whose weekly hours are explained mostly by the intensive margin. The most striking example is workers with 24 weekly hours: more than 50 percent of them report working 12 hours per day.

Clearly, the top of the distribution corresponds to two types of long workweeks: one involving 6 hours

per day and five days per week, and one with 8 hours per day and four days per week. The part-time workers who belong to the last category differ from the typical full-time worker along the extensive margin only: one additional day of work would put these part-timers at 40 hours of weekly work.

Overall, Table 1 indicates a fair amount of consistency between usual weekly hours and days per week as reported by CPS respondents. Hours per day help understand why the distribution of weekly hours exhibits so many peaks, and why these are located at intervals divisible by 5 or 8. This finding is relevant for other labor force surveys in that the multiple peaks in the distribution of hours is a commonly observed phenomenon.

Two types of part-time workweeks

Piecing together Figure 1 and Table 1, one can posit the following typology of the workweek of part-time workers:

- On the one hand, about 5 percent of part-timers work more than five days per week, 30 percent work exactly five days per week and another 5 percent work four days per week with long days of work. These workers differ from full-time workers along one margin only: they have long workweeks or long days of work. As will be shown below, they are also less likely to work on weekends and/or at night.
- The other category contains workers who report that their work schedules changes every week (about 14 percent of part-time workers) and workers with less than three days of weekly work. This group is more dissimilar vis-à-vis full-time workers. For example, the majority of workers with 24 weekly hours has longer days of work compared to full-time workers and works two days per week.

Weekends and night work

So far, the portrait of the part-time workweek says little about the employment conditions of part-time workers. In particular, it was noted above that part-time workers often suffer a wage penalty [6, 1, 5] and lower access to various benefits [2]. One can hypothesize that a lower return to market activity is the price paid for having more time spent in the household and/or with relatives and friends. Whether part-timers work on weekends or at night matters in this respect because such employment conditions make it more difficult to socialize with others. The incidence of “strange hours”, to put it in the words of Hamermesh and Stancanelli [4], is also relevant to characterize the two types of part-time workweeks described in the previous section.

The Work Schedules Supplements of the CPS allows identification of weekend work and night work. Weekend work refers to any work performed on a Saturday and/or a Sunday. Night work is defined as work performed between 10:00pm and 6:00am (inclusive). To fix ideas, under these definitions, 11 percent of full-timers with 40 hours worked weekly are performing some work on week-ends, and 15.6 percent of them are working at night.

One way to characterize further the part-time workweeks just discussed is to analyze whether they affect the propensity to work on weekends or at night. Full-time workers employed 40 hours offer a natural reference group for this purpose, i.e. one can investigate how holding a part-time job changes the probability of working strange hours compared to this group. Table 2 reports estimation results from such a model, in which a set of characteristics (age, education and marital status) are held constant. Three categories of part-time workers are considered: low, intermediate and high hours. Finally, to accord with the above typology of part-time workweeks, these categories are interacted with an indicator for working five days per week.

Table 2. Incidence of work on weekends and work at night in part-time employment

	Working on weekends		Working at night	
	Men	Women	Men	Women
1 to 19 weekly hours	24.441 (1.203)	15.233 (0.756)	4.734 (1.625)	6.732 (0.905)
20 to 29 weekly hours	24.841 (1.340)	18.057 (0.742)	7.179 (1.817)	5.088 (0.907)
30 to 34 weekly hours	25.049 (1.696)	16.262 (0.945)	1.328 (2.509)	5.024 (1.174)
1 to 19 weekly hours × 5 days per week	-29.912 (2.825)	-22.484 (2.085)	-8.111 (3.432)	-2.190 (1.791)
20 to 29 weekly hours × 5 days per week	-23.530 (1.929)	-18.280 (1.164)	0.472 (2.442)	2.613 (1.224)
30 to 34 weekly hours × 5 days per week	-21.894 (2.316)	-14.265 (1.276)	-1.575 (3.212)	-4.264 (1.488)
Predicted probability at mean	12.772 (0.235)	10.432 (0.215)	18.869 (0.270)	11.916 (0.216)
Observations	22,371	23,855	22,371	23,855

NOTE: CPS data; working-age individuals who work part-time and currently hold only one job. Each column displays the marginal effects (evaluated at the mean of regressors) from a Probit model with the following control variables: age, age squared, four educational categories (less than high school; high school graduates; some college; college or higher education) and three marital status categories (married; separated, divorced or widowed; single or never married). Coefficients are multiplied by 100 to improve legibility. Standard errors (computed using the delta method) are reported in parentheses.

Firstly, the estimates reported in Table 2 show that working part-time *raises* the probability of working at strange hours, both for male and female workers. For example, working 20 to 29 hours per week (as opposed to regular full-time work) increases the probability of weekend work by 25 (resp. 18) percentage point for men (resp. women) and the probability of working at night by 7 (resp. 5) percentage point for men (resp. women). These results are striking because they show that the hours of many part-timers are likely concentrated on the moments of the week usually devoted to social interactions.

The second finding from Table 2 is that working five days a week is a strong predictor for *avoiding* strange hours. Indeed, a comparison of the non-interacted

and interacted coefficients shows that a workweek of 5 days undoes the higher incidence of weekend work among part-timers and tends to dampen the incidence of night work.³ This provides support for the typology that distinguishes: (i) a part-time workweek of normal work schedules (work during standard business hours) and (ii) a part-time workweek subject to less favorable employment conditions.

Taking stock

Data on days worked weekly and usual work schedules paints a diverse and nuanced picture of the work-

³The coefficients are statistically significant at the one percent level for weekend work, but most coefficients on the interaction terms are not significant for night work.

week of part-time workers. There are at least two subgroups of part-time workers: those with normal work schedules distributed over the five days of the working week, and those whose hours are concentrated on two or three days of the week sometimes early in the morning, late at night and/or during weekends.

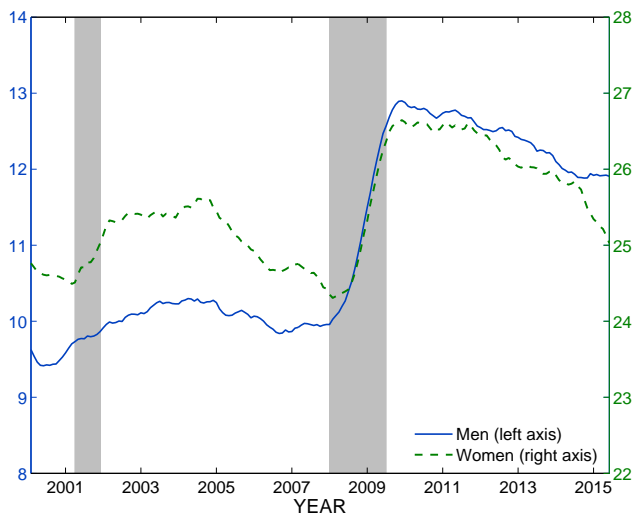


Figure 2. Fraction of workers employed on part-time jobs, men (solid, left) and women (dashed, right) MA-smoothed, seasonally-adjusted time-series. Gray-shaded areas indicate NBER recession periods.

These employment patterns matter for our understanding of the labor market now several years into the recovery. As shown in Figure 2, the fraction of workers employed on part-time jobs remains elevated after the Great Recession. About half of these workers may be employed under less favorable conditions, such as work on weekends and night shifts. This is larger than the fraction of individuals classified as “involuntary part-time workers”.⁴ One possible explanation for the discrepancy is that the constraints that may prompt workers to work at night or on weekends – for instance, being unable to arrange childcare – are not taken into account in the definition of involuntary part-time work – which includes only those who cannot find a full-time job and those working part-time

⁴Involuntary part-time work (also referred to as part-time work for economic reasons) accounts for 15 to 25 percent of overall part-time employment.

because of slack demand conditions. Future research could investigate further the constraints that push individuals to take on part-time jobs with a less favorable work schedule. □

Data and sample dispositions

The Current Population Survey is a survey of households administered by the U.S. Census Bureau under the auspices of the U.S. Bureau of Labor Statistics. The survey records the hours worked weekly by CPS respondents. The Work Schedules Supplement collects additional information on working hours and usual work schedules for all respondents in a household. The universe for the Work Schedules Supplement is civilians aged 15 or older who were working at the time of the supplement.

The sample used in this note is circumscribed to civilians of working age who were holding only one job at the time of the survey. The reason for excluding multiple jobholders is that hours worked at their primary job (the job at which the individual works the greatest number of hours) are likely not independent from hours worked at the second job. This makes their usual weekly schedules less comparable to that of single jobholders.

References

- [1] Daniel Aaronson and Eric French. The effect of part-time work on wages: Evidence from the Social Security rules. *Journal of Labor Economics*, 22(2):329–252, 2004.
- [2] John L Bishow. The relationship between access to benefits and weekly work hours. *Monthly Labor Review*, 2015.
- [3] Daniel Borowczyk-Martins and Etienne Lalé. Employment adjustment and part-time jobs: The US

and the UK in the Great Recession. *Sciences Po Discussion paper 2014–17*, 2014.

- [4] Daniel S Hamermesh and Elena Stancanelli. Long workweeks and strange hours. *Industrial & Labor Relations Review*, (forthcoming), 2015.
- [5] Barry T Hirsch. Why do part-time workers earn less? The role of worker and job skills. *Industrial & Labor Relations Review*, 58(4):525–551, 2005.
- [6] Michael K Lettau. Compensation in part-time jobs versus full-time jobs: What if the job is the same? *Economics Letters*, 56(1):101–106, 1997.