



---

## Federal Reserve Bank of Cleveland Working Paper Series

---

### Part-Time for Economic Reasons During the Global Financial Crisis

Bruce Fallick

Working Paper No. 25-20

August 2025

**Suggested citation:** Fallick, Bruce. 2025. "Part-Time for Economic Reasons During the Global Financial Crisis." Working Paper No. 25-20. Federal Reserve Bank of Cleveland. <https://doi.org/10.26509/frbc-wp-202520>.

---

### Federal Reserve Bank of Cleveland Working Paper Series

ISSN: 2573-7953

Working papers of the Federal Reserve Bank of Cleveland are preliminary materials circulated to stimulate discussion and critical comment on research in progress. They may not have been subject to the formal editorial review accorded official Federal Reserve Bank of Cleveland publications.

See more working papers at: [www.clevelandfed.org/research](http://www.clevelandfed.org/research). Subscribe to email alerts to be notified when a new working paper is posted at: <https://www.clevelandfed.org/subscriptions>.

This work is licensed under Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/>

# PART-TIME FOR ECONOMIC REASONS DURING THE GLOBAL FINANCIAL CRISIS\*

Bruce Fallick<sup>†</sup>

August 20, 2025

## Abstract

Net flows from part-time for noneconomic reasons to part-time for economic reasons contributed substantially to the overall increase in part-time for economic reasons during the Global Financial Crisis in the United States. This suggests that the increase in measures such as U-6 may have overstated the decline in labor demand during that period. However, this does not appear to reflect a general cyclical pattern.

**JEL codes:** J64, J23, E32

**Keywords:** part time

---

\*I thank seminar participants at the Federal Reserve Bank of Cleveland. Mukund Jayaram provided excellent research assistance. The views expressed in this paper are solely the responsibility of the author and should not be interpreted as reflecting the views of the Federal Reserve Bank of Cleveland or the Federal Reserve System.

<sup>†</sup>Federal Reserve Bank of Cleveland, 1455 E 6th St, Cleveland, OH 44114, [bruce.fallick@clev.frb.org](mailto:bruce.fallick@clev.frb.org)

# 1 Introduction

The number of persons working part-time for economic reasons (henceforth "pt-econ") is often used to measure of a dimension of labor market slack that is not captured by the unemployment rate in US labor market statistics. It is taken to represent labor hours that are available from employed workers but not utilized. It is therefore included in the Bureau of Labor Statistics' (BLS) U-6 alternative measure of labor underutilization, in one version of the Hornstein-Kudlyak-Lange Non-Employment Index ([Hornstein et al. 2014](#)), and in the "hours gap" of [Faberman et al. \(2020\)](#), and elsewhere.

Cyclical increases in pt-econ are typically taken to reflect decreases in the demand for labor that force a full-time worker into part-time employment or prevent a job-seeker from finding a full-time job. Indeed, as shown by the blue line in Figure 1, the fraction of the labor force that works pt-econ is highly countercyclical, rising in recessions more or less in line with the unemployment rate (black line).<sup>1</sup>

The gray shading in the figure denotes recessions as determined by the NBER. However, as is well known, the NBER dating of the business cycle is sometimes at odds with the behavior of the unemployment rate.<sup>2</sup> Because my focus is on pt-econ as a dimension of labor market slack beyond what is measured by the unemployment rate, I include dashed lines at business cycle turning points that judgmentally correspond to the troughs and peaks in the unemployment rate.<sup>3</sup>

However, the fluctuations in pt-econ need not be entirely attributable to changes in the demand for the labor of the individual moving into pt-econ. As noted by [Borowczyk-Martins and Lale \(2020\)](#) (henceforth BML), many of the movements into/out of pt-econ are from/to part-time for noneconomic reasons (henceforth "pt-nonecon"), and many such transitions take place while the worker remains at the same employer.<sup>4</sup> If an increase in pt-econ is the result of such movements, it may reflect a change in a worker's *preference* for full-time vs part-time work given new circumstances. One may easily imagine, for example, that someone who was content to work part-time (and was therefore pt-nonecon) may come to prefer full-time work in reaction to another member of the household losing their job, or to a decline in the value of assets, either of which may itself be a cyclical phenomenon. The former

---

<sup>1</sup>I end the graph before the COVID-19 pandemic. Note that the major redesign of the CPS in 1994 resulted in a large step up in the measure of pt-nonecon at the expense of the number pt-econ.

<sup>2</sup>Most notably, the unemployment rate peaked well after the NBER-dated ends of the 1990 and 2001 recessions (the so-called "jobless recoveries"), and arguably began to rise before the NBER-dated beginnings of several recessions.

<sup>3</sup>Because the unemployment rate is not smooth at a monthly frequency, these lines represent my eyeball judgment based on a 3-month centered moving average of the unemployment rate.

<sup>4</sup>See also [Canon et al. \(2014\)](#), [Lariau \(2018\)](#), and [Warren \(2017\)](#).

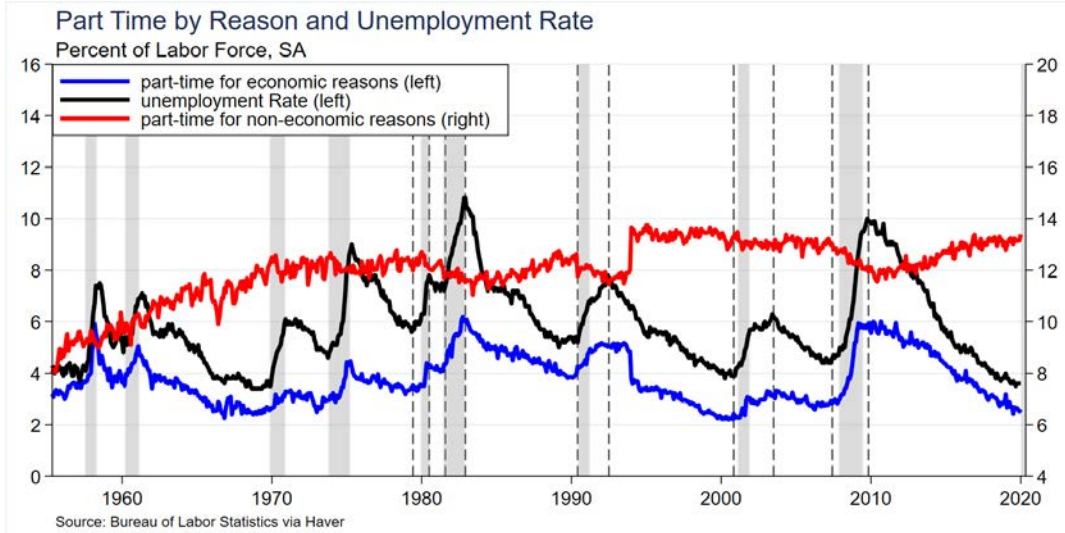


Figure 1: Part-time for economic reasons and for noneconomic reasons, published

Note: Part-time for economic reasons, part-time for noneconomic reasons, and unemployment as percent of labor force, published.

would be an additional dimension of the "added worker effect", as noted in [Bredtmann et al. \(2018\)](#). In the canonical added-worker effect, a person enters the labor force from out of the labor force in reaction to another household member losing their job; here this person enters pt-econ from pt-nonecon instead of entering the labor force from outside the labor force.

In this case, the move from noneconomic reasons to economic reasons, so to speak, would still represent an increase in labor underutilization in the sense that it represents an increase in the amount of that person's labor that is available and not being utilized, but it does so from the supply side: It would not reflect a decline in demand for that person's labor. In the case of a person coming to desire full-time work because a household member lost their job and became unemployed, to count both the increase in pt-econ and the increase in unemployment from these two related events would double-count the decline in the overall demand for labor.<sup>5</sup>

The red line in Figure 1 shows that, while the fraction of the labor force that is pt-econ is countercyclical, the fraction that is pt-nonecon is mildly procyclical. The opposite-signed cyclicity between pt-econ and pt-nonecon makes plausible the possibility that some individuals essentially substitute one type of part-time for the other over the business cycle.

In this note, I examine the size of the contribution of movements from part-time for

<sup>5</sup>This argument is distinct from that in BML that pt-econ should not be taken to measure "hidden unemployment" in the sense that too few jobs are being created. As they note, pt-econ still represents a dimension of underutilization.

noneconomic reasons to part-time for economic reasons to the net increase in part-time for economic reasons in the United States during the Global Financial Crisis in the United States.<sup>6</sup>

## 2 Data

The US Bureau of Labor Statistics (BLS) divides the employed population into those working full-time and those working part-time, where full-time is defined as at least 35 hours per week and part-time 1 to 34 hours per week at all jobs combined.

The BLS further divides part-time work into those part-time for economic reasons and those part-time for noneconomic reasons, often informally called involuntary and voluntary part-time. `pt-econ` refers to "those who worked 1 to 34 hours during the reference week for an economic reason such as slack work or unfavorable business conditions, inability to find full-time work, or seasonal declines in demand." `pt-nonecon` refers to "persons who usually work part time for noneconomic reasons such as childcare problems, family or personal obligations, school or training, retirement or Social Security limits on earnings, and other reasons."<sup>7</sup>

Movements between these two types of part-time work, and between them and other labor market statuses, can be calculated by matching monthly observations in the public-use data from monthly Current Population Surveys (CPS). However, such matched data miss movements in and out of the scope of the data, and in and out of nonresponse. BML attempt to adjust the transition rates calculated from the matched data for such "margin" flows. They also adjust for the effects of the 1994 redesign of the CPS and for time-aggregation bias, and seasonally adjust the data.<sup>8</sup>

The data are available from [Lale \(2020\)](#). Their series cover the years 1976-2019, and thus end before the onset of the pandemic recession. The BML data include only persons aged 15-64, and so are not fully comparable to the published BLS series, which cover ages 16 and up. Nevertheless, as shown in [Figure 2](#), the cyclical movements in the BML series (presented as a percent of the labor force) closely correspond to the cyclical movements in the published series.

---

<sup>6</sup>[Borowczyk-Martins and Lale \(2020\)](#) provide a general characterization of the cyclicity of transition rates between `pt-econ` and `pt-nonecon`, but do not address the contributions of these flows to the change in `pt-econ` in particular business cycle episodes.

<sup>7</sup>A third, small, category of part-time workers is those who usually work full-time but worked part-time during the reference week for temporary reasons such as vacations, holidays, illness, and bad weather. Employed persons who were absent from their jobs for the entire week are not classified as either full-time or part-time.

<sup>8</sup>BML also develop a series that attempts to correct for classification error. This measure is considerably noisier than BML's baseline series, and I use the baseline series for this note. My qualitative conclusions are not sensitive to this choice.

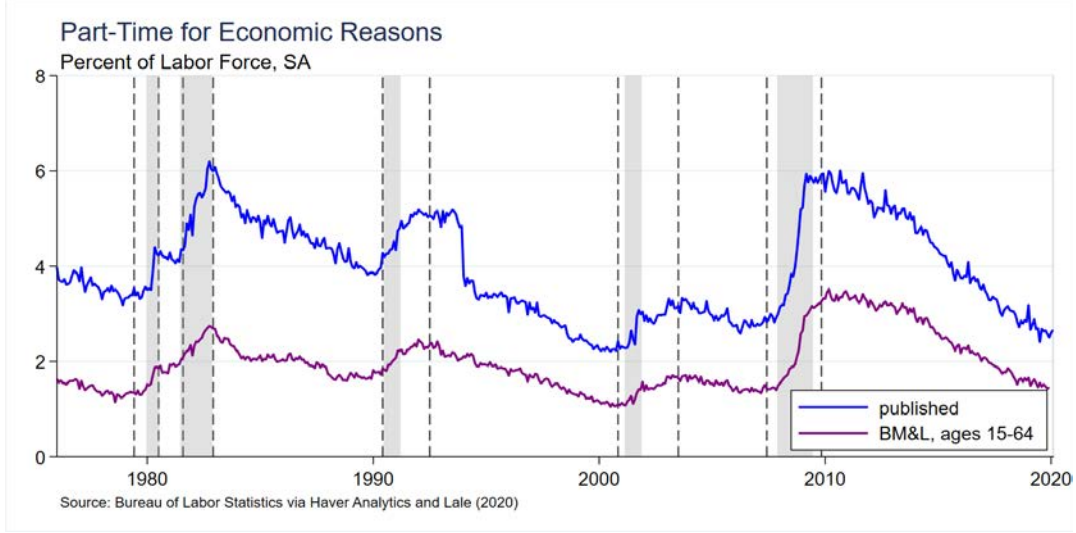


Figure 2: Part-time for economic reasons, published and BML series

### 3 Part-time for Economic Reasons during the Global Financial Crisis

The Global Financial Crisis in the United States, meaning the deep recession that began in late 2007, was particularly ripe for changes in desired hours of work to contribute to a rise in pt-econ. Not only did overall employment decline markedly, which could lead to the added-worker effect mentioned above, but household wealth also took a substantial hit. Notably, as shown in Figure 3, both house and equity prices declined sharply during the Crisis.

Indeed, as shown in Figure 4, the transition rate from pt-nonecon to pt-econ (the black line) rose by an unprecedented amount during that recession, while the transition rate in the other direction (the blue line) fell.

To evaluate how much these striking movements contributed to the increase in pt-econ during the recession, I multiply the transition rates provided by Lale (2020) by the previous-month stocks of the origin states. However, despite the margin adjustment procedure employed by BML, the implied changes in the stock of pt-econ does not quite match the changes in the measured stocks in their data. I therefore make an additional adjustment by apportioning the discrepancy in each month between the implied and measured changes in stocks to each component flow in proportion to the relative sizes of the component flows.

Figure 5 shows the cumulative contributions to the increase in pt-econ of the net flows into pt-econ from each other labor market status (that is, the flow into pt-econ from that status less the flow out of pt-econ to that status) during the Global Financial Crisis, confining

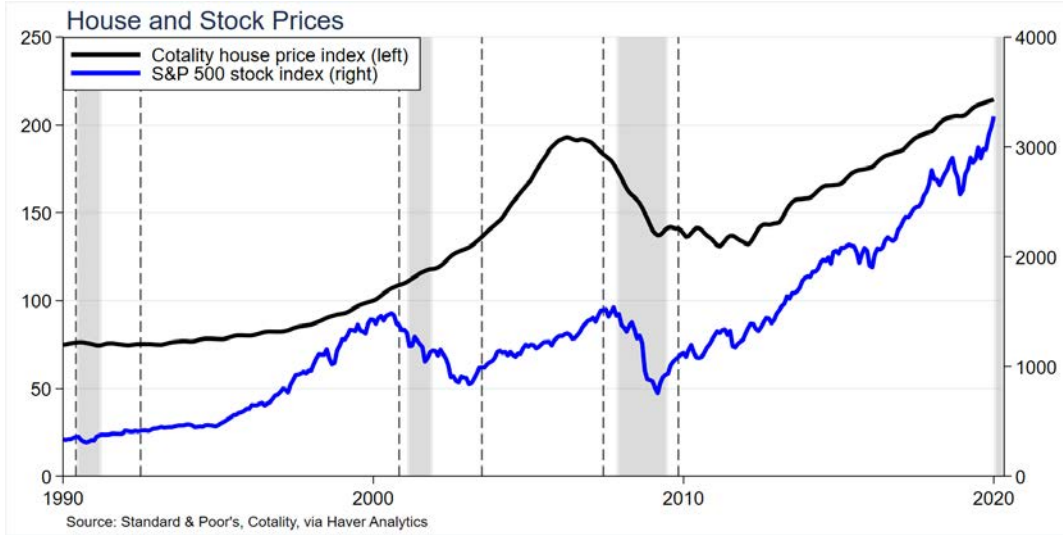


Figure 3: House price and stock price indexes

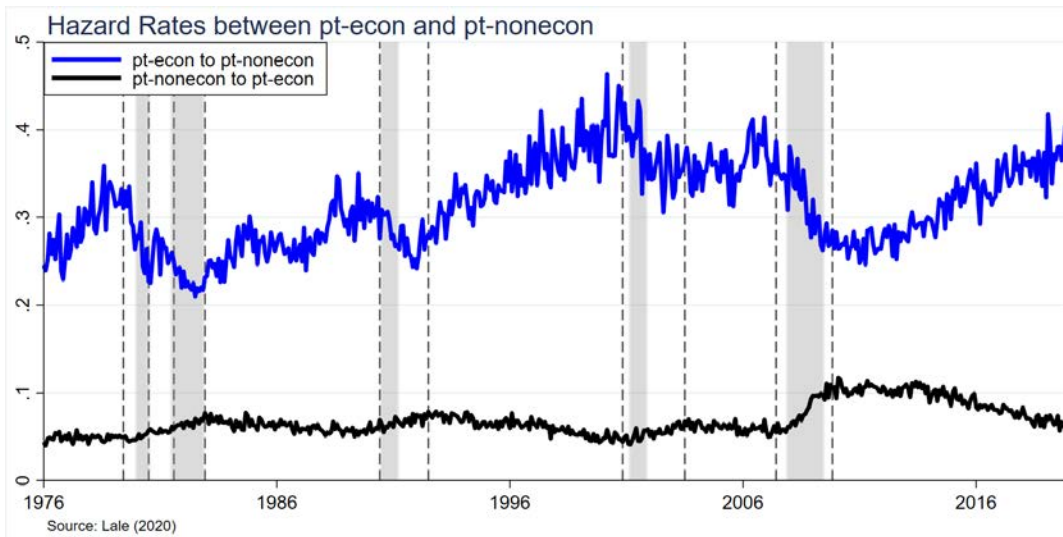


Figure 4: Transition rates between types of part-time work

attention to the unemployment rate method of dating the business cycle.<sup>9</sup> The flows are rendered as a percent of the labor force, so the segments can be viewed as the contributions of each net flow to the change in the equivalent of U-6 for this age range.

Net flows from pt-nonecon to pt-econ and pt-nonecon, which we might interpret as (net) changes in preferences for full-time work owing to changing financial circumstances, account

<sup>9</sup>NBER dating would deliver similar qualitative conclusions.



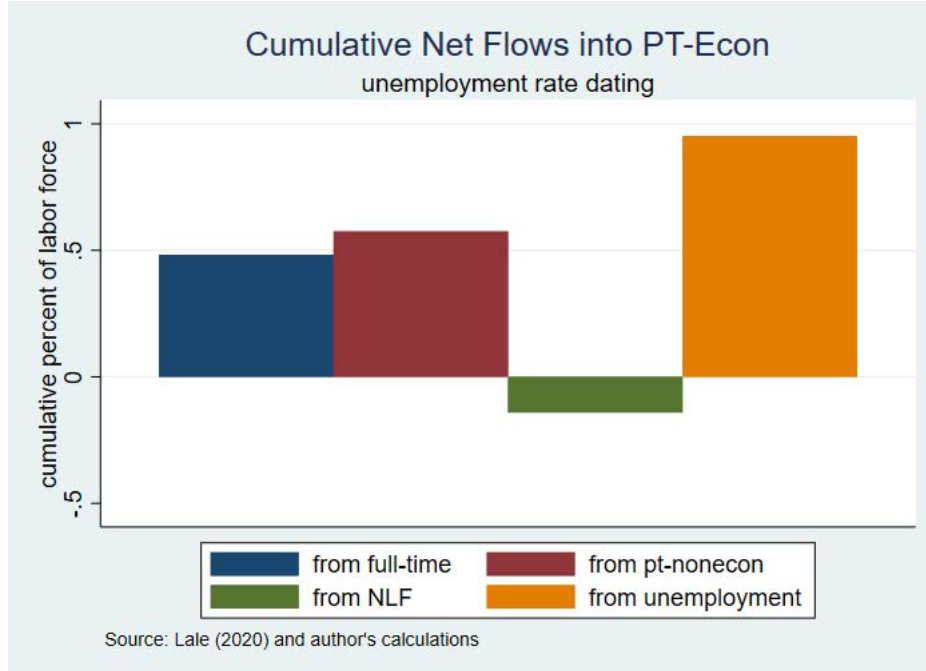


Figure 5: Contributions to the increase in pt-econ during the Global Financial Crisis

for 0.6 percentage point of the total 1.9 percentage point increase in pt-econ (as a percent of the labor force) during the Global Financial Crisis.<sup>10</sup> For comparison, the net flows from unemployment accounted for 1.0 percentage point, while the net flows from full-time employment accounted for only 0.5 percentage point in this episode. Thus, the potential double-counting of the decline in labor demand represented by movements between pt-nonecon and pt-econ was substantial.

However, Figure 6 demonstrates that this is not a general phenomenon. The figure shows the cumulative net contributions during each recession and expansion from 1979 to 2009.<sup>11</sup> There is no consistent cyclical pattern to the net contribution of movements between pt-econ and pt-nonecon. Although positive in four of the five recessions in the BML data, as one would expect, the contribution is also positive in three of the five expansions.<sup>12</sup>

<sup>10</sup>Although the hazard rates from pt-econ to pt-nonecon and from pt-nonecon to pt-econ move in opposite ways over the business cycles, because the stock of pt-econ moves proportionately much more over the cycle, the levels of flows in both directions are countercyclical. For that reason, the net contributions are smaller than might be expected from looking at the hazard rates alone.

<sup>11</sup>The horizontal axis is labeled by the year in which the recession (R) or expansion (E) began. I have omitted the expansion of the late 1970s because the data begin partway through that expansion.

<sup>12</sup>Because expansions tend to last much longer than recessions, the cumulative individual contributions are larger in expansions than in recessions, although the overall changes in the stock of pt-econ are similar in magnitude.



This inconsistency gives one pause in assigning a strong economic interpretation to the contribution of these flows, at least as measured, outside the Global Financial Crisis.

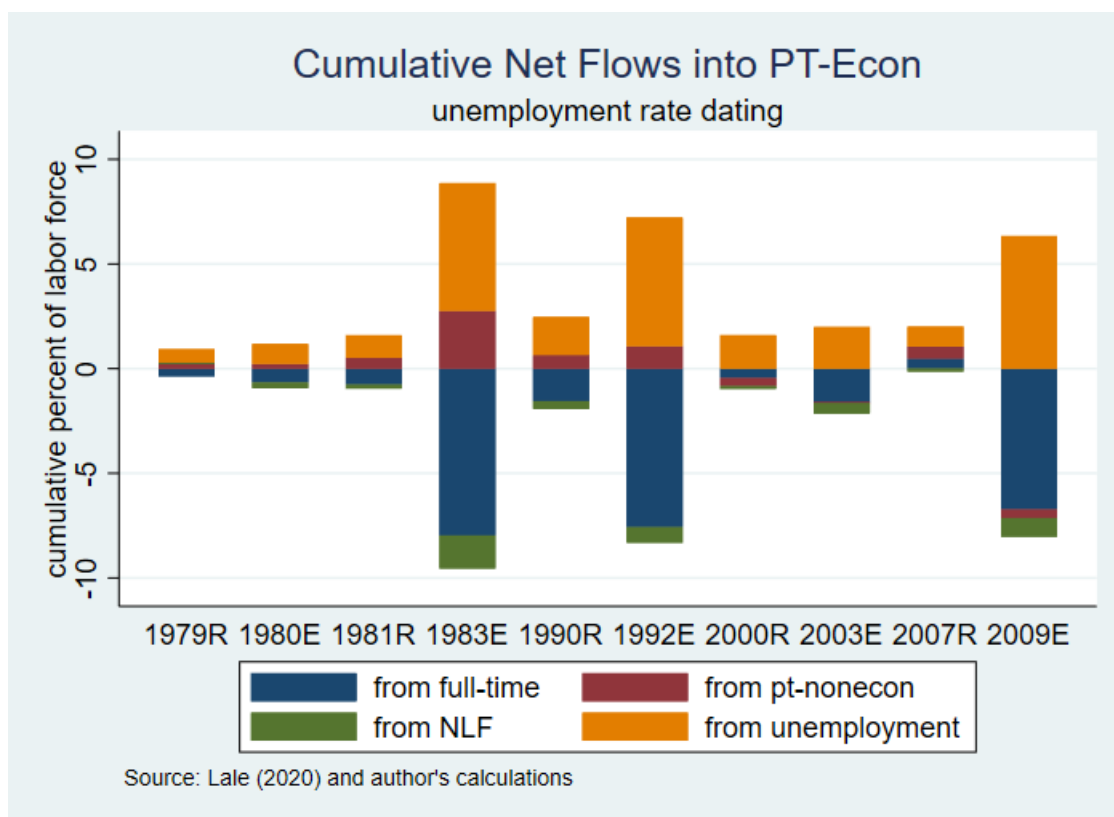


Figure 6: Contributions to changes in pt-econ during business cycle phases

## 4 Conclusion

Net flows from part-time for noneconomic reasons to part-time for economic reasons contributed substantially to the overall increase in part-time for economic reasons during the Global Financial Crisis in the United States. This suggests that the increase in measures such as U-6 may overstate the decline in labor demand during that period. However, this does not appear to reflect a general cyclical pattern.

## References

- Borowczyk-Martins, Daniel and Etienne Lale (2020). “The ins and outs of involuntary part-time employment.” *Labour Economics*, 67. doi:[10.1016/j.labeco.2020.101940](https://doi.org/10.1016/j.labeco.2020.101940).
- Bredtmann, J., S. Otten, and C. Rulff (2018). “Husband’s unemployment and wife’s labor supply: The added worker effect across europe.” *ILR Review*, 71(5), pp. 1201–1231. doi:[10.1177/0019793917739617](https://doi.org/10.1177/0019793917739617).
- Canon, Maria E., Marianna Kudlyak, Guannan Luo, and Marisa Reed (2014). “Flows to and from working part time for economic reasons and te labor market aggregates during and after the 2007-09 recession.” *Federal Reserve Bank of Richmond Economic Quarterly*, 100(2), pp. 87–111. URL [https://www.richmondfed.org/-/media/RichmondFedOrg/publications/research/economic\\_quarterly/2014/q2/kudlyak.pdf](https://www.richmondfed.org/-/media/RichmondFedOrg/publications/research/economic_quarterly/2014/q2/kudlyak.pdf).
- Faberman, R. Jason, Andreas I. Mueller, Ayssegul Sahin, and Giorgio Topa (2020). “The shadow margins of labor market slack.” *Journal of Money, Credit and Banking*, 52(S2), pp. 355–391. doi:[10.1111/jmcb.12756](https://doi.org/10.1111/jmcb.12756).
- Hornstein, Andreas, Marianna Kudlyak, and Fabian Lange (2014). “Measuring resource utilization in the labor market.” *Federal Reserve Bank of Richmond Economic Quarterly*, 100(1), pp. 1–21. URL [https://www.richmondfed.org/publications/research/economic\\_quarterly/2014/q1/hornstein](https://www.richmondfed.org/publications/research/economic_quarterly/2014/q1/hornstein).
- Lale, Etienne (2020). “data for: The ins and outs of involuntary part-time employment”.” doi:[10.17632/czf7f53xt5.1](https://doi.org/10.17632/czf7f53xt5.1). Mendeley Data.
- Lariau, Ana (2018). “Underemployment and the business cycle.” Manuscript.
- Warren, Lawrence F. (2017). “Part-time employment and firm-level demand over the business cycle.” Manuscript.