

# *The Risk of Working Part-time Involuntarily*

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## **Abstract**

This column presents findings indicating that, though longstanding, involuntary part-time work is an important phenomenon that remains largely overlooked. In the U.S. labor market, the number of workers who experience involuntary part-time work is large, and increases dramatically in recessions. Since no public insurance hedges workers against this risk, its impact on workers' welfare can be substantial.

## **Introduction**

Unemployment is arguably the number one concern in the labor market during economic downturns. When a recession hits, a large number of workers quickly become unemployed, but it takes long for them to return to employment. The implications on workers' welfare are well-understood. In recent work we argue that another labor market risk deserves greater attention, namely the risk of working part-time involuntarily.

The first reason for this is simply that the probability of becoming a part-time worker during a recession is very high.<sup>1</sup> In [Borowczyk-Martins and Lalé \(2014\)](#) we show that this is a salient feature of cyclical adjustment in the labor market. For instance, during the Great Recession, the part-time employment share – the fraction of part-time jobs in overall employment – increased around 3 percentage points from peak to trough in the United States, and more than five years after the financial crisis it remains at historically high levels. The second reason is that, contrary to unemployment, most U.S. workers cannot rely on a public insurance mechanism to hedge them against the risk of working part-time *involuntarily*.<sup>2</sup>

The Bureau of Labor Statistics classifies individuals as involuntary part-time workers for two reasons: if they cannot find a full-time job or face slack demand conditions in their job. The notion that workers face constraints in their choice of working hours establishes a useful parallel to the definition of unemployment (according to which, workers actively search for work but lack opportunities to do so), as well as more straightforward interpretation of the empirical patterns. In [Borowczyk-Martins](#)

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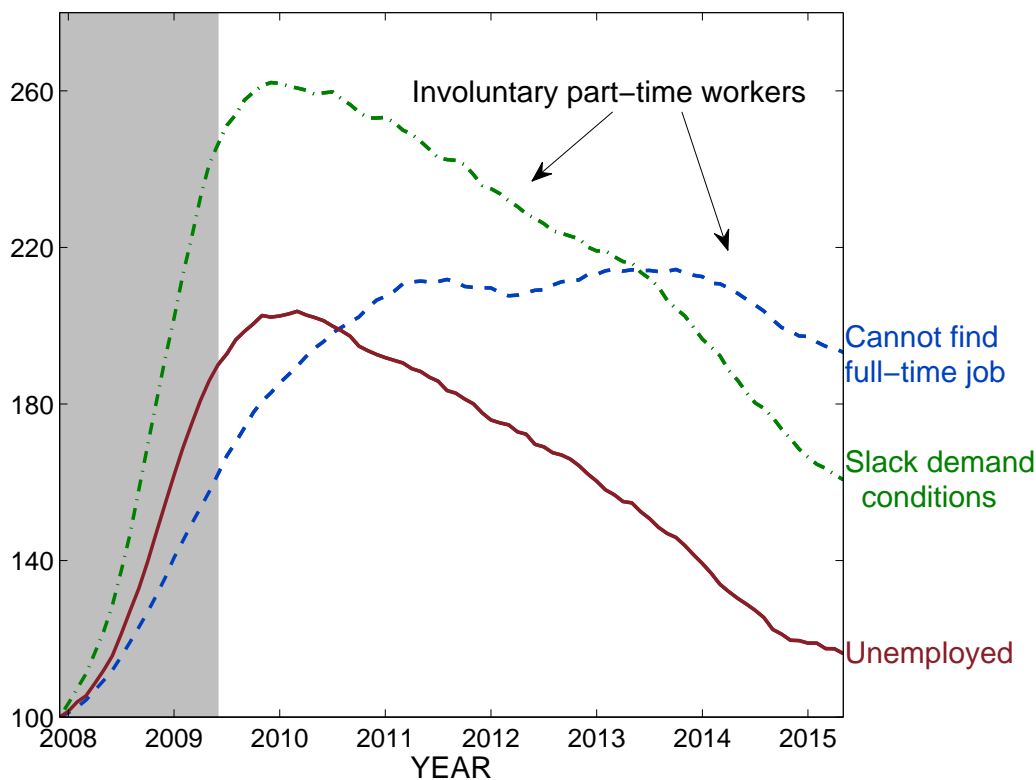
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and Lalé (2015) we make a systematic comparison between the risks of involuntary part-time work and unemployment. We first document patterns in the data, and then use a model to quantify the effects of involuntary part-time risk on workers' welfare. We tabulate large and persistent negative effects on workers' consumption from a spell of involuntary part-time work.

From a policy standpoint, our findings draw attention to the relevance of short-time work as an insurance mechanism. Academic and policy discussions so far have mainly highlighted its potential to save jobs; the most well-known example is the *Kurzarbeit* used in the German labor market during the Great Recession, but many more examples exist and are analyzed by Boeri and Bruecker (2011). Our analysis suggests there are also potentially large effects on individual consumption from using these schemes. Further, short-time work programs are likely to be particularly relevant in recessions followed by jobless recoveries (such as the latest one), since they can operate as a buffer against negative shocks to aggregate consumption.

### What the data show

As Figure 1 highlights, the Great Recession led not only to an increase in the number of unemployed, but also in the number of involuntary part-time workers (either those who cannot find a full-time job or those facing slack demand conditions). What is more surprising, more than five years after the end of the Great Recession, unemployment is close to its pre-crisis level, but the number of involuntary part-time workers remains persistently high.



**Figure 1.** Involuntary part-time work and unemployment during and after the Great Recession. Pre-recession levels are normalized to 100. The grey-shaded area denotes the recession.

One way to see how these patterns affect labor market trajectories is to track the evolution of the probability that a worker in some form of voluntary employment moves to involuntarily part-time work. The set of plots in Figure 2 display the behavior of those probabilities for workers in different educational categories. In all four plots, the probability to move to involuntarily part-time work (blue solid line) increases dramatically at the onset of the crisis, and more so compared to the same probability to move to unemployment (green dashed line). In other words, the risk of involuntarily part-time affects all employed workers irrespective of their characteristics (in this case, educational attainment), and its cyclical response during the Great Recession was stronger than that of unemployment risk.



**Figure 2.** Monthly probability (%) to move from voluntary employment to involuntarily part-time work and unemployment, by education levels. Gray-shaded areas denote recessions.

### What our model predicts

To characterize the effects of involuntarily part-time employment, we consider the problem of an individual whose welfare depends on consumption and leisure, and who seeks to smooth out shocks to

earnings that occur via changes in labor market status (unemployed, part-time or full-time employed). The individual cannot borrow money. The characteristics of part-time and full-time jobs in the model are consistent with features of the U.S. labor market. Working part-time or full-time impacts directly earnings, working hours, job mobility and, critically, the availability of public insurance. In the event of reallocation to unemployment the worker can collect unemployment benefits, but not in the case of involuntary part-time work. Though purposefully simple, the model captures what we see as the main effects of part-time work from the worker's point of view.

Using the model, we simulate and quantify the impact on workers' welfare and other labor outcomes of an exogenous relocation from full-time to part-time work. Our main findings can be summarized as follows:

1. In the calibrated model, the worker always prefers to work full-time over part-time hours. In that sense, part-time employment is indeed involuntary.
2. When a full-time worker is relocated to part-time employment the loss in income is short-lived, since the worker returns to full-time work quickly. However, the associated fall in consumption is more persistent (lasting in excess of two years). The estimated short-term consumption losses are of the order of 6 to 8%, in the same ballpark as those implied by a spell of unemployment documented in a famous study by [Gruber \(1997\)](#).
3. If the risk of involuntary part-time work depicted in Figure 2 were to become a permanent feature of the economy, and if labor market institutions remain unchanged, U.S. workers would experience a welfare loss amounting to 1.5 to 2% of their lifetime consumption.

## Summary and concluding remarks

We find that:

- Like unemployment, the risk of working part-time involuntarily is high and increases dramatically in recessions;
- Considering the behavioral and institutional features of the U.S. labor market, the welfare losses imposed on workers by a spell of involuntary part-time work are large and persistent;
- A variant of the short-time compensation schemes common in Continental European countries has the potential to help U.S. workers cope with labor market fluctuations better.

## References

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## Notes

<sup>1</sup>While in this column we discuss results based on an analysis of the U.S. labor market, in [Borowczyk-Martins and Lalé \(2015\)](#) we show that aggregate labor market data from the OECD indicates that involuntary part-time work is similarly high and strongly countercyclical in a large number of advanced economies.

<sup>2</sup>In the majority of U.S. states there are no public schemes that compensate employed workers for reductions in working hours, and workers who voluntarily quit to unemployment are not eligible to unemployment benefits (see e.g. [Abraham and Houseman, 2014](#)).