The Anatomy of Monthly Earnings Volatility:
Evidence From Paycheck Microdata

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Abstract

It is well-documented that wages are largely stable and, when they do adjust, almost always adjust upwards. In this paper we show that this wage stability does not translate into earnings stability for the majority of U.S. workers. Even within stable employment relationships, and even when wages are constant, we find that many workers nevertheless face substantial earnings volatility due in large part to large fluctuations in hours from one month to the next. Using administrative payroll and bank account data, we find that the standard deviation of month-to-month income changes is above 40% within employment spells. Moreover, we find that this high volatility is ubiquitous across workers: in any given month, one quarter of employed hourly workers see a change in pay of at least 20%. We provide suggestive evidence that this pay volatility is at least half driven by employer-determined instability in work schedules from month to month and show that monthly pay volatility is slightly positively correlated across jobs within the household. Finally, we show that high-frequency pay volatility is potentially costly to workers, finding that higher pay volatility predicts a higher quit rate. Overall, this analysis suggests that high-frequency labor market shocks within employment relationships are an important source of income volatility that has been masked by past studies of annual labor market earnings.