When Is It Hard to Make Ends Meet?

Brian Baugh
University of Nebraska, Lincoln

Jesse B. Leary
Financial Conduct Authority

Jialan Wang
University of Illinois

Prepared for the 19th Annual Joint Meeting of the Retirement Research Consortium
August 3-4, 2017
Washington, DC

The research reported herein was pursuant to a grant from the U.S. Social Security Administration (SSA), funded as part of the Retirement Research Consortium. The findings and conclusions expressed are solely those of the authors and do not represent the views of SSA, any agency of the federal government, the University of Nebraska-Lincoln, the Financial Conduct Authority, the University of Illinois, or the NBER Retirement Research Center.

Since 1997, the Social Security Administration (SSA) has disbursed Old Age, Survivor and Disability Insurance (OASDI) payments on the second, third, or fourth Wednesdays of each month, depending on the beneficiaries' date of birth. This schedule generates pay periods that are either 28 or 35 days long. This study examines the effects of the Wednesday payment schedule on the financial behavior and financial health of OASDI beneficiaries. First, we find that beneficiaries are significantly more likely to experience financial shortfalls during 35-day versus 28-day pay periods. Second, we find that beneficiaries are more likely to experience shortfalls if they have a greater timing mismatch between their benefits income and their due dates for mortgage, auto, and credit card payments. The results suggest that policies and technologies that help consumers align the timing of their income and expenditures could improve financial health.

Data, Methods, and Results

We assess the effects of the Wednesday OASDI disbursement schedule on several measures of financial health from two distinct datasets. Our first dataset comes from an online account aggregator, a free service that allows users to link and monitor their financial activities across multiple financial accounts. We identify about 34,000 beneficiary households that are paid on one of the three Wednesday schedules among the set of users of this aggregation service. For these households, we observe details of their bank and credit card transactions, including transaction dates, descriptions, and amounts. Our second dataset is an anonymized administrative dataset collected by the Consumer Financial Protection Bureau that includes storefront payday loans made by several large lenders. We identify several tens of thousands of OASDI beneficiaries paid on Wednesdays by matching their reported income sources with the SSA disbursement calendar. For each loan, we observe the principal and fee amounts, origination dates, payment due dates, and actual payment dates.

Our key measures of financial health are the propensity of beneficiaries to experience bank overdrafts, bounced checks, and online and storefront payday loans on a given day. On an average day, Wednesday group beneficiaries have a 0.7-percent probability of experiencing an overdraft, an 0.2-percent probability of having a bounced check, and 0.01- and 0.05-percent probabilities of taking out online and storefront payday loans, respectively. While these are not high probabilities on a daily basis, a given household has more than a 13-percent chance of experiencing one of these types of financial shortfalls in an average month.

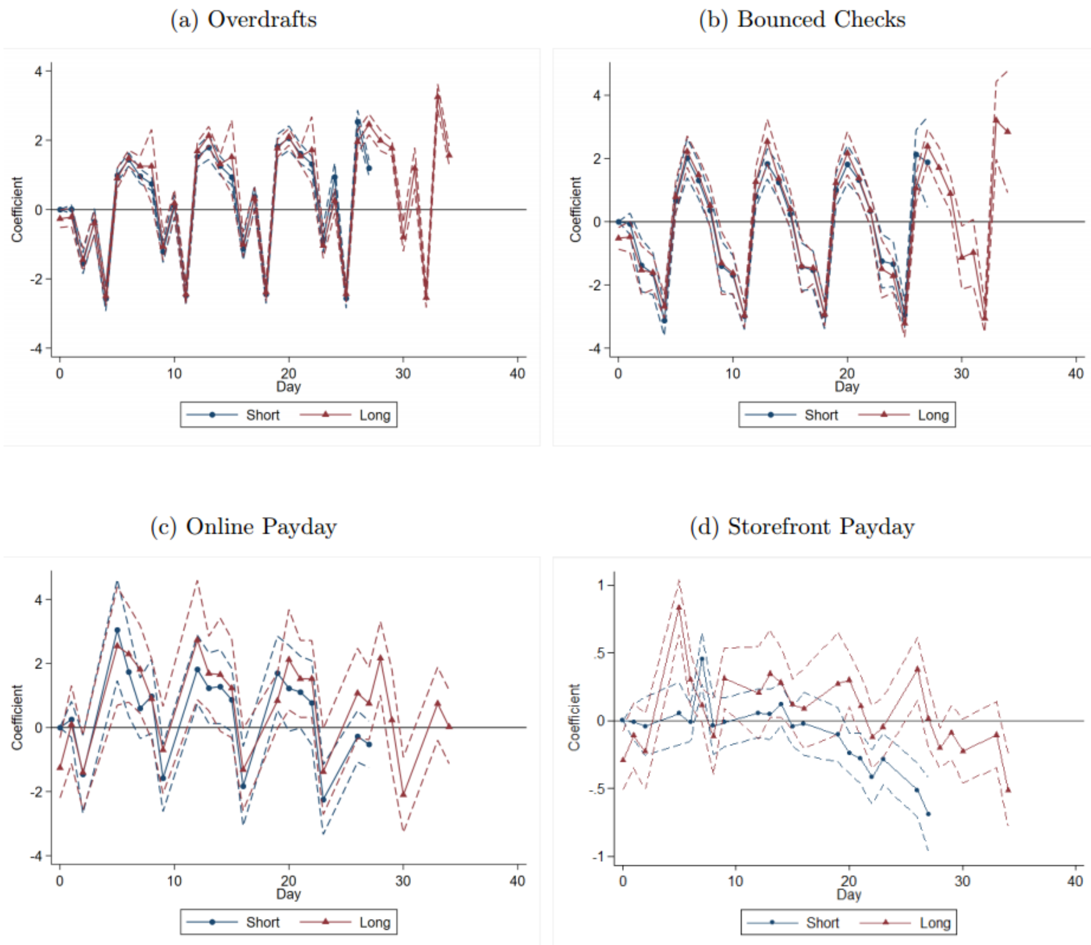
As shown in Figure 1, the incidence of financial shortfalls is significantly higher during long (red triangles) versus short (blue squares) pay periods. Households are 5 percent more likely per day to experience an overdraft during 35-day pay periods compared with 28-day pay periods. They are 3 percent more likely to experience a bounced check, 16 percent more likely to take out an online payday loan, and 31 percent more likely to take out a storefront payday loan. Beneficiaries paid near the end of the month are also in better financial health than those paid in the middle of the month.

Relative to the second Wednesday group, those in the fourth Wednesday group are 3 percent less likely to overdraft, 10 percent less likely to have a bounced check, 14 percent less likely to take out online payday loans, and 4 percent less likely to take out storefront payday loans. We find evidence that the differences in financial health across the three Wednesday groups – who have otherwise identical economic circumstances – are driven by the mismatch in timing between their benefits payments and monthly mortgage, auto, and credit card payments. Despite these findings, we find that beneficiaries are unlikely to adjust the due dates for their monthly expenditures to better align with their incomes – either because they do not want to, because they are not able to, or both.

Implications

Our results highlight the need for better policies and tools to help consumers match the timing of their income and expenditures. Such tools, which are increasingly available through traditional banks, payroll providers, and financial technology firms, could help consumers avoid high-cost borrowing and other costs of financial shortfalls. These innovations would be especially beneficial for vulnerable households, such as those who depend on SSA benefits. The results of this project are not only relevant for the OASDI benefits disbursement system, but may also help inform the impacts of income timing for other benefits programs administered by SSA and other state and federal agencies.

Figure 1. *Financial Shortfalls Over Short and Long Pay Periods*



Note: Figure shows the percentage difference in the incidence of financial shortfalls relative to the first day of the pay period for short pay periods.