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Payment choice with consumer panel data*

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Preliminary!

Abstract

We exploit scanner data to track payment choice for grocery purchases for a large panel of households over three years. We particularly focus on the role of expenditure size in determining payment choice. While the use of a long panel for these purposes is novel, the introduction of household fixed effects has little effect on our estimates.

Introduction

Over the past several decades, the U.S. payments system has shifted from paper payment instruments, cash and check, to digital instruments, debit cards and credit cards. This shift is important since digital payments are typically regarded as superior in most dimensions: they are faster and cheaper to process, and they are easier to track and less subject to crime. The shift to digital payments is far from complete however, as cash and check still play a large role in the economy, particularly in some sectors.

A number of studies aim to identify the determinants of payment choice. However, doing so is often hampered by data constraints. It is difficult to track the payments of individual households, particularly with regard to cash. One method for tracking payment choice is to survey consumers retrospectively such as in Schuh & Stavins (2010) and Koulayev, Rysman, Schuh & Stavins (2012), which use a survey that asks consumers about payment use over the previous month. However, this method makes it difficult to study the determinants of each individual choice, or why choice varies across shopping trips. Another method is to ask survey participants to fill out a diary of payment behavior, such as in Fung, Huynh & Sabetti (2011) and Rysman (2007). This is an important contribution, although Jonker & Kosse (2009) raises questions about how accurate these surveys are, showing that the daily number of transactions in 7 day surveys is significantly less than in one day surveys,

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