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Alternative financial service providers and the spatial void hypothesis

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Abstract

This paper studies the spatial relationship between traditional banking services (Banks) and alternative financial service providers (AFSPs). The main objective is to test the so-called *spatial void hypothesis* that AFSPs tend to locate in markets where traditional banking services are under-provided. The key question of interest here is whether or not AFSPs serve markets with significantly lower income levels than those of Banks. One of the main contributions of this paper is to develop a statistical methodology for addressing this question that builds on previous studies. The present approach is based largely on *K-function* analyses of both individual and paired point patterns. These Monte Carlo testing procedures are applied to Banks and AFSPs in the four-county region around Philadelphia, Pennsylvania, and are also compared with previous methods. In contrast to previous work, the key finding of the present research is that there is indeed strong empirical support for the spatial void hypothesis in this Philadelphia region.

JEL classification: G21; C12
Keywords: Spatial void hypothesis; Point pattern analysis; *K*-functions

1. Introduction

The majority of Americans rely on banks and other traditional financial institutions to conduct their financial transactions. However, a large segment of the population, an estimated 56 million consumers, have no affiliation with these mainstream institutions and use instead alternative financial service providers (AFSPs)—check cashing outlets, payday lenders, pawnshops, rent-to-own stores, auto title lenders, and money transmitters—for their financial needs.[1] Research has shown that many of the patrons of AFSPs are minority and low-income consumers.[2] While this fast growing non-bank segment of the financial industry seems to provide its customers with the services that they need, the price for the services are high relative to comparable services offered at many mainstream financial institutions. On the one hand, these high fees are thought to strip AFSPs' patrons of needed income to pay bills and possibly serve as the basis for asset or wealth accumulation. On the other hand, the AFSPs might fill a financial void due to the lack of mainstream financial institutions

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[1] General Accounting Office (2002).
[2] See Stegman (2001).

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being present in areas where AFSPs' patrons are located. This latter hypothesis, which shall be designated as the *spatial void hypothesis* throughout this study, was most recently studied by the Fannie Mae Foundation (FMF).[3] The FMF study investigated the spatial void hypothesis by focusing on several sites around the country.

This study addresses essentially the same questions as the FMF study, but focuses instead on several counties in the Commonwealth of Pennsylvania. It examines whether AFSPs satisfy a financial vacuum created by the absence of traditional financial institutions and also explores whether AFSPs are disproportionately serving minority and low-income areas. In addition to applying techniques used in the FMF analysis, this study will employ alternative statistical methods that are shown to yield sharper tests of the spatial void hypothesis.

2. Background

Alternative financial service providers (AFSPs) have been around in various forms for sometime. According to one account, in 1986 there were about 2200 alternative providers nationwide, but that number grew to more than 10,000 by 1994.[4] The total number of AFSPs has greatly increased since then, given that the number of pawn shops alone has been estimated to be between 12,000 and 14,000; while the number of payday lending outlets has been put at 22,000 in 2004.[5] Just in Pennsylvania, the number of licensed check cashers and pawnbrokers together grew by nearly 40% from August 2004 to May 2005. However, the proliferation of AFSPs in recent years has drawn a great deal of scrutiny (particularly payday lenders and check cashers) as a result of the heavy reliance on their services by minority and low-income households.[6] In many instances, this dependence has been to the exclusion of using the financial services of mainstream institutions, which offer a better opportunity to build wealth. Since the fees charged by AFSPs are typically higher than similar services available at traditional financial institutions, there continues to be some speculation regarding the popularity of these alternatives.[7] The focus has mostly been on (i) the number and kinds of AFSP establishments and their location, (ii) whether they provide needed financial services not readily available due to the absence of mainstream financial institutions, or (iii) whether they offer more convenient hours and a host of non-financial services in addition to basic financial needs. The FMF study dealt with the first two of the aforementioned areas of interest.[8] While this study will formally address the first two, it will also shed some light on the third.

2.1. Substitutes or complements

In economics parlance, to the extent that check cashers and other AFSPs fill a void due to the absence of mainstream financial institutions, they serve as substitutes. However, to the degree that AFSPs function profitability in areas served by conventional financial institutions, they might be regarded as complements. The interplay of supply and demand forces for financial and related services helps underscore such a dichotomy. Logic would dictate that AFSPs would locate near those consumers who would most likely patronize their businesses. From an economic perspective, such behavior would be considered "rational". This is especially the case in areas with no mainstream financial institutions. Similarly, for those consumers with severely flawed credit or those with no relationship with a traditional financial institution and who frequent AFSPs (notwithstanding their high credit terms and the presence of a mainstream institution) might also be thought to be acting pragmatically.

It is understandable why such consumers might use some AFSPs for their credit needs, but some people might question why consumers who have accounts at traditional financial institutions would use the services of AFSPs. While payday lenders require that borrowers have a checking account in order to receive a short-term loan, potential borrowers ostensibly have access to their mainstream financial institution for such loan needs. One study by Graves (2003) suggests that the exiting of conventional financial institutions from low-income neighborhoods might have

[3] See Sawyer and Temkin (2004).

[4] See Caskey (1994).

[5] For example, see Carr and Schurtz (2001), as well as Flannery and Samolyk (2005).

[6] Estimates indicate that the check-cashing industry handles over 180 million checks annually valued at over 60 billion. See Goldman and Wells (2002).

[7] The Fannie Mae study reported that the fees can range from 15 to 17% for a two-week loan, while the annual percentage rate can reach 300%.

[8] More specifically, Fannie Mae investigated the characteristics of the neighborhoods where AFSPs are located, and whether the heavy patronage of AFSPs was due to the absence of conventional financial institutions to provide the needed services. In addition, the Fannie Mae study considered the influence that laws enacted by local jurisdictions and states had on the locations of AFSPs.