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Entrepreneurial finance, credit cards, and race ☆

Aaron K. Chatterji [a], Robert C. Seamans [b,*]

[a] Fuqua School of Business, Duke University, United States
[b] Stern School of Business, New York University, Suite 7-58, 44 West 4th Street, New York, NY 10012, United States

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ABSTRACT

This paper examines the impact of financial deregulation on entrepreneurship. We assess the impact of credit card deregulation on transitions into self-employment using state-level removal of credit card interest rate ceilings following the US Supreme Court's 1978 *Marquette* decision as a quasi-natural experiment. We find that credit card deregulation increases the probability of entrepreneurial entry, with a particularly strong effect for black entrepreneurs. We demonstrate that these effects are magnified in states with a history of racial discrimination and link the results to discrimination-based barriers to entry.

1. Introduction

This paper examines the impact of financial deregulation on entrepreneurship, a key driver of economic growth. We provide evidence that the deregulation of credit card markets in the late 1970s expanded access to credit in the US economy, enabling liquidity-constrained individuals to borrow money and increase the rate of new businesses formation. While several previous studies of US financial deregulation investigate how commercial banking sector liberalization influenced economic growth through firm entry and exit, other less examined examples exist of financial deregulation that were significant enough to spur new firm formation. In particular, despite anecdotal evidence about the importance of credit cards in financing new enterprises, no previous study has explored how exogenous policy shocks to the availability of credit cards influences key economic activities, such as entrepreneurship.

Our empirical approach leverages differential credit constraints facing black and white entrepreneurs by estimating the impact of credit market deregulation on entrepreneurship by race. This strategy is underpinned by an important finding from previous studies that, depending on demographic characteristics, some individuals are more likely to use credit cards to finance their ventures

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* Corresponding author. Tel.: +1 212 998 0417; fax: +1 212 995 4235.
E-mail address: rseamans@stern.nyu.edu (R.C. Seamans).

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than others. In particular, black entrepreneurs are more likely to finance their ventures using credit cards than white entrepreneurs due to differences in frictions encountered when accessing traditional bank loans and other external finance (Blanchflower, Levine, and Zimmerman, 2003; and Fairlie and Robb, 2008). Specifically, we use a differences-in-differences approach that exploits the removal of state level credit card interest rate ceilings following the US Supreme Court's 1978 decision in *Marquette National Bank of Minneapolis v. First Omaha Service Corp*. Our research design helps rule out plausible alternative explanations and establishes a credible causal link between credit card deregulation and entrepreneurial entry.

We first use data contemporaneous to the Supreme Court's *Marquette* decision to demonstrate that black borrowers were systematically more likely than white borrowers to face barriers to finance in the 1970s and 1980s. Our finding accords with results in Blanchflower, Levine, and Zimmerman (2003) who study barriers to finance using data from the 1990s. We then examine differences in credit card availability and ownership patterns following removal of state-level credit card interest rate ceilings. The patterns reveal that individuals based in states with no ceiling on credit card interest rates had more credit card debt and higher annual percentage rates (APRs) than individuals in states not affected by a similar policy change. These findings complement a study by Zinman (2002), which shows a significant increase in credit card ownership following a state's removal of its credit card interest rate ceiling, and are in line with anecdotal evidence that credit card issuers were likely to move to states without ceilings following a state-level policy change (Ausubel, 1997). More broadly, the results are consistent with the findings in Gross and Souleles (2002) linking credit card debt to changes in credit limits.

After establishing the link between a state's removal of credit card interest rate ceilings and the amount of credit cards in the state, we next examine how this type of credit card deregulation affected entrepreneurial entry. To do this we use data from the *Current Population Survey* (CPS) for 1971–1990 on transitions into self-employment. Our results suggest that living in a no-limit state resulted in a significant increase in the probability of a transition into self-employment, and the effect is particularly pronounced for black entrepreneurs. The results are robust to alternative models, including multinomial logit, and alternative specifications. Thus, one of the main contributions of our paper is to use a large sample setting to demonstrate the importance of credit cards to entrepreneurs. A likely explanation for the differential effect for black entrepreneurs is that, due to discrimination in traditional lending markets, black entrepreneurs with good projects relied more heavily on credit cards to fund new ventures than did white entrepreneurs. Such an explanation was originally suggested by Blanchflower, Levine, and Zimmerman (2003, p. 940), who write that "if financial institutions discriminate against blacks in obtaining small-business loans, we may even expect to see them use credit cards more often than whites, because they have fewer alternatives."

To examine this explanation in more detail, we next test whether the effects of credit card deregulation on black entrepreneurial entry differ depending on the history of discrimination in the state. We split states along several measures of discrimination and show that the effect on black transitions into self-employment is larger in states with a history of discrimination. These results suggest that the increase in competition between credit card companies following a state's removal of its credit card interest rate ceiling reduced discrimination-based barriers to entry for black entrepreneurs.

Finally, we assess the extent to which credit card deregulation was endogenously determined by factors important to our study, such as the percent of self-employed or black individuals in a state. We find no evidence that the timing of credit card deregulation depended on these variables. We use data provided by Kroszner and Strahan (1999) to instead provide evidence that the timing of credit card deregulation was related to political economy variables. We also show patterns from the *Survey of Consumer Finance* (SCF) that suggest black entrepreneurs are more likely to own credit cards than white entrepreneurs in states that remove credit card interest rate ceilings.

We believe our findings provide a substantial contribution to two streams of literature. First, we contribute to a stream of literature that links the role of financial development to economic growth (Fazzari, Hubbard, and Peterson, 1988; Kaplan and Zingales, 1997; Levine, 2005). This literature has recently focused on the relation between bank deregulation and entrepreneurship (Black and Strahan, 2002; Cetorelli and Strahan, 2006; Bertrand, Schoar, and Thesmar, 2007; Huang, 2008; Kerr and Nanda, 2009) and shows that the removal of financial constraints increases entrepreneurial entry.[1] Our paper adds to this literature by studying a different source of financial deregulation, namely, removal of barriers to the access of credit cards. In doing so, we also demonstrate that financial deregulation can differentially affect entrepreneurs depending on demographic characteristics, such as race. This finding is relevant to the literature that examines the social effects of changes to credit market competition (Garmaise and Moskowitz, 2006). We also build on Levine, Levkov, and Rubinstein (2008), which shows a larger decrease in the black-white wage gap following bank deregulation in states with comparatively higher discrimination.

We also add to existing literature on entrepreneurial finance that focuses primarily on sources of finance such as bank loans and venture capital (Kortum and Lerner, 2000; Hsu, 2004; Zarutskie, 2006; Hochberg, Ljungqvist, and Lu, 2007; Hellmann, Lindsey, and Puri, 2008; Kerr and Nanda, 2009) and has only recently started to focus on alternative lending sources. To the best of our knowledge, the only other study on the link between credit cards and entrepreneurial finance is Scott (2010), which uses *Kauffman Firm Survey* data to show that a number of entrepreneurs use credit cards to start companies, although other studies have focused on the link between consumer debt and credit cards (e.g.; Gross and Souleles,

[1] For dissenting views, see Petersen and Rajan (2002) and Hurst and Lusardi (2004).