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Capital Availability in Inner Cities: What Role for Federal Policy?

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I. Introduction

U.S. urban areas are sites of high poverty. Data from the 2000 Census show that the country's 100 largest inner cities were home to almost 20 percent of the country's poverty and over 30 percent of minority poverty, despite accounting for only 8 percent of the total population and 0.1 percent of the country's land mass. Unfortunately, economic conditions over the past decade have exacerbated these issues. During the 2001-2002 recession, inner cities lost jobs at a faster rate than the rest of the country and did not add jobs again until 2006 at the tail end of the real estate bubble. By 2008, the latest year for which there are local area employment data, inner city employment had actually declined slightly from its 1998 levels, while the surrounding regional economies grew on average by almost 10 percent. Given the sluggish performance of the national economy over the past two years, 2009 and 2010 data are likely to show further erosion of the job base in the country's distressed urban areas.

These trends make clear the tremendous need for federal policies that will support economic growth in the country's distressed urban areas. This idea is hardly new. Over the past decades, federal policies from Empowerment Zones to New Markets Tax Credits to Community Development Block Grants to SBA's Emerging 200 have aimed to attract, retain and grow businesses in economically distressed urban areas. Despite many successes, the widening disparity between inner city and national economic performance strongly suggests a need to re-evaluate the efficacy of existing federal policies aimed at supporting inner city economic development.

In this paper, we examine a key driver of business success—access to financial capital—and discuss current and potential roles of federal policy in ensuring access to capital for inner city businesses. Access to capital has historically been a problem in low-to-moderate income (LMI) areas, illustrated most extremely in so-called "redlining," a term coined in the 1960s to describe the practice of refusing to make loans or write insurance policies based on neighborhood characteristics, rather than merits of would-be borrowers. While this practice is illegal, the persistence of the "capital gap" has become a contentious issue among researchers, practitioners, and policy makers. Some believe that major regulatory efforts focused on improving credit access in LMI areas, such as the Community Reinvestment Act (CRA), have rendered the capital gap a problem of the past. Others believe that despite significant improvements, large barriers continue to exist, creating a shortage of capital for even investment-worthy inner city businesses. Resolving this debate is critical for designing appropriate public and private sector responses to the anemic economic performance in inner cities.

To date, this debate has been largely defined by a lack of uniform, detailed, national metrics on capital supply and demand in local geographies. These constraints have been exploited by both those who believe there is a capital gap in LMI areas, as well as skeptics of this claim. Among believers, indicators of depressed capital activity, such as lower-than-average loan-to-firm ratios, are assumed to reflect banks' reluctance to take on risk in inner city neighborhoods. Skeptics look at the same data and conclude that these ratios reflect different types of businesses in low-income urban neighborhoods, which they often caricature as smaller, service-oriented, "mom and pop" businesses that require less capital and in any case, are managed by owners that are more risk averse. In other words, those who believe there is a capital gap focus on the role of supply-side in driving increased capital flows—a legitimate target of public policy intervention—while skeptics look to demand-side factors that are largely beyond the reach of policy. This has created a stand-off between those who see the need for additional policy responses and those who do not. While we cannot fully adjudicate these debates within the context of this paper, we provide a broad range of data that can address key claims within these debates.

The paper is organized as follows. In Section II, we review information on capital flows into economically distressed urban areas. We summarize work by Immergluck (2004) that looks at the availability of debt in low-income urban areas and also examine data from Federal Financial Institutions Examination Council, which aggregates data reported by lending institutions under the Community Reinvestment Act (CRA). We also review the foundational work by Glenn Yago, Betsy Zeidman, and their colleagues at Milken Institute (2003, 2007) on structural impediments to capital flows in underserved markets.

The evidence presented in this section supports the claim that the supply of capital to inner cities is lower than would be expected given the size of the economies. ICIC surveys show that capital access is a challenge even for the fastest-growing inner city firms and Yago *et al.* make a persuasive case that the ethnic-owned businesses so critical to inner city economies remain underserved by traditional capital structures. CRA data—which designate urban census tracts as "low income," "moderate income," "middle income," or "high income"—provide a somewhat more mixed picture: Total loan volume in LMI tracts is small relative to the number of establishments in these areas, but LMI share of total national loan value is actually slightly higher than its share of firms. However, when we limit the comparison to urban economies, where firm sizes are more similar, we find that low- and moderate-income census tracts receive far fewer loans and far fewer loan dollars than firms in middle- and upper-income urban census tracts. Moreover, because CRA data report average number of loans per establishment rather than per

employee or million dollars of revenue, these data likely underestimate the capital gap in inner cities, where establishments tend on average to be significantly larger than elsewhere in the city or country. Altogether, these data are not conclusive, but certainly support claims that capital flows to inner city areas are small relative to the amount of economic activity in these areas.

In Section III, we examine capital demand in inner cities to test the widespread perception that inner city firms simply demand less capital than firms elsewhere in the U.S. and to determine whether the distinct physical and economic structures in inner cities, such as high population density, do in fact influence the demand for capital. While there is no reason to assume *a priori* that capital requirements of inner city firms are lower than those of the average U.S. firm, there is also no reason to assume that inner city capital demands are identical to other firms. Because there are no direct measures of local area capital demand—even data reported under the CRA requirements include "information on loans originated or purchased, but not on applications denied"—we examine various proxies. We begin by looking at general characteristics of the population of inner city firms, including distribution by firm size and sector. We find no evidence based on these characteristics that inner city firms would demand less capital than elsewhere in the U.S.; in fact, the data suggest that the average inner city firm might have a slightly greater demand for capital. We then utilize a highly detailed set of national data on industry characteristics within manufacturing to test whether inner city areas are concentrated in less capital-intensive segments. We find that inner cities are somewhat more concentrated in the most capital-intensive parts of the sector, further undermining claims that demand conditions can explain differential capital flows to inner cities.

Although these data create a compelling story regarding inner city demand, they cannot speak directly to capital supply or capital gap. In Section IV, we exploit the availability of a relatively new data set, the Kauffman Firm Survey (KFS), which allows us to examine capital demand and capital supply at the firm level. Because KFS data capture the industry in which each firm competes, as well as detailed data on capital acquisition, we are able to compare capital levels at individual firms (a proxy for capital utilized) relative to the average of all firms in the industry nationally (a proxy for capital demand) and estimate a gap for each firm in the sample. We then sum these across inner city firms to look for evidence of a capital gap. While the KFS data also show a capital gap, the more important findings we believe relate to the distribution of capital across firms. We discuss this in more detail in Section IV.

The KFS data also allow us to tease out the influence of "race" and "place" on capital flows. This question is critical from an analytical standpoint. Fairlie and Robb (2008) report that, on average, minority-owned firms have less successful business outcomes largely due to lower startup capital levels.[1] ICIC data on some of the country's most successful inner city firms show similar patterns: Even among fastest-growing inner city firms, the race of the owner appears to be an important predictor of capital levels. The struggles and successes of minority-owned businesses (MBEs) in capital markets will strongly affect the economies of inner cities; ICIC estimates that 40-45 percent of inner city businesses are minority-owned, a rate that is about 2.5 times the national average of about 18 percent.[2,3] We document the capital challenges of MBEs and, in a later section, attempt to tease out the relative size of the "race" and "place" effect in capital flows to inner cities.

In Section V, we analyze data on three major federal capital related programs—SBA's loan programs, CDFI lending activity, and New Markets Tax Credits (NMTC)—to assess their impact on inner city economies.

In Section VI, we summarize the findings from the previous sections and discuss their implications for federal policies designed to improve capital access and business growth in inner city areas. We discuss broad implications for data and methods, the conceptual framework for policy formulation, the relevance of existing systems for delivering capital to underserved areas, and specific implications for place-based policies and programs for providing debt and technical advice to inner city firms. Rather than provide micro-analysis of existing or potential programs, we apply the findings from the earlier sections of the paper to create a set of broad principles that can inform the design and implementation of a range of capital-related policies. This approach also reflects our belief that the primary challenge for capital policy is not policy design or program implementation but simply establishing a common base of facts and identifying the specific problems to be fixed.

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[1] In their words, "Racial differences in startup capital are the single most important factor explaining racial disparities in business outcomes" (p. 178). Fairlie, Robert W. and Alicia M. Robb. *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*. MIT Press. 2008.

[2] The estimate of inner city businesses that are minority-owned is based on Current Population Survey data on self-employment (47 percent), data from 10 years of applications to the ICIC's Inner City 100 program (42 percent) and data from the KFS survey (41 percent).

[3] In 2002, 18 percent of all businesses and 12 percent of businesses with employees were minority owned. (Based on recent trends, we estimate that the 2007 data will show slightly higher rates of minority business ownership.) U.S. Small Business Administration, Office of Advocacy. "Minorities in Business: A Demographic Review of Minority Business Ownership." Washington, D.C. April 10, 2007.

The analyses presented in this paper rely on a number of data sources, including the Kauffman Firm Survey (KFS) (2004 – 2007), Small Business Administration (SBA) loan data (1998 – 2007), Community Development Financial Institutions Transaction Level Report data (2006 – 2008), Federal Financial Institutions Examination Council's Community Reinvestment Act data (1997 - 2009), Current Population Survey (2003 – 2007), the National Bureau of Economic Research (NBER) Manufacturing Productivity database (1999 – 2005), ICIC's State of the Inner City Economies (SICE) database (1998 - 2008) and ICIC's annual Inner City 100 Survey (2003 – 2008). (A full description of the data sources is presented in Appendix I.) For examining lending practices in the inner city, we review recent literature by Immergluck (2004) and the Federal Reserve Bank of Boston (2008). We draw heavily from the work of Fairlie and Robb (2008) in our discussions of minority entrepreneurship. Throughout the paper, we cite interviews performed in 2008-2010, as well as participants' comments during a national roundtable on inner city capital held in New York City in March 2009.[4]

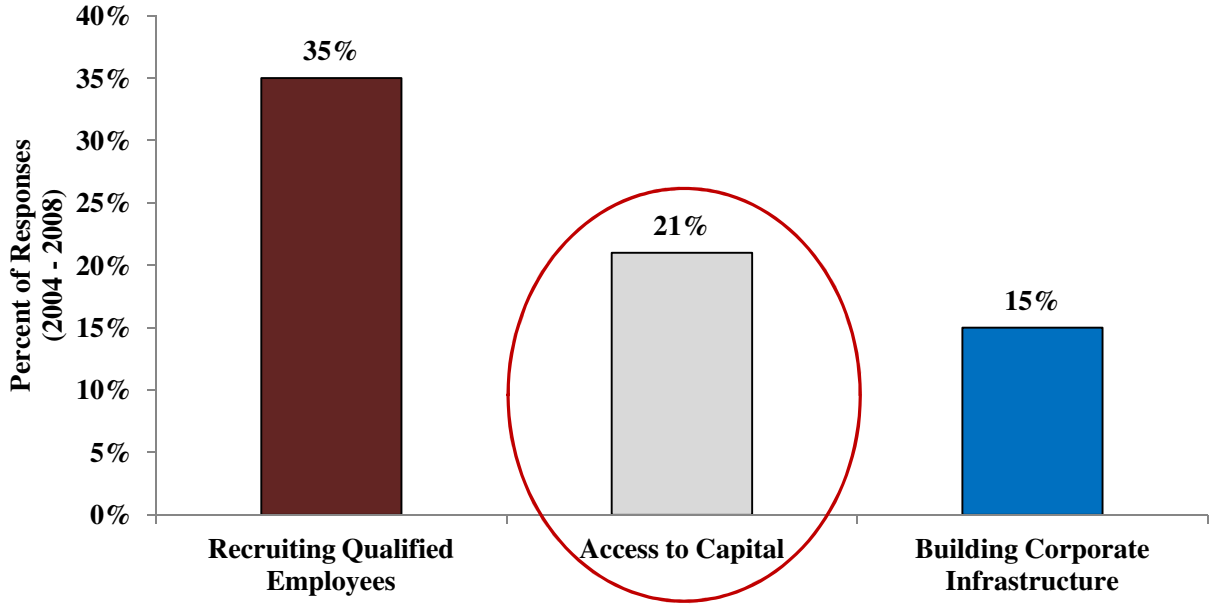
I. Capital Flows to Inner Cities

The role of capital in inner city economic development is best illustrated by its importance to the growth trajectories of individual firms. In ICIC's annual surveys of some of the country's fast-growing inner city businesses, one in five respondents cited capital access as the primary obstacle to growth.[5] (See Figure 1.) While these are high-growth businesses that might require a greater infusion of capital than a typical inner city business, their identification of capital as an obstacle to growth could also indicate that even the most capital-ready businesses in the inner city face access challenges. At a minimum, the survey results underscore the critical role that capital plays in driving business growth and job creation in inner cities. In the debates about the nature of the capital problem in LMI areas, these findings remind us that better access to capital is likely part of the solution to address the slow business growth and job creation in economically distressed urban communities.

[4] "Roundtable: Supporting Inner City Business Growth with Improved Access to Capital." Ford Foundation, 320 East 43rd Street, New York, NY. March 19, 2009. ICIC thanks the Ford Foundation for use of their facilities; and special thanks to Mark Willis, then a Visiting Scholar at Ford Foundation, for shaping the session content and moderating the discussion. We also thank the other participants: Thomas Burke, Wells Fargo; Bill Bynum, Enterprise Corporation of the Delta; Alan Fishbein, Federal Reserve Bank of D.C.; Rachel Hitch, ICIC; Ron Homer, Access Capital Strategies; Mark Pinsky, Opportunity Finance Network; Ellen Seidman, New America Foundation; Deb Shufrin, ICIC; Alfred Titone, Small Business Administration; and Betsy Zeidman, Milken Institute.

[5] Firms in the survey all have operating histories of at least five years and revenues of greater than $1 million. These firms have average year-over-year growth of 40 percent for the most recent five-year period at the time of the survey.

Figure 1: Most Cited Obstacles to Growth by Fast-Growing Inner City Businesses



Source: Inner City 100 Survey, 2004-2008; ICIC analysis

Business owners rely on a number of different capital sources to finance their companies. Common sources of credit include credit cards, commercial lines of credit and loans, mortgages for business use, equipment loans, trade credit and capital leases.[6] On the equity side, businesses rely heavily on owner financing, which include personal assets and depending on the ownership structure of the business, could also include private equity, venture capital, and angel investments.[7] Entrepreneurs also often rely on friends and family, who can provide equity contribution as partners or as providers of patient capital that allows more flexible terms for repayment.

According to the 2002 Survey of Business Owners (SBO), business loans from banks are the most common external source of startup capital and the second most common (behind business credit cards)

[6] "Report to the Congress on the Availability of Credit to Small Businesses." October 2007. <http://www.federalreserve.gov/boarddocs/rptcongress/smallbusinesscredit/sbfreport2007.pdf>

[7] These three types of equity sources can generally be distinguished by the types and phases of businesses that they invest in, although the distinguishing lines can often overlap. Angel investments tend to focus on early-stage businesses with a proven market demand but not yet posting significant revenues, if any. The average size of venture capital investments tend to be larger than that of angel investments and venture can generally be described as a sub-set of private equity that focuses on higher risk businesses that are beyond the phase of angel investment. Private equity, while also a generic term used for the entire asset class, in this case refers to equity investments in later-stage businesses.

external source of expansion capital for U.S. businesses.[8] However, some prior research suggests that the loan flow to inner city areas is lower than to the rest of the U.S. economy and even to the rest of the city. Immergluck (2004), for example, examines small business bank loans of less than $1 million and finds that although loan-to-firm ratios are nearly identical for cities and suburbs, within city areas, lower-income census tracts fare poorly relative to upper-income tracts.[9] In fact, as shown in Figure 2, he finds that loan-to-firm ratios in the poorest urban neighborhoods are nearly 20 percent less than those in the suburbs and 30 percent less than those in upper-income urban neighborhoods.

Figure 2: CRA Reported Small Business Loans, 1997

Type of Census Tract	Number of CRA-Reported Small Business Loans	Firms	Loan-Firm Ratio
Central City	**1,013,460**	**3,622,300**	**0.28**
Low Income	106,704	453,900	0.24
Moderate Income	232,018	943,400	0.25
Middle Income	371,604	1,335,000	0.28
Upper Income	303,134	890,000	0.34
Suburbs	**1,060,441**	**3,649,000**	**0.29**

Source: Credit to the Community: Community Reinvestment and Fair Lending Policy in the U.S., 2004

We update the Immergluck study by examining data for the 1998-2007 period. We find a somewhat mixed picture. By one measure—loan volume—the lowest-income tracts are woefully underserved relative to firms in other parts of the country, with a loan-to-firm ratio of 79 percent. (In other words, the population of firms in these tracts received 21 percent fewer loans than would be expected based on the number of firms in these census tracts.) However, in terms of the total value of loans, performance has been relatively strong by national standards, with a loan amount-to-firm ratio of 103 percent. National comparisons, though, obscure the vast differences in urban and rural firms and economies. When we limit the comparison to urban areas, as we do in Figure 3, we find that low- and moderate-income census tracts receive far fewer loans and far fewer loan dollars than firms in middle- and upper-income urban census tracts. [10]

[8] U.S. Census Bureau. *Survey of Business Owners, 2002.* <http://www.census.gov/econ/sbo/index.html> Accessed: November 2009.

[9] The CRA regulations require banks with more than $250 million in assets to report the number and dollar amount of loans of less than $1 million made to firms (of any size) broken out by census tract. It also requires the separate reporting of loans by tract to firms with less than $1 million in annual sales. Immergluck, Dan. *Credit to Community: Community Reinvestment and Fair Lending Policy in the US*. New York: Cleveland State University. 2004. Print.

[10] These data do not capture lending by banking institutions with less than $1B in assets, but those institutions are likely to account for a very small share of total loan volume. So-called "community banks"—institutions with less

Figure 3: CRA Loan Share to Firm Share by Income Levels of Census Tracts, 1998-2007 Average

	Low	Moderate	Middle	Upper
Share of Loan Volume to Firm Share	79%	89%	101%	117%
Share of Loan Amount to Firm Share	103%	100%	105%	126%

Source: Federal Financial Institutions Examination Council (FFIEC), "Findings from Analysis of Nationwide Summary Statistics for Community Reinvestment Act Data," various years; ICIC analysis

These findings are consistent with broader arguments about capital access. Yago *et al.* emphasize low-income urban areas as one of the critical emerging domestic markets, which they define as: "people, places, or businesses facing capital constraints due to systematic undervaluation arising from imperfect information" and "may include ethnic- and women-owned firms and/or inner city and rural communities."[11] Although most of their evidence focuses on the gender and ethnicity of business owners, Yago *et al.* recognize the strong link between the strength of minority-owned businesses and the rate of job creation in LMI areas.[12] They write, "Ethnic-owned firms grew at twice the rate of all firms during the past decade, yet face capital gaps that limit their ability to expand and generate jobs in urban and low-and moderate-income (LMI) markets, home to a disproportionate amount of the increasingly diverse U.S. population" (2003, p.vii). The CRA data reviewed in this section do not shed light on the challenges facing MBEs operating inside (or outside) the inner city, but we return to this question in Section IV, when we examine firm-level data from KFS and CDFI.

II. Inner City Capital Demand

In this section, we look at the potential influence of demand-side factors on capital flows to inner cities. In doing this, we break with traditional analyses of capital gaps in LMIs, which look exclusively to supply-side factors. We begin by comparing broad measures (inner city firm size distribution and sector composition) to identify any characteristics that would indicate lower demand for capital, a finding that could potentially explain the apparent shortfall of loan volume and value inner cities. Instead, we find that data on firm size and sector composition do not support the hypothesis that the average inner city firm has lower demand for capital than a typical firm elsewhere.

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than $10B in assets—account for about 20 percent of national loan volume, a share that has been rising. (Stacey Perman, "Community Banks Increase Small Business Loans," *Bloomberg Businessweek*, January 27, 2009; accessed online, September 10, 2010.) However, we have not been able to find data on lending by community banks with less than $1B in assets, i.e., those not covered by CRA.

[11] Yago, et al., *Emerging Domestic Markets: Increasing Capital by Improving Data*, 2007; p.2

[12] Yago, et al., *Creating Capital, Jobs and Wealth in Emerging Domestic Markets: Financial Technology Transfer to Low-Income Communities*, Milken Institute, 2003.

We then perform a detailed assessment of industry characteristics in the inner city. While there is little explicit information on capital demand or capital requirements in inner cities, there are highly detailed data on capital intensity in each U.S. manufacturing industry. We begin by estimating capital intensity of each manufacturing industry (4-digit NAICS) at the national level, then overlay these data with information on industrial composition and growth of manufacturing sectors in inner cities, central cities and the U.S. The findings are somewhat mixed. We find that inner cities are concentrated in the most capital-intensive segments of manufacturing, counter to claims that inner city economies tend toward low capital-intensity activities. We also find, however, that inner cities have smaller average firm size in manufacturing. As a result, capital demand per employee is higher in inner city manufacturing but capital demand per firm is lower. Importantly, the evidence suggests that firm size is more likely a function of issues associated with population density (residential pressures, land assembly issues) than the inability of inner cities to compete in capital-intensive activities. In fact, in the 1998-2007 period analyzed in this paper, inner cities had the strongest growth performance in the most capital-intensive parts of the manufacturing sector.

Characteristics of Inner City Economies

In this section, we focus on the demand for capital in inner city areas. We start by comparing the composition of firms and industries in the inner city to the rest of the U.S. in order to ferret out unique characteristics that would indicate difference in the demand for capital. The first characteristic we examine is the size of businesses, which can have a significant impact on the level of capital flows, particularly equity flows, where substantial fixed costs tend to require higher minimum deal sizes to be profitable. In fact, one common argument for low equity flows into inner city areas is "size mismatch"; the amount of equity that can be absorbed by the average inner city firm, according to this argument, is too low to entice investors into this market.

Contrary to conventional wisdom, however, the size distribution of inner city firms is similar to that of the rest of the U.S. In fact, the inner city's share of very small businesses is actually lower than the national average. As shown in Figure 4, 51 percent of inner city establishments have one to four employees compared to 54 percent nationally. Overall, when measured by number of employees, average firm size in the inner city is nearly 20 percent higher than the U.S. as a whole: about 19 employees per firm versus a national average of 16 employees per firm. Furthermore, the rate of self-employment in inner cities is also lower than the national average. According to the Current Population Survey (CPS), the average self-employment rate in the U.S. from 2004 to 2006 was 7.4 percent; we estimate the corresponding rate in the

inner city to be about 5.1 percent.[13] Taken together, establishment size and self-employment data suggest that the inner city's share of "mom and pop" shops and other very small businesses is actually somewhat lower than the national average.

Figure 4: Distribution of Establishments by Size, 2007

Source: State of the Inner City Economy (SICE) database, ICIC analysis

This finding holds when we categorize firms by level of revenue rather than employment. Using firm revenue data from KFS, which consists of nearly 5,000 earlier-stage businesses across industries that began operations in 2004, we find that the share of inner city businesses with less than $100,000 in sales (47 percent) is smaller than in the rest of the central city (53percent) or the U.S. as a whole (55 percent).[14] (See Figure 5.) There is also a greater representation of inner city firms in the $100,000 to $1M range (46 percent of all firms compared to 37 percent for the U.S.) and the $5M+ range (3 percent versus 2 percent), but a smaller proportion of firms in the $1M to $5M revenue range (4 percent versus 7 percent for the U.S.). Overall, the revenue size distribution of inner city firms is somewhat different from the rest of the U.S., but certainly not in ways that render these areas uniformly less attractive to equity or less prepared for credit.

[13] The estimate is based on a monthly survey of about 60,000 households. The self-employment rate is the ratio of self-employed business owners to total population that is 16+ years of age. We derive the self-employment rate for the inner city by multiplying central city's self-employment rate by education level by chare of inner city population at each educational attainment level.
[14] Kauffman Firm Survey database, 2004 – 2007 average.

Figure 5: Distribution of Establishments by Average Revenues, 2004 – 2007

	Inner City	U.S.
$1 to $100K	**49%**	**54%**
$100k to $1M	42%	37%
$1M to $5M	6%	7%
>=$5M	3%	2%
Total Number of Reporting Companies	228	2,513

Source: Kauffman Firm Survey, 2004 – 2007

While the relatively small sample size and limited age of firms mean that KFS data cannot be conclusive, it is worth noting that the three available sources that can actually speak to this question—CPS, KFS and ICIC's SICE database—together undermine the notion that the size distribution of inner city firms can explain lower relative capital flows into these areas. In fact, there is nothing in the employment or revenue size distribution of inner city firms that supports the hypothesis that these firms require less capital than other U.S. firms. This finding is useful for countering assessments of inner city economies as structurally different from the rest of the U.S. economy because they house large numbers of "mom and pop" shops that require less capital.

It is still possible, however, that inner cities require less capital because of the types of activities in which they specialize, i.e., inner cities could receive less capital because their economic bases are biased toward sectors of the economy that have lower capital intensity. To test this possibility, we must examine the sectoral composition of inner city economies and assess whether it would generate lower capital demand per firm than the average across the U.S. economy. If this were the case, then what appears to be *lower supply to* inner city economies could actually be a reflection of *lower demand from* inner city economies. From a policy perspective, it is critical to identify whether capital flow patterns are a function of supply-side or demand-side factors. If it is the former, then increasing capital flow to inner cities would be a legitimate target of public policy; if it is the latter, it simply reflects the local economic variety that characterizes the U.S. economy.

To test this across the inner city and national economies, we must rely on national estimates of capital-intensity at the sector (2-digit NAICS) level. First, we estimate economy-wide capital intensity for the inner city and U.S. economies using 2-digit NAICS 1999-2007 capital stock data from the Annual Capital

Expenditure Survey and dividing by national employment in each sector.[15] We then estimate capital demand using information on employment by sector in the inner city and national economies. Using this approach, we find that the capital intensity of inner city economies is about 5 percent higher than the rest of the U.S. Because there is so much variation within 2-digit NAICS code, this finding is of limited value but it does provide another data point that undermines claims that inner city economies skew toward less capital-intensive activities.

Capital Intensity in Manufacturing

Fortunately, there are detailed data on capital intensity within the manufacturing sector. The National Bureau of Economic Research (NBER) Manufacturing Productivity database contains annual capital expenditures, net capital stock figures and number of employees by 4-digit NAICS for the 1958-2005 period.[16] We begin by estimating capital intensity for each 4-digit NAICS industry within the manufacturing sector. We define capital intensity in two different ways: capital expenditures/employee and net capital stock/employee. The first definition looks at average annual investment per employee; the second looks at net (cumulative) fixed investment per employee. The numerator in the first measure (capital expenditures) captures only the total amount of new investment in a given year; in the second (net capital stock), it reflects total cumulative investment net of depreciation. In order to capture the capital intensity for each of the industries over one full business cycle, we use average intensity of the 1999 to 2005 period.

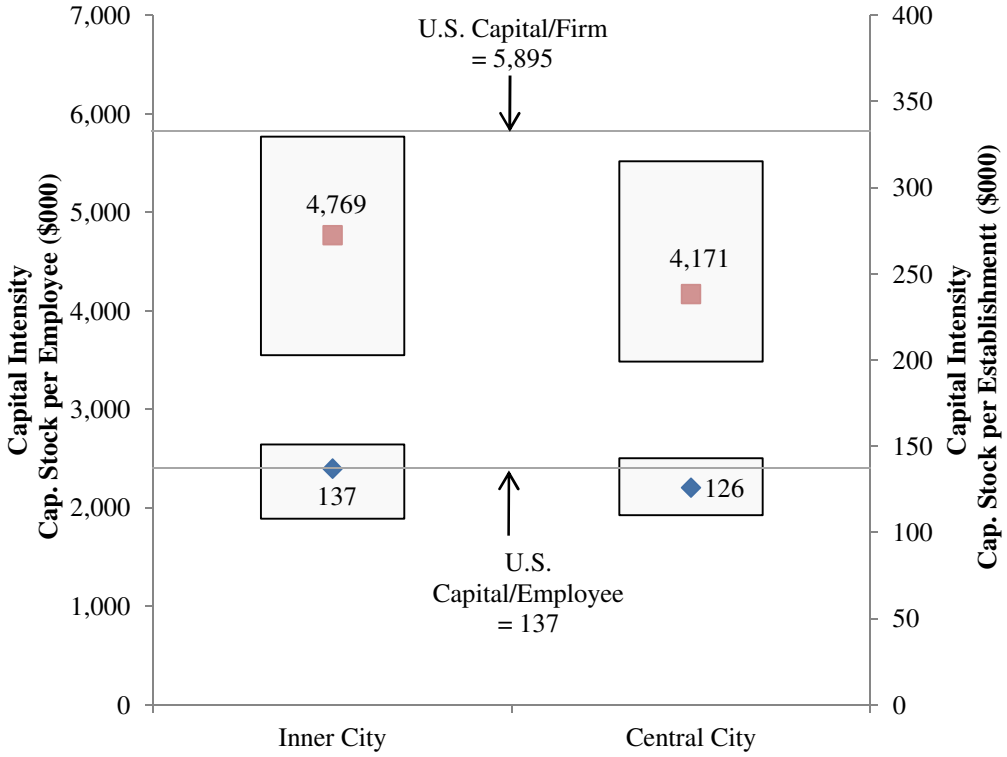
Using NBER capital intensity ratio measures and ICIC employment and establishment data, we calculate the capital intensity of the manufacturing sectors in the inner city, central city and U.S. manufacturing bases by taking an employment-weighted average of the U.S. 4-digit NAICS capital intensity estimates. If we were to see a lower average capital intensity value for inner cities, it would be evidence that inner cities specialize in manufacturing segments that are less capital intensive. If average capital intensity of inner city manufacturing is at least as high as the national average, this would suggest that demand for capital is no lower in the manufacturing sector in inner cities than elsewhere in the country and would undermine claims that structural characteristics of inner city economies lead to lower demand for capital.

[15] Note: Capital stock data were not available for non-manufacturing industries. However, average capital expenditures from 1999-2005 in the NBER data were extremely highly correlated with capital stock (correlation coefficient > .97) at the 4-digit NAICS industry level.

[16] U.S. Census Bureau of Economic Research and The National Bureau of Economic Research. NBER-CES Manufacturing Industry Database. May 2009. <http://www.nber.org/data/nbprod2005.html> Accessed September 2009.

In fact, the data show that capital investment per employee in the inner city manufacturing base is nearly identical to that of all U.S. manufacturing and somewhat higher than in the rest of the central city. For inner cities (and the U.S.), capital stock is $137,000 per employee compared to $126,000 in the rest of the central city. Capital stock per establishment—a number that can be more meaningfully compared to traditional financing metrics—tells a somewhat different story: Inner city manufacturing ($4.8M per firm) requires more capital per firm than central city manufacturing ($4.4M per firm), but less than the average U.S. manufacturing firm ($5.9M).[17] However, this discrepancy is not the result of the capital intensity of the economies but of differences in average firm size: The typical inner city and central city establishment has 50 employees compared to a national average of 75 employees. (We later test whether this difference is the result of access to capital or is more likely to have arisen from different operating conditions, especially land availability and average tract size inside and outside the urban core.)

Figure 6: Average Capital Intensity of Manufacturing, Inner Cities and U.S., 1999-2005



Source: NBER, 1999 – 2005; SICE
Note: The boxed areas denote the 25th-75th percentiles; the weighted averages are labeled for each.

[17] The median capital stock per establishment is roughly equal for inner cities and central cities at slightly less than $4.3 million. The difference between the weighted average and median is consistent with the larger range of capital intensity numbers across inner cities, shown in Figure 6.

We probe further by performing a statistical analysis of the relationship between an industry's capital intensity and its relative concentration in inner cities.[18] This allows us to examine the relationship between capital intensity and employment concentration at the level of individual industries and cities. On the demand side, we are looking for evidence that firms in industries with high capital requirements are naturally inclined to locate elsewhere. If such a bias existed, we would expect to see a negative correlation between capital intensity of industry and the concentration of that industry in inner cities (as measured by location quotient). To test this, we perform a simple regression of capital intensity (using both measures described earlier) on inner city location quotient. As shown in Figure 7, there is no evidence that the manufacturing bases in inner cities are skewed toward less capital-intensive industries.

Figure 7: Regression of Inner City Share of Manufacturing Firms vs. Capital Intensity

Y=Inner City Location Quotient (Capital Intensity=Capital Stock per Employee)		**Y=Inner City Location Quotient (Capital Intensity=Annual Capital Expenditures per Employee)**	
Variable	**Coefficient (std. error)**	**Variable**	**Coefficient (std. error)**
Constant	0.743*** *(0.0626)*	Constant	0.760*** *(0.0628)*
Capital Intensity	0.000405 *(0.000284)*	Capital Intensity	0.00508 *(0.00484)*
R-Squared	0.000	R-Squared	0.000
Adjusted R-squared	0.000121	Adjusted R-Squared	1.16e-05
Observations	8600	Observations	8600

Source: NBER, SICE, ICIC Analysis
Note: *, **, and *** indicate significance at the 90%, 95%, and 99% levels, respectively.

These results suggest that capital intensity alone does not affect the strength of an industry in the inner city. This is not surprising. From ICIC's field experience in urban economies, we know that multiple factors affect location patterns of different activities. One important factor is population density, which is often associated with land scarcity, high land cost and sensitivity to residential neighbors that can discourage investment or growth in capital intensive. The potential for population density to shape patterns of economic activity is particularly high in inner cities, where average density is about 75 times the national average.

[18] We thank Adam Kamins for running the regressions presented in this section.

To test whether population density affects the capital intensity of manufacturing activity, we isolated the 10 inner cities with the highest population density and find that only two—Jersey City and Boston—have manufacturing bases that are at least as capital intensive as the national average. Across the 10 densest inner cities, average capital intensity is $115,000 per employee, about 15 percent less than the national average of $137,000 and 20 percent less than the average of manufacturing of the other 90 largest inner cities ($142,000). (See Figure 8.)

Figure 8: Densest Inner Cities and Capital Intensity

Inner City	Population Density (per square mile)	Capital Intensity (Capital Stock per Employee, $000)
Manhattan - Bronx	62,853	108
Brooklyn - Queens	54,087	118
San Francisco	22,576	70
Long Beach	21,228	107
Jersey City	17,177	190
Santa Ana	16,911	116
Philadelphia	16,745	135
Los Angeles	16,213	110
Chicago	15,642	119
Boston	15,347	141
Average, 10 Densest		*115*
Average, Other 90		*142*

Source: NBER, SICE, ICIC Analysis

To test the effects of population density on capital intensity in inner city manufacturing, we regress inner city location quotient on capital intensity, population density and an interaction term (capital intensity x population) that captures whether the most capital-intensive industries are less likely to locate in inner cities when population density is high. Using this model, we find that once we account for the effects of population density, the relationship between capital intensity and concentration in inner cities is positive and statistically significant. (See Figure 9A.)

In order to ensure that the results above—which are based on an equal weighting of each industry in each inner city—were not driven by small manufacturing sectors, we separately examine only those manufacturing industries with 10,000 employees nationally or more. (See Figure 9B.) If the results were biased by trends in smaller industries, either under- or overstating the extent to which capital intensity matters, we would expect to see a noticeable set of differences when examining the subset of the largest manufacturing industries. This, however, is not the case. While the coefficients reported above lost their

statistical significance, the direction of each independent variable remained the same, indicating that loss of significance is driven by small sample size—which was cut by approximately 70 percent—as opposed to the relationships being fundamentally different for large industries.[19]

Figure 9A: Inner City Share of Capital-Intensive Manufacturing Firms, All 4-Digit NAICS

Y=Inner City Location Quotient (Capital Intensity=Capital Stock per Employee)		Y=Inner City Location Quotient (Capital Intensity=Annual Capital Expenditures per Employee)	
Variable	**Coefficient (std. error)**	**Variable**	**Coefficient (std. error)**
Constant	0.704*** *(0.0811)*	Constant	0.738*** *(0.0814)*
Capital Intensity	0.000923** *(0.000368)*	Capital Intensity	0.0120* *(0.00628)*
Population Density	5.61e-06 *(7.36e-06)*	Population Density	3.13e-06 *(7.39e-06)*
Capital Intensity x Population Density	-7.4e-08** *(3.34e-08)*	Capital Intensity x Population Density	-9.86e-07* *(5.70e-07)*
R-Squared	0.001	R-squared	0.001
Adjusted R-Squared	0.000620	Adjusted R-Squared	0.000293
Observations	8600	Observations	8600

Source: NBER, SICE, ICIC Analysis
Note: *, **, and *** indicate significance at the 90%, 95%, and 99% levels, respectively.

[19] For completeness, an additional regression was run, with a binary variable equal to one for industries with over 10,000 employees added to the full model. While capital intensity and the interaction of capital intensity and population continue to affect inner city location quotient similarly, the large industry variable is positive and significant. Consistent with the higher constant associated with the models shown in Panel B, this supports the idea that, independent of a capital intensity effect, large industries are more likely to be found in inner cities.

Figure 9B: Inner City Share of Manufacturing Industries with >10K Employees

Y=Inner City Location Quotient (Capital Intensity=Capital Stock per Employee)		Y=Inner City Location Quotient (Capital Intensity=Annual Capital Expenditures per Employee)	
Variable	**Coefficient (std. error)**	**Variable**	**Coefficient (std. error)**
Constant	0.901*** *(0.148)*	Constant	0.917*** *(0.155)*
Capital Intensity	0.000593 *(0.000861)*	Capital Intensity	0.00670 *(0.0132)*
Population Density	6.54e-06 *(1.34e-05)*	Population Density	7.53e-06 *(1.40e-05)*
Capital Intensity x Population Density	-7.88e-08 *(7.81e-08)*	Capital Intensity x Population Density	-1.23e-06 *(1.20e-06)*
R-Squared	0.000	R-squared	0.000
Adjusted R-Squared	-0.000643	Adjusted R-Squared	-0.000619
Observations	2800	Observations	2800

Source: NBER, SICE, ICIC Analysis
Note: *, **, and *** indicate significance at the 90%, 95%, and 99% levels, respectively.

These analyses are important for understanding the current status of manufacturing in inner cities but are limited in that they are strongly influenced by investment and expansion decisions made over the course of decades. To assess whether capital-intensive manufacturing firms in inner cities have kept pace with national performance more recently—a better reflection of the recent strength of inner city capital access—we examine industry-specific employment growth rates for the 1998-2007 period. The results are shown in Figure 10. Using this specification, we find that capital intensity is significant and positive, indicating that, in inner cities, capital-intensive industries grew most rapidly during this period. Population density also had a more noticeable effect on the growth of manufacturing firms during this time. Unlike the previous regressions, in which population density was not a significant predictor of the concentration of manufacturing activity, recent manufacturing growth was significantly weaker in those cities with relatively high population densities, suggesting that high density levels may have impeded manufacturing growth.[20] Although the results weaken when looking at large industries alone, there remains a significant negative correlation between population density and growth in these industries. In other words, capital intensity and population density are the most meaningful determinants of recent inner city manufacturing growth. Given that population density is negatively correlated with growth, it appears

[20] The effect is even stronger in wealthier parts of central cities, suggesting perhaps competition between manufacturing and residential uses.

that capital supply is not hindering firm performance in manufacturing, but population density might be. (The full set of regression results is presented in Appendix II.)

Taken together, the data and analysis presented above show that the conventional view of inner cities as lacking in capital- intensive industries is mostly untrue: With the exception of a small number of the most densely populated areas, the manufacturing sector in inner cities is actually more concentrated in high capital-intensity industries. Moreover, over the past decade, inner city firms in the most capital-intensive parts of the manufacturing sector have grown more rapidly than those in less capital-intensive manufacturing sectors. This does not, however, mean that strong capital market structures exist in inner cities. On the contrary, when we examine that data more closely, we find evidence that these patterns are most likely a reflection of the types of manufacturing firms that dominate inner. Just seven industries including beverage manufacturing, tobacco manufacturing and motor vehicle manufacturing, are driving the results. These industries are not typical manufacturing industries but rather are characterized by dominance of a small number of large firms that hold majority market share. Using the Herfindahl-Hirschman Index (HHI) to measure concentration, we find that manufacturing industries with the highest concentrations in inner cities have an average HHI that is well over six times greater than the average for manufacturing.[21] Individual establishments in these industries are likely to be branch plants of a larger firm and would not secure financing in local capital markets but centrally through headquarters. In short, we suspect that the strength and recent performance of inner city establishments in these industries does not reflect strong relationships with local capital markets but simply financing through their own headquarters, rather than typical capital channels. As such, we cannot use these data to assess the health of inner city capital markets or whether inner city firms in general have adequate access to capital. We can explore these questions in the next section, when we look at firm-level data on secured capital and industry capital requirements.

[21] Rather than gather data for all U.S. firms in manufacturing, we calculate HHI using the market shares of the 50 largest firms in the industry. We estimate that the HHI for the seven industries in which inner cities are concentrated is about 1,600, compared to about 250 across manufacturing.

Figure 10: Regression of Employment Growth vs. Capital Intensity and Population Density

Y=Inner City Location Quotient (Capital Intensity=Capital Stock per Employee)		Y=Inner City Location Quotient (Capital Intensity=Annual Capital Expenditures per Employee)	
Variable	**Coefficient (standard error)**	**Variable**	**Coefficient (standard error)**
Constant	0.514*** *(0.0593)*	Constant	0.563*** *(0.0595)*
Capital Intensity	0.000584* *(0.000304)*	Capital Intensity	0.0036 *(0.00482)*
Population Density	-1.49e-05*** *(5.09e-06)*	Population Density	-0.00002*** *(5.08e-06)*
Capital Intensity x Population Density	1.28e-08 *(2.89e-08)*	Capital Intensity x Population Density	4.56e-07 *(4.61e-07)*
R-Squared	0.005	R-Squared	0.004
Adjusted R-Squared	0.004	Adjusted R-squared	0.003
Observations	5,126	Observations	5,126

Source: NBER, SICE, ICIC Analysis
Note: *, **, and *** indicate significance at the 90%, 95%, and 99% levels, respectively.

III. Estimating the Capital Gap: Evidence from the Kauffman Firm Survey

Taken together, the analysis of the structural characteristics of inner cities does not support the contention that economies have lower demand for capital. In fact, the evidence is slightly skewed toward supporting the claim that they are more capital intensive. The Kauffman Firm Survey (KFS) can help us adjudicate these claims by providing firm-level data on capital acquisition by firms that began in 2004. Although the vintage of the firms creates some limitations, it also creates a unique opportunity to observe characteristics of inner city and non-inner city firms before their trajectories are radically shaped by their environment, which in inner cities over the past decade have been characterized by slower growth and higher volatility than the national economy. The KFS data allow us to examine the distribution of capital levels at firms in the inner city and elsewhere in the U.S., as well as to compare capital levels at individual firms (a proxy for capital acquired or availability of supply) relative to the average of all firms in the industry nationally (a proxy for capital requirements or demand).

For the analysis of the relative manufacturing intensity of inner city economies, we assumed that capital demand per employee was identical for all firms within a 6-digit NAICS. In other words, we were examining the underlying capital intensity of the manufacturing bases in different geographies, rather than

looking at capital levels at individual firms. The KFS data allow us to extend the analysis to examine capital levels at individual firms inside and outside the inner city. This is possible because the KFS data provide three critical pieces of information: the average capital intensity of industries in which inner city firms compete (a proxy for demand), the actual capital levels at inner city firms (a proxy for supply) and the difference between the two, which provides an estimate of the capital gap (or surplus). Most researchers, we believe, would favor this measure of capital gap over one that looks solely at capital flows. Until now, however, the necessary data to estimate this have not been available. KFS makes this estimation possible by providing detailed information on location, industry and capital levels for a randomly selected group of nearly 5,000 businesses across the United States.[22] Moreover, one potential shortcoming of the data—namely, that all the firms began operations in 2004—is actually a benefit: It allows us to isolate the effects of geography and industry before these factors are overwhelmed by firm growth trajectories, which over the past decade have been much less robust (on average) in inner city environments. This approach also eliminates any bias from legacy investments (write-offs, acquisition, goodwill, etc.)[23]

Because the dataset includes detailed information on the industry in which each firm competes, we can control differences in firm capitalization levels that arise from industry-specific capital requirements (rather than access to capital). To see why this is important, consider the variation in capital requirements *within* NAICS 335, "Electrical Equipment, Appliance, and Component Manufacturing." Across the U.S., firms that compete in NAICS 3353, "Electrical Equipment Manufacturing," spend an average of $71,000 in capital stock per employee, while those in NAICS 3359, "Other Electrical Equipment and Component Manufacturing," spend $113,500 per employee.[24] Thus, if inner city economies specialize in NAICS 3353 while non-inner city economies specialize in NAICS 3359, capital requirements per employee would be about one-third lower in the inner city than elsewhere in the U.S. In this case, lower average firm capital would not indicate an inability of inner city firms to access capital (a supply effect) but merely differences in demand for capital arising from different economic specializations.

To examine capital demand, supply and gaps using the KFS data, we perform two types of analysis. In the first, we examine capital supply at all inner city and non-inner city firms that: (1) participated in the

[22] The Kauffman Firm Survey over-sampled high-technology businesses.
[23] We thank Deb Shufrin for this point.
[24] U.S. Census Bureau of Economic Research and The National Bureau of Economic Research. NBER-CES Manufacturing Industry Database. May 2009. <http://www.nber.org/data/nbprod2005.html> Accessed September 2009.

survey all four years (2004 to 2007) and (2) reported the use of some type of capital. Of the 4,928 firms in the KFS sample, 2,516 meet these criteria. (See Figure 11.) This set of firms is used to calculate average total capital, which is defined as the sum of equity received and debt incurred over the 2004 – 2007 period. For credit card and line of credit amounts, the year-end net balance is used. For other sources of capital, data are reported on an accumulated basis and thus do not capture financing changes (i.e., debt refinancing). This likely overstates the amount of actual capital available to firms.[25]

To estimate the capital demand and gap, we further restrict the KFS sample to firms that compete in one of the 115 industries with representation from inner city and non-inner city firms.[26] As shown in Figure 11, 1,571 firms meet these conditions, of which 213 (15.7 percent) are in inner city zip codes.[27] Although a sample size of 213 firms might seem relatively small, it is, to our knowledge, the largest existing sample of inner city firms that allows for comparisons with firms in other geographies. Using this sample, we compare average total capital at inner city firms (supply) to the average at firms in the same industry across the U.S. (demand). This captures the relevant metric for assessing the capital gap at inner city firms, namely firm capital relative to the technical and competitive requirements of the industries in which the firm operates.

Figure 11: Kauffman Firm Survey Universe

	Inner City	Non-Inner City	Total
Total universe	466	4,462	4,928
Firms participating all 4 yrs	244	2,425	2,669
And reporting some type of capital	**234**	**2,282**	**2,516**
And in industries represented in IC and Non-IC*	**213**	**1,358**	**1,571**

Source: Kauffman Firm Survey
Note: The number of inner city businesses declines to 213 from 234 as 21 inner city businesses belong in industries that are not represented by non-inner city businesses in the KFS.

[25] We do not take into account the businesses' internally generated earnings as a part of the businesses' capital structure as the firms under analysis are in their startup phase, with less than five years of operating history and the majority have not reached a stable phase in their business in which they use their retained earnings as a source of financing. Of the firms that reported their bottom line in the survey (65 percent of 2,516 firms reported their level of profit/loss), about 75 percent reported a loss in one or more of the four years in operation.
[26] Some industries are not represented among the survey's inner city firms.
[27] We have identified businesses that belong to the inner city by mapping the zip codes of the business locations. We treat those zip codes in which at least one census tract is distressed as "inner city." (There are 29 inner city firms that belong to zip codes that are >0 percent but <5 percent distressed, as measured by land area.) A distressed area is based on ICIC's inner city definition: poverty rates of 20 percent or higher, or meet two of the following three conditions: 1) poverty rate of 1.5 times or more that of their MSAs, 2) median household income of one-half or less that of their MSAs, 3) unemployment rate of 1.5 or more than that of their MSAs.

As shown in Figure 12, inner city firms in the KFS have significantly lower levels of capital: Average total capital at inner city firms is $525,000 compared to $671,000 for the average firm outside the inner city, a 22 percent difference. Most of this gap derives from large average differences in debt ($420,000 for non-inner city firms versus $301,000 for inner city firms) and owner equity ($127,000 versus $71,000). If we assume that the KFS data are an accurate reflection of capital flows in the U.S., they suggest that inner cities receive about 20 percent less capital per firm than other areas of the U.S. Further analysis shows that differences in capitalization rates between inner city and other U.S. firms are driven by a small number of very highly capitalized firms. If we exclude firms with capitalization rates of $10M or above—which describes only 20 of the over 2,500 firms in the observed KFS sample—the average capitalization rate of all U.S. firms drops by 60 percent, from 658,000 to 261,000; and the average inner city firm now has more capital than the average firm elsewhere in the U.S.

Figure 12: Total Capital, Inner City vs. Non-Inner City Firms

	Total Universe			Excluding $10M+ Total K		
(U.S. $)	Inner City	Non-Inner City	Total U.S.	Inner City	Non-Inner City	Total U.S.
Total Debt	301,000	420,000	409,000	260,000	140,000	151,000
Total External Equity	153,000	124,000	127,000	55,000	40,000	41,000
Total Owner Equity	71,000	127,000	122,000	70,000	69,000	69,000
Total Capital	**525,000**	**671,000**	**658,000**	**385,000**	**249,000**	**261,000**
Debt-to-Equity	1.3	1.7	1.6	2.1	1.3	1.4
Total # of Firms	234	2,282	2,516	232	2,263	2,495

Source: Kauffman Firm Survey (KFS), 2004 – 2007; ICIC analysis

To measure a capital gap, we need to examine the supply (as captured by KFS capital levels) relative to demand. (In order to have the estimates be broadly representative of inner city and non-inner city economies, we drop the small number of firms with greater than $10M in capital.) Because KFS does not provide a direct measure of demand, we need to use a proxy. Fortunately, the KFS data provide detailed data on the industry in which each firm competes. We can then use average capital in each industry to proxy for capital demand for each firm. We assume that the industry-wide average captures the capital required to support the technological and competitive requirements of the industry. At a minimum, it captures the average capital of all firms in the industry, many of which are likely to be competitors.

When we exclude the $10M+ firms, we find, relative to its industry segment, the average inner city firm actually has higher capital than its average national counterpart. This can be seen in Figure 13, Columns [1] and [2], which allow us to compare actual capital at inner city firms [1] with predicted average capital, assuming inner city firms had capital identical to all firms in their (6-digit NAICS) industry. The gap is actually substantial: Inner city firms have an average of $367,000 in capital compared to an average of $276,000 for all U.S. firms in the same industry.

Figure 13: Estimating the Capital Gap, Inner City vs. Non-Inner City Firms

(U.S. $)	[1] IC Firms	[2] IC Firms, Non-IC Capital	[3] Delta	[4] Non-IC Firms, Non-IC Capital	[5] Rest of Non-IC Firms
Total Debt	240,000	127,000	89%	113,000	180,000
Total External Equity	58,000	49,000	18%	29,000	56,000
Total Owner Equity	69,000	88,000	-22%	64,000	78,000
Total Capital	**367,000**	**264,000**	**39%**	**206,000**	**314,000**
# of Firms	211			1,349	914

Note: Based on a universe of 2,516 firms that participated in the surveys all four years (2004 – 2007) and reported some type of financing. Total capital is as described in the text. Analysis in Columns [1] and [2] excludes 21 inner city firms that belong to industries in which there is no non-inner city firm representation and excludes 20 firms with >$10 million in average total capital.

This is not sufficient cause to dismiss the notion of a capital gap or to allay concerns about capital access of inner city firms. In fact, as shown in Figure 14, when we look at the population of inner city firms, a capital gap is the norm. In fact, we see two distinct sets of inner city firms. The first group consists of firms that are well-capitalized relative to their industry averages; these firms account for less than one-third (29 percent) of all inner city firms in the KFS.[28] Each group has average capital that defies the national industry norms—the well-capitalized group has about four times the national average capital; the under-capitalized has about one-fourth of the national average. The differences between these groups go beyond their capital levels. Among under-capitalized firms, the prevalence of minority ownership is a full 50 percent higher than for well-capitalized firms (42 percent of all under-capitalized firms are MBEs compared to 28 percent of well-capitalized firms). Under-capitalized firms also tend to be located in zip codes with much higher levels of distress (on average, 30 percent more distress as measured by land area (46 percent versus 34 percent).

[28] Inner city firms that belong to 115 industries that are represented by both inner city and non-inner city firms in the KFS sample.

The findings from the KFS data accord with a larger intuition about capital markets and inner cities, namely that inner city firms have difficulty obtaining access to large amounts of capital. Of the 20 firms with capitalization of $10M or above, two are located in the inner city, a rate that is roughly proportional to the number of inner city firms in the KFS sample. However, among all firms with at least $10M in capital, average total capital is about three times higher for firms located outside the inner city than for those in the inner city. (Because of the small number of firms and concerns about confidentiality, we do not report the actual averages.) Thus, even among firms in the startup stage, the KFS data show evidence of a divergence between highly capitalized firms in the inner city and those elsewhere. Documenting and understanding trends among the most highly capitalized firms is critical to understanding domestic capital flows: The 20 firms with $10M+ capitalization rates make up less than 1 percent of the sample, yet account for a stunning 60 percent of the total capital secured by all firms in the KFS sample.

Figure 14: Inner City Firm Distribution by Average Capitalization

	Well-capitalized IC Firms vs. U.S. Avg (29% of IC Firms)	Under-capitalized IC Firms vs. U.S. Avg (71% of IC Firms)
# of IC Firms	61	150
Avg Capitalization	$1,085,000	$75,000
U.S. Avg Capital Requirement	$283,000	$273,000
% of MBE Firms	28%	42%
Avg Level of Distress at Zip Code Level	34%	46%

Source: Kauffman Firm Survey (KFS), 2004 – 2007; ICIC analysis
Note: Excludes $10M+; Excludes 21 inner city firms that compete in industries that have no non-inner city firm representation.
* The figure represents the average total capital of all non-inner city firms that compete in the same two industries in which the most highly capitalized inner city firms compete. The average total capital of non-inner city firms that have greater than $10M in total capital and compete in these two industries is $89M.

The KFS data provide a third area of concern: the capital structure of inner city firms. As shown in Figure 15, inner city firms are highly leveraged relative to non-inner city firms, with an average debt-to-equity ratio of 1.9 compared to 1.3 for non-inner city firms. Moreover, the inner city firms that are well-capitalized appear to rely heavily on debt, which accounts for a full two-thirds of total capital. Under-capitalized inner city firms face a different challenge: While their debt-to-equity ratios (1.4) are in line with non-inner city firms, external equity accounts for only 4 percent of their capital, about one-fourth the ratio of other firms in the KFS sample. Although owner equity is low in absolute terms ($28,000), it accounts for 37 percent of total capital, a much higher proportion than for other firms.

Figure 15: Capital Structure of Inner City and Non-Inner City Firms, Excluding Firms with $10M+

	Debt	External Equity	Owner Equity	Average Total Capital	Debt-to-Equity Ratio	Number of Firms
Inner City Firms	240,000	58,000	69,000	367,000	1.9	211
All Firms	65%	16%	19%			
Under-capitalized	44,000	3,000	28,000	75,000	1.4	150
% of Total Capital	59%	4%	37%			
Well-capitalized	720,000	195,000	170,000	1,085,000	2.0	61
% of Total Capital	66%	18%	16%			
Non-Inner City Firms	140,000	40,000	69,000	249,000	1.3	2,263
% of Total Capital	56%	16%	28%			

Source: Kauffman Firm Survey (KFS), 2004 – 2007; ICIC analysis
Note: Based on a universe of 2,516 firms that participated in the surveys all four years (2004 – 2007) and reported some type of financing. Excludes 20 firms with greater than or equal to $10 million in total capital. The under-capitalized and well-capitalized inner city firms do not add up to 232 as there are 21 inner city firms without a non-inner city industry peer.

Next, we examine differences in capitalization by the race of the business owner, in addition to the place-based differences we have identified previously. Identifying capital challenges faced by MBEs is critical for understanding outcomes in the economies of inner cities, where 40-45 percent of businesses are minority-owned compared to 18 percent of all firms nationally.[29,30] In the most distressed urban zip codes, MBEs could account for well over half of all businesses. (See Figure 16.) Fairlie and Robb (2008) find that minority entrepreneurs begin their businesses with much lower average startup capital than white entrepreneurs due to lower net worth, lower levels of parental wealth and lending discrimination; these factors lead to higher closure probabilities, lower sales and lower profits.[31] Given the high concentration of minority entrepreneurs in the inner city, these disparities will have a disproportionately large impact on inner city economies.

[29] The estimate of inner city businesses that are minority-owned is based on Current Population Survey data on self-employment (47 percent), data from 10 years of applications to the ICIC's Inner City 100 program (42 percent), and data from the KFS survey (41 percent).
[30] In 2002, 18 percent of all businesses and 12 percent of businesses with employees were minority owned. (Based on recent trends, we estimate that the 2007 data will show slightly higher rates of minority business ownership.) U.S. Small Business Administration (Office of Advocacy). "Minorities in Business: A Demographic Review of Minority Business Ownership." Washington, D.C. April 10, 2007.
[31] Fairlie, Robert W. and Alicia M. Robb. *Race and Entrepreneurial Success: Black-, Asian- and White-Owned Businesses in the United States*. Massachusetts Institute of Technology. 2008. Print. See also, Cavalluzzo, Cavalluzzo, and Wolken, 2002, Fairlie and Robb, 2006, Blanchflower, Levine and Zimmerman, 2003.

Figure 16: Level of Distress and MBE in KFS

Level of Distress (% of zip in IC)	% Minority	Total # of Firms
Not Distressed (0%)	18%	4,324
>0% to 30%	30%	223
>30% to 70%	46%	126
>70% to 100%	58%	98
Total	20%	4,771

Source: Kauffman Firm Survey; ICIC analysis

We employ a three-step approach to analyze the differences in the capitalization of MBEs and non-MBEs. First, we compare average total capital for all MBEs versus all non-MBEs in the KFS sample, a measure of nominal difference in average firm capital. We then remove the 20 firms with $10M or more in capital, which tend to skew the sample. We then control for industry differences to calculate something akin to a real capital gap, i.e., one that accounts for different capital requirements in each industry. (The same procedure was used in the previous section to compare inner city and non-inner city firms.)

As shown in Figure 17, when we examine the average total capital amount of all MBEs and non-MBEs in the KFS sample, we find that average MBE capital is less than half that of other firms ($304,000 versus $666,000, as shown in Figure 17). However, when we remove the 20 firms with $10M or more in capital, the nominal capital gap closes to about 11 percent ($235,000 versus $264,000, as shown in Figure 17). This dramatic narrowing of the gap underscores a critical challenge faced by MBEs, namely that they tend to be under-represented among the most highly capitalized firms in the country. Although MBEs account for about one in six firms in the KFS sample, there is only one MBE among the 20 firms with $10M+ in capital, an outcome we estimate has only a 15 percent chance of being random.[32]

Next, we narrow the comparison to MBE and non-MBE firms that compete in the same industries. As in earlier analyses, we estimate a capital gap by substituting actual capital levels at MBE firms with the national average for their industry. We find that the capital gap facing MBEs is only about 7 percent ($218,000 versus $234,000, as shown in Figure 18). Interestingly, despite widespread concerns about the effects of lower personal wealth of minority entrepreneurs on business outcomes, in the KFS sample,

[32] To estimate the probability of one minority firm appearing in a random sample of 20 firms selected from the KFS data, we used a hypergeometric distribution, which makes it possible to account for the fact that every non-MBE selection slightly increases the probability of the subsequent selection being an MBE. (In the language of statistics, this function allows one to estimate the probability of a "number of successes in a sequence of n draws from a finite population without replacement.") The calculated probability was verified using a simulation model.

when we control for industry, owner equity levels at MBEs are nearly identical to those of the U.S. The small capital gap that does exist can be traced to differences in debt and external equity levels.

Figure 17: Total Capital, MBE and non-MBE firms

(U.S. $)	All Firms			Excluding $10M+ Total K			
	MBE	Non-MBE	Δ	MBEs	Non-MBEs	Δ	Total U.S.
Total Debt	145,000	467,000	-69%	145,000	153,000	-5%	151,000
Total External Equity	89,000	120,000	-26%	22,000	42,000	-48%	38,000
Total Owner Equity	70,000	79,000	-11%	68,000	69,000	-1%	69,000
Total Capital	**304,000**	**666,000**	-54%	**235,000**	**264,000**	-11%	**258,000**
Debt-to-Equity Ratio	0.9	2.3		1.6	1.4		1.4
Total # of Firms	404	2,046		403	2,028		2,431

Source: Kauffman Firm Survey (KFS), 2004 - 2007
Note: Excludes 64 firms that either did not report the race of the owner or had 50/50 ownership between minority and non-minority owners. One of the 64 firms had greater than $10M in total capital.

Figure 18: Estimating the MBE: Non-MBE Capital Gap

	[1]	[2]	[3]	[4]	[5]
(U.S. $)	MBEs	MBEs, U.S. Capital	Delta	Non-MBEs	Rest of Non-MBEs
Debt	132,000	141,000	-6%	140,000	180,000
External Equity	19,000	24,000	-21%	26,000	74,000
Owner Equity	67,000	69,000	-3%	67,000	74,000
Total Capital	**218,000**	**234,000**	**-7%**	**233,000**	**328,000**
# of Firms	367			1,384	644

Source: Kauffman Firm Survey (KFS), 2004 - 2007
Note: Excludes 64 firms that either did not report the race of the owner or had 50/50 ownership between minority and non-minority owners. Excludes 20 firms with $10M+ in total capital.

A 7 percent capital gap hardly seems sufficient to explain the large differences in MBE and non-MBE performance nationally (Fairlie and Robb, 2008). However, there are two factors that could explain weaker business outcomes, i.e., higher failure and lower growth among MBEs. The first is the distribution of relative capital levels *within* the sample of MBEs: Nearly three-quarters of MBEs are under-capitalized and, on average, these firms have only about 30 percent of the capital of the average firm in their industry. In other words, despite similar averages and a set of strongly capitalized firms, the KFS data suggest that the vast majority of MBEs are significantly less capitalized than other firms in their industry segments. As shown in Figure 19, under-capitalized MBEs are more likely to be in or near areas of economic distress; within inner cities, under-capitalized MBEs operate in zip codes that are 60 percent distressed (by land area) compared to only 44 percent for well-capitalized MBEs.

Figure 19: Capital Levels Within MBE Sample

	Well-capitalized MBEs (26% of MBEs)	Under-capitalized MBEs (74% of MBEs)
# of MBEs	97	270
Avg MBE Capitalization	$640,000	$67,000
Avg U.S. Industry Capital Requirement	$230,000	$236,000
Avg Level of Zip Code Distress, All Firms	8%	13%
Avg Level of Zip Code Distress, IC Firms	44%	60%

Source: Kauffman Firm Survey (KFS), 2004 – 2007
Note: Excludes 36 MBEs that compete in industries in which there is no non-MBE representation in the KFS.

A second important difference between MBE and non-MBEs in the KFS sample arises from the characteristics of industries in which each typically competes. As shown in Figure 20, about one-third (644 of 2,028) of the non-MBEs in the KFS sample compete in industries in which there is no MBE representation. While this in itself is not notable—and could simply reflect sample characteristics—these industries have strikingly different characteristics than the industries in which MBEs in the KFS sample compete. As shown in Figure 20, firms in industries without MBE representation have, on average, total capital of $328,000, which is nearly 50 percent higher than that of all firms in shared industry segments. Moreover, firms in industries without MBE representation have strong reliance on external sources of capital, both equity and debt: In industries without MBE representation, firms have raised an average of $3.43 for each $1.00 in owner equity compared to $2.25 and $2.48 for MBEs and non-MBEs in the other (common) industries. In other words, firms in industry segments without MBEs have higher levels of engagement and risk-sharing with external capital providers. (As shown in Column 4, there is also a set of MBEs in the KFS sample that competes in segments without non-MBE representation and many of these are also well-capitalized. However, these firms account for 9 percent of MBEs compared to 32 percent of non-MBEs that compete in industries without MBE representation.)

One possible interpretation is that minority entrepreneurs' choice of industry is a strategic attempt to compensate for lower levels of personal wealth and/or real and perceived challenges in securing external capital.[33] If true, over the long term, MBE selection into industries that are less capital-intensive and less attractive to external capital could lower growth and increase business failure rates, as Fairlie and Robb (2008) report. Less capital-intensive industries will have fewer requirements regarding investments in

[33] If so, the strategy appears to be successful, at least in the early years of firm growth covered in the KFS sample: At the end of the fifth year of operation, failure rates among MBEs (22.2 percent) were identical to those of non-MBEs (22.4 percent).

physical assets like plants and equipment, and intellectual property development like software or patents, but also likely to have lower barriers to entry and higher levels of competition. Firms in these industries are required to make fewer investments, but they also accumulate less collateral, which is nearly universally required of borrowers to access debt financing. For businesses in less capital-intensive industries, the lack of fixed assets could, over time, limit their access to debt.

In recent ICIC interviews with inner city businesses in service industries, debt financing is cited to be nearly inaccessible even for businesses with a robust pipeline of multi-year contracts. The lack of access to capital resulting from limited collateral, which particularly affects businesses in services industries, is an area that demands greater financial innovation and even a policy response. One such innovation in the market place has been the use of the borrowing businesses' accounts receivables as collateral by lenders. While this arrangement, also known as factoring, does capture a segment of the market that otherwise would not have access to debt, the downside is that the cost of capital generally tends to be much higher than that for traditional loans. MBE selection into less capital-intensive industries suggests that capital access challenges of MBEs are partially or substantially mediated through industry selection and challenges can be traced to the industries in which MBEs compete, rather than the level of capital with which they compete. To the extent this is true, traditional capital access policies need to be complemented with formal and high quality (pre-investment) advice on industry selection and (post-investment) strategies to compete successfully in low capital-intensity industries.

Figure 20: Total Capital by Ownership and Industry Type

(U.S. $)	[1] MBE, Common Industries	[2] Non-MBE, Common Industries	[3] Rest of Non-Min Firms	[4] Rest of MBE Firms*
Debt	132,000	140,000	180,000	160,000
External Equity	19,000	26,000	74,000	51,000
Owner Equity	67,000	67,000	74,000	70,000
Total Capital	**218,000**	**233,000**	**328,000**	**281,000**
Debt-to-Equity	1.53	1.51	1.22	1.32
External Capital-to-Owner Equity	2.25	2.48	3.43	3.01
# of Firms	367	1,384	644	35
% of MBE/non-MBE	**91%**	**68%**	**32%**	**9%**

Source: Kauffman Firm Survey (KFS), 2004 – 2007; ICIC analysis
Note: Excludes 64 firms that did not indicate the race of the owner and 20 firms with $10M+ in total capital
* Excludes one minority firm with/$5M in growth capital

Figure 21 shows the capital structure for well- and under-capitalized MBEs. The differences are striking. Among the three-quarters of the under-capitalized MBEs, external equity accounts for only 4 percent of total equity, while owner equity accounts for 45 percent, which is well over the averages for other firms in the sample. Under-capitalized MBEs are also significantly less leveraged, with debt-to-equity ratios (1.0) that are one-third less than the overall average for MBEs (1.5) and non-MBEs.

Figure 21: Capital Structure of MBEs and non-MBEs

		Debt	External Equity	Owner Equity	Average Total Capital	Debt-to-Equity Ratio	Number of Firms
MBEs		132,000	19,000	67,000	218,000	1.5	367
	% of Total Capital	61%	9%	31%			
	Under-capitalized	34,000	3,000	30,000	67,000	1.0	270
	% of Total Capital	51%	4%	45%			
	Well-capitalized	407,000	65,000	168,000	640,000	1.7	97
	% of Total Capital	64%	10%	26%			
Non-MBEs		140,000	26,000	67,000	233,000	1.5	1,384
	% of Total Capital	60%	11%	29%			

Source: Kauffman Firm Survey (KFS), 2004 – 2007; ICIC analysis

IV. Federal Programs and Inner City Capital Flows

In this section, we review the impact on inner city economies of three major federal programs: the Small Business Administration's (SBA) loan programs, CDFI lending activity and New Markets Tax Credits (NMTC). This analysis is based on program data obtained from the SBA and the Department of the Treasury. In addition to a general assessment of the effectiveness of these programs in inner cities, we try to identify particular strengths and weaknesses of the programs' outcomes and design, which could be useful in shaping programs and policies specifically for distressed urban areas. In each case, we note when the data suggest that program outcomes do align with the conventional wisdom.

The largest government-backed loan program is the SBA's 7A and 504 loans. The program is designed to encourage commercial lenders to work with small businesses, which are considered more risky than larger and more established businesses, by reducing the lenders' risk exposure with government-backed

loan guarantees.[34] While the SBA itself does not make loans, it guarantees as much as 85% of the amount of 7A loans that are extended and administered by commercial lending institutions.[35] SBA loans encourage small business lending by addressing actual gaps in the credit market arising from the higher levels of risk associated with small businesses, these loans arguably also serve to address the gaps that stem from perceived risks, whether they be related to the would-be borrower, the borrower's business segment or the operating environment of the borrower's business. These loans tend to be more expensive to the borrower than traditional loans because of fixed interest rate caps and other associated administrative fees. As such, a higher concentration of these loans in a particular area could be an indication of weak local capital markets, in the form of lower availability of traditional financing and/or higher cost of capital for credit-worthy businesses.

In order to determine the importance of government-backed loans to inner cities relative to other areas, we analyzed a dataset containing over 530,000 SBA 7A and 504 loans from 1998 to 2007.[36] First, we categorized each loan as "inner city," "rest of central city" or "rest of U.S." based on the zip code of the borrowing business.[37] In the second part of the analysis, we further break out the inner city zip codes by level of distress, based on the proportion of land mass of the zip code that is economically distressed.

As shown in Figure 22, we find a greater presence of government-subsidized loans in inner cities. The 2004 to 2007 average loan-to-establishment ratio in inner cities is about 35 percent higher than the national average. The higher concentration of government-backed loans is not simply an urban phenomenon: Central cities do receive more loans per establishment than the rest of the U.S., but inner cities receive 10 percent more (relative to establishment counts) than central cities. Again, without data on

[34] For 7A loans, the SBA guarantee is limited to $2 million, while the maximum debenture for 504 loans is $4 million for small manufacturers and $2 million for businesses in other approved industries. The 504 loans provide small businesses with long-term, fixed-rate financing for major fixed assets, such as land, buildings and machinery and equipment, and the 7A loans are generally used for working capital. U.S. Small Business Administration. 7(a) Loan Program. < http://www.sba.gov/financialassistance/borrowers/guaranteed/7alp/index.html>

[35] U.S. Small Business Administration. 7(a) Loan Program. <http://www.sba.gov/financialassistance/borrowers/guaranteed/7alp/FINANCIAL_GLP_7A_TERMS.html> For the 504 loan program the SBA provides a 100% SBA-guaranteed debenture on the CDC's junior lien, which covers up to 40% of the total project cost. <http://www.sba.gov/financialassistance/borrowers/guaranteed/CDC504lp/index.html>

[36] U.S. Small Business Administration, 7A and 504 Loan data, 1998 – 2007. Freedom of Information Act (FOIA)request. January, 2009.

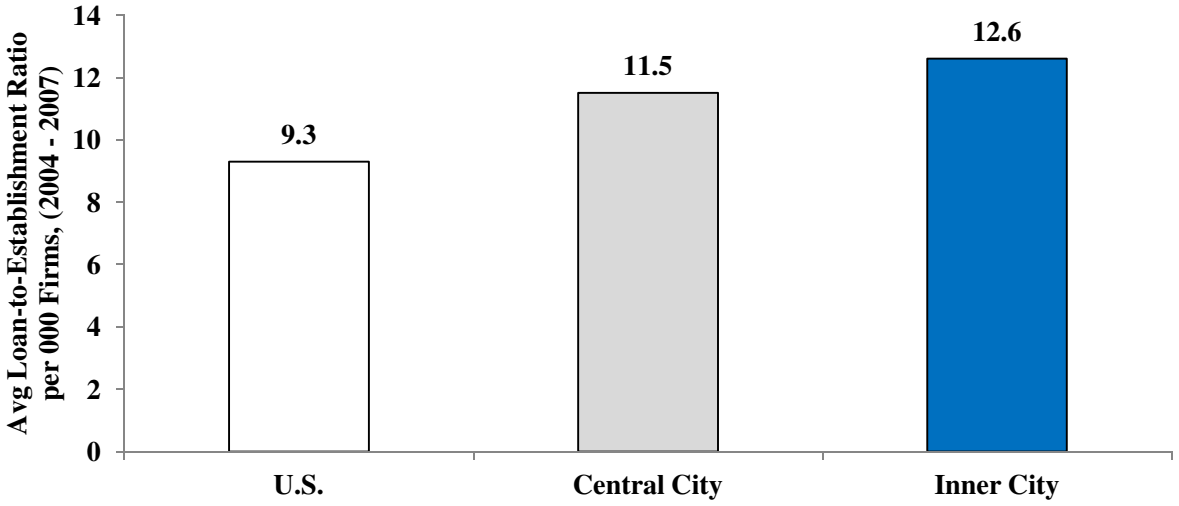
[37] A zip code is classified as being in the central city if 99 percent or more of the zip code area is part of the central city. A zip code is classified as being in the inner city if 99 percent or more of the zip code area falls in the central city and the inner city proportion (based on ICIC's inner city definition) of the central city area is greater than 0 percent. "Inner city" definition as noted in footnote 1.

loan rejection rates and loan default rates, it is difficult to ascertain whether the greater representation of SBA loans is a response to market failure. Nonetheless, the lower flow of commercial credit (Immergluck, 2004) combined with greater use of generally more expensive government-backed SBA loans suggests not that there is lower demand for credit in the inner city, but rather that a greater proportion of loan demand is filled by products and lenders outside of the traditional sources. This hypothesis is supported when we further breakdown the presence of SBA loans in the inner city by the distress levels in inner city economies and find that SBA loan-to-firm ratios increase with level of distress.[38,39] (See Figure 23.)

While SBA loan programs have found a way to reach inner city entrepreneurs who might not have access to more traditional loans, there are inherent limitations to the programs, including size and cyclicality. As shown in Figure 24, in the aggregate, SBA loans make up only about 3 percent of all outstanding small business loans both inside and outside the inner city. Moreover, their availability can vary depending on the credit environment. Participating SBA lenders often pull back when interest rates start to fall as they can no longer profit from selling the guaranteed portions of the loan in the secondary market. During the recent market contraction in 2008, tightened liquidity in the credit market and relatively low prime rates caused SBA loans to decline by 40 percent year-on-year, before the government took measures to alleviate the situation with the 2009 Recovery Act.[40,41] During this time, inner city businesses were likely to have been affected to a greater degree due to their higher exposure to and reliance on SBA loans.

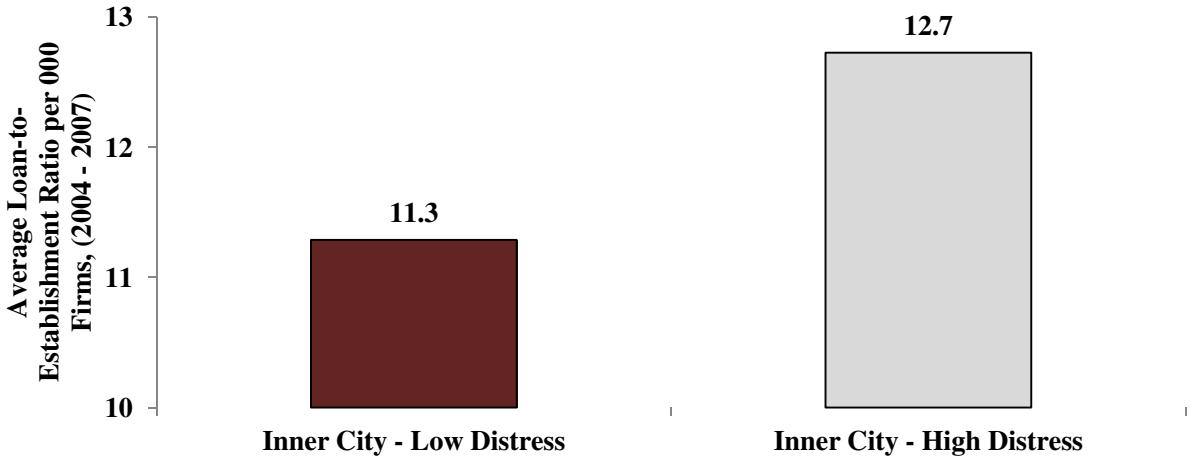
[38] The level of distress is defined by how much of the zip code area belongs to the inner city, with greater than or equal to 99 percent indicating high distress and less than 30 percent to mean low distress.
[39] It is notable that SBA loans do not go toward a subset of the most "attractive" inner city businesses: A separate analysis found that the ratio of SBA loans per unique business is 1.2, identical to the national average.
[40] U.S. Small Business Administration, 7A and 504 Loan data, 1998 – 2007. Freedom of Information Act (FOIA) request. January, 2009.
[41] U.S. Small Business Administration. "2009 Recovery Act: Helping Business Start, Grow and Succeed." <http://www.sba.gov/idc/groups/public/documents/sba_homepage/recovery_act_faqs.pdf>

Figure 22: Average SBA Loan-to-Establishment Ratios



Source: Small Business Administration 7A and 504 Loan data, 2004 – 2007, SICE, 2004 - 2007, ICIC analysis

Figure 23: Average SBA Loan-to-Establishment Ratios in the Inner City by Distress Level



Source: Small Business Administration 7A and 504 Loan data, 2004 – 2007, SICE, 2004 - 2007, ICIC analysis
Note: Low distress level indicates central city zip codes with less than 30 percent inner city area. High distress level indicates central city zip codes with greater than or equal to 99 percent inner city area.

Figure 24: SBA Loans as Percent of Total Small Business Loans

(U.S. Millions $)	2006	2007	2008
Total Small Business Loans	305,590	329,220	295,560
Total SBA Loans	9,060	8,900	6,690
Percent of Total	**3.0%**	**2.7%**	**2.3%**
Estimated Total Small Business Loans in the Inner City	22,710	24,460	21,960
Total SBA Loans in the Inner City	800	800	560
Percent of Total	**3.5%**	**3.3%**	**2.6%**

Source: Small Business Administration 7A and 504 Loan data, 2004 – 2007; FFIEC CRA National Aggregate Reports, 2006 – 2008

Notes: (1) Small business loans are defined as those whose original amounts are $1 million or less and were reported as either loans secured by nonfarm or nonresidential real estate or commercial and industrial loans. (2) The total inner city small business loan amounts were estimated by taking the 2006 percent of inner city employees/total U.S. employees, which is 7.4%, and applying it to the total U.S. small business loan amount. (3) All SBA small business loans in this table are loans of $1 million or less.

Equity: New Markets Tax Credits[42]

The NMTC program was enacted on December 2000 as part of the Community Renewal Tax Relief Act of 2000. The program is designed to subsidize private-sector investment in low-income communities by creating a 39 percent tax credit for equity investments in an NMTC recipient. The tax credits are taken over the course of the seven-year NMTC compliance period.

Since the enactment to the end of 2008, there have been five rounds of funding and two extensions, which amount to $25 billion of tax credits in total.[43] The following summarizes NMTC-related investments in U.S. inner cities, based on the 2004 – 2008 New Markets Tax Credit (NMTC) Allocatee Transaction Level Report from the Community Impact Investment System (CIIS).

From 2004 to 2008, there were 2,630 NMTC projects recorded. Of the total, slightly over half (52 percent) of the projects took place in urban areas. Given that NMTC are designed to stimulate capital flow to low-income areas, it's not surprising that 80 percent of all urban projects have taken place in census tracts ICIC classifies as "inner city." When broken out by total investment (rather than project counts), 63 percent of NMTC investments have been directed toward urban areas, of which about 80 percent went to

[42] While it is designed as an equity investment product, since inception to 2008, 85% of all transactions have been term loans and for business purpose transactions, term loans make up 90% of the total.

[43] Mass Development. "New Markets Tax Credit Program Real Estate Development." March 31, 2009.

inner cities. Overall, half of all NMTC investment dollars have been directed to the inner city since the inception of the program to year-end 2008. (See Figure 25.)

Figure 25: NMTC Project Summary Data

Geography	Total Number of Projects	% of Projects	Total Spent ($B)	% of Total Amt	Average Funding Per Project ($M)
Inner City	1,095	42%	$ 6.1	50%	$ 5.6
Rest of Central City	276	10%	$ 1.6	13%	$ 5.7
Rest of Region	228	9%	$ 1.0	8%	$ 4.6
Outside Region	1,031	39%	$ 3.5	29%	$ 3.4
Total	**2,630**	**100%**	**$ 12.2**	**100%**	**$ 4.7**

Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis

Figure 26: NMTC Average Investment Size by Purpose

Purpose	Inner City	Rest of Central City	Rest of Region	Outside Region	All
Business	3,007,000	3,218, 000	3,968, 000	2,282,000	2,731,000
Commercial Real Estate	7,033,000	7,468,000	4,950,000	5,091, 000	6,290,000
Residential Real Estate	2,763,000	3,038,000	2,479,000	4,004,000	3,032,000

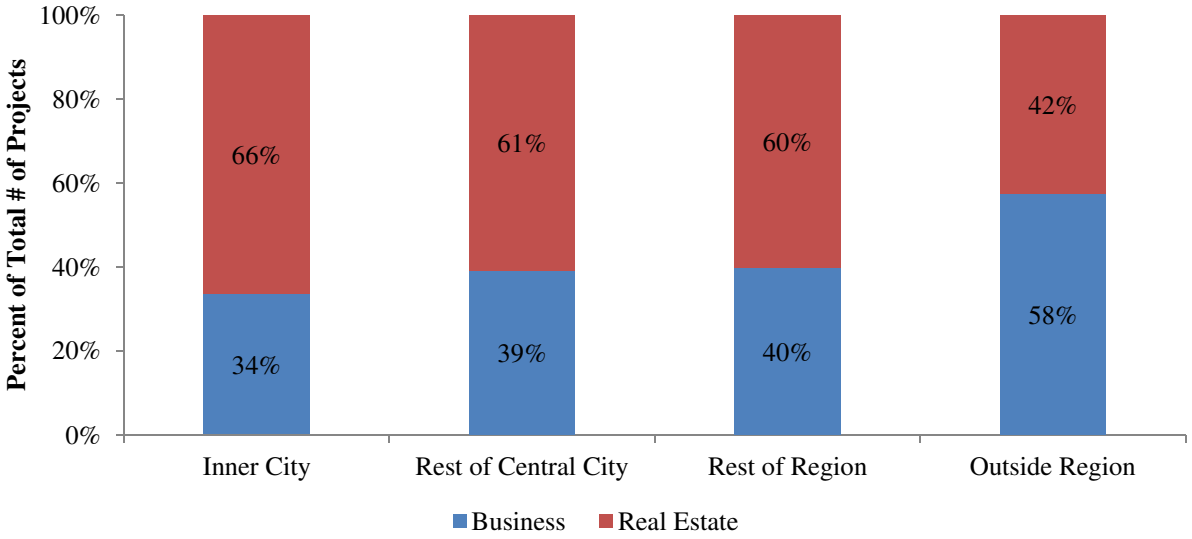
Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis
Note: Excludes "other investments"

As Figure 25 also shows, while the number of projects that have taken place outside metropolitan regions tracks closely to those in the inner city, the total dollar amount invested is much higher in the inner city ($6.1 billion versus $3.5 billion). One reason is that a much greater share of inner city projects are real estate-focused rather than business-focused. Average commercial real estate investment size is about $6.3 million versus $2.7 million for business-related investments (i.e., fixed asset purchases, working capital for startup and growth). (See Figure 26.) Since the inception of the NMTC program through 2008, about 56 percent of all projects were directed toward real estate investments while 44 percent went toward business-related investments. In the inner city, the proportion of real estate projects has been greater, at 66 percent versus 34 percent for business.[44] In fact, about half of all NMTC commercial real estate investments and 70 percent of all residential real estate investments took place in the inner city. As compared to the inner city, the rest of the urban areas are less skewed toward real estate investments,

[44] Excluding "other investments," which make up 4 percent of total investments and 4 percent of inner city investments, from the total.

which suggests less investor appetite for locating businesses in the distressed urban areas and/or investing in inner city businesses even as opposed to the rest of urban areas. (See Figure 27.)

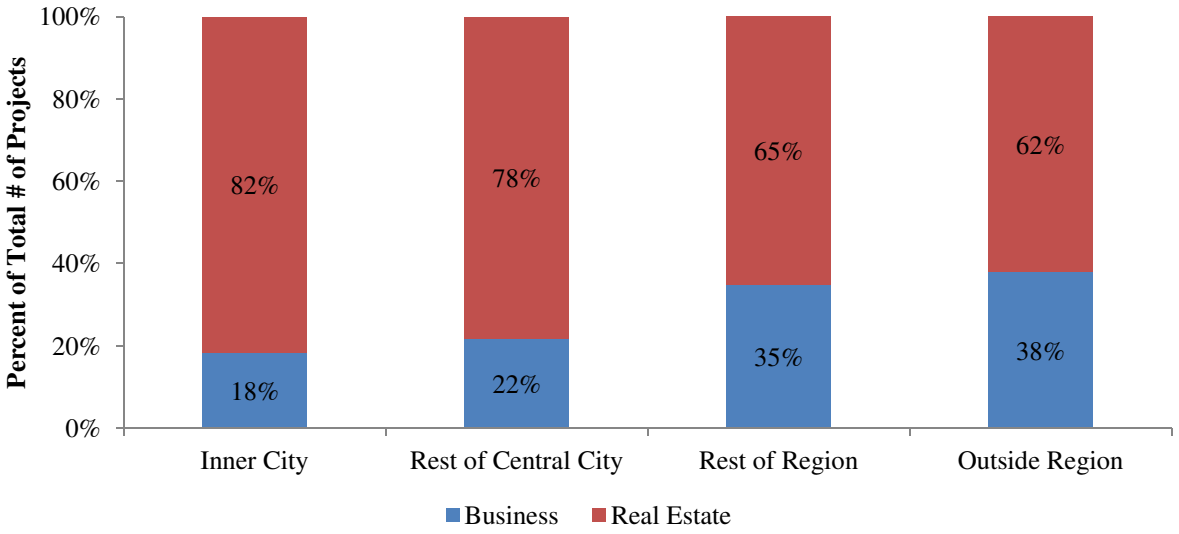
Figure 27: NMTC Project Breakdown by Purpose (by number of projects)



Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis
Note: Excludes "other investments"

By amount, 82 percent of NMTC investments in the inner city are for real estate purposes, but as we move further out of the distressed urban core, the investment dollars tend to be less directed to real estate investments and more toward investment in businesses. Because the average investment size is much greater for real estate than business projects, the bias toward real estate is much greater when we look at investment rather than number of projects. (See Figures 27 and 28.)

Figure 28: NMTC Project Breakdown by Purpose (by total investment amount)



Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis
Note: Excludes "other investments"

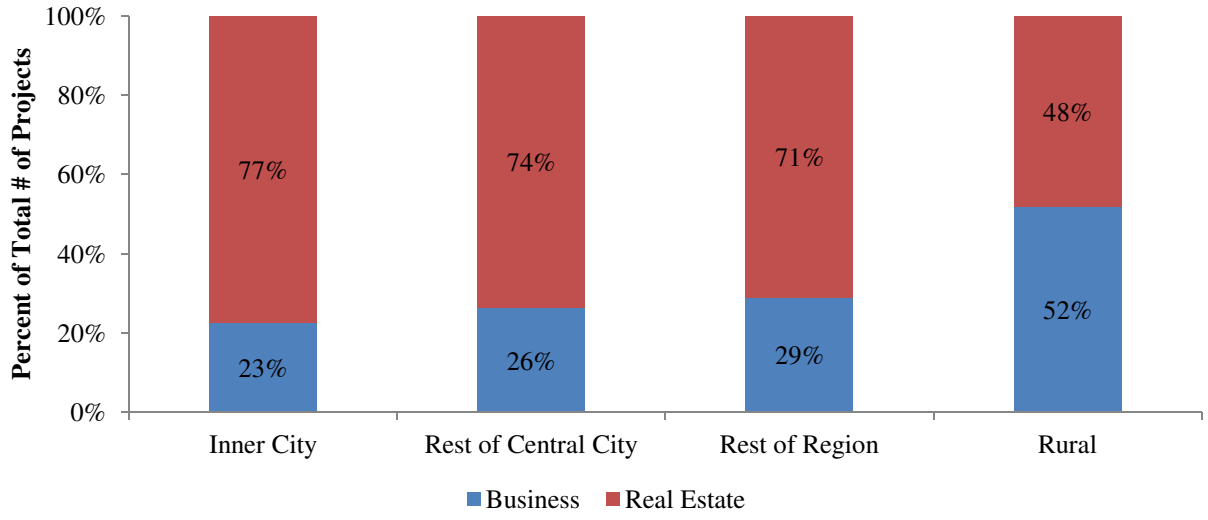
There are a number of explanations for the greater share of real-estate purpose projects, including the basic terms and structure of the NMTC program. According to a recent report by the U.S. Government Accountability Office (GAO), real estate investment is "the predominant form of NMTC investments because investors see real estate as less likely to fall out of compliance with NMTC restrictions. For example, real estate deals can often be more easily paired with other federal, state and local tax incentives. Representatives from CDEs also noted that real estate projects are fixed in location, making it less likely that the project will fall out of compliance with NMTC program rules by moving the investment to a non-qualifying census tract within the 7-year NMTC compliance period."[45] In an interview with ICIC, a NMTC allocatee in Detroit cited these very issues as the reasons for not having invested in business-purpose deals:

> The thing about business investment is that there are too many criteria. You have to show that 40% of employees are located in the census tracts and there are rules that need to be met that ensures that the money helps LMIs and stays there throughout the 7 years, etc. All of this is hard to stay compliant to and makes it tougher to invest in businesses. On the other hand, especially in Detroit, it's easy to own real estate in LMI and if there are no employees, NMTC is quite simple to do.

[45] United States Government Accountability Office. Report to Congressional Committees. "New Markets Tax Credit: The Credit Helps Fund a Variety of Projects in Low-Income Communities, but Could Be Simplified." January, 2010.

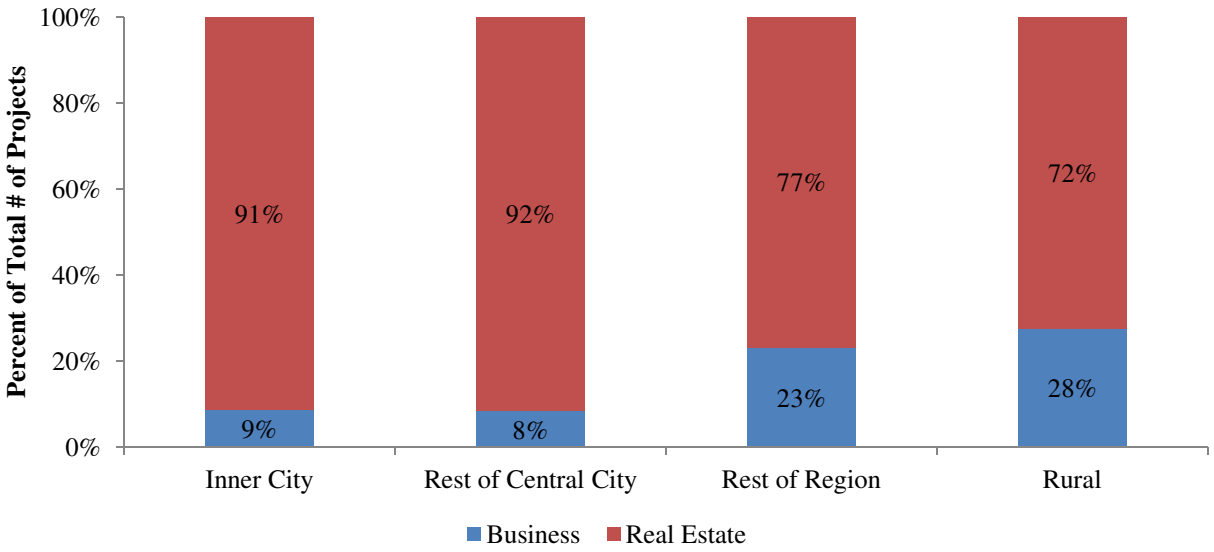
The apparent difficulty for investors to use NMTC for business-purpose projects becomes even more pronounced, when we further break out specific "business-purpose" projects that do not operate in the private sector, such as educational facilities, including charter schools, religious organizations and medical facilities, from the 'business-purpose' projects. As Figure 29 shows, excluding these types of projects, the proportion of 'business-purpose' projects falls to less than a quarter of all inner city projects from 34%, while also falling in similar proportions in other areas. As a share of total investment dollars, the decline is even steeper, with the share of "business-purpose" investment dollars falling to less than 10% in the urban areas. (See Figure 30.) Based on the prevalence of business projects in outside of urban areas, as well as project interviews, we hypothesize that the low incidence of NMTC business projects is due partially to program structure but also to a dramatic shift in interest and expertise in the urban investment community towards real estate and away from business.

Figure 29: NMTC Project Breakdown by Purpose (by number of projects, excluding non-private sector investments previously categorized as "business-purpose")



Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis.
Note: Excludes "other investments." "Business" projects exclude charter schools, other educational facilities, medical facilities, social services and museums.

Figure 30: NMTC Project Breakdown by Purpose (by total investment amount, excluding non-private sector investments previously categorized as "business-purpose")



Source: Community Development Financial Institutions Transaction Level Report data; ICIC analysis
Note: Excludes "other investments". "Business" projects exclude charter schools, other educational facilities, medical facilities, social services, and museums.

V. Summary and Recommendations

The analyses presented in this paper address a number of key questions regarding capital access of firms in inner city areas. The first is the high-level findings on capital supply and demand. The CRA data show that urban LMI tracts have low loan-to-firm ratios and, relative to higher-income urban tracts, significantly lower loan dollars per firm. (These data likely understate the capital flow disparity because they do not account for firm size, which tends to be larger in inner cities than elsewhere.) The KFS data show similar patterns, with inner cities receiving about 20 percent less capital per firm than elsewhere in the U.S. CRA and KFS data also highlight the importance of examining the distribution of capital across firms: The data suggest that inner cities have a disproportionately large number of firms that receive no external capital and/or have overall capital levels that are low relative to firms in the same industry.

The data also suggest that demand for capital is at least as high in inner cities as elsewhere in the U.S. The analysis of the manufacturing base shows that historically inner cities have actually specialized in high capital-intensity industries and, even recently, have performed well in these industries. In the KFS

sample, the average capital intensity of industries in which inner city and non-inner city firms compete is nearly identical. Additional findings like ours should finally put to rest explanations of capital flows that assume that the structures of inner city economies lead to lower demand for capital. More generally, our analyses illustrate the limitations of capital gap analyses that don't consider the demand side, i.e., the capital requirements of the industries in which inner city firms and economies compete. The analyses of the NBER manufacturing data demonstrate how industry-level data can be used to estimate the relative capital intensity of economic areas; our analyses of KFS data show the utility of firm-level data for understanding the size and nature of the capital gap in underserved areas.

Our first set of recommendations relates to issues of data and methods of analysis for examining inner city capital gaps and the relationship between capital flows and inner city economic performance. In addition to these recommendations on data and methods, which we explore further in this section, our findings also have implications for specific empirical questions related to inner city capital flows as well as for broad questions about the framing of questions related to capital flow and inner city economic development. As discussed in the introduction to this paper, we attempt to articulate and illustrate the findings of this paper in terms of data, methods and principles in order to maximize the relevance and applicability of this work.

1. Data and Methods

While we believe that the methods employed in this paper are a step in the right direction, there are still two significant limitations on our understanding of actual capital demand at different geographies. Our approach relies on industry characteristics as a proxy for capital intensity and therefore capital demand. Additionally, available loan datasets, here the SBA and CDFI data, only contain those firms that actually succeed in obtaining loans. There are no data on firms that are rejected. Similarly, any data set on economic activity only contains information on firms that actually exist and thus cannot capture the degree to which challenges with startup capital undermine the firm formation in inner cities. It seems non-controversial to suggest that these challenges with startup capital are higher among would-be minority and inner city would-be entrepreneurs. As such, the available data are likely biased in a way that underestimates the effects of capital market challenges on inner city business formation.

These issues can only be addressed with better data mandated and collected at the federal level. As one expert explained:

> If we're talking about federal policy [and what it is] that the federal government can do…it's very hard to generate solutions and then to sell those solutions as policy unless you have good data to underlie it. And there isn't really good data…I think the notion of creating tax incentives or creating some kind of policy incentive to go into these communities and to put money in and to deploy it is great, but you can only do it if you can make the case that businesses are there. And it's hard to do that without the data.[46]

The 1995 regulatory change in CRA to begin the collection of small business lending data from banks and thrifts on a census tract basis has been an important first step to create transparency around small business lending.[47] However, as Immergluck (2004) argues, further improvements, such as better and more inclusive bank-level data, tracking and disclosure of loan rejection rates and default rates are seen to be necessary to measure and explain business-lending activity in LMI and minority neighborhoods. [48] We would agree and add that federal data reporting be expanded to smaller banks—currently only banks with at least $1B in assets are required to report LMI lending and investment.[49] We propose that reporting requirements on loans and loan applications include detailed information on the industry in which firms compete, in order to gauge actual versus competitive capitalization levels. Data should also be made available at the smallest geography at which confidentiality can be guaranteed. As the analysis in this paper shows, understanding firm characteristics and growth dynamics of distressed urban areas requires data that can be mapped at the zip code or, preferably, the census tract level.

The analyses presented here also underscore the importance of information on the distribution of capital across firms. Certainly, any information on total capital flows will help frame the problem and potential solutions and should be encouraged. However, data on total and average flows obscure what could be a key issue in inner cities, namely the sheer number of firms that are undercapitalized. Fortunately, information on the population of firms, even at very small geographies, will rarely trigger concerns about confidentiality of individual firm data.

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[46] Participant comment, "Roundtable: Supporting Inner City Business Growth with Improved Access to Capital." Ford Foundation, New York, NY. March 19, 2009.
[47] Immergluck, Dan. *Credit to Community: Community Reinvestment and Fair Lending Policy in the U.S.* New York: Cleveland State University. 2004. Print.
[48] Ibid.
[49] Expand Community Reinvestment Act. "The Community Reinvestment Act: A Brief History and Overview." <http://www.expandcra.org/about-cra/history-and-overview/> Accessed: March 2010.

2. Linking Capital Flows to Inner City Economic Development

Close examination of inner city capital supply and demand provides insight into structural characteristics of inner city economies. Much of the data and analysis points to strong bifurcation within the group of firms that operate in the inner city. CRA data reveal that inner cities are home to both a high number of firms with no formal relationship to lending institutions as well as a large share of firms that receive large business loans. The KFS data also paint a picture of two distinct sets of inner city firms: a relatively small set (30 percent) of well-capitalized (but highly indebted) firms and a much larger group (70 percent) of undercapitalized firms.

This is consistent with broader characteristics of inner cities, which we know are home to many of the country's largest medical and educational institutions, as well as a significant portion of the largest American firms. Similarly, inner city manufacturing appears to have a very strong presence of branch plants of firms in highly concentrated sectors like beverage manufacturing and motor vehicle assembly. These large economic actors co-exist with large numbers of much smaller firms, many of which are MBEs with often weak relationships with financial institutions and limited access to business networks. What is striking about this picture, however, is not the differences between these groups but their similarities: Like smaller, struggling inner city firms, the largest economic entities, such as corporate headquarters, manufacturing branch plants, and large education and medical facilities, often operate in highly vertical structures with only weak ties to local capital (and other) institutions.[50] We hypothesize that this can help explain a number of characteristics of inner city economies, including the rapid decline in local commercial banking institutions in the post-merger era, when lending institutions had less incentive to maintain branches for non-business purposes. (Between 1998 and 2007, the number of commercial banking establishments declined by 8 percent in the inner city, while increasing by 27 percent across the U.S.) If true, one implication is a need for policies that promote stable, sustainable economic development institutions, including but not limited to capital providers.

A second, related question is whether inner city performance is shaped by "contagion" effects associated with large numbers of undercapitalized firms. We know that low capital levels are associated with higher probability of firm closure (Fairlie and Robb, 2008); and the various data we have reviewed in this paper suggest that inner cities have high proportions of firms that are undercapitalized. The key question for understanding the implications for inner city economic development is whether closure at one firm

[50] We do not explore it here, but in general, neither set of firms is likely to generate or sustain the support institutions required for a vibrant local economy.

increases the chance of closure at surrounding firms. Vulnerable businesses are employers of local residents, consumers of local goods like real estate and customers of other local inner city firms; for these reasons, we hypothesize that closure at one inner city business increases the probability of closure at neighboring businesses. In this way, high concentrations of undercapitalized businesses sets in motion a cycle in which inner city businesses are associated with shorter job tenures and less experience and skill acquisition for the inner city residents that rely on them for jobs; decreased revenue, profit and survival probability for neighboring firms that rely on them as customers; and increased blight caused by high real estate turnover and empty store fronts.[51] This interpretation is also consistent with the overall performance of U.S. inner cities, which tend to go into recessions early, come out of recessions late and, even in robust economic times, suffer from more volatile employment levels than the rest of the region.

To the extent this is true—and it certainly needs to be explored further—incentives to draw new firms to economically distressed urban areas should be used judiciously. Cities, in particular, should consider whether policies that directly or indirectly steer firms into neighborhoods with high concentrations of undercapitalized firms are creating systemic volatility that undermines the potential job creation impacts of these investments. It is worth exploring if policies should instead be directed toward recruiting highly capitalized firms, which could both survive the environmental volatility and, in fact, help dampen it, thus reducing the closure probability of surrounding firms.

This is an area that requires further research, perhaps most fruitfully along two lines. The first would be an understanding of how the distribution of firm characteristics affects economic development potential and outcomes. What are the implications, if any, of high concentrations of undercapitalized firms? Do these firms fare, on average, worse than undercapitalized firms surrounded by better capitalized firms? What types of economic development institutions are likely to emerge and survive in these environments? What, in turn, is the effect of different constellations of institutions on firm outcomes?

The second area of research would examine the mechanisms through which firms influence outcomes of neighboring firms. Cluster theory highlights the importance of "geographically proximate group[s] of interconnected companies" that influence each other as customers, suppliers and competitors.[52] For

[51] These effects are likely to be magnified in inner cities, where business and residential activity is, by order of magnitude, denser than much of the country, creating the conditions under which contagion effects from business failures are likely to be easily and rapidly transmitted.

[52] Michael E. Porter, "Clusters and Competition: New Agendas for Companies, Governments, and Institutions." Chapter 7 in *On Competition*. Boston: Harvard Business School Press.

analyzing inner city economies, we also need to understand something simpler: How do outcomes at one firm affect outcomes at proximate firms? Here the model might be the research on contagion effects of foreclosures, which has generated relatively precise (if somewhat contested) estimates of the effects of each foreclosure on the value of nearby houses.[53] Further work has examined the effects of home values on small business financing.[54]

3. *The Relationship Between Race and Place*

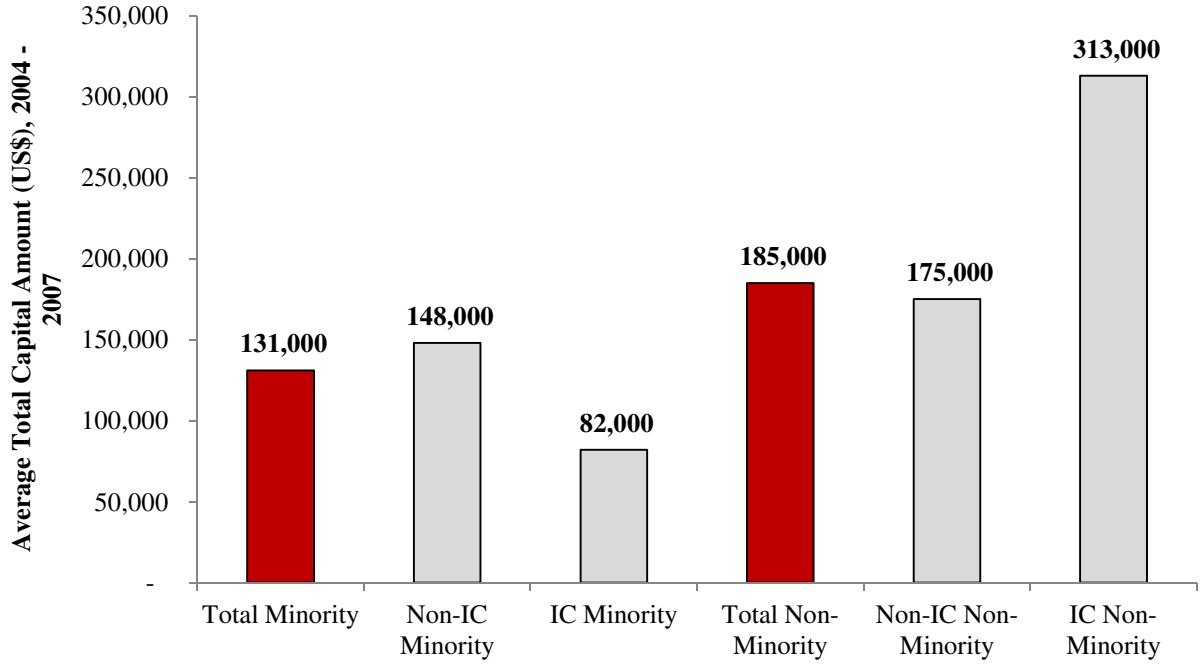
Although only a few federal programs target race specifically, some like SBA's 8(a) program do exist. In addition, local, state and federal procurement guidelines often include targets for minority-owned firm participation, especially in infrastructure and other construction projects. Targeted procurement is part of a larger effort to expand participation of so-called "disadvantaged business enterprises" (DBEs), which include minority-owned as well as women- and veteran-owned businesses.[55,56] Complementing public programs and policies aimed at strengthening MBEs are robust private and non-profit infrastructures aimed at promoting opportunity and growth. Fairlie and Robb (2008) cite research showing that "there exist more than 500 nonprofit programs providing loans, training or technical assistance to disadvantaged entrepreneurs" (2008, p. 182). In addition, many of the country's universities and large corporations have MBE and/or DBE procurement goals and some even venture into business development efforts for their MBE/DBE suppliers.

The data presented in this paper create a somewhat startling picture of the relationship between "race" and "place": A significant portion of the inner city gap appears to be tied to lower capital levels at minority-owned businesses. As shown in Figure 31, among inner city firms in the KFS sample, average total capital at minority-owned firms is $82,000, about a quarter of the level of white-owned firms in the inner city, which have average capitalization rates of $313,000. Outside of inner city areas, minority-owned firms have average capitalization rates of $148,000, compared to $175,000 at white-owned firms. A similar picture emerges when we examine owner equity and loans capital levels at firms with CDFI

[53] See e.g., John P. Harding, Eric Rosenblatt, and Vincent W.Yao. "The Contagion Effect of Foreclosed Properties," July 15, 2008.
[54] See e.g., Center for Responsible Lending, "Soaring Spillover: Accelerating Foreclosures to Cost Neighbors $502 Billion in 2009 Alone; 69.5 Million Homes Lose $7,200 on Average," May, 2009; Scott Shane, "Why Small Businesses Aren't Hiring," *The American*, August 24, 2010; <www.american.com/archive/2010/august/why-small-businesses-arent-hiring>
[55] Fairlie and Robb, p.184
[56] The Section 8(a) Program (started in 1968 under the authority of Section 8(a) of the Small Business Act, as amended) is administered by the Small Business Administration (SBA). SBA regulations concerning social and economic disadvantage determinations (see 13 CFR 124.103(c) and 124.104).
< www.dotcr.ost.dot.gov/documents/dbe/Appendix-E.html> Accessed: March 2010.

investments. (CDFI data do not include external equity.) The data set includes nearly 6,000 firms with loans from CDFIs, which are required to "provide a unique range of financial products and services in economically distressed urban and rural target markets."[57,58] (See Figure 32.) The disadvantaged status of these firms is apparent in the average capitalization rates of firms in the CDFI sample, which at $136K is about 35 percent smaller than the average of the KFS sample, even though the latter is comprised solely of firms less than five years old. In important respects, though, characteristics of the CDFI sample mirror the KFS sample. As shown in Figure 32, white-owned businesses in the sample have more than two times the capital of minority-owned businesses; and for both minority- and non-minority-owned businesses, inner city location is actually associated with higher (+20 percent) average capitalization. (This is most likely an urban effect.)

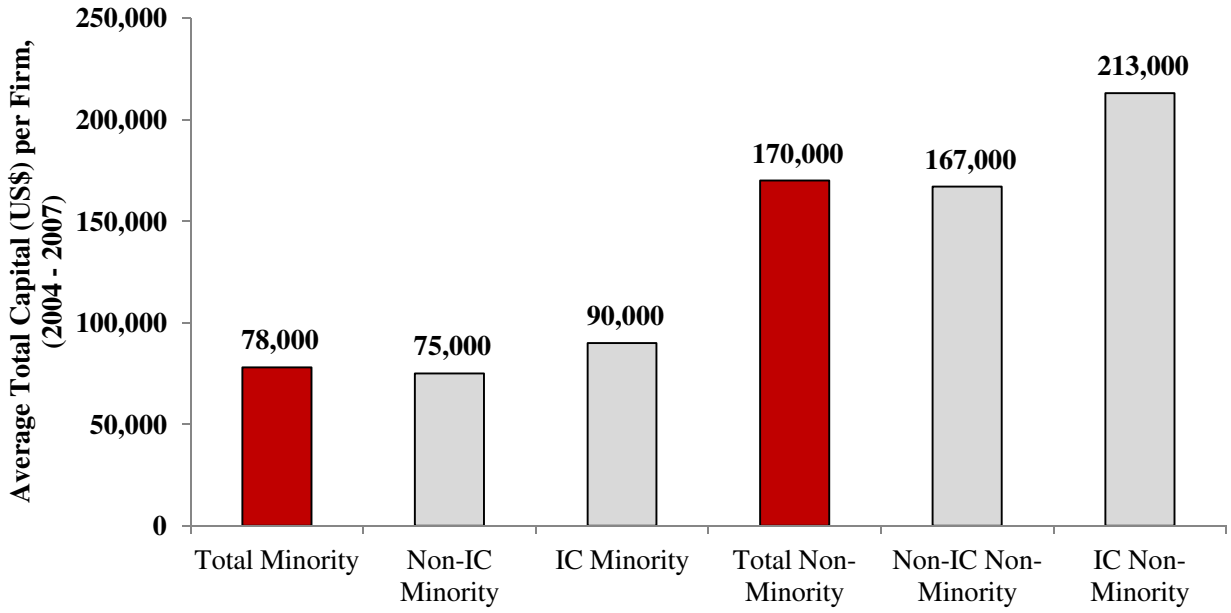
Figure 31: Average Total Capital per Firm by Race and Geography



Source: Kauffman Firm Survey (KFS), 2004 – 2007
Note: Excludes one inner city non-MBE outlier with $9M in total capital and one non-inner city non-MBE with $100M+ in total capital. Amounts do not match earlier figures because sets of firms vary slightly

[57] Community Development Institutions (CDFI) Fund. <http://www.cdfifund.gov/who_we_are/about_us.asp> Accessed: March 2010.
[58] Community Development Institutions (CDFI) Fund. Transaction Level Report, 2006 - 2008.

Figure 32: Average Total Capital per Firm by Race and Geography in CDFI Sample



Source: CDFI Transaction Level Report, 2006 - 2008
Note: Total capital for CDFI data consists of CDFI investments, which are generally loans, and owner equity. Other external financing that may have been used by the businesses are not included.

Taken together, there is good reason to believe that a large portion of the "place" effect can actually be explained by the "race" effect.[59] Interestingly, this does not necessarily mean that race-based programs should be promoted by those looking to strengthen inner city economies. Further analysis actually suggests an important but counterintuitive finding: Race-based programs will have relatively small effects on inner city economies, but programs that target inner cities will have relatively large impacts on the MBE community. Figure 33 illustrates why this is the case. Using KFS data, we estimate MBE concentrations in regions with different levels of racial diversity. We find that in the least diverse regions, MBEs concentrate in inner city areas, perhaps in order to develop and access minority business networks.[60] In the least diverse parts of the country, this geographic sorting is stark: We estimate that in regions in which less than 20 percent of the population is classified as minority, 38 percent of inner city businesses are MBEs compared to only 9 percent of businesses elsewhere in the region. As regional diversity increases, however, MBEs are less likely to concentrate in inner cities. As a result, in the most

[59] Due to data limitations, this analysis was done at the zip code level. In other words, within zip codes that are at least partially inner city, there appears to be no independent place effect. However, we suspect that if we could analyze individual census tracts within zip codes, we might find some place effect in the most distressed tracts.
[60] Marion, Justin. "Firm Racial Segregation and Affirmative Action in the Highway Construction Industry." University of California, Santa Cruz. December 2008.

diverse regions, the proportion of inner city businesses that are MBEs is only 1.4 times that of the rest of the region (51 percent versus 37 percent) compared to 4.5 times higher (38 percent versus 9 percent) in the least diverse regions.

The data in Figure 33 also illustrate why some policymakers might expect race-based policies to also have place-based effects. Consider the most diverse areas in the U.S., those with minority populations that exceed 50 percent. In these regions, almost 60 percent of inner city firms can be expected to be MBEs, giving the impression that helping MBEs will help the inner city economy. What this framing misses is that in diverse regions, MBEs are found in much larger absolute numbers outside the inner city and, as a result, any particular MBE helped by a program or policy is far more likely to be located outside the inner city. On the other hand, across regions, about 40 percent of firms helped by a program or policy that targets the inner city will be MBEs. In short, those hoping that race-based programs will yield place-based results are likely confusing their target area (i.e., the inner city) with the program's treatment area (i.e., the larger region). This finding is contrary to the cognitive frameworks of practitioners and others who influence policy. In interviews conducted for this project, some experts harbored an implicit understanding that race-based approaches would provide significant place-based results and expressed palpable disappointment about programs that failed to perform such double duty.[61]

Figure 33: MBE Concentration by Population Diversity of Region, KFS Sample

Rest of Region % Minority Population Categories	Share of MBEs		Inner City MBE/ Rest of Region MBE	Inner City Share of Region's Minority Owned Firms
	Rest of Region	Inner City		
<=20%	9%	38%	4.2	42%
>20 to 30%	15%	28%	1.9	26%
>30 to 40%	25%	38%	1.5	20%
>40 to 50%	30%	44%	1.5	21%
>50%	37%	51%	1.4	21%

Source: Kauffman Firm Survey, 2004, SICE, 2000.
Note: KFS sample is slightly more heavily weighted toward minority entrepreneurs (~20%) than the U.S. economy (~18%). The analysis is based on 466 inner city firms and 3,058 non-inner city firms. The analysis is of 83 MSAs in the country containing the 100 largest central cities and excludes firms located outside of those MSAs.

The analysis of "race" versus "place" effects in inner city economies offers three important facts to the discussion on policy. The first is that it is likely that all inner cities have a high proportion of MBEs in

[61] Project interviews, 2008-2010.

their economies. As a result, approximately one in two of the firms affected by policies that target inner cities will be MBEs, thus yielding high dual race and place impacts. The second implication is that because most MBEs are located outside inner cities, policies that target MBEs will have relatively small effects on inner cities. Interestingly, one possible exception to this rule is the least racially diverse regions, where MBEs tend to concentrate in inner cities. This concentration might allow these neighborhoods to capture a good portion of the impact of MBE policies. It is important to note that the data do not necessarily constitute an endorsement of place-based approaches to inner city business development, but merely indicate that programs that target inner city locations will probably have a larger effect on MBEs than vice versa. The third point, which needs further exploration, is the possible interactive effects of race and place: While race appears to strongly influence average firm capital levels in inner cities, place might be a good predictor of the distribution of capital levels.

4. *Existing Delivery Systems*

The review of the impact of federal policies on inner city economies was, at the same time, an assessment of the strength of various capital delivery systems to inner city areas. Two strengths stand out: the ability of the CDFIs to channel loans into distressed urban areas and for firms in the most distressed areas to access SBA loans. In fact, the data suggest that SBA loans are most important in areas of highest distress. For capital providers that explain poor performance by reference to the paucity of capital-ready firms in the inner city, the performance of SBA loans provides an important counterpoint: It is clear that SBA has developed methods to reach these businesses, such as through the participation of a greater share of smaller community banks to the SBA loan guaranty programs, and foster a quality of interaction that, while still working through the traditional channels, results in relatively high numbers of loans to businesses in distressed urban areas.[62] One contributing factor is likely the ability of SBA to reach MBEs: Fairlie and Robb (2008) cite an SBA study that reports that one-third of its loans go to MBEs.[63] A study by the Federal Reserve Bank of Cleveland further posits this notion with the finding that "SBA-guaranteed lending has a greater impact on economic performance in markets with a high percentage of

[62] During 1998 to 2007, only a third of SBA loans to businesses located in the inner city were extended by the 10 largest banks in America. The deposit share of the 10 largest banks is close to 50% of the market. Small Business Administration 7A and 504 Loan data, 2004 – 2007, The Largest Banks in the U.S. <http://nyjobsource.com/banks.html>, Deposit market share of top 10 banks in the U.S. <http://latimesblogs.latimes.com/money_co/2010/10/banks-market-share-deposits-foreclosures-tbtf.html>

[63] Fairlie and Robb, p.183

potential minority small businesses."[64] CDFIs have also been recognized for their ability to get loans into underserved communities (urban and rural). According to one expert:

> Then there [are] clear lessons in what CDFIs have done. You look at the relative percentage of lending in… minorities and throughout communities. It's much higher than it is for banks…I think there [are] clear examples of what it takes to put money into these communities. So CDFI is making loans, they don't make them to make them grants. They want loans that have to be repaid, or we don't live. But we have the ability to take more time and unpack the deal in a much different way.[65]

At the same time, other parts of the capital delivery system have been severely weakened, as evidenced by the dramatic decline in commercial lending institutions in low-income urban neighborhoods. One expert discussed how New York City is addressing this issue:

> … usually in the inner cities there is [less] availability of capital. Most banks don't open branches there. New York City, for example, has a program that actually will…deposit money in a bank if they open in certain areas of the city. Carver National Bank is an example of that.

There is also an institutional architecture supporting place-based initiatives, especially by the large federal programs, e.g., HUB Zones, Empowerment Zones, Renewal Communities, NMTCs. There seem to be few instances of university or corporate place-based procurement policies, which tend to target businesses by the ownership characteristics (race, gender, veteran status) rather than location. In the non-profit sector, most place-based efforts are aimed at housing, job training and other direct service provision rather than capital access or business development. At the same time, substantial private-sector capabilities have developed around doing deals using place-based incentives, especially NMTC. As discussed in the next section, however, owing to the structure of the NMTC, this program has been much more successful in supporting real estate transactions than moving capital to business development in distressed areas. Recent proposals by the Department of the Treasury aim to strengthen the role of NMTC in business development. [66]

The effectiveness of NMTCs to address inner city capital challenges is more mixed. The primary weakness, we would argue, is that allocations tend to track local capabilities rather than need. For most of

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[64] Craig, Ben R., William E. Jackson, III and James B. Thomson. *"Small Firm Credit Market Discrimination, SBA-Guaranteed Lending and Local Market Economic Performance*." Federal Reserve Bank of Cleveland. 2006.
[65] Participant comment, "Roundtable: Supporting Inner City Business Growth with Improved Access to Capital." Ford Foundation, New York, NY. March 19, 2009.
[66] U.S. Department of the Treasury. "Obama Administration Announces New Measures to Support Job Creation and Small Businesses in Hard-Hit Communities through the New Markets Tax Credit." <http://www.treas.gov/press/releases/reports/nmtc%20fact%20sheet.pdf>

the past decade, for example, CDEs in Boston have received far greater allocations than CDEs in Detroit, an outcome some have suggested reflected an unwillingness of any one organization in Detroit to take a leadership role.[67] (A lack of local and regional allocates generally means an area will have few NMTC projects.) A second problem, which others have acknowledged, is that the value of credits rises and falls with the overall economy, which will exacerbate the tendency of inner cities to fall into recession early and come out late.

A common criticism of the NMTC program—that it is structured in a way that makes business loans difficult—is not fully supported by the data. Although there are reasons that NMTCs are difficult to use for business purposes, the analysis presented here shows that outside of urban and metropolitan areas, the vast majority of NMTC projects are actually for business investments. Thus, while the structure of the program is not ideal, the data suggest it is certainly adequate for business loans. The bigger problem seems to be the wholesale shift in private- and public-sector urban economic development expertise toward real estate over the last decade. We will explore further the factors behind the high utilization of NMTCs for business investments outside of urban areas.

5. *The Conceptual Framework*

The findings in this paper support claims that access to capital is a contributing factor to anemic inner city economic performance. The implications of our findings, however, go well beyond capital policy into broader business development and economic development strategy and policy. We have come to believe that a key problem with the current conceptual framework is its emphasis on compensating for income and wealth outcomes that are generated by larger economic and social processes and that are relatively intractable, especially in the short-term. For example, low owner equity at large numbers of inner city businesses cannot be separated from current and historic challenges faced by minority- and low-income people in accessing quality education and quality jobs. Narrowing the effects of these types of disadvantages is certainly a worthy public and private goal. Historically, however, there has been little political appetite for the type of wholesale change that would be required to eradicate gaps in wealth between social groups. If we accept that a large part of the capital challenge—that arising from large differentials in personal and "friends and family" wealth—is unlikely to be solved in the short-term, we can expand the range of possible solutions to business development of MBEs and other inner city firms tremendously.

[67] Detroit interview, 2008

The current framework starts with desirable business outcomes such as growth, profits or survival and asks how to secure the capital to achieve these results. In this framing, outcomes are fixed and capital is a variable. We propose a complementary approach that would take capital levels as a given and identify the tools, strategies and complementary investments that would maximize growth and output for a given level of capital. This is not a fool's errand nor unduly pessimistic about the potential of capital policy. Rather, it recognizes the tremendous potential that resides in inner city firms at all levels of capital. Some of the country's most successful inner city firms started with miniscule amounts of capital: Of the 335 firms identified by ICIC as among the country's fastest-growing inner city firms between 2003 and 2006, almost one-third (96) had start-up capital levels of $10,000 or less. (The average for all firms was about $360,000.) While these start-up capital levels are not ideal, many entrepreneurs and would-be entrepreneurs come from modest backgrounds that preclude bringing high levels of personal wealth or friends' and family investments to their business ventures. By acknowledging this as a reality, we can complement capital policy with programs aimed at provision of services and development of strategies that will maximize the chance of success for inner city firms at all levels of capitalization.