

Financial Capital Injections among New Black and White Business Ventures: Evidence from the Kauffman Firm Survey

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Abstract

This paper uses new panel data from the Kauffman Firm Survey to examine racial differences in the incidence and determinants of financial capital use among young firms. We find a heavy reliance on owner's equity at startup that declines substantially in subsequent years, whereas the reliance on outsider debt remains as high in subsequent years as at the point of startup. We find that black-owned businesses face persistent difficulty in accessing external capital markets. Black-owned businesses rely much more on owner equity than do white-owned businesses indicating that black-owned businesses face more difficulty in raising external capital. Direct evidence on average levels of external capital reveals large racial disparities between blacks and whites. Regression analyses indicate that racial disparities in the amounts and types of early financing between blacks and whites do not entirely disappear after controlling for differences in credit quality, human capital, and firm characteristics. Blinder-Oaxaca decomposition estimates identify several factors contributing to lower average capital injections for black-owned businesses. The most important factor contributing to white/black differences in financing levels are credit scores, especially for financial injections in the years following startup. Lower levels of startup capital and initial sales are also found to be associated with lower black levels of capital use in the two years after startup.

1. Introduction

A firm's access to financial capital—both debt and equity—in its early years of development is an essential, but poorly understood, determinant of success for most new business ventures. The limited understanding of early stage capital injections stems not from a lack of sound theoretical guidance, but from a lack of detailed panel data with information on financial capital inputs in the years immediately following startup. As a first step to fill this void, this paper uses a newly available longitudinal dataset—the Kauffman Firm Survey (KFS)—to study how early stage capital injections, and how the timing and composition of capital injections relate to race and other business and owner characteristics.

We focus on both the initial capital that firms receive in their year of startup, as well as the capital injections that follow, allowing us to study the dynamics of capital structure and access to capital in new business ventures. This is important for several reasons. Often financial contracts are optimally staged to coincide with the completion of milestones. Even if optimal financial contracts do not explicitly call for staging, time-variation in investment opportunities or capital availability will naturally induce a demand for later stage capital as firms grow. In addition, entrepreneurs who possess private information about the future value of their startups may optimally choose to wait until they can credibly convey hard information to outside investors rather than rely on the soft information potentially embodied in owner characteristics.

Indeed, our focus on black-white differences in access to capital is motivated by the role that human capital plays in capital market access for entrepreneurial firms. Most models of financial contracting assume that the entrepreneurial idea is a function of the

owner's human capital, or is somehow inalienable to the enterprise owner. In addition, if there are limited assets within the firm that can be pledged as collateral, then the human capital of the owner should be positively correlated with the amount of capital injections. If capital markets are competitive, owner characteristics correlated with business outcomes should be important for determining initial capital injections, but less important for later stage injections, as increasing amounts of firm-level operating and performance data become available. On the other hand, if owner characteristics signal persistent differences in firm quality, or if capital markets make distorted capital allocations based on owner characteristics even when data are available about a firm's operating performance, then the owner characteristics that determine initial funding should also continue to be important at later stages.

In the initial round of funding, we find that many owner characteristics are correlated with access to capital, suggesting that capital market participants, lacking hard information, screen based on observable owner characteristics. But most of these characteristics cease to be important when we look at follow-on capital injections, especially when we control for measures of interim firm performance. However, one factor that continues to be strongly associated with the use of financial capital is the owner's race. Black-owned businesses not only receive significantly smaller injections of outside capital in their founding year, but this tendency persists in the years that follow.

The question of how racial differences in access to financial capital for startups persist raises questions from numerous perspectives. Previous research indicates that black business owners have substantially lower levels of personal wealth, home ownership, bank loans, and startup capital (see Bates 1997, Fairlie and Robb 2008, U.S.

Census Bureau 2008, Cavalluzzo, Cavalluzzo and Wolken 2002, Blanchflower, Levine and Zimmerman 2003 for example). Low levels of startup capital among black-owned businesses relative to white-owned businesses persist across all major industries (U.S. Census Bureau 1997, Fairlie and Robb 2008). Surprisingly, however, there is no evidence on access to financial capital in subsequent years among young black firms. We also know little about whether black and white firms differ in the dynamics of financial capital use — in particular, substituting between external and internal capital over time.

Understanding how African-American firms access capital markets for injections of later-stage capital is important because of its relationship with the broader question of wealth inequality. The median level of net worth among blacks is \$5,500, which is fourteen times lower than the white level (U.S. Census Bureau 2008). Low levels of black personal wealth may be detrimental to securing capital because this wealth can be invested directly in the business or used as collateral to obtain business loans. In addition to relatively low levels of personal wealth, previous research provides evidence that is consistent with black entrepreneurs facing lending discrimination. Black-owned firms experience higher loan denial probabilities and pay higher interest rates than white-owned businesses even after controlling for differences in credit-worthiness and other factors (see Cavalluzzo, Cavaluzzo and Wolken 2002, Blanchflower, Levine and Zimmerman 2003, and Cavalluzzo and Wolken 2005 for example).¹

If new black firms are constrained in their access to optimal levels of capital not just at startup, but also in subsequent years, then this could have a detrimental effect on their long term performance. The existing literature suggests that lack of access to capital

¹ Bates and Bradford (2009) provide evidence that venture-capital funds specializing in financing minority-owned businesses earn attractive returns, which is consistent with an underserved market and credit constraints.

is a potential barrier to successful black entrepreneurship. Indeed, there is some evidence that racial differences in startup capital affect the relative performance of black-owned firms (Bates 1997, Fairlie and Robb 2008).² In turn, the lack of success among black-owned businesses resulting from financing constraints may have negative implications for wealth accumulation, economic advancement and job creation among African-Americans (Boston 1999, 2006 and Bradford 2003).

The paper is organized as follows. In Section 2, we present the KFS panel data that allow us to explore questions of race and access to financial capital among startups. In examining racial differences in financial capital use, the richness of the KFS allows us to control for many factors that would otherwise be unobserved, such as the firm's credit score, the entrepreneur's educational background, and previous industry experience. In Section 3, we document the use of financial capital among young firms at startup and in the two years following startup. We also conduct a detailed analysis of the broader determinants of startup capital and subsequent capital injections. In section 4, we explore the potential causes of black/white differences in access to capital among new business ventures. A special decomposition technique is used to estimate how racial differences in human capital, credit scores, and other firm and owner characteristics contribute to black/white differences in financial capital use. Section 5 concludes.

2. Data

We use confidential-access longitudinal data from the Kauffman Firm Survey (KFS). The KFS is the only large, nationally representative, longitudinal dataset

² Additionally, there is evidence indicating that limited access to capital limits black and other disadvantaged minorities from starting businesses (Fairlie 1999, Bates and Lofstrom 2008, Lofstrom and Wang 2008, Fairlie and Woodruff 2009).

providing detailed information on new firms and their financing activities. Most previous research on the use of financial capital among small businesses has relied on cross-sectional data. The Characteristics of Business Owners (CBO) Survey data provides information on the amount and sources of startup capital, but does not provide information on subsequent financing. Another commonly-used dataset, the Federal Reserve Board's Survey of Small Business Finances (SSBF), provides information on recent financing, but does provide information on financing at startup or the early stages of firm growth. Furthermore, both the CBO and the SSBF are cross sectional surveys and do not provide information on firm financing over time for the same firms and only provide retrospective information on financing. Levels of financial capital in the KFS are measured annually are thus less prone to recall bias as in the CBO and SSBF.

The KFS is a longitudinal survey of new businesses in the United States, collecting annual information for a sample of 4,928 firms that began operations in 2004. These data contain unprecedented detail on the capital injections that these firms receive, as well as detailed information on both the firm and up to ten business owners per firm. In addition to the 2004 baseline year data, we use two years of follow up data (2005 and 2006). The KFS will ultimately contain eight years of data. Detailed information on the firm includes industry, physical location, employment, profits, intellectual property, and financial capital (equity and debt) used at start-up and over time. The detailed financing information in the KFS allows us to examine the relative importance of each source of financing at start up and over time.

Information on up to ten owners includes age, gender, race, ethnicity, education, previous industry experience, and previous startup experience.³ A subset of the confidential dataset is used in this research—the set of firms that either have data for all three survey years or have been verified as going out of business in either 2005 or 2006. (That is, we exclude firms with ambiguous event histories.) This reduces the sample size to 4,163 businesses. The method we used for assigning owner demographics at the firm level was to define a primary owner. For firms with multiple owners (35 percent of the sample), the primary owner was designated by the largest equity share. In cases where two or more owners owned equal shares, hours worked and a series of other variables were used to create a rank ordering of owners in order to define a primary owner. (For more information on this methodology, see Ballou et. al, 2008). For this research, multi-race/ethnic owners are classified into one race/ethnicity category based on the following hierarchy: black, Asian, other, Hispanic, and white. For example, an owner is defined as black, even if he/she is also Hispanic. As a result of the ordering, the white category includes only non-Hispanic whites.

3. Patterns of Capital Use by Black- and White-owned Businesses

Using the KFS, we explore the broad patterns of capital structure in newly formed businesses. Rather than square these patterns against existing theories of capital structure, as is done in Robb and Robinson (2009), our main purpose is to outline key patterns in startup and follow-on capital injections made by black- and white-owned businesses to

³ For more information about the KFS survey design and methodology, please see Ballou et. al (2008). A public use dataset is available for download from the Kauffman Foundation's website and a more detailed confidential dataset is available to researchers through a data enclave provided by the National Opinion Research Center (NORC). For more details about how to access these data see www.kauffman.org/kfs.

set the stage for the analysis that follows. Patterns of financial capital use at start up are discussed first with a few comparisons to capital use in subsequent years. As shown in Table One, the vast majority of firms use owner equity capital in their start up year. Nearly 80 percent of white-owned firms and more than 83 percent of black-owned firms had equity injections in 2004. This is predominantly owner equity. Less than 10 percent of white owned firms and less than seven percent of black-owned firms had outside equity in the year of start up, and those percentages drop in subsequent years. Owner equity also becomes less prevalent, with less than half of white-owned firms and just over 60 percent of black-owned firms using owner equity in their second year of operation (2005). The percentages also dropped further for their third year of operations (2006). Owners appear to be putting their disposable wealth in at startup instead of waiting until later years.

In terms of debt, there are also racial differences in the use of debt, both personal debt used for business purposes and business debt. About 55 percent of white-owned firms have debt financing in their start up year and the follow up years as well. While black-owned firms initially have a lower percentage of firms using debt financing in 2004 (47 percent), the percentages of new debt inflows that black-owned businesses receive approach rates for white-owned businesses in subsequent years. Owner debt is more common than business debt; however, the percentage of firms using business debt financing rises with subsequent capital injections.

Table One addresses the prevalence of use of the different types of capital; it does not speak to differences in the amount of capital accessed, and thus, it does not address the question of capital structure. Although there are some racial differences in the

patterns of equity and debt use by source type, much larger differences emerge when we examine levels of financing by source.

Table Two presents the mean amounts of financing by source. As seen in the second column of the first set of columns for 2004 financing, white-owned business have more than \$80,000 of initial capital on average, while black-owned businesses have less than \$30,000. These patterns are consistent with previous findings of racial differences in startup capital differences from the CBO (Bates 1997, Fairlie and Robb 2008). And although this difference is large, both in economic and statistical terms, it is noteworthy to compare the roughly three-fold gap in startup capital to the roughly fourteen-fold gap in net worth present in the Census data. Black-owned businesses rely much more on owner equity than do white-owned businesses. While more than half of the startup capital in black-owned businesses comes from owner equity, only about one third of start up capital comes from owners in white-owned businesses. This is a clear indication that black-owned businesses face more difficulty in raising external capital, for even if the average black-owned business were endowed with the average level of white-owned owner equity, it would still be only half the size of the average white-owned business.

External equity is a negligible source of financing for black-owned businesses, and among blacks, the equity is evenly split between insider equity (parents and spouse equity) and outsider equity (informal investors, venture capitalists, etc.). In contrast, white-owned businesses rely much more heavily on outsider equity (nine percent and two percent of overall financing respectively). Since these estimates are calculated by averaging the vast number of firms that receive zero external equity, they mask the fact that black-owned businesses receive less external equity even when it is a source of

funding for them. The mean level of external equity for black-owned firms receiving external equity is less than \$16,000, while for the mean level for white-owned firms nearly ten times higher. Thus, black-owned businesses not only receive external equity less often; they receive lower amounts of equity conditional on receiving equity funding.

Debt is broken out into owner debt, insider debt (family, employee, and business debt held by owner), and outsider debt (bank loans, credit lines, business credit cards, etc.). Outsider debt is the most important of the three debt categories; however, large racial differences persist in this category as well. Outsider debt accounts for more than 40 percent of the white-owned business financing, whereas it makes up just 27 percent for black-owned businesses. Insider debt makes up about 10 percent of financing for both groups, while owner debt makes up less than five percent of financing for each.

Explaining Initial Funding

The preceding analysis speaks to stark funding differences between white- and black-owned businesses. Black-owned businesses raise far less capital than white-owned businesses, and the capital that is raised comes primarily from internal sources. White-owned businesses rely far more on external debt; black-owned businesses on owner's equity. Of course, these results are only descriptive and do not take into account racial differences in other factors.

The next step in the analysis is to identify the determinants of startup capital by regressing capital levels on owner- and business-characteristics. This allows us to control for many factors that might confound the financing patterns highlighted in the previous tables. It also provides an analysis of the broader issue of the determinants of startup

capital. The three columns in Panel A of Table Three separately examine equity raised from owners, insiders, and outsiders, while Panel B shows debt from owners, insiders, and outsiders. The dependent variable in each case is the natural log of the total dollar amount of each type of capital.⁴ We estimate all regressions with OLS adjusting for the stratified sampling frame of the KFS.⁵ Throughout these regressions, we include fixed effects for industry at the two-digit NAICS level, but the coefficients are not presented due to the number of industry controls.⁶

Across the board, black-owned businesses receive smaller amounts of all types of capital after controlling for detailed owner and firm characteristics. In particular, they receive significantly less outside equity and outside debt. They also receive significantly less insider debt. The point estimates suggest that, holding all else equal, a black-owned business receives roughly 12 percent less in outsider equity, 48 percent less outsider debt, and is funded with 38 percent less owner debt. We return to examining the causes of these differences in the next section.

Examining other owner characteristics, we find that age has a positive and significant affect on owner's equity, as well as outside capital sources, indicating that older founders not only raise more capital from external sources, but also supply more of their startup funding. This concave increasing relationship between age and funding is reversed for insider equity, where we see that older entrepreneurs rely increasingly less on equity funding from other family members.

⁴ To address problems with taking logs of zero values and to lessen the influence of small changes in actual capital at initial levels near zero, we add \$500 before taking log values.

⁵ We estimate each equation separately to simplify the decomposition analysis that follows. We find that estimates from a Seemingly Unrelated Regression (SUR) model allowing for correlation in the errors across equations are similar.

⁶ The industry controls are jointly significant in most equations.

Similarly, the education dummies indicate that college educated or advanced degree holding entrepreneurs use considerably more capital, and that this extra capital comes primarily from the owner. Hours worked, which is a proxy for full time vs. part time ventures, is also positive and significant in all models. Similarly, being home based has a negative and statistically significant coefficient in all models. Previous start up experience is positive in all models, but only statistically significant in the equity equation. Previous years of industry experience is negative and statistically significant in all of the models. Legal form is also a significant predictor of capital levels. Not surprisingly, being structured as an LLC or a corporation has a positive and significant effect on the amount of funding from external sources, as well as on the amount of owner equity.

Having a comparative advantage and having intellectual property (patents, copyrights, and/or trademarks) both predict more owner equity, but they behave differently with respect to outsider equity. While comparative advantage (an indicator that the entrepreneur thinks their business has a comparative advantage over its industry peers) predicts less external equity, possessing patents or other intellectual property increases the amount of outside equity. This latter effect reflects the increased availability of angel, venture capital, and other types of equity funding for tech-oriented businesses.

Finally, credit scores are strong predictors of accessing external debt. Firms with low credit scores have significantly lower insider and outsider debt. Firms with high credit scores have significantly more outsider debt, and significantly less owner debt, suggesting that the better access to credit allows the founder to shift debt away from

personal accounts (like personal credit cards, etc.) towards formal lines of credit attached to the firm.

Later-stage Capital Injections

The patterns that we document at the start of a firm's life persist in the subsequent years of its operation, as seen in the second and third sets of columns in Table Two, which show breakdowns for financial injections in 2005 and 2006 for all firms, white-owned firms, and black-owned firms, respectively. Estimates from the KFS indicate that large racial differences in financing persist in the years following startup. Young black-owned businesses invested less than half the amount of financial capital than white-owned businesses in both years. Blacks continued to rely more heavily on owner equity to finance the operations (42 percent vs. 22 percent in 2005 and 33 percent and 20 percent in 2006, respectively). Blacks were able to better leverage their investments, with their outside debt financing increasing from 27 percent of the total financial capital in 2004 to 36 percent in 2005 and 46 percent in 2006. White-owned businesses showed similar patterns, increasing from 42 percent in 2004 to 49 percent in 2005 and 55 percent in 2006. However, even in 2006 black-owned businesses received more than 42 percent of their total financial capital injections through owner financing (debt and equity), compared with just one-quarter for white-owned firms. Most of the remainder came from other debt (53 percent of the total financing) and the remainder (4.7 percent) from other equity. On the other hand, for whites, 62 percent of the total came from other debt financing and more than 12 percent in other equity financing.

Consistent with previous findings from the SSBF, black firms have lower amounts of bank loans. Because black-owned businesses start at a considerably lower base level of funding than white-owned businesses, they grow at a faster rate. The average capital injection in 2005 is 100% of startup capital for black-owned businesses; for white-owned businesses the average injection is only 60% of initial capital. In 2006 the average capital injection for black-owned businesses represents a 50% growth rate over the amount invested in 2005. For white-owned businesses, this figure is closer to 40%.

The Determinants of Capital Injections

Due to previous data limitations, the determinants of financial injections after startup have not been well understood. In Table Four we address this question. We now restrict the sample to firms that survived over the period 2004-2006 and regress the log of different types of capital injections in 2005 and 2006—owner, insider and outsider debt and equity—on a similar set of control variables reported in Table Three. We group 2005 and 2006 because of similarities in patterns of capital use for the two years. We again control for industry at the two-digit NAICS level, but the coefficients are not reported due to the number of industry dummies.

Many of the owner characteristics that are important in determining the initial sources of funding for a business cease to be important for follow-on capital injections. For instance, education ceases to play a role in capital injections after startup. Age continues to predict less inside debt, but ceases to predict a greater use of outside debt and equity, especially when we control for interim sales volume. Gender ceases to

predict a pronounced use of owner debt. These findings support the prediction that owner characteristics are important initially, before there is a track record of operations, but once that track record exists, firm performance becomes a strong predictor of the firm's future quality.

Business characteristics, on the other hand, continue to play an important role in capital injections. Business credit ratings continue to have a very strong effect on the ability to raise capital. We find that firms with higher credit scores have substantially larger amounts of capital injections after startup, especially debt investments. Having a high credit score is associated with a 4.0 log point higher total capital injection and 4.2 log point higher debt investment in the business than having a mid-level credit score. These effects from having a high credit score are larger in subsequent injections than they are for startup capital. Credit ratings are clearly very important for the ability of young firms to raise capital both at startup and in the early stages of growth.

Are levels of new financial injections in the years just following startup related to the level of startup capital? On one hand, we might expect firms with low levels of startup capital to have less need for large capital injections in the following years because of adequate funding. On the other hand, we might expect firms that are good at raising capital for startup are also good at raising capital in subsequent years and are simply facing intertemporal liquidity constraints. We investigate this question by including the level of startup capital in 2004 in the regressions for financial injections in 2005/06. The results indicate that startup capital levels have a strong positive association with subsequent financial injections in the firm. But the differences in magnitude across type of capital injection are interesting in their own right. By far the biggest impact is on

outside debt, where we see that a doubling of initial financial capital raises later stage outside debt by 40%. In contrast, the same doubling results in only a 25% increase in owner equity, 10-15% increases in owner and insider debt, and significant, but economically small increases in insider and outside equity. Nevertheless, the coefficient estimate is highly significant in all cases.

There are a number of possible interpretations for this finding. One possibility is that variation in underlying firm type drives variation in overall demand for capital; high capital firms thus have high demand for initial capital, but also higher demand for later stage capital as well. Variation in underlying demand for capital could be driven by differences in industry characteristics or in the projected scale of operation. Another possibility is that initial funding levels are positively correlated with success, and the subsequent growth that this success engenders creates additional demand for capital. A third possibility is that firms face serially dependent investment opportunities and persistent financial constraints.

Sales levels of young firms may also be important in determining initial capital use. Early sales revenues may be plowed back into the business, creating a positive relationship with financial capital investments after startup. Alternatively, firms with low sales may require more financing to stay afloat. Higher initial sales may also be used by some firms as a positive signal of growth potential, and thus attract more investors. We answer these questions by including average annual sales levels in the early years in the regressions. Table Four also reports estimates for average sales for 2005 and 2006 using a series of dummy variables. The early-stage sales of young firms have a strong positive

association with new financial capital injections. We find a monotonically increasing function over the sales dummies.

How do black-owned businesses overcome their low-levels of initial funding? The debt portion of Table Four indicates that they do not do so by tapping external capital markets. Before controlling for the initial level of financial capital, we find that black-owned businesses access about 35% less outside debt. When we hold constant the level of startup capital, the significance diminishes. Of course, the interpretation here requires care, because many other factors are being held constant in the regression. When we hold constant business characteristics, credit characteristics, but not startup capital, the interpretation is that a black-owned business that faced difficulty in raising capital from external capital markets continues to face difficulty in subsequent periods. By holding constant the level of startup capital, we are comparing white-owned businesses to black-owned businesses that were able to raise funding levels similar to whites. Here, black- and white-owned businesses continue to be no different in terms of access to debt in the follow-on years.

If not differences in external capital markets, then what drives this difference? The answer from Table 4 seems to be owner equity. Black-owned businesses rely significantly more on repeated injections of owner equity. Depending on whether we control for initial capital and sales levels, blacks plow 50-70% more into their business in follow-on owner's equity than otherwise similar whites. To study this in greater detail, we next focus our analysis on decompositions of the black-white funding gap.

4. Explaining Racial Differences in Capital Injections between Black- and White-owned Businesses

The regression analysis identifies several owner and firm characteristics that are strongly associated with the use of startup capital and financial injections in subsequent years for young firms. These results provide new insight into the overall determinants of capital use in new business ventures. The next question is whether or not black-owned businesses and white-owned businesses differ in these characteristics. Large differences between black and white firms in the key determinants of access to financial capital will contribute to racial differences in levels of capital use. The exact contributions are estimated using a decomposition technique described below.

Black and White Differences in Owner and Firm Characteristics

To explore differences between black- and white-owned businesses, we compare means of all of the owner and firm characteristics included in the regression models. Table Five presents results for both the sample used for the 2004 startup capital regressions and the sample used for the 2005/06 financial capital injections regressions. Black firms are more likely to be owned by women than are white firms. The difference is not large, however, and for both racial groups business owners are predominately male. Black business owners tend to be younger on average than white business owners. Related to age, Black owners also have less previous industry experience and less previous startup experience. Among black business owners, 38 percent have prior startup experience compared to 44 percent of white business owners. Less experience may

contribute to black entrepreneurs facing more difficulty finding startup and subsequent financial capital for their businesses.

Black business owners have a roughly similar educational distribution as white business owners among new firms. Black owners are slightly less likely to have a college degree, but are more likely than white owners to have some college (defined as less than a 4-year degree). These patterns for new firms differ from those for older, more established firms. Previous estimates from the CBO indicate that black business owners have less education than white owners, which appears to be related to education differences in the population (Bates 1997 and Fairlie and Robb 2008). The business ownership structure differs somewhat between the races. Black businesses are less likely to have team ownership than white businesses (23 percent compared to 35 percent, respectively). They are also more likely to be home based, but have a similar legal structure as white firms. Black firms are also less likely to report having a comparative advantage and have similar likelihood of reporting intellectual property as white firms.

One of the largest and potentially most important differences between white and black firms are credit scores. Less than 5 percent of black firms have a high credit score. In contrast, 13 percent of white firms have a high credit score. Perhaps more importantly, however, is that roughly half of all black business owners have a low credit score. Only 32 percent of white business owners have this level of credit score. Black firms may be at a substantial disadvantage in applying for loans with such low credit ratings making them more reliant on internal equity financing.

Focusing on the determinants of financial injections after startup, we find two additional striking differences between black and white firms. First, black firms have

substantially lower levels of startup capital. The difference between black startup capital and white startup capital is 90 log points. We also find that young black firms have lower initial sales than white firms. A higher percentage of black firms are in the low sales categories and a lower percentage of them are in the high sales categories than are white firms. The slower start among black firms may limit their ability to secure financial injections in the few years immediately after startup.

Decomposition Estimates

Estimates from the KFS indicate that black business owners differ from white owners for many characteristics. The estimates reported in Tables Three and Four also indicate that many of these variables are important determinants of financing for young firms. Taken together, these results suggest that racial differences in many owner and firm characteristics, especially credit scores and sales, contribute to the lower levels of start up capital and subsequent financial injections by black-owned businesses. The impact of each factor, however, is difficult to summarize. In particular, we wish to identify the separate contributions from racial differences in the distributions of all of the variables or subsets of variables included in the regressions. To explore these issues further, we decompose inter-group differences in a dependent variable into those due to different observable characteristics across groups (sometime referred to as the endowment effect) and those due to different "prices" of characteristics of groups (see Blinder 1973 and Oaxaca 1973). The Blinder-Oaxaca decomposition of the white/black gap in the average value of the dependent variable, Y , can be expressed as:

$$(1) \bar{Y}^W - \bar{Y}^B = \left[(\bar{X}^W - \bar{X}^B) \hat{\beta}^W \right] + \left[\bar{X}^B (\hat{\beta}^W - \hat{\beta}^B) \right].$$

Similar to most recent studies applying the decomposition technique, we focus on estimating the first component of the decomposition that captures contributions from differences in observable characteristics or “endowments.” We do not report estimates for the second or “unexplained” component of the decomposition because it partly captures contributions from group differences in unmeasurable characteristics and is sensitive to the choice of left-out categories making the results difficult to interpret. The first component of the decomposition provides an answer to the question of how much of the black/white gap in financial capital is explained by racial differences in owner and firm characteristics.⁷

Another issue that arises in calculating the decomposition is the choice of coefficients or weights for the first component of the decomposition. One alternative is to weight the first term of the decomposition expression using coefficient estimates from a pooled sample of the two groups or all groups (see Oaxaca and Ransom 1994 for example). We follow this approach to calculate the decompositions by using coefficient estimates from regressions that include a sample of all racial groups as reported in Table Four. The contribution from racial differences in the characteristics can thus be written as:

$$(2) (\bar{X}^W - \bar{X}^B) \hat{\beta}^* .$$

⁷ Another interpretation of this component is that it captures the difference between the white level of financing and the level of financing predicted for blacks if they are treated as white.

Where \bar{X}^j are means of firm characteristics of race j , $\hat{\beta}^*$ is a vector of pooled coefficient estimates, and $j=W$ or B for white or black, respectively. The advantage of using the pooled coefficients is that all groups contribute to estimating the regression and thus the determinants of financial capital for all firms in the United States are identified.⁸

Equation (2) provides an estimate of the contribution of racial differences in the entire set of independent variables to the racial gap. Separate calculations are made to identify the contribution of group differences in specific variables to the gap. For example, we can estimate the contribution of lower credit scores among black business owners to the racial gap in financial capital.

Table Six reports estimates from this procedure for decomposing the large white/black gaps in levels of startup capital discussed above. The separate contributions from racial differences in each set of independent variables are reported. We focus on the main explanatory factors. Black firms have a lower level of startup capital by 75 log points. Roughly 5 percent of this difference in startup capital levels is due to black business owners being younger on average than white business owners. The relative youth hinders the ability of black business owners to raise outside sources of capital, but the main effect is due to younger black business owners not being able to invest as much equity in the business. The relative youth of black business owners compared to white owners explains 2.7 percent of racial differences in startup capital debt, but 10.6 percent of racial differences in startup capital equity. Younger black firms may be partially constrained by having lower levels of wealth. Personal wealth increases with age and

⁸ The decomposition estimates are similar using the white coefficients. They are also generally similar using the black coefficients, but are prone to more variability because of smaller sample sizes.

differs substantially between blacks and whites. The median wealth level of blacks is only \$5,500 compared with \$75,000 for whites (U.S. Census Bureau 2008).

Interestingly, we find a negative coefficient estimate on the hours worked contribution to white/black differences in startup capital levels. This finding indicates a favorable level of hours worked for black firms relative to white firms. Indeed, we find that black business owners work more hours on average than white business owners, and hours worked has a positive effect on startup capital levels. The negative contribution indicates that black businesses would have a higher level of startup capital than white businesses because of their greater hours worked if it were not for other factors limiting their access to startup capital. Low levels of team ownership among black businesses relative to white businesses limits their access to capital. It particularly restricts their access to startup equity. Roughly 10 percent of the racial gap in startup equity is explained by white/black difference in team ownership. Black firms were 11.8 percentage points less likely to be owned by teams than white firms. Related to team ownership, racial differences in the legal structure of the firm also partially limit the ability of black firms to raise startup capital. Ownership structure differences clearly affect patterns of capital use by race. Black businesses were found to be more likely to be home based than white businesses. This factor explains 7.2 percent of the total racial difference in startup capital. The higher likelihood of black businesses being home based may limit their need to raise startup capital for their businesses.

The most important endowment factor in explaining white/black differences in startup capital levels are credit scores. As noted above, black firms have lower credit scores than white firms. Roughly 50 percent of black firms have credit scores in the low

quality category. Low credit ratings among black businesses are detrimental to raising startup capital. Racial differences in credit scores explain 11.3 percent of the white/black difference in levels of startup capital. In terms of absolute levels, black startup capital levels would increase by 8.4 log points if they had similar credit ratings as whites.

We do not find any evidence of industry or capital intensive measures explaining differences in the use of equity between black and white firms. The decomposition results indicate that industry differences between black and white firms explain virtually none of the gap in startup capital. This is an important finding because it suggests that white/black differences in the use of startup capital are due more to constraints of black firms to obtain access to startup capital than differences in needs for startup capital levels based on the industries of the businesses. Combining all of the factors, we find that racial differences in owner and firm characteristics explain 30 percent of the white/black gap in startup capital. We explain more of the racial gap in startup equity at 51 percent. These are relatively large explanatory estimates because decomposition techniques generally do not explain a large share of gaps in outcomes. The remaining or "unexplained" portion of the racial gaps in startup capital may be due to the omission of unmeasurable or difficult-to-measure factors such as preferences for growth, risk aversion, networks, and lending discrimination against black-owned firms. The evidence from the previous literature that black firms are more likely to be denied loans, pay higher interest rates and are less likely to apply for loans out of a fear of denial after controlling for creditworthiness and other relevant factors is consistent with lending discrimination (Cavalluzzo, Cavalluzzo and Wolken 2002, Blanchflower, Levine and Zimmerman 2003).

We now turn to the decomposition results for racial differences in financial injections after startup among young firms. The base model specification that does not include previous startup capital or sales is discussed first. Table Seven reports decomposition estimates for this model. The white/black gap in total financial injections is smaller than the gap for startup capital, but the difference remains large at 34 log points. The racial gap in new debt investments is larger at 52 log points, but the gap in new equity investments changes signs. Black firms have higher levels of new equity investments than white firms when measured in logs. This finding is different than when we measure new equity investments in levels. As reported in Tables Three and Four black firms have lower levels of equity investments than white firms in both 2005 and 2006. Given these differences some care is needed in discussing the new equity investment results. We do not report percentages for these contributions because of the negative gap.

The most important endowment factor contributing to why black firms inject less financial capital in the years just following startup are credit scores. Lower credit scores among black firms explain nearly 30 percent of the entire gap in financial capital injections in 2005/06. We also find that it contributes to why black firms have smaller new debt investments than white firms. It explains 22 percent of the racial gap in new debt investments. It also hurts black firms in securing new equity investments. The positive contribution estimate implies that new equity investment levels would increase by 4.3 log points if black firms had similar credit ratings as white firms. The importance of credit ratings is clear. Lower levels of credit scores among young black firms restrict their ability to obtain financing not only at startup, but also in the early years after startup.

If black firms had credit ratings that were similar to white firms their startup capital levels would be 8.4 log points higher and their levels of subsequent financial injections would be 9.6 log points higher.

The lower percentage of young black firms that have team ownership works to lower capital injections in 2005/06. Team ownership was found to an important determinant of raising capital, especially for new equity investments. Racial differences in team ownership explain 13.2 percent of the gap in total new financial investments after startup. We also find that if black firms had team ownership levels that were more comparable to white levels then new equity investments would increase by 3.8 log points. Another important factor explaining the lower level of subsequent financial capital investment is whether the business is home based. Black firms have a higher rate of being home based (59.7 percent compared to 50.5 percent) which potentially limits their need for raising additional capital. Racial differences in the likelihood of being home based explain 11.2 percent of the gap in total new financial investments in young firms after startup.

Black business owners are younger, are more likely to be women, and have less previous startup experience than white business owners. All of these factors contribute to why black firms have lower levels of financial capital investments after startup. The legal form of organization for black firms also contributes to why black firms have lower levels of new capital investments. Educational differences between black and white owners and the differences in industry structure do not appear to contribute to why black firms have lower levels of subsequent financial injections. The finding that industry

differences have little explanatory power suggests that racial differences in subsequent capital investments are not primarily being driven by different capital needs.

We also estimate decompositions that include a measure of the amount of startup capital. Racial differences in the level of startup capital may affect the need for capital injections in subsequent years. Table Eight reports estimates from the decomposition for racial differences in new financial injections in 2005/06. We find that racial differences in startup capital are the most important explanatory factor for the white/black gap in new financial injections. The one factor alone explains 100 percent of the gap⁹. Lower levels of black startup capital are associated with lower levels of subsequent capital injections among black firms. How do we interpret this result? One interpretation is that there does not appear to be a substitution of timing in financing between black and white firms. Young black firms have lower levels of startup capital than young white firms and these differences are strongly associated with why they have lower levels of subsequent financial investments. If young black firms relied more heavily on startup capital than subsequent financing, relative to white firms then we should find a weaker explanatory power for this variable.

In Table Nine we include sales in the decomposition. Black firms are found to have lower initial sales than white owned firms. For example, less than 10 percent of young black firms have \$110,000 or more in sales in the early years of existence compared with nearly 30 percent of young white firms. Lower sales levels among black firms explain 36 percent of why black firms have lower levels of new financial investments in 2005/06 than white firms. Apparently, all of the difference in total

⁹ The sum of contributions in the decompositions can contribute to more than 100 percent if there is a negative unexplained factor that offsets it.

financial injections is created by their lessened ability to obtain debt financing and not equity financing. White/black differences in early sales levels explain 36 percent of the gap in new debt financing, but virtually none of the gap in new equity investments.

Slower sales growth among young black firms may hinder their ability to obtain outside financing relative to young white firms. If early sales levels are important for signaling business potential to lenders then this creates a disadvantage for young black firms because of their lower early sales levels.

5. Summary and Conclusions

Our analysis of the KFS panel provides new insights into the financing of black and white firms in their first few years of existence. These panel data, which do not suffer from recall bias, allow for the first analysis of early-stage financing of young firms. We find a heavy reliance on owner's equity at startup and to a lesser extent in the first two years following startup. In contrast, the reliance on outsider debt for capital injections in subsequent years remains as high as at the point of startup. In regression analyses, we find important similarities and differences in the determinants of subsequent capital injections than the more commonly studied determinants of startup capital. For example, we find that the education level of the owner is positively associated with financial injections, but not as strong as the positive relationship with startup capital. This finding is consistent with owner's education initially serving as a valuable screening device, but then diminishing in importance once the young firm has a track record. In contrast, we find that credit ratings are more important for the ability of young firms to raise capital in the early stages of growth than at startup. Further analysis of the determinants of

financial injections after startup reveals that they continue to be strongly associated with startup capital levels. One possible explanation is that the firms that are good at raising startup capital are also good at raising capital instead of the two types of capital being intertemporal substitutes. Finally, we find that subsequent capital injections are positively associated with initial sales levels providing further support for the investor-signaling hypothesis. Young firms in contrast do not appear to be plowing early sales back into their businesses.

Turning to racial differences in capital use between black- and white-owned businesses, estimates from the KFS indicate that black-owned businesses face persistent difficulty in accessing external capital markets. Black-owned businesses are significantly less likely to access external debt or equity in their first year of funding. This results in significantly lower levels of initial financial capital. The initial black/white funding deficit, however, is not overcome through later stage capital injections, which is a new finding from the KFS panel.

In the years following startup, black-owned businesses rely more on additional equity funding from owners, and show persistence in their lack of external funding. These intertemporal patterns of capital injection among black firms raise important questions. Why are black owners injecting their own capital into firms year after year? Are they repeatedly screened from credit markets? Why did they not inject more of their own capital at the initial stage?

As always, we must proceed with caution when attaching causal interpretations to our findings. In the absence of a randomized experimental setting, a nagging concern is that unobserved features of business quality or creditworthiness are correlated with race

and simultaneously drive access to credit. In this regard, the richness of the KFS allows us to control for many factors that would otherwise be unobserved, such as the firm's credit score, the entrepreneur's educational background and previous industry experience. Our findings are robust to all of these controls. We continue to find substantial racial differences in the use of financial capital at startup and in the years following startup.¹⁰

To explore the causes of these differences in financial capital use we employ the Blinder-Oaxaca decomposition technique. Using the regression results and average differences between blacks and whites in owner and firm characteristics, we estimate the contribution of various factors to why black businesses have lower capital injections on average. The most important factor in explaining white/black differences in startup capital levels are credit scores. Racial difference in credit scores are even more important in explaining black/white gaps in levels of financial injections in subsequent years explaining nearly 30 percent of the entire gap in financial capital injections in 2005/06. We also find that lower levels of startup capital and initial sales are associated with lower black levels of capital use in the years after startup.

These new results from KFS data have several implications for policy and further study. First, after controlling for observable differences in credit quality, human capital, and firm characteristics, we find continued racial differences in the amounts and types of financing used by new firms at start up and in their early years of operation. Black-owned businesses face persistent constraints in external capital markets, especially in the years following startup. Access to external capital is important for the growth and continuance of young firms. An expansion of loan guarantee and assistance programs

¹⁰ One important characteristic that the KFS does not currently have is owner wealth. The 2008 survey asks this question of all respondents. In future work, we will be able to control for wealth.

may help, but much care needs to be taken in the design of these programs to avoid high default rates in view of the current housing and financial crisis. Second, the finding that low credit scores limit black firm use of capital especially in the years following startup is very important. More effort is needed to improve the credit history for black-owned firms. Third, the fact that young black-owned businesses have less access to financial capital than young white-owned businesses may be the primary reason behind the lower success rates of minority-owned businesses documented elsewhere. Although beyond the scope of this study, further research on the relationship between levels and sources of early-stage financing and business success is needed.

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Table One
 Firm Financing by Primary Owner Race
 (Percent of active firms in each year using each type of financing)

| | 2004 | | 2005 | | 2006 | |
|-------------------|-------|-------|-------|-------|-------|-------|
| | White | Black | White | Black | White | Black |
| Equity Injections | 79.9% | 83.4% | 46.8% | 62.2% | 40.1% | 56.9% |
| Debt Injections | 56.0% | 47.3% | 53.8% | 54.1% | 55.7% | 53.2% |
| Owner Equity | 79.1% | 83.5% | 44.9% | 61.6% | 37.6% | 55.7% |
| Outside Equity | 9.8% | 6.8% | 5.9% | 6.1% | 5.7% | 5.7% |
| Owner Debt | 47.6% | 43.2% | 46.1% | 50.4% | 46.5% | 48.0% |
| Business Debt | 24.7% | 17.2% | 28.3% | 23.2% | 29.0% | 28.7% |

Source: Kauffman Firm Survey Microdata

Table Two
Mean Amounts of New Financial Injections by Source (2004-2006)

| | 2004 | | 2005 | | 2006 | |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| | White | Black | White | Black | White | Black |
| Total Financial Capital | \$ 81,773 | \$ 28,198 | \$ 59,846 | \$ 29,001 | \$ 59,998 | \$ 26,318 |
| Owner Equity | \$ 27,503 | \$ 15,828 | \$ 13,327 | \$ 12,040 | \$ 12,007 | \$ 8,611 |
| Insider Equity | \$ 1,758 | \$ 453 | \$ 1,537 | \$ 968 | \$ 881 | \$ 328 |
| From Spouse | \$ 499 | \$ 147 | \$ 712 | \$ 232 | \$ 345 | \$ 283 |
| From Parent(s) | \$ 1,259 | \$ 307 | \$ 825 | \$ 736 | \$ 536 | \$ 44 |
| Outsider Equity | \$ 7,294 | \$ 461 | \$ 6,782 | \$ 965 | \$ 6,492 | \$ 912 |
| From Internal Investors | \$ 2,721 | \$ 174 | \$ 3,287 | \$ 406 | \$ 1,542 | \$ 56 |
| From Other Businesses | \$ 1,775 | \$ 19 | \$ 2,037 | \$ 354 | \$ 2,950 | \$ 760 |
| From Government | \$ 388 | \$ 249 | \$ 120 | \$ 175 | \$ 151 | \$ 59 |
| From Venture Capitalists | \$ 1,924 | \$ - | \$ 1,335 | \$ 30 | \$ 1,227 | \$ - |
| Owner Debt (Pers. Credit Card(s) & Other Owner Loans) | \$ 3,661 | \$ 788 | \$ 3,619 | \$ 2,005 | \$ 3,486 | \$ 2,505 |
| Insider Debt | \$ 7,838 | \$ 3,018 | \$ 5,051 | \$ 2,726 | \$ 4,169 | \$ 1,852 |
| Family Loan | \$ 4,081 | \$ 2,506 | \$ 3,511 | \$ 2,526 | \$ 2,884 | \$ 1,213 |
| Business Loan by Owner | \$ 2,179 | \$ 48 | \$ 602 | \$ 8 | \$ 711 | \$ - |
| Loan from Employees | \$ 74 | \$ 51 | \$ 24 | \$ 20 | \$ 70 | \$ 30 |
| Other Owner Loans | \$ 1,504 | \$ 414 | \$ 973 | \$ 173 | \$ 512 | \$ 610 |
| Outsider Debt | \$ 33,720 | \$ 7,649 | \$ 29,529 | \$ 10,295 | \$ 32,964 | \$ 12,111 |
| Personal Bank Loan by Owner(s) | \$ 13,390 | \$ 5,034 | \$ 8,201 | \$ 4,423 | \$ 9,362 | \$ 3,828 |
| Business Credit Card Balances | \$ 2,575 | \$ 1,115 | \$ 3,987 | \$ 3,347 | \$ 6,163 | \$ 4,898 |
| Business Bank Loan | \$ 10,103 | \$ 718 | \$ 7,799 | \$ 320 | \$ 7,776 | \$ 1,596 |
| Credit Line Balance | \$ 3,458 | \$ 482 | \$ 6,000 | \$ 1,335 | \$ 5,628 | \$ 1,341 |
| Non Bank Business Loan | \$ 2,453 | \$ 25 | \$ 1,969 | \$ 187 | \$ 2,072 | \$ 15 |
| Government Business Loan | \$ 721 | \$ 23 | \$ 743 | \$ 207 | \$ 784 | \$ 380 |

Source: Kauffman Firm Survey Microdata

Table Three: Panel A
 Start Up Capital (2004)
 Logs of Owner, Insider, and Outsider Equity

| Coefficients | Log of 2004 Owner Equity | Log of 2004 Insider Equity | Log of 2004 Outsider Equity |
|--|--------------------------------|----------------------------------|-----------------------------------|
| Black | -0.152 (0.0992) | -0.0578 (0.0370) | -0.116*** (0.0340) |
| Asian | 0.327* (0.175) | 0.0416 (0.0883) | -0.0459 (0.0936) |
| Other | 0.0216 (0.225) | -0.00874 (0.0832) | -0.122 (0.0948) |
| Hispanic | 0.0735 (0.141) | 0.0174 (0.0636) | -0.128** (0.0508) |
| Female | -0.222*** (0.0745) | 0.0433 (0.0334) | -0.142*** (0.0330) |
| Age | 0.0589*** (0.0192) | -0.0191** (0.00946) | 0.0212** (0.00899) |
| Age Squared | -0.000431** (0.000206) | 0.000160* (0.0000951) | -0.000197** (0.0000956) |
| High School Graduate | 0.506* (0.265) | -0.172 (0.151) | 0.0348 (0.0919) |
| Some College | 0.514** (0.253) | -0.161 (0.150) | 0.115 (0.0901) |
| College Degree | 0.752*** (0.256) | -0.185 (0.151) | 0.132 (0.0951) |
| Graduate Schooling or Graduate Degree | 0.752*** (0.263) | -0.143 (0.154) | 0.182* (0.101) |
| Hours Worked (week) | 0.0157*** (0.00147) | 0.00135** (0.000618) | 0.00140* (0.000777) |
| Work Experience (Years) | -0.00842** (0.00350) | -0.00304** (0.00128) | -0.000669 (0.00209) |
| Start Up Experience | 0.130* (0.0677) | -0.0230 (0.0294) | 0.0769** (0.0367) |
| Team Ownership | 0.370*** (0.0883) | -0.0770* (0.0466) | 0.0995* (0.0597) |
| Partnership | 0.0524 (0.162) | 0.346*** (0.0896) | 0.165 (0.110) |
| Limited Liability Corporation | 0.435*** (0.0894) | 0.314*** (0.0458) | 0.181*** (0.0481) |
| Corporation | 0.386*** (0.0938) | 0.201*** (0.0388) | 0.193*** (0.0478) |
| Home Based | -0.517*** (0.0727) | -0.0902*** (0.0317) | -0.123*** (0.0375) |
| Comparative Advantage | 0.155** (0.0680) | 0.0203 (0.0296) | -0.0734* (0.0394) |
| Intellectual Property | 0.170** (0.0841) | 0.0586 (0.0418) | 0.126** (0.0530) |
| High Credit Score | 0.157 (0.116) | -0.00933 (0.0545) | 0.00628 (0.0708) |
| Low Credit Score | -0.211*** (0.0719) | -0.0115 (0.0308) | -0.0363 (0.0382) |
| Constant | 5.938*** (0.585) | 7.094*** (0.383) | 5.921*** (0.334) |
| Observations | 4023 | 4023 | 4023 |
| R-Squared | 0.188 | 0.050 | 0.057 |

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
 Two digit NAICS controlled for in model.

Table Three: Panel B
 Start Up Capital (2004)
 Logs of Owner, Insider, and Outsider Debt

| Coefficients | Log of 2004 Owner Debt | Log of 2004 Insider Debt | Log of 2004 Outsider Debt |
|--|------------------------------|--------------------------------|---------------------------------|
| Black | -0.379*** (0.0573) | -0.0734 (0.0682) | -0.481*** (0.107) |
| Asian | -0.0619 (0.119) | 0.447*** (0.171) | 0.105 (0.214) |
| Other | 0.274 (0.204) | 0.0685 (0.193) | -0.0552 (0.218) |
| Hispanic | 0.0447 (0.111) | 0.131 (0.122) | -0.101 (0.167) |
| Female | 0.136** (0.0555) | -0.0348 (0.0571) | -0.218*** (0.0845) |
| Age | 0.0202 (0.0135) | -0.0108 (0.0140) | 0.0680*** (0.0213) |
| Age Squared | -0.000197 (0.000143) | 0.0000720 (0.000144) | -0.000591*** (0.000229) |
| High School Graduate | 0.0862 (0.161) | -0.369 (0.228) | 0.242 (0.274) |
| Some College | 0.139 (0.154) | -0.337 (0.222) | 0.246 (0.260) |
| College Degree | 0.149 (0.156) | -0.370* (0.224) | 0.234 (0.265) |
| Graduate Schooling or Graduate Degree | 0.0530 (0.160) | -0.291 (0.231) | 0.369 (0.274) |
| Hours Worked (week) | 0.00869*** (0.00108) | 0.00694*** (0.00110) | 0.00974*** (0.00166) |
| Work Experience (Years) | -0.00963*** (0.00242) | -0.00391 (0.00269) | -0.0148*** (0.00414) |
| Start Up Experience | 0.0447 (0.0473) | -0.0224 (0.0505) | 0.0657 (0.0772) |
| Team Ownership | -0.0628 (0.0624) | -0.00329 (0.0707) | 0.266** (0.105) |
| Partnership | -0.113 (0.102) | -0.00695 (0.126) | -0.167 (0.187) |
| Limited Liability Corporation | 0.0821 (0.0658) | 0.00509 (0.0697) | 0.423*** (0.103) |
| Corporation | 0.0674 (0.0682) | 0.0626 (0.0770) | 0.350*** (0.106) |
| Home Based | -0.0876* (0.0495) | -0.336*** (0.0547) | -0.535*** (0.0810) |
| Comparative Advantage | 0.0400 (0.0461) | -0.0117 (0.0517) | 0.0294 (0.0781) |
| Intellectual Property | 0.0674 (0.0643) | 0.0664 (0.0672) | -0.0222 (0.0941) |
| High Credit Score | -0.171** (0.0754) | -0.0693 (0.0924) | 0.357** (0.140) |
| Low Credit Score | -0.0700 (0.0527) | -0.109** (0.0538) | -0.324*** (0.0802) |
| Constant | 6.203*** (0.433) | 7.325*** (0.487) | 5.801*** (0.672) |
| Observations | 4023 | 4023 | 4023 |
| R-Squared | 0.062 | 0.070 | 0.131 |

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
 Two digit NAICS controlled for in model.

Table Four: Panel A
 New Equity Injections (2005 & 2006)
 Regression for Logs of Equity Injections

| Coefficients | Log Owner Equity | | | Log Insider Equity | | | Log Outsider Equity | | |
|---------------------|------------------------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| Black | 0.533*** (0.132) | 0.695*** (0.127) | 0.691*** (0.127) | -0.000475 (0.0448) | 0.0164 (0.0449) | 0.00749 (0.0445) | -0.0203 (0.0562) | 0.0128 (0.0563) | 0.00782 (0.0566) |
| Asian | 0.173 (0.214) | 0.0481 (0.222) | 0.0420 (0.220) | -0.0733 (0.0723) | -0.0863 (0.0719) | -0.0862 (0.0724) | -0.0674 (0.0762) | -0.0929 (0.0779) | -0.0932 (0.0775) |
| Other | 0.185 (0.273) | 0.185 (0.244) | 0.162 (0.244) | 0.0306 (0.0912) | 0.0306 (0.0902) | 0.0273 (0.0920) | 0.0639 (0.134) | 0.0639 (0.131) | 0.0608 (0.131) |
| Hispanic | 0.298* (0.165) | 0.330** (0.156) | 0.326** (0.155) | 0.0868 (0.0917) | 0.0901 (0.0915) | 0.0859 (0.0905) | 0.114 (0.115) | 0.121 (0.114) | 0.118 (0.114) |
| Female | -0.227** (0.0902) | -0.158* (0.0880) | -0.171* (0.0883) | 0.0117 (0.0375) | 0.0189 (0.0382) | 0.0148 (0.0372) | -0.132*** (0.0395) | -0.118*** (0.0391) | -0.121*** (0.0394) |
| Owner Age | -0.00819 (0.0234) | -0.0266 (0.0229) | -0.0258 (0.0229) | -0.00495 (0.0105) | -0.00688 (0.0105) | -0.00668 (0.0105) | -0.0141 (0.0110) | -0.0179 (0.0110) | -0.0177 (0.0109) |
| Age Squared | 0.000221 (0.000250) | 0.000385 (0.000245) | 0.000377 (0.000244) | 0.0000349 (0.000109) | 0.0000520 (0.000109) | 0.0000486 (0.000109) | 0.000185 (0.000117) | 0.000219* (0.000117) | 0.000216* (0.000116) |
| High School Grad | 0.294 (0.296) | 0.207 (0.288) | 0.199 (0.286) | -0.180 (0.191) | -0.189 (0.190) | -0.175 (0.189) | -0.130 (0.144) | -0.147 (0.142) | -0.142 (0.143) |
| Some College | 0.169 (0.279) | 0.0623 (0.271) | 0.0500 (0.269) | -0.146 (0.191) | -0.157 (0.191) | -0.147 (0.190) | 0.0217 (0.143) | -0.000191 (0.141) | 0.00423 (0.143) |
| College Degree | 0.232 (0.283) | 0.111 (0.275) | 0.101 (0.273) | -0.202 (0.194) | -0.214 (0.193) | -0.199 (0.192) | -0.0108 (0.147) | -0.0355 (0.145) | -0.0286 (0.147) |
| Graduate Degree | 0.477 (0.292) | 0.353 (0.283) | 0.348 (0.281) | -0.147 (0.198) | -0.160 (0.197) | -0.147 (0.196) | 0.132 (0.155) | 0.106 (0.152) | 0.113 (0.154) |
| Hours Worked (week) | 0.0117*** (0.00181) | 0.00654*** (0.00185) | 0.00658*** (0.00188) | 0.00267*** (0.000774) | 0.00214*** (0.000768) | 0.00235*** (0.000789) | 0.00186** (0.000914) | 0.000811 (0.000963) | 0.000923 (0.000982) |
| Industry experience | -0.00468 (0.00431) | -0.00133 (0.00420) | -0.00142 (0.00421) | -0.00253* (0.00146) | -0.00218 (0.00146) | -0.00211 (0.00147) | 0.00131 (0.00251) | 0.00200 (0.00251) | 0.00205 (0.00255) |
| Start up experience | 0.347*** (0.0821) | 0.317*** (0.0801) | 0.315*** (0.0800) | -0.0316 (0.0318) | -0.0347 (0.0320) | -0.0345 (0.0318) | 0.0750* (0.0444) | 0.0688 (0.0438) | 0.0691 (0.0438) |
| Team ownership | 0.178 (0.110) | 0.0379 (0.109) | 0.0421 (0.109) | 0.0579 (0.0470) | 0.0433 (0.0465) | 0.0447 (0.0465) | 0.232*** (0.0655) | 0.204*** (0.0649) | 0.205*** (0.0649) |
| Partnership | 0.129 (0.217) | 0.167 (0.214) | 0.170 (0.214) | 0.0604 (0.0783) | 0.0643 (0.0780) | 0.0693 (0.0779) | -0.140 (0.0998) | -0.133 (0.0996) | -0.130 (0.0995) |
| LLC | 0.164 (0.106) | 0.0247 (0.104) | 0.0343 (0.104) | 0.166*** (0.0410) | 0.152*** (0.0407) | 0.161*** (0.0411) | 0.0913* (0.0487) | 0.0628 (0.0487) | 0.0676 (0.0475) |
| Corporation | 0.0744 (0.119) | -0.0572 (0.115) | -0.0457 (0.117) | 0.150*** (0.0470) | 0.137*** (0.0472) | 0.151*** (0.0482) | 0.205*** (0.0539) | 0.178*** (0.0554) | 0.186*** (0.0582) |
| Home based | -0.247*** (0.0884) | -0.0655 (0.0865) | -0.0685 (0.0874) | -0.00671 (0.0340) | 0.0123 (0.0356) | 0.000537 (0.0354) | -0.0461 (0.0453) | -0.00885 (0.0450) | -0.0156 (0.0477) |
| Comp. Adv. | -0.146* (0.0821) | -0.177** (0.0808) | -0.176** (0.0808) | 0.0547* (0.0283) | 0.0515* (0.0282) | 0.0554** (0.0281) | 0.0000216 (0.0421) | -0.00639 (0.0422) | -0.00456 (0.0421) |
| Int. Property | 0.418*** (0.106) | 0.388*** (0.103) | 0.399*** (0.102) | 0.171*** (0.0507) | 0.168*** (0.0508) | 0.165*** (0.0512) | 0.231*** (0.0676) | 0.225*** (0.0677) | 0.224*** (0.0676) |
| High Credit Score | 0.227* (0.132) | 0.170 (0.128) | 0.172 (0.129) | 0.00940 (0.0549) | 0.00349 (0.0550) | 0.0114 (0.0554) | 0.137 (0.0885) | 0.126 (0.0885) | 0.131 (0.0901) |
| Low Credit Score | -0.0807 (0.0889) | 0.0141 (0.0867) | 0.00612 (0.0868) | -0.0260 (0.0308) | -0.0161 (0.0311) | -0.0213 (0.0312) | 0.0108 (0.0412) | 0.0302 (0.0413) | 0.0276 (0.0415) |
| Log of 2004 FK | | 0.244*** (0.0224) | 0.245*** (0.0225) | | 0.0255*** (0.00931) | 0.0268*** (0.00960) | | 0.0500*** (0.0149) | 0.0508*** (0.0147) |
| \$5K- \$35K Sales | | | 0.255*** (0.0985) | | | 0.0307 (0.0415) | | | 0.0142 (0.0480) |
| \$35K-\$62.5K | | | -0.00508 (0.159) | | | -0.0263 (0.0575) | | | -0.00360 (0.0828) |
| \$62.5-\$100K | | | 0.139 (0.129) | | | -0.0847* (0.0466) | | | -0.0329 (0.0704) |
| \$100K+ | | | 0.00543 (0.122) | | | -0.0503 (0.0511) | | | -0.0331 (0.0711) |
| Constant | 7.540*** (0.697) | 5.837*** (0.707) | 5.720*** (0.704) | 6.648*** (0.396) | 6.471*** (0.390) | 6.443*** (0.385) | 6.592*** (0.384) | 6.244*** (0.383) | 6.228*** (0.385) |
| Observations | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 |
| R-squared | 0.088 | 0.132 | 0.134 | 0.049 | 0.052 | 0.054 | 0.070 | 0.076 | 0.077 |

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1
 2-digit industry dummies included

Table Four: Panel B
 New Debt Injections (2005 & 2006)
 Regression for Logs of Debt Injections

| Coefficients | Log Owner Debt | | | Log Insider Debt | | | Log Outsider Debt | | |
|---------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|---------------------------|--------------------------|-------------------------|-------------------------|
| | | | | | | | | | |
| Black | -0.111 (0.102) | -0.00964 (0.0980) | 0.0210 (0.0984) | -0.0167 (0.0905) | 0.0595 (0.0903) | 0.0793 (0.0901) | -0.337*** (0.152) | -0.0661 (0.141) | 0.0587 (0.137) |
| Asian | 0.0254 (0.158) | -0.0529 (0.152) | -0.0489 (0.150) | 0.259 (0.172) | 0.200 (0.168) | 0.203 (0.168) | 0.144 (0.250) | -0.0647 (0.235) | -0.0561 (0.232) |
| Other | 0.0684 (0.227) | 0.0685 (0.217) | 0.0584 (0.217) | 0.158 (0.229) | 0.158 (0.221) | 0.171 (0.222) | -0.380 (0.259) | -0.380 (0.255) | -0.319 (0.253) |
| Hispanic | 0.105 (0.149) | 0.124 (0.144) | 0.132 (0.144) | 0.366** (0.157) | 0.380** (0.156) | 0.397** (0.155) | 0.100 (0.188) | 0.153 (0.174) | 0.246 (0.171) |
| Female | -0.0794 (0.0726) | -0.0364 (0.0716) | -0.0329 (0.0709) | -0.0744 (0.0671) | -0.0421 (0.0671) | -0.0296 (0.0670) | -0.508*** (0.103) | -0.394*** (0.0967) | -0.327*** (0.0961) |
| Owner Age | 0.00715 (0.0188) | -0.00443 (0.0183) | -0.00478 (0.0182) | -0.0439** (0.0180) | -0.0526*** (0.0179) | -0.0535*** (0.0179) | 0.0625** (0.0260) | 0.0317 (0.0243) | 0.0269 (0.0238) |
| Age Squared | -0.0000730 (0.000198) | 0.0000301 (0.000192) | 0.0000358 (0.000191) | 0.000428** (0.000186) | 0.000506** (0.000185) | 0.000520*** (0.000185) | -0.000625* (0.000277) | -0.000351 (0.000259) | -0.000277 (0.000254) |
| High School Grad | 0.181 (0.214) | 0.127 (0.210) | 0.0707 (0.211) | -0.0191 (0.245) | -0.0598 (0.240) | -0.0692 (0.242) | 0.426 (0.349) | 0.282 (0.347) | 0.175 (0.356) |
| Some College | 0.255 (0.201) | 0.188 (0.197) | 0.148 (0.198) | 0.0716 (0.236) | 0.0212 (0.232) | 0.00946 (0.234) | 0.484 (0.328) | 0.306 (0.328) | 0.202 (0.338) |
| College Degree | 0.129 (0.203) | 0.0533 (0.199) | -0.00610 (0.201) | 0.105 (0.241) | 0.0484 (0.237) | 0.0256 (0.238) | 0.526 (0.333) | 0.324 (0.333) | 0.153 (0.342) |
| Graduate Degree | 0.125 (0.211) | 0.0468 (0.208) | -0.00209 (0.208) | 0.151 (0.249) | 0.0923 (0.244) | 0.0704 (0.245) | 0.504 (0.344) | 0.296 (0.343) | 0.139 (0.351) |
| Hours Worked (week) | 0.00896*** (0.00143) | 0.00574*** (0.00144) | 0.00524*** (0.00145) | 0.00164 (0.00131) | -0.000771 (0.00133) | -0.00116 (0.00137) | 0.0148*** (0.00206) | 0.00619*** (0.00208) | 0.00359* (0.00207) |
| Industry experience | -0.00906*** (0.00342) | -0.00695** (0.00341) | -0.00728** (0.00341) | -0.00107 (0.00316) | 0.000508 (0.00315) | 0.000146 (0.00317) | -0.0133*** (0.00497) | -0.00774* (0.00468) | -0.00972** (0.00461) |
| Start up experience | 0.0369 (0.0670) | 0.0181 (0.0661) | 0.0159 (0.0660) | 0.101* (0.0605) | 0.0866 (0.0597) | 0.0838 (0.0597) | 0.200** (0.0953) | 0.150* (0.0905) | 0.135 (0.0888) |
| Team ownership | -0.0806 (0.0848) | -0.169** (0.0857) | -0.168** (0.0853) | 0.0348 (0.0833) | -0.0312 (0.0830) | -0.0350 (0.0829) | 0.266** (0.125) | 0.0314 (0.120) | 0.0104 (0.118) |
| Partnership | 0.0123 (0.153) | 0.0360 (0.151) | 0.0311 (0.151) | -0.0630 (0.163) | -0.0451 (0.159) | -0.0496 (0.158) | -0.278 (0.217) | -0.214 (0.202) | -0.255 (0.200) |
| LLC | 0.0967 (0.0900) | 0.00944 (0.0884) | -0.00979 (0.0887) | 0.00823 (0.0749) | -0.0572 (0.0752) | -0.0713 (0.0752) | 0.421*** (0.125) | 0.188 (0.120) | 0.0906 (0.119) |
| Corporation | 0.105 (0.0951) | 0.0224 (0.0934) | -0.0101 (0.0948) | 0.110 (0.0941) | 0.0476 (0.0944) | 0.0206 (0.0939) | 0.810*** (0.137) | 0.589*** (0.129) | 0.412*** (0.129) |
| Home based | 0.0342 (0.0709) | 0.148** (0.0708) | 0.173** (0.0717) | -0.288*** (0.0659) | -0.203*** (0.0647) | -0.178*** (0.0642) | -0.448*** (0.0994) | -0.144 (0.0962) | 0.0183 (0.0960) |
| Comp. Adv. | -0.0951 (0.0660) | -0.115* (0.0650) | -0.127* (0.0647) | 0.0859 (0.0598) | 0.0711 (0.0593) | 0.0666 (0.0596) | -0.0342 (0.0956) | -0.0866 (0.0909) | -0.123 (0.0895) |
| Int. Property | 0.0844 (0.0863) | 0.0656 (0.0845) | 0.0775 (0.0841) | 0.0916 (0.0822) | 0.0775 (0.0804) | 0.0803 (0.0808) | -0.0117 (0.119) | -0.0618 (0.112) | -0.0335 (0.111) |
| High Credit Score | -0.115 (0.0982) | -0.151 (0.0963) | -0.167* (0.0966) | 0.173 (0.114) | 0.147 (0.112) | 0.126 (0.112) | 0.381** (0.154) | 0.287** (0.146) | 0.161 (0.146) |
| Low Credit Score | -0.127* (0.0747) | -0.0674 (0.0738) | -0.0540 (0.0739) | -0.0730 (0.0614) | -0.0283 (0.0614) | -0.0209 (0.0615) | -0.305*** (0.102) | -0.147 (0.0966) | -0.0954 (0.0949) |
| Log of 2004 FK | | 0.153*** (0.0178) | 0.150*** (0.0180) | | 0.115*** (0.0179) | 0.111*** (0.0179) | | 0.408*** (0.0267) | 0.385*** (0.0264) |
| \$5K- \$35K Sales | | | 0.125 (0.0780) | | | 0.0443 (0.0651) | | | 0.195* (0.112) |
| \$35K-\$62.5K | | | 0.434*** (0.143) | | | 0.0124 (0.108) | | | 0.151 (0.172) |
| \$62.5-\$100K | | | 0.267** (0.106) | | | 0.0564 (0.0923) | | | 0.694*** (0.140) |
| \$100K+ | | | 0.200** (0.0939) | | | 0.176* (0.0932) | | | 1.007*** (0.135) |
| Constant | 6.454*** (0.567) | 5.384*** (0.573) | 5.374*** (0.572) | 7.517*** (0.511) | 6.714*** (0.544) | 6.747*** (0.545) | 6.243*** (0.779) | 3.393*** (0.749) | 3.599*** (0.748) |
| Observations | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 | 3282 |
| R-squared | 0.039 | 0.068 | 0.074 | 0.058 | 0.077 | 0.079 | 0.154 | 0.243 | 0.264 |

Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1
 2-digit industry dummies included

Table Five
Owner and Firm Characteristics by Race

| | Startup Capital (2004) | | Financial Injections (2005/06) | |
|-------------------------------|------------------------|--------|-----------------------------------|--------|
| | White | Black | White | Black |
| Female | 30.3% | 36.7% | 29.2% | 34.7% |
| Age | 45.4 | 42.9 | 45.6 | 42.5 |
| Age Squared | 2178.7 | 1947.5 | 2194.7 | 1915.0 |
| High School Graduate | 12.8% | 9.4% | 12.3% | 8.0% |
| Some College | 35.7% | 44.1% | 35.7% | 44.1% |
| College Degree | 31.0% | 26.8% | 31.0% | 28.0% |
| Graduate Schooling/Degree | 18.3% | 17.8% | 18.9% | 19.9% |
| Hours Worked (Weeks) | 41.7 | 43.4 | 42.6 | 43.0 |
| Work Experience (Years) | 12.3 | 10.5 | 12.7 | 10.6 |
| Start Up Experience | 43.5% | 37.5% | 43.4% | 37.0% |
| Team Ownership | 34.7% | 22.9% | 35.0% | 20.8% |
| Partnership | 5.7% | 5.2% | 5.6% | 3.5% |
| Limited Liability Corporation | 31.6% | 27.5% | 32.0% | 28.1% |
| Corporation | 26.7% | 24.6% | 26.6% | 25.2% |
| Home Based | 51.1% | 57.8% | 50.5% | 59.7% |
| Comparative Advantage | 62.8% | 51.8% | 63.7% | 51.4% |
| Intellectual Property | 18.9% | 17.7% | 19.0% | 18.5% |
| High Credit Score | 12.5% | 4.8% | 13.8% | 4.3% |
| Low Credit Score | 32.0% | 50.1% | 29.5% | 49.6% |
| Log of 2004 Financial Capital | | | 9.65 | 8.75 |
| \$5K - \$35K Sales | | | 17.3% | 22.9% |
| \$35K - \$62.5K Sales | | | 6.0% | 5.1% |
| \$62.5K - \$110K Sales | | | 15.3% | 11.7% |
| \$110K+ Sales | | | 28.1% | 9.5% |

Source: Kauffman Firm Survey Microdata

Table Six
 Start Up Financial Injections (2004)
 Logs of Total Financial Capital, Equity, and Debt
 White/Black Decompositions

| | Log of New Financial Investments | | Log of New Equity Investments | | Log of New Debt Investments | |
|------------------------|-------------------------------------|---------|----------------------------------|---------|--------------------------------|---------|
| | Contribution | Percent | Contribution | Percent | Contribution | Percent |
| White mean of dep var | 9.6145 | | 8.8275 | | 8.1798 | |
| Black mean of dep var | 8.8659 | | 8.4065 | | 7.4243 | |
| White/black difference | 0.7486 | | 0.4210 | | 0.7555 | |
| Female | 0.0158 | 2.1% | 0.0169 | 4.0% | 0.0080 | 1.1% |
| Age | 0.0407 | 5.4% | 0.0446 | 10.6% | 0.0202 | 2.7% |
| Education | 0.0030 | 0.4% | 0.0038 | 0.9% | -0.0051 | -0.7% |
| Hours worked | -0.0349 | -4.7% | -0.0277 | -6.6% | -0.0280 | -3.7% |
| Industry experience | -0.0304 | -4.1% | -0.0182 | -4.3% | -0.0342 | -4.5% |
| Start Up | 0.0042 | 0.6% | 0.0092 | 2.2% | 0.0011 | 0.1% |
| Team Ownership | 0.0425 | 5.7% | 0.0440 | 10.5% | 0.0080 | 1.1% |
| Partnership, etc... | 0.0342 | 4.6% | 0.0358 | 8.5% | 0.0233 | 3.1% |
| Home Based | 0.0541 | 7.2% | 0.0393 | 9.3% | 0.0419 | 5.5% |
| Comparative | 0.0110 | 1.5% | 0.0152 | 3.6% | 0.0075 | 1.0% |
| Intellectual | 0.0020 | 0.3% | 0.0023 | 0.5% | 0.0000 | 0.0% |
| Credit score | 0.0843 | 11.3% | 0.0475 | 11.3% | 0.0878 | 11.6% |
| Industry | 0.0007 | 0.1% | 0.0023 | 0.5% | 0.0072 | 0.9% |
| Total explained | 0.2271 | 30.3% | 0.2149 | 51.0% | 0.1378 | 18.2% |

Source: Kauffman Firm Survey Microdata

Table Seven
 New Financial Injections (2005 & 2006)
 Logs of Total Financial Capital, Equity, and Debt
 White/Black Decompositions

| | Log of New Financial Investments | | Log of New Equity Investments | | Log of New Debt Investments | |
|---------------------------|----------------------------------|---------|-------------------------------|---------|-----------------------------|---------|
| | Contribution | Percent | Contribution | Percent | Contribution | Percent |
| White mean of dep var | 9.9488 | | 8.5073 | | 8.8976 | |
| Black mean of dep var | 9.6138 | | 8.6901 | | 8.3786 | |
| White/black difference | 0.3350 | | -0.1828 | | 0.5190 | |
| Female | 0.0289 | 8.6% | 0.0149 | -8.2% | 0.0318 | 6.1% |
| Age | 0.0232 | 6.9% | 0.0308 | -16.9% | 0.0079 | 1.5% |
| Education | -0.0129 | -3.9% | -0.0024 | 1.3% | -0.0167 | -3.2% |
| Hours Worked | -0.0054 | -1.6% | -0.0041 | 2.3% | -0.0058 | -1.1% |
| Industry Experience | -0.0186 | -5.6% | -0.0069 | 3.8% | -0.0352 | -6.8% |
| Start Up Experience | 0.0172 | 5.1% | 0.0205 | -11.2% | 0.0155 | 3.0% |
| Team Ownership | 0.0450 | 13.4% | 0.0388 | -21.2% | 0.0248 | 4.8% |
| Legal Form of Organizatio | 0.0230 | 6.9% | 0.0142 | -7.8% | 0.0232 | 4.5% |
| Home Based | 0.0384 | 11.5% | 0.0225 | -12.3% | 0.0465 | 9.0% |
| Comparative Advantage | -0.0105 | -3.1% | -0.0165 | 9.0% | -0.0033 | -0.6% |
| Intellectual Property | 0.0017 | 0.5% | 0.0024 | -1.3% | 0.0003 | 0.1% |
| Credit score | 0.0959 | 28.6% | 0.0460 | -25.2% | 0.1062 | 20.5% |
| Industry | 0.0059 | 1.8% | 0.0188 | -10.3% | 0.0076 | 1.5% |
| Total explained | 0.2317 | 69.1% | 0.1790 | -97.9% | 0.2027 | 39.1% |

Source: Kauffman Firm Survey Microdata

Table Eight
 New Financial Injections (2005 & 2006)
 Logs of Total Financial Capital, Equity, and Debt including Startup Capital
 White/Black Decompositions

| | Log of New Financial Investments | | Log of New Equity Investments | | Log of New Debt Investments | |
|------------------------|----------------------------------|---------|-------------------------------|---------|-----------------------------|---------|
| | Contribution | Percent | Contribution | Percent | Contribution | Percent |
| White mean of dep var | 9.9488 | | 8.5073 | | 8.8976 | |
| Black mean of dep var | 9.6138 | | 8.6901 | | 8.3786 | |
| White/black difference | 0.3350 | | -0.1828 | | 0.5190 | |
| Female | 0.0230 | 6.9% | 0.0112 | -6.1% | 0.0249 | 4.8% |
| Age | 0.0069 | 2.1% | 0.0205 | -11.2% | -0.0112 | -2.2% |
| Education | -0.0084 | -2.5% | 0.0005 | -0.3% | -0.0115 | -2.2% |
| Hours worked | -0.0026 | -0.8% | -0.0024 | 1.3% | -0.0025 | -0.5% |
| Industry experience | -0.0080 | -2.4% | -0.0002 | 0.1% | -0.0226 | -4.4% |
| Start Up | 0.0143 | 4.3% | 0.0186 | -10.2% | 0.0120 | 2.3% |
| Team Ownership | 0.0142 | 4.2% | 0.0193 | -10.6% | -0.0113 | -2.2% |
| Partnership, etc... | 0.0131 | 3.9% | 0.0079 | -4.3% | 0.0114 | 2.2% |
| Home Based | 0.0128 | 3.8% | 0.0062 | -3.4% | 0.0163 | 3.1% |
| Comparative Advantage | -0.0164 | -4.9% | -0.0203 | 11.1% | -0.0103 | -2.0% |
| Intellectual Property | 0.0014 | 0.4% | 0.0022 | -1.2% | 0.0000 | 0.0% |
| Credit score | 0.0674 | 20.1% | 0.0250 | -13.7% | 0.0811 | 15.6% |
| Log 2004 capital | 0.2542 | 75.9% | 0.1884 | -103.1% | 0.2164 | 41.7% |
| Industry | 0.0059 | 1.8% | 0.0188 | -10.3% | 0.0076 | 1.5% |
| Total explained | 0.3777 | 112.7% | 0.2957 | -161.8% | 0.3004 | 57.9% |

Source: Kauffman Firm Survey Microdata

Table Nine
 New Financial Injections (2005 & 2006)
 Logs of Total Financial Capital, Equity, and Debt including Startup Capital and Sales
 White/Black Decompositions

| | Log of New Financial Investments | | Log of New Equity Investments | | Log of New Debt Investments | |
|------------------------|-------------------------------------|---------|----------------------------------|---------|--------------------------------|---------|
| | Contribution | Percent | Contribution | Percent | Contribution | Percent |
| White mean of dep var | 9.9488 | | 8.5073 | | 8.8976 | |
| Black mean of dep var | 9.6138 | | 8.6901 | | 8.3786 | |
| White/black difference | 0.3350 | | -0.1828 | | 0.5190 | |
| Female | 0.0211 | 6.3% | 0.0116 | -6.3% | 0.0216 | 4.2% |
| Age | 0.0103 | 3.1% | 0.0209 | -11.4% | -0.0058 | -1.1% |
| Education | -0.0080 | -2.4% | 0.0008 | -0.5% | -0.0109 | -2.1% |
| Hours worked | -0.0021 | -0.6% | -0.0024 | 1.3% | -0.0017 | -0.3% |
| Industry Experience | -0.0104 | -3.1% | -0.0004 | 0.2% | -0.0263 | -5.1% |
| Start Up | 0.0137 | 4.1% | 0.0186 | -10.2% | 0.0111 | 2.1% |
| Team Ownership | 0.0128 | 3.8% | 0.0196 | -10.7% | -0.0138 | -2.7% |
| Partnership, etc... | 0.0092 | 2.7% | 0.0081 | -4.4% | 0.0049 | 0.9% |
| Home Based | 0.0044 | 1.3% | 0.0059 | -3.2% | 0.0028 | 0.5% |
| Comparative Advantage | -0.0189 | -5.7% | -0.0202 | 11.0% | -0.0146 | -2.8% |
| Intellectual Property | 0.0015 | 0.4% | 0.0023 | -1.2% | 0.0002 | 0.0% |
| Credit Score | -0.0547 | -16.3% | -0.0431 | 23.6% | -0.0391 | -7.5% |
| Log 2004 capital | 0.3254 | 97.1% | 0.2145 | -117.4% | 0.3786 | 73.0% |
| Sales level | 0.1167 | 34.8% | -0.0002 | 0.1% | 0.1895 | 36.5% |
| Industry | 0.0052 | 1.5% | 0.0190 | -10.4% | 0.0062 | 1.2% |
| Total explained | 0.4261 | 127.2% | 0.2549 | -139.5% | 0.5028 | 96.9% |

Source: Kauffman Firm Survey Microdata