

Creative Culture, Risk-taking, and Corporate Decisions

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Abstract: I examine how creative culture affects corporate decisions. I show that firms have corporate risk-taking and policies consistent with variations in local risk-taking induced by creative culture. Firms located in areas with a strong creative culture have higher levels of risk exposure, investment, and growth. These firms accumulate more cash consistent with the precautionary motive. These firms also have lower levels of dividend payout in line with the geographically varying dividend demand induced by creative risk-taking. My findings remain robust after controlling for endogeneity. This paper introduces and highlights the role of creative culture and risk-taking in shaping corporate decisions.

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1. Introduction

There is a close relationship between creativity and risk-taking which is highlighted by studies in the social science literature but overlooked in the finance literature. I focus on this overlooked relationship and examine the impact of the risk-taking propensity associated with creative culture on corporate outcomes. There is a growing body of literature demonstrating the impact of culture on financial and economic decisions (i.e. Stulz and Williamson (2003), Hilary and Hui (2009), Kumar et al. (2011), and Ucar (2016)). Local factors can shape financial outcomes through their influence on either corporate culture or local investors. Previous literature uses factors such as religion or demographic factors in order to show cultural effects on corporate outcomes. However, the role of creative culture and creative risk-taking is an important missing detail that can shed additional light on the link between local and behavioral factors and corporate decisions. Social science studies show the link between creativity and risk-taking behavior (i.e. Amabile (1983), Gardner (1994), Dewett (2004), Dewett (2006), and (Heilman 2016)), suggesting that there is a risk-taking propensity associated with creative culture. In this paper, I investigate the effect of local risk-taking propensity induced by creative culture on corporate decisions.

I use a novel measure of local risk-taking propensity, local creative culture, and demonstrate the effect of local creative risk-taking on geographically-varying corporate risk-taking behavior and corporate policies. Specifically, I show that firms located in counties with a stronger creative culture—as proxied by the local creative class—have higher levels of volatility of stock returns and return on assets (ROA), as well as higher levels of investment and growth. For example, one standard deviation increase in *CreativeShare*—the creative culture variable in the tests—leads to an increase in ROA volatility, which is almost 12.8% of the average ROA volatility level in the sample. Similarly, one standard deviation increase in *CreativeShare* is associated with

an increase investment (growth) which is approximately 8% (6.8%) of the average investment (growth) level in the sample. These findings are consistent with the risk-taking tendency induced by innovativeness and creative culture. I also examine the impact of the risk-taking tendency induced by local creative culture on corporate cash policies in my paper. I present a positive relationship between local creative culture and cash holdings and show that firms located in areas with a stronger creative culture accumulate more cash. One standard deviation increase in local creative culture level leads to an increase in cash holdings, which is about 12.5% of the average cash holdings in the sample. This finding is consistent with prior studies demonstrating a positive relationship between risk and cash holdings and highlighting the precautionary motive.

In addition, I investigate geographically-varying dividend demand and corporate dividend policies and find that firms located in areas with a strong creative culture are less likely to pay and initiate dividends. These firms also have lower levels of dividend yield. My findings suggest that one standard deviation increase in local creative culture in a firm's location is associated with a 21.2% (12.2%) less likelihood in the odds that a firm pays (initiates) dividends. Previous studies suggest that risk-aversion is an important determinant of investors' dividend preference over capital gains (Gordon (1963) and Lintner (1962)) and firms cater to investors' dividend through corporate payout policies Baker and Wurgler (2004a) and (2004b). My results are consistent with risk-taking characteristics associated with creative culture and supports the notion that firms cater to investors' dividend preferences induced by local factors through corporate dividend policies (i.e. Becker et al. (2011) and Ucar (2016)).

My empirical findings still hold after addressing endogeneity concerns and a series robustness tests. I use a matched sample analysis and an instrumental variable (IV) approach, showing that my empirical findings hold after addressing endogeneity concerns. Moreover, my

findings are robust to local controls as well as to an alternative firm location dataset. My results are more pronounced for local firms versus geographically dispersed firms that have operations in multiple locations. This point highlights the local component of corporate risk-taking behavior and decision-making, suggesting that the creative risk-taking effect emerges through interactions between local and corporate cultures. My empirical findings also hold after excluding areas with a strong well-known creative culture. This point shows strength of the local risk-taking effect and indicates that creative-risk taking not only affects firms located in areas with a well-known creative culture but also firms located in other areas without a well-known creative culture.

Studies from other literatures indicate a creative risk-taking effect by presenting the relationship between creativity and risk-taking ((e.g. Fidler and Johnson (1984), Jalan and Kleiner (1995), Shalley (1995), Tesluk et al. (1997) Zhou and George (2001), Dewett (2004), and Dewett (2006)). By its nature, creativity includes a higher risk-taking propensity. Dewett (2004) reports that, “Sethia (1989) notes that creative activity is a largely uncertain endeavor in which the action-outcome link is often unclear and drawn out over time.” A willingness to take risks is a key point of creative behavior (Dewett (2004) and Dewett (2006)); creative environments emerge in organizations when employees have a willingness to take risks (Tesluk et al. (1997)). Previous studies also highlight the risk-taking behavior of creative people (i.e. Gardner (1994) and Amabile (1983)) by suggesting that creative people are risk-takers (i.e. Heilman (2016)). Popular news media also recognizes creative people as risk-takers.¹ I accordingly conjecture that the risk-taking behavior associated with creative culture can affect both corporate risk-taking behavior and related

¹ http://www.huffingtonpost.com/2014/03/04/creativity-habits_n_4859769.html ; <http://www.forbes.com/sites/stevenkotler/2012/10/11/einstein-at-the-beach-the-hidden-relationship-between-risk-and-creativity/#7efe466b678a> ; http://www.huffingtonpost.com/robert-f-brands/innovation-is-creativity-b_1772304.html

corporate policies. My findings support this conjecture, demonstrating a consistently higher degree of corporate risk-taking tendencies and corporate outcomes consistent with creative risk-taking.

In order to measure local creative culture I use fraction of the local creative class which is “comprised of people in occupations that produce new knowledge and ideas and understand their use” (McGranahan et al. (2011)). Richard Florida introduces the creative class theory (Florida(2002a), Florida(2002b), while Florida (2005)) describes the creative class as people who work in knowledge intensive industries, intellectuals, artists, etc. The creative class plays an important role in supporting both creative output and innovative growth (Florida(2002a), Florida(2002b), Florida (2005), McGranahan and Wojan (2007)). After considering the close connection between innovation and risk, one expects that fraction of the local creative class measures the local risk-taking induced by creative culture.

The cash policy literature has investigated the factors affecting cash policies and determining cash holdings for a long time. Opler et al. (1999) suggest that firms with growth opportunities and riskier cash flows hold higher cash balances. Bates et al. (2009) highlight the importance of precautionary motive in determining corporate cash holdings. Prior literature underlines the relationship between risk and cash holdings (e.g. Acharya, Davydenko, and Strebulaev (2012), Liu and Mauer (2011)). Acharya, Davydenko, and Strebulaev (2012) examine the relationship between cash holdings and credit risk and find that riskier firms accumulate more cash in line with the precautionary motive. Harford et al. (2014) show that cash holdings can mitigate the negative effects of refinancing risk. Liu and Mauer (2011) find a positive relationship between CEO risk-taking incentives and cash holdings. Consistent with prior studies, my findings suggest a positive relationship between risk-taking and corporate cash holdings. I show that local creative culture

affects corporate risk-taking and corporate policies so that there is a positive relationship between the local risk-taking tendency induced by local creative culture and cash holdings.

The dividend literature has investigated the determinants of dividend demand and investors' payout preferences since Miller and Modigliani (1961). Prior literature suggests that risk aversion plays an important role for investors' choice between dividends and capital gains (i.e. Gordon (1963) and Lintner (1962)). Investors can choose dividends because dividends are perceived as safe current income compared to future risky capital gains (Gordon (1963) and Lintner (1962)). Consistent with this notion, my findings show a lower dividend payout for firms located in areas with a stronger creative culture and risk-taking. Previous studies also indicate some factors such as investor income or age determine variations in dividend preferences and shape dividend clienteles (i.e. Graham and Kumar (2006), Becker et al. (2011).) Moreover, recent studies show the impact of local factors on dividend demand and variations in corporate payout policies that cater to investor demand (i.e. Becker et al. (2011) and Ucar (2016)). My paper suggests a geographically varying dividend clientele effect is consistent with local creative culture. Firms determine their dividend policies in line with local risk-taking tendency associated with creative culture. This point is consistent with the notion that firms cater to local dividend demand shaped by variations in local creative risk-taking effect.

There is a growing body of literature underlining the role of local factors and local investors on financial outcomes. Ivkovic and Weisbenner (2005) show that individual investors have a local bias. Pirinsky and Wang (2006) study the comovement of returns firms located within the same geographic areas. Hong, Kubik and Stein (2008) find a greater local bias effect in areas with a smaller number of firms. Garcia and Norli(2012) demonstrate differences in the locality of stock returns between local firms versus geographically dispersed firms. Pantzalis and Ucar (2014)

highlight the impact of local religious characteristics on investor inattention to firm news. Previous studies also demonstrate the effect of local factors on corporate policies. Kumar et al. (2011) confirm the effect of local culture as proxied by religion on investment and corporate decision-making. Becker et al. (2011) examine the impact of local demographic factors on corporate payout policies. Ucar (2016) finds the role of religion for local dividend clienteles and corporate dividend policies. Hilary and Hui (2009) find the impact of local religious characteristics on corporate risk-taking and policies. My paper introduces a new local risk-taking measure induced by creative culture and shows the impact of local creative culture and risk-taking on corporate policies.

This study contributes to the literature in the following ways. It demonstrates the effect of a new risk-taking measure on geographically-varying corporate policies and risk-taking behavior. This study suggests that the local creative culture affects corporate outcomes through its influence on local risk-taking characteristics. My paper introduces the role of local creative culture for corporate policies and shows a positive relationship between local creative culture and corporate risk-taking, investment and growth. I additionally highlight the local component of corporate cash holdings by demonstrating the impact of risk-taking behavior induced by local creative culture on cash holdings. Firms located in areas with a pronounced creative culture accumulate more cash consistent with the positive relationship between risk and cash holdings shown in prior literature and the precautionary motive. I also show firms have geographically varying dividend policy in line with variations in local risk-taking and dividend demand induced by local creative culture. My empirical results suggest that the impact of creative culture on corporate risk-taking emerges through the interactions between local and corporate cultures. My paper therefore also highlights the influence of local characteristics on corporate culture and decisions.

The remainder of the paper is organized as follows. The next section shows a short summary of the data and the sample selection method in addition to the summary statistics. Section 3 presents the main empirical tests, identification tests, and robustness checks for corporate risk-taking and policies, along with cash holdings and dividend policy. Section 4 provides my conclusions.

2. Data, Sample Selection, and Summary Statistics

This paper follows a sample selection and variable construction method consistent with prior literature. I include U.S. firms with available accounting and firm information from COMPUSTAT in my sample. The sample excludes utilities and financials categories (SIC codes 4900 to 4999 and SIC codes 6000 to 6999). The main variable of interest for all tests is local creative culture as measured by *CreativeShare* for a given year. *CreativeShare* measures the fraction of the creative class within a given firm county. In order to construct the *CreativeShare* variable, I use the creative class information from the US Department of Agriculture Economic Research Service (USDA ERS) website which provides county-level data sets for the years 1990, 2000, and 2007.² I use data interpolations in order to construct the variable for years without available data, and my sample accordingly includes *CreativeShare* variable for the years between 1990 and 2007. The ERS website provides detailed information on the construction of county-level creative share information as well as the creative class occupations used in the dataset. The ERS website reports that they use occupations “that involve a high level of creative thinking” such as architecture, engineering, arts, design, entertainment, sports, media, computer and mathematical, etc.³

² <http://www.ers.usda.gov/data-products/creative-class-county-codes/>.

³ <http://www.ers.usda.gov/data-products/creative-class-county-codes/documentation/>.

My empirical tests use the *CreativeShare* variable and therefore the final sample includes firm and accounting information from COMPUSTAT as well as stock return information from the CRSP for the years between 1990 and 2007. I use an empirical model similar to the one that is used in Hilary and Hui (2009) in examining the impact of creative risk-taking behavior by focusing on volatility of stock returns and ROA, investment, and growth. The first dependent variable used in these tests is *StdRet* which is the natural logarithm of the standard deviation for the monthly stock returns in a given year. I obtain stock return information from the CRSP. The next variable is *StdROA*, which is the standard deviation of ROA for the years between $t-5$ and $t+5$ for a given firm year. I use COMPUSTAT data items in constructing the following variables: *ROA* is calculated as IB by dividing the lagged AT using COMPUSTAT items. *Inv* is the investment in terms of tangible capital. *Inv* is calculated by dividing CAPX by the lagged PPENT using COMPUSTAT items. *Growth* is the natural logarithm of the ratio of the market value of equity divided by the book value of assets. This ratio is calculated as AT plus PRCC_F multiplied by CSHO minus CEQ and TXDB divided by AT using COMPUSTAT items. These empirical tests also include the following main control variables. *Size* is the natural logarithm of sales calculated by taking the log of COMPUSTAT item SALE. *Liquidity* is the ratio of cash balance items to lagged tangible capital. It is the sum of DP and IB divided by lagged PPENT using COMPUSTAT items. *Leverage* is calculated by dividing the sum of DLTT and DLC by the sum of DLTT, DLC, and CEQ using COMPUSTAT items. *Loss* is an indicator variable which takes a value of one if ROA is negative, and zero otherwise. All accounting and firm variables are winsorized at the 1% and 99% levels.

In the second set of tests, I focus on corporate cash policies by examining the impact of local creative culture on corporate cash holdings following an empirical model similar to the one used

by Bates et al. (2009). I define the variables used in this empirical model consistent with Bates et al. (2009). I use a cash holdings variable, *Cash*, as the dependent variable. I calculate *Cash* as CHE divided by AT using COMPUSTAT items. I use the following variables as independent variables in addition to *CreativeShare*: *MB* is the market-to-book ratio. *CFtoAssets* is the ratio of the cash flow to assets. *NWCtoAssets* is the ratio of the net working capital to assets. *CapextoAssets* is the ratio of the capital expenditures to assets. *LevtoAssets* is the ratio of leverage to assets. *DivPayout* is a dummy variable that takes a value of one if the firm is a common dividend payer, and zero otherwise. *RDtoSales* the ratio of the R&D expenditures to sales. I set the value of zero to this ratio if XRD is missing. *AcqtoAssets* is the ratio of the acquisition expenditures to assets. *IndustrySigma* measures the cash flow risk. It is defined as the mean of the standard deviations of *CFtoAssets* for the prior 10 years for firms in the same industry where two digit SIC code classifications are used to define industries as in Bates et al. (2009).⁴

In the third set of tests, I examine dividend policy. I use the following set of main control variables and define them by following prior literature (e.g. Becker et al. (2011) and Ucar (2016)). I define *NtoTA* as the net income divided by total assets for a given year. *CHtoTA* is the cash divided by total assets for a given year. I define *Q* as the sum of the market value of equity and the book value of liabilities divided by total assets for a given year. *LTDtoTA* is the long-term debt divided by total assets for a given year. I define *Log of MV* as the logarithm of a firm's market value for a given year and *Log of assets* as the logarithm of total assets. I define *Volatility* as the standard deviation of monthly stock returns for the previous two-year period and *Lagged return* as the monthly stock returns for the previous two-year period⁵. *Asset growth* is the logarithm of

⁴ I additionally require at least three observations.

⁵ I require *Volatility* and *Lagged return* to have stock return information to be non-missing for at least for the previous 12 months for firms with stock return available less than for 24 months by following Ucar (2016).

the total assets growth rate calculated using both the current and previous year's figures. Firm age is the time between the date that a firm is listed on the CRSP and the current year. I use the following firm age-group indicator variables in my empirical tests: Age 1-5, Age 6-10, Age 11-15, and Age 16-20. Age 21 and over is the indicator which is not included in the empirical tests.

I also include local control variables that measure county-level demographic, economic, and other factors. Previous studies show that local religion has an impact on corporate risk-taking and policies (Hilary and Hui (2009)). I accordingly include local religion as a local control variable in empirical tests by using county level religion information from the ARDA dataset. I include *Cpratio* which is the ratio of Catholics to Protestants in the county where a firm is located by following previous studies. The other local control variables are from the US Censuses and the US Census website. Prior literature demonstrates the role of fraction of local senior as an important factor for corporate policies (e.g. Becker et al. (2011)). Therefore, I include *Local seniors*, which is the proportion of individuals who are 65 years old or older within a county where a firm is headquartered. I also include the following local control variables by following prior literature: *Log of Population* is the logarithm of population for a given county; *Local Education* as the fraction of individuals 25 years and over having a bachelor's, graduate, professional, or some college degree; *Local Income* is the median household income for a given county. I use interpolations of both the Census and ARDA datasets in order to construct local variables for years without available data.

Table 1 reports summary statistics for the main variables in the empirical tests. Panel A presents the summary statistics for some variables used in the first set of corporate policy tests along with local creative culture as measured by *CreativeShare*. Panel B reports the summary statistics for the variables used in cash holdings tests in the second part of the paper. On average a

sample firm is located in a county where approximately 29.4% of the people employed are from the creative class. This point represents mean value of local creative culture for the sample firms. An average firm additionally has the following statistics: *StdRet* is -1.26, *StdROA* is 0.342, *Inv* is 0.288, *Growth* is 0.580. Similarly, Panel B provides summary statistics for some variables used in the corporate cash holdings analysis. For example, Panel B shows that an average firm has the following statistics: *Cash* is approximately 0.20 and *MB* is approximately 3. This suggests that on average the ratio of cash holdings to assets is approximately 20%. On the other hand, the median value of *Cash* is approximately 0.09 and the median *MB* is about 1.6. Panel C presents summary statistics for some variables used in the third set of tests, dividend policy tests. On average, 27% of the sample firms are dividend payer firms with 0.6% dividend yield. On average, 2.3% of the sample firms initiate dividends during the sample years.

[Insert Table 1 here]

3. Empirical Results

3.1. Main Corporate Risk-taking and Policy Tests

I use an empirical model similar to the one used by Hilary and Hui (2009). The empirical tests control for *Size*, *Liquidity*, *Loss*, and *Leverage*. I also control for year and industry dummy variables. I adjust standard errors for heteroskedasticity and cluster them at the firm level in all empirical tests. The main variable of interest in all empirical tests is *CreativeShare* which measures the local creative culture as a proxy for creative risk-taking. The dependent variable in Column 1 of Table 2 is *StdRet* which is the log of daily stock return volatility. *StdRet* helps examine corporate risk-taking. *CreativeShare* is positive and statistically significant. This result shows a positive

relationship between risk-taking induced by local creative culture and stock return volatility.⁶ Column 1 suggests that a one standard deviation increase in *CreativeShare* is associated with an approximately 0.0428 standard deviation increase *StdRet*.

[Insert Table 2 here]

Column 2 investigates firm's risk exposure by examining the volatility of its ROA. Column 2 presents a positive relationship between *CreativeShare* and *StdROA*. Firms located in areas with a stronger creative culture have higher volatility of ROA. This result suggests that a one standard deviation increase in creative share is associated with a 0.0434 standard deviation increase in ROA volatility. This increase is approximately 12.8% of the sample average of *StdROA*. These results demonstrate that firms located in areas with a strong creative culture display higher degrees of risk exposure.

Another way of examining corporate risk-taking is corporate investment. Risk-taking behavior is expected to encourage investment behavior so that higher investment levels are associated with corporate risk-taking. Column 3 investigates the role of risk-taking behavior as induced by local creative culture for *Inv*. This column indicates that local risk-taking culture as associated with the existence of a strong creative class within an area leads to higher levels of investment for local firms. *CreativeShare* is statistically significant and economically important. Column 3 suggests that a one standard deviation increase in *CreativeShare* is associated with a 0.095 increase in *Inv*. This increase is approximately 8% of the average investment level in the sample. Next, I examine how the corporate risk-taking behavior induced by local creative culture affects growth. Specifically, I examine the effect of creative share on *Growth* in Column 4. Consistent with my

⁶ The results for all empirical tests are similar when the standard deviation of daily stock returns is used in unreported tables.

earlier results, this column demonstrates that a stronger local creative culture is associated with higher corporate growth. *CreativeShare* is positive and statistically significant. Column 4 indicates that a one standard deviation increase in the creative share leads to a 0.0469 standard deviation increase in *Growth*. This finding suggests an increase of approximately 6% of the sample average. Columns 3 and 4 provide additional support to the earlier findings and demonstrate that firms located in areas with a stronger risk-taking culture—induced by local creative culture—make greater investments and have greater growths.

Overall, this table shows that firms located in areas with a strong creative culture have higher levels of risk exposure, investment, and growth. This result is consistent with the higher degrees of risk-taking tendency associated with creative culture and innovativeness. Areas that host a higher fraction of individuals from the creative class have strong creative cultures, and these empirical results find that local creative culture has an influence on the corporate cultures of firms located in such areas and encourages risk-taking behavior.

3.2. Main Cash Holding Tests

In this section I focus on another important corporate decision, cash policy, in order to shed additional light on the role of the risk-taking tendency associated with local creative culture and innovativeness on corporate policies. Determinants of cash holdings have been investigated by the cash holdings literature for a long time. Recent studies highlight the relationship between risk and cash holdings (e.g. Acharya, Davydenko, and Strebulaev (2012), Liu and Mauer (2011) among others). Opler et al. (1999) show that firms with growth opportunities and riskier cash flows accumulate more cash. Bates et al. (2009) suggest that the precautionary motive is an important determinant in explaining corporate cash holdings. Acharya, Davydenko, and Strebulaev (2012)

demonstrate that riskier firms hold more cash consistent with the precautionary motive. They investigate the relationship between cash holdings and credit risk, showing that larger cash levels are associated with higher risk levels. Harford et al. (2014) suggest that cash holdings help reduce the negative effects of refinancing risk. Liu and Mauer (2011) examine the role CEO compensation incentives play on cash balances, demonstrating a positive relationship between CEO risk-taking incentives and cash holdings. They suggest that firms accumulate more cash when CEO risk-taking incentives are encouraged.

Consistent with prior literature, I investigate the impact of the risk-taking behavior induced by local creative culture on corporate cash holdings. My earlier results show that firms located in areas with a greater fraction of creative class individuals have corporate policies consistent with the higher risk-taking tendencies associated with creative culture. Firms located in areas with a strong creative culture have higher levels of risk exposure, investment, and growth. Consistent with my earlier findings as well as recent studies that suggest larger cash holdings for riskier firms, I conjecture that firms located in areas with a strong creative culture accumulate more cash. I investigate this conjecture using an empirical model consistent with prior literature. Specifically, I use an empirical model similar to the one that is used by Bates et al. (2009). The dependent variable, *Cash*, is the ratio of cash and marketable securities to assets and measures cash holdings and the following independent variables; *LogofAssets*, *CFtoAssets*, *NWCtoAssets*, *CapextoAssets*, *LevtoAssets*, *DivPayout*, *RDtoSales*, *AcqtoAssets*, and *IndustrySigma*. The main independent variable of interest is *CreativeShare* in the cash holdings tests. I also include both year and industry dummies in the cash holdings tests. Standard errors are adjusted for heteroskedasticity and clustered at the firm level in the empirical tests. I first provide results for the main cash holdings test in Table 3.

[Insert Table 3 here]

CreativeShare is positive and statistically significant in Table 3. There is a positive relationship between the risk-taking tendency induced by local creative culture and cash holdings. This finding is also economically important. Table 3 demonstrates that a one standard deviation increase in *CreativeShare* is associated with an approximately 0.104 standard deviation increase in *Cash*. This increase is approximately 12.5% of the sample average of *Cash*. This table provides evidence consistent with prior studies highlighting the positive relationship between risk-taking and cash holdings. My earlier results show that firms located in areas with a strong creative culture have higher levels of risk exposure. Table 3 shows that firms accumulate more cash when they are located in areas with a strong creative culture. These risk-taking firms hold larger cash balances as a buffer against the negative consequences of this higher risk-taking tendency consistent with prior studies (e.g. Acharya, Davydenko, and Strebulaev (2012), Liu and Mauer (2011)). Larger cash balances for higher risk-taking firms are also consistent with the precautionary motive (Bates et al. (2009), Acharya, Davydenko, and Strebulaev (2012), and Liu and Mauer (2011)). My findings highlight the role of local factors for corporate policies by presenting the impact of local creative culture on cash holdings.

3.3. Main Dividend Policy Tests

Risk-taking is one of the important factors in shaping dividend demand and it has attracted attention in the literature. Previous studies suggest that investors prefer dividends over capital gains because dividends investors see dividends as safe current income compared to future risky capital gains (Gordon (1963) and Lintner (1962)). Consistent with this literature, I investigate

whether local risk-taking behavior induced by creative culture affect geographically varying dividend demand and corporate dividend policies. Moreover, Baker and Wurgler (2004a) and (2004b) suggest that investors consider dividends as more valuable compared to capital gains and firms cater to investors' dividend preferences through their corporate dividend policies. Becker et al. (2011) and Ucar (2016a) show that firms cater to dividend preferences by providing dividend payouts in line with local dividend clienteles. Consistent with this literature, my paper investigates whether creative culture and creative risk-taking affect dividend demand and lead to a dividend clientele effect.

I employ an empirical model similar to the one used in the related literature (i.e. Becker et al. (2011) and Ucar (2016a)). The main control variables include *NIta*, *CHtoTA*, *Q*, *LTDtoTA*, *Volatility*, *Lagged return*, *Log of MV*, *Log of Assets*, *Asset growth*, and also firm age indicator variables. The main tests also include industry and year fixed effects. Standard errors are adjusted for heteroskedasticity and clustered at the firm level in the empirical tests. The dependent variables in Table 4 are *Dividend payer*, *Dividend yield*, and *Dividend initiation* for Columns 1, 2, and 3, respectively. The main variable of interest is *CreativeShare*. I use a Logit regression model for *Dividend payer* and *Dividend initiation* tests whereas an OLS model for *Dividend yield* test in this table as well as the following tables.

[Insert Table 4 here]

CreativeShare is negative and statistically significant in all three columns. This result demonstrates a negative relationship between dividend payout variables and local risk-taking. Firms located in areas with a pronounced creative culture are less likely to be dividend payers and to initiate dividends, and they have lower levels of dividend yields. Coefficients do not directly

reveal economic significance of coefficients in Logit regressions. In order to shed light on economic importance of variables in Logit regressions, it is better to examine change in odds for the dependent variable by using a one standard deviation change in a given independent variable. I highlight this way in interpreting economic values of coefficients in dividend policy tests. Column 1 of Table 4 suggests that a one standard deviation increase in creative share in a firm's county is associated with a 21.2% less likelihood in the odds that a firm pays dividends compared to another firm located in a county with lower creative share. Similarly, Column 3 indicates that a one standard deviation increase in creative share in a firm's county is associated with 12.2% less likelihood in the odds that a firm initiates dividend. These findings demonstrate economic significance of the impact local creative culture on dividend demand and corporate dividend payout. Column 2 also presents a similar result. Column 2 suggests that a one standard deviation increase in local risk-taking behavior as measured by local creative culture leads to an almost 0.064 standard deviation decrease in dividend yield. Table 4 presents empirical findings consistent with risk-taking effect associated with creativity and creative culture highlighted in previous social science studies. Table 4 also shows evidence in line with the relationship between risk aversion and investors' dividend preferences suggested in the related dividend literature. Prior studies suggest that dividends are considered as safe income compared to capital gains and higher (lower) level of risk-taking is associated with lower(higher) level of dividend demand and payout. The empirical findings also are consistent with dividend clientele argument which suggests a variation in dividend demand associated with differences in investor characteristics. Overall, this table indicates that risk-taking characteristics induced by local creative culture and environment plays an important role for investors' demand for dividends and payout policies of local firms that cater to this demand.

3.4. Robustness Checks

3.4.1. Robustness Checks for Corporate Risk-taking and Policy Tests

In this section, I focus on additional tests and robustness checks for the corporate risk-taking behavior and policies. In first three columns of Table 5, I investigate whether the impact of creative culture and risk-taking on corporate risk-taking and policies is robust to local factors. In Column 1, the impact of local risk-taking associated with local creative culture remains robust after controlling for local population, education, income as well as local religious and demographic factors. *CreativeShare* still holds after controlling for state fixed effects. Column 3 also examines whether state effects and local factors affect the main results and shows that the role of creative culture on corporate risk-taking and decisions remain robust. It demonstrates a positive relation between *CreativeShare* and corporate risk-taking after controlling for local factors and state fixed effects. This result holds for all the tests—*StdRet*, *StdROA*, *Inv*, and *Growth*—of the corporate risk-taking and policies analysis in all the panels of Table 5. This finding provides additional support to the earlier results and suggests that local creative culture, rather than local controls, is the main driver of corporate risk-taking effects

[Insert Table 5 here]

Some areas can be hosts for very strong and famous creative cultures. One therefore expects to see a strong local risk-taking culture associated the existence of a well-known creative culture within a given area. In the next column, I revisit my main results after excluding areas with a strong well-known local creative environment in order to examine whether the local risk-taking associated with creative culture also affects firms located in other areas. I specifically exclude

firms located in the Silicon Valley area and re-run my main regressions in Column 4; Silicon Valley is famous for its strong creative culture and firms with innovative products. Excluding this area helps to more clearly see the robustness of the local risk-taking effect induced by creative culture on corporate decisions. Column 4 demonstrates that creative share remains robust for all corporate risk-taking and decision variables after excluding areas with a strong well-known local creative culture. This result supports earlier findings and demonstrates the strength of the local-risk taking effect by providing evidence suggesting that local creative culture affects corporate risk-taking behavior.

I use firm location information provided by COMPUSTAT following previous studies. However, one can suggest that COMPUSTAT only provides the most recent firm location and does not consider corporate relocations. Although prior literature shows that there are a small number of headquarters relocations (i.e. Pirinsky and Wang (2006)), one can suggest that headquarters moves can affect earlier results. In Column 5, I use an alternative firm location dataset in order to investigate whether these earlier findings are driven by COMPUSTAT location information. I use firm location information from the Compact Disclosure as well as Bill McDonald's website⁷ and re-examine my main tests. Column 5 shows that these results are similar to earlier ones when I use an alternative firm location dataset. Similar to the earlier findings, all the corporate policy test variables—*StdRet*, *StdROA*, *Inv*, and *Growth*—have similar findings in the last two columns. Overall, this table demonstrates that my empirical results are robust to any corporate relocation cases and remain robust after using an alternative firm location dataset. This provides additional support to the earlier findings.

⁷ http://www3.nd.edu/~mcdonald/10-K_Headers/10-K_Headers.html.

3.4.2. Robustness Checks for Cash Holding Tests

Similar to the previous analysis, now I investigate whether my cash policy results remain robust after robustness checks in Table 6. I include the local factors from my earlier corporate policy tests and state fixed-effects in Columns 1-3 and re-examine the cash policy main tests. *CreativeShare* has a positive sign and the impact of the local risk-taking associated with local creative culture remains robust after controlling for local factors and state variables. One can expect to see a strong local creative culture effect on cash holdings for firms located in these areas. I accordingly re-examine my cash holdings tests after excluding firm located in areas with a notable strong creative culture in Column 4 as in the previous corporate policy tests. *CreativeShare* has a statistically significant and positive coefficient value as in the main results so that creative culture remains robust after excluding areas with a strong well-known local creative culture. Local creative culture has an important role in determining corporate risk-taking behavior not only in locations with a very well-known creative culture, but also in less famous creative areas. This finding supports the notion that local creative culture affects corporate risk-taking behavior and therefore corporate policies through its influence on corporate culture.

In the last column, I use an alternative firm location dataset and re-examine my results. In order to investigate whether my cash policy results are robust to alternative firm location information. I use the alternative firm location information dataset that is used in the previous corporate policy tests and re-run the cash holdings regressions. Column 5 presents the main cash holdings test with the alternative firm location data, demonstrating that the results are robust to alternative firm location data. These robustness checks show that local creative culture is the main driver of the results reported in the main cash holding tests. This table also provides supporting

evidence for my earlier findings and highlights the strength of the effect of the local-risk taking tendency induced by creative culture on corporate cash holdings.

I provide a series of robustness checks in Table 6 to shed additional light on the effect of risk-taking as induced by creative culture on cash policy. These tests help determine whether local creative culture is the main driver of the findings presented in the main cash holding tests. Previous studies suggest that corporate governance can have an important impact on cash holdings (e.g. Dittmar and Mahrt-Smith (2007), and Liu and Mauer (2011)). In unreported tests, I include the G-index, the Gompers, Ishii and Metrick governance index, and re-run the main cash holdings tests in order to evaluate whether or not my cash holdings results are robust to this impact. I find similar results in these unreported tests. *CreativeShare* is positive and statistically significant, showing that the local creative culture effect is robust to the corporate governance impact.⁸

3.4.3. Robustness Checks for Dividend Policy Tests

In this section, I examine robustness checks for my dividend policy tests in Table 7 similar to the robustness tests used in the previous sections. Columns 1-3 investigate whether local factors or state variables drive the results reported in the main dividend policy tests. *CreativeShare* has a negative sign consistent with the earlier main dividend test results. These columns provide additional support to the earlier findings and demonstrates that the effect of local-risk-takings, as measured by local creative culture, is robust to local factors and state effects and it is the main driver of the results shown in the earlier findings.

[Insert Table 7 here]

⁸ I find results similar to the ones reported in the paper in these unreported tests. These results can be provided on request.

In order to shed more light on my previous findings and demonstrate that local risk-taking induced by creative culture is effective on not only some areas with a well-known creative culture but also on all the other areas, I exclude firms located in areas with a famous creative culture and repeat the main regressions in Column 4. By doing so helps to investigate extend of the local risk-taking effect. Column 4 results in Panels A-C demonstrate that local risk-taking effect on dividend payout holds not only for the areas with a well-known and strong creative culture but also the other areas. This finding provides additional supporting evidence and highlights the strength of local risk-taking propensity induced by creative culture on dividend demand and corporate payout policies of local firms.

The previous tests use firm location information provided by COMPUSTAT. In order to show whether my findings are driven by COMPUSTAT firm location information or not, I use an alternative firm location dataset similar to the one used in the previous tables and re-examine my dividend payout tests. Column 5 presents a negative and statistically significant coefficient for *CreativeShare* for all the three dividend payout variables after using alternative firm location information. This table provides additional supporting evidence to my earlier findings and highlights the role of local-risk-taking induced by local creative culture on investors' dividend demands and corporate dividend policies of local firms that cater to these demands. Overall, all the robustness tests for the different corporate policy tests in this section show that local creative culture has an influence on local investor base and corporate cultures. Firms located in areas with a strong creative culture have higher levels of corporate risk-taking consistent with creative risk-taking. Firms also have corporate policies like payout policy in line with dividend demand induced by local risk-taking tendency shaped by creative culture and innovativeness.

I provide a series of robustness tests in order to highlight the local-risk taking effect induced by creative culture on geographically varying dividend demand and corporate dividend policies. Some previous studies employ a different set of variables in examining some dividend payout variables. In unreported tests, I repeat my main tests for *Dividend payer* and *Dividend yield* after controlling an alternative set of control variables⁹ used in prior literature (i.e. Fama and French (2001), Grullon et al. (2011), and Ucar (2016a)). These tests present a negative and statistically significant creative share coefficient for dividend policy tests as consistent with my earlier results.¹⁰ This finding provides additional support to my earlier findings. Overall, this section suggests that local risk-taking propensity by creative culture and creative risk-taking tendency is the main driver of my dividend payout results indicated in the previous sections.

3.5. Identification Tests

3.5.1. Matched Sample Analysis and Instrumental Variable Approach: Corporate risk-taking and Corporate Policies

In this section I address endogeneity concerns by employing a matched sample analysis and an instrumental variable (IV) approach and re-examine my findings. One might argue that there is a potential endogeneity concern suggesting that some omitted variables can affect both creative culture and corporate decisions. In order to shed more light on my results, first, I use a matched sample analysis and re-examine the impact of the local risk-taking induced by creative culture on corporate risk-taking behavior and policies. I identify sample firms located in areas with different local creative cultures but very similar firm characteristics, and then analyze the role of local

⁹ Specifically, I control for market-to-book ratio, ROA, sales growth, and firm size, by following the definitions used by Fama and French (2001) and Grullon et al. (2011).

¹⁰ I find results similar to the ones reported in the paper in these unreported tests. These results can be provided on request.

creative culture on corporate risk-taking. The matched sample tests present pair-wise comparisons between firms that are headquartered in counties with a greater creative share and a matched sample of firms with similar firm characteristics located in counties with a lower creative share.

I divide the sample into five sections based on *CreativeShare*, and identify the sample firms in the highest quintile of *CreativeShare* as those located in areas with a stronger creative culture (*High CreativeShare*), and the lowest quintile of *CreativeShare* as those firms located in areas with a weaker creative culture (*Low CreativeShare*). I determine a firm-year observation with the same year, industry, and *Loss* variables from the *Low CreativeShare* subsample for each firm-year observation of the *High CreativeShare* subsample. I use a matching process based on the firm characteristics including *Size*, *Leverage*, and *Liquidity*. This sample analysis matches every firm-year observation of the *High CreativeShare* subsample with a firm-year observation from the *Low CreativeShare* subsample from the same year, industry, and *Loss*, as well as the closest matched values of *Size*, *Leverage*, and *Liquidity*. I next examine the differences in corporate risk-taking and policy variables between the *High CreativeShare* subsample firms and their matches from the *Low CreativeShare* subsample firms in Panel A of Table 8.

[Insert Table 8 here]

Panel A shows that mean values for *StdRet*, *StdROA*, *Inv*, *RD*, and *Growth* as well as the differences in these variables between the *High CreativeShare* subsample firms and their matches from the *Low CreativeShare* subsample firms. The difference of *StdRet* between *High CreativeShare* area firms and the matched sample of *Low CreativeShare* firms is positive and statistically significant, demonstrating higher stock return volatility for firms located in areas with a strong creative culture consistent with my earlier findings. Similarly, Panel A reports a positive

and statistically significant difference for *StdROA*, suggesting a higher volatility of ROA for firms located in high creative share areas. These results provide additional support to earlier findings and show greater risk exposure for firms headquartered in areas with a strong local creative culture that encourages risk-taking. Moreover, differences in *Inv* and *Growth* are positive and statistically significant as expected. These findings suggest that firms located in areas with a strong creative culture both invest more and have a greater growth, consistent with higher-risk-taking behavior. This result provides additional evidence for the positive impact of local creative culture and the corporate-risk-taking behavior encouraged by local creative culture. Overall, this table supports my earlier findings and demonstrates that my empirical findings remains robust after using a matched sample analysis.

Next, I take a further step to address the potential endogeneity problem. I use a two-stage least squares (2SLS) analysis with instrument variable (IV) approach. I use *CreativeShare_{t-10}*, the creative share lagged by ten years, as the first IV for the *CreativeShare*. The creative share lagged by ten years can be considered correlated with the current creative share. On the other hand, one expects that the creative share lagged by ten years is not correlated with any omitted variables in the current year settings. Furthermore, using a local variable lagged by ten years can be considered a good IV candidate considering the point that Hilary and Hui (2009) use local religion lagged by three years as an IV for current local religion in their settings. The first stage of 2SLS uses *CreativeShare_{t-10}* as an IV in order to predict *CreativeShare* before running the main tests for corporate decision and risk-taking variables during the second stage. Panel B reports the second stage results.

Panel B shows that all the dependent variables used in the main tests have statistically significant and positive coefficients consistent with the earlier findings after using a 2SLS analysis

with IV approach. The results remain robust after addressing for endogeneity concerns. Along with the matched sample analysis in the earlier section, this section provides more evidence on the positive effect of local risk-taking associated with local creative culture on corporate risk-taking behavior and corporate policies.

CreativeShare shows fraction of people from the creative class in a given county and measures local creative culture. One can suggest that there can be an omitted variable which affects both creative culture and corporate decisions and this may raise endogeneity concerns. In Panel C, I use another IV for *CreativeShare* in order to further address endogeneity concerns and shed more light on the impact of creative culture on corporate decisions. In particular, I use *ArtShare*, fraction of people employed in the arts for a given county, as the second IV in Panel C. People who are employed in the arts include “art and design workers, painters, musician and composers, sculptors, photographers and etc.”¹¹. *ArtShare* is a subset of *CreativeShare*—creative class—which includes the people who work in the arts. USDA ERS reports that creative class dataset identifies occupations that involve a high level of "thinking creatively" and this skill element is defined as "developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions". The USDA ERS *CreativeShare*—creative class—definition includes occupations such as architecture, engineering, arts, design, entertainment, sports, media, computer and mathematical science, advertising, top executives, physical scientists, social scientists, etc. Artists or people from art occupations are considered as creative people and risk-takers¹² as the other occupations in the creative class—*CreativeShare*. Therefore, *ArtsShare* and *CreativeShare* are correlated in terms of creativity and risk-taking. Although one might suggest

¹¹ <https://www.ers.usda.gov/data-products/creative-class-county-codes/> and <https://www.ers.usda.gov/data-products/creative-class-county-codes/documentation.aspx>

¹² E.g. Poorsoltan (2012), Tyagi et al. (2017), and Fillis(2000).

that other occupations that constitute creative culture—*CreativeShare*— such as architecture, engineering, media, computer and mathematical science, advertising and etc. might be considered as related to corporate decisions or factors affecting corporate decisions, this point cannot be said for people employed in the arts. *Artshare*, which represents local fraction of artists or people from art occupations, is directly related to local creative culture while *Artshare* cannot be considered as a factor related to local corporate decisions or a factor influences local corporate policies. Therefore, *ArtShare* can be considered as a good IV because it is correlated with creativity and creative-risk taking but not correlated with any potential omitted variables related to corporate decisions.

Panel C presents the second 2SL model that uses *ArtShare* as IV. Panel C demonstrates that all the dependent variables used in the main tests have positive coefficients consistent with the earlier results. Except the *StdRet* test, all the other tests have a statistically significant creative culture effect. Although it has a statistically insignificant creative culture coefficient, creative culture has a positive coefficient in the *StdRet* test in the first column. Overall, along with the previous tests of this table, this section provides more evidence on addressing endogeneity concerns. These identification tests provide additional support to the findings showing that firms located in areas with a strong creative culture encouraging risk-taking behavior have higher degrees of risk exposure, invest more, and have higher levels of growth. These findings highlight the positive relationship between local creative risk-taking and corporate risk-taking.

3.5.2. Matched Sample Analysis and Instrumental Variable Approach: Cash Holdings

There might be some omitted variables that lead to endogeneity and one might argue that there is a potential endogeneity problem that can influence cash holdings as it can affect previous

corporate decisions. I provide some tests in order to address endogeneity concerns similar to the earlier identification tests. Specifically, I present a matched sample analysis and a 2SLS analysis with instrumental variable approach for cash holdings analysis in Table 9.

[Insert Table 9 here]

In Panel A, I use a matched sample analysis and investigate the impact of local risk-taking induced by creative culture on cash policies. The matched sample tests show pair-wise comparisons between firms located in areas with a greater creative share and a matched sample of firms with similar firm characteristics located in counties with a lower creative share. Determination of low and high creative share area firms is as in the previous matched sample tests. I follow a similar matching process and determine a firm-year observation with the same year, industry, and *DivPayout* variable from the *Low CreativeShare* subsample for each firm-year observation of the *High CreativeShare* subsample. The matched sample analysis matches every firm-year observation of the *High CreativeShare* subsample with a firm-year observation from the *Low CreativeShare* subsample from the same year, industry and *DivPayout*, as well as the closest matched values of *LogofAssets*, *MB*, *CFtoAssets*, *NWCtoAssets*, *CapextoAssets*, *LevtoAssets*, *RDtoSales*, *AcqtoAssets*, and *IndustrySigma*. After this step the matched sample analysis examines differences in cash holdings as measured by the *Cash* variable between the *High CreativeShare* subsample firms and their matches from the *Low CreativeShare* subsample firms in Panel A of Table 9. The difference in *Cash* between *High CreativeShare* area firms and the matched *Low CreativeShare* area firms is 0.119 which is positive and statistically significant. This result indicates that firms located in areas with a pronounced creative culture hold more cash consistent with strong risk-taking behavior induced by the local creative culture and the precautionary motive

as suggested by prior literature. The main cash holdings findings remain robust after using a matched sample analysis, providing additional support for the positive impact of local creative culture corporate cash policy.

Now, I more directly address endogeneity concerns and provide a two-stage least squares (2SLS) analysis using an instrument variable (IV) approach. Similar to the previous identification tests, I use $CreativeShare_{t-10}$ as an IV for the $CreativeShare$ in Panel B and $ArtShare$ as an IV for $CreativeShare$ in Panel C. Panels B and C report the second stage of these IV analyses. Both panels show a statistically significant and positive coefficient for the local creative culture and risk-taking effect consistent with my earlier cash policy tests. This finding demonstrates that my corporate cash holdings results remain robust after addressing endogeneity concerns with an IV approach. Table 9 provides additional support for the impact of the risk-taking tendency induced by local creative culture on cash policies by providing both matched sample analysis and IV approach. These identification tests present additional evidence on that the local creative risk-taking tendency leads firms to have more risk exposure and therefore accumulate more cash consistent with the precautionary motive, suggesting higher cash balances against the negative consequences of higher risk exposure.

3.5.3. Matched Sample Analysis and Instrumental Variable Approach: Dividend Policy

As discussed earlier, there might be some omitted variables that affect creative culture and corporate policies like dividend payout, and this point can lead to potential endogeneity problems. Therefore, I use a matched sample analysis and an IV approach to address endogeneity concerns consistent with the earlier identification tests. First, I use a matched sample analysis similar to the one used in Ucar (2016a) and my earlier matched sample analyses and re-examine dividend payout

variables. I determine low and high creative share area firms as in the previous matched sample tests. Next, I identify a firm-year observation with the same year, industry, and age group from *Low CreativeShare* area firms for each firm-year observation from *High CreativeShare* area firms. I use a matching process based on the firm characteristics variables used in the main dividend payout tests including total assets, market value, net income, cash, q value, debt, volatility, and lagged return. In particular, I match every firm-year observation of *High CreativeShare* area firms with a firm-year observation from a *Low CreativeShare* area firm from the same year, industry, and age group, with the closest matched values for asset size, market value, net income to debt, cash to total assets, q, long-term debt to total assets, volatility, and lagged return in Panel A of Table 10. The findings are consistent with the earlier findings. The difference in *Dividend payer* between *High CreativeShare* area firms and *Low CreativeShare* area firms is negative and statistically significant. Similarly, the differences in *Dividend yield* and *Dividend initiation* are negative and statistically significant. The matched sample analysis shows that firms located in areas with a strong creative culture are less likely to pay and initiate dividends and have less dividend yields compared to firms located in areas with a weaker creative culture consistent with local risk-taking tendency induced by creative culture.

[Insert Table 10 here]

In order to shed more light on the local-risk-taking effect induced by creative culture and to take a further step in addressing endogeneity concerns, now, I use an instrumental variable (IV) approach consistent with the earlier identification tests and re-examine dividend payout variables. In particular, I re-examine the earlier Logit regression analyses of *Dividend payer* and *Dividend initiation* by using an IVProbit analysis with an IV approach. I repeat the earlier OLS regression

analysis of *Dividend yield* by using a 2SLS analysis with an IV approach in Panels B and C. I report coefficients of the instrumented creative share variable from the second stages of these IV analyses. Similar to the previous identification tests, I use *CreativeShare*_{*t-10*} as an IV for the *CreativeShare* in Panel B and *ArtShare* as an IV for *CreativeShare* in Panel C

After using IVs, *CreativeShare* has a coefficient as expected and it is consistent with the earlier results. *CreativeShare* is statistically significant for *Dividend payer* and *Dividend yield* tests. This provides additional support to the earlier findings and highlights the role of local risk-taking induced by creative culture for dividend demand and dividend policy. *CreativeShare* is not statistically significant for *Dividend initiation* although it has a negative sign as expected. This result might come from a smaller sample of observations used in the dividend initiation tests. Overall, these panels, along with Panel A, support to the earlier findings and show that local creative culture and creative risk-taking have a negative effect on dividend demand and corporate dividend payout after addressing for endogeneity concerns.

3.6. Locality of Creative Culture Effect

3.6.1. Corporate Risk-taking and Corporate Policies for Local Firms vs. Geographically Dispersed Firms

This paper shows how local culture affects both corporate risk-taking and corporate policies through risk-taking behavior induced by local creative culture. One therefore expects that these effects should be more pronounced for local firms with greater interaction with their firm locations compared to geographically dispersed firms that have operations in many locations. Garcia and Norli (2012) extract information regarding number of states where a firm has operations from 10-Ks for US firms between 1994 and 2008 and analyze differences in stock returns between local

and geographically dispersed firms. I use the Garcia and Norli's (2012) local and geographically dispersed firm definitions and match their data dataset¹³ with my sample. Next, I examine differences in the impact of creative culture on corporate risk-taking and policies between local and geographically dispersed firms in Table 11.

[Insert Table 11 here]

In particular, I define an indicator variable for local firms, *LocalFirm*, based on Garcia and Norli (2012) in Table 11. This variable shows firms with more localized operations compared to geographically dispersed firms with operations in many states. I add *LocalFirm* as well as *CreativeShare*LocalFirm*, the interaction term between *CreativeShare* and *LocalFirm*, in my corporate risk-taking and policies tests in order to see locality of creative culture effect in Table 11. The main variable of interest is *CreativeShare*LocalFirm* in these tests. In all the columns of this table, *CreativeShare*LocalFirm* has a positive sign as expected. It is statistically significant in all tests, except *StdROA* test, suggesting a stronger creative culture effect for local firms. This table provides evidence for locality of risk-taking behavior induced by local creative culture and highlights the local component of corporate risk-taking. It suggests that creative culture effect emerges through local channel. Local creative culture and creative-risk taking affects corporate decisions and risk-taking through their influence on corporate culture and interaction between corporate and local cultures.

3.6.2. Corporate Cash Holdings for Local Firms vs. Geographically Dispersed Firms

¹³ The dataset is provided by Garcia's website: <http://www.unc.edu/~garcia/research.htm>.

In order to provide additional evidence on the notion that the effect emerges through local-risk-taking channel induced by local creative culture and highlight the local component of corporate cash policy, I examine the effect for local vs. geographically dispersed firms. If the effect comes from local creative risk-taking then one expects this effect to be stronger for local firms compared to geographically dispersed firms with operations in many locations. Consistent with the previous table, I include *LocalFirm* and the interaction term between *CreativeShare* and *LocalFirm*, $CreativeShare * LocalFirm$ and re-run my cash holdings test for local versus geographically dispersed firms in Table 12. As expected the interaction term has a statistically significant positive coefficient. There is a stronger creative culture effect for local firms with more localized businesses and operations compared to geographically dispersed firm. This finding provides additional evidence on the impact of creative culture on cash holdings and highlights the importance of the local component of corporate risk-taking induced by creative culture. Local risk-taking tendency induced by creative culture has a stronger influence on local firms, which are expected to have stronger interactions with their locations, compared to geographically dispersed firms.

[Insert Table 12 here]

3.6.3. Dividend Payout for Local Firms vs. Geographically Dispersed Firms

Similar to the previous analyses, I investigate the local component of creative culture on dividend payout and take a closer look at the role of creative share for local firms. Consistent with the previous tests, I include *LocalFirm* and the interaction term, $CreativeShare * LocalFirm$ in Table 13 and re-examine my dividend payout tests for local compared to geographically dispersed firms. Table 13 presents coefficient signs and magnitudes as expected for

*CreativeShare*LocalFirm* in all dividend payout variables. *CreativeShare*LocalFirm* is negative consistent with the conjecture of stronger creative culture effect for local firms. However, it is not statistically significant. This result might come from small sample size used in the tests of this table. There is a smaller subsample of my dividend payout sample firms available for Table 13 after matching my sample with local vs. geographically dispersed firm information. This can be the reason for statistical insignificance in this table. However, as stated earlier, coefficient signs are as expected and this table supports my earlier findings, providing some evidence on the impact of local creative risk-taking on dividends. Overall, all the tables in this section highlight local component of the impact of creative culture on corporate decisions by showing local risk-taking propensity shaped by creative culture has a more pronounced effect on local firms compared to geographically dispersed firms. This section provides support to the notion that the creative culture effect emerges through local-risk-taking channel induced by creative culture. These results suggest that the creative culture effect comes through the influence of local culture on corporate culture.

[Insert Table 13 here]

4. Conclusion

I use a novel measure of local risk-taking tendency and examine the role of local risk-taking characteristics on corporate outcomes. I investigate the impact of risk-taking behavior associated with local creative culture on corporate decisions. Previous studies from social science literature suggest that creativity is associated with higher degrees of risk-taking and that creative people are risk-takers. By using the fraction of the local creative class (the fraction of people employed in occupations that require creative thinking) as a measure of local creative culture I show that firms located in areas with a strong creative culture have higher levels of risk exposure and growth, and

invest more. For example, the empirical findings show that a one standard deviation increase in creative culture—as measured by fraction of the local creative class—in a firm location is associated with an increase in ROA volatility which is almost 12.8% of the average ROA volatility of the sample. A similar increase also leads to an investment increase which is about 8% of the average sample investment level. These findings are consistent with the risk-taking behavior induced by creativity and creative culture. I also show that firms headquartered in counties with a pronounced creative culture accumulate more cash. A one standard deviation increase in creative culture in a firm location suggests an increase in cash holdings which is approximately 12.5% of the average cash holdings in the sample. This finding is consistent with recent studies highlighting a positive relationship between risk and cash holdings.

Moreover, I demonstrate that firms located in areas with a stronger creative culture are less likely to become a dividend payer and to initiate dividends. A one standard deviation increase in creative culture indicate a 21.2% (12.2%) less likelihood in the odds that firm becomes a dividend payer (initiates dividends.) Firms located in areas with a more pronounced creative culture also have lower dividend yields. These empirical findings are consistent with higher risk-taking behavior associated with creative culture and innovativeness. These results are also in line with previous studies that highlight the role of risk aversion for dividend demand and suggest the notion that investors consider dividends safe and current income compared to risky future capital gains (e.g. Gordon (1963) and Lintner (1962)).

My results remain robust after addressing endogeneity concerns after using an IV approach and a matched sample analysis. These empirical results are also robust to other local factors or locations effects, and furthermore hold after using an alternative firm location dataset. My empirical results are more pronounced for local than the results for geographically dispersed firms.

This point highlights the locality of the risk-taking effect induced by creative culture. Moreover, the local creative risk-taking effect also remains robust after excluding areas with a well-known creative culture, suggesting that the local creative culture effect is observed in not only the areas with a very pronounced creative culture but also in the other areas.

This paper uses a new measure of risk-taking tendency, demonstrating how the local risk-taking tendency induced by local culture influences corporate culture and corporate risk-taking behavior. I show a positive relationship between corporate risk exposure, investment, and the growth of local creative culture consistent with creative risk-taking. I also demonstrate the role of local factors on corporate cash policies by providing evidence for the positive relationship between corporate cash holdings and local creative culture. This paper introduces a new local factor—creative culture and creative risk-taking—to dividend literature and shows geographically varying dividend clientele effect and corporate dividend payout policy consistent with risk-taking tendency associated with creative culture and innovativeness. This finding highlights the notion that firms cater to investors' dividend preferences determined by local risk-taking characteristics.

REFERENCES

- Acharya, V., Davydenko, S.A., and Strebulaev, I.A., 2012, “Cash Holdings and Credit Risk”, *Review of Financial Studies* 25, 3572-3609.
- Adams, K., 2005, “The Sources of Innovation and Creativity”, National Center on Education and Economy.
- Amabile, T. M., 1983, “The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology* 45, 357-376.
- Baker, M. and J. Wurgler, 2004a, “A Catering Theory of Dividends,” *Journal of Finance* 59, 1125–1165.
- Baker, M. and J. Wurgler, 2004b, “Appearing and Disappearing Dividends: The Link to Catering Incentives,” *Journal of Financial Economics* 73, 271–288.
- Bates, T.W., Kahle, K.M., and Stulz, R.M., 2009, “Why Do U.S. Firms Hold So Much More Cash than They Used To?”, *Journal of Finance* 64, 1985-2021.
- Bebchuk, L., Cohen, A., and Ferrell, A., 2009, “What matters in corporate governance”, *Review of Financial Studies* 22, 783–827.
- Becker, B., Z. Ivkovic, and S. Weisbenner, 2011, “Local Dividend Clienteles,” *Journal of Finance* 66, 655–684.
- Dewett, T., 2004. “Employee creativity and the role of risk”, *European Journal of Innovation Management*, 7(4), 257–266.
- Dewett, T., 2006, “Exploring the role of risk in employee creativity”. *The Journal of Creative Behavior*, 40(1), 27–45.
- Dewett, T., 2007, “Linking intrinsic motivation, risk-taking, and employee creativity in an R&D environment” *R&D Management* 37(3), 197–208.
- Dittmar, A., and Mahrt-Smith, J., 2007, “Corporate Governance and the Value of Cash Holdings”, *Journal of Financial Economics* 83, 599–634.
- Fama, E.F. and K.R. French, 1997, “Industry Costs of Equity,” *Journal of Financial Economics* 43, 153–193.
- Fama, E.F. and K.R. French, 2001, “Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?” *Journal of Financial Economics* 60, 3–43.
- Fidler, L. A., and Johnson, J. D. ,1984, “Communication and innovation implementation”, *Academy of Management Review* 9, 704-711.

- Fillis, I., 2000, "Being creative at the marketing/entrepreneurship interface: Lessons from the art industry", *Journal of Research in Marketing and Entrepreneurship* 2, 125-137.
- Florida, R., 2002a, "Bohemia and economic geography" *Journal of Economic Geography* 2, 55–71.
- Florida, R., 2002b, "The Rise of the Creative Class: And How it's Transforming Work, Leisure, Community, and Everyday Life." New York: Basic Books
- Florida, R., 2005, "Cities and the Creative Class". New York: Routledge
- Garcia, D., and Norli, O., 2012, "Geographic Dispersion and Stock Returns, *Journal of Financial Economics* 106, 547-565.
- Gardner, H., 1994, "Creating Minds: An Anatomy of Creativity Seen Through the Lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi" Basic Books, Reprint edition.
- Gompers, P., Ishii, J., and Metrick, A., 2003, "Corporate Governance and Equity Prices", *Quarterly Journal of Economics* 118, 107–155.
- Gordon, M.J., 1963, "Optimal Investment and Financing Policy," *Journal of Finance* 18, 264–272.
- Graham, J.R. and A. Kumar, 2006, "Do Dividend Clienteles Exist? Evidence on Dividend Preferences of Retail Investors," *Journal of Finance* 59, 1125–1165.
- Grullon, G., P. Bradley, S. Underwood, and J. Weston, 2011, "Has the Propensity to Pay out Declined?" *Journal of Financial and Quantitative Analysis* 46, 1–24.
- Harford, J., Klasa, S., and Maxwell, W.F., 2014, "Refinancing Risk and Cash Holdings", *Journal of Finance* 69, 975-1012.
- Heilman, K.M., 2016, "Possible Mechanisms of Creativity", *Archives of Clinical Neuropsychology* 31, 285-296.
- Hilary, G. and K.W. Hui, 2009, "Does Religion Matter in Corporate Decision Making in America?" *Journal of Financial Economics* 93, 455–473.
- Hong, H., J.D. Kubik, and J.C. Stein, 2008, "The Only Game in Town: Stock-Price Consequences of Local Bias," *Journal of Financial Economics* 90, 20–37.
- Hutton, I., Jiang, D., and Kumar, A., 2014, "Corporate Policies of Republican Managers", *Journal of Quantitative Analysis* 49, 1279-1310.

- Ivkovic, Z. and S.J. Weisbenner, 2005, "Local Does as Local Is: Information Content of the Geography of Individual Investors' Common Stock Investments," *Journal of Finance* 60, 267–306.
- Jalan, A., and Kleiner, B. H., 1995, "New developments in developing creativity", *Journal of Managerial Psychology* 10, 20-23.
- Kumar, A., J.K. Page, and O.G. Spalt, 2011, "Religious Beliefs, Gambling Attitudes, and Financial Market Outcomes," *Journal of Financial Economics* 102, 671–708.
- Liu, Y., and Mauer, D.C., 2011, "Corporate Cash Holdings and CEO Compensation Incentives", *Journal of Financial Economics* 102, 183–198.
- Lintner, J., 1962, "Dividends, Earnings, Leverage, Stock Prices and Supply of Capital to Corporations," *Review of Economics and Statistics* 64, 243–269.
- McGranahan, D., and Wojan, T., 2007, "Recasting the Creative Class to Examine Growth Processes in Rural and Urban Counties", *Regional Studies* 41, 197-216.
- McGranahan, D., and Wojan, T., and Lambert, D.M., 2011, "The rural growth trifecta: outdoor amenities, creative class and entrepreneurial context", *Journal of Economic Geography* 11, 529-557.
- Miller, M.H. and F. Modigliani, 1961, "Dividend Policy, Growth, and the Valuation of Shares," *Journal of Business* 34, 411–433.
- Opler, T., Pinkowitz, L., Stulz, R., and Williamson, R., 1999, "The Determinants and Implications of Cash Holdings," *Journal of Financial Economics* 52, 3–46.
- Pantzalis, C. and E. Ucar, 2014, "Religious Holidays, Investor Distraction, and Earnings Announcement Effects," *Journal of Banking & Finance* 47, 102–117.
- Pirinsky, C. and Wang, Q., 2006, "Does Corporate Headquarters Location Matter for Stock Returns?" *Journal of Finance* 61, 1991–2015.
- Poorsoltan, K., 2012, "Artists as Entrepreneurs", *International Journal of Entrepreneurship* 16, 77-94.
- Sethia, N.K. (1989), "The shaping of creativity in organizations", *Academy of Management Best Papers Proceedings, 49th Annual Meeting August 13-16, Washington, DC*, 224-8.
- Shalley, C. E., Gilson, L. L., and Blum, T. C., 2000, "Matching creativity requirements and the work environment: Effects on satisfaction and intentions to leave", *Academy of Management Journal* 43(2): 215–223.

Stulz, R. and R. Williamson, 2003, "Culture, Openness, and Finance," *Journal of Financial Economics* 70, 313–349.

Tesluk, P. E., Farr, J. L., and Klein, S. R., 1997, "Influences of Organizational Culture and Climate on Individual Creativity" *The Journal of Creative Behavior* 31, 27-41.

Tyagi V, Hanoch Y, Hall SD, Runco M, Denham SL, 2017, "The Risky Side of Creativity: Domain Specific Risk Taking in Creative Individuals", *Frontiers in Psychology* 8.

Ucar, E., 2016, "Local Culture and Dividends", *Financial Management* 45, 105-140.

Zhou, J., and George, J. M, 2001, "When job dissatisfaction leads to creativity: Encouraging the expression of voice", *Academy of Management Journal* 44(4): 682–696.

Table 1. Summary Statistics

This table presents summary statistics of the all main variables that are used in the empirical tests. Panel A reports the summary statistics of variables used in corporate risk-taking and policies tests along with the creative culture variable, *CreativeShare*. Panel B presents the summary statistics of variables used in cash holdings tests in the second part of the paper. Panel A has the following variables: *CreativeShare*, which measures the fraction of the creative class in a firm county. The creative class information is from the US Department of Agriculture Economic Research Service (ERS) website. *StdRet* is the natural logarithm of the standard deviation of the monthly stock returns for a given year. The stock return information is from CRSP. *StdROA* is the standard deviation of ROA for the years between $t-5$ and $t+5$ for a given firm year. *ROA* is calculated as IB by dividing lagged AT by using COMPUSTAT items. *Inv* is the investment in terms of tangible capital. *Inv* is calculated as dividing CAPX by lagged PPENT by using COMPUSTAT items. *RD* measures R&D and it is calculated as by dividing XRD by lagged AT by using COMPUSTAT items. *RD* is considered as zero if R&D information is missing by following previous studies. *Growth* is the natural logarithm of the ratio of the market value of equity divided by the book value of assets where the ratio is calculated as AT plus PRCC_F multiplied by CSHO minus CEQ and TXDB divided by AT by using COMPUSTAT items. *Size* is the natural logarithm of sales, which is calculated as by taking log of COMPUSTAT item SALE. Liquidity is the ratio of cash balance items to lagged tangible capital. It is calculated as by the dividing the sum of DP and IB by lagged PPENT by using COMPUSTAT items. *Leverage* is calculated as by dividing the sum of DLTT and DLC by the sum of DLTT, DLC, and CEQ by using COMPUSTAT items. *Loss* is an indicator variable which takes the value of one if ROA is negative and the value of zero otherwise. Panel B has the following variables: *Cash* is calculated as CHE divided by AT by using COMPUSTAT items. *NWCtoAssets* is the ratio of net working capital to assets. *CapextoAssets* is the ratio of the capital expenditures to assets. *AcqtoAssets* is the ratio of acquisition expenditures to assets. Panel C has the following variables: *Dividend payer* is a dummy variable that takes a value of one if the total amount of dividends is greater than zero for a given year, and zero otherwise. *Dividend yield* is the ratio of total dividends to lagged market value. *Dividend Initiation* is a dummy variable that takes a value of one if a nondividend payer firm in the previous year becomes a dividend payer in the current year, and zero if a nondividend payer firm in the previous year stays as nondividend payer firm in the current year. Total assets show total asset value in million dollars. Firm age is the time between the date that a firm is listed on the CRSP and the current year. More details about the variables used in cash holdings analysis reported in the paper.

Panel A. Summary Statistics of Corporate Risk-taking and Policies Analysis					
	Mean	25th Percentile	Median	75th Percentile	Std. Dev.
CreativeShare	0.294	0.250	0.281	0.339	0.070
StdRet	-1.970	-2.381	-1.979	-1.574	0.603
StdRoa	0.342	0.044	0.093	0.217	1.008
Inv	0.288	0.122	0.222	0.396	0.231
Growth	0.580	0.082	0.418	0.921	0.743
Size	4.639	2.986	4.764	6.412	2.583
Leverage	0.365	0.000	0.000	1.000	0.481
Liquidity	-0.969	-0.053	0.255	0.641	7.975
Loss	0.365	0.000	0.000	1.000	0.481
Panel B. Summary Statistics of Cash Holdings Analysis					
	Mean	25th Percentile	Median	75th Percentile	Std. Dev.
Cash	0.193	0.023	0.091	0.284	0.233
MB	2.935	1.115	1.565	2.613	5.407
NWCtoAssets	-0.053	-0.057	0.060	0.209	0.890
CapextoAssets	0.063	0.018	0.040	0.077	0.074
AcqtoAssets	0.021	0.000	0.000	0.003	0.060
Panel C. Summary Statistics of Dividend Policy Analysis					
	Mean	25th Percentile	Median	75th Percentile	Std. Dev.
Dividend payer	0.275	0.000	0.000	1.000	0.446
Dividend yield	0.006	0.000	0.000	0.005	0.012
Dividend initiation	0.023	0.000	0.000	0.000	0.149
Total assets (\$mil)	1,222.124	32.146	129.586	588.833	3,799.233
Age	14.332	4.441	9.422	19.641	14.475

Table 2. Creative Culture and Corporate risk-taking and Policies

This table presents the main tests for corporate risk-taking and policies. The dependent variables are *StdRet*, *StdROA*, *Inv*, *RD*, and *Growth*. *CreativeShare* measures fraction of people employed in creative class occupations in a county where a sample firm is located. The tests also include *Size*, *Liquidity*, *Loss*, and *Leverage*, which are defined in Table 1. The tests also include year and industry dummies. Intercept, year and industry dummies are not reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level. T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

	(1)	(2)	(3)	(4)
Dep. Var.	StdRet	StdROA	Inv	Growth
CreativeShare	0.369*** (6.89)	0.622*** (4.76)	0.312*** (15.61)	0.497*** (6.10)
Size	-0.089*** (-52.75)	-0.094*** (-20.18)	-0.009*** (-14.44)	-0.060*** (-20.80)
Liquidity	0.001*** (3.66)	-0.035*** (-16.39)	-0.003*** (-19.71)	-0.017*** (-25.59)
Loss	0.309*** (52.13)	0.078*** (6.36)	-0.032*** (-14.80)	-0.122*** (-15.26)
Leverage	0.092*** (12.14)	-0.073*** (-4.99)	-0.031*** (-17.60)	-0.102*** (-12.03)
Year fixed effects	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y
Observations	76,572	69,298	96,019	85,264
R-squared	0.398	0.211	0.165	0.228

Table 3. Creative Culture and Cash Holdings

This table presents the main tests for cash holdings. This table uses an empirical model similar to the one used in Bates et al. (2009). The dependent variable is *Cash*, which is the ratio of cash and marketable securities to assets and measures cash holdings. *Cash* is calculated as CHE divided by AT by using COMPUSTAT items. *CreativeShare* measures fraction of people employed in creative class occupations in a county where a sample firm is located. *LogofAssets* is the natural logarithm of assets. *MB* is the market-to-book ratio. The analysis also has the following independent variables: *CFtoAssets* is the ratio of cash flow to assets. *NWCtoAssets* is the ratio of net working capital to assets. *CapextoAssets* is the ratio of the capital expenditures to assets. *LevtoAssets* is the ratio of leverage to assets. *DivPayout* is dummy variable which takes the value of one if the firm is common dividend payer, and zero otherwise. *RDtoSales* the ratio of the R&D expenditures to sales. *AcqtoAssets* is the ratio of *IndustrySigma* measures cash flow risk and it is defined as the mean of the standard deviations of *CFtoAssets* for the prior 10 years for firms in the same industry where two digit SIC code classifications are used to define industries as in Bates et al. (2009). These independent variables are defined consistent with Bates et al. (2009) and more details are reported in the paper. All the tests include year and industry dummies. Standard errors are adjusted for heteroskedasticity and clustered at firm level. Intercept, year and industry dummies are not reported for brevity. T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Dep. Var.	Cash
CreativeShare	0.344*** (15.05)
MB	0.007*** (16.65)
LogofAssets	-0.008*** (-9.73)
CFtoAssets	0.028*** (10.76)
NWCtoAssets	-0.048*** (-12.19)
CapextoAssets	-0.296*** (-19.34)
LevtoAssets	-0.193*** (-29.99)
IndustrySigma	-0.000 (-0.26)
DivPayout	-0.043*** (-13.03)
RDtoSales	0.071*** (38.86)
AcqtoAssets	-0.328*** (-33.85)
Year fixed effects	Y
Industry fixed effects	Y
Observations	84,547
R-squared	0.384

Table 4. Creative Culture and Dividend Payout

This table reports the main tests for dividend policy. The dependent variables are *Dividend payer*, *Dividend yield*, and *Dividend initiation* for Columns 1, 2, and 3, respectively. Columns 1 and 3 have Logit regressions whereas Column 2 has OLS regression. *Dividend payer* is a dummy variable that takes a value of one if the total amount of dividends is greater than zero for a given year, and zero otherwise. *Dividend yield* is the ratio of total dividends to lagged market value. *Dividend Initiation* is a dummy variable that takes a value of one if a nondividend payer firm in the previous year becomes a dividend payer in the current year, and zero if a nondividend payer firm in the previous year stays as nondividend payer firm in the current year. *CreativeShare* measures the fraction of the creative class in a firm county. This table uses an empirical setting, as well dependent variables and main control variables similar to the ones used in the related literature (i.e. Becker et al. (2011)). This table has the following main controls: *NIttoTA* is defined as the net income divided by total assets for a given year. *CHtoTA* is the cash divided by total assets for a given year. *Q* is defined as the sum of the market value of equity and the book value of liabilities divided by total assets for a given year. *LTDtoTA* is defined as the long-term debt divided by total assets for a given year. *Log of MV* is defined as the logarithm of a firm's market value for a given year. *Log of assets* is defined as the logarithm of total assets. *Volatility* is defined as the standard deviation of monthly stock returns for the previous two-year *Lagged return* is defined as the monthly stock returns for the previous two-year period. *Asset growth* is the logarithm of the total assets growth rate calculated using both the current and previous year's figures. The tests also include the following age-group indicator variables: Age 1-5, Age 6-10, Age 11-15, and Age 16-20. Age 21 and over is the dropped category in the tests. All the tests include year and industry dummies. Intercept, year and industry dummies, along with age indicators are not reported for brevity. Other variables are not reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level. Intercept, year and industry dummies are not reported for brevity. T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Pseudo R-squared values are reported for *Dividend payer* and *Dividend initiation* tests.

	(1)	(2)	(3)
Dep. Var.	Dividend payer	Dividend yield	Dividend initiation
CreativeShare	-3.418*** (-6.47)	-0.011*** (-6.04)	-1.891*** (-3.19)
NIttoTA	3.894*** (14.57)	-0.001*** (-4.26)	4.062*** (6.41)
CHtoTA	-0.912*** (-4.24)	0.000 (0.61)	0.283 (1.40)
Q	-0.163*** (-4.10)	-0.000*** (-8.22)	-0.153*** (-3.65)
LTDtoTA	-1.004*** (-5.57)	-0.004*** (-8.36)	-0.380* (-1.75)
Volatility	-16.507*** (-24.89)	-0.020*** (-18.98)	-4.609*** (-5.80)
Lagged Return	-0.005 (-0.20)	0.000 (0.70)	0.187*** (6.33)
Log of MV	0.394*** (7.08)	0.001*** (8.07)	0.262*** (3.59)
Log of Assets	0.052 (0.90)	0.000** (2.04)	-0.071 (-0.95)
Asset Growth	-0.597*** (-10.80)	-0.001*** (-16.75)	-0.286** (-2.41)
Year fixed effects	Y	Y	Y
Industry fixed effects	Y	Y	Y
Observations	65,432	65,432	47,084
R-square	0.436	0.279	0.115

Table 5. Additional Tests and Robustness Checks - Corporate Risk-taking and Policies

This table presents the additional tests and robustness checks for corporate risk-taking and policies. The dependent variables are *StdRet*, *StdROA*, *Inv*, *RD*, and *Growth*, in Panels A, B, C, and D, respectively. The main variable of interest is *CreativeShare*. The tests also include *Size*, *Liquidity*, *Loss*, and *Leverage*. All the variables are defined in Table 1 and Table 2. The tests also include year and industry dummies. Some tests include local control variables for local religion, population, education, and income. These local controls are defined in the text. Some tests also include state dummies. Column 4 re-examines the tests after excluding firms located in areas with a strong creative culture, and more details are provided in the text. Column 5 re-examines the tests by using firm location information provided by the Compact Disclosure data as well as the firm location information from Bill McDonald's website. Only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

	(1)	(2)	(3)	(4)	(5)
Panel A. StdRet Tests					
Dep. Var.: StdRet					
CreativeShare	0.367*** (4.81)	0.349*** (5.93)	0.357*** (4.02)	0.258*** (4.59)	0.399*** (6.83)
Main Controls	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	76,311	76,572	76,311	70,939	55,442
R-squared	0.401	0.405	0.406	0.393	0.413
Panel B. StdROA Tests					
Dep. Var.: StdROA					
CreativeShare	0.671*** (3.41)	0.696*** (4.71)	0.709*** (3.15)	0.584*** (4.27)	0.369*** (3.11)
Main Controls	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	69,070	69,298	69,070	65,082	46,919
R-squared	0.212	0.213	0.214	0.217	0.225

Table 5 cont.

	(1)	(2)	(3)	(4)	(5)
Panel C. Inv Tests					
Dep. Var.: Inv					
CreativeShare	0.288*** (9.95)	0.318*** (14.44)	0.253*** (7.58)	0.220*** (11.01)	0.333*** (15.24)
Main Controls	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	95,737	96,019	95,737	89,545	63,254
R-squared	0.168	0.178	0.179	0.148	0.172
Panel D. Growth Tests					
Dep. Var.: Growth					
CreativeShare	0.538*** (4.54)	0.668*** (7.05)	0.643*** (4.49)	0.318*** (3.80)	0.466*** (5.36)
Main Controls	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	84,983	85,264	84,983	84,983	59,835
R-squared	0.229	0.235	0.236	0.236	0.228

Table 6. Additional Tests and Robustness Checks - Cash Holdings

This table presents the additional tests and robustness checks for cash holdings. The dependent variable is *Cash*. The main variable of interest is *CreativeShare*. The main control variables are *LogofAssets MB*, *CFtoAssets*, *NWCtoAssets*, *CapextoAssets*, *LevtoAssets*, *DivPayout*, *RDtoSales*, *AcqtoAssets*, *IndustrySigma*. These variables are defined in Table 1 and Table 3. The tests also include year and industry dummies. Some tests include local control variables for local religion, population, education, and income. These local controls are defined in the text. Some tests also include state dummies. Column 4 re-examines the tests after excluding firms located in areas with a strong creative culture, and more details are provided in the text. Column 5 re-examines the tests by using firm location information provided by the Compact Disclosure data as well as the firm location information from Bill McDonald's website. Only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level. T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

	(1)	(2)	(3)	(4)	(5)
Dep. Var.: Cash					
CreativeShare _{t-1}	0.279*** (8.20)	0.316*** (12.57)	0.227*** (5.84)	0.230*** (10.07)	0.404*** (15.69)
Main Controls	Y	Y	Y	Y	Y
Year variables	Y	Y	Y	Y	Y
Industry variables	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	84,291	84,547	84,291	78,772	60,025
R-squared	0.389	0.400	0.403	0.359	0.401

Table 7. Additional Tests and Robustness Checks – Dividend Payout

This table presents the additional tests and robustness checks for dividend payout. The dependent variables are *Dividend payer*, *Dividend yield*, and *Dividend initiation* in Panels A, B, and C, respectively. The main variable of interest is *CreativeShare*. The tests also include the following main controls: *NltoTA*, *CHtoTA*, *LTDtoTA*, *Log of MV*, *Log of assets*, *Volatility*, *Lagged return*, *Asset growth*, and age indicator variables. All the variables are defined in Table 1 and Table 4. The tests also include year and industry dummies. Some tests include local control variables for local religion, population, education, and income. These local controls are defined in the text. Some tests also include state dummies. Column 4 re-examines the tests after excluding firms located in areas with a strong creative culture, and more details are provided in the text. Column 5 re-examines the tests by using firm location information provided by the Compact Disclosure data as well as the firm location information from Bill McDonald’s website. Only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level. Intercept, year and industry dummies are not reported for brevity. T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Pseudo R-squared values are reported for *Dividend payer* and *Dividend initiation* tests. *Dividend payer* and *Dividend initiation* tests have Logit regressions whereas *Dividend yield* has OLS regression.

	(1)	(2)	(3)	(4)	(5)
Panel A. Dividend payer Tests					
Dep. Var.: Dividend payer					
CreativeShare	-2.746*** (-3.66)	-3.277*** (-5.31)	-2.807*** (-3.05)	-3.031*** (-4.79)	-3.310*** (-6.17)
Main Controls	Y	Y	Y	Y	Y
Year variables	Y	Y	Y	Y	Y
Industry variables	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	65,239	65,432	65,239	62,528	49,375
R-squared	0.438	0.447	0.447	0.444	0.428
Panel B. Dividend yield Tests					
Dep. Var.: Dividend yield					
CreativeShare	-0.013*** (-4.75)	-0.010*** (-4.79)	-0.010*** (-3.12)	-0.010*** (-4.31)	-0.011*** (-5.30)
Main Controls	Y	Y	Y	Y	Y
Year variables	Y	Y	Y	Y	Y
Industry variables	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	65,239	65,432	65,239	62,528	49,375
R-squared	0.280	0.289	0.289	0.289	0.277

Table 7. cont.

	(1)	(2)	(3)	(4)	(5)
Panel C. Dividend initiation Tests					
Dep. Var.					
CreativeShare	-1.692** (-2.13)	-1.789*** (-2.79)	-2.032** (-2.09)	-1.675** (-2.54)	-2.095*** (-3.18)
Main Controls	Y	Y	Y	Y	Y
Year variables	Y	Y	Y	Y	Y
Industry variables	Y	Y	Y	Y	Y
Local controls	Y	N	Y	N	N
State fixed effects	N	Y	Y	N	N
Excl. areas with a famous creative culture	N	N	N	Y	N
Alternative Location Data	N	N	N	N	Y
Observations	47,014	46,901	46,831	44,268	34,513
R-squared	0.117	0.123	0.124	0.121	0.111

Table 8. Identification Tests – Corporate Risk-taking and Policies

Panel A presents the mean values for *StdRet*, *StdROA*, *Inv*, and *Growth*, for firms that are located in *High Creative Share* and a matched sample of firms that are located in *Low CreativeShare* areas along with the difference in corporate policy variables. The matching process is described in the text in more details. The matching process is described in the text in more details. Difference in mean values of corporate policy variables and p-values for difference are reported in Panel A (* significant at 10%; ** significant at 5%; *** significant at 1 %.) Corporate policy variables—*StdRet*, *StdROA*, *Inv*, and *Growth*—are defined in Table 1. Panels B and C employ the same variables as dependent variables. Panels B and C employ a 2SLS analysis with IV approach for the OLS regression analyses of the corporate policy variables used in the main tests. Panels B and C use coefficients of the instrumented creative share variable from second stages of these IV analyses. Panels B and C use all the main control variables used the earlier corporate policies analyses along with year and industry dummies and local controls. Panel B uses *CreativeShare_{t-10}*, creative share lagged by five years, as IV whereas Panel C uses *ArtShare*, fraction of people employed in the arts in a county in a year, as IV. More details on IV approach are provided in the text. In the last two panels, only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Panel A. Matched Sample Tests					
	N	<i>High CreativeShare</i>	<i>Low CreativeShare</i>	Difference	p-value (difference)
StdRet	11,768	-1.945	-2.063	0.118	(0.000)***
StdROA	11,768	0.608	0.339	0.269	(0.000)***
Inv	11,768	0.349	0.271	0.078	(0.000)***
Growth	11,768	0.639	0.460	0.179	(0.000)***
		(1)	(2)	(3)	(4)
Panel B. IV approach (IV: CreativeShare_{t-10})					
Dep. Var.	StdRet	StdROA	Inv	Growth	
CreativeShare	1.481*** (3.86)	3.694*** (4.10)	0.873*** (5.07)	1.699*** (2.84)	
Main Controls	Y	Y	Y	Y	
Local Controls	Y	Y	Y	Y	
Year fixed effects	Y	Y	Y	Y	
Industry fixed effects	Y	Y	Y	Y	
Observations	40,571	35,094	51,131	45,994	
R-squared	0.408	0.185	0.190	0.226	
Panel C. IV approach (IV: Artshare)					
Dep. Var.	StdRet	StdROA	Inv	Growth	
CreativeShare	0.080 (0.78)	1.054*** (3.85)	0.141*** (3.66)	0.357** (2.22)	
Main Controls	Y	Y	Y	Y	
Local Controls	Y	Y	Y	Y	
Year fixed effects	Y	Y	Y	Y	
Industry fixed effects	Y	Y	Y	Y	
Observations	76,311	69,070	95,737	84,983	
R-squared	0.400	0.212	0.168	0.229	

Table 9. Identification tests - Cash Holdings

Panel A presents the mean values for *Cash*, for firms that are located in *High Creative Share* and a matched sample of firms that are located in *Low CreativeShare* areas along with the difference in corporate policy variables. The matching process is described in the text in more details. The matching process is described in the text in more details. Difference in mean values of cash holdings and p-values for difference are reported in Panel A (* significant at 10%; ** significant at 5%; *** significant at 1 %.) *Cash* is defined in Table 1. Panels B and C employ the same variable as dependent variable. Panels B and C employ a 2SLS analysis with IV approach for the OLS regression analyses of the cash holdings tests used in the main tests. Panels B and C use coefficients of the instrumented creative share variable from second stages of these IV analyses. Panels B and C use all the main control variables used the earlier cash holdings analyses along with year and industry dummies and local controls. Panel B uses *CreativeShare_{t-10}*, creative share lagged by five years, as IV whereas Panel C uses *ArtShare*, fraction of people employed in the arts in a county in a year, as IV. More details on IV approach are provided in the text. In the last two panels, only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Panel A. Matched Sample Analysis					
	N	<i>High CreativeShare</i>	<i>Low CreativeShare</i>	Difference	p-value (difference)
Cash	13,211	0.281	0.162	0.119	(0.000)***
Panel B. IV approach (IV: CreativeShare_{t-10})					
Dep. Var.				Cash	
CreativeShare				0.810***	(4.68)
Main Controls				Y	
Local Controls				Y	
Year fixed effects				Y	
Industry fixed effects				Y	
Observations				45,819	
R-squared				0.395	
Panel C. IV approach (IV: Artshare)					
Dep. Var.				Cash	
CreativeShare				0.124**	(2.56)
Main Controls				Y	
Local Controls				Y	
Year fixed effects				Y	
Industry fixed effects				Y	
Observations				84,291	
R-squared				0.388	

Table 10. Identification Tests – Dividend Payout

Panel A presents the mean values for dividend payout variables for firms that are located in *High Creative Share* and a matched sample of firms that are located in *Low CreativeShare* areas along with the difference in dividend payout variables. The matching process is described in the text in more details. Difference in mean values of dividend payout variables and p-values for difference are reported in Panel A (* significant at 10%; ** significant at 5%; *** significant at 1 %.) Dividend payout variables—*Dividend Payer*, *Dividend Yield*, and *Dividend Initiation*—are defined in Table 1. Panels B and C employ the same variables as dependent variables. Panels B and C uses an IVProbit analysis with an instrumental variable (IV) approach for Logit regression analyses of *Dividend payer* and *Dividend initiation* used in the main tests and a 2SLS analysis with IV approach for the OLS regression analysis of *Dividend yield* used in the main tests. Panels B and C present coefficients of the instrumented creative share variable from second stages of these IV analyses. Panels B and C use all the main control variables used the earlier dividend payout analyses along with year and industry dummies and local controls. Panel B uses *CreativeShare_{t-10}*, creative share lagged by five years, as IV whereas Panel C uses *ArtShare*, fraction of people employed in the arts in a county in a year, as IV. More details on IV approach are provided in the text. In the last two panels, only *CreativeShare* is reported for brevity. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Pseudo R-squared values are reported for *Dividend payer* and *Dividend initiation* tests.

Panel A. Matched Sample Tests					
Variable	N	<i>High CreativeShare</i>	<i>Low CreativeShare</i>	Difference	p-value (difference)
Dividend Payer	11,777	0.203	0.297	-0.093	(0.000)***
Dividend Yield	11,777	0.004	0.006	-0.002	(0.000)***
Dividend Initiation	7,317	0.014	0.021	-0.007	(0.001)***
		(1)	(2)	(3)	
Dep. Var.		Dividend payer	Dividend yield	Dividend initiation	
Panel B: IV approach (IV: CreativeShare_{t-10})					
CreativeShare		-1.240*** (-4.40)	-0.014*** (-3.75)	-0.589 (-1.03)	
Main controls		Y	Y	Y	
Local controls		Y	Y	Y	
Year fixed effects		Y	Y	Y	
Industry fixed effects		Y	Y	Y	
Observations		25,691	25,691	19,049	
R-squared		0.400	0.229	0.137	
Panel C: IV approach (IV: Artshare)					
CreativeShare		-1.688*** (-7.59)	-0.011*** (-3.14)	-0.412 (-0.95)	
Main controls		Y	Y	Y	
Local controls		Y	Y	Y	
Year fixed effects		Y	Y	Y	
Industry fixed effects		Y	Y	Y	
Observations		65,239	65,239	47,014	
R-squared		0.429	0.280	0.110	

Table 11. Local Firms vs. Geographically Dispersed Firms – Corporate Risk-taking and Policies

This table examines the difference in corporate policies between local firms and geographically dispersed firms. The dependent variables are *StdRet*, *StdROA*, *Inv*, *RD*, and *Growth*. The tests include the main control variables used the earlier corporate policy analyses along with year and industry dummies and local controls. All these variables are defined in the earlier tables. The tests also include *CreativeShare*, which is defined earlier, and *LocalFirm* and the interaction between *CreativeShare* and *LocalFirm*—*CreativeShare*LocalFirm*. *LocalFirm* is an indicator variable which demonstrates firms with more localized operations or firms that have operations only in one or very few states compared to geographically dispersed firms with operations in many states. Local and geographically dispersed firm definitions are based on Garcia and Norli (2012) and more details are provided in the text. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

	(1)	(2)	(3)	(4)
Dep. Var.	StdRet	StdROA	Inv	Growth
CreativeShare	0.148 (1.07)	0.726*** (2.84)	0.222*** (4.05)	0.472** (2.33)
CreativeShare*LocalFirm	0.298* (1.96)	0.471 (1.42)	0.213*** (3.42)	0.502** (2.09)
LocalFirm	-0.093* (-1.94)	-0.129 (-1.32)	-0.052*** (-2.75)	-0.135* (-1.83)
Main Controls	Y	Y	Y	Y
Local Controls	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y
Industry fixed effects	Y	Y	Y	Y
Observations	18,884	16,634	21,258	20,140
R-squared	0.456	0.209	0.196	0.204

Table 12. Local Firms vs. Geographically Dispersed Firms – Cash Holdings

This table examines the difference in cash holdings between local firms and geographically dispersed firms. The dependent variable is *Cash*. The table include the main control variables used the earlier cash holdings analyses along with year and industry dummies and local controls. All these variables are defined in the earlier tables. This table also includes *CreativeShare*, which is defined earlier, and *LocalFirm* and the interaction between *CreativeShare* and *LocalFirm*—*CreativeShare*LocalFirm*. *LocalFirm* is an indicator variable which demonstrates firms with more localized operations or firms that have operations only in one or very few states compared to geographically dispersed firms with operations in many states. Local and geographically dispersed firm definitions are based on Garcia and Norli (2012) and more details are provided in the text. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively.

Dep.Var.	Cash
CreativeShare	0.134** (2.24)
CreativeShare*LocalFirm	0.438*** (6.55)
LocalFirm	-0.088*** (-4.44)
Main Controls	Y
Local Controls	Y
Year fixed effects	Y
Industry fixed effects	Y
Observations	19,789
R-squared	0.458

Table 13. Local Firms vs. Geographically Dispersed Firms – Dividend Payout

This table examines the difference in dividend payout between local firms and geographically dispersed firms. The dependent variables are *Dividend payer*, *Dividend yield*, and *Dividend initiation*. The tests include the main control variables used the earlier dividend payout analyses along with year and industry dummies and local controls. All these variables are defined in the earlier tables. The tests also include *CreativeShare*, which is defined earlier, and *LocalFirm* and the interaction between *CreativeShare* and *LocalFirm*—*CreativeShare*LocalFirm*. *LocalFirm* is an indicator variable which demonstrates firms with more localized operations or firms that have operations only in one or very few states compared to geographically dispersed firms with operations in many states. Local and geographically dispersed firm definitions are based on Garcia and Norli (2012) and more details are provided in the text. Standard errors are adjusted for heteroskedasticity and clustered at firm level T-statistics are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Pseudo R-squared values are reported for *Dividend payer* and *Dividend initiation* tests. *Dividend payer* and *Dividend initiation* tests have Logit regressions whereas *Dividend yield* has OLS regression.

Dep. Var.	(1) Dividend payer	(2) Dividend payer	(3) Dividend yield
CreativeShare	-0.490 (-0.35)	-0.010* (-1.77)	-1.250 (-0.69)
CreativeShare*LocalFirm	-0.644 (-0.43)	-0.000 (-0.02)	-0.257 (-0.14)
LocalFirm	0.277 (0.61)	0.001 (0.58)	-0.209 (-0.39)
Main Controls	Y	Y	Y
Local Controls	Y	Y	Y
Year fixed effects	Y	Y	Y
Industry fixed effects	Y	Y	Y
Observations	15,129	15,130	10,074
R-squared	0.442	0.286	0.132