The Effect of Policy Uncertainty on VC Investments Around the World

Abstract

This study documents a significant negative relationship between policy uncertainty and Venture Capital (VC) investment in entrepreneurial firms across non-U.S. countries. The adverse effect of policy uncertainty is exacerbated for younger and early-stage firms. By contrast, the effect is attenuated for firms which have headquarters in cities with high concentration of global Venture Capital investment or in countries with more developed stock markets, and for firms which are backed by corporate or government lead VCs. Using close national elections and ethnic fractionalization to alleviate endogeneity concerns, I find that the baseline results continue to hold. Furthermore, I also find that policy uncertainty reduces the amount of cross-border VC investment. Finally, this study provides evidence that uncertainty increases the number of financing rounds, decreases the fraction of investment amount during the first round, and reduces the likelihood of successful exit through acquisition.

JEL Classification: G18, G24

EFM Classification: 810, 620

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1. Introduction

Venture Capital (VC) has been an important source of finance for commercializing innovation for many years (Nanda and Rhodes-Kropf, 2013). Given the importance of new technologies in driving the economic growth and creative destruction process in an economy, understanding the policy risk faced by VCs in the United States is a central issue for both academics and policy makers (Aghion and Howitt, 1992; Schumpeter, 1942; Kortum and Lerner, 2000; and Samilla and Sorenson, 2011).

Since the early 2010s, however, there has been a rapid increase in VC investments outside the United States. According to the 2018 Preqin Global Private Equity & Venture Capital Report (Preqin, 2018), there is continued movement of Venture Capital deal away from North American markets, shifting towards European markets and emerging opportunities in Greater China. For instance, the fourth quarter of 2017 saw several $1 billion or more mega-deals outside the U.S. market, including $4 billion funding rounds to China-based companies Didi-Chuxing and online retail services provider Meituan-Dianping (KPMG Venture Pulse, 2017). While Venture Capital investment amounts were up dramatically, the Venture Capital market saw a continued decline in the number of deals. The decline in deal volume only emphasized the increasing importance of mega-deals in the global VC market.

To evaluate the extent to which policy uncertainty risks influence the decision of VCs to finance entrepreneurial firms outside the United States, I analyse a sample of VC investments occurring in 22 countries between 1987 and 2015. Motivated by the pioneering study of Tian and Ye (2018), I use this sample to investigate whether policy uncertainty decreases the amount of VC investment, the number of VCs investing, and the investment per VCs in a given year. I also

analyze whether the adverse effects of policy uncertainty exhibit heterogeneity in the cross-section along several entrepreneurial-firm and lead-VC characteristics. Furthermore, I examine whether policy uncertainty affects VC investment structure and success. Finally, since cross-border VC investments have been rising in recent years, I also investigate whether policy uncertainty reduces the value of cross-border VC investment deals.

Academic research has documented the impact of policy uncertainty on real economic outcomes. For the United States, Julio and Yook (2012), Bloom et al. (2014) find that uncertainty shocks are followed by a substantial drop in GDP, driving business cycles. Previous literature also shows that firms are less likely to execute IPOs (Colak et al., 2016) and SEOs (Jens, 2016) during gubernatorial election year. Further, Gulen and Ion (2016) show a significantly negative link between capital expenditures and policy uncertainty using the Economic Policy Uncertainty Index. A recent paper by Tian and Ye (2018) explores how policy uncertainty impacts U.S. Venture Capital market. In a cross-country study, Julio and Yook (2016) and Kelly, Pastor, and Veronesi (2016) also find that election cycles affect corporate investments and equity option values respectively. My paper aims to expand prior literature to understand the effect of policy uncertainty on global VC investment activity.

This study argues that policy uncertainty negatively impacts VC investment in entrepreneurial firms across countries. This hypothesis is motivated by the real options literature, which emphasizes that if investment projects are (even partially) irreversible, uncertainty shocks can increase firms' incentives to postpone investment until some of the uncertainty resolves (e.g., Bernanke 1983; Rodrik 1991; Dixit and Pindyck 1994). Several more recent theoretical papers (Chen and Funke, 2003; Bloom et al., 2007) also argue that investors become more cautious in the face of uncertainty since it increases the value of the option to wait. Policy uncertainty is relevant

for the dynamics of Venture Capital investment because the expected returns on investment projects become less predictable when uncertainty increases. This problem is relatively more severe for foreign VCs than domestic ones because foreign investors are more likely to be less informed about the policy environment and may be treated differently than domestic investors. Moreover, VC investment cannot be easily reversed without paying substantial sunk costs as VC investment typically have a long-time horizon (about 10 years). Hence, forward-looking VC investors must continuously be anticipating how changes in government policy could affect the expected returns of their investments and/or their barriers to enter and exit the market.

While this paper complements prior literature, there are several main departures. First, I focus on the effect of political uncertainty on non-U.S. entrepreneurial firms, whereas most of the literature centers attention on the effect of policy uncertainty in the United States. There is only limited research in the financial economics literature, such as Megginson (2004), Nahata et al. (2014), Chemmanur et al. (2016), and Phillips and Zhdanov (2017) that have documented the spread of Global Venture Capital investing. Second, using close national election datasets, ethnic fractionalization, and placebo tests, I provide evidence that the effect of policy uncertainty on Venture Capital investment across countries is likely causal. Additionally, I also highlight the influence of entrepreneurial firms' geographic location and equity market development on the link between policy uncertainty and VC investment activity. Finally, I conduct empirical analysis at various units of observation, including firm-level, industry level, and country-pair level.

The two main challenges in the investment under uncertainty research are to find an appropriate measure of policy uncertainty and to establish causality. Measuring the portion of uncertainty attributed to the political and regulatory system is a difficult task. Despite that, Baker, Bloom, and Davis (2016) fill this gap in the literature by creating a news-based policy uncertainty

index as a weighted average of the frequency of articles related to policy uncertainty in the leading domestic newspapers. The news index is in principle designed to capture the uncertainty associated with all policy decisions, including those captured by the tax-code components and by government spending and inflation components. This index significantly correlates with events ex-ante predicted to create policy-related uncertainty and withstand a detailed human audit check. In this paper, I will use the news-based policy uncertainty index developed by Baker, Bloom, and Davis Index to estimate the effect of policy uncertainty on Venture Capital investments.

To address endogeneity concerns, I follow Julio and Yook (2016) and Bhattacharya et al. (2017) and use close national elections as a natural and clean experimental framework to study how politics affect economic decisions because the timing of close elections is beyond the control of investors. I also rely on ethnic fractionalization, which is exogenous to most policy makers (Alesina et al. (2003). I predict that higher ethnic fractionalization will exacerbate the effect of policy uncertainty on investment activities as the social disruption due to election is more pronounced in a system with higher disagreement. Finally, I also consider various fixed effects typically used in the literature to reduce potential omitted variable bias, and these variables do not significantly alter the results.

I begin the empirical analysis at the firm-year level by estimating the effect of policy uncertainty on several benchmark VC investment variables, including VC investment amount, number of VCs investing, and investment amount per VC. Besides the classic investment predictors (Tobin's Q, cash flows, sales growth), I also control for other industry proxies (tangibility, competition) and several macroeconomic proxies for investment opportunities (e.g., stock return, real GDP growth, composite leading indicators, country openness, technology shocks, and inflation rate). In my baseline regression, I also include industry-, stage-, year-, and

entrepreneurial firms' country fixed effects. This specification aims to address endogeneity concerns stemming from the fact the uncertainty is likely to be countercyclical and may be capturing the impact of future poor economic performance.

One key finding suggests that a one standard deviation increase in policy uncertainty at a given year is associated with a 0.212, 0.161, and 0.136 standard deviation decline in Venture Capital investment amount, number of VCs investing, and investment per VC in the same year, respectively. This corresponds with a 12.46% decrease in the amount of VC investment, a 9.4% decrease in the number of VCs investing, a 7.9% decrease in Investment per VCs in the same year. From a time-series perspective, I find no evidence of a subsequent uptick in VCs investment in the following years. Following Tian and Ye (2018), I use the residual Economic Policy Uncertainty Index (by regressing each country Economic Policy Uncertainty index on the United States Economic Policy Uncertainty Index) and aggregate observations to industry-country level as robustness checks, and the results continue to hold. Furthermore, I also find that VC investment activity declines during a close national election year, and the effect of an election year is more pronounced in countries with higher ethnic fractionalization.

To identify possible mechanisms through which policy uncertainty affect entrepreneurial firms, I investigate whether the adverse effect of policy uncertainty on VC investment activity exhibits heterogeneity in the cross-section. I find that the adverse effect of policy uncertainty on VC investment is more pronounced when entrepreneurial firms are younger and are in the early-stage of development. This finding is consistent with the notion that VCs are more likely to postpone their investment under uncertainty if there are more underlying risks associated with the entrepreneurial firms. This result is also consistent with prior literature, which documents that the

negative effects of policy uncertainty are more pronounced for less mature entrepreneurial firms because these firms have relatively less experienced and therefore are riskier to invest in.

Another source of cross-sectional heterogeneity I explore is the geographic location of the entrepreneurial firms. Figure 1 Panel A & B shows that in the period 2010-2015, VC investments were geographically concentrated in China (Beijing, Shanghai, and Shenzhen), United Kingdom (London), and Canada (Calgary, Toronto). This geographic concentration of VC Investments supports the notion that knowledge and technology know-how spillover are geographically localized (Jaffee,1993). I hypothesize that the resulting concentration of Venture Capitalists and entrepreneurs may encourage policy makers in cities/regions with high concentrations of Venture Capital investment to provide incentives for VCs to maintain their investment (Chen et al., 2010). Consistent with this predication, I find that the dampening effect of policy uncertainty is less pronounced when entrepreneurial firms are in cities with high concentration of VC investments. Further, the effect of policy uncertainty is also less pronounced for VC investments in entrepreneurial firms in the countries with more developed equity markets. I argue that VCs that invest in these countries are more optimistic about the return of their investment, and therefore are more likely to maintain their investment level in the face of uncertainty.

[Insert Figure 1 about here]

The other sources of cross-sectional heterogeneity are the types of lead VC investors, particularly whether the entrepreneurial firms are backed by corporate and government lead VC firms. I find that the adverse effect of policy uncertainty is attenuated for firms which are backed by corporate or government lead VCs. One explanation of these findings is that captive VC firms (who are affiliated with corporations, banks, or governments) have longer investment horizons than independent VCs. Second, Corporate Venture Capitals and Government Venture Capitals

pursue both the strategic goals of their parent institutions and financial objectives, whereas independent VCs sole investment objective is to achieve high monetary returns (Chemmanur, Loutskina, Tian, 2014).

From a VC investor's standpoint, it is important to ask if the negative effect of policy uncertainty affects the VC investment structure and probability of investment success, respectively. To answer this, I use the number of financing rounds and the fraction of investment amount during the first round (skewness) to measure VC investment structure. Additionally, I use IPO exit dummy (Acquisition exit dummy) that equals one if the firm exits by going public (Acquisitions) and zero otherwise as measures of VC investment success. My cross-sectional test provides support that policy uncertainty affects VC investment structure primarily by increasing the value of the option to wait (e.g., larger rounds and less skewness). Moreover, I find that policy uncertainty has a negative and strong significant effect on the probability of acquisition exit, but it only has a negative and weak significant effect on the probability of IPO exit.

To investigate more closely the cross-border deal flows from VC countries to entrepreneurial firms behind the prior results, I then study country-pair level cross-border investment of VCs across countries. My results then show that policy uncertainty has a negative and significant effect on Cross-Border VC investment flows in the same year. Interestingly, I show that the adverse effect is not significant in the following year. To my knowledge, this study is the first to uncover a connection between uncertainty and cross-border Venture Capital investment activity.

This paper contributes to two streams in the existing literature. One is the literature on investment under general uncertainty, as well as the literature studying political uncertainty. On the theoretical side, predictions from early theory literature on investment under uncertainty were

mixed. Roberts and Weitzman (1981), and Bar-Ilan and Strange (1996) predicted that higher levels of uncertainty would increase investment, while Bernanke (1983), Dixit (1989), and Leahy (1993) predicted a decline in investment in times of higher uncertainty. Furthermore, the existing empirical literature start to expand on international samples, including countries with far greater levels of political uncertainty than is experienced in the U.S. (Julio and Yook, 2012) and distinguishing different types of uncertainty (Baker et al., 2016; Gulen and Ion, 2016, and Jens, 2017).

The other stream of literature this paper contributes to is on Venture Capital investment. Prior literature has examined how various VC investors' characteristics (e.g. experience) and market characteristics (e.g. industry competition and investment environment) affect VC investment in entrepreneurial firms (Nahata, 2008; Da Rin et al., 2013). However, the existing literature has ignored how an important macroeconomic shock such as policy uncertainty affects VC investment activity and exits. My study fills this gap and explores how policy uncertainty affects VCs' investment and its outcomes.

The remainder of this paper is structured as follows. Section 2 discusses the data and summary statistics. I present the research design and the main empirical results in Section 3. Section 4 concludes the paper with a summary of my findings.

2. Data, Sample, and Descriptive Statistics

This section presents the data and documents several characteristics of VC investment in entrepreneurial firms located in non-U.S. markets.

2.1. Measuring policy Uncertainty

My sample covers entrepreneurial firms from 22 countries with complete Economic Policy Uncertainty Index (EPU) values over the 1987-2015 period. The EPU index is developed by Baker et al. (2012), Kroes et al. (2015), and Zalla (2016) who recently expanded the EPU index to include more countries outside the United States.

Baker et al. (2016) initially construct indices of economic policy uncertainty based on newspaper coverage frequency. To meet the Economic Policy Uncertainty criteria, an article must contain terms in all three categories pertaining to the economy (E), policy (P) and uncertainty (U). They then scale the raw count by the total number of articles in the same newspaper and month. For each paper, they then standardize the monthly series of scaled counts to unit standard deviation over time. The final step averages the standardized, scaled counts across the ten papers by month to obtain the monthly EPU index.

To construct a news-based Economic Policy Uncertainty (EPU) Index for each country in this study, I proceed as follows: First, I re-normalize each national news-based EPU index available at www.policyuncertainty.com to a mean of 100 based on the base on the value in January 2010. Second, I compute the yearly average of each national EPU index values.

Furthermore, following the Julio and Yook (2012) and Piotroski (2014) methods, I also collect cross-country sample data pertaining to close national elections across 47 countries as another proxy of policy uncertainty shocks. My study also adopts Brender and Drazen's (2013) approach to limit the national election sample to democracies by including only the years in which the country has a non-negative score in the POLITY IV level of democracy index.

2.2. Entrepreneurial Firms and Venture Capital Investment data

I combine data from several major sources. My VC investment sample is obtained from Thomson Reuters VentureXpert database and includes round-by-round investments by VC investors for entrepreneurial firms that received their first Venture Capital financing between January 1, 1987, and December 31, 2015. I only include non-U.S. entrepreneurial firms and exclude those with missing or inconsistent data. I also collect a number of data items from VentureXpert, including the round investment date, disclosed and estimated investing amount, the number of participating VCs' name, the addresses of the VCs, as well as the portfolio firms' names, founding year, primary industry measured by the four-digit Standard Industrial Classification code, and its address of headquarter.

I restrict my sample to Venture Capital Deals, defined by VentureXpert as Venture Capital investments that include startup/seed, early, expansion, and later stage deals, or any non-venture stage investments made by traditional venture focused firms. I also correct VentureXpert's overreporting problem by following the procedures of Tian (2011). More specifically, I eliminate repeated rounds within 3 months if they share the same amount of round financing.

In addition to that, I collect firm exit status by combining the information of IPO exits and M&A exits in VentureXpert with the Securities Data Company (SDC) Global New Issues database and the SDC Mergers and Acquisition database. More specifically, I use the IPO and M&A dates as proxies of entrepreneurial firm exits. Following Chemmanur et al. (2014) and Tian and Ye (2018) I classify a firm as being written-off if it does not receive any financing within three-year of its last round of financing and indicate the three-year mark after its last round of financing as its exit date. My firm-year sample covers all entrepreneurial firms during their incubation periods,

which can be defined as the period between the date of first VC financing and the date of exit. Finally, I follow Gompers (1995) and Tian and Ye (2018) procedure to identify the Lead VC for each entrepreneurial firm.

Following the methods of Julio and Yook (2012), I also collect national election and National Congress of the Chinese Communist Party data. The major source of data is the Database of Political Institutions. This source provides information about electoral rules and the classification of political platforms for the elected leaders and candidates. I supplement the election data with various internet sources for cases in which election information is missing. To calculate close election variables, I defined close elections as those in which the margin of victory is smaller than the first quartile value of the margin of victory distribution over the sample of countries under consideration. The margin of victory is defined as the vote difference between the winner and the runner-up across all elections for the sample considered. The second proxy for close elections is defined as the elections in which the margin of victory is smaller than 5%. Similarly, I use National Congress year of Chinese Communist Party as the source of policy uncertainty shocks in China. According to Piotroski (2014), the National Congress is the most important event in China with respect to the determination of party leadership, political objectives, and economic policy. During this Congress, key central government and party positions are confirmed and the transition of power takes place.

I also collect accounting data for international companies from Worldscope (Datastream). I need this accounting data to construct various industry control variables that are known to potentially affect VC investment activities. Following Gompers (1995) and Tian and Ye (2018), I compute four main control variables, namely, Tobin's Q, sales growth, cash flow, and tangibility on an annual basis. Tobin's Q is computed as the book value of total assets plus the market value

of common equity minus the book value of common equity, scaled by the book value of total assets. Sales growth is computed as the year-on-year growth rate in annual sales. Cash flow is computed as the operating cash flow divided by total assets. A firm's tangibility is calculated as net property, plant, and equipment divided by assets. I measure industry Tobin's Q by taking an average of Tobin's Q in each 3-digit SIC industry annually. I use the same approach to construct industry sales growth, industry cash flow, and industry tangibility. Further, I add additional control variables such as industry competition, currency volatility, stock market returns, patent applications, real GDP growth, trade openness, financial openness, and inflation in the full augmented models.

To be included in the analysis, firms must have non-missing observations for all the investment variables, industry-level accounting variables, and economic policy uncertainty variables. This amounts to a sample of 15,237 distinct entrepreneurial firms with 23,354 firm-year observations. Table 1 Panel A presents the summary statistics of the economic policy uncertainty index. Table 1 Panel B presents the summary statistics of the main VC investment and entrepreneurial firm variables. Table 1 Panel C presents the summary statistics of the industry-level control variables. Finally, Table 1 Panel D presents the summary statistics of macroeconomic-level control variables. Additionally, the summary statistics for the national elections are provided in Table 2. All variables' definitions are given in Table A1 in the Appendix.

In this paper, I adopt four units of observation. In the first part of the analysis, I focus on VC investment in a given entrpreneurial firm at a given year. For this, I construct the unit of observation as entrpreneurial firm-year. Moreover, to address the concern that missing values in VC investment amount between two successive VC financing rounds could bias my findings, I aggregate observations to the industry-country level. In the later part of the analysis, I focus on the

relationship between policy uncertainty and investment success, as well as the relationship between policy uncertainty and investment structure. For these parts of the analysis, the observation unit of analysis is entrepreneurial firms. In the last part of the analysis in which I analyze the effect of policy uncertainty on cross-border VC investments, the unit of observation is VC country - entreprenurial country pair.

3. Empirical Results

In this section, I present and discuss my primary empirical results on the relation between policy uncertainty and VC investments around the world. I also provide preliminary evidence relating the patterns of VC investment to countries' economic policy uncertainty.

3.1. Preliminary evidence

As a preliminary look at the data, Figure 2 plots the relation between the natural logarithm transformation of Venture Capital investment amount at the year 2010 (for each of the 22 countries) and the average natural logarithm of policy uncertainty index over the same period. The graph clearly displays a negative correlation between these two variables. On the one hand, Venture Capital investment activity is high in countries such as the Brazil and Singapore where the EPU score is relatively low. On the other hand, VC investment activity is low in countries such as the United Kingdom and France, where the EPU score is high.

[Insert Figure 2 about here]

3.2. Multivariate analysis: the relation between policy uncertainty and VC investments

Our primary empirical tests examine whether VC investment activity is influenced by economic policy uncertainty. Following Tian and Ye's (2018) analysis of VC investment in the United States, I use panel data model to assess the effect of policy uncertainty on investment decisions of VC firms across 22 countries. The model estimates the level of investment a VC will engage in year *t* given the level of the policy of uncertainty in the same year. Specifically, I model the panel data regression for VC investment activity as:

$$Investment_{ikjt} = \alpha_{ijt} + \beta_1 Policy\ Uncertainty_{jt} + \beta_2 Controls_t + \varepsilon_{ijt} \quad (1)$$

where *i* indexes entrepreneurial firms, *k* indexes industries, *j* indexes countries, and *t* indexes years. I use three variables as the indicator variable for investment: VC amount, number of VCs, and average investment per VCs. I define VC amount as the total VC investment amount an entrepreneurial firm receives in a year; Number of VCs as the number of VCs investing in a portfolio firm in a year; and Average Investment per VC as total investment amount a portfolio firm receives divided by the number of investing VCs in a year.

The *Policy Uncertainty* variable is the annual measure of economic policy uncertainty. To construct this variable, in each year *t*, I take the natural logarithm of yearly arithmetic average of the Baker et al. (2016) EPU index in year *t*. In all regressions, I control for startup firm age (*Age*) that is the natural logarithm of entrepreneurial firm i's age in year *t*, considering that startup firm age could significantly affect a VC's investment. I add one when taking the natural logarithm to avoid losing observations as some startups receive VC first-round financing when they are younger than one year old. Furthermore, to address the concern that public markets could affect VC investment, I add a set of 3-digit SIC industry corporate financial variables in *Controls*, namely, industry Tobin's Q, industry sales growth, industry cash flow, and industry tangibility. I also add a set of economic control variables including stock market return and Real GDP growth to capture

the expectation of future economic conditions. All variables are measured contemporaneously to the VC investment decision. See Table A1 for the definitions and data sources of my independent variables. All estimations include stage, year, industry, and entrepreneurial-firm country fixed effects. I use the entrepreneurial firm country fixed effect to capture the effect of entrepreneurial location cluster on VC investment. Following Bhattacharya et al. (2017), standard errors are clustered at country-industry and year level.

Table 3 presents coefficients from various estimations of the panel-data model presented in equation (1). I estimate equation (1) using the panel regression model. The coefficient estimates on BBD are negative and significant at the 5% or 1% level in all columns, suggesting that VCs' investment activity declines significantly when policy uncertainty increases. The economic effect of *Policy Uncertainty* on VC investment propensity is substantial: increasing *Policy Uncertainty* by one standard deviation (1.79) from its mean value (95.4) is associated with a 12.4% (0.212×Ln(1.79)), a 9.4% (0.161×Ln(1.79)), and 7.9% (0.136*Ln(1.79) lower VC investment amount, number of VCs investing, and Investments per VCs at the same year, respectively.

[Insert Table 3 about here]

Table 4 presents the effect of policy uncertainty across time. In column (1) to (6), the coefficient estimates of *Policy Uncertainty* are statistically insignificant, indicating that the effect of policy uncertainty on VC investments does not continue to the following year after the change in policy uncertainty. In contrast to prior literature, I do not find evidence suggesting that the VC investment response to policy uncertainty shocks lasts over time.

[Insert Table 4 about here]

Tables 3 and 4 further show that the coefficient estimates on lead VC firm age are positive and significant, suggesting more experienced Venture Capitalists tend to invest more. The industry Tobin's Q variables have insignificant coefficients. The coefficient estimates on trade openness and financial openness are positive and significant at 1% and 5% level in several specifications, suggesting that country openness is positively associated with VC investment activity. The adjusted R-squared is moderate, ranging from 0.111 to 0.331, depending on the control variable and fixed effects specifications.

3.3 Addressing a variety of concerns

In this section, I conduct additional tests to address various concerns about my main results. The first concern is that my proxy of policy uncertainty, the EPU index, may also capture the effect of other more economic policy uncertainty from other countries. Since these sources of uncertainty could affect VC investment activity, it is important to control them for identification purposes. Since the United States is one of the main trading partners of many countries around the world, I expect United States to share some common factors with other trading countries. In this paper, I extract the common component from each country's economic policy uncertainty with the U.S. economic policy uncertainty index. To perform this, I regress each country economic policy uncertainty index on the U.S. economic policy uncertainty index as the only independent variables and use the residual as an alternative measure for each country policy uncertainty. I report the results of this re-estimation of equation (1) using residual policy uncertainty index in Table 5. I continue to observe a negative and significant effect of policy uncertainty on VC investment in the same year.

[Insert Table 5 about here]

The second concern is that VCs may not invest in an entrepreneurial firm every year, creating missing values in the years between rounds of financing. To address this concern, I sum the entrepreneurial firm-year level data from previous analysis into three-digit-SIC industry-country level data and repeat my main analysis results. Yet, I continue to observe a negative effect of policy uncertainty on VC amount and Investment per VC in the contemporaneous year. In summary, the findings in Table 6 show that my results are robust to using alternative policy uncertainty proxies and construction of unit of observation.

[Insert Table 6 about here]

3.4.Establishing Causality

In this section, I attempt to deal with time-varying omitted variables as well as reverse causality, by relying on plausibly exogenous variation generated by a close national election. As argued by Julio and Yook (2012), elections around the world provide a natural and clean experimental framework for studying how politics influence many economic decisions because the timing of elections is beyond the control of any firm. Bhattacharya et al. (2017) further argues that a close election is unpredictable and reasonably exogenous.

Following the prior literature, I obtain national election information from the Database of Political Institutions - IADB database. This database provides detailed information on each national election. 75 close national elections take place in my sample period between 1987 and 2015 in 47 countries. Overall, the results presented in Table 7 Panel A suggest that VC investment activity declines during a close national election year. Table 7 Panel B also provides evidence from a placebo test where a close national election dummy is randomly assigned to countries in the

sample. The placebo tests show that none of the close national election dummies remain statistically significant in the regression.

[Insert Table 7 about here]

My second identification attempt is to utilize ethnic fractionalization, which is exogenous to most economic and political factors (Easterly and Levine, 1997; Alesina et al., 2003). Because the social disruptions caused by national elections are greater in a community with higher disagreement, I expect that ethnic fractionalization exacerbates the adverse effect of policy uncertainty on Venture Capital investment activity.

I collect data of the proportion of the largest ethnic groups to total population from the latest update of the CIA World Factbook website. I split all sample countries into high and low fractionalization groups when their largest ethnic groups' shares are below the 30th percentile (above the 70th percentile) in each year. My strategy is to conduct subsample regressions and to compare the coefficients on the variable of interest across the 2 subsamples. Table 8 shows that the negative effect of policy uncertainty on Venture Capital investment only exists in the high ethnic fractionalization countries while there is no significant negative effect of policy uncertainty on Venture Capital investment in the low ethnic fractionalization countries.

[Insert Table 8 about here]

I also use the Congress year of Chinese Communist Party as a proxy of political uncertainty in China. There are six Congress years (1988, 1993, 1998, 2003, 2008, 2013) in my sample period. I re-estimate equation (1) by replacing policy uncertainty with Congress year. Table 9 shows that there is also a significantly lower Venture Capital investment activity during the Congress year relative to Non-Congress year.

[Insert Table 9 about here]

These combined results from Tables 7, 8, and 9 mitigate concerns about the endogeneity concern coming from the economic conditions and demand side. They support my main findings that political uncertainty adversely affects VC investment. In summary, relying on plausibly exogenous variation in policy uncertainty generated by close national election, ethnic fractionalization, and congress year, my results support the notion that policy uncertainty appears to have a causal, negative effect on VC investment.

3.5.Heterogeneity effects across Cross-Sections

In this section, I further investigate the effect of economic policy uncertainty on VC investment by conducting cross-sectional tests that re-estimate equation (1) in various dimensions of entrepreneurial firm and lead VC investors characteristics. Specifically, I add an interaction term between the EPU index and entrepreneurial firm characteristics in the baseline regression to study how these characteristics change the effect of policy uncertainty on VC investment.

$$INV_{ikjt} = \alpha_{ijt} + \beta_1 EPU_{jt} + \beta_2 EPU_{jt} * Char + \beta_3 Char + \beta_4 Controls_t + \varepsilon_{ijt} \quad (2)$$

where *i* indexes entrepreneurial firms, *k* indexes industries, *j* indexes countries, and *t* indexes years. I use three variables as the indicator variable *INV*: VC amount, the total VC investment amount an entrepreneurial firm receives in a year; Number of VCs, the number of VCs investing in a portfolio firm in a year; Average Investment per VC, total investment amount an entrepreneurial firm receives divided by the number of investing VCs in a year. The variable Policy Uncertainty (*EPU*) is the annual measures of economic policy uncertainty. The unit of observation in this test is entrepreneurial firm-year. *Char* represents entrepreneurial firm or *lead VC* characteristics. *EPU* ×

Char is the interaction term of economic policy uncertainty and the entrepreneurial firm characteristic that I examine. All other control variables and fixed effects are the same as those included in equation (1).

I consider several dimensions of entrepreneurial firms' and Lead VC investors' characteristics (*Char*) that may influence the effect of policy uncertainty on VC investment. First, I explore how entrepreneurial firm age and stage of development change my main results. Second, I show how the main findings vary with different types of lead VC investors. Third, I explore the effect of the share of global Venture Capital investment of the cities where the entrepreneurial firms are located. Finally, I examine how stock market development in an entrepreneurial firm country alters the main findings.

The first dimension of cross section I study is entrepreneurial firm maturity, which is proxied by entrepreneurial firm age and development stage. To test this conjecture, I use firm age (*Age*) as Char, and hence *EPU* × *Age* is the main independent variable in equation (2). I show the regression results in Table 10. The coefficient estimates on *Policy Uncertainty* are negative and significant, consistent with my main findings. The coefficient estimates on the interaction term, EPU × Age, are positive and significant at the 1% level in Column 1 & 3, suggesting that the negative effect of policy uncertainty on VC investment is mitigated for older entrepreneurial firms.

Similarly, I use an early-stage dummy as a proxy for firm maturity. I define the early-stage dummy to be one if it is startup/seed or early stage and equals zero if the firm is in an expansion, later stage or buyout/acquisition. and hence *EPU* × *Early-stage dummy* is the main independent variable in the equation. I provide the regression results in Table 11. The coefficient estimates on Policy Uncertainty (*EPU*) are negative and significant, consistent with my main findings, while the coefficient estimates on the interaction term, *EPU* × *Early-stage dummy*, are negative and

significant at the 1% level in Column 1 & 3, suggesting that the negative effect of policy uncertainty on VC investment is mitigated for entrepreneurial firms at later stage of development.

[Insert Table 10 about here]

[Insert Table 11 about here]

The second dimension I explore is the type of lead VCs investing in the firms. To examine this, I construct Corporate Venture Capitals Dummy and Government Venture Capital Dummy variables. Table 12 presents the results regarding VCs' propensity to invest depending upon the type of its VC investors. The marginal effects of the interaction term, *EPU* × *Char*, are both positive and significant at the 1% level. This finding suggests that the negative effect of policy uncertainty on VC total investment is mitigated if the startup firm is financed by Corporate VCs or Government lead VCs. All these findings are consistent with my conjecture that Captive VCs (Corporate and Government lead VCs) are investing to achieve strategic goals instead of solely financial objectives. Therefore, corporate and government lead VCs' investments on risky entrepreneurial firms are less sensitive to policy uncertainty.

I next construct the Global Hubs dummy, which has a value of one if an entrepreneurial firm city is in the top 50 ranks of total 675 non-U.S. cities in my sample which obtain VC investments during the period 2010-2015 and zero otherwise. I then replace the characteristics variable (*Char*) with the Global Hubs dummy in equation (2) and report the results in Table 12.

Table 12 presents the results on VC investment activity where the coefficient estimates on the interaction term, *EPU*× *Global Hubs* are positive and significant at the 1% level in all columns. This finding suggests that the negative effect of policy uncertainty on VCs' investment is less pronounced if the entrepreneurial firms are in cities with higher intensity of VC investments. All

these findings are consistent with the hypothesis that cities with high investment activity may have more stable policies toward VC investments compared to other cities with less VC investment activity.

[Insert Table 13 about here]

Similarly, I also test whether equity market development in the entrepreneurial firm country affects the magnitude of policy uncertainty effect on VC investment. I argue that VC investors are less sensitive to policy uncertainty in countries with more developed equity market because the entrepreneurial firms have a better chance to exit through IPOs or Acquisitions (Black and Gilson, 1998; Cumming, 2008). My proxy for equity market development is the market capitalization of listed firm scaled by total GDP. I obtain this data from World Development Indicators (WDI).

Table 14 presents the results on VC investment activity where the coefficient estimates on the interaction term, *EPU* × *Equity Market Development*, are positive and significant at the 5% level in column (1). This finding suggests that the negative effect of policy uncertainty on VCs' investment amount is less pronounced if entrepreneurial firms are located countries with well-developed equity markets.

[Insert Table 14 about here]

3.6. VC Investment Structure and Investment Outcomes

In this section, I examine whether policy uncertainty affects VC investment structure and outcomes. The number of firms included in the sample for this section is larger than that of previous section, because I also include the deals that have missing round amounts here. Moreover, there are typically three investment outcomes for entrepreneurial firms that are backed by VCs:

going public, being acquired, and being written-off. To understand the effect of policy uncertainty on investment outcome, I regress VC investment outcomes (IPO, Acquisition, or both) on economic policy uncertainty in a cross-sectional Probit model. As a robustness check, I re-estimate the same equation using panel regression with fixed effects and the results continue to hold. I report the marginal effect of the Probit regression in Table 16.

The marginal effects of policy uncertainty in both columns (2) and (3) in Table 15 are negative and significant at the 1% level, while the marginal effect of policy uncertainty in column (1) is negative but only significant at the 10% level. These findings indicate that a higher level of policy uncertainty during an entrepreneurial firm's incubation period is negatively related to the startup firm's probability of Acquisition exit. The economic significance is considerable. For example, according to the coefficient estimates reported in column (1), increasing economic policy uncertainty by one standard deviation from its mean value is associated with a 40.3% (40.1%) lower probability that a startup venture will have an Acquisition exit (Successful exit).

[Insert Table 15 about here]

If greater economic policy uncertainty is associated with worse investment outcomes and exit prospects, VCs may undertake various investment structures to mitigate such adverse effects of policy uncertainty. I explore two plausible strategies that VCs could use, VC staging and VC investment skewness. I use the number of rounds as the proxy of VC staging and the proportion of first round VC investment amount to total investment during the incubation period as the proxy of VC investment skewness.

Following that, I regress the number of financing rounds an entrepreneurial firm goes through on the *Policy Uncertainty* variable and run a cross-sectional regression. I report the results

in Table 14. I find that the marginal effects of EPU is positive and significant at 1% level, suggesting that the average policy uncertainty during the entrepreneurial firm incubation period increases the number of rounds taken by the VCs. An increase of one standard deviation of EPU from its mean value is associated with a 47% increase in the number of rounds by VC firms.

Similarly, I also run the regression of investment skewness on economic policy uncertainty and find that the marginal effect of EPU is negative and significant at 1% level, indicating that higher averages of policy uncertainty during an entrepreneurial firm's incubation period reduces the fraction of investment in the first-round relative to total VC investment in the entrepreneurial firm. A one standard deviation increase of EPU from its mean value is associated with a 9.7% decrease of skewness by VC firms.

[Insert Table 16 about here]

3.6. Cross-Border Venture Capital Investment

In this section, I ask whether policy uncertainty affects cross-border Venture Capital investment. To observe the effect of policy uncertainty on the cross-border flow of VC investments, I aggregate all cross-border VC investments in pairings of VC country - entrepreneurial firms' country. To be included in the sample, each VC-firm country pair must have at least a five-year long observation during the sample period considered. Following that, I regress cross-border VC investments to entrepreneurial firm country on economic policy uncertainty and various macroeconomic control variables, including real GDP growth distance, culture distance, geographic distance, bilateral trade, common language, common colonizer between VC country and entrepreneurial firm country, as well as the market friendliness of entrepreneurial firm country.

I present these estimation results in Table 17. The estimates reported in Columns 1 to 2 indicate that economic policy uncertainty has a significant negative impact on cross-border investment. The estimated coefficient reported in Column 1 of Table 17 is negative and significant at the 1% level, implying that a one-standard-deviation increase in the policy uncertainty for a given entrepreneurial firm - VC country pair is associated with a 15.2% decrease in the amount of cross-border Venture Capital investment.

[Insert Table 17 about here]

4. Conclusions

VC investment plays an integral role in fostering innovative firms and commercializing technology innovation. But macroeconomic risk, such as economic policy uncertainty risk, can cause a delay in VC investments. Motivated by the growing prevalence and importance of Venture Capital investment in non-U.S. firms, I try to understand how uncertainty surrounding government policies could affect Venture Capital investment across countries. As VC investors become cautious, they scale back their risky Venture Capital investment until the policy uncertainty of the entrepreneurial firm's country resolves itself.

I present robust evidence that policy uncertainty negatively influences VC investment in the firm, industry, and aggregate country pair levels. The economic magnitude of the effects are significant. At the firm level, an increase of one standard deviation in policy uncertainty is associated with a 12.46% decrease in VC investment amount, a 9.4% decrease in number of VCs investing, a 7.9% decrease in investment per VC in the same year. At the industry level, an increase of one standard deviation in policy uncertainty is associated with a 20.2% decrease in Venture Capital investment amount, and a 16.04% decrease in investment per VC in the same year.

Additionally, I provide evidence that VC investment amount and investment per VC are lower during a closely-won election year. Furthermore, I do not observe mean reversion, indicating that Venture Capital investment tends to be lost rather than simply delayed.

I also find some evidence that the effect of policy uncertainty on Venture Capital investment activity is more pronounced in younger and early-stage firms. In contrast, the effect of policy uncertainty on Venture Capital investment is less pronounced in cities with larger shares of global venture investment, more developed equity markets, and those which are lead VC-backed by corporations and governments. Additionally, economic policy uncertainty lowers the number of VC rounds and fraction of investment amount during the first round, and also decreases the likelihood of successful exit.

Finally, I show that economic policy uncertainty negatively affects cross-border Venture Capital investment. These results are robust even after controlling for geographic distance, cultural distance, and bilateral trade between VC countries and entrepreneurial firm countries. From a policy makers' standpoint, this finding is particularly important since it shows that even a moderate amount of policy uncertainty can act as a hefty tax on VC investment.

Appendix

Table A1- Variable definitions:

Variables	**Description**	**Data Sources**
Economic Policy Uncertainty	A weighted average of the frequency of news articles related to policy uncertainty in a country. The index construction is based on the methods in Baker, Bloom, and Davis (2012).	Baker, Bloom, and Davis (2012), Kroes et al. (2015), Zalla (2016)
VC investment amount	The natural logarithm of one plus total VC investment amount that an entrepreneurial firm receives in a year	VentureXpert

Number of VCs	Total number of VCs investing in an entrepreneurial firm in a year	VentureXpert
Investment per VC	The natural logarithm of one plus total VC investment amount that an entrepreneurial firm receives divided by the number of investing VCs in a year	VentureXpert
Firm Age	The natural logarithm of one plus the number of years since the inception of the entrepreneurial firms	VentureXpert
Lead VC Age	The natural logarithm of one plus the number of years since the founding date of the Lead VC firms	VentureXpert
Early-Stage Dummy	Dummy equals to one if the first VC investment in entrepreneurial firms occurred at the firm's seed or early stage of development.	VentureXpert
Number of rounds	The natural logarithm of the total rounds of financing in each entrepreneurial firm.	VentureXpert
Skewness	The proportion of first-round investment over total investment in the same entrepreneurial firm.	VentureXpert
Industry Tobin's Q	Firm's Tobins' Q is calculated as Assets (WS item 02999) plus market value of equity (WS item 08001) minus book value of equity (WS item 03501) divided by total assets (WS item 02999). Industry Tobin's Q is calculated by taking average of Tobin's Q in each 3-digit SIC industry annually	Datastream
Industry sales growth	Firm's sales growth is calculated as the year-on-year growth rate in annual sales (WS item 01001). Industry sales growth is calculated by taking average of sales growth in each 3-digit SIC industry annually	Datastream
Industry cash flow	Firm's cash flow is calculated as net income before extraordinary items (WS item 01551) plus depreciation (WS item 04049) minus capital expenditures (WS item 04601) divided by assets (WS item 02999). Industry cash flow is calculated by taking average of cash flow in each 3-digit SIC industry annually	Datastream
Industry tangibility	Firm's tangibility is calculated as net property, plant, and equipment (WS item 02501) divided by assets (WS item 02999). Industry tangibility is calculated by taking average of tangibility in each 3-digit SIC industry annually	Datastream
Industry competition	One minus the Lerner index, defined as the industry (three-digit SIC) median gross profit margin (WS item 08306).	Datastream
Currency volatility	The natural logarithm of one plus the standard deviation of the weekly nominal exchange rate against US dollars.	Datastream
Stock market return	The annual change of country-specific stock market index.	Datastream
Patent applications	The number of patent application by residents. Patent applications are worldwide patent applications filed through the Patent Cooperation Treaty procedure or with a national patent office for exclusive rights for an invention.	World Development Indicators (WDI)

Trade openness	The sum of exports and imports of goods and services measured as a share of gross domestic product.	WDI
Inflation	The year-on-year change of annual consumer price index	WDI
Real GDP Growth distance	The difference (for each entrepreneurial firm – lead VC country pair) of the annual real growth rate of the GDP, expressed in US dollars.	WDI
Market capitalization of listed firms (% of GDP)	The share price times the number of shares outstanding for listed domestic companies scaled by gross domestic product	WDI
Financial openness	An index measuring a country's degree of capital account openness	Chinn and Ito (2006)
Ethnic fractionalization	The share of the largest ethnic group in a country	CIA World Factbook
IPO Exit	A dummy variable that equals to one if the entrepreneurial firms exited via initial public offering and zero otherwise	SDC Platinum & VentureXpert
Acquisition Exit	A dummy variable that equals to one if the entrepreneurial firms exited via acquisition and zero otherwise	SDC Platinum & VentureXpert
Successful Exit	A dummy variable that equals to one if the entrepreneurial firms exited via an IPO or acquisition and zero otherwise	SDC Platinum & VentureXpert
Cultural Distance	Cultural difference between the entrepreneurial firm 's and VC's countries, as measured by the Cartesian distance between Hofstede's four cultural dimensions for the two countries.	Taras et al. (2012) & Hofstede (1980)
Geographic Distance	The distance between the capitals of countries of entrepreneurial firms and VC investors, calculated using the great circle formula	Mayer and Zignago (2005)
Common language	A dummy variable that equals to one if firm's country and VC country has common official or primary language	Mayer and Zignago (2005)
Common colonizer	A dummy variable that equals to one if firm's country and VC country has the same common colonizer post 1945	Mayer and Zignago (2005)
Bilateral trade	The maximum of bilateral import and export between an entrepreneurial firm and Lead VC country pair. Bilateral import (export) is calculated as the value of imports (exports) by the entrepreneurial firm's country from (to) the Lead VC as a percentage of total imports (exports) by the entrepreneurial firm country.	IMF-Direction of Trade Statistics
Market-friendliness	A dummy variable that equals to one if the incumbent government is classified as right-leaning or centrist, and zero otherwise	The Database of Political Institutions - IADB

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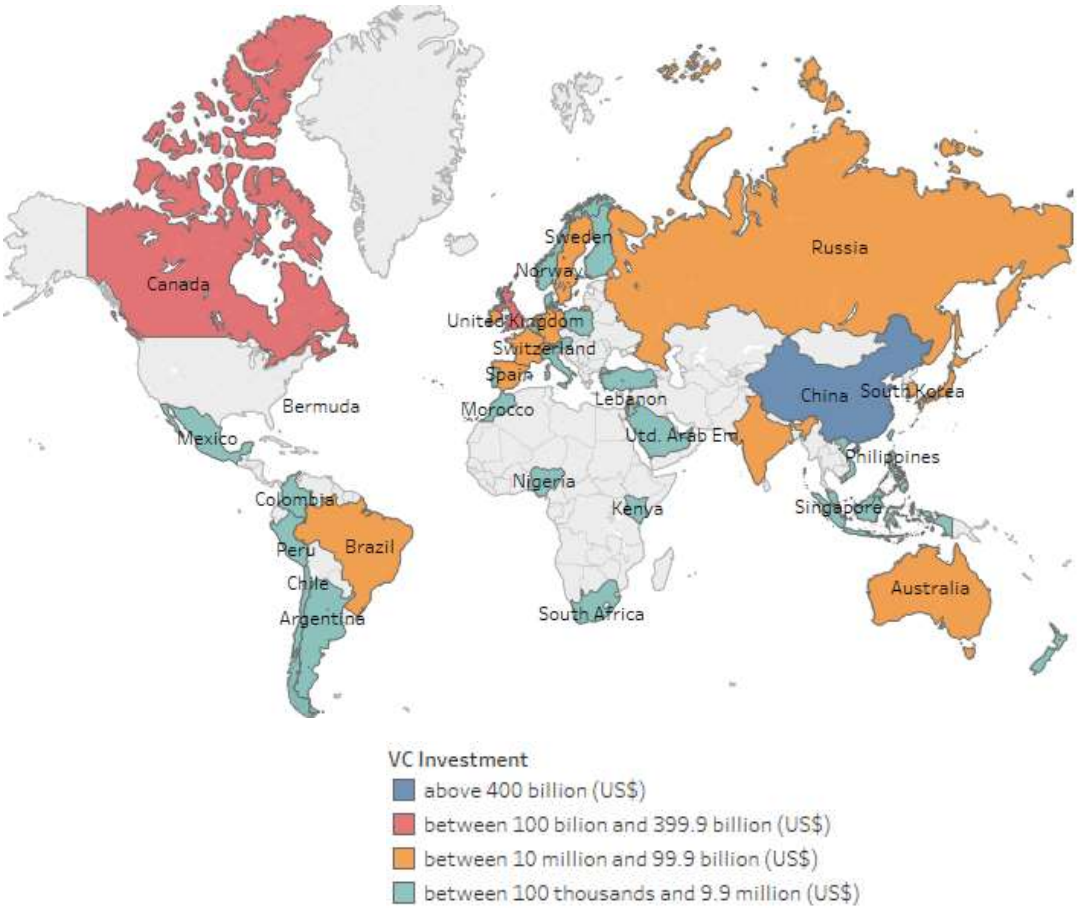
Figure 1 – Venture Capital Investment across countries and cities around the world, excluding the United States.

Subfigure A shows the amount of Venture Capital investment in top 50 countries around the world based on $ values in 2010-2015 period. The color of the area represents the amount of Venture Capital investment. Subfigure B shows the amount of Venture Capital investment in top 50 cities around the world based on $ value in 2010-2015 period. The size and the color of the nodes represents the amount of Venture Capital investment.

Subfigure A – Venture Capital investment in the top 50 countries based on $ value (2010-2015)



Subfigure B - Venture Capital investment in the top 50 cities based on $ Value (2010-2015)

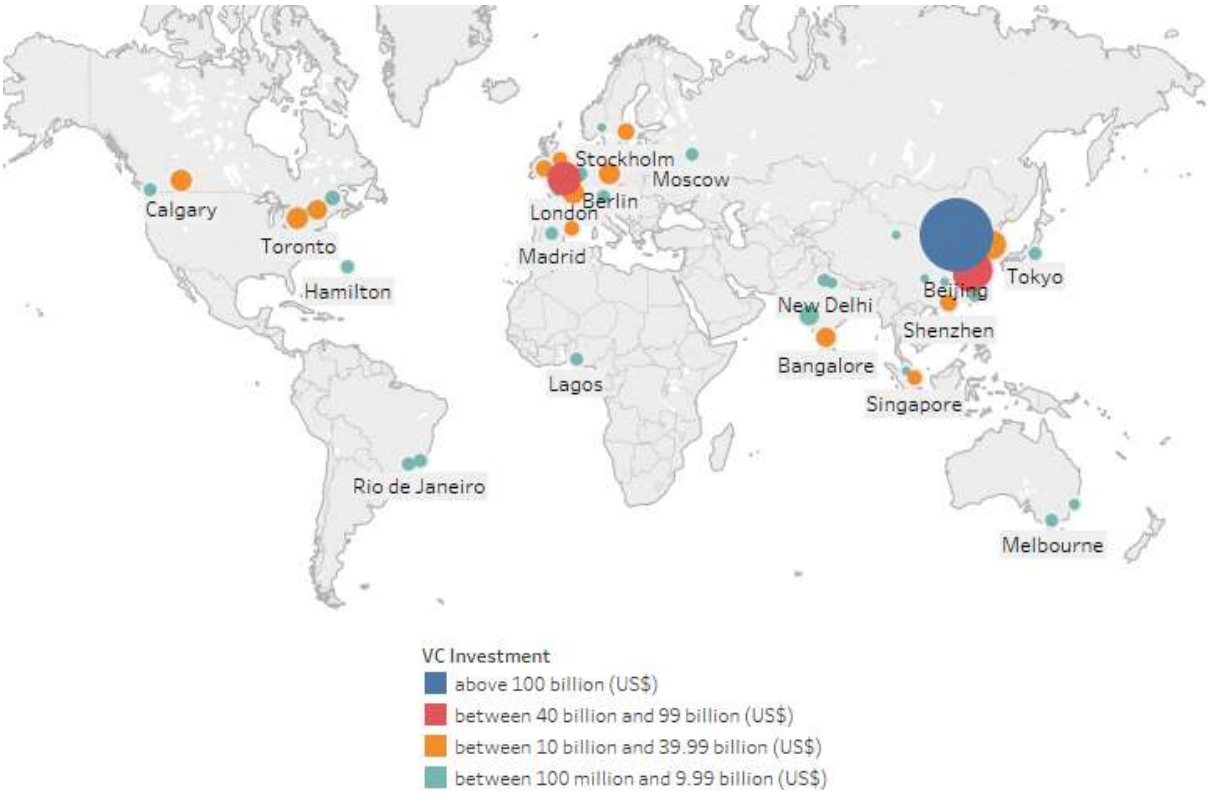


Figure 2 – Economic policy uncertainty and Venture Capital investment.

The figure plots the natural logarithm of Venture Capital investment against economic policy uncertainty of each country, respectively. The Venture Capital investment of each country is the total annual amount of the Venture Capital investment in a country calculated in year 2010. The economic policy uncertainty is from Bloom, Baker, and Davis (2016) and captures the extent to which the country has a high uncertainty about government policy.

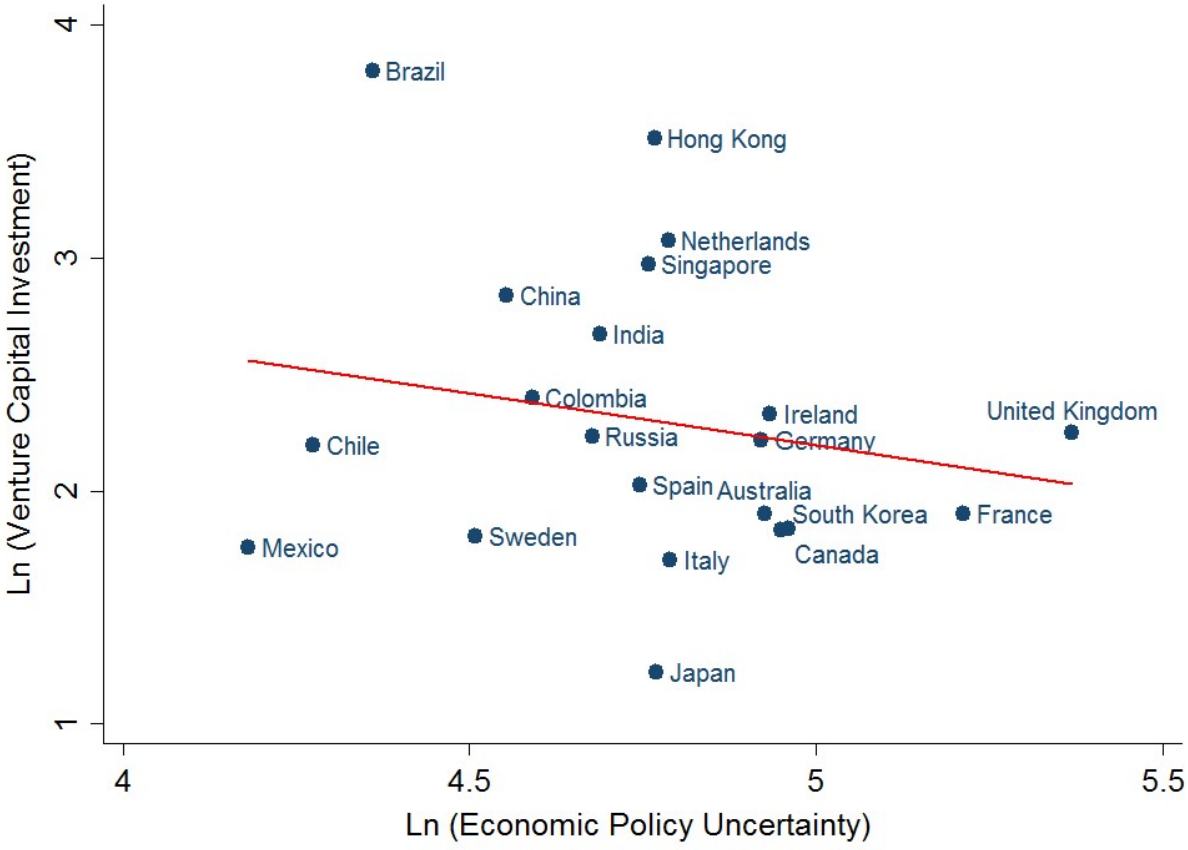


Table 1 - Summary Statistics:

This table presents the summary statistics of the sample between 1987 and 2015. Panel A reports summary statistics for economic policy uncertainty index between in 22 countries. Panel B reports summary statistics for the entrepreneurial firms and Venture Capital firms used in the analysis. Panel C reports the summary statistics for industry control variables. Industry is based on three-digit SIC industry groups for all industry control variables. Panel D reports the summary statistics for macroeconomic control variables. See the Appendix for variable descriptions as well as the variable sources.

Panel A: Policy Uncertainty Index, by country

Country	N	First year	Last year	Mean	Q1	Median	Q3	Standard deviation
Australia	18	1998	2015	106.52	66.54	108.67	132.52	39.33
Brazil	25	1991	2015	77.33	51.69	65.39	86.87	37.17
Canada	29	1987	2015	102.55	57.42	100.03	123.62	45.20
Chile	23	1993	2015	112.52	84.06	99.44	144.43	33.50
China	21	1995	2015	112.92	76.50	111.29	129.98	41.86
Colombia	22	1994	2015	63.65	44.17	59.79	80.64	20.69
France	29	1987	2015	98.34	50.74	76.11	94.29	69.27
Germany	23	1993	2015	107.54	80.24	97.71	125.19	30.70
Greece	18	1998	2015	96.16	67.24	95.31	112.01	39.09
Hong Kong	18	1998	2015	109.22	67.69	92.13	148.81	46.62
India	13	2003	2015	111.18	70.89	96.68	140.65	42.57
Ireland	29	1987	2015	84.41	60.10	75.02	105.09	31.27
Italy	19	1997	2015	105.32	81.83	102.67	121.67	25.13
Japan	29	1987	2015	93.12	76.59	88.52	105.95	22.95
Mexico	20	1996	2015	96.93	60.18	79.05	137.20	48.19
Netherlands	13	2003	2015	94.88	67.58	95.06	119.43	29.82
Russia	22	1994	2015	120.97	83.93	103.73	145.52	51.29
Singapore	13	2003	2015	102.57	72.81	105.89	118.80	32.10
South Korea	26	1990	2015	70.45	40.51	53.50	86.02	38.40
Spain	15	2001	2015	89.50	55.90	97.91	115.66	33.49
Sweden	29	1987	2015	116.38	98.89	108.00	130.82	21.53
United Kingdom	19	1997	2015	98.60	35.15	44.43	204.46	86.12

Panel B: Main VC Investment & Entrepreneurial firms variables

Investment Variables	N	Mean	Q1	Median	Q3	Standard deviation
VC investment	23354	2.144	0.913	1.946	3.180	1.445
Number of VCs investing	23354	1.980	1.000	2.000	3.000	1.198
Average investment per VC	23354	1.702	0.705	1.504	2.485	1.169
Entrepreneurial firms Age	23354	1.848	1.099	1.792	2.485	0.922
Lead Venture Age	23354	2.491	1.946	2.565	3.135	0.906

Panel C: Main Industry variables

Variables	N	Mean	Q1	Median	Q3	Standard deviation
Industry Tobin's Q	23354	5.131	1.450	2.257	4.166	9.312
Industry Sales growth	23354	0.548	0.076	0.238	0.599	1.058
Industry Cash flow	23354	-0.398	-0.232	-0.030	0.027	1.183
Industry Tangibility	23354	0.195	0.090	0.152	0.260	0.148
Industry Competition	23182	0.737	0.579	0.731	0.859	0.354

Panel D: Main Macroeconomic variables

Variables	N	Mean	Q1	Median	Q3	Standard deviation
Economic policy uncertainty	23354	4.564	4.169	4.583	5.042	0.584
Currency volatility	23271	1.03	0.156	0.425	0.98	1.455
Stock market return	23354	0.147	-0.064	0.108	0.272	0.376
Patent Applications by Residents	23284	9.606	8.457	9.597	10.854	1.365
Real GDP Growth	23354	0.037	0.017	0.029	0.052	0.032
Trade Openness	23354	4.071	3.916	4.062	4.182	0.323
Capital Openness	23354	0.769	0.416	1	1	0.351
Inflation rate	23354	0.025	0.013	0.02	0.028	0.021

Table 2 - National Election Summary Statistics:

This table presents national election characteristics for each of the 47 countries in our sample between 1987 and 2015. The number of elections refers to the number of elections with Polity IV index greater than or equal to zero in the sample. The number of close national elections indicates the number of elections of which the margin of victory is smaller than the first quartile value of the margin of victory distribution over the national election in the sample of countries under consideration. Average Margin of victory is defined as the vote difference between the winner and the runner-up across all elections for the sample considered (also including elections with Polity IV index less than or equal to zero).

Countries	Number of Election	Number of Close Election	Average Margin of Victory
Argentina	7	1	22.5
Australia	10	5	4.4
Austria	8	2	5.9
Belgium	8	2	4.0
Brazil	7	1	16.3
Canada	9	0	12.7
Chile	6	1	19.4
Colombia	6	1	19.2
Czech Republic	6	4	3.4
Denmark	10	4	7.7
Finland	8	7	2.2
France	5	3	5.3
Germany	8	2	7.0
Greece	9	2	5.3
Hungary	6	2	12.0
India	7	0	10.9
Indonesia	2	0	5.3
Ireland	7	0	15.4
Israel	4	2	6.0
Italy	8	3	7.0
Japan	8	2	11.4
Luxembourg	6	0	10.2
Malaysia	6	0	25.4
Mexico	5	1	11.2
Netherlands	8	4	3.7
New Zealand	10	2	10.6
Norway	7	1	11.7
Pakistan	5	2	8.5
Peru	5	0	18.5
Philippines	4	0	11.8
Poland	8	2	9.4
Portugal	9	1	12.7
South Korea	5	2	7.7
Russia	5	0	39.1
South Africa	0	0	41.1
Singapore	0	0	51.8
Slovakia	6	1	15.9
Spain	7	1	7.7
Sri Lanka	6	1	10.6

Sweden	8	1	14.8
Switzerland	8	3	4.9
Taiwan	5	2	11.7
Thailand	6	3	12.3
Turkey	8	2	12.7
United Kingdom	7	1	8.1
Venezuela	6	1	14.2
Zimbabwe	1	0	26.2

Table 3 - Economic Policy Uncertainty and VC Investment:

This table presents the results of estimating equation (1). The dependent variables are VC investment amounts (Column 1 & 2), Number of VCs investing (Column 3 & 4), and Investment per VC (Column 5 & 6). Policy uncertainty is measured by the natural logarithm of average value of the Baker, Bloom, and Davis (2016) index annually. Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	VC Inv.	No. VC	No. VC	Inv per VC	Inv per VC
	(1)	(2)	(3)	(4)	(5)	(6)
Policy uncertainty	-0.212***	-0.169***	-0.161***	-0.167***	-0.136***	-0.099**
	(0.054)	(0.053)	(0.055)	(0.044)	(0.042)	(0.042)
Entrepreneurial firm age	0.003	0.026	-0.087***	-0.083***	0.031	0.051**
	(0.027)	(0.027)	(0.018)	(0.019)	(0.022)	(0.022)
Lead VC firm age	0.086***	0.054**	0.047***	0.061***	0.065***	0.030*
	(0.021)	(0.020)	(0.012)	(0.012)	(0.017)	(0.015)
Industry Tobin's Q	0.002	0.001	-0.000	0.000	0.001	0.001
	(0.003)	(0.003)	(0.001)	(0.002)	(0.002)	(0.002)
Industry sales growth	-0.021*	-0.025**	-0.004	-0.007	-0.018**	-0.021***
	(0.011)	(0.009)	(0.008)	(0.009)	(0.008)	(0.007)
Industry cash flow	-0.041**	-0.029*	-0.003	-0.004	-0.038**	-0.028*
	(0.017)	(0.016)	(0.015)	(0.016)	(0.015)	(0.015)
Industry tangibility	-0.075	-0.057	-0.316**	-0.269*	0.032	0.030
	(0.168)	(0.161)	(0.142)	(0.144)	(0.129)	(0.122)
Stock market returns	0.014	0.033	0.021	0.028	0.011	0.023
	(0.025)	(0.032)	(0.044)	(0.050)	(0.025)	(0.027)
Real GDP growth	-0.044	0.603	-0.690	-0.622	0.219	0.705
	(0.857)	(1.070)	(0.835)	(1.011)	(0.778)	(0.824)
Industry competition		-0.053		-0.019		-0.041
		(0.040)		(0.031)		(0.032)
Currency volatility		0.055		-0.008		0.049
		(0.082)		(0.048)		(0.066)
Patent applications		0.148		-0.024		0.152*
		(0.088)		(0.081)		(0.076)
Trade openness		-0.078		0.405**		-0.149
		(0.181)		(0.157)		(0.134)
Financial openness		1.331***		-0.133		1.294***
		(0.267)		(0.216)		(0.209)
Inflation		1.908		2.002*		1.273
		(1.327)		(1.023)		(1.117)

Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Stage fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Lead VC country fixed effects	No	Yes	No	Yes	No	Yes
Observations	21392	20760	21392	20760	21392	20760
Adjusted R-squared	0.218	0.255	0.111	0.122	0.293	0.331

Table 4 - Economic Policy Uncertainty and One-Year and Two-years ahead VC Investment:

This table presents the results of regressing one-year and two-years ahead VC investment activity measures on contemporaneous economic policy uncertainty index. The dependent variables are one-year and two-years ahead VC investment amount (Column 1 & 2, respectively), one-year and two-years ahead No. of VCs (Column 3 & 4, respectively), and one-year and two-years ahead Investment per VC (Column 5 & 6, respectively). Policy uncertainty is measured by the natural logarithm of average value of the BBD index annually. Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, and year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv. t+1	VC Inv. t+2	No. VC t+1	No. VC t+2	Inv. Per VC t+1	Inv. Per VC t+2
	(1)	(2)	(3)	(4)	(5)	(6)
Policy uncertainty	0.015	0.029	0.019	0.027	0.007	0.015
	(0.026)	(0.037)	(0.023)	(0.023)	(0.021)	(0.030)
Entrepreneurial firm age	-0.015	0.004	-0.017	0.015	-0.010	-0.001
	(0.011)	(0.019)	(0.013)	(0.012)	(0.010)	(0.014)
Lead VC firm age	0.004	-0.001	-0.009	0.007	0.006	-0.005
	(0.009)	(0.006)	(0.011)	(0.008)	(0.008)	(0.005)
Industry Tobin's Q	0.002	-0.001	0.002	-0.001	0.002	-0.000
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
Industry sales growth	-0.001	0.016**	-0.006	-0.005	0.001	0.019***
	(0.015)	(0.007)	(0.009)	(0.008)	(0.011)	(0.005)
Industry cash flow	-0.001	-0.006	0.009	-0.015	-0.003	-0.001
	(0.021)	(0.011)	(0.009)	(0.011)	(0.018)	(0.006)
Industry tangibility	-0.146	0.169*	-0.071	0.001	-0.102	0.147*
	(0.127)	(0.090)	(0.103)	(0.080)	(0.109)	(0.085)
Industry competition	0.019	-0.014	0.067***	0.015	0.001	-0.020
	(0.021)	(0.032)	(0.016)	(0.039)	(0.021)	(0.022)
Currency volatility	0.016	0.044	-0.014	0.016	0.023	0.036
	(0.037)	(0.027)	(0.026)	(0.030)	(0.029)	(0.030)
Stock market returns	-0.024	0.051	0.018	0.034	-0.035	0.026
	(0.047)	(0.053)	(0.029)	(0.024)	(0.036)	(0.042)
Patent applications	-0.043	-0.138*	-0.021	-0.096*	-0.037	-0.095
	(0.053)	(0.070)	(0.053)	(0.055)	(0.051)	(0.056)
Real GDP growth	1.297	-0.063	0.151	0.220	1.019	-0.162
	(0.815)	(0.790)	(0.570)	(0.594)	(0.758)	(0.634)
Trade openness	-0.073	0.033	-0.110	0.002	-0.053	0.015
	(0.075)	(0.081)	(0.101)	(0.075)	(0.046)	(0.079)

Financial openness	0.252	-0.355	0.055	-0.040	0.302	-0.302
	(0.313)	(0.346)	(0.255)	(0.338)	(0.278)	(0.224)
Inflation	-1.021	-0.860	-1.395**	0.951	-0.478	-1.136
	(1.145)	(0.967)	(0.579)	(0.732)	(0.894)	(0.783)
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Stage FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21148	21147	21148	21147	21148	21147
Adjusted R-squared	0.024	0.021	0.013	0.015	0.028	0.026

Table 5 - Residual Economic Policy Uncertainty and VC investment:

This table presents the results of robustness check with residual economic policy uncertainty. We replace each country economic policy uncertainty by the residual from regressing of each country policy uncertainty index on the U.S. economic policy uncertainty. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. Per VC
	(1)	(2)	(3)
Policy Uncertainty - Residual	-0.077***	-0.056**	-0.055**
	-0.02	-0.019	-0.015
Entrepreneurial firm age	0.006	-0.084***	0.034
	-0.028	-0.018	-0.023
Lead VC firm age	0.082**	0.045**	0.060**
	-0.023	-0.013	-0.018
Industry Tobin's Q	0.003	0	0.002
	-0.002	-0.001	-0.002
Industry sales growth	-0.014	0	-0.014
	-0.011	-0.008	-0.008
Industry cash flow	-0.046**	-0.005	-0.042**
	-0.016	-0.016	-0.013
Industry tangibility	-0.079	-0.316*	0.031
	-0.165	-0.125	-0.131
Stock market returns	-0.001	-0.013	0.012
	-0.051	-0.053	-0.04
Real GDP growth	-0.024	-0.458	0.167
	-1.213	-0.748	-1.093
Industry fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Stage fixed effects	Yes	Yes	Yes
Firm Country fixed effects	Yes	Yes	Yes
Observations	20479	20479	20479
Adjusted R-squared	0.217	0.113	0.291

Table 6 - Robustness Check on Industry-Country Level VC Investment Measures:

This table presents the results of robustness check with industry-country level. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy Uncertainty	-0.352***	-0.012	-0.279***
	-0.126	-0.987	-0.098
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	4088	4088	4088
adj. R-square	0.365	0.467	0.259

Table 7 - Identification Attempt using Close National Elections:

This table reports the results of the panel regressions of VC Investment on National Election across 47 countries over 1987-2015 period. The dependent variables are VC investment amount (Column 1 &2), No. of VCs (Column 3 & 4), and Investment per VC (Column 5 & 6). For Column 1-3, we set close election dummy to one if the margin of victory is smaller than the first quartile value of the margin of victory distribution over the sample of countries under consideration, where the margin of victory is defined as the difference between the fraction of votes won by the victor and that garnered by the runner-up. For column 4-6, we set close election dummy to one if the margin of victory is smaller or equal to 5%. Panel A reports the results for all samples. Panel B reports the estimation results when we use randomized National Election. Firm age is measured by the natural logarithm of the age of firm *i* in year *t* plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Full Samples

	Close Election I			Close Election II		
	VC Inv.	No. VC	Inv per VC	VC Inv.	No. VC	Inv per VC
	(1)	(2)	(3)	(4)	(5)	(6)
Close election	-0.159**	-0.034	-0.143**	-0.147**	-0.051	-0.126**
	-0.066	-0.049	-0.053	(0.064)	(0.050)	(0.050)
Entrepreneurial firm age	-0.02	-0.100***	0.013	-0.020	-0.100***	0.013
	-0.021	-0.017	-0.018	(0.021)	(0.017)	(0.018)
Lead VC firm age	0.057***	0.046***	0.033**	0.057***	0.046***	0.033**
	-0.018	-0.014	-0.015	(0.018)	(0.014)	(0.015)
Industry Tobin's Q	0.003	0	0.002	0.003	-0.000	0.002
	-0.002	-0.001	-0.002	(0.002)	(0.001)	(0.002)
Industry sales growth	-0.015	-0.005	-0.014	-0.016	-0.005	-0.014
	-0.012	-0.008	-0.009	(0.012)	(0.008)	(0.009)
Industry cash flow	-0.038**	-0.001	-0.036**	-0.038**	-0.001	-0.036**
	-0.018	-0.017	-0.014	(0.018)	(0.017)	(0.014)
Industry tangibility	0.007	-0.199	0.09	0.009	-0.199	0.092
	-0.184	-0.141	-0.155	(0.184)	(0.141)	(0.155)
Stock market returns	0.086	0.056	0.052	0.088	0.058	0.053
	-0.134	-0.101	-0.118	(0.134)	(0.100)	(0.118)
Real GDP growth	0.452	-0.39	0.635	0.492	-0.389	0.673
	-1.422	-1.767	-1.185	(1.408)	(1.772)	(1.173)
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Stage fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Firm Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17755	17755	17755	17755	17755	17755
Adjusted R-squared	0.204	0.12	0.272	0.204	0.120	0.272

Panel B: Placebo Tests using Randomized National Elections

	Close Election I			Close Election II		
	VC Inv.	No. VC	Inv per VC	VC Inv.	No. VC	Inv per VC
	(1)	(2)	(3)	(4)	(5)	(6)
Close Election	0.077	-0.062	0.060	0.083	-0.051	0.065
	(0.094)	(0.094)	(0.078)	(0.076)	(0.074)	(0.063)
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17755	17755	17755	17755	17755	17755
Adjusted R-squared	0.204	0.120	0.272	0.204	0.120	0.272

Table 8 - Identification Attempt using National Elections - Subsample Analysis based on Country's Ethnic Fractionalization:

This table reports the results when we split all sample countries into low (high) groups when their largest ethnic groups' shares are above (below) the 70th (30th) percentile in each year in Column 1-3 (4-6). The dependent variables are VC investment amount (Column 1 & 4), No. of VCs (Column 2 & 5), and Investment per VC (Column 3 & 6). Firm age is measured by the natural logarithm of the age of firm *i* in year *t* plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Ethnic Fractionalization (<p30)			Ethnic Fractionalization (>p70)		
	VC Inv.	VC Inv.	No. VC	No. VC	Inv per VC	Inv per VC
	(1)	(2)	(3)	(4)	(5)	(6)
Close election	-0.305**	-0.447***	-0.18	-0.148	-0.068	-0.121
	-0.118	-0.115	-0.117	-0.124	-0.103	-0.091
Industry controls	Yes	Yes	Yes	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4651	4651	4651	7343	7343	7343
Adjusted R-squared	0.15	0.122	0.236	0.222	0.147	0.251

Table 9 - Identification Attempt using Congress Year of Chinese Communist Party in China:

This table presents the estimation results when we restrict our sample to China and use the National Congress of the Chinese Communist Party as plausibly exogenous variation of policy uncertainty. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). The National Congress is the most important event in China with respect to the determination of party leadership, political objectives, and economic policy. Congress Year dummy is set to one during the year when Congress Year is held, and zero otherwise. Firm age is measured by the natural logarithm of the age of firm *i* in year *t* plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects. Standard errors are clustered at the industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Congress Year	-0.183**	-0.186**	-0.103*
	-0.084	-0.083	-0.055
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	3493	3493	3493
adj. R-squared	0.145	0.036	0.208

Table 10 - Cross-Sectional Heterogeneity on Firm Age:

This table presents the results of the panel regression of VCs' investment on economic policy uncertainty, and the interactions between entrepreneurial firm age and policy uncertainty variable. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, and year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy uncertainty	-0.344***	-0.128*	-0.266***
	(0.059)	(0.065)	(0.040)
Policy uncertainty*Firm age	0.077***	-0.019	0.075***
	(0.020)	(0.018)	(0.013)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	21395	21395	21395
Adjusted R-squared	0.219	0.111	0.294

Table 11 - Cross-Sectional Heterogeneity on Entrepreneurial Firm Development stages:

This table presents the results of the panel regression of VCs' investment on economic policy uncertainty, and the interactions between entrepreneurial firm development stage dummy and policy uncertainty variable. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Early-stage dummy equals one if the entrepreneurial firm is in startup/seed or early stage, and equals zero if the firm is in expansion, later stage or buyout/acquisition. Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, entrepreneurial firm country fixed effects, and year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy uncertainty	-0.206***	-0.159***	-0.132***
	(0.049)	(0.041)	(0.041)
Pol. Uncertainty * Early Stage Dummy	-0.108***	0.017	-0.104***
	(0.024)	(0.027)	(0.018)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	21395	21395	21395
Adjusted R-squared	0.189	0.104	0.250

Table 12 - Cross-Sectional Heterogeneity on Venture Capital Types:

This table presents the results of the panel regression of VCs' investment on economic policy uncertainty, and the interactions between Venture Capital Types Dummy and policy uncertainty variable. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, and year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Government Lead VC

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy uncertainty	-0.219***	-0.162***	-0.142***
	(-4.00)	(-2.90)	(-3.36)
Pol. Uncertainty * Government Lead VC	0.313**	0.0272	0.265**
	(2.24)	(0.21)	(2.48)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	21395	21395	21395
Adjusted R-squared	0.221	0.111	0.295

Panel B: Corporate Lead VC

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy uncertainty	-0.213***	-0.159***	-0.139***
	(-4.00)	(-2.89)	(-3.34)
Pol. Uncertainty * Corporate Lead VC	0.139**	-0.00208	0.132**
	(2.16)	(-0.02)	(2.44)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	21395	21395	21395
Adjusted R-squared	0.219	0.112	0.293

Table 13 - Cross-Sectional Heterogeneity on Entrepreneurial Firm Cities:

This table presents the results of the panel regression of VCs' investment on economic policy uncertainty, and the interactions between Global Hubs and policy uncertainty variable. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Global Hubs equals to 1 if the headquarter of the entrepreneurial firms is located in the top 50 cities with the largest Venture Capital investment between 2010-2015 and equals zero otherwise. Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, and year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy Uncertainty	-0.261***	-0.193***	-0.169***
	(0.056)	(0.047)	(0.043)
Policy Uncertainty * Global Hubs	0.115***	0.072	0.076***
	(0.030)	(0.047)	(0.024)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	21395	21395	21395
Adjusted R-squared	0.224	0.114	0.298

Table 14 - Cross-Sectional Heterogeneity on Equity Market Development:

This table presents the results of the panel regression of VCs' investment on economic policy uncertainty, and the interactions between equity market development and policy uncertainty variable. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). Firm age is measured by the natural logarithm of the age of firm i in year t plus one. Industry control variables include Tobin's Q, sales growth, cash flow, tangibility, and competition. Industry is based on three-digit SIC industry groups. Macroeconomic control variables include stock return, and GDP growth. All specifications include industry fixed effects, stage fixed effects, entrepreneurial firm country fixed effects, Lead VC country fixed effects, year fixed effects. Standard errors are clustered at the country-industry year are reported in parentheses. All variables are winsorized at the 5th and 95th percentiles. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	VC Inv.	No. VC	Inv. per VC
	(1)	(2)	(3)
Policy uncertainty	-0.436***	-0.315***	-0.243***
	(0.105)	(0.109)	(0.080)
Pol. Uncertainty * Equity market development	0.189**	0.037	0.105*
	(0.073)	(0.108)	(0.058)
Industry controls	Yes	Yes	Yes
Macroeconomic controls	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes
Observations	19075	19075	19075
Adjusted R-squared	0.222	0.116	0.297

Table 15 - Policy Uncertainty and Probability of Investment Success:

This table presents the results of regressing the measures of investment outcomes on economic policy uncertainty. The independent variables are IPO Exit Dummy (Column(1)), Acquisition Exit Dummy (Column (2)), and Success Exit Dummy (Column(3)). All continuous variables are winsorized at the 5% and 95% levels. Standard errors clustered at the country-industry level are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	IPO Exit	Acquisition Exit	Successful Exit
	(1)	(2)	(3)
Policy uncertainty	-0.593*	-0.883***	-0.880***
	(0.320)	(0.104)	(0.111)
Entrepreneurial firm age	-0.025	0.029	0.021
	(0.048)	(0.022)	(0.021)
Lead VC firm age	-0.042	-0.028	-0.031
	(0.035)	(0.030)	(0.025)
Industry Tobin's Q	0.014	0.009	0.012*
	(0.018)	(0.007)	(0.007)
Industry sales growth	0.173**	0.007	0.031
	(0.071)	(0.039)	(0.036)
Industry cash flow	0.220	0.056	0.097*
	(0.141)	(0.057)	(0.057)
Industry tangibility	0.472	0.216	0.369*
	(0.440)	(0.211)	(0.208)
Real GDP growth	0.103	0.203***	0.191***
	(0.066)	(0.049)	(0.046)
Fixed effects	yes	yes	yes
Observations	14291	20913	21210
Pseudo R-squared	0.2149	0.2714	0.2405

Table 16 - Policy Uncertainty and VC Investment Structure:

This table presents the results of regressing the measures of VC investment structure on economic policy uncertainty. The independent variables are Number of rounds (Column(1)) and Skewness (Column (2)). Number of rounds is the natural logarithm of total number of financing rounds in each entrepreneurial firms. Skewness is the fraction of first round investment over total investment in the same underlying entrepreneurial firm. All continuous variables are winsorized at the 5% and 95% levels. Standard errors clustered at the country-industry level are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	No. Rounds	Skewness
	(1)	(2)
Policy uncertainty	1.043***	-0.213***
	(-0.091)	(-0.024)
Entrepreneurial firm age	-0.108***	0.056***
	(-0.012)	(-0.005)
Lead VC firm age	0.056***	0.007
	(-0.021)	(-0.005)
Industry Tobin's Q	0.01	-0.003**
	(-0.007)	(-0.002)
Industry sales growth	0.114***	-0.027**
	(-0.033)	(-0.012)
Industry cash flow	-0.087	-0.016
	(-0.06)	(-0.013)
Industry tangibility	-0.908***	0.232***
	(-0.139)	(-0.045)
Real GDP growth	-0.151***	0.039***
	(-0.026)	(-0.009)
Fixed effects	yes	yes
Observations	24585	15130
R-squared	0.2515	0.1982

Table 17 - Policy Uncertainty & Cross-Border Venture Capital Investments:

This table presents the results of regressing the cross-border Venture Capital investments on economic policy uncertainty. The dependent variables are VC investment amount (Column 1), No. of VCs (Column 2), and Investment per VC (Column 3). All continuous variables are winsorized at the 5% and 95% levels. Standard errors clustered at the entrepreneurial firm country and VC country level are reported in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

	Cross-Border VC Inv.	Cross-Border VC Inv. *t*+1
	(1)	(2)
Policy Uncertainty	-0.286**	-0.287*
	(0.134)	(0.152)
Real GDP growth distance	-7.138	-3.339
	(4.669)	(3.798)
Culture distance	-0.026	-0.027
	(0.033)	(0.028)
Geographic distance	0.208	0.189
	(0.338)	(0.310)
Bilateral trade	0.068***	0.066***
	(0.010)	(0.008)
Common language	0.496	0.379
	(0.330)	(0.295)
Common colonizer	0.810*	0.775**
	(0.402)	(0.367)
Market-friendliness	-0.080	-0.018
	(0.098)	(0.111)
Year fixed effects	Yes	Yes
Country fixed effects	Yes	Yes
Observations	2170	2164
Adjusted R-squared	0.200	0.205