No. 2104 [EN]

IMI Working Paper

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Precautionary Saving or Speculating?

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Corporate Financial Asset Holdings under Economic Policy Uncertainty: Precautionary Saving or Speculating? ⋆

By **Huang Jialin, Luo Yu and Peng Yuchao**⋆

May 2021

Abstract

Non-financial corporations invest heavily in financial assets nowadays, raising questions about the traditional boundaries of non-financial firms. We investigate how economic policy uncertainty affects firms' holdings of non-currency financial assets and portfolios in China. We find that economic policy uncertainty has a negative effect on firms' non-currency financial asset allocation, especially for less financially constrained firms. This result implies that other than precautionary saving, speculation is the underlying motive that drives firms to increase their non-currency financial asset holdings. Furthermore, economic policy uncertainty has a negative but weaker impact on financial asset holdings for firms in industries/regions with intensive competition.

JEL Classification: G18, G31, G32, G38, E60
Keywords: Economic policy uncertainty; Financial asset; Financial constraint; Speculation; Precautionary saving

1. Introduction

In the literature on corporate cash holdings, financial assets are usually regarded as important components of cash equivalents in managing liquidity.[1] In other words, corporate financial assets allow firms to cut the transaction costs of raising funds compared

⋆ Published in International Review of Economics and Finance.
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[1] An incomplete list of studies examining corporate financial assets as liquidity management includes Allen and Phillips (2000), Gorton, Lewellen, and Metrick (2012), Jeffers and Kwon (1969), Miller and Orr (1966, 1968), and Selden (1961).

to liquidating assets, and to seize future investment opportunities when other sources of funding are not available or are excessively costly (Opler, Pinkowitz, Stulz, & Williamson, 1999). However, recent studies document that cash equivalents provide conditional liquidity and fail to fulfill the same precautionary role as cash (Lins, Servaes, & Tufano, 2010; Sufi, 2007; Yun, 2009). Moreover, Duchin, Gilbert, Harford, &Hrdlicka (2017) propose that large numbers of firms, including Google and Apple, now hold financial assets for improving returns on their money, which they now manage conservatively. Although non-financial corporations are increasingly involved in financial markets worldwide, little evidence has been provided for the property of corporate financial assets so far. Do firms treat non-currency financial assets as a part of liquidity management? Or do they increase their financial asset holdings in order to improve stockholders' earnings? This study contributes to the literature on cash holdings by documenting the real attributes of corporate financial asset holdings in China, which are considered crucial components of corporate cash equivalents.

According to the literature, economic policy uncertainty (EPU) has a great impact on the environment in which firms operate and hence, on their behavior. Previous studies have found a negative relationship between EPU and corporate investment owing to investment irreversibility and the option value of waiting to invest. Therefore, EPU may be one of the main reasons for the sluggish recovery following the 2007–2008 global financial crisis(An, Chen, Luo, & Zhang, 2016; Bloom, 2009; Gulen & Ion, 2016; Julio & Yook, 2012; Wang, Chen, & Huang, 2014).We contribute to this debate by presenting evidence to show how policy-related uncertainty impacts firms' specific reversible assets, that is, firms' financial asset holdings and portfolios of such assets in China, rather than corporate investment generally.

Recent studies have documented that some financial assets, including financial derivatives, are a means for corporations to manage risks and generate yields (e.g., Guay & Kothari, 2003; Jin & Jorion, 2006). However, such speculative properties of the entire range of corporate financial assets have rarely been examined in a transition economy. This study attempts to fill the gap by presenting new evidence to show that corporates hold financial assets for speculation (Campbell & Kracaw, 1990; Ljungqvist, 1994). Specifically, we examine the relationship between EPU and firms' non-currency financial asset holdings in China.

When governments introduce new series of economic policies to stimulate the macroeconomy, which result in great uncertainty for the real economy, corporations may change their holding positions of financial assets for different reasons. On the one hand, firms with the precautionary saving motive hold more financial assets when EPU increases. As the liquidity of financial assets is higher than that of fixed assets, firms seek to hold financial assets in order to mitigate corporate liquidity crisis and to help enterprises seize investment opportunities at times of unexpected shocks and funding shortages (Duchin, 2010). EPU is positively associated with the possibility of liquidity crisis in the future, and consequently, firms invest more in financial assets to hedge unexpected risk induced by economic policy in response to an increase in EPU.

On the other hand, firms with the speculative motive seek to invest less in financial assets when EPU increases. As Ljungqvist (1994) mentions, managers with private information speculate on financial assets to manipulate stock prices in order to maximize stockholders' interests, on condition that the stock price is a convex function of profits. When EPU

increases, future profit is expected to be more volatile, and thus, the link between stock prices and profits weakens. Therefore, managers speculate less on financial assets in response to an increase in EPU.

Previous empirical work suggests that there is general consensus about the negative effects of EPU on corporate investment in both developed and developing countries. However, little evidence has been provided on the impact of EPU on corporate financial asset holdings. Our study attempts to fill the gap by investigating whether corporations hold financial assets for the precautionary saving or the speculative motive.

To disentangle these effects, we use data from China, for the following reasons. First, the Chinese government is regarded as an active authority that plays a crucial role in promoting economic development (e.g., Maskin, Qian, & Xu, 2000; Piotroski & Zhang, 2014). After the outbreak of the 2007–2008 global financial crisis in particular, the Chinese government launched important economic policies to combat economic recession, including an RMB4 trillion stimulus plan. These policies resulted in great uncertainty for the real economy. Therefore, China provides an ideal setting to study the issue of non-financial corporations' involvement in financial markets. In addition, as China is the largest emerging economy, an examination of the impact of China's EPU on corporate financial asset holdings would produce interesting results with important implications for other transition economies. Second, it has become more common for Chinese corporations to invest in financial assets (Acharya, Qian, & Yang, 2019; Allen, Qian, Tu, & Yu, 2016; Du, Li, & Wang, 2017).Therefore, it is important to understand the main motivation for Chinese corporations to invest in financial assets, that is, the precautionary saving motive or the speculative motive.

We use an aggregate index proposed by Baker, Bloom, and Davis (2016) to measure EPU and examine firm-quarter panel data of Chinese listed firms during the period 2007–2015.We measure firms' financial assets comprised of (1) firms' total marketable non-currency short-term assets, which include the balance sheet accounts "financial assets held for trading," "available-for-sale financial investments," and "held-to-maturity financial investments," and (2) one additional long-term financial asset reported as "investment property."

We further investigate the mechanism through which EPU affects corporate financial asset holdings. First, we investigate the effect of EPU on corporate cash holdings to show that firms have an alternative way to meet the needs of precautionary saving when EPU increases. Second, we explore the heterogeneous impact of EPU on financial asset holdings for firms that are subject to financial constraints.

Our study's contribution to the literature is summarized in the following three points. First, this study has noticeable implications for the literature on corporate cash holdings, as financial assets are perceived as important components of corporate cash equivalents. The study shows that Chinese firms increase their financial asset holdings in order to improve stockholders' interests and not to mitigate corporate liquidity crisis, which challenges the dominance of the precautionary savings motive for corporate financial asset holdings. Second, this study complements the recent literature that EPU has a negative effect on corporate investment owing to irreversibility and the option value of waiting to invest. This study shows that although corporate financial assets are reversible, uncertainty still incentivizes firms to delay financial asset holdings for speculation. Third, we contribute to the literature on the speculative motive of corporate financial assets. Studies

generally have documented the speculative motive of specific financial assets, including financial derivatives. This study provides support for the existence of such speculative properties for the entire corporate financial assets in a transition economy.

The remainder of the paper proceeds as follows. Section 2develops testable hypotheses. Section 3 describes the data and variables. Section 4 presents the empirical results. Section 5 examines the underlying mechanisms and cross-sectional heterogeneity. Section 6 concludes.

2. Background and hypothesis development

2.1. China's financial system and firms' financial investment

China's financial system is commonly regarded as less developed and discriminatory against privately owned enterprises and small firms (Brandt & Li, 2003; Allen, Qian, & Qian, 2005). This is the essential financial distortion in China, which became more intense after the outbreak of the 2007–2008 global financial crisis. The allocation of financial resources became more concentrated, and larger firms or state-owned enterprises (SOEs) gained greater access to bank loans than small firms or privately owned enterprises did (Beuselinck, Deloof, & Xia, 2017). In November 2008, the Chinese government officially announced an economic stimulus package of RMB 4 trillion to increase bank credit supply and investment spending. However, the government simultaneously announced detailed information of capital distribution, whereby it would supply capital concentrated in favored industries, including transportation and power infrastructure, rural village infrastructure, and culture industries. Under these circumstances, firms in favored industries or with political connections have better access to formal finance than others do.

The Chinese financial market introduced several highly structured financial products after the global financial crisis. According to the previous literature, owing to strict bank regulations, Chinese banks significantly increased the issuance of wealth management products, which are a major component of China's shadow-banking sector (Acharya et al., 2019). Allen et al. (2016)argue that entrusted loans,[2] an important type of shadow banking tool in China, increased drastically after the global financial crisis. In the face of respectable profitability of shadow banking activities, firms with fewer financial constraints and lower productivity are actively involved in these investments. Furthermore, Du et al. (2017) find that numerous non-financial enterprises participate in re-lending activities in China, and act like financial intermediaries if they have poor growth prospects and good access to formal finance.

Besides the above mentioned kinds of financial assets, nowadays, a large number of corporations with adequate capital also seek to hold real estate in order to earn rent or capital appreciation, which is dubbed *touzixing fangdichan* ("investment property") in China's Financial Report Standard (Third Edition). Moreover, owing to the high return rate and price volatility of investment properties, large numbers of Chinese firms use them as the main alternative financial asset to bank deposits or (risky) stock.

Based on this unique situation, we argue that Chinese credit distortion, limited investment opportunities for the real economy, and the low level of development of the Chinese financial market have driven Chinese firms to invest actively in financial assets.

[2]Entrusted loans are loans made to a party by a non-bank party (e.g., industrial firm, entity sponsored by a local government, or private equity fund), using a bank as a servicing agent.

2.2. Chinese economic policy uncertainty

The Chinese government is generally considered an active authority that intervenes frequently in economic development. Since the outbreak of the 2007–2008 global financial crisis, the Chinese government has launched a series of economic policies to mitigate economic recession. Even though these policies have contributed significantly to the recovery of the Chinese economy, they have also resulted in great uncertainty for the real economy. Moreover, China experienced a huge political transition in 2012. Generally, new leaders launch different economic policies, which are difficult to anticipate by firms and households. After Chinese President Xi Jinping took over China's leadership in 2012, the Central Committee of the Communist Party of China announced a strong anti-corruption campaign, which also has a significant influence on economic policymaking (Pan & Tian, 2017).

Recent studies have shown that Chinese EPU has great impacts on the real economy and corporate behavior (e.g., Liu, Shu, & Wei, 2017; Piotroski & Zhang, 2014; Wang et al., 2014; Xu, Chen, Xu, & Chan, 2016). In particular, the previous literature has found that Chinese political uncertainty has negative impacts on future asset prices and dampens corporate investment. However, little is known about the impact of EPU on corporate financial asset holdings, which is the main concern of this study.

2.3. Hypothesis development

Research on corporate cash holdings generally argues that firms hold cash and cash equivalents as liquidity management tools for the precautionary saving motive (e.g., Frazer, 1958; Jeffers and Kwon, 1969; Opler et al., 1999). Cash equivalents include bank deposits, treasuries, and non-cash financial assets. These financial assets are regarded as safe assets as they are information insensitive, suggesting that investors do not require private information about the issuer. However, besides cash and non-cash safe assets, a growing number of firms hold a certain share of risky financial assets in their portfolios, including corporate debt, equity, and asset-backed securities. For instance, risky financial assets represent 40% of the financial portfolios of U.S. firms. Moreover, the share of risky financial assets in financial asset portfolios is found to be positively associated with the size of the portfolio (Duchin, Gilbert, Harford, & Hrdlicka, 2017).

When EPU increases, firms with the precautionary saving motive prefer to hold more liquidity through two different channels. First, EPU increases the cost of firms' external financing and the unpredictability of firms' cash demand, which increase the value of liquidity. Thus, firms are incentivized to hold more liquidity when EPU increases. Second, cash holdings enable firms to use liquid assets to finance their future investment opportunities, and uncertainty increases the value of the real option of waiting to invest in fixed assets (Bloom, Bond, & Van Reenen, 2007; Gulen & Ion, 2016). Therefore, firms choose to hold more liquid assets so as to wait for the best chance to invest. As an important substitute for cash, an increase in EPU is assumed to encourage firms to hold more financial assets.

However, another strand of literature considers corporate financial assets an object of speculation. The classic theory of Tobin (1965) emphasizes that investors wish to invest in financial assets when rates of return on the real sector are too unattractive for investment, which means there is substitutability of real and financial assets in portfolio balances. Increasing the availability and accessibility of investment opportunities in financial

markets can help firms in the real sector sustain profit margins despite market rigidities, increasing goods market competition, or higher levels of risks (Demir, 2009).Indeed, a growing number of corporate managers are searching for yield when investing in financial market (Becker & Ivashina, 2015; Rajan, 2010).

When EPU increases, firms with the speculative motive prefer to decrease financial asset holdings for two reasons. First, uncertainty raises the heterogeneity of investors' beliefs in future market prices, and hence, increases the price volatility of financial markets (Pástor & Veronesi, 2012, 2013). Firms hold fewer risky financial assets to prevent loss owing to fear of a sharp drop of financial asset prices. Second, uncertainty makes it more difficult to forecast future returns, and firms' preferences for heterogeneous financial assets in terms of expected returns may alter rapidly, which gives firms incentives to delay financial investment. Therefore, managers are less motivated to speculate on financial assets when EPU increases. Based on the above mentioned predications, we empirically test the following two competing hypotheses.

Hypothesis 1-a. (Precautionary saving view): EPU is positively associated with firms' financial asset holdings.

Hypothesis 1-b. (Speculative view): EPU is negatively related to firms' financial asset holdings.

2.3.1. Financial constraints and the effect of economic policy uncertainty

To explore the motive for firms to hold financial assets further, we investigate the heterogeneous effect of EPU on firms with different extent of financial constraints.

According to the precautionary saving view, the function of financial assets is likely to be liquidity, such as cash and cash equivalents, and thus, more financially constrained firms are assumed to hold more liquidity. When EPU increases, financial intermediation frictions increase, firms have more difficulty raising external financing, and the price of external financing rises (Gungoraydinoglu, Colak, & Oztekin, 2017). Therefore, firms with more financial constraints increase liquidity more when uncertainty is higher (Han & Qiu, 2007). Thus, for financially constrained firms, holdings of financial assets are assumed to increase substantially in response to an increase in EPU.

By contrast, from the speculative view, financial assets are more likely to be an investment, like fixed assets. Firms with fewer financial constraints have more financial investment opportunities, and can supply relatively sufficient capital to fund their financial and fixed investment projects. When EPU increases, higher price volatility of financial markets and more fixed and financial investment opportunities drive firms with fewer financial constraints to have higher value on the option of waiting; thus, firms with fewer financial constraints reduce financial asset holdings more. In other words, the negative effect of EPU on financial asset speculation mainly derives from firms with fewer financial constraints (Xie, 2009).These arguments lead to the following competing hypotheses.

Hypothesis 2-a. (Precautionary saving view): The positive effect of EPU on firms' non-currency financial asset holdings is more pronounced for more financially constrained firms.

Hypothesis 2-b. (Speculative view): The negative effect of EPU on firms' non-currency financial asset holdings is more pronounced for less financially constrained firms.

3. Empirical research design

Our sample includes all Chinese domestic companies listed on the Shanghai and Shenzhen Stock Exchanges, and the sample spans 2007 to 2015. We start our analysis in 2007 because the China Securities Regulatory Commission (CSRC) required listed firms to disclose detailed information about their financial assets only from 2007. The data on quarterly financial statements and capital market information are obtained from the China Stock Market and Accounting Research Database. We measure Chinese EPU using an aggregate index developed by Baker et al. (2016).

Our sample selection process is as follows. (1)We exclude stocks in the financial and real estate industries according to the classification standard of the CSRC. (2) We drop stocks that were in special treatment (ST, *ST, suspended and delisted firms) to avoid survivorship bias. (3) We delete observations with missing values of variables. Our final sample consists of 51225 firm-quarter observations for2122firms.

3.1.Measures of financial asset holdings

In our empirical analysis, we focus on firms' financial asset holdings. According to the "Chinese Accounting Standards for Business Enterprises No. 22—Recognition and Measurement of Financial Instruments," the standard measure of Chinese corporate financial assets includes the balance sheet accounts "financial assets held for trading," "available-for-sale financial investments," and "held-to-maturity financial investments." Following Duchin et al. (2017), we include one additional long-term financial asset reported as "investment property."[3] We divide total financial assets into two parts: traditional financial assets and investment property. Traditional financial assets are short term and liquid, while investment property is long term and illiquid.[4]The definitions of these variables are listed in Appendix 1.

3.2.Chinese economic policy uncertainty

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[3]With regard to the composition of financial assets held by non-financial firms, Duchin et al. (2017) include "equity investment" in their measures of financial assets. However, firms' equity investment may include the securities of companies related to their own industrial chain, and it should belong to firms' operating assets, other than financial assets. Unfortunately, it is practically impossible to make a distinction between strategic equity investment and other equity investment, because such detailed information is not reported in Chinese quarterly financial reports. Meanwhile, it is difficult to define the standard for distinguishing firms' equity investment. As a robustness check, we follow Duchin et al. (2017) and include "equity investment" in our measures of financial assets. The basic results are presented in Appendix Table A.1. It turns out that our major results barely change, which increases our confidence that the results are consistent and unaffected by such adjustment.

[4]One may be concerned that "long-term debt investments," other liquid assets, like financial products investment, and trust investment should be included in firms' financial assets. Actually, these investments are all included in "traditional financial assets." In China's new accounting standards adopted in 2006, the balance sheet item "long-term debt investment" was cancelled and replaced with "held-to-maturity financial investments," which refers to non-derivative financial assets with fixed maturity and fixed or determinable payments that managers have the intention and ability to hold to maturity. "Financial products investment" now belongs to the item "financial assets held for trading," which is trading financial assets at fair value, including bonds, stocks, and funds held by the enterprise for trading. Moreover, if the purpose of having "trust investment" is not for long-term holding, it should be classified as "financial assets held for trading." If it is prepared for long-term holding until maturity and the trust products are guaranteed products, it should be "hold-to-maturity investment." If the holding period and purpose is not clear or the product is not a guaranteed product, then the investment is classified as "available-for-sale financial assets" account.

We measure Chinese EPU using the policy uncertainty index developed by Baker et al. (2016) (henceforth, BBD index).The Chinese BBD index quantifies the volume of news discussing policy-related economic uncertainty.[5]To convert the monthly data into quarterly data, this study uses the mean method, that is, the Chinese quarterly EPU index equals the arithmetic average of the BBD index in the 3 months of the quarter.

3.3. Other control variables

Following the previous literature, we control a vector of firm characteristics that may affect corporate financial asset allocation. The control variables include firm size, cash flow, firm growth, Tobin's Q, leverage ratio, return on assets (ROA), margin profit, SOE dummy, and GDP growth. These factors, their relationship with financial asset holdings, and their measures are discussed as follows.

Firm size. A larger firm, which can secure more resources from external markets, invests more in financial assets. Therefore, firm size is expected to be positively correlated with financial asset holdings. We use the natural logarithm of total assets (denominated in yuan) to measure firm size.

Cash flow. According to Duchin et al. (2017), cash flow shocks are expected to be positively associated with firms' financial asset holdings. The reason is that profits of holding financial assets are substantially higher than holding currency assets. In addition, the costs of adjusting them are significantly lower than real investments or shareholder distributions. Therefore, firms with more cash flow tend to hold more financial assets for relatively higher profit with low risks. We use net operating cash flow scaled by total asset to measure cash flow.

Firm growth. Theoretically, the relationship between growth opportunities and financial assets allocation should be negative. Rapid business expansion requires a large amount of funds, which easily squeeze out financial asset holdings. Therefore, high-growth firms tend to have less financial asset allocation. We define the annual growth rate of total sales (sales growth) as a firm's growth opportunity.

Tobin's Q. Firms with higher market value have easier access to resources, and hence, have fewer financial constraints. Therefore, we expect that Tobin's Q is positively related to financial asset holdings. We define Tobin's Q as the ratio of the sum of market value of traded and non-traded shares and total debt to total assets.

Leverage ratio. A higher leverage ratio means fewer external funds. Therefore, firms with more debt hold fewer financial assets. Leverage ratio is the ratio of total debt to total assets.

ROA. Following Demir (2009), lower profitability incentivizes firms to invest in reversible financial assets rather than irreversible long-term fixed investments. Therefore, a firm's profitability is expected to be negatively related to financial asset allocation. We use net profits scaled by total assets (ROA) to measure a firm's profitability.

Margin profit. To control the impacts of return gap between financial investments and fixed ones, we include margin profit in our model. Higher margin profit encourages more

[5]Unlike the construction of the U.S. EPU index, the Chinese EPU index is the same as the news-based indexes of EPU for the United States and other countries. Gulen and Ion (2016) find that the correlation coefficient with the overall BBD index and the news-based index is very high (0.887), and their empirical findings are similar for these two indexes.

investment in short-term financial assets than long-term ones with fixed returns. Margin profit is measured by revenues of financial assets divided by operating revenue.

SOE dummy. The relationship between SOE dummy and corporate financial asset holdings is unclear. On the one hand, SOEs are believed to suffer more policy burden and care less about corporate profitability, and thus, private firms hold more financial assets for improving net income. On the other hand, previous literature (e.g., Brandt & Li, 2003; Li, Yue,& Zhao, 2009) suggests that state ownership is a significant determinant of Chinese firms' financial constraints. It is generally found that SOEs face fewer financial constraints, and thus, SOE dummy may be positively related to financial asset allocation. SOE dummy equals one if the firm is ultimately controlled by the state, and otherwise zero.

GDP growth. This is meant to alleviate endogeneity concerns stemming from the fact that uncertainty tends to be countercyclical and therefore, could capture the effect of poor economic prospects (Gulen & Ion, 2016). We expect that a decline of the real economy decreases a firm's real investment and increases its financial asset allocation, as financial asset holdings are important substitutes for real investment. GDP growth is calculated as the quarterly growth rate of GDP.

3.4. Empirical model

Following Duchin et al. (2017) and Gulen and Ion (2016), we estimate the effect of EPU on financial asset holdings using the following empirical model:

$$Financial\ Assets_{i,t} = \alpha + \beta EPU_t + \boldsymbol{\gamma}'\mathbf{X}_{i,t} + Quarter_t + \mu_i + \varepsilon_{i,t} \quad (1)$$

where subscripts *i* and tare indexes for firm and quarter, respectively. The dependent variable, $Financial\ Assets_{i,t}$, is firms' holdings of financial assets scaled by total assets. EPU is the Chinese BBD index. X represents a vector of control variables, including firm size, cash flow, growth, Tobin's Q, leverage, ROA, profit margin, SOE, and GDP growth. The definitions of these control variables are listed in Appendix 1. We include quarter dummies (Quarter) to account for the seasonal trends of the macroeconomy. We include a firm fixed effect (μ) to capture the time-persistent differences in financial assets across firms. Standard errors are adjusted for clustering at the firm level.

As many firms do not hold certain financial assets, the dependent variables contain a large number of zero values, and obviously have the characteristic of left-censoring distribution. To avoid biased estimation caused by the distribution of the dependent variable, the Tobit model with fixed effects proposed by Honoré (1992) is used in the baseline estimation. The Tobit model is set as follows:

$$\begin{aligned} Financial\ Assets_{i,t}^{*} &= \alpha + \beta EPU_t + \boldsymbol{\gamma}'\mathbf{X}_{i,t} + Quarter_t + \mu_i + \varepsilon_{i,t} \\ Financial\ Assets_{i,t} &= \max\{0, Financial\ Assets_{i,t}^{*}\} \end{aligned} \quad (2)$$

We first estimate Models (1) and (2) for the full sample using ordinary least squares (OLS) and the Tobit model. To address the endogeneity problem, we then estimate the models using two-stage least squares (2SLS). The endogeneity problem is discussed in further detail in Subsection 5.1.

3.5. Summary statistics

Panel A of Table 1 presents the summary statistics for our sample by firm-quarter. All firm-level financial variables are winsorized at the 1% level in both tails. The ratio of financial assets to total assets is 2.216% on average. After decomposing the financial asset holdings, we reveal that traditional financial asset holdings play an important role in corporate financial asset allocation. In Table 1 (Panel A), the traditional financial asset holdings are on average 1.248%, yet account for about 56% of the total financial asset portfolio. Moreover, the mean of investment property ratio is 0.854%.

The mean of our key variable, "economic policy uncertainty," is about 1.68, ranging widely from 0.64 to 5.52.[6] On average, the cash flow and leverage are about 1.78% and 41%, respectively. The quarterly sales growth rate is on average 37.24%, indicating that Chinese listed firms grew rapidly from 2007 to 2015. The mean values of firm size and Tobin's Q are about 21.58 and 2.23, respectively. We observe that corporate profitability is quite low, averaging 3.019%. The average profit margin between financial and fixed investments is about 9.1%, and 45.1% of firm-quarters were SOEs. The mean of GDP growth rate is3.64%.

To preview the connection between EPU and corporate financial asset allocation, we compare the mean values of all the variables between low- and high-EPU periods in Table 1 (Panel B). The low-EPU group is composed of observations whose EPU index does not exceed the median value, and the high-EPU group is composed of those whose EPU index exceed the median value. In Table 1 (Panel B), the mean values of total financial asset holdings in the high-EPU group are significantly different (at the 1% level) from those in the low-EPU group. Specifically, the total financial asset holdings in the low-EPU group are 0.198% higher than those in the other group. We find that the difference of total financial asset holdings between these two groups is mainly from traditional financial asset holdings. Moreover, traditional financial asset holdings in the low-EPU group are 0.192% more than those in the other group, accounting for about 14.68% (0.192/1.308) of the average ratio in the low-EPU group.

[6]Higher EPU indicates greater uncertainty. Three time points with the largest EPU are the third quarter of 2011 (5.52), the third quarter of 2009 (3.57), and the last quarter of 2011 (3.09). The election in 2012 may have contributed substantially to the jump in uncertainty in 2011, and the global financial crisis may be the main reason for the large EPU index in 2009.

Table 1. Summary statistics

Panel A. Summary statistics

Variables	No. of obs.	Mean	S.D.	Min	Median	Max
Total financial asset holdings	51225	2.216	5.282	0.000	0.085	31.590
Traditional financial asset holdings	51225	1.248	3.787	0.000	0.000	24.879
Investment property ratio	51225	0.854	2.602	0.000	0.000	17.657
Economic policy uncertainty	51225	1.684	0.996	0.644	1.440	5.522
Firm size	51225	21.586	1.192	19.568	21.410	25.326
Cash flow	51225	1.782	6.103	-14.924	1.451	19.663
Growth	51225	37.243	75.190	-87.278	46.854	235.975
Tobin's Q	51225	2.234	1.808	0.235	1.723	10.021
Leverage ratio	51225	41.022	20.474	3.761	41.227	83.423
ROA	51225	3.019	3.371	-4.219	2.170	15.601
Profit margin	51225	0.091	0.420	-1.395	0.000	2.682
SOE	51225	0.451	0.498	0.000	0.000	1.000
GDP growth	51225	3.639	10.684	-16.666	7.592	14.507

Panel B. Summary statistics in high vs. low economic policy uncertainty periods

	Low EPU		High EPU		Diff
	Mean	S.D.	Mean	S.D.	
Total financial asset holdings	2.279	5.339	2.081	5.154	-0.198***
Traditional financial asset holdings	1.308	3.867	1.117	3.604	-0.192***
Equity investment ratio	0.854	2.586	0.853	2.636	-0.001
Investment property ratio	1.142	0.290	2.851	0.977	1.708***
Economic policy uncertainty	17.967	14.758	19.985	15.821	2.018***
Firm size	21.608	1.187	21.540	1.203	-0.069***
Cash flow	1.621	5.926	2.129	6.454	0.508***
Growth	37.532	81.476	36.621	59.431	-0.910
Tobin's Q	2.446	1.940	1.777	1.376	-0.669***
Leverage ratio	41.319	20.272	40.381	20.890	-0.939***
ROA	2.829	3.249	3.430	3.585	0.602***
Profit margin	0.096	0.424	0.081	0.409	-0.015***
SOE	0.452	0.498	0.451	0.498	-0.001
GDP growth	3.587	11.496	3.751	8.679	0.164
No. of obs.	34982		16243		51225

Notes: Panel A presents the summary statistics of all variables used in this study. Panel B reports the summary statistics grouped by economic policy uncertainty. The variables are defined in Table 1.

Table A.2 in the Appendix provides the Pearson correlation coefficients among the key variables. As expected, EPU is negatively correlated with all corporate financial asset holdings. The correlation coefficients between all control variables are less than 0.7 (the threshold of the multicollinearity problem), and thus, we are confident that multicollinearity is not a concern in our sample. It is also evident that corporate total financial asset holdings exhibit positive correlations with firm size, leverage ratio, profit margin, SOE dummy, and GDP growth, but are negatively correlated with the other variables.

4. Empirical results

4.1. Baseline regression estimates

Table 2 presents the estimation results of the baseline regressions. Columns 1 and 2 are estimated with the OLS model. In Column 1, EPU is included as the only independent variable. Column 2 includes all control variables. In both cases, the coefficients on EPU are negative and significant at the 10% level, and indicate that for a one standard deviation increase in EPU, the corresponding decrease in total financial asset holdings is 0.1%after controlling for other variables. Columns 3 and 4 repeat Columns 1 and 2 by using the Tobit model. The magnitudes of coefficient on EPU increase dramatically, and they remain significant at the 10% level. If EPU increases by one standard deviation, total financial asset holdings decrease by 0.26% (compared to 2.216% of average total financial asset holdings).Therefore, the baseline estimation results indicate that EPU negatively influences corporate total financial asset holdings, and this effect is more influential after taking into account the left-censoring distribution of the dependent variable. This finding is consistent with the prediction of Hypothesis 1b that firms hold financial assets for the speculative motive rather than the precautionary saving motive.[7]

For the control variables, the coefficient of firm size is significantly positive, which suggests that firms of larger size hold more financial assets to seek profits. Tobin's Q is found to be positively associated with financial asset holdings, while leverage is negatively correlated. These results show that firms with higher market value and lower leverage face fewer financial constraints, and thus, can hold more financial assets. We also find that the firm's profitability effect is significantly negative, while the coefficient on the profit margin is positive. This result shows that lower real profitability and a higher return gap between financial and fixed investments encourage firms to invest in reversible financial assets rather than irreversible long-term fixed investments. Notably, the SOE dummy is negatively associated with financial asset holdings, which means that private enterprises have more financial asset holdings to improve net income. The coefficient of GDP growth is negative, confirming that the increase of the real economy depresses firms' financial asset allocations.

[7]To show that firms have an alternative way to meet the needs of precautionary saving when EPU increases, we further investigate the effect of EPU on corporate cash holdings, shown in Appendix Table A.3. We use $Cash\ holding_{i,t} = \alpha + \beta EPU_t + \gamma' X_{i,t} + Quarter_t + \mu_t + \varepsilon_{i,t}$ as the model. EPU is positively associated with corporate cash holdings. We conclude that Chinese firms have incentive to hold liquidity as precautionary saving while they prefer cash to financial assets.

Table 2. Economic policy uncertainty and corporate financial asset holdings: basic approach

Specification	(1)OLS Without control	(2)OLS With control	(3)Tobit Without control	(4) Tobit With control
Economic policy uncertainty	-0.025**	-0.019*	-0.052**	-0.049*
	(-2.36)	(-1.71)	(-2.27)	(-1.72)
Firm size		0.507***		1.224***
		(4.89)		(3.89)
Cash flow		0.000		0.002
		(0.09)		(0.22)
Growth		-0.000		-0.002
		(-0.94)		(-1.61)
Tobin's Q		0.175***		0.430***
		(8.55)		(7.08)
Leverage ratio		-0.018***		-0.041***
		(-4.53)		(-4.20)
ROA		-0.040***		-0.095***
		(-4.22)		(-4.26)
Profit margin		0.343***		0.536***
		(6.58)		(6.09)
SOE		-0.504**		-1.080**
		(-2.53)		(-2.12)
GDP growth		-0.081***		-0.160***
		(-6.51)		(-5.52)
Quarter dummies	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
No. of obs.	51225	51225	51225	51225
Adjusted R2	0.655	0.665		

Notes: This table reports the estimation of the effect of economic policy uncertainty on corporate financial asset holdings based on the multivariate regression. The variables are defined in Appendix A. The dependent variable is total financial asset holdings. Columns 1 and 2 show the estimation of OLS regressions. Column 1 includes only economic policy uncertainty as the independent variable. Column 2 includes all control variables. For both regressions, standard errors are clustered at the firm level. Columns 3 and 4 repeat Columns 1 and 2 by using the Tobit model as regressions. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

4.2.Different types of corporate financial investment

We proceed to examine whether EPU has an impact on the structure of corporate financial asset holdings. We predict that if corporations hold financial assets for the precautionary saving motive, then the increase of EPU drives firms to hold more financial assets, especially short-term financial assets. However, the speculative motive makes firms hold fewer financial assets, including short-term and long-term financial assets.

In Table 3, we estimate the effect of EPU on different types of financial asset holdings. We find that the effects on traditional financial asset holdings and the investment property ratio are both negative and significant at the 10% level when using the Tobit model. Their magnitudes indicate that a one standard deviation increase in EPU leads to a 0.29% decrease in traditional financial asset holdings and a 0.06% decrease in the investment property ratio. Therefore, we conclude that Chinese corporations invest financial assets more for the speculative motive than the precautionary saving motive.

Table 3. Economic policy uncertainty and different types of corporate financial asset holdings

	Traditional financial asset holdings		Investment property ratio	
Dependent variable	(1) OLS	(2) Tobit	(3) OLS	(4) Tobit
Economic policy uncertainty	-0.021*	-0.075**	-0.005	-0.023*
	(-1.67)	(-2.38)	(-0.75)	(-1.92)
Firm size	0.949***	2.185***	-0.281***	-0.400***
	(7.48)	(7.86)	(-3.56)	(-2.70)
Cash flow	-0.003	0.002	0.001	0.001
	(-0.72)	(0.22)	(0.48)	(0.42)
Growth	-0.000	-0.001	-0.000	-0.000
	(-0.15)	(-1.04)	(-0.32)	(-0.97)
Tobin's Q	0.201***	0.507***	0.023	0.092***
	(8.34)	(10.30)	(1.45)	(3.34)
Leverage ratio	-0.034***	-0.054***	0.001	0.009**
	(-6.85)	(-6.65)	(0.46)	(2.09)
ROA	-0.033***	-0.086***	-0.013	-0.022**
	(-2.96)	(-4.42)	(-1.60)	(-2.16)
Profit margin	0.369***	0.463***	0.050	0.071*
	(5.89)	(7.18)	(1.23)	(1.65)
SOE	-0.515*	-0.542	-0.257**	-0.674**
	(-1.77)	(-1.28)	(-2.21)	(-2.46)
GDP growth	-0.062***	-0.148***	-0.037***	-0.088***
	(-4.29)	(-5.13)	(-3.68)	(-6.23)
Quarter dummies	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes
No. of obs.	51225	51225	51225	51225
Adjusted R2	0.575		0.785	

Notes: This table estimates the effect of economic policy uncertainty on heterogeneous corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 and 2 use traditional financial asset holdings as the dependent variable. OLS regression results are shown in Column 1.Column 2 uses Tobit regression. Columns 3 and 4 repeat Columns 1and 2 by using investment property ratio as the dependent variable. For OLS regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

The empirical evidence suggests that EPU is negatively associated with firms' financial asset holdings. As discussed, firms' financial asset holdings may be driven by either the precautionary saving motive or the speculative motive. To verify the main motivation, we next examine the heterogeneous effects of EPU on corporate financial asset holdings for firms with and without financial constraints. While the speculative motive posits that the effect is strengthened for less financially constrained firms, the precautionary saving motive predicts the opposite.

4.3. Mechanism of the impact of economic policy uncertainty on corporate financial asset holdings

We examine the heterogeneous effect of EPU on financial asset holdings with different extent of financial constraints. We use the KZ index developed by Kaplan and Zingales (1997) and firm size to measure financial constraints. These are commonly used in the literature to measure a firm's financial constraints (Acharya, Almeida, & Campello, 2007; Almeida, Campello, & Weisbach, 2004).To test whether firms' financial constraints have a significant impact on the relationship between EPU and corporate financial assets, we re-

estimate the baseline model for groups with different financial constraints. The high financial constraint group is composed of observations whose KZ index (firm size)exceeds (is less than) the median value. Otherwise, the firms are defined as having fewer financial constraints. Table 4 reports the results. In either case, the negative EPU effect for firms with fewer financial constraints is significant while the effect for firms with high constraints is insignificant; the magnitude is also higher for firms with fewer financial constraints (0.41 vs. 0.018/0.099 vs. 0.039/0.031 vs. 0.013/0.067 vs. 0.013). We also report the F-test for the coefficient difference in Table 4.The results show that the differences in the two coefficients are both significant at the 5% level (besides when we measure financial constraints by firm size and use the Tobit model for the regression). This finding indicates that the negative effect of EPU on financial assets is narrowed for firms with stringent financial constraints. These results suggest that firms mainly hold financial assets for speculation in China, and that they reduce their holdings when EPU increases. This further strengthens our conclusion drawn from the baseline model.

Table 4. The mechanism of the impact of economic policy uncertainty on corporate financial asset holdings

	KZ dummy				Firm size			
	Low financial constraint OLS	High financial constraint OLS	Low financial constraint Tobit	High financial constraint Tobit	Low financial constraint OLS	High financial constraint OLS	Low financial constraint Tobit	High financial constraint Tobit
Economic policy uncertainty	−0.041*** (-2.62)	0.018 (1.14)	−0.099** (-2.57)	0.039 (0.98)	−0.032** (-2.20)	0.013 (0.71)	−0.067** (-2.19)	0.013 (0.25)
Firm size	0.546*** (3.70)	0.427*** (3.64)	1.214*** (3.02)	1.062*** (2.86)	0.532*** (3.59)	0.910*** (4.47)	1.073*** (2.92)	2.334*** (3.90)
Cash flow	−0.010** (-2.09)	0.003 (0.69)	−0.021** (-1.99)	0.009 (0.80)	0.004 (1.05)	−0.001 (-0.30)	0.009 (1.08)	−0.000 (-0.04)
Growth	−0.000 (-0.07)	−0.001 (-1.21)	−0.000 (-0.35)	−0.002* (-1.77)	−0.000 (-0.86)	−0.000 (-0.26)	−0.001 (-1.34)	−0.001 (-0.74)
Tobin's Q	0.308*** (7.26)	0.167*** (7.47)	0.664*** (6.32)	0.405*** (6.39)	0.155*** (3.68)	0.182*** (7.51)	0.290*** (2.98)	0.498*** (6.47)
Leverage ratio	−0.016*** (-3.08)	−0.011** (-2.31)	−0.034*** (-2.96)	−0.028** (-2.24)	−0.014** (-2.57)	−0.020*** (-3.36)	−0.032** (-2.48)	−0.044*** (-2.89)
ROA	−0.042*** (-3.28)	−0.029*** (-2.58)	−0.090*** (-3.37)	−0.072*** (-2.60)	−0.033*** (-2.84)	−0.038*** (-3.08)	−0.067*** (-2.92)	−0.095*** (-3.03)
Profit margin	0.344*** (6.36)	0.309*** (4.00)	0.496*** (5.81)	0.499*** (3.74)	0.277*** (4.04)	0.355*** (4.69)	0.411*** (3.60)	0.536*** (4.57)
SOE	−0.596* (-1.81)	−0.438* (-1.82)	−1.273* (-1.76)	−0.926 (-1.49)	−0.278 (-1.42)	−0.847** (-2.01)	−0.725 (-1.46)	−1.392 (-1.42)
GDP growth	−0.110*** (-7.05)	−0.059*** (-3.85)	−0.213*** (-6.04)	−0.119*** (-3.31)	−0.040*** (-2.60)	−0.095*** (-5.17)	−0.064** (-2.04)	−0.220*** (-4.72)
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Coefficient test for EPU F-statistic (P value)	13.7 (0.0002)		11.88 (0.0006)		6.29 (0.0122)		2.23 (0.1357)	
No. of obs.	25,444	25,613	25,444	25,613	25,528	25,697	25,528	25,697
Adjusted R^2	0.705	0.660			0.701	0.682		

Notes: This table examines whether firms with strong/weak financial constraints are affected differently by economic policy uncertainty on corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 to 4 divide the sample based on whether a firm's KZ index is below or above the median. The results of OLS regressions are presented in Columns 1 and 2 and those of Tobit regression from are presented in Columns 3 and 4. Columns 5 and 8 repeat Columns 1 to 4 by dividing the sample based on whether firm size is below or above the median. For all OLS regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We test the difference of coefficients of EPU between the two groups. The null hypothesis is that the coefficients of EPU between the two groups are equal.

To further examine whether the interaction effect of EPU and the extent of corporate financial constraint exists for financial assets with different extent of liquidity, we repeat the regressions from Table 4in Table 5by using different types of financial asset holdings as the dependent variable. We observe that, just as in the baseline regression, the coefficients of EPU are significant (insignificant) and have higher (lower) magnitude among low (high) financial constraints on traditional financial asset holdings. In addition, the F-tests for the coefficient difference are all significant at the 10% level (besides when we measure financial constraints by firm size and use the Tobit model for the regression),indicating that corporations may take them as substitutes for real investment. Moreover, with regard to the investment property ratio, the interaction effect of financial constraint and EPU exists only when using the Tobit specification. In these cases, the negative EPU effect on firms with fewer financial constraints is significant while the effect on firms with high constraints is insignificant. However, the F-tests for the coefficient difference on investment property ratio are all insignificant. Therefore, the investment attribute for this kind of financial assets is not obvious.

Table 5. The impact of economic policy uncertainty on financial asset holding heterogeneity by financial constraints

	KZ dummy				Firm size			
	Low financial constraint OLS	High financial constraint OLS	Low financial constraint Tobit	High financial constraint Tobit	Low financial constraint OLS	High financial constraint OLS	Low financial constraint Tobit	High financial constraintTobit
Panel A: Traditional financial asset holdings								
Economic policy uncertainty	−0.055*** (-2.93)	0.025 (1.35)	−0.117*** (-2.77)	0.025 (0.54)	−0.034** (-2.07)	0.015 (0.77)	−0.084** (-2.42)	−0.018 (-0.31)
Coefficient test for EPU F-statistic (P value)	18.28 (0.000)		5.62 (0.0178)		9.35 (0.0023)		1.25 (0.2628)	
No. of obs.	25,444	25,613	25,444	25,613	25,528	25,697	25,528	25,697
Adjusted R^2	0.641	0.523			0.641	0.557		
Panel B: Investment property ratio								
Economic policy uncertainty	−0.009 (-1.14)	−0.002 (-0.17)	−0.030** (-2.02)	−0.015 (-0.91)	−0.005 (-0.78)	−0.006 (-0.44)	−0.023* (-1.78)	−0.025 (-1.13)
Coefficient test for EPU F-statistic (P value)	0.47 (0.492)		0.15 (0.7025)		0.01 (0.9179)		0.01 (0.9197)	
No. of obs.	25,444	25,613	25,444	25,613	25,528	25,697	25,528	25,697
Adjusted R^2	0.821	0.785			0.858	0.785		
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table examines whether firms with strong/weak financial constraints are affected differently by economic policy uncertainty on heterogeneous corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 to 4 divide the sample based on whether a firm's KZ index is below or above the median. OLS regressions are estimated in Columns 1 and 2. The results in Columns 3 and 4 are of Tobit regressions. Columns 5 and 8 repeat Columns 1 to 4 by dividing the sample based on whether firm size is below or above the median. Panel A uses traditional financial asset holdings as the dependent variable. The dependent variable for Panel B is investment property ratio. For all OLS regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We test the difference of coefficients of EPU between the two groups. The null hypothesis is that the coefficients of EPU between the two groups are equal.

5. Robustness tests

5.1.Controlling for endogeneity

Even though we include firm fixed effects to control the heterogeneity of cross-firm financial asset holdings in Section 4, endogeneity problems may still exist if there are unobserved variables correlated with both EPU and corporate financial assets, such as other sources of economic uncertainty. The classic approach used in the literature to address endogeneity concerns is the use of instrumental variables. First, we use EPU lagged by one period as the instrumental variable, based on a method commonly used in the previous literature. Second, we use EPU_7 foreign countries as our instrumental variable, which is calculated by a weighted average of the EPU index for China's seven largest international trade partners, using a weight of the total trade amount between China and these countries divided by China's total international trade amount. The economic rationale behind the instrumental variable is as follows. On the one hand, the extensive international trade activities between the seven foreign countries and China have created tight links between these economies. For this reason, we expect many of the shocks that affect general economic uncertainty in these economies also to affect general economic uncertainty in China. On the other hand, the EPU of the seven foreign countries is not affected by Chinese corporate financial investments, and affects the dependent variable through Chinese EPU. Furthermore, we use global EPU as our third instrumental variable.[8]

Table 6 presents the results from the instrumental variable method; the results are similar to those in Table 2. We make the following observations. First, for all the first-stage estimations (Columns 1, 3, and 5), the coefficients on the instrumental variables are positive and significant at the 1% level, which is consistent with our expectation that the instrumental variables have positive effects on current Chinese EPU. We conduct an endogeneity test (D-W-H chi-sq test) to examine whether the OLS estimates are different from the 2SLS estimates. The test statistic indicates that the 2SLS estimates are significantly different from the OLS estimates, implying that there is endogeneity in the OLS model. Then, we perform the weak instrumental variable test to determine whether the instrument is sufficiently correlated with the endogenous regressor. In all three cases, the Kleibergen–Paap rk Wald F statistic is above the critical value at the 10% significance level, indicating that our instrumental variables are valid and effective.

The second-stage estimations (Columns 2, 4, and 6) show that higher EPU is associated with significantly fewer corporate financial assets. In summary, considering the direct impact of Chinese EPU on corporate financial assets and the possible endogeneity problem, we obtain consistent results that a rising level of uncertainty in economic policy causes a company to reduce financial assets.[9]

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[8]The global EPU index, which is released by Baker et al. (2016), is a GDP-weighted average of national EPU indexes for 18 countries from January 1997 to the present. The 18 countries are Australia, Brazil, Canada, Chile, China, France, Germany, India, Ireland, Italy, Japan, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States.

[9]Since IV-Tobit disallows controlling for firm fixed effects, we consider that using IV-OLS fits our research purpose better than IV-Tobit does. Doing so helps verify that the IV result is not driven by excluding firm dummies. In the robustness check, we use IV-Tobit by controlling industry fixed effects to address endogeneity concerns. The results are reported in Appendix Table A.4. It turns out that our major results barely change.

Table 6. Analysis of the impact of economic policy uncertainty on corporate financial asset holdings (instrumental variable)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	IV=Last period EPU		IV = EPU_7 foreign countries		IV = EPU_global	
	1st-stage	2nd-stage	1st-stage	2nd-stage	1st-stage	2nd-stage
Last period EPU	0.338***					
	(271.64)					
EPU_7 foreign countries			0.021***			
			(284.53)			
EPU_global					0.024***	
					(342.52)	
Economic policy uncertainty		−0.144***		−0.169***		−0.052**
		(-4.79)		(-6.04)		(-2.40)
Firm size	−0.164***	0.482***	0.037***	0.475***	−0.082***	0.500***
	(-17.44)	(4.58)	(5.31)	(4.66)	(-14.53)	(4.90)
Cash flow	−0.009***	−0.001	−0.001	−0.001	0.000	−0.000
	(-9.27)	(-0.33)	(-0.98)	(-0.37)	(0.60)	(-0.01)
Growth	0.000	−0.000	0.000***	−0.000	0.001***	−0.000
	(0.23)	(-0.99)	(2.98)	(-0.98)	(7.25)	(-0.96)
Tobin's Q	−0.090***	0.159***	0.011***	0.155***	0.033***	0.171***
	(-28.20)	(7.60)	(4.21)	(7.76)	(14.77)	(8.38)
Leverage ratio	−0.002***	−0.019***	0.001	−0.018***	0.002***	−0.018***
	(-4.97)	(-4.81)	(1.50)	(-4.80)	(4.93)	(-4.68)
ROA	0.021***	−0.036***	−0.003**	−0.035***	0.001	−0.039***
	(11.43)	(-3.87)	(-2.26)	(-3.84)	(0.63)	(-4.21)
Margin profit	−0.016*	0.303***	0.037***	0.340***	0.036***	0.343***
	(-1.70)	(6.26)	(4.96)	(6.68)	(5.19)	(6.72)
SOE	0.032	−0.512**	0.073***	−0.499**	0.123***	−0.503**
	(0.83)	(-2.55)	(3.39)	(-2.56)	(5.80)	(-2.58)
GDP growth	−0.079***	−0.088***	−0.044***	−0.102***	0.048***	−0.085***
	(-77.79)	(-6.26)	(-44.03)	(-7.81)	(54.89)	(-7.10)
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen–Paap rk Wald F statistic	77173.2		84453.9		1.2e+05	
D-W-H chi-sq test (P value)	28.569 (0.000)		52.578 (0.000)		5.842 (0.0156)	
No. of obs.	48,240	48,117	51,225	51,220	51,225	51,220
Adjusted R-squared	0.321	−0.017	0.577	−0.015	0.663	−0.011

Notes: This table presents estimates from the instrumental variable estimator regressions of the effect of economic policy uncertainty on corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 and 2 use one-period-lagged Chinese economic policy uncertainty as the instrumental variable and the average economic policy uncertainty of seven foreign countries in Columns 3 and 4. In Columns 5 and 6, we useglobal economic policy uncertainty as the instrumental variable. For all regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

5.2.Dynamic impact of economic policy uncertainty on corporate financial investment

Following the previous literature (Gulen & Ion, 2016; Wang et al., 2014), which finds that EPU exerts a negative impact on corporate investment with a longer delay, we further examine whether this applies to the effect on corporate financial assets if corporations increase financial assets for an investment motive. The results of the multi-period-lagged EPU on current financial assets are presented in Table 7. Consistent with the original results in Table 2, we find that EPU is significant at 1%, and negatively related to corporate financial assets for the next four lags. Moreover, when we include all four lags in the model, the coefficients for all lags of EPU are still significant at least at 5%.This is consistent with the notion that uncertainty causes delays in financial asset holdings. Specifically, the coefficient on EPU_{t-1} in Column 1 remains negative and significant at the 1% level, and its magnitude indicates that a one standard deviation increase in the last-period EPU decreases corporate financial asset holdings by 0.64% after controlling for other variables.

Table 7. The dynamic impact of economic policy uncertainty on corporate financial asset holdings

	(1)	(2)	(3)	(4)	(5)
	Lagged one periodTobit	Lagged two periodsTobit	Lagged three periodsTobit	Lagged four periodsTobit	With all four lagsTobit
	−0.120***				−0.058***
	(-4.49)				(-2.61)
		−0.134***			−0.040**
		(-4.84)			(-2.21)
			−0.165***		−0.052***
			(-5.69)		(-2.85)
				−0.238***	−0.202***
				(-8.06)	(-8.28)
Firm size	1.185***	1.137***	1.065***	1.054***	1.022***
	(3.75)	(3.53)	(3.23)	(3.11)	(3.01)
Cash flow	0.001	0.003	0.004	0.005	0.006
	(0.08)	(0.38)	(0.55)	(0.69)	(0.74)
Growth	−0.002	−0.002*	−0.002**	−0.002**	−0.002**
	(-1.58)	(-1.83)	(-2.20)	(-2.12)	(-2.11)
Tobin's Q	0.419***	0.411***	0.446***	0.443***	0.425***
	(6.70)	(6.28)	(6.17)	(5.86)	(5.59)
Leverage ratio	−0.043***	−0.045***	−0.045***	−0.045***	−0.046***
	(-4.23)	(-4.28)	(-4.16)	(-4.10)	(-4.16)
ROA	−0.092***	−0.098***	−0.111***	−0.113***	−0.113***
	(-4.16)	(-4.41)	(-4.85)	(-4.74)	(-4.72)
Profit margin	0.462***	0.404***	0.357***	0.291***	0.290***
	(5.70)	(5.30)	(4.94)	(4.24)	(4.23)
SOE	−1.110**	−1.169**	−1.253**	−1.404**	−1.408**
	(-2.16)	(-2.28)	(-2.33)	(-2.44)	(-2.45)
GDP growth	−0.148***	−0.114***	−0.103***	−0.099***	−0.108***
	(-4.83)	(-3.98)	(-3.60)	(-3.59)	(-3.73)
Quarter dummies	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
No. of obs.	48,240	45,497	43,003	40,683	40,683

Notes: This table estimates the dynamic effects of economic policy uncertainty on corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 and 2 use the one-period-lagged and two-period-lagged economic policy uncertainty index as independent variables, respectively. For Columns 3 and 4, the independent variables are the three-period-lagged and four-period-lagged economic policy uncertainty indexes, respectively. Column 5 uses all four lagged economic policy uncertainty indexes as the independent variable. For all regressions, Tobit regression are estimated. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

5.3.Impact of EPU on corporate financial investment in different periods

We then analyze whether the effect of EPU on corporate financial asset holdings changes over time. Since the global financial crisis of 2007–2008 exerted a strong exogenous shock on the Chinese economy, which would have affected government policy and increased EPU, we consider whether this might have influenced the effect on corporate financial assets. According to economic data published by the National Bureau of Statistics of China, China's export revenue declined sharply after the third quarter of 2008; thus, we define the financial crisis dummy as one when the sample period is after the third quarter of 2008, and otherwise zero. In Table 8, we rerun the baseline regression for the sub-periods before and after the financial crisis. Columns 1 and 2 are estimated with the OLS model and Columns 3 and 4 repeat Columns 1 and 2 by using the Tobit model. The results show that the coefficient for the period before the financial crisis turns positive and significant at the 5% level; however, the coefficient for the period after the financial crisis remains negative and significant at the 1% level, suggesting that before the financial crisis, firms mainly take corporate financial assets as liquidity management tools, owing to the low risk and high liquidity attributes of financial assets; thus, firms increase their financial asset holdings as EPU increases. However, after the start of global financial crisis, firms have begun to consider the riskiness of financial assets more, as a result of which corporations take these

assets as a substitute for real investment; then, EPU has a negative effect on financial asset holdings.

Table 8. Economic policy uncertainty and corporate financial asset holding by period

	(1)	(2)	(3)	(4)
	Before financial crisisOLS	After financial crisisOLS	Before financial crisisTobit	After financial crisisTobit
Panel A. Total financial asset holdings				
Economic policy uncertainty	0.315**	−0.036***	0.684**	−0.098***
	(2.33)	(-3.32)	(2.25)	(-3.47)
No. of obs.	5337	45,888	5337	45,888
Adjusted R^2	0.804	0.692		
Panel B. Traditional financial asset holdings				
Economic policy uncertainty	0.213**	−0.024***	0.808***	−0.116***
	(2.37)	(-3.21)	(2.68)	(-3.57)
No. of obs.	5337	45,888	5337	45,888
Adjusted R^2	0.724	0.569		
Panel C. Investment property ratio				
Economic policy uncertainty	0.068	−0.013***	0.204	−0.045***
	(1.48)	(-3.93)	(1.56)	(-3.97)
No. of obs.	5337	45,888	5337	45,888
Adjusted R^2	0.894	0.811		
Control variables	Yes	Yes	Yes	Yes
Quarter dummies	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes

Notes: This table estimates the effect of economic policy uncertainty on corporate financial asset holdings by different periods. The variables are defined in Appendix A. Panel A uses the total financial investment ratio as the dependent variable. The dependent variables for Panels B and C are traditional financial asset holdings and investment property ratio, respectively. OLS regressions are estimated in Columns 1 and 2. The results in Columns 3 and 4 are of Tobit regressions. For both OLS regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

In Panels B to C of Table 8, we repeat the regressions by using different types of financial asset holdings as the dependent variable. Our findings among firms in different periods are robust to traditional financial asset holdings and investment property holdings.

5.4. Cross-sectional heterogeneity

5.4.1.Impact of marketization

We further investigate the impact of marketization on the relationship between EPU and corporate financial asset holdings. Table 9 reports the empirical results on the heterogeneous effects of EPU among firms in different degrees of regional marketization. We rerun the Tobit regression for firms in the eastern, central, and western regions. In Column 1 of Panel A, we observe that the coefficient on EPU for firms in the eastern region is negative and significant at the 1% level. Column 2 restricts the sample to firms in the central region; the coefficient on EPU is no longer significant and smaller than that for firms in the eastern region (0.060 vs. 0.088, respectively). In Column 3, which restricts the sample to firms in the western region, the coefficient is also insignificant. We use the marketization index of China's provinces developed by Fan, Wang, and Zhang (2001) to measure the degree of regional marketization. If a company is in a province/region with a marketization index equal to or above the median value in a certain year, the company falls into the high marketization group; otherwise, it belongs to the low marketization group. The results are reported in Columns4 and 5 in Panel A of Table 9. The significant and negative effect of EPU persists among firms in high marketization regions. Its magnitude is also higher than firms in low marketization regions.

These results suggest that the effect of EPU is more pronounced among firms in higher marketization regions. Firms in regions with higher degrees of marketization should be subject to more market discipline and profit maximization; thus, they are more sensitive to the uncertainty arising from economic policies, and eventually, their non-currency financial asset holdings are more impacted by the increase of EPU. This conjecture confirms the results of previous research (Calomiris, Love, & Martínez Pería, 2012; Wang et al., 2014).

Table 9. The impact of economic policy uncertainty on corporate financial asset holding: the impact of marketization.

	(1) Eastern	(2) Central	(3) Western	(4) Low	(5) High
	Tobit	Tobit	Tobit	Marketization Tobit	Marketization Tobit
Panel A. Total financial asset holdings					
Economic policy uncertainty	−0.088**	−0.060	−0.040	−0.025	−0.145***
	(-2.37)	(-1.09)	(-0.41)	(-0.66)	(-2.85)
Coefficient test for EPU F-statistic (P value)		0.27 (0.6047)	0.24 (0.6276)	5.54 (0.0185)	
No. of obs.	35,151	9934	6140	31,607	19,618
Panel B. Traditional financial asset holdings					
Economic policy	−0.079**	−0.006	−0.174	−0.021	−0.172***
Uncertainty	(-2.12)	(-0.09)	(-1.62)	(-0.48)	(-3.25)
Coefficient test for EPU F-statistic (P value)		1.41 (0.2355)	0.64 (0.4238)	7.72 (0.0055)	
No. of obs.	35,151	9934	6140	31,607	19,618
Panel C. Investment property ratio					
Economic policy	−0.013	−0.039	−0.055	−0.021	−0.021
Uncertainty	(-0.93)	(-1.09)	(-1.42)	(-1.32)	(-1.01)
Coefficient test for EPU F statistic (P value)		1.91 (0.1670)	0.75 (0.3866)	0.04 (0.84)	
No. of obs.	35,151	9934	6140	31,607	19,618
Control variables	Yes	Yes	Yes	Yes	Yes
Quarter dummies	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes

Notes: This table estimates the effect of economic policy uncertainty on corporate financial asset holdings by group. The variables are defined in Appendix A. We divide the sample based on the locations of firms, and the impact of marketization on the relationship between economic policy uncertainty and corporate financial asset holdings. Panel A uses total financial asset holdings as the dependent variable. The dependent variables for Panels B and C are traditional financial asset holdings and investment property ratio, respectively. For all regressions, we use Tobit regression. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We test the difference of coefficients of EPU between the groups. The null hypothesis is that the coefficients of EPU between the groups are equal.

In Panels B to C of Table 9, we repeat the regressions by using different types of financial asset holdings as the dependent variable. We observe that our findings among firms for different degrees of regional marketization are robust to traditional financial asset holdings.

5.4.2.Impact of industrial competition

We then investigate the different effects of EPU on corporate financial asset holdings across industries. First, we calculate the sales-based Herfindahl–Hirschman index (HHI), that is, the sum of squared sales shares of all firms in a certain industry, where the sales share of a firm is defined as its sales over the sum of all firms' sales of the industry. The second proxy we use is the asset-based HHI, which is calculated similarly to the sales-based HHI. Finally, we partition our sample into regulated and non-regulated industries.[10]

[10]We define regulated industries as those including mining, gas and chemicals, metal, energy supply, transportation, information technology, and entertainment; otherwise, the industry is defined as unregulated.

Table 10 reports the results. In Panel A, the coefficients on EPU for highly competitive and non-regulated industries are significantly negative, while the coefficients on EPU among industries with little competition are insignificant and turn positive. The coefficient on EPU for regulated industries is less significant and its magnitude is smaller than that for non-regulated industries (0.001 vs. 0.076, respectively). These results show that the effect of EPU on financial asset holdings is more pronounced for firms in highly competitive industries. From Panels B and C, we observe that our findings are robust to traditional financial asset holdings and the investment property ratio.

Table 10. The impact of economic policy uncertainty: high vs. low competitive industries

	(1)	(2)	(3)	(4)	(5)	(6)
	Low competitive (by sale)Tobit	High competitive Tobit	Low competitive (by asset)Tobit	High competitive Tobit	Regulated Tobit	No-Regulated Tobit
Panel A. Total financial asset holdings						
Economic policy uncertainty	0.089 (1.17)	−0.071** (-2.24)	0.084 (1.11)	−0.077** (-2.47)	−0.001 (-0.01)	−0.076** (-2.08)
Coefficient test for EPU F-statistic (P value)	25.53 (0.000)		26.84 (0.000)		4.22 (0.04)	
No. of obs.	7943	43,282	8511	42,714	20,097	31,128
Panel B. Traditional financial asset holdings						
Economic policy uncertainty	0.023 (0.25)	−0.088*** (-2.59)	0.032 (0.36)	−0.098*** (-2.88)	−0.049 (-0.98)	−0.091** (-2.23)
Coefficient test for EPU F-statistic (P value)	10.69 (0.0011)		14.57 (0.0001)		1.06 (0.3028)	
No. of obs.	7943	43,282	8511	42,714	20,097	31,128
Panel C. Investment property ratio						
Economic policy uncertainty	0.051 (1.60)	−0.040*** (-2.98)	0.061** (2.30)	−0.040*** (-2.93)	0.017 (0.92)	−0.045*** (-2.94)
Coefficient test for EPU F-statistic (P value)	45.52 (0.000)		54.79 (0.000)		16.53 (0.000)	
No. of obs.	7943	43,282	8511	42,714	20,097	31,128
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table estimates the effect of economic policy uncertainty on corporate financial asset holdings by group. The variables are defined in Appendix A. We divide the sample based on whether the firm is in competitive industries or not. Panel A uses total financial asset holdings as the dependent variable. Columns 1 and 2 are split according to the HHI index of firm sales. Columns 3 and 4 are split according to the HHI index of firm size. Columns 5 and 6 are divided based on whether the industry is regulated. Panels B and C repeat Panel A by using traditional financial asset holdings and investment property ratio as the dependent variable, respectively. For all regressions, we use Tobit regression. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. We test the difference of coefficients of EPU between the two groups. The null hypothesis is that the coefficients of EPU between the two groups are equal.

6. Conclusions

Large numbers of global non-financial corporations increase their non-currency financial asset holdings rapidly, and this phenomenon has become more common among Chinese listed firms since the outbreak of the 2007–2008 global financial crisis. It is important to understand the determinants and implications of non-financial corporates' portfolio choices regarding non-currency financial assets. By using an aggregate index to measure EPU developed by Baker et al. (2016), we empirically investigate the effect of EPU on firms' non-currency financial asset holdings. We find that EPU has a significantly negative effect on firms' non-currency financial asset holdings. In addition, we find that this effect is more pronounced after the outbreak of the global financial crisis, and that it

persists for a long time. Moreover, the effect is still robust after addressing potential endogeneity. Furthermore, this negative effect is different for firms with heterogeneous characteristics. Our results show that for firms with financial constraints and less market competition (regions or industries), EPU has a weaker negative impact on corporate non-currency financial asset holdings. In summary, these findings provide a series of confounding proofs that speculation is the underlying motive driving firms to increase their financial asset holdings in China.

This study has three important implications. First, we provide new evidence on the theory that EPU has a significant impact on corporate operating behavior. Firms' financial asset holdings are negatively associated with EPU. Second, we document empirical evidence supporting the arguments derived by previous theoretical studies on corporate speculation. Indeed, firms speculate on financial assets under certain conditions. Third, this study sheds light on the determinants and implications of corporate portfolio choice about financial assets in China. Other than the precautionary saving motive in developed economies, Chinese firms invest in non-currency financial assets for speculation.

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Appendix

Appendix 1. Variable Definitions

Variable	Definition
Total financial asset holding (%)	(Traditional financial assets + Investment property)/Total assets*100 in the current quarter.
Traditional financial asset holding (%)	(Financial assets held for trading + Available-for-sale financial investments + Held-to-maturity financial investments)/Total assets*100 in the current quarter.
Investment property ratio (%)	Ratio of the firm's investment property to total assets in the current quarter, then multiplied by 100.
Economic Policy Uncertainty	The mean of current quarter's 3-monthly policy uncertainty indexes, adopting Baker et al.'s (2013) method to calculate Chinese monthly policy uncertainty index.
Firm size	Natural logarithm of total assets; total assets in yuan.
Cash flow (%)	Net cash flow normalized by total assets, then multiplied by 100.
Growth (%)	Total sales in quarter *t* divided by total sales in quarter *t*-1, then minus 1, and multiplied by 100.
Tobin's Q	(Market value of tradable shares + Market value of non-tradable shares + Total debt – Short term assets)/Total assets.
Leverage ratio (%)	Ratio of the firm's total debt to total assets in the current quarter, then multiplied by 100.
ROA (%)	Ratio of the firm's net profit to total assets in the current quarter, then multiplied by 100.
Margin profit	(Interest revenue + Investment revenue – Investment revenue from associates and joint ventures – Exchange gains + Revenue from fair value changes)/Operating revenue.
SOE	Equals one if the firm's ultimate control is state ownership, and zero otherwise.
GDP growth (%)	Quarterly GDP in quarter *t* divided by quarterly GDP in quarter *t*-1, then minus 1, and multiplied by 100.
Economic Policy Uncertainty _7 foreign countries	First calculate the mean of the current quarter's 3-monthly policy uncertainty index for China'sseven largest international trade partners, adopting Baker et al.'s (2013) method to calculate monthly policy uncertainty index; then calculate the weighted average of EPU index, using a weight of the total trade amount between China and this country divided by China's total international trade amount.
Economic Policy Uncertainty _global	The mean of current quarter's 3-monthly global policy uncertainty index, adopting Baker et al.'s (2013) method to calculate monthly policy uncertainty index.
KZ index	KZ index developed by Kaplan and Zingales(1997).

Table A1. Economic policy uncertainty and corporate financial asset holdings, including equity investment

Specification	(1)OLS Without control	(2)OLS With control	(3)Tobit Without control	(4) Tobit With control
Economic policy uncertainty	-0.061**	-0.073***	-0.078**	-0.104***
	(-2.56)	(-2.97)	(-2.52)	(-2.82)
Firm size		0.036		-0.025
		(0.13)		(-0.06)
Cash flow		0.021**		0.032**
		(2.53)		(2.53)
Growth		-0.003***		-0.005***
		(-2.58)		(-2.84)
Tobin's Q		0.254***		0.410***
		(5.53)		(5.06)
Leverage ratio		-0.044***		-0.067***
		(-3.91)		(-3.60)
ROA		-0.080***		-0.121***
		(-3.47)		(-3.60)
Profit margin		0.706***		0.828***
		(5.63)		(5.46)
SOE		-1.625***		-2.626***
		(-2.96)		(-2.80)
GDP growth		-0.169***		-0.230***
		(-5.73)		(-5.40)
Quarter dummies	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	No	No
No. of obs.	51225	51225	51225	51225
Adjusted R^2	0.806	0.810		

Notes: This table reports the estimation of the effect of economic policy uncertainty on corporate financial asset holdings.The dependent variable is total financial asset holdings, whicharereplacedwith total amounts of traditional financial assets, investment property, and equity investment. Other variables are defined in Appendix A. In Columns 1 and 2, the OLS regression estimations are shown. Column 1 includes only economic policy uncertainty as the independent variable. Column 2 includes all control variables. For both regressions, standard errors are clustered at the firm level. Column 3 and 4 repeat Columns 1 and 2 by using the Tobit model as regressions. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table A2. Correlation matrix

	Total financial asset holding	1	2	3	4	5	6	7	8	9	10	11
1. Traditional financial asset holding	0.789***	1										
2. Investment property ratio	0.635***	0.131***	1									
3.Economic Policy Uncertainty	-0.013***	-0.010**	-0.014***	1								
4.Firm size	0.014***	0.077***	-0.044***	-0.019***	1							
5.Cash flow	-0.015***	-0.002	-0.023***	0.008*	0.151***	1						
6.Growth	-0.010**	-0.002	-0.011**	-0.028***	-0.014***	0.079***	1					
7.Tobin's Q	-0.009**	0.014***	-0.045***	-0.096***	-0.439***	0.022***	0.026***	1				
8.Leverage ratio	0.024***	-0.010**	0.077***	-0.041***	0.523***	0.011**	0.004	-0.491***	1			
9.ROA	-0.024***	0.007	-0.052***	0.096***	-0.021***	0.404***	0.194***	0.336***	-0.310***	1		
10.Margin profit	0.180***	0.192***	0.075***	-0.012***	0.020***	-0.035***	0.010**	-0.020***	0.031***	-0.018***	1	
11.SOE	0.105***	0.081***	0.094***	-0.035***	0.398***	0.079***	-0.027***	-0.272***	0.348***	-0.102***	0.047***	1
12.GDP growth	0.006	0.007	0.005	-0.012***	0.005	0.202***	0.886***	0.012***	0.017***	0.304***	0.023***	0.009**

Table A3. The impact of economic policy uncertainty on corporate cash holding

Specification	(1) Without control	(2) With control
Economic policy uncertainty	0.946***	1.052***
	(14.43)	(17.28)
Firm size		-1.572***
		(-4.22)
Cash flow		0.182***
		(11.92)
Growth		0.004**
		(2.19)
Tobin's Q		-1.098***
		(-11.22)
Leverage ratio		-0.369***
		(-22.66)
ROA		0.292***
		(7.24)
SOE		-0.538
		(-0.56)
GDP growth		1.232***
		(21.58)
Quarter dummies	Yes	Yes
Firm fixed effects	Yes	Yes
No. of obs.	50498	50498
Adjusted R^2	0.596	0.673

Notes: This table estimates the effect of economic policy uncertainty on corporate cash holding. We use the same sample as in Table 2. The models we use in this table are as follows:

$$Cash\ holding_{i,t} = \alpha + \beta EPU_t + \gamma' X_{i,t} + Quarter_t + \mu_i + \varepsilon_{i,t}$$

The dependent variable is corporate cash holding, which is the ratio of the firm's cash and cash equivalents to total assets in the current quarter. Control variables are defined in Appendix A. Column 1 includes only economic policy uncertainty as the independent variable. Column 2 includes all control variables. For all regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

Table A4. Analysis of the impact of economic policy uncertainty on corporate financial asset holdings (IV-Tobit)

Variables	(1) IV=Last period EPU	(2)	(3) IV=EPU_7 foreign countries	(4)	(5) IV=EPU_global	(6)
	1st-stage	2nd-stage	1st-stage	2nd-stage	1st-stage	2nd-stage
Last period EPU	0.338***					
	(271.64)					
EPU_7 foreign countries			0.021***			
			(284.53)			
EPU_global					0.024***	
					(342.52)	
Economic policy uncertainty		-0.810***		-0.852***		-0.483***
		(-9.11)		(-10.94)		(-7.81)
Firm size	-0.164***	0.725***	0.037***	0.738***	-0.082***	0.762***
	(-17.44)	(4.99)	(5.31)	(5.10)	(-14.53)	(5.27)
Cash flow	-0.009***	-0.008	-0.001	-0.003	0.000	-0.001
	(-9.27)	(-0.49)	(-0.98)	(-0.21)	(0.60)	(-0.05)
Growth	0.000	-0.006**	0.000***	-0.005**	0.001***	-0.005**
	(0.23)	(-2.45)	(2.98)	(-2.24)	(7.25)	(-2.22)
Tobin's Q	-0.090***	0.157**	0.011***	0.163**	0.033***	0.198**
	(-28.20)	(1.98)	(4.21)	(2.11)	(14.77)	(2.57)
Leverage ratio	-0.002***	-0.022**	0.001	-0.018*	0.002***	-0.018*
	(-4.97)	(-2.13)	(1.50)	(-1.80)	(4.93)	(-1.74)
ROA	0.021***	-0.111***	-0.003**	-0.110***	0.001	-0.120***
	(11.43)	(-2.76)	(-2.26)	(-2.76)	(0.63)	(-3.02)
Margin profit	-0.016*	2.360***	0.037***	2.411***	0.036***	2.419***
	(-1.70)	(9.32)	(4.96)	(9.48)	(5.19)	(9.52)
SOE	0.032	1.920***	0.073***	1.957***	0.123***	1.949***
	(0.83)	(4.98)	(3.39)	(5.10)	(5.80)	(5.09)
GDP growth	-0.079***	-0.255***	-0.044***	-0.302***	0.048***	-0.254***
	(-77.79)	(-6.40)	(-44.03)	(-8.17)	(54.89)	(-7.44)
Quarter dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen–-Paap rk Wald F statistic	77173.2		84453.9		1.2e+05	
Wald test of exogeneity (P value)	89.93(0.000)		148.37(0.000)		61.45(0.0000)	
No. of obs.	48240	48117	51225	51220	51225	51220
Adjusted R-squared	0.321		0.577		0.663	

Notes: This table presents estimates from the IV-Tobit regressions and the effect of economic policy uncertainty on corporate financial asset holdings. The variables are defined in Appendix A. Columns 1 and 2 use one-period-lagged Chinese economic policy uncertainty as the instrumental variable. In Columns 3 and 4, the instrumental variable is the average economic policy uncertainty of seven foreign countries. In Columns 5 and 6, we use global economic policy uncertainty as instrumental variables. For all regressions, standard errors are clustered at the firm level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.