How can the Government deal with the Economic Policy Uncertainty?

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Keywords: Uncertainty of economic policy, Institutional environment, Cash holdings, Macro-control

Abstract: At present, a series of problems such as the difficulty of financing and financing of private enterprises in China have attracted widespread attention. Under the socialist market economy system with Chinese characteristics, the business strategy and decision-making of an enterprise are inseparable from the government's various policy directions. This article uses the quarterly data of China's A-share listed companies from 2007 to 2017 as a sample to study how economic policy uncertainty affects corporate cash holding behaviors, and examines different systems from the perspective of regional financial development and legal integrity of businesses in environmental conditions. Studies show that when economic policy uncertainty rises, companies will choose to increase their holdings of cash, and this behavior varies among companies. Through research, this article hopes to provide a scientific basis for the country to formulate and adjust macroeconomic policies in the future in order to improve the financing environment for enterprises and promote the healthy development and sustainable growth of the economy.

1. Introduction

After the reform and opening-up in 1978, the non-public sector of the economy has continued to develop and expand under the guidance of the party's principles and policies and has become an important part of China's market economy system. However, in recent years, private enterprises have encountered many difficulties in management. The government should give priority to solving the problems of difficult and expensive financing for private enterprises. Uncertainty will affect economic activities through irreversible investment, convex marginal income, preventive savings and other mechanisms. Economic policy uncertainty refers to the unpredictability of the government's actions to regulate the market and formulate and implement economic policies for economic and political considerations. In China, where the economic system is not perfect enough and the business decisions of enterprises are highly dependent on the government's economic policies, can the uncertainty of economic policies affect the cash holding behavior of enterprises? In addition, are there significant differences in the impact on individuals with different institutional environmental conditions, especially different property rights? The content of this article can provide scientific basis for the country to formulate and adjust macroeconomic policies in the future so as to promote healthy and sustained economic growth.

2. Literature Review and Theoretical Analysis

The existing literature uses different indicators to measure the level of economic uncertainty to study how it affects the cash holding level of enterprises, and basically obtains a conclusion that economic uncertainty is significantly positively related to cash holding.

Han Liyan (2010) defines macroeconomic uncertainty as consumer price index. The rise of uncertainty increases the cash held by the company. The same conclusion is still reached with the level of economic uncertainty (Li Qingyuan et al., 2014).Wang Chaoyang and Zhang Xuelan (2018) conducted an empirical study on Chinese manufacturing enterprises from 1998 to 2013. They found that the rise in economic policy uncertainty has prompted enterprises to be more cautious in investment decisions and become "reluctant to lend" in order to reduce risks and improve returns.

  DOI: 10.25236/icmeem.2019.081

Therefore, the following assumption 1 is put forward:

Assumption 1: When economic policy uncertainty increases, enterprises will often choose to increase cash holdings.

Many literatures have conducted empirical studies from the perspective of property rights and found that there is serious "credit discrimination" in the capital market. Allen et al. (2005) found that from 1994 to 2002, non-state-owned enterprises accounted for less than 20% of the total bank loans. During the period of tight monetary policy, the growth rate of long-term liabilities of non-state-owned enterprises decreased significantly (Lu Zhengfei, 2009).Zhang Chaolin and others (2013) and Li Sihai (2014) have all found through empirical research that the total amount of cash retained by the company decreased significantly during the period of tight money supply. Under the unstable external financing environment, some state-owned enterprises have the right to give priority to loans and more opportunities, and can make overall arrangements for the best investment plan. Therefore, the following assumption 2 is put forward:

Hypothesis 2: When the uncertainty of economic policy increases, the cash holdings of state-owned enterprises are not sensitive to non-state-owned enterprises.

The degree of financial development outside the enterprise will undoubtedly have a greater impact on the financing constraints. A developed financial market means that information is completely transparent, investors can obtain the most accurate market information, and enterprises can obtain financial support more easily, avoiding unnecessary costs. Due to the uneven distribution of financial resources, enterprises in different regions have different financing constraints. In addition, the perfect regional legal system provides a good external financing environment for enterprises. To a certain extent, it reduces the economic litigation costs incurred by enterprises due to external financing, and at the same time improves the financing efficiency of enterprises.Therefore, the following assumptions 3 and 4 are put forward:

Assumption 3: The positive correlation between the uncertainty of economic policies and the cash holdings of enterprises gradually increases with the decline of financial development in the region where the enterprises are located.

Assumption 4: The positive correlation between the uncertainty of economic policies and the cash holdings of enterprises gradually increases with the decrease of legal perfection in the region where the enterprises are located.

3. Research Design

3.1 Sample Selection and Data Source

Due to the changes in accounting standards for listed companies in 2006, this paper takes the relevant data of China's Shanghai and Shenzhen A-share listed companies from 2007 to 2017 as samples to explore the impact of economic policy uncertainty on cash holding behavior of enterprises. Quarterly financial data of listed companies come from the economic and financial database of China's Tai 'an (CAMAR). Economic policy uncertainty level data refer to China's economic policy uncertainty index (the economic policy uncertainty index comes from http://www.policyuncertainty.com/china_monthly.html). Quarterly data of GDP regions come from the official website of the National Bureau of Statistics. This paper screens the samples as follows: (1) delete ST and PT samples (2) delete financial enterprise samples due to the particularity of financial indicators in the financial industry;(3) delete the samples with negative owner's equity;(4) delete the missing samples of main variables. The final sample after screening is 542 Shanghai and Shenzhen A-share listed companies, with a total of 23848 quarterly observations.

Before using stata15.0 software to carry out subsequent inspection and analysis on the data, in order to avoid the influence of abnormal data values, all continuous variable data in this paper are subjected to 1% Winsorize.

3.2 Variable Definition

The main variables used in this paper are shown in Table 1:

Table 1 Variable Situation Table

Variable type	variable symbol	Variable name	Variable calculation
Interpreted variable	CASH	Corporate cash holdings	Increase in cash holdings/total assets
Explanatory variable	PU	Economic Policy Uncertainty	Monthly Average of China's Economic Policy Uncertainty Index Every Three Months
	STATE	Property right nature	If the sample company is a state-owned enterprise, then STATE=1, otherwise STATE=0.
	FD	Regional financial development	Bank loan balance at the end of the period/GDP of each province in the current period
	LD	Degree of perfection of regional laws	"The Development of Intermediary Organizations and Legal System Environment" in China's Provincial Marketization Index compiled by Gang and Wang Xiaolu et al. (2016)
Control variable	TQ	Enterprise growth	(Number of tradable shares × price of tradable shares+number of non-tradable shares × net assets per share+total liabilities)/total assets at the beginning of the period
	JCASH	cash flow	Total Net Cash Flows/Total Assets Due to Operating Activities
	CAPX	Capital expenditure	Capital expenditure/total assets
	LEG	Financial leverage	Total liabilities/total assets
	SIZE	Enterprise scale	In total assets
	NWC	net working capital	(Net Working Capital-Cash)/Total Assets
	SALE	Sales growth rate	Year-on-year growth rate of sales
	GDP	Gross national product	GDP/ total assets
	SEA	Quarter	Quarterly dummy variable

3.3 Model Design

To test hypothesis 1, that is, "when the uncertainty of economic policies increases, enterprises often choose to increase their cash holdings." Based on the basic models of Li Fengyu and Shi Yongdong (2016), this paper constructs a linear regression model 1, and on this basis, classifies sample enterprises according to the nature of property rights to test hypothesis 1:

$$CASH = \beta_1 POLICY_{i,\ t} + \beta_2 CASH_{i,\ t-1} + \beta_3 TQ_{i,\ t-1} + \beta_4 JCASH_{i,\ t-1} + \beta_5 CAPX_{i,\ t-1} + \beta_6 SIZE_{i,\ t-1} + \beta_7 NWC + \beta_8 LEG_{i,\ t-1} + \varepsilon_{i,t}$$

In order to test hypothesis 3 and hypothesis 4, this paper uses the basic models of Li Fengyu and Shi Yongdong (2016) for reference, and introduces the cross-product term to construct multiple linear regression models 2and 3:

$$CASH = \beta_1 POLICY_{i,\ t} + \beta_2 FD_{i,\ t} + \beta_3 POLICY_{i,t} \times FD_{i,\ t} + \beta_3 CASH_{i,\ t-1} + \beta_4 TQ_{i,\ t-1} + \beta_5 JCASH_{i,\ t-1} + \beta_6 CAPX_{i,\ t-1} + \beta_7 SIZE_{i,\ t-1} + \beta_8 NWC + \beta_9 LEG_{i,\ t-1} + \beta_{10} LLD_{i,\ t} + \varepsilon_{i,t}$$

$$CASH = \beta_1 POLICY_{i,\ t} + \beta_2 LD_{i,\ t} + \beta_3 POLICY_{i,t} \times LD_{i,\ t} + \beta_4 CASH_{i,\ t-1} + \beta_5 TQ_{i,\ t-1} + \beta_6 JCASH_{i,\ t-1} + \beta_7 CAPX_{i,\ t-1} + \beta_8 SIZE_{i,\ t-1} + \beta_9 NW + \beta_{10} LEG_{i,\ t-1} + \beta_{11} LLD_{i,\ t} + \varepsilon_{i,t}$$

FD and LD are the control variables of the model, which respectively indicate the degree of regional financial development in hypothesis 3 and the degree of regional legal perfection in hypothesis 4.

4. Empirical Results and Analysis

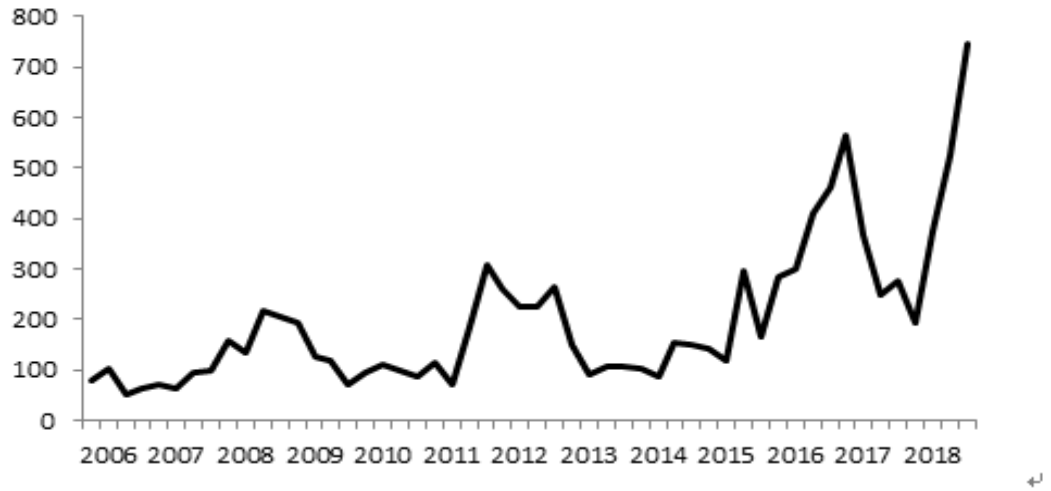

Figure 1 China's Economic Policy Uncertainty Index from 2006 to 2018

As shown in Figure 1, affected by the spread of the financial crisis, China's economic uncertainty index rose in 2008.In 2011, under the influence of the "4 trillion investment plan" implemented by the central government, there was nationwide inflation, the future economic situation was difficult to predict, and China's economic policy uncertainty index showed a small peak. In 2015, China's economy has entered a "new normal" stage due to the complex and intensified economic environment at home and abroad. The government vigorously promotes supply-side structural reform and is committed to optimizing and upgrading the industrial structure.

4.1 Regression Results and Analysis

Table 2 Economic Policy Uncertainty and Return Results of Cash Holding of Enterprises under

Property Rights Grouping

Variable	CASH		
	(1) Full sample	(2) sample of non-state-owned enterprises	(3) Sample of State-owned Enterprises
PU	0.0129*** （7.04）	0.0134*** （5.76）	0.00209*** （4.98）
$CASH_{i,\ t-1}$	0.893*** （310.86）	0.902*** （262.16）	0.872*** （165.28）
TQ	0.00203*** （8.14）	0.00204*** （6.60）	0.00209*** （4.98）
JCASH	0.178*** （35.05）	0.183*** （28.85）	0.166*** （19.53）
CAPX	-0.155*** （-18.36）	-0.169*** （-15.76）	-0.131*** （-9.52）
SIZE	-0.00144*** （-5.22）	-0.00109** （-3.10）	-0.00221*** （-4.90）
NWC	-0.0100*** （-6.06）	-0.0102*** （-4.95）	-0.00875** （-3.10）
LEG	0.00000499 （1.86）	0.00000646 （1.91）	0.00000147 （0.33）
CONS	0.0383*** （6.22）	0.0288*** （3.70）	0.0590*** （5.81）
R2	0.8271	0.7935	0.8420
N	23848	8776	15072

Note: *, * *, * * * in the table indicate significant levels from low to high, i.e. 10%, 5% and 1%.

As can be seen from table 2, under the three categories of "all enterprise samples", "non-state-owned enterprise samples" and "state-owned enterprise samples", the coefficients of economic policy uncertainty PU and CASH holding level cash of enterprises are significantly positive, the significance level is 1%, and the coefficient of "state-owned enterprise samples" is 0.00209 far lower than that of "non-state-owned enterprise samples" 0.0134.It is also lower than 0.0129 of "all enterprise samples", so with the enhancement of financing constraints, the regression coefficient between PU and CASH gradually increases, and its correlation becomes more and more significant. The grouping regression results in Table 3 verify the results of Hypothesis 1.

Table 3 Economic Policy Uncertainty and Return Results of Cash Holdings of Enterprises

Variable	CASH		
	（1）	（2）	（3）
$CASH_{i,\ t-1}$	0.893*** （310.86）	0.892*** (309.00)	0.889*** (305.14)
PU	0.0129*** （7.04）	0.0134*** (7.30)	0.0166*** (8.80)

TQ	0.00203*** （8.14）	0.00213*** (8.52)	0.00206*** (8.29)
JCASH	0.178*** （35.05）	0.179*** (35.06)	0.172*** (33.53)
CAPX	-0.155*** （-18.36）	-0.154*** (-18.12)	-0.159*** (-18.84)
SIZE	-0.00144*** （-5.22）	-0.00152*** (-5.45)	-0.0000286 (-0.09)
NWC	-0.0100*** （-6.06）	-0.0105*** (-6.33)	-0.0119*** (-7.11)
LEG	0.00000499 （1.86）	-0.00000807 (-1.60)	0.00000225 (0.69)
FD			-2.838** (-3.04)
PU*FD			-2.830** (-3.029)
LD		-0.00444* (-2.10)	
PU*LD		-0.00460** (-2.90)	
CONS	0.0383*** （6.22）	0.00694 (0.69)	0.00986 (1.41)
R2	0.8271	0.8264	0.8277
N	23848	23848	23848

Note: *, * *, * * * in the table indicate significant levels from low to high, i.e. 10%, 5% and 1%.

As shown in Table 3, after controlling other relevant influencing variables, the coefficient of economic policy uncertainty is significantly positive at 1% level, and the coefficient of cross-product PU×FD and economic policy uncertainty is significantly negative at 5% level. Therefore, when the economic policy uncertainty increases, the increase of financial development level in the region can inhibit the increase of cash holdings of enterprises. This regression result verifies hypothesis 3.Similarly, the available hypothesis 4 has also been verified.

5. Research Conclusions and Policy Recommendations

5.1 Research Conclusion

This paper finds that when the uncertainty of economic policy rises, enterprises will choose to increase their cash holdings. Furthermore, the behavior of increasing cash holdings is more obvious in non-state-owned enterprises and enterprises with poor financial and legal environment in the region.

5.2 Policy Recommendations

5.2.1 Improve Public Trust and Maintain Policy Consistency

When the level of economic policy uncertainty increases, enterprises will tend to increase their cash holdings, but this part of the increased idle funds is a waste to the whole society. In addition, under the condition of frequent changes in economic policies, enterprises will usually fall into the "dilemma" of increasing cash holdings or maintaining existing investment strategies. Therefore, the government should improve the level of credibility and maintain policy consistency and coherence

as much as possible.

5.2.2 Reduce Government Intervention and Give Full Play to the Autonomy of Enterprises

The development of China's financial market is relatively immature, with indirect financing such as bank loans as the main financing method for enterprises. However, there is serious "credit discrimination" in the capital market, and problems such as difficulty in financing and lack of financing for private enterprises are becoming increasingly prominent. Therefore, the government should reduce excessive interference, give full play to the autonomy of economic subjects, and create a fair, just and open market competition environment for all kinds of market subjects.

5.2.3 Improve the Financial Market and the Legal System

When the uncertainty of economic policies increases, enterprises in areas where financial markets are relatively backward and the legal environment is imperfect are more sensitive. Therefore, the government should broaden the financing channels for enterprises, narrow the gap between financial markets in various regions, and improve the efficiency of social capital utilization. To perfect and perfect the regional laws and regulations system, to provide a good legal environment for the sustainable development of enterprises.

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