

## The Effect of Cultural Heterogeneity and Economic Uncertainty on Cash Holdings

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### Abstract

*The objective of this study is to decide the effect of social variety and monetary vulnerability on cash property in 22 developing business sector nations. We check three significant discoveries out. First off, corporate money property are unfavorably connected with individualism and decidedly connected with uncertainty avoidance. Second, corporate money property are connected with economic uncertainty. We likewise investigate the aggregation and scattering of money property by analyzing the connection between business size, productivity, research and development, net working capital, and market to book, which are all well related while influence is unfavorably related.*

### Keywords

economic uncertainty; business size; productivity; research; development



### I. Introduction

The subject of cash holdings property has been widely explored in different monetary literary works. As per some writing, organizations with an elevated degree of broadening will like to hold little money since it gives the organization a huge inward capital market that will assist with beating monetary requirements emerging from outer capital business sectors, in this manner lessening the need to store cash. Bakke and Gu (2016), this study then examines the new literature from an innovative standpoint, focusing on the cultural heterogeneity inherent in multinational corporations. Cultural diversity will have a significant impact on financial activities and international business behavior. Multinational corporations must adopt local culture in order to compete with foreign operations. Social reception, then again, is a troublesome and tedious cycle since culture is established in the human brain, which is diligent and hard to change. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019).

Cultural differences have been shown to have a variety of influences on decisions and decision making on both the corporate and investment sides. There is a relationship between national culture and cash holdings at the country level using a cross-sectional sample provides valuable insight in dealing with potential risks that are difficult to identify due to the effects that arise due to culture as a factor that determines institutions and laws. These two dimensions are commonly used in academia to better understand various decision-making processes. Individualism and uncertainty avoidance tend to be more conservative and have a lower tolerance for risk taking, as evidenced by these two dimensions.

Cash is a critical and liquid company asset. Cash holdings have piqued the interest of investors and academics. Economic uncertainty has a detrimental actual and financial impact, according to several financial literatures. Companies tend to postpone investments,

particularly those that are irreversible, in the face of significant economic policy uncertainty. Economic instability can raise external costs and wreak havoc on a company's finances.

Cash holdings are strategically essential since they define a company's ability to maintain smooth operations while also realizing investment and expansion prospects. Determine the quantity of cash in the company is a critical decision for financial managers to make in order to maintain the company's financial success. Holding a significant quantity of cash in a company can provide a lot of profit for the company, one of which is used to finance unforeseen expenses, but holding an excessive amount of cash can also remove the firm's opportunity to earn profits, such as investment opportunities. Baumol (1952) attempted to investigate the factors influencing currency holdings.

## **II. Review of Literature**

### **2.1 Cultural Dimension and Cash Holdings**

Several works give novel viewpoints on cultural heterogeneity as an intrinsic feature of multinational organizations. Cultural diversity has a huge impact on financial transactions and international business conduct. According to Hofstede (1991), culture is a mental program that influences how people behave and think, which is referred to as national culture. Individualism, uncertainty avoidance, power distance, masculinity, and long-term orientation are the five cultural dimensions that Hofstede believes might impact an organization's thinking. This study, however, will only look at the cultural aspects of individualism and uncertainty avoidance. Uncertainty avoidance is a cultural component that explains the nature of society in the face of an uncertain, unstructured, ambiguous, and unpredictable cultural environment. The nature of society describes how culture is tied to ambiguity and uncertainty, as well as how society might adapt to future changes. Nations with an elevated degree of vulnerability evasion will focus on security and congruity over risk. Nations with diminished vulnerability evasion, then again, will have a higher capacity to bear vulnerability, making them bound to embrace risk, settle issues, and endure equivocality. Individualism is a cultural characteristic that exhibits behavior that is more concerned with personal interests and is more open to assessing a culture in order to swiftly adapt to a new culture. Individualist organizations will be more preoccupied with themselves and their closest kin, with less regard for other individuals or those outside the group. Individualistic societies use the phrase *i* instead of *we*. To get the intended results, they transform themselves into individuals who don't care about those in the group.

### **2.2 Individualism and Cash Holdings**

Independence alludes to how much individuals have a mental self portrait or a feeling of freedom instead of being relying upon confidence (Hofstede, 2001). A solid individualistic culture values individual freedom, while a feeble individualistic culture areas of strength for values cohesiveness. People in individualistic societies are more worried about how they contrast from their friends, and thus, they show arrogance and self-attribution predisposition. Pompous people, as indicated by the mental writing, are the individuals who go about like they have a greater number of abilities than they really do. Individuals from collectivist social orders, then again, have more grounded self-checking, which impressively limits the mental predisposition of arrogance. Presumptuousness predisposition in individualistic social orders is similar to that investigated widely in the conduct finance field.

### 2.3 Uncertainty Avoidance and Cash Holdings

Vulnerability evasion is additionally associated with wants like rule, steadiness, and consistency, and is particularly connected with mental characteristics regularly investigated in conduct finance financial matters like traditionalism and hazard avoidance. As of late, a few proof on the connection between vulnerability evasion and hazard avoidance has been introduced. Risk mentalities are affected by social components like independence and vulnerability evasion, relinquishment of conduct viewpoints, hazard avoidance in gain and hazard avoidance in misfortune, as reflected by prospect hypothesis. They see that vagueness repugnance is associated with cash property just for monetarily limited endeavors, suggesting that supervisors are mindful of financial backers' inclinations as well as effectively answer this prerequisite. Which channel does vulnerability evasion impact cash holding? In an original paper, the preparatory interest for saving, as opposed to utilization, is a positive capacity of vulnerability. That is, when future pay turns out to be more questionable about the given projected esteem, the pace of abundance reserve funds increments. Besides, not exclusively may vulnerability influence the amount of reserve funds, however it can likewise influence the level of individual money related needs.

### 2.4 Economic Uncertainty and Cash Holdings

Demir and Ersan (2017) analyzed the relationship between monetary arrangement vulnerability and corporate liquidity strategies in BRIC countries from 2006 to 2015 and found that partnerships decide to keep more money while confronting more vulnerability. Monetary strategy vulnerability could impact an organization's money property in two ways. As indicated by the accessible writing, the monetary emergency significantly affects the organization's liquidity strategy as an exogenous shock. Monetary emergencies, as per Akin et al. (2015), raise a company's money saves and income responsiveness by influencing the association's monetary requirement. The mindful inspiration for keeping cash develops progressively further. Utilizing an example of 8,663 perceptions from 1,435 Chinese endeavors, they found that organizations raised more capital during the emergency. This can be made sense of by the way that enterprises' money spending surpasses their investment funds inferable from outer monetary restrictions.

## III. Research Method

Research methods are steps taken by researchers to collect data or information to be processed and analyzed scientifically (Octiva et al., 2018; Pandia et al., 2018; Pandiangan, 2015).

The developing market data was gathered by S&P capital IQ. The sampling is part of the population that has characteristics similar to the population itself (Asyraini et al., 2022, Octiva, 2018; Pandiangan et al., 2022). The sampling period runs from 2011 until 2020. Financial subsidiaries are also prohibited since they are more frequently than not to function as special purpose entities for insulating multinationals from bad debts. The final sample comprises 6,657 firm-year observations based on Fama-French from 22 countries: Argentina, Brazil, Chile, China, Colombia, Czech, Greece, Hungary, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand, and Turkey. The financial sector is left out.

This section explains how to collect data and create variables. Hofstede's psychological evaluation of IBM employee values was used to create the index of individualism and uncertainty avoidance. Hofstede (1991) developed and expanded the individualism index, which is based on a nationwide average of 14 IBM-scored items

regarding workers' perspectives of work and personal life. The index is calculated by taking the average score (or percentage) for each country's three survey questions: stress, job security, and rule orientation. The individualism index estimates a nation's independence, and individuals who live in exceptionally individualistic social orders are bound to be hopeful and presumptuous (Titman and Wessels, 1998). What's more, the world uncertainty index is utilized to work out economic uncertainty.

The goal of study is so that data can be found, developed, and proven (Pandiangan, 2018; Pandiangan et al., 2021). The goal of this study is to see how national culture influences institutional influence decisions. We provide the findings of our basic regression analysis model, which is specified as follows:

$$\text{Cash}_{it} = \alpha_i + \beta_1 \text{IDV}_{it} + \beta_2 \text{UAI}_{it} + \beta_3 \text{EU}_{it} + \beta_4 \text{Size}_{it} + \beta_5 \text{Profit}_{it} + \beta_6 \text{Lev}_{it} + \beta_7 \text{RnD}_{it} + \beta_8 \text{Growth}_{it} + \beta_9 \text{NWC}_{it} + \beta_{10} \text{MTB}_{it} + \varepsilon_{it}$$

The dependent variable is what you want to use the model to explain or predict (Otiva et al., 2021; Pandiangan et al., 2018). The dependent variable is cash holdings, and the significant independent variables are two cultural qualities, individuality (IDV) and uncertainty avoidance (UAI). Firm size, profitability, leverage, research and development, sales growth, net working capital, and market-to-book are all driving variables.

To limit the influence of outliers, we winsorize the observations. With the statistics acquired, do regression using combined ordinary least squares (OLS). For enterprise-level clustering, use robust standard error. OLS is a type of linear least squares method for estimating the unknown parameters in a linear regression model (Pandiangan, 2022; Tobing et al., 2018).

#### IV. Result and Discussion

**Table 1.** Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Cash	0.061	0.06	0.004	0.184
IDV	35.68	13.316	18	48
UAI	61.129	20.891	40	87
EU	0.06	0.035	0.025	0.128
Size	11.369	1.959	8.136	14.382
Profit	0.078	0.066	-0.019	0.188
LEV	0.241	0.188	0	0.552
R&D	0.001	0.003	0	0.009
Growth	0.029	0.203	-0.298	0.393
NWC	0.149	0.197	-0.144	0.485
MTB	6.517	6.449	0	20.449

This table reports summary statistics for all the countries in our sample. Individualism and uncertainty avoidance are Hofstede's index. Economic uncertainty is world economic index the average value of the dependent variable, cash holdings, demonstrates the amount of cross-country variance in the cash-to-asset ratio. The overall average is 0.061. The average cash value is relatively low since most samples do not have complete data, hence the data is excluded from observation. The observations' results exclude nations where the Hofstede cultural index is not available. Individualism (IDV) and uncertainty avoidance have also shown significant variance in the cultural index (UAI). Individualism varies from 18 (South Korea) to 48 (United States) (India). Meanwhile, uncertainty avoidance ranges from 40 in India to 87 in the United States (Peru).

Furthermore, the standard deviation of economic uncertainty is 0.035, implying that cash holdings are likely to fluctuate greatly from year to year depending on the amount of economic uncertainty. The minimal value for research and development is zero since most nations and most sample firms do not invest money on research and development (R&D). Furthermore, due to the lack of comprehensive data, the minimum leverage and market-to-book numbers are set to 0.

The results of relapse Table 2 segment (1) exhibits that the individualism social file, regardless of the control variable, essentially adversely impacts cash holdings, with the size of the coefficient showing that each adjustment of one unit of individualism delivers a -0.0008 drop in cash holdings. The discoveries support the main speculation, which expresses that independence affects cash property, with associations with individualistic societies holding less money than organizations with collectivistic societies. Like the discoveries introduced by Chen et al. (2015), which show a negative connection among individualism and cash holdings since chiefs with independence societies will quite often be more careless about the organization's future income capacity when the organization holds more money, this is additionally predictable who found that independence and presumptuousness lead to an expansion in an organization's direction. Endeavors in nonconformist countries will quite often put resources into long haul resources. Financial backers with solid independence are more delicate to how effective administration is in spending assets, as per research.

**Table 2.** Regressions of Cash Holdings on National Culture

Cash	(1)	(2)	(3)	(4)
IDV	-0.0008*** (0.000)			-0.0005*** (0.000)
UAI		0.0005*** (0.000)		0.0003*** (0.000)
EU			0.0512*** (0.000)	0.0115 (0.167)
Size	0.0025*** (0.000)	0.0027*** (0.000)	0.0046*** (0.000)	0.0018*** (0.000)
Profit	0.0611*** (0.000)	0.0515*** (0.000)	0.0378*** (0.000)	0.0614*** (0.000)
LEV	-0.0283*** (0.000)	-0.0247*** (0.000)	-0.0326*** (0.000)	-0.0245*** (0.000)
R&D	1.3624*** (0.000)	1.1926*** (0.000)	2.0446*** (0.000)	1.0616*** (0.000)
Growth	0.0009 (0.405)	0.0021* (0.063)	0.0032*** (0.006)	0.0015 (0.183)
NWC	0.0932*** (0.000)	0.0957*** (0.000)	0.0947*** (0.000)	0.0945*** (0.000)
MTB	0.0006*** (0.000)	0.0009*** (0.000)	0.0007*** (0.000)	0.0008*** (0.000)
_cons	0.0434 (0.000)	-0.0224 (0.000)	-0.0121 (0.000)	0.0162 (0.001)
F-stat	0.000	0.000	0.000	0.000
Observations	66570	66570	66570	66570

() = p-value

This table reports the regression results of cash holdings on national culture. The dependent variable is cash holdings. Cash holdings is cash and cash equivalent divided by total assets. firm size is the natural logarithm of total assets. Profitability is EBITDA divided by total assets. Leverage is total debt divided by total assets. Research and development is research and development expenses divided by total assets. Growth is sales growth is total revenue (t) minus total revenue (t-1) divided by total revenue (t-1). Net working capital is total current assets minus total current liabilities divided by total assets. Market-to-book is market capitalization divided by total equity. We run pooled ordinary least squares (OLS) regression, with t-statistics (in parentheses) computed using standard errors robust to both clustering at the firm level and heteroscedasticity.

The relapse brings about segment (2) show that the uncertainty avoidance culture file affects cash holdings when joined with the control variable, with the extent of the coefficient demonstrating that each adjustment of one uncertainty avoidance unit causes a 0.0005 expansion in cash holdings. The discoveries support the subsequent speculation, in particular that uncertainty avoidance impacts cash holdings. The uncertainty avoidance Index estimates individuals' capacity to manage vulnerability and vagueness. Individuals that have a high uncertainty avoidance culture try to keep away from vulnerability. A low uncertainty avoidance culture, then again, shows that people are more open to vulnerability and ready to take risks.

The relapse brings about segment (3) show that the economic uncertainty file, when joined with the control factors, has a positive yet not genuinely huge effect on cash holdings, with the size of the coefficient demonstrating that every unit change in economic uncertainty causes a 0.0512 expansion in cash holdings. The discoveries support the third speculation, to be specific that economic uncertainty emphatically affects cash holdings. This shows that as the country's economic uncertainty rises, organizations are more disposed to accumulate cash. it very well may be seen as a supporting instrument against vulnerability. Wariness could bring about an expansion in real money possessions. A high cash holdings level infers that the organization's beneficial resources are declining. Expanded cash possessions bring about wasteful assignment of assets to advantageous financial action. Demir and Ersan (2017) likewise explore in the event that there is a connection between economic uncertainty and cash holdings in emerging nation firms somewhere in the range of 2006 and 2015. Monetary vulnerability can likewise affect cash property in an assortment of ways. Besides, economic uncertainty brings down the pace of return on resources and raises the expense of outer subsidizing, accordingly demolishing the organization's funds.

The relapse segment (4) discoveries exhibit that all free factors are relapsed with the control factors, and the outcomes are predictable with the separate free movers being relapsed. This shows that when a variable is joined with different free thinkers, its impact isn't decreased, bringing about something very similar and predictable results like clockwork. The control variable outcomes are extensively predictable with earlier exploration. Cash holdings is well influenced by firm size, profitability, research and development, growth, net working capital, and market-to-book, as indicated by the discoveries. Influence adversely affects cash holdings.

The relapse discoveries exhibit that there is a positive connection between firm size and cash holdings, with the worth of the coefficient showing that every unit change in firm size delivers a 0.002 ascent in cash holdings. Since bigger associations have a greater number of prerequisites and responsibilities than more modest organizations, rising organization size produces more money. The higher the association's size, the more grounded the sign gave to possible financial backers to put their capital in the organization,

which will without a doubt impact developing the organization's income. Accordingly, the size of the firm will affect the level of corporate liquidity. Bigger companies frequently have more resources. The more the organization's resources, the better the organization's liquidity since it is easier and more adaptable to utilize resources for create gains (Irwanto et al., 2019).

The relapse discoveries show that there is a positive connection among profitability and cash holdings, with the size of the coefficient demonstrating that every unit change in profitability delivers a 0.061 ascent in cash holdings. Expanded benefits made by a partnership could mirror a high measure of pay for the organization as a wellspring of money inflows. Organizations with high benefit will have all the more consistent income, permitting them to further develop their income. Productivity might be utilized to decide how effective a firm is at creating gains through the usage of its assets. Expanded benefit recommends an improvement in resource efficiency in getting benefit, which will impact the organization's sources of financial support. As indicated by Gitman and Zutter (2015), benefit has a positive connection among pay and consumptions caused because of the utilization of firm resources, including current and fixed resources.

The relapse discoveries uncover that there is a negative connection among leverage and cash holdings, with the worth of the coefficient demonstrating that every unit change in leverage creates a - 0.025 decrease in cash holdings. Organizations with a ton of obligation will use their accessible money to pay their rule and premium. At first, the partnership would back itself through cash holds, killing the requirement for outside funding. On the off chance that the current capital isn't adequate, the firm will look for speculation from outside sources.

The relapse discoveries show a positive connection among research and development and cash holdings, with the size of the coefficient demonstrating that each adjustment of one research and development unit creates a 1.062 ascent in cash holdings.

The relapse discoveries show that there is a positive connection between sales growth and cash holdings, with the worth of the coefficient demonstrating that every unit of sales growth delivers a 0.002 ascent in cash holdings. At the point when the firm starts to fill as far as deals, income increments, and the organization has more cash than income.

The relapse discoveries show that there is a positive connection between net working capital and money possessions, with the size of the coefficient demonstrating that every unit change in net working capital delivers a 0.095 ascent in cash holdings. On the off chance that the organization's functioning capital improves, so will its money property since its resources offset its commitments.

The relapse discoveries show that there is a positive connection between market-to-book and cash holdings, with the worth of the coefficient demonstrating that each adjustment of market-to-book creates a 0.001 ascent in cash holdings.

## V. Conclusion

This study explores in the event that cash property in 22 countries could make sense of social varieties and monetary precariousness. Moreover, it portrays the connection among individualism and uncertainty avoidance utilizing, and afterward proposes a speculation that there is an adverse impact among individualism and cash holdings and a positive impact between uncertainty avoidance and cash holdings. Independence affected cash holdings, as people were presumptuous while keeping cash, bringing about an expansion in navigation, as per information from 6,657 firms from 22 nations gathered somewhere in the range of 2011 and 2020. in the in the mean time, uncertainty avoidance

affects cash holdings, showing that people try to stay away from vulnerability and equivocalness. Besides, a speculation is proposed to check whether there is an impact of economic uncertainty on cash holdings, utilizing the world uncertainty index, expressing that there is a positive huge impact on cash holdings, demonstrating that when economic uncertainty in the nation increments, organizations are bound to hold cash. It very well may be seen as a supporting device against vulnerability. Independence, uncertainty avoidance, and economic uncertainty were likewise found to impact the inspiration for being mindful while putting away money. Besides, the review's discoveries contain control factors, with the discoveries demonstrating that cash holdings is emphatically affected by firm size, profitability, research and development, growth, net working capital, and market-to-book in the interim, leverage adversely affects cash holdings. As far as cash holdings levels, the outcomes are comparable with those portrayed in before writing.

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