

# Empirical Research on the Factors Affecting Residents' Intention of Deposit

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**Abstract:** *There are many factors that can affect economy, such as production, technology, consumption, imports, exports, investment, etc. Among them, consumption has a huge driving effect on the economy. Poor consumption can easily cause economic contraction. On the other hand, the intention of residents to deposit directly affect their consumption ability. This paper focus on the impact of deposit and takes an empirical perspective, trying to find out what factors could affect people's intention of deposit, and how to deal with the problems resulting from that.*

**Keywords:** *Economy, Deposit, Consumption*

## 1. Introduction

The 2008 US debt crisis severely struck the world economy. Since then most of the countries put to use various kind of economic revitalization policy and the world economy gradually recover from the wound. Many countries adopted expansionary fiscal policy and moderately loose monetary policy to deal with the crisis and the result is quite effective. The world's economy had developed fast in the following decade. However, in recent years the globalization process has been severely challenged. In this situation, the driving effect of internal consumption demand on economic growth is self-evident. This article takes country Z as an example to analyze the stimulating effect of consumption on the economy, the inhibitory effect of residents' savings on consumption, and the factors that affect residents' willingness to make savings.

### 1.1. Problem Statement

Z is a country which is located in eastern Asia. In the first and second quarters of 2020, the total consumption demand decreased a lot in country Z. The problem lies in that starting from the second quarter of 2020, country Z 's economy achieved a V-shaped rebound, but the recovery of consumer demand did not keep pace with economy recovery while family deposits in country Z have been increasing. Deposit and consumption are two sides of a coin, which means the increase of deposits will inevitably lead to the decrease of consumption. What caused the increase of family deposits in country Z? This article is trying to address this problem by doing research on country Z's family deposits intention.

### 1.2. Research Questions

Questions 1: What factors are affecting families' intention of deposit in country Z and making it become more conservative?

Questions 2: Is there a major factor that affect families' intention of deposit in country Z?

Questions 3: how to increase consumption demand in a country with high deposit intention?

### 1.3. Research Objectives

This article aims at the research on the country Z's family deposit intention, trying to find out the factors affecting families' intention of deposit in country Z, hoping to give a reasonable explanation for the reason why country Z's family deposits account for a relatively high proportion, and hoping to give enlightenment on how to take measures to promote consumption market from deposit perspective.

## 2. Literature Review

Deposit and consumption has been two important human activities in the past centuries, and theories related to deposit and consumption are emerging one after another, such as absolute and relative income hypothesis, life cycle-permanent income hypothesis, random walk hypothesis, Defensive deposit theory, buffer-stock model, etc. From these theory it can be seen that there are many factors affecting consumption willingness and saving habits. This article would focus literature review on insecurity, uncertainty and preventive saving.

### 2.1. Historical Review

As an important research field of economics, deposit and consumption has a very long history. Song Mingyue <sup>[1]</sup> summarized the early development history of this study as follows:

Modern deposit and consumption theory originated from the absolute income hypothesis represented by Keynes in the 1930s. Then came Modigliani's life cycle hypothesis (1954) and Friedman's lasting income hypothesis (1957). However, the researcher who really combine consumption with deposit and prove the existence of preventive deposit are Leland (1968). After that, miller (1974, 1976) and Sibley (1975) expanded and verified Leland's theory. Kimball (1990, 1991) put forward the theory of absolute prudence and relative prudence. Deaton (1991) and Carroll (1992) proposed buffer reserve model. When studying the relationship between Preventive Deposit and consumption, Kimball's "cautious motivation" model (1990) is a commonly used basic model. In the research Kimball designed a new coefficient called "caution coefficient", which refers to the behavior of taking all kinds of countermeasures in the face of risks.

### 2.2. Recent Literature Review

Song Zheng <sup>[2]</sup> believed that the uncertainty of future income comes from personal risk and system risk, in which personal risk refers to the uncertainty of future individuals, and system risk refers to the uncertainty of the whole macroeconomic operation.

Sun Feng <sup>[3]</sup>, through the error correction model, proved that uncertainty has a significant negative impact on Chinese consumers.

Hang Bin, Shen Chunlan <sup>[4]</sup> believed that in order to prevent possible liquidity constraints in the future, families will try to increase their deposit before they have large expenditures.

Yi Xingjian, Wang Junhai and Yi Junjian <sup>[5]</sup> used empirical results to demonstrate that China's families have high prudence coefficient and strong preventive deposit motivation.

## 3. Empirical research

This study used a questionnaire survey method to distribute questionnaires to 400 households in four major cities in Z country. In the questionnaire, the independent variables that affect deposit intention are divided into four dimensions, namely: "Risk of Income Fluctuation", "Risk of Indispensable Large Expenditure", "Risk of Unemployment" and "Risk of Emergent Illness". The dependent variable is named as "Intention of Deposit". In addition, there is a mediating variable between the dependent and independent variables, namely "Sense of Insecurity". The total number of questions in the questionnaire is 24. The filling and retrieval of questions are conducted through online electronic questionnaires. The distribution and collection of questionnaires took two weeks. Out of the 400 questionnaires distributed, 312 valid questionnaires were ultimately collected, with an effective rate of 78%.

### 3.1. Research hypothesis

H1a: Risk of Income Fluctuation has a significant positive impact on Sense of Insecurity

H1b: Risk of Income Fluctuation has a significant positive impact on Intention of Deposit

H2a: Risk of Indispensable Large Expenditure has a significant positive impact on Sense of Insecurity.

H2b: Risk of Indispensable Large Expenditure has a significant positive impact on Intention of

Deposit.

H3a: Risk of Unemployment has a significant positive impact on Sense of Insecurity.

H3b: Risk of Unemployment has a significant positive impact on Intention of Deposit.

H4a: Risk of Emergent Illness has a significant positive impact on Sense of Insecurity.

H4b: Risk of Emergent Illness has a significant positive impact on Intention of Deposit.

H5: Sense of Insecurity has a significant positive impact on Intention of Deposit.

### 3.2. Reliability and Validity Test

Table 1: Composite Reliability Statistics

Latent Variables	Cronbach's Alpha	rho_A	Composite Reliability
Risk of Income Fluctuation	0.864	0.871	0.908
Risk of Indispensable Large Expenditure	0.863	0.867	0.907
Risk of Unemployment	0.861	0.862	0.905
Risk of Emergent Illness	0.871	0.872	0.912
Sense of Insecurity	0.846	0.850	0.897
Intention of Deposit	0.865	0.867	0.908

This study used SmartPLS 3.0<sup>[6]</sup> software as the main data analysis and processing tool. From Table 1, it can be seen that the Cronbach's Alpha values for the six latent variables in this study are 0.864, 0.863, 0.861, 0.871, 0.846, and 0.865, respectively, which are greater than the baseline value of 0.6. The composite reliability values were 0.908, 0.907, 0.905, 0.912, 0.897, and 0.908, respectively, all higher than the benchmark value of 0.7. Another indicator rho\_A, also representing composite reliability, are 0.871, 0.867, 0.862, 0.872, and 0.850 respectively, which are all greater than the reference value of 0.7. Based on the above results, it shows that the internal reliability of this scale is relatively high, which indicates that the overall design of the scale is relatively reasonable.

In terms of the validity of the questionnaire, all latent variables' outer loading value and cross loading value are greater than 0.5, indicating that this scale meets the requirements in terms of validity structure. The Average Variance Extracted (AVE) values of each latent variable were 0.711, 0.709, 0.706, 0.722, 0.685, and 0.711, all greater than the minimum requirement value of 0.5. In addition, for the Fornell-Larcker Criterion, the square roots of the Average Variance Extracted (AVE) values of each latent variable were greater than the correlation coefficient between the latent variables, also indicating that this scale has good validity.

Table 2: R-Square

	R-Square	R-Square Adjusted
Intention of Deposit	0.718	0.715
Sense of Insecurity	0.855	0.849

From Table 2, it can be seen that the R-Square values for Intention of Deposit and Sense of Insurance are 0.718 and 0.855 respectively, and the R-Square Adjusted values are 0.715 and 0.849, respectively. All of the R-Squares are above 0.7, indicating that the model meets the requirements in terms of variable interpretation ability.

Table 3: Q<sup>2</sup> value

Latent Variables	Q <sup>2</sup> value
Risk of Income Fluctuation	0.512
Risk of Indispensable Large Expenditure	0.505
Risk of Unemployment	0.499
Risk of Emergent Illness	0.528
Sense of Insecurity	0.466
Intention of Deposit	0.510

Table 4: VIF

Indicators	VIF
Deposit 1	2.235
Deposit 2	1.854
Deposit 3	1.944
Deposit 4	2.738
Expenditure 1	2.111
Expenditure 2	1.768
Expenditure 3	2.274
Expenditure 4	2.185
Illness 1	2.221
Illness 2	1.998
Illness 3	2.147
Illness 4	2.120
Income 1	1.836
Income 2	2.600
Income 3	1.762
Income 4	2.577
Insecurity 1	1.946
Insecurity 2	2.363
Insecurity 3	2.125
Insecurity 4	1.636
Unemployment 1	1.762
Unemployment 2	2.056
Unemployment 3	2.135
Unemployment 4	2.232

From Table 3, it can be found that the  $Q^2$  of the variables are 0.512, 0.505, 0.499, 0.528, 0.466, and 0.510 respectively. All the  $Q^2$  values are all greater than 0, indicating that the model meets the detection requirements in predicting correlation. Besides, the table 4 shows that the VIF values of all variables are less than 10, representing that this model also passed the test of multi-collinearity.

### 3.3. Results and Data Interpretation

Table 5: Results of Hypothesis test

Hypothesis	Relationship between Latent Variables	Path Coefficients	T-statistics	P-Values	Results
H1a	Risk of Income Fluctuation -> Sense of Insecurity	0.251	2.659	0.000	Accepted
H1b	Risk of Income Fluctuation -> Intention of Deposit	0.213	2.619	0.000	Accepted
H2a	Risk of Indispensable Large Expenditure -> Sense of Insecurity	0.236	2.312	0.000	Accepted
H2b	Risk of Indispensable Large Expenditure -> Intention of Deposit	0.200	2.316	0.000	Accepted
H3a	Risk of Unemployment -> Sense of Insecurity	0.236	2.656	0.000	Accepted
H3b	Risk of Unemployment -> Intention of Deposit	0.200	2.688	0.000	Accepted
H4a	Risk of Emergent Illness -> Sense of Insecurity	0.260	2.945	0.000	Accepted
H4b	Risk of Emergent Illness -> Intention of Deposit	0.221	2.897	0.000	Accepted
H5	Sense of Insecurity -> Intention of Deposit	0.447	4.363	0.000	Accepted

The results of the hypothesis test are listed in table 5. From the result data, it can be seen that the path coefficients, T values and P-Values of all variables meet the testing requirements. Therefore, all of the hypotheses in this study have been accepted. Therefore, all the factors assumed in this article have

been proved to have significant impact on residents' willingness to deposit. After comparing hypothesis H1a, H1b, H2a, H2b, H3a, H3b, H4a, and H4b, it can be found that the significance of the impact of risk factors on sense of insecurity and deposit intention from large to small is: Risk of Emergent Illness, Risk of Unemployment, Risk of Income Fluctuation, and Risk of Indispensable Large Expenditure.

#### 4. Conclusions

This article used questionnaire survey and statistical methods, with the aid of professional data analysis software to analyze the factors that affect the deposit intention of residents in Z country. The study set a total of four main influencing factors on deposit intention, with a mediator in between, and proposed hypothesis questions based on this. The results of data analysis confirmed all the research hypotheses, representing that all four factors proposed in this article have an impact on residents' deposit intention. Next, this study also ranked the four factors based on their magnitude of influence on the deposit intention. As analyzed above, the most serious risk for families in these cities is disease, being the factor that has the greatest impact on them. It is probably because the cost of cure is too high, and it may bring economic, physical, family and other impacts. Unemployment and income fluctuation ranked the second and the third. The impact of unemployment is slightly stronger than income fluctuation, because unemployment will not only cause economic difficulties, but also have some certain impact on living conditions or life styles. At the bottom of the impact level is large expenditure. It can be seen that for families in these cities, the risk brought by large expenditure is not as serious as the first three factors. Moreover, hypothesis H5 is well supported and Sense of Insecurity has been proved to have a significant positive impact on Intention of Deposit. This result shows that for families in these cities, the higher their sense of insecurity, the higher their deposit intention. The relatively high correlation and significance show that even if the factors that produce insecurity are different, sense of insecurity itself has a great positive impact on deposit intention. Surely, in terms of the impact on deposit intention, even if still significant, the effect of four risk factors affecting deposit intention are not as significant as sense of insecurity does. This may be because except for the factors listed in this article, there are a number of other risk factors that have significant effects on deposit intention, so the respondents' answers are relatively scattered and cannot become a single focus in the questionnaire as sense of insecurity does. However, regardless of the ranking, the research results shows that all four risk factors have significant positive impacts on sense of insecurity and deposit intention.

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