# Corporate Governance and Liquidity Risk of ZTE Corporation

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**ABSTRACT**

The purpose of this study is to measure corporate governance impact to the corporation performance and liquidity risk of ZTE using the linear regression SPSS system analysis the liquidity performance of ZTE. In this study found that ZTE's liquidity ratio not very good in these 5 years as the ability of ZTE to pay the short-term liability is weaker. Through SPSS system also shows that the internal factors that affect the liquidity of ZTE is debt to income ratio while the external factors are inflation, standard deviation (STDV) and exchange rate.

***Keywords: Liquidity Risk, Electronic Industry and Debt to Income Ratio**

# 1.0 Introdction

Corporate governance is very important to build up a modern corporation because of the separation between management and ownership control in the organizations. Besides that, corporate governance is also the process and structured used to direct and organise the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long-term shareholder value, in the same time it also includes the interest of other stakeholders. In this topic, we will discuss about how the ZTE Corporation (ZTE) which is a smartphone company and located in China fulfilled their duty in terms of corporate governance.

## 1.1 Company Background

ZTE Corporation (ZTE) is a multinational telecommunications equipment and also the headquartered corporations is in Shenzhen and Guangdong in China. ZTE is one of head of the China especially in the fields of telecom equipment manufacturers. ZTE was founded as Zhongxing Semiconductor Co., Ltd in Shenzhen, Guangdong. In 1985, a groups of investors associated with the China's Ministry of Aerospace Industry had been incorporated and it changes the name to Zhongxing New Telecommunications Equipment Co., Ltd in 1993. ZTE had spent the capital of CNY 3 million in order to create a new business model.

ZTE Corporation has made their initial public offering (IPO) on the Shenzhen stock exchange in1997 and also on the Hong Kong stock exchange in December 2004. ZTE is also dedicated to the provision of ICT products and solutions to satisfy the needs of customers, integrating design, development, production, sale and services with a special focus. This made ZTE in the right track as the leader in the international telecom market in year 2006 as it took around 40% of new global orders for CDMA networks by number of shipments.

This is due to ZTE has given the innovative technology and also product solutions to telecommunications service providers corporate network clients in some countries and regions, making contributions to facilitate communications via multiple means, including the voice, data, multimedia and cable broadband in global world. In the global telecommunications market, ZTE had placed third of the largest vendors of GSM telecom equipment worldwide. In 2011 and 2012, ZTE was granted the greatest number of patent applications in global which is a first model for a Chinese company.

### 1.2 Concept of Sound Corporate Governance Associated With ZTE Corporation

ZTE Company has also established a reasonable and effectively operating internal control regime in order to enhance internal control, increase the level of ZTE's operational management standard and risk aversion ability and safeguard its assets security, compliance and effective operation of the corporation. This will helps ZTE in the sustainability and the stability of the corporation in the market.

#### 1.2.1 Openness, Honesty, Transparency

Openness is a willingness to provide information to all individuals and also the group about the corporation. ZTE has fulfilled the openness which is one of the concepts of sound corporation government as the Annual Report of the corporation have been provided and can easily find in any web site starting from year 2004 to year 2018. All relevant information about ZTE such as financial statement, annual report summary and result announcements and shareholdings of the shareholders and framework of control has been provided by the ZTE.

Honesty in corporate government is that the corporate's statement is believe by all stake holders especially shareholders and investors to be a true statement by the Board of Directors. In the case of ZTE corporation has successfully to show its honesty to all the stakeholders. The financial statement prepared by ZTE corporation have been audited by PRC auditors accordance with Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants (HKCPA) accounting principles generally accepted in Hong Kong and the disclosure requirements of the Hong Kong Companies Ordinance. Besides that, ZTE also provide documents for the stakeholders to inspect it financial statement such as the Group's audited financial reports original copies and consolidated financial statements for the year ended 31 December 2018 and the annual report signed by the Chairman of the Board of Directors and others which are legally binding.

Transparency can refer to the ease with which an outsider is able to make a meaningful analysis of a company and its actions. In the aspect of transparency to disclose the information, The Secretary to the Board of Directors and officers are responsible for arranging receptions of the visiting of shareholders, handling information disclosure, and answering enquiries on behalf of the ZTE corporate. ZTE procures real, accurate, full information and timely disclosure of relevant information in compliance with relevant PRC laws and regulations and the Articles of Association. This is to ensure that all shareholders have equal right to information.

**1.2.2 Independent**

Independent means that the extent to the procedures and structures are in place so as to minimise, or avoid completely potential conflicts of interest that could arise such as the domination of a company by an all-powerful chairman-cum-CEO or a major shareholder. ZTE's investment properties contain 5 commercial properties in China and it investment properties were revalued on 31 December 2017 based on valuations performed by an independent professionally qualified valuer, at CNY 2,023,809,000. After that, every year ZTE's property manager and the chief financial officer decided, to appoint which external valuer to be responsible for the external valuations of the ZTE's properties after approval from the audit committee.

**1.2.3 Fairness**

Fairness means to protect all shareholders right and treat all shareholders including minorities and equitably accordance to the principle that all shareholders should receive equal consideration. ZTE corporate has formulated and put into implementation the Administrative Rules for Information Disclosure to strengthen the duty of the ZTE's internal institutions and also the staff for information disclosure and to ensure that the information disclosure of the ZTE is real, accurate, complete and timely. Besides that, it also has defined and put into implementation the System of Registration of Owners of Inside Information to remedy administration of the ZTE's inside information, procure confidentiality of the inside information and safeguard the principle of fairness in information disclosure.

**1.2.4 Responsibility**

In corporate government, responsibility mean who should have responsibility, whether in certain issues the company directors should be liable for their performance to the company shareholders and stakeholders. In the Annual Report 2017, ZTE had clearly declared The Board of Directors' responsible to ensure the financial statements are prepared in respect of every year to give a trustworthy and also reliable report on the corporate's situation, same as the result cash flow accounts for the relevant time. Besides that, it also mentions that the Board of Directors have applied appropriate accounting policies consistently and also ensure the preparation of the financial statements for the year ended 31 December 2017 is always complied with all applicable accounting standards. The directors should make sure that the corporate has enough resources on operation in future. Above, This are the responsibility of ZTE directors.

### 1.3 Main Risk Associated with ZTE Corporation

#### 1.3.1 Risk Associated with Intellectual Property Rights

ZTE has attached large significant to product technology research and the development same as the managements and protections of intellectual property rights. Trademarks of the ZTE's products and services are registered, and also such products and services are all protected under relevant patent rights. In the same time, ZTE has also adopted highly stringent ways to protect its intellectual property rights, potential disputes over intellectual property rights between the organization and also other telecommunications equipment manufacturers, franchisee corporates and carriers under partnerships with the corporates cannot be totally ruled out. ZTE will continue to drive the solution of related issues with an open-minded, cooperative and mutually beneficial approach.

#### 1.3.2 Risk Associated with Credit Risk

ZTE provides one-stop communications solutions to ZTE's customers. Also, ZTE is serving a huge clients base with differing credit status and also its business will inevitably be affected by the varied credit profiles of these clients. ZTE also seeks to mitigate the aforesaid impact by identifying and managing credit risks through the adoption of internal credit management measures, such as customer credit search, customer credit rating, customer credit limit management, overall risk control and credit control against customers with faulty payment records, and by transferring credit risks through the purchase of credit insurance and appropriate financial instruments.

### 1.3.3 Risk Associated with Interest Rate Risk

The interest rate risk of the ZTE corporate is also mainly associated with interest-bearing liabilities. The fluctuations trend in the interest rates of CNY will causes the changes in the total amount of interest payable by corporate and will therefore affect the its's profitability. ZTE corporate seeks to decrease the company's interest rate risk mainly by managing the total amount and structure of its interest bearing liabilities. ZTE control over the total amount of interest-bearing liabilities is mainly achieved by raising the cash turnover efficiency and rise up the free cash flow of the ZTE. Structured management of interest-bearing liabilities is achieved mainly through portfolio control of a mixture of long-term/short-term domestic and overseas loans denominated in CNY with fix or floating interests, complemented by derivative instruments such as interest rate swaps, sought from a diverse range of low-cost financing channels in the global market taking into account the trends of market changes.

# 2.0 Literature Review

### 2.1 Introduction

In this following literature review will be talk about the corporate government, company performance, credit risk, operation risk, liquidity risks and market risk and focusing about the definition and the past literature about these.

### 2.2 Literature Review Corporate Governance and Company Performance

Wear and Lang (2000) concluded that independent directors have negative relationship with firm performance. But, they argue that the independent directors have notable contribution to the company performance after a specific period of the poor performance. And also, there are European Journal of Business and Management mixed findings on the relationship between the board composition (age) and company performance. Klein (1998) documented insignificant relationship while Mclntyre, et al (2007) have documented strong association between board composition (age) and company performance. In Bonn findings, Bonn (2004) had concluded that the directors' age has no effect on company performance. The company that fail to carry their duty to stakeholders might have legitimacy denied and be forced out of existence through regulatory changes, lawsuits or boycotts by Gordy, 1993.

### 2.3 Literature Review Corporate Governance and Credit Risk

In the previous financial crisis is termed as the most serious financial crisis after the Great Depression of 1930's by Blundell-Wignall et al., 2008; Cheffins, 2009; Kirkpatrick, 2009; Clarke, Lang and Jagtiani, 2010. A fews of the researchers and reports reviewed the reasons of this global financial crisis (Clarke, 2010; Laeven et al., 2010; Lang and Jagtiani, 2010; Tarraf, 2010; UNTACD, 2010; Yeoh, 2010). A lot of scholars implicate corporate governance as the reason for global crisis, while other factors play only a supplementary role (Kirkpatrick, 2009; Yeoh, 2009; Fetisov, 2010). A few deficiencies in the corporate governance structure and processes led to the collapse of many financial institutions, and triggering the crisis. A lot of banking and financial company did not pay due attention to corporate governance before and during the crisis. The financial crisis of 2007-08 was a crisis truly global in nature that affected all regions and countries of the world (Clarke, 2010).

## 2.4 Literature Review Corporate Governance and Operation Risk

Internal audit's role is significant in assurance audits because it provides objective assurance (PwC, 2005B). The assurance function of internal audit has always been perceived of as an independent and continuing appraisal of an organization's internal control system, providing appropriate assurance that the systems were adequate, effective, and could be relied upon (The IIA, 2002). This is significant since the internal control system comprises the whole network of systems established in an organization to provide reasonable assurance that organizational objectives will be achieved with particular reference to risk; effective operations; economical and efficient use of resources; compliance with procedures, laws and regulations; safeguarding against loss including fraud; and the integrity and reliability of information and data (PwC, 2006).

## 2.5 Literature Review Corporate Governance and Liquidity Risk

Corporate failures have drawn shareholders' and stakeholders' attention to the importance of risk-related information (Linsley *et al.*, 2008; Solomon *et al.*, 2000). Hence, pressure for enhanced risk and risk management reporting has emerged (Carlon *et al.*, 2003) and companies are encouraged to report not only their activities but also the risks surrounding them and their ability to manage these risks (Eccles *et al.*, 2001; Institute of Chartered Accountants in England and Wales (ICAEW, 1999). A lot of reasons stood behind the East Asian financial crisis in July 1997, such as a highly leveraged corporate sector, heavy reliance on foreign currency borrowing, high real interest rates, vulnerability to capital outflows and inadequate supervision of financial systems. But, the lack of adequate risk disclosure exaggerates the crisis because investors lacked relevant information to assess companies' risk exposures (Rahman, 1998).

## 2.5 Literature Review Corporate Governance and Market Risk

According to Frenkel *et al.* (2000), diversification is one of the main measures open to the company in confronting risks. It includes product and regional diversification. Referred to as "risk defusing operators" (Huber *et al.*, 2001), such measures transform the gross risk of an alternative into net risk. Notwithstanding the popularity of diversification, most companies struggle to gain profitability through this measure (Bishop, 1995). Zook (2001) found that 90 percent of diversification efforts over the past decade have failed. One of the main reasons for this situation is the use of poor diversification strategies. Many companies found to their dismay that diversification often contributes to poor outcomes, such as reduced organizational fit, inconsistencies, loss of focus and ultimately lower profitability (Zook, 2001; Zook and Allen, 2001).

# 3.0 Methodology

## 3.1 Introduction

In this chapter will briefing the method that conducting in this study. It will mention all the parts that involved in this study from the data collected, population and sampling & statistical techniques that have been used to analysis the data. Lastly, it will also provide a detail explanation of the model used for analysis and data collection methods.

## 3.2 Population and Sampling Technique

Population sampling is the process of taking a subset of subjects that is a representative of the whole population selected for the research. Based on the subset of the population, researchers can infer the information about a population done with save more time and money as it reduce the cost and number of people in this study. However, in order to obtain accurate and high quality result, it requires a large enough sample size with enough power to determine a true association. So, it is significant matter about the representative of the whole population. In this study, the population is the largest smartphone companies in China. One smartphone company will be selected as sample from the population and for this study, ZTE Corporation had been selected. Annual reports from 2014 to 2018 have been used to calculate the dependent variable (liquidity risk) and the independent variables (internal, external, internal and external factors).

## 3.3 Statistical Technique

Statistical techniques are very helpful in interpreting the data such as extreme values, mean, median, standard deviations and interquartile ranges. These are useful in exploring, summarizing, and visualizing data collected. It really simple and good starts for the data analysis as it can indicate the trends, outliers, and patterns in the data. Thus, ZTE had been selected in this studying using the annual report data from year 2014 to year 2018 to examine the effect of the corporation about the internal and external factors from various aspects such as company performances, credit, operational and others. While for the external factors that might affect to the liquidity risk of ZTE, the data of China's GDP, inflation rate, interest rate and exchange rate (2014 - 2018) have been collected and analysed.

### 3.4 Data Analysis

For the data analysis, this study will be divided into 2 parts which are independent variable and dependent variable. Dependent variable is a variable whose value depends on that of another factor such as internal factors, external factors and both factors. While independent variable is a variable whose variation does not depend on that of another such as the liquidity risk.

### 3.5 Statistical Package for Social Sciences (SPSS Systems)

The 3 models of multivariate regression were used to find out the effect of internal and external factors on liquidity risk of ZTE. Thus, the hypothesis was illustrated in Model 1, 2 and 3.

Model 1: Pooled model of internal factors to the liquidity risk of ZTE Liquidity risk = a + a1ROAi + a2ACPi + a3DTIi + a4ORi + a5OMi + a6CGIi + εit

Model 2: Pooled model of external factors to the liquidity risk of ZTE Liquidity risk = a + a1GDPi + a2Inflationi + a3IRi + a4ERi + a5MRi + εit

Model 3: Pooled model of liquidity risk of ZTE Liquidity risk = a + a1ROAi + a2ACPi + a3DTIi + a4ORi + a5OMi + a6CGIi + a7GDPi + a8Inflationi + a9IRi + a10ERi + a11MRi + εit

## 4.0 Findings And Analysis

**Table 1: Descriptive statistics of dependent and company specific variables**

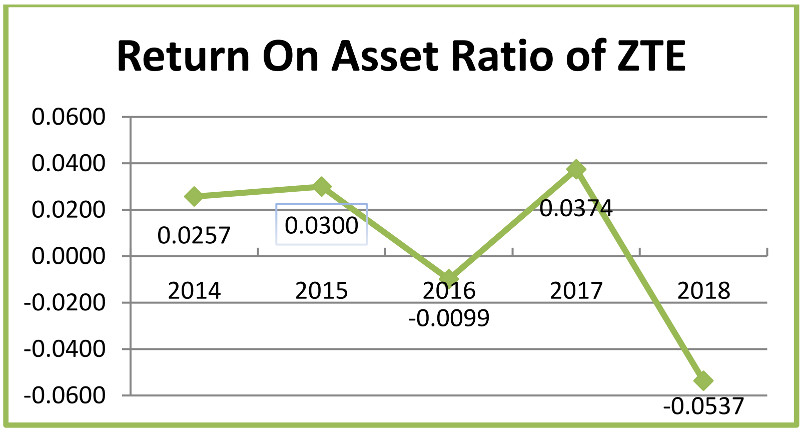
**Descriptive Statistics**

| | Mean | Std. Deviation | N |
|---|---|---|---|
| QUICK RATIO | 0.928000 | 0.1239758 | 5 |
| ROA | 0.203560 | 0.3887998 | 5 |
| AVERAGE-COLLECTION PERIOD | 118.068000 | 17.2250187 | 5 |
| DEBT TO INCOME | 0.494560 | 0.0676100 | 5 |
| OPERATIONAL RATIO | 2.286420 | 0.9586690 | 5 |
| OPERATING MARGIN | 0.282380 | 0.0256888 | 5 |
| Index | 1.00 | 0.000 | 5 |
| GDP | 6.859800000000000 | 0.268776301038615 | 5 |
| Exchange Rate (AOP) | 6.5560 | 0.26717 | 5 |
| STDV | 0.506794435270520 | 0.217750564076057 | 5 |

Descriptive statistics are used primarily to summarize the data in this study. In this study, 5 years of ZTE data from 2014 to 2018 have been used to run the SPSS system using the regression analysis. Mean represent to the average of the data available and the standard deviation represent the fluctuated data. The higher the value of standard deviation means the higher fluctuated value data. From, Table 1 indicates the mean, standard deviation of dependent variables ratio.

**I. COMPANY PERFORMANCE**

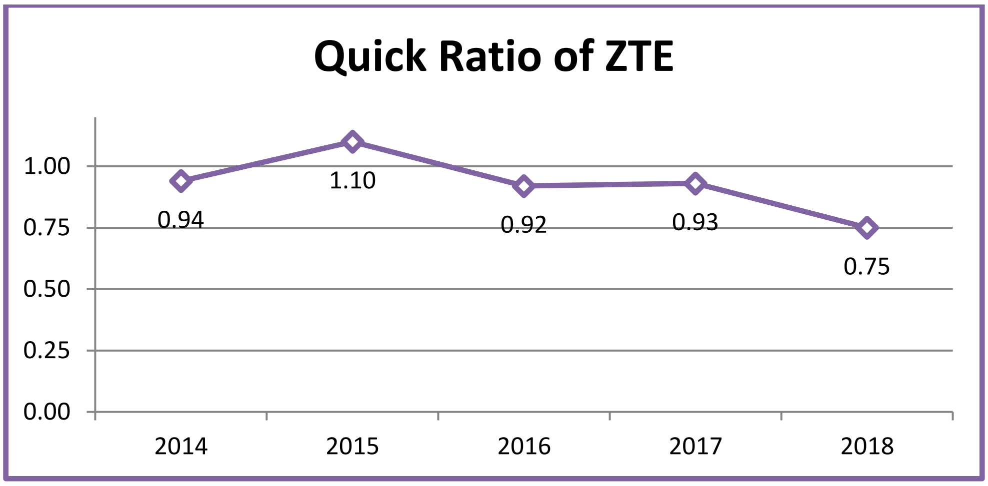
**Graph 1: Return on asset ratio of ZTE from 2014-2018**



ROA (Return on Assets) is an indicator of how profitable a company is relative to its total assets. The higher the value of ROA indicates, the higher the return or profitability to corporation. Generally, ROA used to measure the performance of a company. Table 1 indicates that the standard deviation is 0.3887998 and mean is 0.203560. This shows that 0.20 CNY profit generate when 1 CNY of ZTE assets invested. The range of the profit generated in these 5 years is between ± RM0.39. From the graph 1, it shows that the fluctuated trend in the 5 years chosen. In 2014, ROA ratio show 0.0257 increase slightly to 0.03 in 2015 but it decrease to -0.0099 when it comes to 2016. Even it show negative value in 2016, ZTE manage to rise up the ROA ratio to 0.0374 in 2017 but again it dropped drastic to -0.0537 comes to 2018. Thus, the ability of ZTE to generate profit from assets is considers as low.

**II. LIQUIDITY RISK**

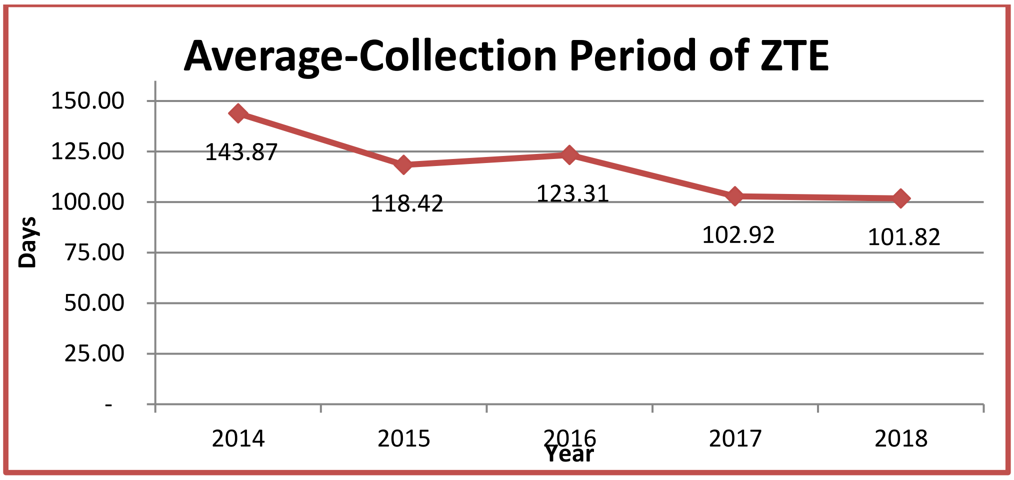
**Graph 2: Quick ratio of ZTE from 2014-2018**




Quick ratio can be defined as the current assets or the liquidity of a company and measures a company's ability to meet its short-term obligations. The higher the value of quick ratio means the higher the liquidity of the assets such as cash in the company. Quick ratio usually used to measure the ability of a company to pay back its debt in short term. Table 1 indicates that the standard deviation is 0.1239758 and mean is 0.928. From the Table 1, for every 1 CNY of the short-term debt, ZTE able to pay back 0.93 CNY and it indicates that how strong the ability of ZTE to pay back the corporation short-term debt in the range between ± RM0.12 from 2014 to 2018. The trend of the quick ratio ZTE shows slightly fluctuate from 2014 to 2018. In 2014, the quick ratio shows 0.94 rises up to 1.1 in 2015 and dropped again to 0.92 in 2016. In 2017, the quick ratio shows a little increase to 0.93 and decrease significantly to 0.75. Lastly, the ability of ZTE to pay back its short-term debt is strong and quite stable.

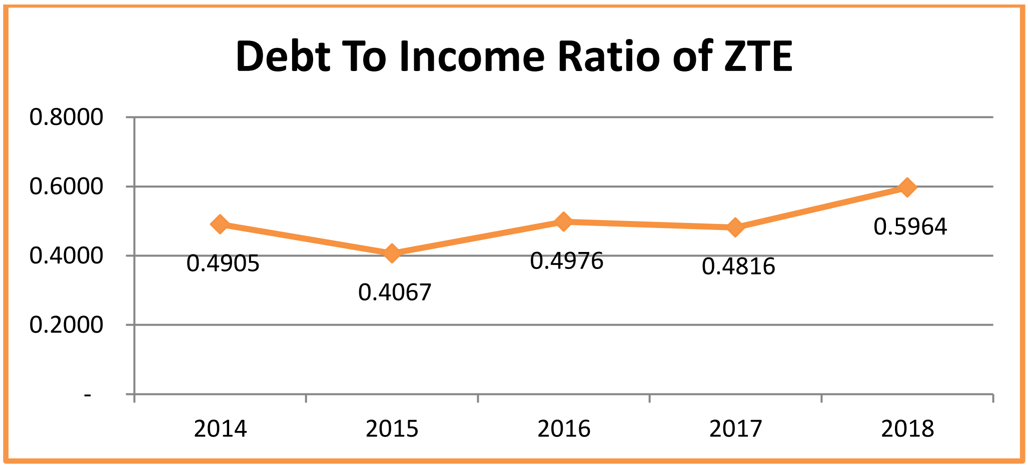
## III. CREDIT RISK

**Graph 3: Average-collection period of ZTE from 2014-2018**




The average collection period is the average number of days between the days that credit sales were made and the days that the money was received from the account receivables. The higher the average collection period ratio means the longer the time to collect the money from the account receivable. This will be given some impact to the liquidity of the company. Table 1 indicates that the standard deviation is 17.23 days and average collection day is 118.07 days from 2014 to 2018. In these 5 years, the average collection period for ZTE to collect its credit sales is 118.07 days and it might be different between the ranges ± 17.23 days. From graph 3 indicates that the trend fluctuate from 2014 to 2018. The average collection periods dropped from 143.87 days in 2014 to 118.42 in 2015 and increase slightly to 123.31 days in 2016 and dropped again two years continuously to 101.82 days in 2018. Hence, the ability of ZTE to collect back the credit sales from receivables considers as poor.

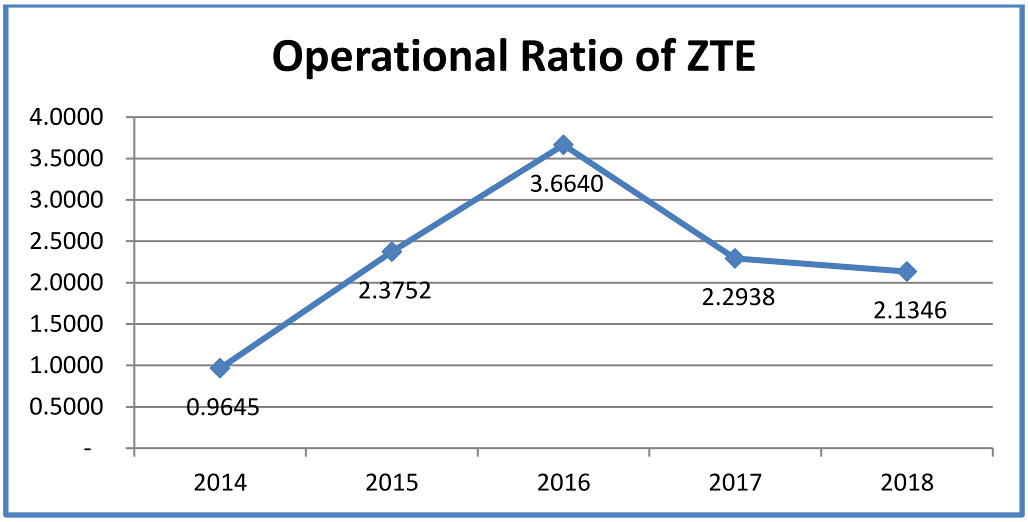
**Graph 4: Debt to income ratio of ZTE from 2014-2018**



The debt-to-income ratio is the percentage of gross profit that goes to paying debt payments. It also refers to the ability to pay back debts based on its income and cost. The mean and standard deviation of debt to income ratio from 2014 to 2018 are 0.494560 and 0.06761. This indicates that 0.49 CNY paid to the debt for every 1 CNY and this number may be varied to a range of ± 0.068 CNY of profit. As shown in graph 4, the debt to income ratio of ZTE has increase drastic from 0.9645 CNY per 1 CNY income in 2014 to 3.6640 CNY per 1 CNY income in 2016. But, it dropped to 2.1346 CNY per 1 CNY in 2018. Hence, the ability of ZTE to pay its debt by income show a huge fluctuate and unstable.

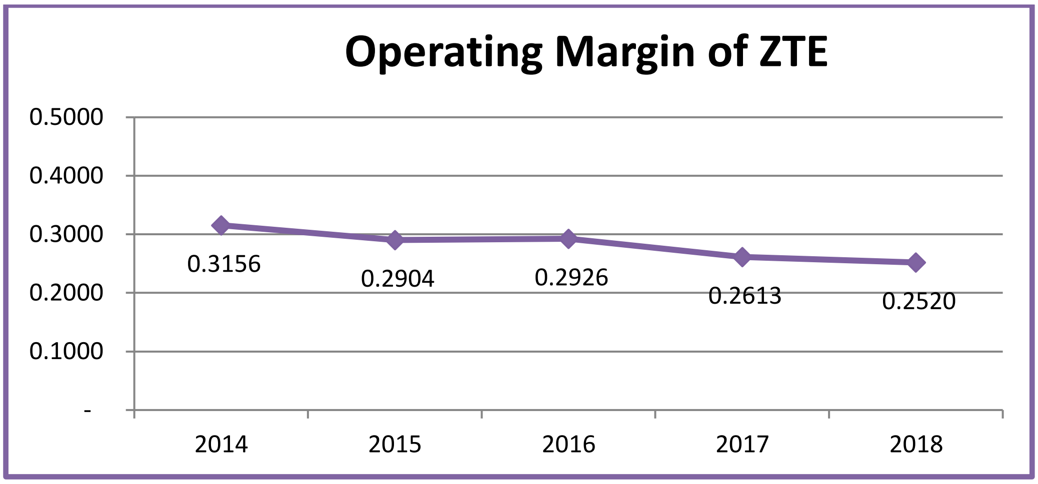
## IV. OPERATIONAL RISK

**Graph 5: Operational ratio of ZTE from 2014-2018**




Operating ratio can be considered as a company's operating expenses as a percentage of company income. The ratio can be used to determine the efficiency of a company's management by comparing company operating expenses to its net sales. The smaller the ratio value means the operating expenses are becoming an increasingly smaller percentage of net sales. The average value of operational ratio and standard deviation of ZTE are 2.286420 and 0.9586690. This shows that ZTE spends 2.29 CNY to generate 1 CNY and it will be different in a range value between ± 0.96 CNY. From graph 5 indicates that the operational ratio rise up continuously drastic from 2014 (0.9645) to 2016 (3.664) and dropped again in 2017 (2.2938) and 2018 (2.1346). Thus, efficiency of ZTE corporate to manage its operating expenses to net sales is very poor and unstable

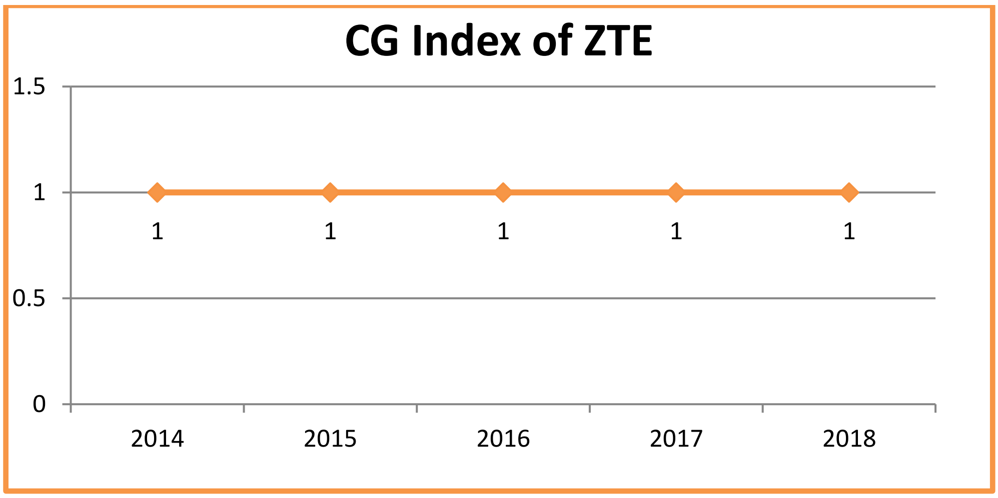
**Graph 6: Operating margin of ZTE from 2014-2018**




Operating margin directly relate to the day-to-day decisions managers make and operating margin. It is also a measure of managerial flexibility and competency other than profitability after minus production's variable costs such as raw materials cost and others. Operating margin is calculated by operating profit divide by its net sales. The higher the operating margin ratio means the higher the ability to produce profit. The average value of operating margin ratio and standard deviation of ZTE are 0.282380 and 0.0256888. This shows that the operating margin ratio is 0.2824 of the total income of ZTE and it will be different in a range value between $\pm$ 0.03 CNY. From graph 6 shows that the trend of operating margin decrease continuously in 5 years. In 2014, it shows that the operating margin of ZTE is 0.3156 dropped continuously to 0.2520 in 2018. This shows that the operating margin ratio of ZTE is good and stable.

**V. CORPORATE GOVERNANCE INDEX (CGI)**

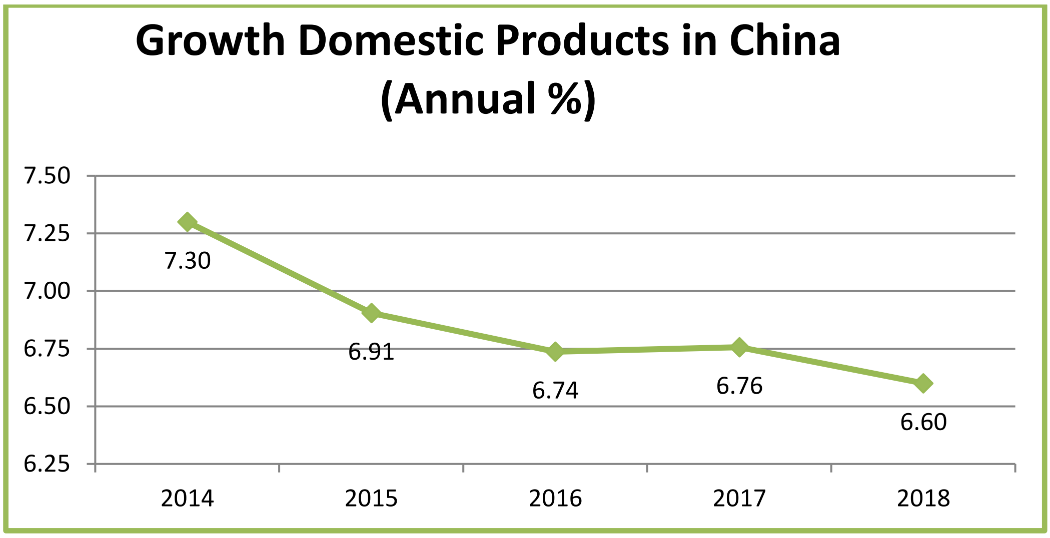
**Graph 7: CG Index of ZTE from 2014-2018**



Corporate governance index (CGI) is measured based on the 5 principles are accountability, transparency, independence, fairness and sustainability. The value of 1 show that it fulfilled the conditions of the 5 principles such as meeting, do they have audit committee, having more 50% of non-executive directors in the board, having female on the board and have organized charity, CRS or green technology program. ZTE shows value of 1 for each principles in5 years continuously. Thus, the index of ZTE shows 100% equal to mean value of 1.

## VI. GROWTH DOMESTIC PRODUCT (GDP)

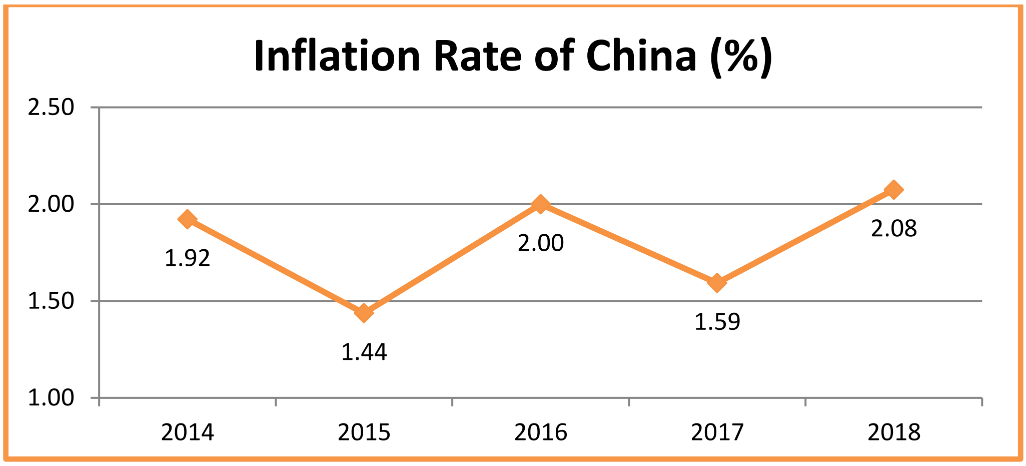
**Graph 8: Growth Domestic Products (GDP Annual %) in China from 2014-2018**




Gross Domestic Product (GDP) is the market value of all the finished goods and services that produced within a country's borders in a specific time period mention. It also can be represent a country's economic health. In this study, the annual percentage of growth domestic product in China is collected. From Graph 8 indicates that the overall trend of GDP in china shows decreasing as the GDP in 2014 is 7.30% decrease to 6.60% in 2018 even though that is a slightly increasing from 2016 (6.74%) to 2017 (6.76%). In table 1 shows that the mean and standard deviation are 6.8598 or 6.86% and 0.2688.

**VII. INFLATION RATE**

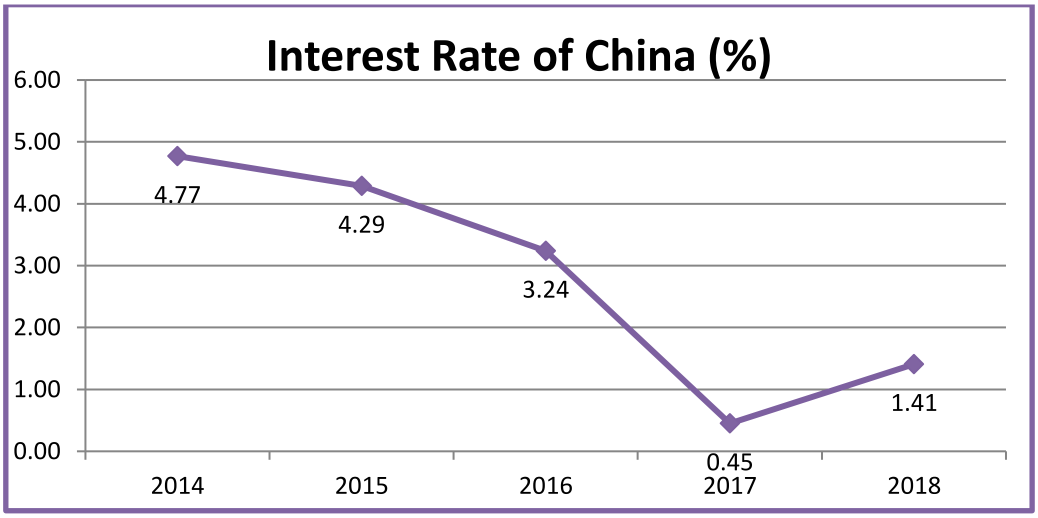
**Graph 9: Inflation rate of China from 2014-2018**




Inflation is one of the quantitative measures of the rate at which the average price level of a basket of chosen goods and services in an economy rise up in a specific time period. It also indicates the purchasing power of a nation's currency decrease. From graph 9 indicates that the inflation rate of China from 2014 to 2018 is fluctuated. The inflation rate in China in 2014 is 1.92 % and dropped to 1.44% in 2015 but it rise up again to 2.00%. However, it dropped again to 1.59% in 2017 and increase to 2.08% in 2018.

**VIII. INTEREST RATE**

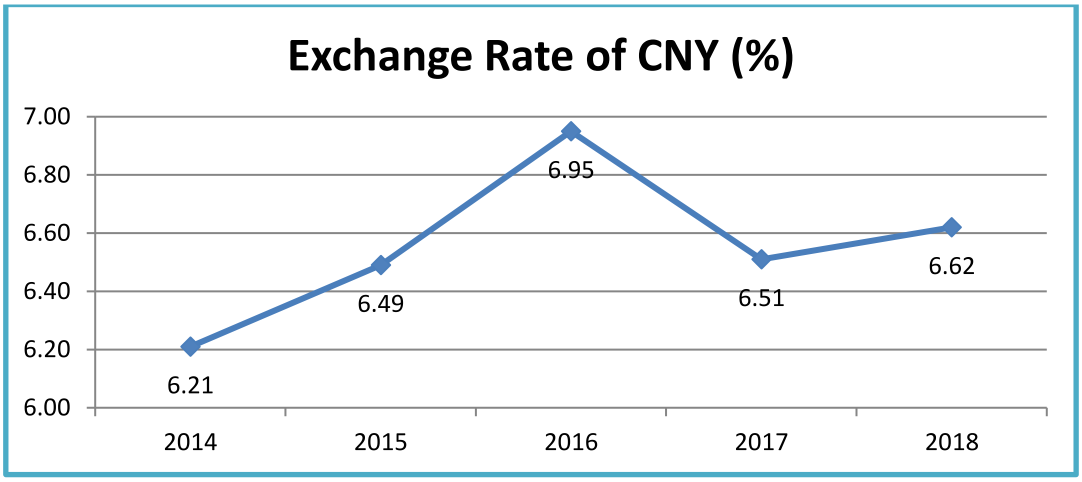
**Graph 10: Interest rate of China from 2014-2018**




An interest rate is the percentage of principal charged by the lender for the use of its money. The trend in these 5 years shows a drastic decrease from 2014 (4.77%) to 2017 (0.45%) but rise up again in 2018 to 1.41%.

**IX. EXCHANGE RATE (CNY)**

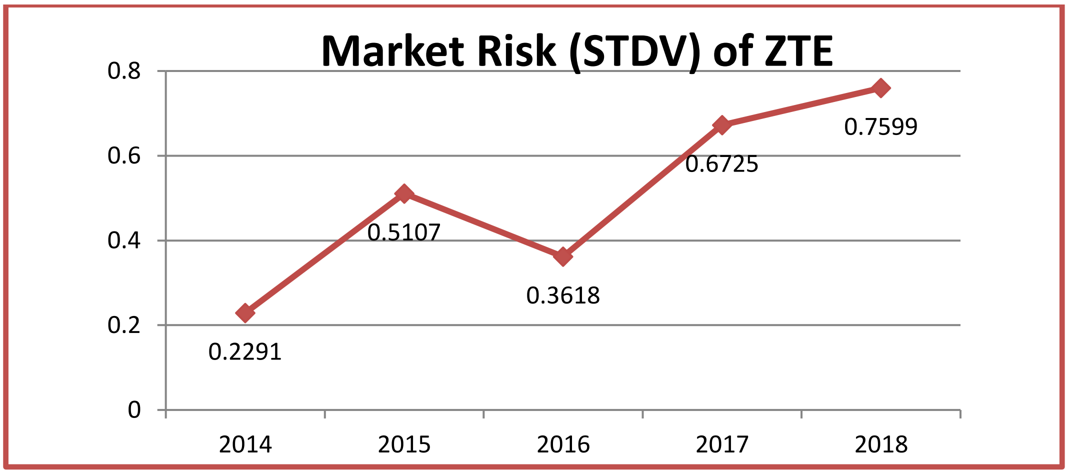
**Graph 11: Exchange rate from 2014-2018**




An exchange rate is the value of a country currency compared to the currency of another country or economic zone. In table 1 shows that the mean and standard deviation are 6.5560 and 0.26717. The overall trend for the exchange rate of 1 USD to CNY is fluctuated. From 2014 shows 6.21% increasing to 6.95% in 2016 but it dropped to 6.51% in 2017 and increase again to 6.62% in 2018.

**X. MARKET RISK (STDV)**

**Graph 11: Market risk of ZTE from 2014-2018**




Market risk is the possibility of an investor experiencing losses due to factors that affect the overall performance of the financial markets in which he or she is involved. The mean and standard deviation for the market risk in China are 0.5068 and 0.2178. The overall trend from 2014 to 2018 is fluctuated as it shows the increasing from 0.2291 in 2014 to 0.5107 in 2015 but it decrease again to 0.3618 in 2016. However, it rise up drastic to 0.7599 in 2018.

## 4.2 SPSS ANALYSIS

The SPSS analysis of liquidity risk on company specific variables will be discussed in four perspective, namely correlation, model summary, anova and coefficient.

### I. Correlation

**Table 2: Correlation Between Dependent Variable And Company Internal And External Factors Of ZTE**

| Correlations | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | QUICK RATIO | ROA | AVERAGE-COLLECTION PERIOD | DEBT TO INCOME | OPERATIONAL RATIO | OPERATING MARGIN | GDP | Inflation | Interest Rate | ExchangeRate（AOP) | STDV | Index |
| Pearson Correlation | QUICK RATIO | 1.000 | -0.012 | 0.373 | -0.994 | 0.032 | 0.554 | 0.451 | -0.817 | 0.565 | -0.227 | -0.428 | |
| | ROA | -0.012 | 1.000 | -0.514 | -0.085 | -0.013 | -0.485 | -0.227 | -0.425 | -0.735 | -0.108 | 0.455 | |
| | AVERAGE-COLLECTION PERIOD | 0.373 | -0.514 | 1.000 | -0.339 | -0.371 | 0.975 | 0.891 | 0.144 | 0.876 | -0.393 | -0.970 | |
| | DEBT TO INCOME | -0.994 | -0.085 | -0.339 | 1.000 | -0.053 | -0.522 | -0.430 | 0.840 | -0.496 | 0.215 | 0.407 | |
| | OPERATIONAL RATIO | 0.032 | -0.013 | -0.371 | -0.053 | 1.000 | -0.250 | -0.687 | 0.037 | -0.235 | 0.961 | 0.156 | |
| | OPERATING MARGIN | 0.554 | -0.485 | 0.975 | -0.522 | -0.250 | 1.000 | 0.861 | -0.028 | 0.912 | -0.327 | -0.977 | |
| | GDP | 0.451 | -0.227 | 0.891 | -0.430 | -0.687 | 0.861 | 1.000 | -0.126 | 0.744 | -0.751 | -0.799 | |
| | Inflation | -0.817 | -0.425 | 0.144 | 0.840 | 0.037 | -0.028 | -0.126 | 1.000 | -0.053 | 0.297 | -0.121 | |
| | InterestRate | 0.565 | -0.735 | 0.876 | -0.496 | -0.235 | 0.912 | 0.744 | -0.053 | 1.000 | -0.297 | -0.834 | |
| | ExchangeRate（AOP) | -0.227 | -0.108 | -0.393 | 0.215 | 0.961 | -0.327 | -0.751 | 0.297 | -0.297 | 1.000 | 0.203 | |
| | STDV | -0.428 | 0.455 | -0.970 | 0.407 | 0.156 | -0.977 | -0.799 | -0.121 | -0.834 | 0.203 | 1.000 | |
| | Index | | | | | | | | | | | | 1.000 |
| Sig. (1-tailed) | QUICK RATIO | | 0.492 | 0.268 | 0.000 | 0.479 | 0.166 | 0.223 | 0.046 | 0.161 | 0.356 | 0.236 | 0.000 |
| | ROA | 0.492 | | 0.188 | 0.446 | 0.492 | 0.204 | 0.357 | 0.238 | 0.079 | 0.431 | 0.221 | 0.000 |
| | AVERAGE-COLLECTION PERIOD | 0.268 | 0.188 | | 0.289 | 0.269 | 0.002 | 0.021 | 0.409 | 0.026 | 0.257 | 0.003 | 0.000 |
| | DEBT TO INCOME | 0.000 | 0.446 | 0.289 | | 0.466 | 0.183 | 0.235 | 0.038 | 0.198 | 0.364 | 0.248 | 0.000 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPERATIONAL RATIO | 0.479 | 0.492 | 0.269 | 0.466 | | 0.342 | 0.100 | 0.477 | 0.352 | 0.005 | 0.401 | 0.000 |
| | OPERATING MARGIN | 0.166 | 0.204 | 0.002 | 0.183 | 0.342 | | 0.030 | 0.482 | 0.016 | 0.296 | 0.002 | 0.000 |
| | GDP | 0.223 | 0.357 | 0.021 | 0.235 | 0.100 | 0.030 | | 0.420 | 0.075 | 0.072 | 0.052 | 0.000 |
| | Inflation | 0.046 | 0.238 | 0.409 | 0.038 | 0.477 | 0.482 | 0.420 | | 0.466 | 0.314 | 0.423 | 0.000 |
| | InterestRate | 0.161 | 0.079 | 0.026 | 0.198 | 0.352 | 0.016 | 0.075 | 0.466 | | 0.314 | 0.040 | 0.000 |
| | ExchangeRate （AOP) | 0.356 | 0.431 | 0.257 | 0.364 | 0.005 | 0.296 | 0.072 | 0.314 | 0.314 | | 0.372 | 0.000 |
| | STDV | 0.236 | 0.221 | 0.003 | 0.248 | 0.401 | 0.002 | 0.052 | 0.423 | 0.040 | 0.372 | | 0.000 |
| | Index | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| N | QUICK RATIO | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | ROA | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | AVERAGE-COLLECTION PERIOD | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | DEBT TO INCOME | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | OPERATIONAL RATIO | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | OPERATING MARGIN | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | GDP | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | Inflation | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | InterestRate | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | ExchangeRate （AOP) | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | STDV | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | Index | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |

In SPSS analysis, table 2 shows the Pearson correlation that measures the degree of linear relationship between 2 variables which are ZTE's quick ratio (dependent variable) and ZTE's internal and also external variables. While the significance value between the quick ratio (dependent variable) and other independent variables is shows in the table by Sig. or usually known as P-value. From table 2, the average collection period (ACP), operational ratio (OR), operating margin (OM) and GDP are positive correlated to liquidity risk. While the ROA, exchange rate (ER), debt to income and STDV indicate negatively correlated to liquidity risk. In the same time, index shows no relationship or correlated to liquidity risk.

The positive relationship means when the dependent variable (ZTE's quick ratio) increase, the independent variables (ZTE's ACP, OR, OM and GDP) will increase as well. In the opposite, when it shows the negative relationship or correlated means when the dependent variable (ZTE's quick ratio) decreases, the independent variables (ZTE's ROA, ER, STDV and debt to income) will increase as well. In the same time, when there is no correlated between dependent variable (ZTE's quick ratio) and independent variable (ZTE's Corporate Government Index) means there is no predictable relationship between these two variables.

From the table 2, debt to income is the most significance to the liquidity risk as the P-value is the smallest value and less than 0.05 while ROA will be the least significant factors to the liquidity risk as the P-value is the largest value and more than 0.05. This shows that the debt to income give the most impact to the company quick ratio, while ROA gives the least impact to the quick ratio of ZTE.

**II. Model 1: Liquidity Risk on Internal Factors**

**Table 3: Model Summary of ZTE's Liquidity Risk On Internal Factors**

| **Model Summary[b]** | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .994[a] | .989 | .985 | .0152035 | 2.138 |

a. Predictors: (Constant), DEBT TO INCOME

b. Dependent Variable: QUICK RATIO

Based on table 3, the relationships between debt to income ratio and quick ratio of ZTE have high degree of correlation due to the high R value show 0.994. The model summary of dependents and internal factors show that 98.5% of the variance in the dependent variable (liquidity ratio) is explained by debt to income ratio. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the liquidity ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

**Table 4: Anova Of ZTE's Liquidity Risk On Internal Factors**

| ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | .061 | 1 | .061 | 262.978 | .001[b] |
| | Residual | .001 | 3 | .000 | | |
| | Total | .061 | 4 | | | |

a. Dependent Variable: QUICK RATIO

b. Predictors: (Constant), DEBT TO INCOME

From table 4 shows that debt to income ratio has given huge impact to the quick ratio or liquidity risk of ZTE. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the quick ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

**Table 5: Coefficients Of ZTE's Liquidity Risk On Internal Factors**

| Coefficients[a] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | | Collinearity Statistics | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Tolerance | VIF |
| 1 | (Constant) | 1.830 | 0.056 | | 32.662 | 0.000 | 1.651 | 2.008 | | |
| | DEBT TO INCOME | -1.823 | 0.112 | -0.994 | -16.217 | 0.001 | -2.181 | -1.465 | 1.000 | 1.000 |

a. Dependent Variable: QUICK RATIO

From coefficients table 5 shows that debt to income has greatest significant effect to the liquidity ratio of ZTE with the P-value is less than 0.05. This means that the when the ZTE's liquidity ratio decrease, the debt of ZTE will increase in the same time. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the liquidity ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

**III. Model 2: Liquidity Risk on External Factors**
**Table 6: Model Summary Of ZTE's Liquidity Risk On External Factors**

| Model Summary[b] | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | .987[a] | .974 | .894 | .0403217 | 2.422 |

a. Predictors: (Constant), Inflation, STDV, ExchangeRate （AOP)

b. Dependent Variable: QUICK RATIO

From table 6 shows that the model summary of dependent and external factors is 89.40% of the variance in the dependent variable is explained by the inflation, STDV and exchange rate. The result for the dependent variable is explained by the inflation is inconsistent with the pass study done by Cenap Ilter (2017) stated that quick ratio does not change throughout the inflation range as it exclude non-monetary assets and liabilities. Besides that, the result for the dependent variable is explained by the STDV is consistant with the pass study done by Diby François Kassi, Dilesha Nawadali Rathnayake and Akadje Jean Roland Edjoukou (2019) stated that the results show that market risk indicators have a negative and significant influence on the companies' financial performance.

**Table 7: Anova Of ZTE's Liquidity Risk On External Factors**

| ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | .060 | 3 | .020 | 12.271 | .206[b] |
| | Residual | .002 | 1 | .002 | | |
| | Total | .061 | 4 | | | |

a. Dependent Variable: QUICK RATIO

b. Predictors: (Constant), Inflation, STDV, Exchange Rate （AOP)

From table 7, anova of ZTE's liquidity risk on external factors shows that inflation, STDV and exchange rate have affected the quick ratio of ZTE. The result for the dependent variable is explained by the inflation is inconsistent with the pass study done by Cenap Ilter (2017) stated that quick ratio does not change throughout the inflation range as it exclude non-monetary assets and liabilities. Besides that, the result for the dependent variable is explained by the STDV is consistant with the pass study done by Diby François Kassi, Dilesha Nawadali Rathnayake and Akadje Jean Roland Edjoukou (2019) stated that the results show that market risk indicators have a negative and significant influence on the companies' financial performance.

**Table 8: Coefficients Of ZTE's Liquidity Risk On External Factors**

**Coefficients[a]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. | 95.0% Confidence Interval for B Lower Bound | 95.0% Confidence Interval for B Upper Bound | Collinearity Statistics Tolerance | Collinearity Statistics VIF |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | (Constant) | 1.343 | 0.499 | | 2.693 | 0.226 | -4.995 | 7.681 | | |
| | ExchangeRate （AOP) | 0.078 | 0.082 | 0.168 | 0.952 | 0.516 | -0.960 | 1.115 | 0.854 | 1.171 |
| | STDV | -0.327 | 0.096 | -0.575 | -3.396 | 0.182 | -1.552 | 0.897 | 0.923 | 1.084 |
| | Inflation | -0.420 | 0.078 | -0.937 | -5.395 | 0.117 | -1.411 | 0.570 | 0.878 | 1.139 |

a. Dependent Variable: QUICK RATIO

From coefficients table 8 shows that exchange rate, STDV and inflation have effect to the ZTE's liquidity ratio but not so significant because the P-value is more than 0.1. The result for the dependent variable is explained by the inflation is inconsistent with the pass study done by Cenap Ilter (2017) stated that quick ratio does not change throughout the inflation range as it exclude non-monetary assets and liabilities. Besides that, the result for the dependent variable is explained by the STDV is consistant with the pass study done by Diby François Kassi, Dilesha Nawadali Rathnayake and Akadje Jean Roland Edjoukou (2019) stated that the results show that market risk indicators have a negative and significant influence on the companies' financial performance.

**IV. Model 3: Liquidity Risk on Internal and External Factors**

**Table 9: Model Summary Of ZTE's Liquidity Risk On Both In Internal And External Factors**

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .994[a] | .989 | .985 | .0152035 | 2.138 |

a. Predictors: (Constant), DEBT TO INCOME

b. Dependent Variable: QUICK RATIO

Based on table 9, the relationships between debt to income ratio and quick ratio of ZTE have high degree of correlation due to the high R value show 0.994. The model summary of dependents and internal factors show that 98.5% of the variance in the dependent variable (liquidity ratio) is explained by debt to income ratio. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the liquidity ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

**Table 10: Anova Of ZTE's Liquidity Risk On Both Internal And External Factors**

| ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | .061 | 1 | .061 | 262.978 | .001[b] |
| | Residual | .001 | 3 | .000 | | |
| | Total | .061 | 4 | | | |

a. Dependent Variable: QUICK RATIO

b. Predictors: (Constant), DEBT TO INCOME

From table 10 shows that debt to income ratio has given huge impact to the quick ratio or liquidity risk of ZTE. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the quick ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

**Table 11: Coefficients Of ZTE's Liquidity Risk On Both Internal And External Factors**

| Coefficients[a] | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Unstandardized Coefficients | | Standardized Coefficients | | | 95.0% Confidence Interval for B | | Collinearity Statistics | |
| Model | | B | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound | Tolerance | VIF |
| 1 | (Constant) | 1.830 | 0.056 | | 32.662 | 0.000 | 1.651 | 2.008 | | |
| | DEBT TO INCOME | -1.823 | 0.112 | -0.994 | -16.217 | 0.001 | -2.181 | -1.465 | 1.000 | 1.000 |

a. Dependent Variable: QUICK RATIO

From coefficients table 11 shows that debt to income has greatest significant effect to the liquidity ratio of ZTE with the P-value is less than 0.05. This means that the when the ZTE's liquidity ratio decrease, the debt of ZTE will increase in the same time. The result is consistent with the pass study done by Hanaffie Bin Md Yusoff (2017), stated that the liquidity ratio has a significant effect in the course of operation in which high ratio level will enable the company to avoid immediate payment and non-payment of debt or dependence on debt. Which means high liquidity ratio will reduce the debt borrowed thus affect to reduce the debt to income ratio.

# 5.0 Discussion And Conclusion

To determine the internal and external factors that will affect the liquidity risk of ZTE corporate is the main purposes of this study. In order to achieve the purpose, internal factors (ROA, debt to income ratio, index, operating margin, operational ratio and average collection-period) and also the external factors (inflation, STDV and exchange rate) were used and calculated using SPSS in this study. Hence, the finding have been discussed and included in this chapter.

## 5.1 Limitations

This study is limited only to smartphone industry in China and the data of financial statement of ZTE that collected from 2014 to 2018.

## 5.2 Conclusion

In the conclusion, ZTE has a not very good liquidity performance in these 5 years. The internal factor that affects ZTE's liquidity is debt to income ratio while for the external factors that affect ZTE's liquidity is inflation, exchange rate and STDV. The lower the debt to income ratio, the greater performance of this liquidity corporation as the external factors and internal factors will decide the liquidity risk. ZTE should control its debt as the internal factor (debt to income ratio) has more effect on the corporation. Thus, ZTE should be taken care of its corporation's debt. If the corporation fail to deal with this issue, the ability of ZTE to pay back its company debt using its total income become weaker and threaten the survival of the corporation.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