

**Determinants of Account Receivable:  
Evidence from Non-Financial Firms of Pakistan**

**By**

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## Table of content

Abstract.....	6
<b>Chapter no.1</b>	
1 Introduction .....	7
1.1 Back ground of study.....	7
1.2 Definition of trade credit.....	12
1.3 Terms of trade credit.....	14
1.4 Costs & benefits of trade credit.....	15
1.5 Objectives of this study .....	16
1.6 Research Question.....	17
1.7 Significance of study.....	17
1.8 Research Gap.....	17
<b>Chapter no.2</b>	
2 Literature review .....	18
2.1 Over view.....	18
2.2 The role of trade credit.....	22
2.3 The use of trade credit .....	23
2.4 Motivation of trade credit .....	24
2.4.1 Financial advantage theory.....	26
2.4.2 Price discrimination theory.....	27
2.4.3 Transaction costs theory .....	28
2.5 Factors of trade credit .....	29

2.5.1 Macroeconomic factors .....	30
2.5.2 Firm-specific factors.....	31
2.6 Determinants of accounts receivable.....	34
2.6.1 Creditworthiness and availability of external funds.....	34
2.6.2 Internal resources.....	37
2.6.3 Sales Growth.....	37
2.6.4 Product Quality.....	39
2.6.5 Gross Profit.....	40
2.6.6 Market cost of capital.....	41
2.6.7 GDP.....	41
2.7 Relationship among determinants and account receivable.....	42
2.7.1 Relationship with organization’s creditworthiness.....	44
2.7.2 The relation with organization’s inner cash production.....	47
2.7.3 The relationship with organization’s financial debt and costs.....	49
2.7.4 The relation with organization’s sales growth.....	50
2.7.5 The relation with Product quality.....	52
2.7.6 The association of Profit margin.....	54
2.7.7 The relationship with GDP.....	55
2.7.8 The association with Market interest rate.....	56
2.8 Hypothesis.....	58
<b>Chapter no.3</b>	
3. Methodology.....	59

3.1 overview.....	59
3.2 Data Collection.....	59
3.3 Data Analysis.....	61
3.4 Variable Measurement.....	62

**Chapter no.4**

4. Analysis and Findings.....	64
4.1 Overview.....	64
4.2 Interpretation of the results.....	64
Descriptive Statistics .....	64
Correlation Matrix.....	66
Fixed Effect Model.....	77

**Chapter no.5**

5.1 Over view.....	72
5.2 Discussion of Results.....	72
5.3 Conclusion.....	75
5.4 Recommendation.....	77
5.5 Limitations.....	78
References.....	80

## **Abstract**

This research is about to look into the determinants of account receivables identifying with the firm-explicit and macroeconomics qualities dependent on the listed firm in the Pakistan. There are 282 non-financial firms inspected with 9 years perception from 2008-2016.

Account receivable is the division between conveyance of merchandise and services and their installments to providers. In view of its particular nature of not having a place with bank divisions, exchange credit isn't constrained by specialists; its estimation is characterized as account receivable and account payable however our point of examination is account receivables in this thesis. The intentions of utilizing trade credit are characterized into three classifications: financial advantage theory, price discrimination theory, and transaction cost theory.

In our thesis results, we see that more established firms give less credit and smaller give more credit. Organizations with availability to less expensive outer financing, give less credit to clients. While identifying with record of sale, firms with high development give less financing to client. In this way, access to bank credit may expand the company's capacity to manage the cost of credit. Henceforth, firms may assume a monetary mediator job among banks and clients, as proposed by the financing theory. Companies whose sales have made less progress are providing more funding to their customers. This could be interpreted as meaning that businesses use commercial credit to try to boost sales. The positive but insignificant relationship between cash flow or internal financing and account receivables. Firm with low level of sales turnover offer more account receivable. The profit margin can be an indicator of profitability, indicates that profitable companies do not want to take risk for customers with limited financial resources.

At last, with respect to the effect of monetary development on the degree of business credit truly, the GDP and interest variables shows when financial development is high, organizations money more deals for their clients but effect of this variable isn't significant.

Our findings are interesting and important for non-financial companies listed in Pakistan Securities. Our results summarize the determinants of account receivable and their relationship with account receivable. It is useful for companies to think about our results when developing a commercial credit policy. In the end, some restrictions were mentioned about this thesis.

# Chapter No.1

## 1. Introduction

### 1.1 Background of the Study

Account receivables evaluates the unpaid cases a firm towards its clients in given period, generally comes through working credit augmentation and is basically due inside for the most part short time period (up to one year). The volume of accounts receivables shows organization supply of trade credit while account payable exhibits its interest of trade credit. The research is about the account receivables and its determinants are rule focus in this thesis. Account receivables are one of the most noteworthy bit of working capital. Receivables are frequently address tremendous enthusiasm for asset and incorporate vital volume of transaction and decision. Regardless, there are different types of standards towards the receivables in firms' all over the world. Manufacturing sector which is considered as one of the best trade sector in Pakistan. Pakistan has additionally contained bulk of rough material just for the identification of the non-financial firms. Private segments is contributing a ton in the creation of manufacturing industry. The non-financial related firms of Pakistan is likewise creating the more valuable reserves by sending towards the relating items to the neighbouring countries like India, United Arab Emirates, Afghanistan, Russia and Iraq. The interest of the non-financial related firms products has been expanding energetically both at residential and worldwide markets during the most resent couple of decades. Pakistan has likewise effectively caught the African nations.

Account receivable is the cash to be under commitment to an organization because of having sold its goods and services to clients using loans. Organization typically sale its products using a credit as opposed to requiring fast money instalment. These sorts of credit sales produces account receivables.

Account receivables show the huge part of most firms' assets. Interest in money due, especially for manufacturing organizations; speak to a huge piece of short term financial management. Firms generally sells goods and services on money just as using a loan premise. Firms prefer to deal on money, however focused weights demands most firms to give credits. The extension of trade credits prompts the developments of account receivables. Receivables shows credit sales that isn't gathered. As the client pays these receivables, the firm gets the

related with the original sales. In the event that the client does not pay the account, an awful obligation misfortune is caused.

Account receivables administration is viewed as significant in the field of finance for the vast majority of the organizations. This investigation illuminates the administration of current assets in connection to the trade credit. This type of trading has been developing wellspring of economy and the industries Pakistan. So, in this study, the major objective is about the highlight the account receivables towards the process of manufacturing sector. Account receivables, as different part of working capital, has gotten little consideration in the writing. Particularly, for the nation like Pakistan there is no different investigation on account receivables, fairly the greater part of the investigations are identified with through proper management. Account receivable is the shared agreement between two parties to deferral installment enabling the buyer to buy goods on accounts. The purchaser views this as the financial risk on the obligation side of the balance sheet (Mian& Smith, 1992). From the provider perspective, the understanding is viewed as an interest in current assets as far as account receivables towards balancing the budget. Account receivable gives more preferred positions to provider. If the purchaser doesn't make installment inside the rebate time frame. (Martinez-Sola, Gracia-Teruel, & Martinez-Solan, 2014, Deloof, 2003).

The basic consideration towards the study is about the supply side, looking at the impact of the trade credit term of account receivables as present interest of manufacturing sector of Pakistan. Pakistan is creating nation confronting the various political and financial issues particularly psychological oppression and insecurity in harmony which are viewed as fundamental obstacles in its advancement. In any case, with in the sight of these issues, there are a few businesses in Pakistan which nearly stay stable. Moreover, there are loads of activities which are began in the nation as developments of streets, highways (China Pakistan economic corridor), ports, dams, lodging social orders and so on. These components additionally expanded the interest for the supply of industrial related goods. Presently, there is supply and demand gap in this industry which is an open door for the development of the sector. That is motivation behind why in this thesis non-financial sector is the main population. The present investigation is in this way significant on the grounds that it gives experimental proof with respect to the connection between interest in account receivables and firm related factors and economy related factors. The investigation gives significant proposal to the firms administrations by expanding their interest in trade credit and improve their sales



development and productivity, and furthermore valuable to proprietors for basic leadership and obligation holders and other policy makers as well.

The investigation has significant functional implications for managerial finance. Since, there is a target record of sales level, company administration ought to think about proficient and viable observing of account receivables level in their working capital administration choices. Along these lines, firms can stay away from over putting in account receivables in that may prompt higher opportunity cost and bad debts; or under-contributing that prompts lower sales and market share. Apart from such type of cash flow management and their relation towards banks can be considered as the as a significant issue about the critical effect on trade credit policy (Abuhommous, An, & Mashoka .T, 2017).

Offering trade credits to clients may build overall market share, acquire client dedication, or potentially diminish cost; consequently a company financial performance ought to be influenced. However, the body of information has minimal experimental proof on the connection between trade credits offers and firms productivity. Along these lines, this investigation except to fill this gap where it hypothesize that a company interest in account receivables ought to be reflected in the company performance. Moreover, the connection towards the trade credit offered and the firms' sometimes creates issues as well for the organizations. The yield from putting resources into trade credit might be not quite the same as one firm to another. Along these lines we expect that, organization's attributes can influence the arrival from allowing the trade credit. Hence, we divide firms as indicated by explicit paradigm, we utilize the motivation for trade credit as a foundation to separate firms. The measure of account receivables speak to a huge segments of firm's investment. Therefore the point of this is to examine the connection between the interests in account receivables and firm's benefit. What's more, we research the effect of trade credits intention on the connection between account receivable and profitability. It has highlighted that organization can build their gainfulness by putting resources into account receivables; this impact is more noteworthy in firms with an exceptionally unstable interest. Besides, it has been observed that organization can get progress as compared others in a better way. (Ala'aAdden A. Abuhommous 2017).

Account receivable is the sort of creditor's right for an organization while selling items. As a fairly current asset in a company, accounts receivable is related to the turnover of the cash

flow, and thus affects the firm's growth and development (Yanping Shi, Chengke Zhu, Ting Yang, 2016).

Trade credit management is especially significant on small-medium size organizations, the vast majority of whose are as current assets. Proficient trade credit management could improve firm's gainfulness altogether. Because of such type of effect of trade credit strategy on benefit is profoundly significant, no examination have been done to analyze this relationship (Martinez-Sola, C., Garcia-Teruel, P. J, & Martinez-Solano, P, 2014).

According to Khan, M. A (2012), the determinants of Pakistani has highlighted the companies has discussed about the account receivables and account payable as far as the textile sector is concerned. It is clear from the discoveries that account receivables are strongly influenced by the company's motivating force to utilize the trade credit as the method for the price discrimination and internal financing. Moreover, the impact of the firm towards the level of accounts receivable can prove to be boast able for the company to move on. Though, the effective and important determinants of trade credit are considered as the size of the firm about purchases and loan fee.

Organizations can't survive without capital; they need money to place assets into plants, inventories, apparatus and different resources. Brealey, 2008 explains the source of capital which are getting used towards long term debt and short term debt. Likewise, account receivables has slot with short term financing.

Trade credits speak to a significant part of the firm's investment, where they convey product or render administrations to clients before getting their money installment. Given the significance of account receivables as an investment, a few hypothetical and experimental examinations have concentrated on clarifying the rationale approach towards the power of trade credit. At first it makes possible the process of sales because of the financial inspiration, with firms going about as financing middle people offering trade credits towards the finance department for the clients (Emery 1984, & Smith 1987). Also, it can prove to be a promoting apparatus for the purpose of manufacture and build up client base. Thirdly, account receivables is an elective device to value decreases and avoiding value limitations without inciting competitors to a value war. It is likewise an adaptable way to deal with upgrade corporate sector. (Ng1999; Garcia-Teruel, & Martinez-Solano 2010). Fourthly, it makes strong relation with where clients think that it's hard to move their sales and purchases somewhere else. (Petersen & Rajan 1994, 1995; Wilner 2000). Fifthly, account receivables

lessens the exchange cost merchandise traded for cash, rather than paying the provider for buys each time the purchaser gets the items, they aggregate every one of the installment until the agreed date between them. Subsequently, the purchaser lessens the expense of prudent money property that are expected to cover any unexpected buys (Ferris 1981). Interest in account receivables are seen by financial specialists as an indication of expanding sales and development in benefit. In this way, as a company size expands it puts more in debt claims to flag monetary wellbeing (Garcia-Teruel, & Martinez-Solano, 2010). Moreover, it assumes a significant job in diminishing data asymmetry between firms; merchants move products to purchasers without the prompt interest of money installment which gives sufficient opportunity to review the nature of merchandise got, along these lines improving the ethical connection between the firms and its customer. Moreover, it has an important impact towards the information asymmetry between establishments. The suppliers go towards their buyers without any type of demoing approach of cash. It is considered as the procedure to know about the quality of products received. Furthermore, the role of progressive firms showing their performance through higher sales and market share, accounts receivable also could be used to reduce the cost of bank loans. As the consequence, the positive and negative influence of trade credit generates the way for these types of firms toward making important trade-offs in between costs and benefits of investment in accounts receivables.

The supposition that organization promptly change toward their objective account receivables proportion may not be practical. Along these lines, there are purpose behind the gap among the real and target accounts receivables level. Subsequently, the disequilibrium in other assets report things may influence the change procedure in debt claims. Nonetheless, there are couple concentrates that analyze the dynamic model of account receivables, where they expect that organization bear few expenses so as to change their present account receivables level. Subsequently, they alter their account receivables level toward the ideal the ideal objective level (Garcia-Teruel, & Martinez-Solano, 2010).

The demonstration of compaction concerning benefits or a prizes increments with the progression of time and explanation for this globalization and financial incorporations. Along these lines, in this circumstances credit sales is significant apparatus to draw in client, it is significant for bot new market and for existing ones. It will be helpful for the firms since increment the deal through which it increment benefits. Yet, on the opposite side it will expand the few issues like the bad debts and account receivables management cost. Mian and

Smith (1992) found that manufacturing firms in USA had 21% account receivable to add up to resources in 1986. In Belgium non-financial firms, the proportion was 16% in 1995 (Deloof, & Jegers, 1999). There is not many numbers in exact proof utilizing Pakistan's information. In Pakistan non-financial related firm sector goes ahead second no in commitment to GDP. In this study, I am going to test the determinants of account receivables utilizing information of non-financial related firms working in Pakistan stock exchange.

The following part will highlight the detail of account receivable.

## **1.2 Definition of trade credit**

According to Brennan (1988) the process of money related financial help which they get from different types of firms is considered as the best unit of installment for the goods and services as a process of import and export. It is used as the source for the finance department. It is also known as trade credit. A large portion of organizations attempts to late their installment to providers to help credits imperatives in a brief period. In this money due is considered as transient outside financing for firms, particularly the lower size towards the ratio of the firms (Bovery, & Gobert, 2007). Guariglia, & Mateut (2006) highlight the impact of credit which is about to hold money set up. It has said that the firm get restriction towards money credit as they utilize trade credit.

In context of receivables unequivocal nature of not having a managing bank, trade credit has not been measured by experts (Nieuwkerk, 1979); and it is tended to various side of accounting reports as accounts receivables (having a spot with current assets) and account payable (having a spot with current liabilities). Hence, the degree of trade credit in this thesis is are account receivables. It is imparted that utilization of trade credit is effected by the movement of nation's genuine and budgetary structure. According to Demirguc-Kunt and Maksimovic (2001) the defective monetary structure, firm can continue on through cash related access containment enough; subsequently, the wellspring of focal point required is moved to providers who are non-financial establishments. In this circumstance, account receivables about as an option in contrast to credits from money related organizations. They ion like in way fight that in a well-made certified framework nation, there is powerfully real insistence for trade credit system towards borrowers. As it highlights the relationship between the trade credit and the degree of the effectiveness of lawful capacity of nation.

Suppliers may offer trade credit such type of companies which are facing complications to get access to capital, owing to their comparative benefit in fetching information about their debtors, greater capability of liquidating the assets subject to trade credit, as well as higher hidden share in the purchaser's survival over a long term. Furthermore, trade credit permit bring down transaction costs through desecrating the supply cycle from the payment schedule. In their model of trade receivables, Petersen and Rajan (1997) highlight the importance of more trade credit. The positive relationship between the company age and trade credit offered is a non-linear one. The credit supply grows together with the company age initially, to show a slow downturn thereafter. Larger firms provide more trade credit. The trade credit supply is positively related to the maximum credit line available. The demand for trade credit shows a weak positive relation to the company age and size. Delannay and Weill (2004) prove that firms lead to minimize their recourse to trade credit financing as their profitability gets larger in most Central and Eastern Europe countries, except Hungary and Lithuania. Yet, larger and more profitable firms are more likely to go for such system, while those facing the risk of bankruptcy. (Bougheas, Mateut and Mizen 2009) Although the latter group is more considered to use trade credit (Coupey-Soubeyran i Hericourt, 2011). On the basis of negative value of the variable measuring the length of the banking relationship, Petersen and Rajan (1997) conclude that trade credit is getting more involve in getting order towards capital structure.

Short-range financing is often describes as the other part of trade credit, where the payment of trade accountabilities can be postpone, especially in times of low liquidity. It may be a strong bargaining chip in trade negotiations and become a strong competitive advantage or even an export-supporting tool. On the other way, trade credits translate into elevated trade liabilities resulting from extended payment terms. Firms enlarge their demand for trade credit when these restrictions was implied by banks (Danielson and Scott, 2004). Establishments facing financial complexities, less financially stable, whose most recent loan request was denied are more likely to use trade credit (Wilner, 2000). That's why, in order to know about the basic structure credit in business operations, it is very necessary to investigate whether trade credit may solve the problem of credit rationing by banks, that is, whether it substitutes bank loans?

It shows that about its importance that trade credit lead the way to development of a network of financial dependency. Like a mechanism, while stimulating the demand and the economic growth, leads to the risk of bankruptcy on the other way (Sędzicki, 2007). A debtor's insolvency brings financial problems on all their creditors and undermines the stability of

other participants of the credit chain. Antonowicz (2011) says that bankruptcies are caused namely by payment backlogs between business partners. Trade credit may mitigate the information asymmetry between banks and establishments and credit rationing by banks (Biais and Gollier, 1997; Roncagli and Bathala, 2007; Couppey-Soubeyran and Hericourt, 2011), as well as negative outcomes of a restrictive monetary policy (Schwartz, 1974; Melzer, 1996; Atanasova and Wilson, 2003). In Europe, trade credit liabilities account for 20% to 25% of total liabilities on the average, but in some companies this can be even 80% (Bougheas, Mateut and Mizen, 2009). Trade credit is also very popular in Use, China, India, and Northern Africa and in the Near East. It has been clearly mentioned by (Petersen and Rajan, 1997; Couppey-Soubeyran and Hericourt, 2011) in their studies.

### **1.3 Terms of trade credit**

According to Ng et al. (1999) and Smith (1987) these two aspects of terms of trade credit which are considered as the basic net term, which just help the firm to make its position clear till due dates as far as the item are concerned. For example, there are net 30 implies full portion as to pay in normal these days after the receipt date. So the buyer has to adopt the system. The following term is about highlight the term into three central parts. These parts are regarded as like the mark down rate on receipt, the refund time allotment and the convincing financing cost. It is normally considered as term of 2/10 net 30 (Smith, 1987).

Trade credit, also known as merchant credit or open account, is defined as the delivery of products and services under transactions between industries, with deferred terms of remittance. Trade credit is a origin of short-term financing for our recipient's business, i.e. it means our accounts receivable on the one hand, while being our own credit from suppliers, i.e. our account payable on the other hand. Mian and Smith (1992, 1994) define trade credit as a deferral of payment for products delivered. Lee and Stowe (1993) conclude that trade credit is very effective for finance and economy of the country, in which a firm sells a products or service and it actually goes for the much credit for the customer. Hence, it makes seller finances the purchase, whereby taking the credit risk.

## 1.4 Costs & benefits of trade credit

According to Petersen and Rajan (1994, 1997) the process of the trade credit is considered as very important as it has close term with banking sector. In their investigation, the typical cost of bank move up to 11.3% while for trade credit, in order to make sure for the customers to make sure their portion on plan 2/10 net 30 is surrendered to customers intermittently. As it discussed earlier that the this term shows saving of 2% procurement for customer recognizing portion in following days by keeping in mind the full portion which is required for the remaining days. Additionally, assessed by yearly rate, 2% refund thinks about 44.6% yearly rate,

Despite of the way that the surprising costs of trade credit, there are up till different organizations picking it as their short term financing. Schwartz (1974) highlights that the process of the trade among supply and customers has less strategy for diminishing the simple approach to deal with money dealings. Grounds for trade the credit extension may include: reduction of the informational asymmetry between the financial and non-financial market, highlighting the operational effectiveness, minimizing the inefficiency on the financial market, capturing investment opportunities or strengthening the competitive position. Cheng and Pike (2003) state that these types of organizations which are working competitive markets are drive to offer trade credit. The decision to expand trade credit signalizes schemes to support and develop relationships with buyers, thereby build-up the firm's public perception.

Petersen and Rajan (1994, 1997) in like manners endeavors to explain the reason of why firms expect trade credits affirmation rather than choices with more affordable alternative expense. They highlight the process of trade credit which is used very effectively just to make sure the cash related assistance from bank credit. Trade credit is progressively yielding during the tight money related period, as the risk for suppliers to give trade credit is less thought about than bank credit issuance. Furthermore, there are numerous advantages of enthusiasm for suppliers of trade credits: first, they can survey cash related execution of customers and their financial soundness adequately from business relationship, similarly as assessing the default of the customers expediently and beneficially (Ono, 2001). They use their abilities for the customers by decreasing stock of products and reposing items if there ought to be an event of default. Second, the division of merchandise conveyance and installment can diminish the costs of trade similarly as offering confirmation to the nature of your product or

items. Third, a value separation hypothesis is highlighted by Petersen and Rajan (1994, 1997). They talk about the suppliers ordinarily through which customers who had share their finance for early portion and late portion. These types of these hypotheses clarify by the numerous specialists in their examination (Garcia-Teruel, & Martinez-Solano, 2010a; Atanasova, 2007). The trade credit channel weakens the bank lending channel, hence credit relocation between firms – from those having access to bank loans towards those with a limited access to bank financing, via trade credit (a redistribution effect). The monetary policy transmission occurs via the trade credit channel, which weakens the traditional bank lending channel (Guariglia and Mateut 2006). The redistribution effect plays an important role under a restrictive monetary policy, where SMEs’ access to bank lending is constrained (Ogawa, Sterken and Tokutsu, 2011).

The net impact of the monetary policy tightening on corporate financing depends on the extent, to which trade credit substitutes loans from banking sector. Small firms are more likely to substitute bank loans with trade credit during monetary contractions. Firms with a high share of intangible assets that cannot be used as an additional collateral, seem to be both liquidity- and trade credit constrained during monetary tightening.

Talking about the outcomes of trade credit, according to Wilson and Summers (2002), the trade credit is very effective. New members’ grants trade credits for various potential customers whose approach toward bank for short term finance isn’t simple. From the perspective of buyer, Schwartz (1974) talks about the trade credit which actually brings the best position for portion of unconstrained purchase. Meanwhile, buyers can measure future obtaining as shows in term of professional trade credit and improve money management by occasional credit installment.

## **1.5 Objectives of this study**

The purpose of this research is

- To find the relationships between determinants and Account Receivables in Pakistan by analyzing the coefficients of determinants with Account Receivables, specifically focusing on Non-Financial firms listed companies in PSX. Understanding the relationship between Account receivable and firms and economy characteristics can give a firm’s financial summary on one hand; on the other hand, firms can utilize trade credit more efficiently..



## **1.6 The research question of this Thesis is**

The size, age, short term financing finance cost, sales growth, profitability, cash flows ,product quality, GDP and market interest rate are considered as the main dependent variable of this study. So the problem statement of this study is as follows;

*What are the determinants of Account receivable for non- financial firms in Pakistan?*

## **1.7 Significance of Study**

This study aims to make a number of contributions to the understanding of the trade credit policy in Pakistan. First, this study makes a contribution by reporting the results of target accounts receivable level. Second, the paper examines the factors that affect the target accounts receivable level using data in emerging market. Third, the regression models were estimated using panel data methodology. This method enables us to control for firm-specific effect and time-specific effect. This study has practical significance for managerial finance. Thus, firms can avoid over-investing in accounts receivable that may lead to higher opportunity cost and bad debt; or under-investing that leads to lower sales and market share. Furthermore, firms should consider cash flow management and their relationship with banks as an important issue because it has significant impact on trade credit policy.

## **1.8 Research Gap**

Attributable to the imperative job of trade credit on the organization, and its advantages over other financing options, factor that influenced trade credit to be explored by specialists. Emery (1984) and Petersen and Rajan (1997) likewise recommended that more research is required to explore the connection among the determinants and account receivables with section of time. The efficient circumstances of each nation fluctuate to one another a few nations have bank arranged market and few nations have capital arranged market situated so the aftereffect of determinant of account receivables is diverse for various economy and give us various outcomes. Non-Financial firms sector is second biggest segment of Pakistan. Our unit of investigation is non-financial firms which are listed in PSX. Khan M.A, 2012 had research in material segment yet we are taking entire non-financial firms with some increasingly factor, for example STF, FCOST, Product quality and Profitability and doing top to bottom examination of determinants of account receivables through this we improve sales and manage receivables.

## Chapter No.2

### 2. Literatures Review

#### 2.1 Over view

This study tells about the significance of trade credit. It highlights the financial delegate job, simple access and data towards suppliers and customers as far as the bank credit is concerned. Secondly it highlights the usage of the impacting trade credit. The relation between the suppliers and customers, highlights the financial approach and saving in monitoring costs as far as the impacting trade credit utilization towards it approach is concerned. Third, the most important discussion is about the usage and the purpose of utilizing trade credit. These all three motivational highlights the importance of the financial advantage theory. It also discusses the relation towards the determinants and trade credit about the involvement of the macroeconomic and firm-explicit components. Accounts receivable management is regarded as the important aspect of the corporate finance because of its effecting nature towards the profit and value of any firm. It also highlights the age of the firm (AGE),size of the firm (SIZE), short term financing(STF),finance cost(Fcost),internal cash flow, product quality (TURN), firm's profitability, sales growth, Gross Domestic product(GDP) and market interest rate(INT).

According to Abuhommous, An., and Mashoka, T (2017) the aspect of trade credit arrangement of firms during 2000–2014. The study highlights the s receivable choices towards the model of partial modification. The conclusions of policies for instant assessment of consequences suggest that administrations have independent accounts receivable scale and drive towards this impartial quickly. Furthermore, we can trace that small type of funding, inner currency stream, positive development of sales, manufactured goods excellence, and effectiveness are in performance of an important role in policy of trade credit. The strategies shows the results about the solid purpose for the organizations for having a receivable accounts receivable level. These all are considers as very important part for the trade credit strategy

Ala'a Adden A. Abuhommous 2017 say that the process of investment in account receivable is considered as very important figure. Trade credit makes its position very clear for the process of installation of the purchase. Consequently, this examination aspects at the title role

of asset in following accounts receivable on companies' effectiveness, applying an example of openly registered Jordanian organizations till duration of 1999 to 2015. Similarly, we propose to investigate that the effectiveness of savings is subjected by the relationship's qualities. If any firm put an enormous efforts towards the accounts receivable, it would help the company to get profit because of the investment. In this way, firms plan to exploit this investment and increment their profitability.

Chengke Zhu,& Ting Yang,(2016) study the determinants of accounts receivables in China's equipment producing industry. The outcomes demonstrate that the accounts receivable is firmly influenced by financial leasing and short term financing capacity. Moreover, the creditworthiness of the firm, internal financing and goods quality additionally influence the degree of accounts receivable.

Martínez-Sola, C (2014) highlight the importance of the steps of towards the trade credit arrangement by suppliers. It's not about observational proof over the impact of allowing trade credit towards the profit of the firm. Trade credit affects the degree of investment through many resources. In this way, it affects the profit system of any firm. These examinations equally illuminate the differences in the effectiveness of trade credit by means of per economic, effective, and profitable purposes. The detections suggest that organization can expand companies' effectiveness by increasing their asset in receivables, and its effect is higher, additional liquid companies, organizations with unpredictable request, and for businesses having maximum market portion.

According to Khan, M. A (2012), he highlights the major variables towards the Pakistani listed organizations having accounts receivable and accounts payable as far as textile area is concerned. It is very much obvious that results play very important role towards the finance and trade credit system. Furthermore, the size of the firm additionally influences the degree of accounts receivable a firm keeps up. It is clear from the results that accounts receivable are emphatically influenced by the association's motivator to utilize trade credit as a methods for price discrimination and level of internal financing. Furthermore, the size of the firm additionally influences the degree of accounts receivable a firm keeps up.

Garcia-Teruel, P. J., and Martinez-Solano, P. (2010) offers the inspection towards causes of the specific trade credit that are acceptable and conventional by severe European data of 47,197 SMEs during the time phase 1996 to 2002. Our consequences reveals that a hard

similarity occurs in the specific fundamentals describing trade credit in these countries. From this viewpoint, organizations with supplementary noticeable capability to gain assets by the center markets, and economically, reward additional trade credit to the consumers. Also, the conclusions appear to engage with value perception concept. Moreover we establish that administrations react back by increasing credit they offers frustrating to shockingly decreasing sales. Likewise, the consequences appear to link with amount perception concept. Furthermore we investigate that organizations react by increasing the credit they honor demanding to decreasing sales. Then once more, better organizations, with additional notable expansion beginnings and extra protruding asset in present possessions, acquire supplementary reserves by the dealers. Association have substitute foundations of investment they have a smaller amount probable to alternate to salesperson funding (exchange effect).

According to García-Teruel, P. J, and Martínez-Solano, P. (2010), they both highlights the fiction on the basis of openhanded of trade credit. The more concern is about assessment that, if the financial records receivable varieties for an exemplary of fractional alteration. For doing that, we utilize a common Spanish SMEs data of nearly about 2,922. By means of an energetic board data ideally and retaining the GMM procedure to estimate, so for the control of unnoticed heterogeneity and possible endogeneity problems. These consequences discover that many administrations have a grade of financial records receivable and revenue elections finishing that scale target. Furthermore, we discover that sales expansion (if positive), the extent of the administrations and capability to harvest inner assets and become small period funding and financial expansion are important in decisive trade credit acceptable by companies.

Niskanen and Niskanen (2006) examines trade credit plans of tiny companies employed in a bank focused on environmental situation. We discover that affluence and admittance to investment markets are substantial causes of trade credit overextended by retailers. Superior and additional experienced companies and organizations with inner funding are supplementary antipathetic to use trade credit, although companies with an extraordinary quantity of present possessions to whole resources, for all, administrations that are focus to early payment rearrangements utilizes it maximum. Negative loan selections by monetary mediators upturn and a bank pledge association reduces the probability that a well-founded take assistances of even trade credit drops.

Delannay, A.-F. and L. Weill (2004) examines in different countries the causes of trade credit. Outdated concepts related to trade credit allowance propose that equally the economical and profitable reasons can persuade non-commercial corporations to accept a starring role of commercial importance. Besides these, precise circumstances of funding of corporations in various states may backup to trade credit a significant part in commercial backbone. The examination shows that the factors for receivable and payable accounts on a trial of nearly about 9300 corporations in countries of Eastern Europe. Consequences recommend that together commercial and economical causes clarify the basic credit performance of organisations. Though, we cannot discover comprehensive outlines to utilize the trade credit between all conversions of states.

Niskanen and Niskanen (2000) both revise experimentally that the factors of Finnish registered organizations' receivable and payable accounts. The consequences establish that receivable accounts are able to effect by all the administrations' stimulus to operate trade credit similarly a technique of worth judgment. Intensifications in the concentration ratio scale also rises the quantity of receivable accounts over the amplified request of the trade credit. The maximum and important causes of the gradation of trade credit occupy all assigns to show the source of trade credit, multinational's extent, marketplace attentiveness ratio, the quantity of recent possessions and resources in excess of entire resources, and insufficient inner funding and support.

Deloof, M. also, M. Jegers (1999) investigate the role of trade credit to be used as supporting. Make use of a multinationals data of about 661 large non-economic from Belgium from the duration of 1989 to 1991 time period, we discover about the process of this system towards trade credit a customer incomes is calculated through obligation of reserves and the on the inside the available resources. Essentially Trade credit is also utilized to sponsorship the existing resources. In this sense of capability, every account have an important selection of small term responsibility also for extended term of commercial responsibility, comprising intra group of requirement. We determine the non-proof calculations of trade credit that are occupied is also exaggerated by assembly with the contractor.

Deloof, M. also, M. Jegers (1996) anticipated that a perfect dependent on Long, Malitz, and Ravid (1993) that the important inspiration in arrears of trade credit is basically to empower customers to estimate the wildlife of the corporation's objects paying formerly. In this investigation, we relate a proportional technique exploiting an example of various

manufacturing organizations, so far, in accumulation of an illustration of Belgian comprehensive dispersal organizations. Furthermore, we generate an examination two additional suggestions, in graceful aspect of the awareness about manufacturing and monetary alliances undertake a momentous role in Belgian budget. Although our consequences rather than encourage the four assumptions of Long et al., we determine that an organizations contribution to an associated consumer extends trade credit for explanations that other than assessing article excellence. We discover that as soon as an organizations have a nonexistence of currency, savings of receivable accounts from associated companies is diminished. An accumulation of currency never gives the idea that to impression of trade credit organization.

## **2.2 The role of trade credit:**

An inquiry analyzed in this writing is: the reason trade credit is utilized by firms even on account of presence of financial intermediaries. Jain (2001) has responded to this inquiry by recommending that trade creditor assumes a job as the second layer between financial intermediaries (here for the most part banks) and borrowers. Since the two suppliers and banks need data to assess the creditworthiness of customers and their default risk, and suppliers have simpler and less expensive channels to acquire financial data of customers as compared to banks. Accordingly, in an industry with numerous customers, banks want to loan cash to suppliers rather than customers to spare assessing costs. Forthright and Maksimovic (2004) additionally show this unique second layer job is useful for the two suppliers and purchasers to decrease their requirements for outer account, particularly in inefficient financial market and market where suppliers have more power.

Besides, the examination consequences of Alphonse (2003) affirm a presumption, which expresses that an expansion in bank obligation brings down the degree of trade credit of a firm. As clarified by the creators, firms with credit compelled and get to impediment to bank credit, may utilize trade credit. Schwartz (1974) underlines the impact of monetary control is relieved by trade credit. During monetary restriction period, firms with access to financing resources are happy to offer trade credit to customers; those customers are probably going to utilize trade credit gave in light of the fact that bank premium is higher than trade credit costs.

Rodriguez-Rodriguez (2006) underscores data asymmetry issues among firms and financial institutions. The author contends that suppliers have data points of interest contrasted and banks, in parts of surveying a company's financial exhibition and exchanging items if there should arise an occurrence of non-installment. Along these lines, trade credit is considered as a technique to relieve data asymmetry issues, in light of the fact that the degree of trade credit is a sign of company's creditworthiness for banks. Then again, the quality of goods can be shown by the measure of trade credit to purchasers, which results in data asymmetry decrease among suppliers and purchasers (Burkart and Ellingsen, 2004).

Fisman and Love (2003) accept that organizations relying upon trade credit become quicker than those without access to trade credit. Wilson and Summers (2002) likewise find that trade credit is especially utilized by quickly developing firm however with financial issue firms.

Ng et al. (1999) and Wilson and Summers (2002) state two-section terms of trade credit can show issues of company's financial circumstance ahead of time, and credit terms offered by suppliers can assist purchasers with mitigating financial troubles incidentally. In this manner, those creators contend that despite the fact that trade credit is a transient financing technique, it is considered as a major aspect of long haul system by suppliers to keep up customer relationship.

### **2.3 The use of trade credit:**

Suppliers are considered as a backbone and essential part in trade credit financing as per research of Burkart and Ellingsen (2004). The relationship between suppliers and buyers is moving (backward and forward) on the degree of trade credit shown in the research of Petersen & Rajan (1994). The time needed for the clearance of merchandise both by suppliers and buyers and correlation affects between both of them used to determine the trade credit as well as its a goal of a supplier to give such trade credit rebate from which they get right instalment on expected time highlighted by Nilsen (2002).

Peterson and Rajan (1997) identify that the small firms which don't have any affiliation with banks and other financial institutions have a larger measure for accounts payable in USA. They conclude that trade credit is the last decision to obliged establishment in financing. Wilner (2000) studied give more information about the relationship between buyers and suppliers and suggest when this relationship face financial boundaries the more customers

with suppliers relying upon them and considering more trade credit and bank credit.

Nilsen (2002) investigate that monetary layout is used to identify the utilization of trade credit. Trade credit act as a substitution to bank credit which seem not to be a right conclusion. it is clarified in his research that little establishment resort more trade credit during fiscal obliges, as trade credit is the main substitute for them to raise funds; in addition author tells that big establishment with higher channels of getting financing supports will sustain a strategic gap from trade credit in spite of fact that the conclusion of research are opposite from this prediction. In broad establishment increment during tight money related period is more noteworthy as compare to smaller establishments.

Nilson (2002) study showed that most establishments keep themselves away from trade credit due to its high rate as compared with bank credit. The study showed that most establishments keep themselves away from trade credit due to its high rate as compared with bank credit. The establishment resort trade credit from suppliers in case of financial imperatives and no option financial credit accessible. Bank credit cost is likely to be larger than trade credit cost due to premium of trade credit which keep accordant after some time on account of money related boundaries. As per study establishment will move their financial origins to trade credit.

## **2.4 Motivation of trade credit**

Many theories are clearly describes why suppliers are so avid to give credit to buyers, and why buyers interested to utilize the different types of trade credit. Plain and Maksimovic (2004) demonstrated that inspiration of trade credit focus on two dimensions; the basic feature is identified with genuine venture. It shows the incorporation of transaction expense, way of utilizing trade credit, cost variation and quality ensures: the subsequent feature is about financial capacity of trade credit. The author agrees that suppliers always ready to give trade credit to those buyers who are having sufficient funds so consequently they establish a good relationship. Emery(1984)stated that suppliers must keep reserves in liquidity so as to stretch out trade credit to make benefits especially when condition of financial market is not better .In addition, suppliers must have solid market control in a market which faces small amount of challenges so they sell goods as much as they can ,specifically for the circumstances with larger revenue so they can expand trade credit to their buyers.



Fisman and Love (2003) depicted that the application of trade credit is associated with industry standard. They have outlined the trade credit arrangements into four parts dependent on industry characteristics of the US: the liquidation of industry, guarantee for product, price variation and customized product. Another study of Biais and Gollier (1997), establishments relying on such suppliers which have enough creditworthiness and they are trusted by them for issuance of trade credit. In this way, outsider investor agrees to give accounts to buyers.

Niskanen and Niskanen, 2006; Couppey Soubeyran and Hericourt (2011) demonstrated that in the time span of monetary restrictions the average probability of a limited access to bank lending gets higher. Establishments facing such problems increase the use of trade credit (Atanasova 2007). Establishments having approach to capital market and trade credit may fill the financing space in the time of credit crunch. Especially in the SME sector, thereby mitigating the impact of the monetary policy tightening on business operations.

Conclusion of Cheng and Pike (2003), there are many obstacles in motivation of utilizing trade credit between establishments. In the middle of, most establishments consider trade credit as a probability to upgrade its corporate picture and fabricate solid correlation with buyers. Shiraishi and Yano (2010), Ng et al. (1999) and Petersen and Rajan (1997) suggest that trade credit is considered as a device to achieve higher sales inquires. Nilsen (2002) describes that few buyers not prefer to depend upon bank but depend on trade credit even when they cannot stretch bank credit with reasonable budget paralleling they want same increase in liabilities and assets in order to maintain balance sheet. Ng et al (1999) demonstrated that in trade contract suppliers fully utilize trade credit to build up buyer trust and buyer also get some benefits.

Researches also concluded some interesting facts about utilizing trade credit. As per Garcia Teruel and Martinez Solano (2007) establishments have not many options for outer financing as they worked in a bank ruled financial framework in this way they depend more on trade credit. Schwartz (1974) indicates those suppliers who is having access to financial market can give more trade credit and make benefits on customers who is having limited access to outer financing; also Deloof and Jegers (1996) study focused on item quality theory which states that trade credit allow purchasers to assess item quality before paying, and theory is affirmed by their exploration outcomes. Cunat (2007) describes that it's a pricey that change suppliers and buyers in certain industry areas. In thus way, suppliers might want to extend trade credit to buyers who face liquidity issues and customer grade to pay their trade liabilities; establishments with access to capital market would help those without capital market access

by expanding trade credit(Kohler et al 2000).To enlighten past hypotheses, Petersen and Rajan (1997)thought processes are grouped into three classifications financial advantage theory, price discrimination theory (business intentions) and transaction costs theory(operational thought process).

#### **2.4.1Financial advantage theory**

Petersen and Rajan (1997) and Huyghebaet (2006) signifies that establishment with large financial limitations utilize more trade credit which shows that organizations with external financing limitation want to fall back on trade credit. A few investigations (Petersen and Rajan,1997;Kohler et al.2000;Garcia Teruel and Martinez Salano 2010 ;Emery,1984;Demirguc Kunt and Maksimovic.2001) show that suppliers have a less benefits on furnishing trade credit contrasted and other financing firms.

These benefits are classified into three points. Firstly, suppliers without much disperse assess buyers financial demonstration and its creditworthiness through their business (Petersen and Rajan ,1997;Garcia Teruel and Martinez Solano ,2010).In thus way they face a less risk for issuing trade credit contrasted and bank credit. Secondly, suppliers have capacity to compensate buyers to eliminate its future stock of goods and services, specifically in market of less confrontation, so buyers will depend on few suppliers. Financial institutions might be limited by law when financial loaning is moving downward (Emery,1984;Demirguc Kunt and Maksimovic ,2001).This enables the suppliers to issue more trade credit pat the sum that banks are happy to offer (Cunat ,2007).Third, suppliers can repossess merchandise effectively on the off chance that buyers cannot understand instalment and those products can be exchanged to different buyers which give another advantage to suppliers in particular businesses .Summarized by Garcia Teruel and Martinez Solano (2010 a).irrespective to give trade credit ,will depend on the creditworthiness of buyers and their ability to get various less cost outside financing.It is the reality that organizations having access to capital markets will expand more trade credit to the individuals who don't.

There are some negative aspects to the financial advantage of suppliers. According to Burkat and Ellingseb (2004), there are two basic issue of enlighten the benefits of suppliers. The primary issue as evident that banks having a large practical experience in evaluating the creditworthiness of borrowers contrasted and suppliers, and why bank can't acquire much data about financial circumstance of borrowers. The weakness is that while having much financial data about borrowers, why they don't loan money legitimately to them.

Secondly, Frank and Maksimoviv (2004) traders can repossess and exchange their goods if the merchandiser are not ready to complete merchandise, it is not permitted to do prefer as such. This shows that security advantage of suppliers is minimized. Fisman and Love (2003) demonstrated that qualities of information mediums identified the way towards exchanging goods for example, deterioration and firm particularity. Enterprises can hold enormous quantity of trade credit without expanding raw materials.

Third, Nilsen (2002) describes that trade credit is a poor selection for bank credit. The main reason is that bank credit is not limited while trade credit is associated with the contributions of borrowers. Emery (1984) states that trade credit is allowed to borrowers who have standard contracts with them; trade credit is accepted within 30 days for full instalment, which is shorter than bank advances; if borrowers are unable to pay trade credit instalment as per schedule or pay back late so they subjected to punishment from suppliers and also have negative impact on relationship between borrowers and bank.

#### **2.4.2 Price discrimination theory**

Ng et al.(1999)suggested with evidence that supplier in term of long relation with borrower can stretch trade credit time or offer unearned rebate rate its due to price discrimination theory .Petersen and Rajan (1997) exploration result reliable with this theory. Brennan et al (1988) states that organizations offer more trade credit having solid market power. Such organizations have motivating forced to work with high revenue to achieve high sales without decreasing price to buyers. In addition, they also give correlated credit term to all buyers. Brennan et al. (1988) states that purchasers have access to less expensive financing source instalment before markdown date to get rebate investment funds. The buyers hesitate to pay on due date are those who is having no access to various mediums so they keep themselves away from costly interest expense.

Wilson and Summers (2002) evident that credit terms gave the engrossing price of items. Brennan et al.(1988)discuss the widen instalment time span and issue rebate for easy and fast instalment which is a techniques for lessening price for buyers. Fishman and Love (2003) prove that trade credit must be utilized as difference in price in the accompanying conditions: firstly the adaptability of requesting from credit buyers is lower than money buyers. Low flexibility lead a stable relationship between buyers and supplier which show low flexibility; secondly, data asymmetry present in the credit showcase. Supplier extend trade credit to build sales in case of data information deficiency of customers about item ,third ,in a similar

industry the trade credit is utilized to compete with different rivals. Petersen and Rajan (1997) described that organizations give more trade credit as they have higher net revenue as they all depend altogether on trade credit to achieve higher fixed sales. In short, organizations with larger net revenue desire to issue more trade credit.

Another aspect of discussion that trade credit buyer can analysed product quality in the way of allowing customers to have time to evaluate as per Garcia Teruel and Martinez Salano,2010a;Smith ,1987.If the buyers require more time to made a decision about the quality of goods so supplier maximizes the payment time of their buyers. In case for new entrants towards any industry, the establishment with good product quality offer longer trade credit period to buyers in order to satisfy with quality.

### **2.4.3 Transaction costs Theory**

Emery(1984) and Frankand Maksimovic (2004) describe the transaction prices and the fundamental transaction cost speculations .As per research oh Kohler et al.(2000) the concept of trade credit is signifies the importance of installation process which help the customers and suppliers to cut the ratio of agency expenses in every delivery of instalment.

Schwartz (1974) added that in case of incidence of client cash shortage and sudden busy there is still a lot of possible chances to get the appropriate measure for instalment process .So, they can overcame the gap by improving coins management .Bougheas et al (2009) illustrated that stock may not be sold for money during the proceeding time period and stock expenses spare as a result of loosing trade credit for suppliers by sales during request time span. It also forecasted that trade credit also put resources in the form of stock especially for establishment with high sale procedures.

Fisman and Love (2003) classifies four types of theories and factors used for utilization of trade credit as described in previous writings .Notwithstanding previously mentioned theories, underestimated the liquidation of purchaser firms and customized product having influence on the provision of trade credit by suppliers. They concluded the simpler of a purchaser to be liquidated, the profitability of trade credit associated with the purchaser will be higher as well as if there would be a chances arise of purchaser default it is simpler for supplier to resale products. This is steady part of financial advantage theory while customized product is another theory for analyst. They also suggest that the association between customer and supplier worked during the procedure of customizing product survive more. Addition to this supplier wants to give more trade credit on account of their claim of speciality to

customers. It is viewed that trade credit is more adaptable than bank loans. Danielson and Scott (2004) agree that delay in trade credit instalments is more affordable as compare to bank loan payment delay.

Emery (1984) concluded the existence of operational thought process when clients request are not steady. Client request for an item are not always the same due to the result of seasonality so the providers react correctly to the fluctuation in client request by changing diploma of production and fee this will consequently charge extra fee for both providers and customers.

Wilson and Summers (2002) clarifies that the objective of trade credit is to maintain a longer association towards clients but not to make a benefit for providers yet for seeking after arrival on the combination of merchandise and finance but this will lead additional costs to both supplier and customers. A better option is to offer trade credit as it allows greater flexibility in activities. They stated that suppliers are not make benefits from trade credit arrangement.

Beside those theories of trade credit innovation, there are some negative aspects from benefit for establishment. Burkart and Elligsen (2004) demonstrated that cost difference theory is not related in a central market .keeping in view all the points, trade credit is a main tool for enhancing sales .The benefit of supplier to repossess and exchange merchandise is not considered as relevant in service industry; in different type of market product quality theory is pointless.

## **2.5 Factors of Account Receivables**

As indicated by research consequences examined beforehand, numerous elements are considered as trade credit (Nilsen, 2002; Niskanen and Niskanen, 2006). A part of those elements are recognized with the economic development of a nation, for example, GDP, showcase loan charge and money associated approach; economic frameworks and legitimate systems are additionally considered as components impacting trade credit. A process of those components are identified with economical improvement of a nation, for example, GDP, showcase loan fee and money related approach; financial frameworks and legitimate frameworks are additionally assumed as elements impacting trade credit. Every one of these elements has a place with macroeconomic components which are not controlled by a establishment. All these ingredients belong to macroeconomic factors which are not bounded by establishment. On the alternative hand the company specific factors having core significance in firm account receivable management and to beautify sales of the agencies which might be age of firm, length of firm, short term financing, finance cost, product

quality, income growth and profitability, those variables have played a critical position in determinants of account receivable.

### **2.5.1 Macroeconomic Factors**

From a macroeconomic point of view, the trade credit rating is stricken by cash related methodology, improvement of financing structures, and substantial premise of a realm. Nilsen (2002) shows that little and medium estimated firms depend more on business credit assessment sooner or later of tight money related arrangement as they practically face fiscal issues. Niskanen and Niskanen (2006) asserted the idea that there's a fine association between commercial center financing cost and cash payments which has been received. When such type of commercial center excitement proceed, there is a more prominent probability of exchange acknowledge taken as a choice. Believe it or not, their disclosures don't support this hypothesis.

In the proposed time, Demirguc-Kunt and Maksimovic (2001) unequivocal that due to well-made financial commercial center, budget can investigate account holders effectively, so it's very much invaluable for partnerships to get spending plan from fiscal go-betweens. In any case, in a state with defective monetary structures, organizations can bear money related get admission to limitation effectively. Thusly, the wellsprings of the fund are moved to providers who're non-budgetary organizations. Accordingly, it's considered as negative association among trade credit rating usage and the level of the productiveness of substantial relationship of a realm.

Huyghebaert (2006) and Garcia-Teruel and Martinez-S Solano (2010b) show that a lessening in macroeconomic outcomes in organizations to make greater records as the paying models for the organization's capability by getting credit system from banks through loan. Apart from such type of this hypothesis, Niskanen and Niskanen (2006) legitimize that cash has been done through the payment method which is till now extended during the over the top made macroeconomic situation. The most extreme part used mediator of macroeconomic is the improvement of all-out countrywide yield (Gross domestic product).

Demirguc Kunt and Maksimovic (2001) mentions firms to improve macroeconomic components. Accordingly, one's factors are restricted mulled over on this thought. Different determinants that are not noted on this idea are the checking charges of banks to its account holders and its liquidation expenses. Since as stated by Jain (2001), such type of

deficiencies in the bank can occur and because of this, it leads towards the expenses for banks to release the getting demand from borrowers, and it is quiet content for the banking sector to show favor towards the loan cash to suppliers with lower prices. Those prices can't be constrained by establishments neither and relinquished in this postulation.

Fisman and Love (2003) and Ng et al. (1999) show that the utilization of trade credit assessment is different across over adventures, simultaneously likewise with little expansion inside associations. Since specific organizations without substantial inventories need never again required trade credit assessment, for instance, development organization offices and bistros, it's far startling from associations with obvious inventories (Niskanen and Niskanen, 2006). Jain (2001) states that in foundations with a few sellers, exchange credit isn't constantly applied consistently, as the speculation spending plan of watching charge for banks are not getting involved in such type of activity. Because of this, banks may need to advance payments to customers direct.

Smith (1987) shows that interior a comparable industry, the terms of exchange acknowledge keeping reliable as the two suppliers and clients face a comparable money related circumstance. Trade credit assessment game plan is thus identical for buyers' inner an equivalent industry. In light of past trade, a test is required to explore the determinants of trade credit assessment to understand the associations among trade credit rating plans and firm-express characteristics. In this postulation taking factors commercial center intrigue expense and GDP.

### **2.5.2 Firm-Specific Factors**

Wilson and Summers (2002) unequivocal the two-course nature of exchange financial assessment, indicating that partnerships use trade credit rating as beneficiaries essentially as providers. This is as indicated by the possibility of Petersen and Rajan (1997). Thusly, an exchange financial assessment is anticipated both through cash owed receivable and cash owed payable, the going with interchange are given subject to records of sales and cash owed payable autonomously. Be that as it may, my topic of the examination is on money due which is profoundly talked in this theory. The certificate of exchange credit isn't in every case just picked by method for clients yet besides providers. On one hand, the confirmation of bills receivable depends upon an organization's capacity to achieve out similarly as how bounty its

ability to give to its clients; of course, the cash owed receivable is in like manner chose to use the enthusiasm of customers, their availability of resort on exchange credit.

As asserted by Petersen and Rajan (1997), Garcia-Teruel and Martinez-Solano (2010a) and Wilson and Summers (2002), through their studies. According to them, the banking sector are looking for meaningful development through determinants of trade credit rating. The main issue is about the organization's reliability, which shows an organization's financial assessment limit and notoriety, moreover its capability of having opportunity reserves.

Additionally, Petersen and Rajan (1997) in like manner get that huge and antique company's concern more prominent trade credit rating to their customers. This is unsurprising with the assessment delayed consequences of Ng et al. (1999) and Danielson and Scott (2004). They show that huge firms can achieve exchange credit conditions adequately. The subsequent aspect is the potential of the internal money era. It is characterized as how much income a company can earn without all and sundry else for the duration of a period. It is estimated by way of internet income further to depreciation over sales (Garcia-Teruel and Martinez-Solano, Wilson & Summers (2002), talked about such type of approaches towards their main variables through determinants of trade credit. There are some factors of is company which are showing its worth. It can be explained through the company's credit limitation and reputation, also its capacity of getting substitute fund. Since Schwartz (1974) depicts that these types of firms are working hard to get their better credit reputation tby paying their commitments for managing their economy and sales. According to Petersen and Rajan (1997) that such type of these forms can create issue at times for their more trade credit towards their buyers. Because they can get towards their bank credit, contrasted and little and youthful establishments; in a better way for their sales and purchase. According to the study of Ng et al. (1999) and Danielson and Scott (2004). They defined that such types of establishments can make trade credit prerequisites effectively.

Nowadays, it has been considered as an effective relationship among internal cash technology with accounts receivable. Since companies with the exquisite potential to generate inner cash glide those agencies moreover have the potential to stretch out greater money owed receivable to customers. The third issue is the accessibility of acquiring financial obligation, estimating the restriction of a corporation to get right of entry to outdoor financing. This issue may be deciphered further as the number one element of creditworthiness. Nilsen (2002) besides contends that in money associated tight periods, the value of financial institution



advances could be higher than trade credit score; the diploma of trade credit can be expanded alongside those lines. The fifth component is identifying with sales development. It means that sales development is determined by using the once a year sales increase of an organization.

Such type of element is considered as the capacity of internal cost generation. It is regarded as the different type of specific work which has been profitable work as earning in limited time period. It is measured by net profit in addition to depreciation over sales (Garcia-Teruel and Martinez-Solano, 2010a). It shows some sort of positive connection towards the internal cash generation with accounts receivable. As these types of establishments which are having great capacity to generate internal cash flow. In this way, such type of organizations additionally show sort of approach and capacity to stretch out more accounts receivable to buyers.

Thirdly, the factor is about the accessibility by acquiring the financial obligation for measuring the limit towards an easy access for finance departments. This factor can be generated very effectively for the primary factor of trade creditworthiness. Specifically, an organization which is having an access for financial obligation just to put pressure on trade credit and has capacity to stretch out more credit towards their buyers.

The fourth determinant is about to highlight the expenses of finance and credit. It has been observed that the expense of finance divided by total liability provided less towards the accounts payable (Garcia-Teruel and Martinez-Solano, 2010a). So in this regard, the high financial expenses lead these types of organizations to cut down their motivational aspects by offering them trade credit towards credit from suppliers. Nilsen (2002) further states that during any firm is having an issue regarding finance, the cost of bank advances could be higher than trade credit; the degree of trade credit can be expanded along these lines.

Lastly, the factor is gross net revenue. It is measured as the gross benefit over sales. This factor is utilized to test the impact of a relation over the issue of revenue on the degree of trade credit. Emery (1984) finds that firms which are having such type of high gross net revenue can be able to accomplish high sales by conceding more trade credit. It has identified similarly with the fifth factor.

## **2.6 Determinant of Accounts Receivable**

Carrying receivables has both direct and indirect costs but it also has an important benefit that is increased sales. Receivable management begins with the credit policy, but a monitoring system is also important. Corrective action is often needed, and the only way to know whether the situation is getting out of hand is with a good receivables control system.

The dependent variable of the study is firm accounts receivable level. We follow Petersen and Rajan (1997) and use the ratio of accounts receivable to sales (REC) as the dependent variable to measure the longest term of payment that firms grant to customers. The main purpose of this research is to examine whether Pakistani non-financial firms have target accounts receivable level. Since the banking sector is very important for Pakistani firms finance, our main independent variable is the access and availability to external funds. There are also some factors that may affect the accounts receivable level, we include them as control variables. Therefore, we include in our model firm sales growth, internal cash flow, product quality, and profitability.

### **2.6.1 Creditworthiness and availability of external funds**

The financial writing units up that trader of products have robust factor over monetary establishments with regards to information of patron and monitoring of purchaser to whom make income on credit, and this lets in certain non-economic firms with excessive creditworthiness to collect budget to assist different firms which enjoy issues getting to capital markets because of their low credit rating (Schwartz, 1974; Emery, 1984; Smith, 1987; Mian and Smith, 1992; Petersen and Rajan, 1997). In particular, the provider may additionally have a greater noteworthy capacity to collect facts about the client, due to their continuous contact with clients. The volume and term frequency of product which is furnished with the aid of the provider to their patron relies upon the facts about their client's present financial situation. Moreover, trade credit mitigates desirable risk problems since information assets given by using providers are less correctly occupied than money given through banks (Burkart and Ellingsen, 2004), especially for separated objects and administrations that are increasingly tough to offer to another client (Burkart et al., 2005). At last, companies are probably eager on the persistence in their clients due to shared rents from long-standing corporations connections (Boissay and Gropp, 2007; Cunat, 2007; Wilner, 2000).

Along these lines, the degree of trade credit allowed will rely upon the creditworthiness of the provider and their access to external finance. Firm size and firm age are utilized in the writing as intermediaries for the creditworthiness of the firm (Petersen and Rajan, 1997). Larger firms are considered to have better creditworthiness and simpler access to funds in the capital markets, and more seasoned firms have had more opportunity to create connections and can be considered to have more noteworthy financial limit and notoriety in the market. From this point of view we anticipate a positive connection between trade credit and firm age and size. Nonetheless, from the viewpoint of the data asymmetry among purchaser and vender, various investigations (Long et al. 1993; Lee and Stowe, 1993; Pike et al. 2005) found that littler and more youthful firms that have more terrible reputation need to utilize more trade credit so as to ensure their product. In addition, clients may apply their market capacity to purchase on credit when the provider is little so as to decrease vulnerability about the quality of the product bought (Van Horen, 2007). From this viewpoint, we can likewise anticipate a negative relationship for these measures. Firm size (SIZE) is measured as the logarithm of sales, and firm age (LAGE) is defined as the logarithm of (1+age), where age is the number of years since the foundation of the firm. As we have indicated above, the expected relationship of both SIZE and AGE with the dependent variable could be either positive or negative.

The financial market imperfections may enable sellers to have better management if they offer credit to customers than the financial institutions, in terms of information collection process and managing the debt. The financing motives of trade credit demonstrate that firms with high creditworthiness have better access to funds from financial markets, and as a result, they act as financial intermediaries between capital markets and financially constrained customers. Therefore, creditworthiness of sellers and their accessibility to financial markets affect the ability to grant trade credit (Schwartz 1974; Wilner 2000; Petersen and Rajan 1997). However, the degree to which the firm's characteristics measure its ability to finance investments is influenced by the financial system structure. The accessibility of suppliers to funds is affected by the information asymmetric between them and financial institutions. Bond et al. (2003) find that firms that operate in bank-based markets have better access to funds than firms that operate in market-based markets. They find that bank-based markets enable firms to establish good relations with banks and obtain funds easily. The supplier can have updated information about their customer due to regular interaction. The trading activities may give important information regarding the financial situation. Sellers can liquidate the

repossessed products quickly if customers default. Hence, the collateral value of products is higher than for financial institution (Garcia-Teruel and Martinez-Solano 2010a). Furthermore, the trade credit may mitigate the moral hazard problem, the first reason is that the supplier offers inputs and goods which are costly to divert. Secondly, the buyers may bear high costs if they switch suppliers, especially if the supplier offers differentiated goods and services (Giannetti, et al. 2011). Consequently, we measure creditworthiness and reputation by firm size; where large firms may have less asymmetric information than small firms. Following Garcia-Teruel and Martinez- Solano (2010a), we measure size as the natural log of total assets. Another important proxy of creditworthiness is a firm's age; a long relationship with financial markets reduces the asymmetric information problem with the firm and lenders, which allows firms to raise funds easily with low cost (Guariglia 2008). Besides, older firms have more experience with customers. So they may face lower risk when extending their trade credit to customers that they have known for long periods (Petersen and Rajan 1994). We measure the AGE as the logarithm of (1 +age), where age is number of years since the firm was established. In addition, it is more important to build reputation during the early years of a firm's life than in later years We use the natural log of the firm's total assets (LN (book value of assets)) and the natural log of firm age (LN (1 + firm age)) to proxy the supplier's access to external capital. These variables are assumed to measure the firm's creditworthiness to suppliers of debt and equity. These measurement proxy used by Niskanen and Niskanen (2000,2006)

The ability of a firm to borrow from financial institutions at a reasonable cost may affect its trade credit decision, which affects the financing motives of the firm (Schwartz 1974; Emery 1984; Smith 1987). There is no benefit from acting as a financial intermediary when a firm cannot finance itself, or has to pay a high cost for borrowing funds (Garcia-Teruel and Marti'nez-Solano 2010a). The financial system of Pakistan is bank based, and most firms depend on banks to raise funds. Therefore, the only short-term sources of finance are bank loans. Thus, we use short-term financing as a proxy for the availability of external funds. Furthermore, the financial cost of debt (FCOST) can affect the cost of financing accounts receivable; when the cost is low, firms are encouraged to extend their credit policy. FCOST can be calculated as the percentage of financial expenses over total debt less accounts payable. We expect a relationship between short-term loans and accounts receivable.

### **2.6.2 Internal resources**

The internal financing is the major source for funding of financing clients. Petersen and Rajan (1997) investigated that some administrations give more funds to their particular clients, those administrations have more conspicuous capability to yield internal funds. However, this investigation is not related to USA SMEs. Remarkably, Niskanen and Niskanen both (2006) works in a system of bank likewise Spanish SMEs and they investigate constructive assembly of SMEs inward financing and trade credit. Additionally, devalue the deals. We anticipate that a positive correlation should the dependent variable, since establishment with a more noteworthy capability to produce inside subsidizes will have more assets accessible and will have the option to offer more fund to their customers.

Capacity to produce unseen resources by organizations is predictable by the flexible CFLOW, which must be categorized equally like the amount of gross profits with contracts reduction. The needy flexible amount is expected for a positive association, some of the organizations have more ability to create inside subsidizes, so they also offers funds because they have many manageable resources for funding. Pecking order theory states that, internal funds are the first line of choice for the investment to show their clients (Myers 1984). From now, they have additional assets for customers to discard the trade credit contribution. Therefore, only for extension of policy of credit an organization should have availability of strong internal resources (Niskanen and Niskanen 2006; Petersen and Rajan1997; Garcia-Teruel and Martinez-Solano 2010a). That are measured through adjustable CFLOW, and may be considered equally to calculation with percentage of net profit plus depreciation over sales.

### **2.6.3 Sales growth**

The credit trade policies are used by organizations to identify objective growth rates of objectives. Usually, credit relations, e.g. installment time and credit trade limits both are conventional to use as an economical authority. A developing organization should select a module for going up trade credit when considering its rivals. As designated like its indication, the organization development ought acknowledged with amount of financial records that must be received, on the other hand if a organization want to be successful, it should use credit trade for improvement of sales in the market if a organizations deals are decreasing day by day they should use more trade credit then other organizations who are its competitive to stimulate their sales every organization uses same trade credit system. An organization that

want success in market or to find more clients, it should upraise the credit for clients, if its sales are not increasing sufficiently. So it is concluded that positive connection exists among trade credit and sales.

Emery (1987) also recommends that an organization can utilize trade credit for enhancement of stock sales to get it in time that is present in a very low demand. If credit terms are lost, retailers can reduce the room of that should be combined to keep the dependable production. Similarly this supports the organizations to exclude the expense of altering the manufacturing units. Long et al. (1993) also supported this, who investigate that administrations having adjustable claim accepted as more prolonged trade credit period as compared to market companies with suitable request of product. Molina and Preve (2006) also determine that administrations opposing gainfulness matters, must be following receivable trade credit that could be the cause of financial pain. Annual sales expansion are demonstrated as sales growth (GROWTH). Using this adjustable values we try for fastening the impression of possible staggers proceeding and it determines the receivable accounts. Considering trade credit to elevate sales levels when its level is decreasing eventually. So we can demonstrate the relationship between REC and adjustable values.

The organization's possessions can be indicated as growth sales. Therefore, organizations utilizes trade credit to attain their rate of growth target, so, these companies give their customer concession offers and let the customers to delay expenses (Niskanen and Niskanen 2006). In contrast to this, it is necessary for an organization to elevate the level of its trade credit if it want to be market competitive. Subsequently, multinationals utilizes trade credit in place of promotion means for rising of sales (Nadiri 1969). Motives of operating organizations elevate their trade credit levels when demands are very low and vice versa (Emery 1987). On the other hand, some organizations increase their receivable accounts ratio, by forcing the consumers to pay cash in time when the negative sales period is running (Molina and Preve 2009). Accounts are also affected by growth sales, and it is inspected by the policy of trade credit and growth of sales. Consequently, the term growth is divided into two portions, dummies are multiplied with growth to distinguish among positive (PGROWTH) and negative( NGROWTH) growth. Considering that companies gives funding to trade credit in case of continual positive growth sales, satisfactory to sales. Alternatively, we assume companies have a tendency to reduce the trade credit in case of negative sales. In

downturn phases, multinationals face a difficulty in financing their tasks, which bound their capacity of selling to credit (García-Teruel and Martí'nez-Solano 2010a).

#### **2.6.4 Product quality:**

For the promotion of organizations about their receivable accounts can play a key role. Companies with extraordinary self-assurance on their worth of its retail may be allow consumers to inspect their product. Thus, consumers may utilize or can give a trial to the products, and if they don't math their standard, they can return them. The unequal data is problematic among consumer and its production authority system so, it is beneficial for the organization to give some time to the consumers to pay their debts. Consequently, for the promotion of quality of product many multinationals utilize receivable accounts (Pike et al. 2005 Lee and Stowe 1993). By Long et al. (1993) it was cleared that, excellence of a product (TURN) is now calculated by  $[(\text{sales}/\text{total assets})/\text{receivable accounts}]$ . Hence, resources reduction and turnover specifies that companies can be influenced by stable resources for manufacturing of products, which influence the indication for quality of product. Later on, multinationals that require extended time for product manufacturing are very afraid of the quality standards.

Long et al.(1993) proved that through some establishments award towards trade credit as compared to other than organizations has brought an impact over the image of the market. These types of little efforts can brought new modern technology towards the usage of trade credit just to show their best products. According to Pike et al. (2005)that it has been found in America, England and other countries like Australia use trade credit just to cut down the data irregularities among buyers and merchants.

Smith (1987) declares that dealer can communicate to the organization for nature of their things by compatible credit terms that gives authority to the customers a time to clear their debt. In certain, trade credit allows consumers to evaluate that the product approves by the agreed terms, and gives an assurance that every examination can be done as agreed. In contrast to this, if the stuffs don't encounter needs of the customers, the product can be return and consumers are not allow to pay any assets in case of instant paying, when credit offer is not there, a discount offer is requested. Anyhow request for the discount offer is costly and bothersome. Furthermore, extended payment in portion till payable dates can be produced when assessing of the goods quality is tough or it needs significant time of collapse. Lee and

Stowe (1993) also view the trade credit module as very perfect technique for certifying stuffs. Tinier and young companies use this kind of guarantee; subsequently their consumers may investigate their responsibilities they accuse. Long et al.(1993) observations shows that tinier, young multinationals gives additional trade credit in contrast to the organizations having high market reputation. These tinier, young organizations practice trade credit for showing the product quality. Pike et al. (2005) studied that in many states like the UK, USA and Australia, trade credit is utilized to diminish data irregularities among customers and the wholesalers.

Goods quality has been estimated by the intermediary variable TURN, determined as the proportion of sales over assets less accounts receivable. Long et al. (1993) and Deloof and Jegers (1996) investigated that, negative connection among REC and TURN. They proves that each and every single thing is comparable (a similar thing created for a similar use), it is practical to admit that a highest quality products need more time to manufacture as compared to low-quality retail, subsequently, testing of quality must be done at different time and stages. So some extra time requires to conduct tests to sure about high standards of quality.

### **2.6.5 Gross profit:**

As far as the determinant profit margin is concerned, literature always shows that firms with higher profit margin can generate more sales and have more incentive for it. The profits can be received from financial and commercial activities. Peterson and Rajan (1997) explored that the firm which has more marginal earning is more interested to enhance their sales, and its supported by (Garcia-Terueland Martinez-Solano, 2010). Eleonora (2013) examined the interaction among profitability and accounts receivable, thus he found out that profitability is positive for accounts receivable. i.e. the increase in profitability can lead to an increase in the level of accounts receivable.

Concentration in trade credit shows that many relationship's accounting report thing. Trade credit occurs when companies let the consumers to give the payment in various intervals. With huge expanse of placing assets into receivable accounts. In this way, company's strategy is to take profits to this asset. Placing funds into receivable accounts is important and construction routine trade credit the administrators is vital for the productivity of a company. As follows, every organization should investigate their financial system for management of receivable accounts and planning process Ala'a Adden A. Abuhommous(2017).



Trade credit also utilized likewise the variety of price parting the multinationals for each whether installments of payment are acceptable or not (Mian and Smith, 1992; Brennan et al., 1988). Postponing credit time or rising the refund for momentary expense sufficiently relates to a worth decrease. Thusly, a comparable article may be wholesaled at numerous charges to many users. Petersen and Rajan (1994) enlarge this type of controversy, saying that only once organizations, which is related to a specific manufacturing choose to give trade credit to their customers, the expressions accessible, follow commercial design, giving minute admiration to the debtor's comfort. Following these circumstances, trade credit viably diminishes the charges rewarded by smallest lucky excellence consumers, those are surely very gentle to the value of article. Petersen and Rajan (1997) determine towards funding of trade value through hypothesis which is representing that societies with advanced or developed net incomes by floating their contracts. This is just because of the term that the negligible salary they get are extraordinary, letting them to generate further budgets for the production of new deals. The assistances of this kind of organizations come from their commercial and economic trainings, so they can all be the very punctually acknowledge minor earnings on the deposit they reward.

### **2.6.6 Market cost of capital**

Niskanen and Niskanen (2000) and Khan M.A (2012) analyze that market cost of capital also has an effect on account receivables and the desire of trade credit increase as market interest rate increase both have positive relation. The study uses annual average three month KIBOR rate to compute the basic cost of capital. A positive relationship is expected between accounts receivable level and level of interest rate. The reason behind this can be the demand for trade credit which can be expected to be high when the cost of alternative capital is increased.

### **2.6.7 GDP**

The standards of receivable accounts are determined by the government budget. This can be investigated internally by numerous ways e.g. the net confined development or a global level by trade standing. The final offers an amount material, how several imported things can be obtained with only one part of national production. Rise in the amount, the effectiveness of the state progresses. We can regulate the ranks of receivable accounts over the economy (Smith, 1987). The utilization of Receivable accounts can be exaggerated by the declining macroeconomic situations. On this side businesses undergo a boundless damage of producing

currency by their actions in such declining macroeconomic situations, and banks may decline the recognition to organizations. In the significances of it the amount of days of receivable accounts can be amplified. In contrast to that, it is similarly a guess that the organizations, those express additional struggle in acquiring investment, suggest that a smaller amount of credit for their consumers. So, the key to switch macroeconomic possessions is to utilize the development in net Gross Domestic Product (GDP), however the predictable association among the business cycle and trade credit providing by multinationals is not unfurnished.

## **2.7 Relationship among determinants and receivable accounts**

Organizations age and scope tells about the wealth of that Organization. The age of particular organization tells that how much it is strong, and able to avail all possible outside funds to grow its business. Besides this both massive and ancient organizations provide supplementary skill credit for clients, suggesting that there are certain associates among corporation's age, size and receivable accounts. This is displayed by investigation outcomes that were discovered by Petersen and Rajan (1997), Garcia-Teruel and Martinez-Solano (2010a), Bougheas et al. (2009) and Niskanen and Niskanen (2006). The central division is that Garcia-Teruel and Martinez-Solano (2010a) determine the basic assembly among multinationals' time phase and receivable accounts, but that's remarkable for definite nations. The specific motive is apparently express that inspection be governed by the European countries, and the unqualified be influenced by America. The assorted economic situations and structures can influence the investigation consequences.

Proposed prediction on inner supporting age antedates a constructive connotation with receivable accounts. The inspection detections of Martinez-Solano and Garcia-Teruel (2010a) and Niskanen (2006) are in harmony with supposed probability. Nevertheless, the subsequent effects of it are remarkable. In their survey, Niskanen (2006) firstly illustrate the amount of core money age in place of the quantity of remaining profit and additionally parting the gross profit into assistance and shortage to recheck this, the conclusion quiet retains the comparable. so, the determining factor work of this adjustable value is now interrogated and it is trusted on, to become unambiguous authorizations about this issue.

In the theoretical point of interpretation, it is usual that positive association of a commercial responsibility and negative assembly of economic price related to receivable accounts. Since Petersen and Rajan (1997) direct that administrations with advanced economic

responsibility have measurements to give supplementary trade credit for funding their consumers; and organizations provoking extraordinary commercial prices reduce the degree of commercial responsibility that is gained.

Another feature observed is development of sales. In theory of Niskanen (2006), organizations seeking after high development compromise to additional trade credit and extended pay periods in excess of contenders; besides, so as to build sales, organizations confronting sales insufficient take the technique for giving additional trade credit to consumers. Petersen and Rajan (1997) talk about the sales development which is certain or negative, and a positive association exists by receivable accounts. As it has mentioned by Martinez-Solano (2010a) and Garcia-Teruel locate negative association for positive sales development and receivable accounts, demonstrating organizations having extraordinary trades development reward fewer trade credit. Although the negative development sales, it retains a comparable positive reminder with receivable accounts.

Adjustable gradation the basis income is troubled, Garcia-Teruel and Martinez-Solano (2010a) resist that income for trades by capitals removing receivable accounts is defiantly acknowledged with receivable accounts. This is thought to be the organizations may forcedly need to grant additional trade credit to communicate data related to their high piece feature. It is clarified that minor takings proves advanced article excellence and extended age group cycle. Administrations with highest quality of product deals extra trade credit to let clienteles for measure their article excellence. It is clear that lower turnout describes about their best quality and process of long generation cycle. In this regard, the authorities having top quality goodies offer more trade credit to enable buyers to assess their purchase and sale for the best quality

There are few factors which are getting used as the most part referenced part used in previous writing. Discoveries of Petersen and Rajan (1997) and Garcia-Teruel and Martinez-Solano (2010a) bolster the philosophy of supplementary trade credit is accessible to consumers if dealers have extraordinary overall revenue. They clarify that advanced benefit creates dealers simpler to acknowledge minor income or can harm on credit terms they give.

Considering factors discussed in chapter 2, hypotheses related to the associations among organization-specific features and macroeconomic factors of trade credit are follows.

### **2.7.1 The relationship with organization's creditworthiness**

It is dignified as the company's scope, age square and age has the forecast positive signal but it is not statistically substantial. In European republics Garcia-Teruel and Martinez-Solano (2010b) discover that, equivalent grades for age, however, different grades for size. This can effect from the economic system in Jordan, in the banking sector. In future, the adjacent association that subsists among organizations with banks. Consequently, size and age are not significant issues of banks to assess the economic position of the organizations (Abuhommous, A, & Mashoka, T.2017).

According to Yanping Shi, et al. (2016) the persistent of ASSET and AGE in investigation are positive and noteworthy. In common, superior administrations are very creditworthy than other once. Also grownup organizations can give much credit. The consequences maintained the concepts of Peterson and Rajan (1997) according to that greater organizations often have greater receivable accounts. Size of Multinationals and age both play an important role to calculate the multinational's creditworthiness and entree to center bazaars. The ordinary log of organization's age is utilize as substitution for creditworthiness and ordinary log of entire benefit is engaged to deputation by the providers' admittance to center of exterior. The outcomes shows that its size is adjustable Khan, M. A (2012).

Firstly, size of an organization is understood as a cause factor for the receivable accounts. Precisely, in every the nations analyzed, there is a positive connection among size and trade credit that is granted. Thus, greater organizations sponsor the consumers much as others. This outcome was predictable, subsequently large organizations can find economic support more certainly and so successfully play a role in financial intermediaries. Dependent value never affected by age. Thus, the age of the organization never seem to disturb the directors when deciding about judgments connected to the contribution trade credit for clientele (Garcia-Teruel, P. J., & Martinez-Solano, P. 2010).

The size constant value is important and negative, which establishes that greater organizations award fewer funding for the clients. This maintains the dispute of Long et al. (1993) who carefully say that minor organizations have a smaller status and essential to utilize supplementary trade credit to give product assurance. Though, there is no significant value for the constant values of AGE and its square, which displays that every age value of

the organization is insignificant for the receivable accounts grades of Garcí'a-Teruel, P. J., & Martí'nez-Solano, P. (2010b).

The factor that effects the size of organization is positive and extremely important. This consequence designates that developed organizations with enhanced admittance to the economic marketplaces spread greater trade credit in contrast to other organizations. It is stated that a supplementary year never improve the standing of organization, which is older as compared to young once. The first order organization constant of age becomes pointedly positive when we complement a squared age value into model. The negative coefficient is present in squared age value that is significant. Then the positive cost of the line age is very large, the consequence proposes that in initial stages of an organization's phase its level of receivable accounts rise, after that, they reach at the peak and eventually decrease. We can calculate from the first nine years of the organization the fundamentals of operation receivable accounts and how they grow, furthermore their comparative share occurs. The reduction subsequently results in the peak or highest value that is much slower than the rise in receivable accounts, when discussing the growth phase. Though, in a forty years old organization other effects are equivalent, the (comparative) levels of receivable accounts are not greater as compared to the organization that is only one year old. Thus, the universal outcome regarding the age effect on receivable accounts in studying sample is that the elder organizations spread fewer trade credit as compared to positive size of a young organization that is extremely important. This consequence designates that well developed organizations have enhanced admittance towards the commercial markets spread through trade credit in contrast to other organizations (Niskanen & Niskanen, 2006).

Strength of size is important for sample I, but irrelevant in sample II. Age of organization rests irrelevant in both samples. We further include the squared age value, because results of Petersen and Rajan's (1997) shows that subsequently 19 years of progress of an organization's the grades of receivable accounts are highest and jumps to shrinkage. The consequence that an organization's creditworthiness and entree to center markets never touch the grades of trade credit, it spreads notionally unpredicted, and it is also changes from earlier experimental conclusions by Petersen and Rajan (1997). Size and time period of an organization are interrelated by variable 0.4. Even though the association is not much larger, it's the only one cause after the irrelevance of Size and time period of organization as forecasters for trade credit. Organization's creditworthiness and entree into principal markets

never disturb the grades of trade credit it ranges are highly unpredictable, and it is also varies from earlier experiential conclusions by Petersen and Rajan (1997). While the association is not much larger. (Niskanen & Niskanen, 2000).

A corporation's creditworthiness tells about its credit worth and also about aptitude of receiving external support. Establishment's size and time period both are measured as quantities of creditworthiness (Petersen and Rajan, 1997; Huyghebaert, 2006; Garcia-Teruel and Martinez-Solano, 2010a; Niskanen and Niskanen, 2006). Since Schwartz (1974) tells about the ancient and huge organizations that improved credit worth to give their promises for their extended history and vast budget of rulers. Petersen and Rajan (1994) inspect that the grade of trade credit describes trust among dealers and clients. Contractors reward much more trade credit to clients with extraordinary creditworthiness and those who belief in business. Ng et al. (1999) observations shows about the dealers with abundant status of their crops are for the maximum portion chosen by procurers; procurers with excellent market status have comfort in getting trade credit from sellers.

Schwartz (1974) highlights that in tough time period of economic strategy, attention rate and credit allocation increase. The main influence of tough economic strategy is extent to tinier organizations, who obtain resources with better expenditures from center markets. Somehow, this results in minor organizations to yield trade credit instead of bank credit. Then all over again, superior organizations uses their loan capability to aid their clients.

Usually talking, enormous organizations have healthier admittance to economic debt, improved creditworthiness and intervention force compared to the tinier ones. Consequently, they have volume to give a loan cash to consumers who are suffering from economic problems. Remarkably, Rodriguez-Rodriguez (2006) opposes that tinier organizations are subjected to more by trade credit as its detention of receiving other funding. Furthermore, old organizations propose that organizations can tolerate healthy if market faultiness is there and usually they have enhanced entree to economic incomes.

***H1: There is an association between organization's age and receivable accounts.***

***H2: There is a relation between organization's size and receivable accounts.***

### **2.7.2 The relation with organization's inner cash production**

The results of Abuhommous, A., & Mashoka, T.2017demonstrates about positive and significant cash flow coefficient (CFLOW).Resulting that, organizations that produce additional cash flows have extra ability to sell assets on credit.

In Yanping Shi, et al. (2016) investigations there is a negative amount of adjustable CF that is important. The consequence is unpredicted and very problematic to describe, when some organization having a tougher internal funding, minor receivable accounts are there. The probable understanding is that organizations that are in distress will multiply more credit sales, as mentioned in Peterson and Rajan (1997).

This training utilizes functional cash flow (salaries earlier then reduction and interest minus taxes) divided by resources to quantify the capacity of organization's to produce cash by inner , to deposit the trade credit, which is extended to their clients. The consequences show that inner funding possessions positively to grades of receivable accounts. The positive value is important that specifies that if the positive cash flow is greater as compared to the dealer, the advanced the trade credit it gives to its consumers Khan, M. A (2012).

With the concerns, which the effect on ability to produce inner assets on yielding the trade credit, the consequences gained here display that a consequence of this adjustable value that depending upon nation that is being analyzed. While, as predictable, French, Finnish and Greek SMEs, produce much more assets funding and more trade credit for consumers, this consequence never frequently used for British and Spanish organizations. A negative substantial association found among the different values for markets of Belgian organizations and American organizations (García-Teruel, P. J., &Martínez-Solano, P. 2010).

As we predicted, we discover some of the organizations investment at greater amount of their transactions when they responsible for making more inner reserves. We measured that if there any positive association among CFLOW and REC continued. In this way, the possessions between positive and negative cash flow independently. Previously, we detached the adjustable values of CFLOW and substituted it with PCFLOW and NCFLOW values. PCFLOW is considered as the proportion of the assets, that could be produced within the inner funding for sale (net profits plus reduction), when assets are positive, but NCFLOW is proportion of sales to negative inner assets. Like this, the consequences display that

organizations individually give additional trade credit in case of positive cash flows, subsequently only PCLFOW variable is important according to study of Garcia Teruel, P. J, & Martinez -Solano, P. (2010).

The results are diverse and very problematic to understand. If original cash flow value is utilized, the constant is unimportant. Conversely, when dividing both positive and negative observations into two values, the positive observations value lie with negative quantity, on the other hand the adjustable value of negative observations is irrelevant. These outcomes demonstrate, the higher positive cash flow of contractor, the smaller amount of trade credit it is agreeable to spread throughout the consumers. Both Petersen and Rajan (1997) discover that an organization's capability to create cash within actions is calculated important but its symbol is unpredictably negative. But, if they extend their examination, they discover that only damages are expressively negative and interrelated with receivable accounts, and accomplish that organizations in distress spread much more credit to preserve sales. Our consequences may be measured correctly. Niskanen & Niskanen (2000)

Including with the striking request theory, both Rodriguez-Rodriguez (2006) and Alphonse et al. (2003) emphasize to look towards inner funding as the major sponsoring plan throughout the economic trials. The more developed the inner money produced, a smaller amount is the outer supply, principal trade credit. It represents that organizations having extraordinary inner money age, should have additional receivable accounts (Garcia-Teruel and Martinez-Solano, 2010a).

Niskanen and Niskanen (2006) describe the quantity of inner money age by means of amount of sales and benefit, and they receive positive assembly that is not dangerous. They additionally, divide gross profit into benefit and deficit to recheck, the consequence yet being comparable. Consequently, the contributing factor value of role is as now challenged. In this system, a positive association is acknowledged for this type of variable and receivable accounts. Furthermore, Garcia-Teruel and Martinez-Solano (2010a) and Niskanen and Niskanen (2006) describes that organizations with improved capability of producing cash, acquire fewer by of dealers.

***H3: There is an association between organization's inner cash generation and receivable accounts.***



### **2.7.3 The relationship with organization's financial debt and costs**

Observations of Abuhommous, A., & Mashoka, T.2017 investigations shows that the immediate accessibility is positive and important at a conservative point. Thus, entree to bank credit can rise the organization's aptitude to have enough money for trade credit. Therefore, organizations can produce a commercial intermediate character among banks and clients, as proposed by the sponsoring motives theory. As forecast, the predictable constant of negative price of finance (FCOST). Though, it is calculated insignificant. This may be clarified by the capacity of the organization to handover the price of appropriating to clients.

There is a positive and important influence of small sponsoring on receivable accounts, representing that, if the organization have a healthier volume of small funding, it will produce greater receivable accounts. This is clarified by the organization itself that may give suggestion for extended credit time period, in phase of very small sponsoring Yanping Shi, et al. (2016).

Furthermore, organizations experiencing greater charges for investment decrease their intermediation action, wounding the sales, they sponsor to the clients. So, the organizations are obviously conducting resources to the level that they have the capacity of gaining assets at minor price (Garcia-Teruel & Martinez-Solano, 2010).

Observations also shows that the constant positive value of variable STF and noteworthy in all types of deteriorations (2 are in 10% but 3 are in 5% level). This consequence can be understood as denotation that organizations propose for extended relationships of expense, when having greater number of small sponsors. The advanced the grade for small financing, the upper the grade of trade credit that is given. Besides, these consequence can show that organizations compete the prime of life of their resources and accountabilities. With respect of the financial outcome on the reliant value, a proliferation of one average change towards the STLEV value yields an upturn in REC, regularly, of about 11.26%. Though, its impact is important and brings great effects of FCOST upon receivable accounts. The price of exterior assets seems irrelevant aspect deliberated by organizations when deciding about contribution skills credit Garcia-Teruel, P. J., & Martinez-Solano, P. (2010b).

The volume of levitation external funding of an organization, both counting long and short term responsibility, stimulates towards system of credit. In the perspective on receivable

accounts, Petersen and Rajan (1997) explains that organizations with greater economic responsibility reward much more trade credit from consumers. It is underlined that trade credit is additionally costly as compared to bank credit. This is in harmony with the inspection consequences of Rodriguez-Rodriguez (2006). Rodriguez-Rodriguez (2006) mentions that organizations be determined by established sponsoring and frequently better and increasingly useful compared to organizations supported by trade credit.

Inspections reveals that greater responsibility prices will lead organizations towards alternative resources from another sponsorship, counting trade credit by the contractors. (Rodriguez-Rodriguez, 2006 Garcia Teruel and Martinez-Solano (2010a) say that some organizations have motivation to decrease the grade of receivable accounts when the prices are receiving by the banks.

***H4: There is an association between organization's financial debt and receivable accounts.***

***H5: There is an association between organization's financial costs and receivable accounts.***

#### **2.7.4 The relation with organization's sales growth**

The rate of growth also influence the receivable accounts grades; the constant value of GROWTH is insignificant. This proposes that organizations growth never use any type of trading system for the promotion of sales. The consequence is not reliable with operational motives. To demonstrate examination for analysis of influence of sales growth upon receivable accounts, we substitute the values of GROWTH with other positive and negative variables. The consequences shows that there is not any effect of positive or negative growths of sales on grades of receivable accounts (Abuhommous, A., & Mashoka, T.2017).

Yanping Shi, (2016) investigations shows that, the constants of growth sales is positive, but irrelevant. It is understood by the growth that never disturb the receivable accounts.

Generally organization's objectives to growth proportions are committed with the trade credit rules. Commonly, credit circumstances same as concessions and extent of expenditures shows an important role of economical devices. With the intention of increasing sales, organization can have a choice for strategy of proposing trade credit with late payable periods

as compared to its competitors. This suggests that a positive association among growth and the grades of receivable accounts. However, trade credit can be utilized for enhancement of sales of certain organizations that are not able to continue a horizontal rise of sales. In circumstances of decreasing sales of organization can give more trade credit as a regular corporation can give a proposal in the same business. This training calculates growth with the help of yearly percentage of sales growth. Empirically, it is a set up that growth of sales are unimportant that is also understood as the trades growth not disturb the grades of trade credit presented Khan, M. A (2012).

Alternatively, the consequences for the values of growth, do corresponds for every country which is studied. So, in comparison to previous indication by the American SMEs (Petersen and Rajan, 1997), we concluded that European usually go for an opposite relation among the growth sales and the adjustable value of RECEIV. This designates that organizations appreciating advanced growth sales decrease the investment degree that is approved for their consumers. Similarity, a reliable conclusions by the USA, organizations having negative growth sales elevate the ratio of their supported sales. These consequences propose that organizations are taking trade credit for marketing tool to expand statistics about purchase and sales. If sales is not producing good results, they can go for some other options through their type of mechanism (Garcia Teruel & Martinez-Solano, 2010).

In this regard, the development of sales also affect towards conclusion of trade credit, designated as the negative and important constant at the 1% flat of the GROWTH value. Organizations with fewer growth of sales allowance and more funding to their clients. This is also understood as sense that organizations utilize trade credit in the effort to encourage sales Garcí'a-Teruel, P. J., & Martí'nez-Solano, P. (2010b).

Our annual measurement for growth is percentage of sales growth. This development quantify the multiple dummies representing if development is positive or negative, i.e. we utilize diverse positive and negative variables of development in the sample for investigation. It seems that organizations with extraordinary development ratios spread more credit as compared to slow developing organizations. Alternatively, the consequences shows that when sales of an organization's are declining, the scale of the reduction never affect the quantity of trade credit, but it spreads Niskanen & Niskanen (2006)

When the adjustable value is separated on the origin of the symbols of observations, it look like the constant value of negative growth sales should have an important positive factor. When understood, these outcomes earns that an organization's with a much negative sales growth, has a smaller amount of trade credit that it outspreads. Conversely, the constant value of positive growth interpretations is expressively negative, representing that organizations with extraordinary growth ratios cover a lesser amount of trade credit as compared to other organizations. The consequences are precisely the reflection of Petersen and Rajan's (1997) outcomes, who originate that organizations with extraordinary development ratios outspread more credit as compared to organizations having lower ratios of growth. Moreover, their grades exhibited that organization's sales degenerated more, it uses trade credit to invest its buyers' acquisitions. Niskanen & Niskanen (2000)

Petersen and Rajan (1997) discovered the positive assembly among establishment's sales versus receivable accounts. They struggle that positive development sales of organizations will have additional inspiring services to acknowledge trade credit. Whereas negative development of sales of organizations attempt to provide additional trade credit to enlarge sales. Additionally, this is sustained by Niskanen and Niskanen (2006), they illuminate that organizations having greater progress challenge to struggle unpaid credit time periods than participants. In this way, Petersen and Rajan (1997) suggested that the process of trade credit can be considered as the symbol of business's economic condition and means of promotion. It is practical that administrations trying to attain extraordinary sales proposal and additional trade credit to make variety of them for customers.

***H6: There is an association between organization's sales growth and receivable accounts.***

### **2.7.5 The relation with Product quality:**

The constant value of TURN which is presented to exam the creation excellence theory is positive and important. Hereafter, organizations having extraordinary deals income with more receivable accounts grades, thus. Organizations manufacturing great feature goods suggest additional trade credit to provide the client the compulsory time for testing their invention. Organizations creating goods which are not essential for a longer time period to assess more prepared to propose trade credit ( Abuhommous, A.& Mashoka, T.2017).

Yanping Shi (2016) investigations shows the adjustable item for consumption that are of high quality, positive and substantial impression on receivable accounts. Both Lee and Stowe (1993) deliberated the same phenomenon, trade credit is finest mode to assure product. This consequence is clarified by the detail that organizations by way of advanced product feature will suggest additional trade credit and become developed receivable accounts.

To the extent that the TURN value is apprehensive, that is presented for assessment Long et al.'s (1993) assumption of excellence gesturing, the consequences found, that are mutual in all republics, all do not let us to upkeep this impression. In detail, in comparison with our expectation, it is about organizations having maximum salary, for which many funding are there for auctions. This proposes that production of things whose excellence is at ease to confirm, which invest mostly their sales. Though, this is reliable with the relative up to that time to found among the needy value and size. Greater organizations, and subsequently those having more status (which spontaneously not want to convey indications related to the excellence of the products by yielding maximum trade credit), giving economic support to their consumers supplementary than minor organizations. Belgian organizations study by Deloof and Jegers (1996), demonstrated that there is no trademark for quality signaling theory (Garcia-Teruel & Martinez-Solano, 2010).

Likewise, not any constants that are assessed for TURN variable are important. Thus, we are not able to deliver any experiential funding for the disagreement that is progressive by Long et al. (1993), it explains that organizations having lesser sales income, can be deliberated to yield a greater excellence product, propose additional trade credit for consumers, so that all of the charger able to test product excellence Garcia Teruel, P. J., & Martinez Solano, P. (2010b).

Receivable accounts can be utilized as the tool to encourage organizations' belongings. Organizations with great self-assurance about the excellence of stock may tolerate clients to inspect the yields. So, regulars somehow use and examine the yields, and return, if they are under the decided values. The unequal evidence of problem among an organization and its regulars can be concentrated, if party awards some time to consumers among their buying and expense payment. Consequently, organizations usage for receivable accounts as an instrument to encourage product excellence (Lee and Stowe 1993; Pike et al. 2005). Following Long et al. (1993), a product excellence (TURN) can be calculated as very

effective. Therefore, small resources income specifies that organizations hang on to additional immobile resources for yield that may be measured as an indication for item for consumption and quality. Afterwards, organizations which needs extended manufacturing time are supplementary about the excellence of the products.

*H7: There is an association between Product quality and receivable accounts level.*

## **2.7.6 The association of Profit margin**

The PROF value is negative but statistically important constant. Organizations with extraordinary turnover sideline have a tendency to produce extra cash by funding minor consumers. In comparison, the consequences propose that organizations with extraordinary profit sideline finance a smaller amount in receivable accounts. Profit edge is a sign for effectiveness, that allow to display moneymaking organizations, not need to take threat by giving to the economically embarrassed consumers (Abuhommous, A.& Mashoka, T.2017).

Additionally, the bulk of trade credit acts as an amount for sales is positively connected by the uncultivated income sideline in the republics of Europe. This maintains Petersen and Rajan's (1997) describes that organizations having greater boundaries are supplementary to prepared to fund or to supporting their consumers. Certainly, organizations with greater limitations will have additional encouragement to sell, straight forward, if they want to invest the auctions to do like this. The reduction of the consequence that can ensure if the limitations are extraordinary and perceived completely for every country excluding Greece, Finland and Spain. Therefore, we accomplish that organizations utilizes trade credit as worth judgement appliance. In this esteem, we can propose that an organization's attention in perceptive of favor of uncertain consumers, when they go for option like to sell their business through the process of trade credit lies, it helps them to generate through small profit periods duration. But also in the upcoming incomes to be enlarged for preserving the profitable association with them (Garcia-Teruel & Martinez-Solano, 2010).

To the level that the GPROF variable is alarmed, the assessed constants are important only when two of the five estimates, that only when it's at the 10% scale. For its square, the constants are not important to some extent of the assessments. With these kind of consequences, we cannot obtain adequate indication to receive that the needy adjustable value is firm by GPROF. As a significance, the price judgement philosophy is not sustained.

We cannot find, as we are originally predictable, that organizations with greater operational limitations, in a direction to make additional cash flow, trade credit is used to invest the sales of supplementary components to minor consumers. Garcí'a-Teruel, P. J., & Martí'nez-Solano, P. (2010b).

Trade credit is used as a procedure for price judgement by organizations rendering the weather interruptions in expense are acceptable or not (Brennan et al., 1988; Mian and Smith, 1992). Extending the time period of acknowledgment or increasing the reduction for quick cash successfully associates to an amount of discount. So, the similar product can be wholesaled at dissimilar charges to diverse clients. Petersen and Rajan (1994) spread this dispute, declaring that organizations of a specific business choose to contribute trade credit to the consumers, the relations accessible to follow the business arrangement, irrespective of the borrower's creditworthiness. In this condition, trade credit successfully decreases the value compensated by the unfortunate excellence consumers, who are in line to the greatest delicate to the product. Petersen and Rajan (1997) discover funding for value judgment concept presentation that organizations having advanced income limitations have additional concentration in upgrading their sales. That's why, the circumstances and the process has mentioned their salaries which they are receiving through experience extra prices to make new purchase and sales. The incomes of this kind of organization originate by the profitable and the economic actions, so they can be supplementary receive minor yields on the investment they give. Therefore we expect organizations having advanced income limitations to upturn their trade credit grades.

*H8: There is an association between organization's profit margin and receivable accounts.*

### **2.7.7 The relationship with GDP**

The variable net Domestic Products are important and have a negative influence on receivable accounts that describes that if the macroeconomic situation is not good, the receivable accounts are elevated. This is just because, that during bad macroeconomic situations, organizations can produce fewer cash flow as compared to previous, and thus the time period increases for the receivable accounts (García Teruel and Martínez Solano, 2010).

In conclusion, by having the consequence towards financial development over the grades of trade credit arranged, the projected constants for the GDP value is positive but significant at

level it includes all types of assessments which are accepted. This reveals that when commercial growth is greater, organizations investment is more in sales for their buyers (García Teruel and Martínez Solano, 2010b)

Receivable accounts are calculated by the ceremonial of the budget. This is restrained on the national level e.g., the uncultivated domestic creation or on the worldwide scale due to trade. The later gives a amount about how many distant possessions can be bought with one component of domestic production. If it increases, the affordability of the certain nation expands, (see, e.g., Burda and Wyplosz, 1993). We are probable to realize negative symbols on mutually discussed variables because the samples, comparing with others, propose that failing macroeconomic circumstances a rise in the usage of receivable accounts and vice versa. The consequences describes that the both variable values have no consequence on scale of trade credit that is prolonged by the section organizations. This consequence is slightly challenging to clarify. Though, our investigation time period is small, and throughout the years that are in question, the expansion of the budget was moderately stable. During these years, the Finished budget had now in progress to improve from the downturn of the initial nineties (Niskanen & Niskanen (2006).

*H9: There is an association between GDP and receivable accounts.*

### **2.7.8 The association with Market interest rate**

Niskanen & Niskanen (2006) used the annual HELIBOR ratio (Helsinki Interbank Offering Rate) to quantity at the macro scale deviations in the charges of assets. Throughout the investigation age, the market attention ratio diverse among 3.6% and 5.8%. We predicted to understand a positive relationship among receivable accounts and the impact of market ratio. It actually claims about the trade credit may be predictable to be at maximum, if the cost of substitute causes of assets is extraordinary. Though, the market attention ratio has no consequence on the quantity of trade credit prolonged throughout the 3-year time period. To the extent that organizations with superior positive cash flows (measured by net profit) outspread additional credit as compared to others, it specifies that unusually great scales of receivable accounts are funded by the assets created from the organizations' operation.

Niskanen & Niskanen (2000) determine positive among receivable accounts and the concentration rate level, because the request for trade credit can be predictable to be main



source, when the charges for other foundations are high. The consequence allows the attention rate that is important positive constant operations. This study utilizes twelve-monthly usual of three month KIBOR ratio to calculate the undeveloped price of wealth Khan (2012).

***H10: There is an association between market interest rate and receivable accounts.***

## **2.8 Hypothesis:**

H1: There is a relationship between age and account receivables.

H2: There is a relationship between size and account receivables.

H3: There is a relationship between short term financing and account receivables.

H4: there is a relationship between finance cost and account receivable.

H5: There is a relationship between cash flow or internal financing and account receivables.

H6: There is a relation between sales growth and account receivables.

H7: There is a relation between gross profit and account receivables.

H8: The is a relationship between product quality and account receivable.

H9: There is relationship between GDP and account receivables.

H10: There is relationship between Market interest rate and account receivables.

## CHAPTER 3

### 3. Methodology

#### 3.1 Overview

This chapter deals the method and process towards the data which has been used in this study for the research purpose.

#### 3.2 Data Collection

The work about trade credit has been conducted through the period of 2008-2016. In this regard, the data from Pakistani firms has been collected with the help from Pakistan Stock Exchange. So, the secondary data has been collected for the purpose of the research. In this regard, the annual reports of the companies and Pakistan Stock Exchange's website proved to be very helpful. For analyzing the research, the main purpose is to study the high and low rates by analyzing the impact. In this regard, the researcher got help from Pakistan Stock Exchange's website. The independent variables has been used for data collection through different types of methodologies. These variables has been taken from the annual reports of such firms mentioned in the period of 2008-2016. The total 282 firms were taken for the process of research. There are non-financial sectors of Pakistan used in this work. In this regard, there is calculation about number of observations which is 2538. Here is the detail about the companies whose data has been used;

Sector	No. of Companies Taken
1. Textile	120
2. Chemical	30
3. Paper & Board	8
4. Pharmaceutical	12

5. Sugar Data	30
6. Cement	20
7. Automobile	18
8. Technology and Communication	4
9. Transport	4
10. Refinery	4
11. Power Generation & Distribution	7
12. Synthetic & Rayon	4
13. Food and Personal Products	10
14. Glass and Ceramics	6
15. Cables and Electrical Goods	4

### 3.3 Data Analysis

The process of analysis on Eviews7 software has been used for analyzing the variables. Collected data will be analyzed by using E-View software. The data will be panel data and therefore panel estimation techniques will be used like fixed effect, random effect and common effect.

The model of study is presented in following Equation.

$$AR = \alpha + \beta_1 LSIZE + \beta_2 LAGE + \beta_3 STF + \beta_4 FCOST + \beta_5 GROWTH + \beta_6 CF + \beta_7 TURN + \beta_8 GPROF + \beta_9 GDP + \beta_{10} KIB + \varepsilon_{it}$$

SIZE: size of the organization

LAGE: age of the organization

STF: short term financing

FCOST: finance cost

GROWTH: sales growth

CF: cash flow

GPROF: gross profit

TURN: product quality

GDP: gross domestic product

KIB: interest rate (KIBOR)

### 3.4 Variables and Measurement:

Variables	Measurement	Author	Title
<b>AR</b>	<b>ratio of accounts receivable to sales</b>	<b>Peterson and Rajan (1997)</b>	<b>Trade credit: theory and Evidence</b>
Size	LN (total assets)	Niskanen& Niskanen(2006)	The Determinants of Corporate Trade credit Policies in a Bank-dominated Financial Environment: the Case of Finnish Small Firms
Age	LN of (1+age)	Niskanen& Niskanen(2006)	The Determinants of Corporate Trade credit Policies in a Bank-dominated Financial Environment: the Case of Finnish Small Firms
STF	Current Liabilities/Sales	Garcia-Teruel and Martinez-Solano (2010)	Determinants of trade credit: A comparative study of European SMEs
FCOST	the ratio of finance costs over outside financing less trade creditors.	Garcia-Teruel and Martinez-Solano (2010)	A Dynamic Approach to Account Receivable: a Study of Spanish SMEs

Sale Growth	Annual Growth rate of revenue	Khan, M. A(2012)	Determinants of account receivables  And account payables: A case study of Pakistan textile sector
CF	Ratio of net profit plus depreciation to sales	Garcia-Teruel and Martinez-Solano (2010)	Determinants of trade credit: A comparative study of European SMEs
Product Quality	Sales/assets-account receivable	Garcia-Teruel and Martinez-Solano (2010)	Determinants of trade credit: A comparative study of European SMEs
(GPROF)	Ratio of gross profit to sales.	Garcia-Teruel and Martinez-Solano (2010)	Determinants of trade credit: A comparative study of European SMEs
GDP	Gross Domestic Product growth.	Garcia-Teruel and Martinez-Solano (2010)	A Dynamic Approach to Account Receivable: a Study of Spanish SMEs
Market Interest Rate	KIBOR rate	Khan, M. A (2012)	Determinants of account receivables and account payables: A case study of Pakistan textile sector

## CHAPTER 4

### 4. ANALYSIS AND FINDINGS

#### 4.1 Overview

The current chapter is highlighting the impact of the study which has been devised into two major parts. The chapter is about the process of the regression. It also helps to gather and interpret the results. Moreover, first part is based upon the results through descriptive statistics table, correlation matrix table and regression result table. The next part is about the highlighting of the findings.

#### 4.2 Interpretation of the Results

##### 4.2.1 Descriptive Statistics

Table no. 1

Descriptive Statistics

Variables	Observation	Mean	Std. Deviation	Minimum	Maximum
AR	2538	0.11155	0.150012	0	0.983862
AGE	2538	3.384127	0.653457	0	4.644391
SIZE	2538	22.05444	1.802362	12.20547	28.17697
CF	2538	0.08394	0.75327	-34.5148	3.775508
FCOST	2538	0.079827	0.343743	-0.10833	10.60072
STF	2538	0.744944	2.475038	0	45.57124
TURN	2538	1.348156	1.511812	0	23.49728
GROWTH	2538	1.111093	1.077058	0	33.52458
GPROF	2538	0.138113	0.249422	-3.53432	1.889117
GDP	2538	3.524916	1.318194	1.606692	5.526736
INT	2538	12.45343	1.8801	8.755	14.5375



**Note:** *AR* = account receivable,  $AGE_{it}$  = age of the firm, *Size* = size of the firm, *CF* = Cash, flow (internal cash generation), *FCOST* = Financial Cost, *STF* = Short term financing, *TURN* = Product Quality, *GROWTH* = Sales growth, *GPROF* = gross profit (profitability), *GDP* = gross domestic product and *INT* = market interest rate.

Descriptive Statistics talks about the importance of the variables which are considered as independent & dependent variable according to the context. It gives about complete detail towards the research. This table show that there are total number of observations, range (maximum and minimum values) about each variable, which actually highlights the central tendency of single variable (mean, and median), and finally, it also shows the dispersion measures which are normally used as deviation method.

Mean value shows 'average value' of entire observations employed in each variable. Standard Deviation value indicates the extent to which the observations deviate from its mean value. Range values indicate the maximum and minimum values that belong to every observation of variable.

Above table shows descriptive details of eleven variables in which one is dependent variable (Account receivable) and remaining are independent variable. This table shows ten variables affecting the Account receivable of non-financial firms. Account receivable range from 0 to 0.983862 with its mean value of 0.11155 and standard deviation value of 0.150012. There is AGE that ranges from 0 to 4.644391 with its mean value of 3.384127 and standard deviation of 0.150012. Third variable is Size of organization that ranges from 12.20547 to 28.17697 to with its mean value of 22.05444 and standard deviation value of 1.802362. Fourth variable is CF (cash flow), which ranges from -34.5148 to 3.775508 with its mean value of 0.08394 and standard deviation value of 0.75327. Fifth variable of this study is FCOST, which ranges from -0.10833 to 10.60072 with its mean value of 0.079827 and standard deviation value of 0.343743. Sixth variable in this study is STF, which ranges from 0 to 45.57124 with its mean value of 0.744944 and standard deviation value of 2.475038. Seventh variable in this investigation is TURN (product quality), which ranges from 0 to 23.49728 with its mean value of 1.348156 and standard deviation value of 1.511812. Eighth variable in this observation is GROWTH (sales), which ranges from 0 to 33.52458 with its mean value of 1.111093 and standard deviation value of 1.077058. Ninth variable is GPROF (profitability), which ranges from -3.53432 to 1.889117 with its mean value of 0.138113 and standard deviation value of 0.249422. Tenth variable is GDP (Gross Domestic product), which ranges

from 1.606692 to 1.318194 with its mean value of 3.524916 and standard deviation value of 1.318194. Eleventh variable INT (Market interest rate), which ranges from 8.755 to 14.5375 with its mean value of 12.45343 and standard deviation value of 1.8801.

**Table no. 2**  
**Correlational Matrix**

	AR	AGE	CF	FCOST	GDP	GPROF	GROWTH	SIZE	STF	TURN
<b>AR</b>	1	-0.03948	-0.01171	-0.05241	-0.00219	0.007025	-0.04715	0.054774	0.185958	-0.10639
<b>AGE</b>	-0.03948	1	-0.00484	0.028559	0.143338	-0.00564	0.004396	-0.01496	0.031108	0.1269
<b>CF</b>	-0.01171	-0.00484	1	-0.06936	0.023957	0.179958	0.026514	0.0063	-0.03197	0.010413
<b>FCOST</b>	-0.05241	0.028559	-0.06936	1	0.006169	-0.02111	-0.01916	-0.01228	-0.02412	0.220999
<b>GDP</b>	-0.00219	0.143338	0.023957	0.006169	1	0.003358	-0.05946	0.094025	0.033737	-0.02455
<b>GPROF</b>	0.007025	-0.00564	0.179958	-0.02111	0.003358	1	0.063878	0.241421	-0.23147	0.018289
<b>GROWTH</b>	-0.04715	0.004396	0.026514	-0.01916	-0.05946	0.063878	1	0.054996	-0.03489	0.097951
<b>INT</b>	0.002058	-0.12369	-0.00654	0.004178	-0.82222	0.000207	0.067321	-0.07196	-0.04115	0.059191
<b>SIZE</b>	0.054774	-0.01496	0.0063	-0.01228	0.094025	0.241421	0.054996	1	-0.07823	0.101276
<b>STF</b>	0.185958	0.031108	-0.03197	-0.02412	0.033737	-0.23147	-0.03489	-0.07823	1	-0.14654
<b>TURN</b>	-0.10639	0.1269	0.010413	0.220999	-0.02455	0.018289	0.097951	0.101276	-0.14654	1

Word “Correlation” is actually has been divided in two segments. First segment is “CO” which means “correct and among” while the second segment is “relation” which shows “relatedness among the variables or things”. Correlation Matrix illustrates the relation between independent and dependent variables. Correlation measure the relation between two or more than two variables. Correlation values can be negative or positive. Values, shown in diagonal form in the correlation matrix table express perfect relation with itself. One of the major functions of correlation matrix is to ensure the presence or absence of multicollinearity issue in the data.

Problem of ‘multicollinearity’ occurs when the relation between two or more independent predictors (variables) exceeds or become equals to the limit of 0.90. Multicollinearity is also referred to as Collinearity. Cut-off values for multicollinearity are less than 0.80 or 0.90.

Such values are usually checked by various researchers for checking the issue of multicollinearity in the data. So the values of correlation matrix must be  $<0.80$  or  $<0.90$ , otherwise there is a problem of multicollinearity in the data.

According to the values present in the above Correlation Matrix Table, it is clear that there is no multicollinearity of colinearity issue in the data. Data of the current study is completely free from the issue of multicollinearity. This shows that all the correlation coefficient values of correlation matrix are less than the cut-off value of multicollinearity which is  $<0.90$ . Hausman test helps which model we use random effect model or fixed effect model if its value is less than 5% so we use fixed effect model.

**Table no.3**

**FIXED EFFECT MODEL**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	-0.038069	0.018867	-2.017728	0.0437
CF	0.002059	0.002643	0.778910	0.4361
FCOST	-0.014168	0.006707	-2.112501	0.0348
GDP	0.001351	0.002735	0.493862	0.6215
GPROF	-0.036525	0.011329	-3.224118	0.0013
GROWTH	-0.007241	0.001869	-3.873617	0.0001
INT	0.000957	0.001711	0.559304	0.5760
SIZE	0.011344	0.003060	3.706698	0.0002
STF	0.003082	0.001292	2.385788	0.0171
TURN	-0.008502	0.002422	-3.510055	0.0005
C	-0.003266	0.093009	-0.035114	0.9720

Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.674241
Adjusted R-squared	0.632035
F-statistic	15.97482
Prob (F-statistic)	0.000000

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The process of multivariate Regression Analysis has been used through Fixed Effect Model in the E-views7 Software over (282) Pakistani firms. The results are as under.

Most interesting thing of the regression table is F-statistic and corresponding probability or (p-value). F-statistic tells that whether independent variables (IVs') jointly affect the dependent variables (DV) or not.

In the above table, F-Statistic value is 15.97482 and corresponding probability (P-value) is 0.0000. This means that P-value is less 0.05 and thus it is significant because if P-value is <5% or <0.05 then it means it is significant. But if P value is >5% or >0.05 then it is not significant. Thus, in the regression table the Probability (P-value) of seven variables (out of four) is <0.05 or <5% which means that they are significant while three variable is insignificant which means that the P-value of that variable is more than 5% (>5% or >0.05). In the current study, SIZE, AGE, STF, FCOST, TURN, GROWTH and GPROF are significant while CF, GDP and INT are insignificant. So, Independent Variables, SIZE, AGE, STF, FCOST, TURN, GROWTH and GPROF jointly can influence the Dependent Variable which is "Account Receivable".

The next process is about the table which is "R-squared". R-squared is also referred to Coefficient of Determination and it is denoted by  $R^2$ . It also highlights the accuracy of the model. The calculation towards coefficient is between 0 and 1.

$R^2$  highlights the actual percentage about the independent variables in dependent variables. The general rule of thumb for R-squared is that the value of  $R^2$  lies in between 0.50 to 0.90.

According to the above regression analysis table, the value of R-squared is 0.674241 or 67.4241%. This value shows that 67.4241% of variation is explained by all ten independent variables (AGE, SIZE, STF, FCOST, CF, TURN, GPROF, GROWTH, GDP and INT) in the dependent variable (Account Receivable). In other words, independent variables are explaining the dependent variable at the value of 67.42%.

The important process in the research in Table is about the Coefficient values and their respective P-values. It shows the magnitude/direction of relationship between independent variables and dependent variable. It also known as Regression Coefficient.

### **AGE**

The relationship between AGE and Account Receivable is negative.

If there will be one unit increase in age, then Account Receivable will also decrease to - 0.038069.

The P-value of Age is 0.0437 which is less than 5% or <0.05 significant level. This shows that Size has significant contribution towards Account receivable.

### **SIZE**

The relationship between SIZE and Account Receivable is positive.

If there will be one unit increase in SIZE, then Account Receivable will also increase 0.011344.

The P-value of SIZE is 0.0002 which is less than 5% or <0.05 significant level. This shows that Size has significant contribution towards Account receivable.

### **FCOST**

The relationship between FCOST and Account Receivable is Negative.

If there will be one unit increase in FCOST, then Account Receivable will also decrease - 0.014168.

The P-value of FCOST is 0.0348 which is less than 5% or <0.05 significant level. This shows that FCOST has significant contribution towards Account receivable.

## **STF**

The relationship between STF and Account Receivable is positive.

If there will be one unit increase in STF, then Account Receivable will also increase 0.003082.

The P-value of STF is 0.0171 which is less than 5% or  $<0.05$  significant level. This shows that STF has significant contribution towards Account receivable.

## **CF**

The relationship between CF and Account Receivable is positive.

If there will be one unit increase in CF, then Account Receivable will also increase 0.002059..

The P-value of CF is 0.4361 which is more than 5% or  $<0.05$  significant level. This shows that CF has insignificant contribution towards Account receivable.

## **TURN**

The relationship between TURN and Account Receivable is Negative.

If there will be one unit increase in TURN, then Account Receivable will also decrease - 0.008502.

The P-value of TURN is 0.0005 which is less than 5% or  $<0.05$  significant level. This shows that TURN has significant contribution towards Account receivable.

## **GROWTH**

The relationship between sales growth and Account Receivable is Negative.

If there will be one unit increase in sales growth, then Account Receivable will also decrease -0.007241.

The P-value of Growth is 0.0001 which is less than 5% or  $<0.05$  significant level. This shows that GRWOTH has significant contribution towards Account receivable.

## **GPROF**

The relationship between GPROF and Account Receivable is Negative.

If there will be one unit increase in GPROF, then Account Receivable will also decrease - 0.036525.

The P-value of GPROF is 0.0013 which is less than 5% or  $<0.05$  significant level. This shows that GPROF has significant contribution towards Account receivable.

## **GDP**

The relationship between GDP and Account Receivable is positive.

If there will be one unit increase in GDP, then Account Receivable will also increase 0.001351.

The P-value of GDP is 0.6215 which is more than 5% or  $>0.05$  significant level. This shows that GDP has insignificant contribution towards Account receivable.

## **INT**

The relationship between INT and Account Receivable is positive.

If there will be one unit increase in INT, then Account Receivable will also increase 0.000957.

The P-value of INT is 0.5760 which is more than 5% or  $>0.05$  significant level. This shows that INT has insignificant contribution towards Account receivable.

## **CHAPTER 5**

### **5. Conclusion/Discussion/Recommendations**

#### **5.1 Overview**

The last portion of the study is regarded as the conclusion. It highlights and discuss the results of the analysis in this chapter by having proof through previous studies.

#### **5.2 Discussion of result**

According to regression analysis results, there is negative relationship between age of firm and account receivable of the firms. It means that if the firm's AGE will increase, the Account receivable of the firm will decrease and if the firm's AGE will decrease the Account receivable of the firm will increase .We find out that firm age has a negative relationship with accounts receivable at significant level. It is explained that young firms take accounts receivable as a marketing strategy to increase sales. Therefore, young firms have higher accounts receivable compared with old ones. The relationship between firm size and accounts receivable is similar to that found with firm age. This demonstrates that large firms grant less trade credit to their customers compared with small ones. It is considered that small firms would like to increase sales by offering trade credit, especially in market with fierce competition. These results are consistent with the results of the study done by Niskanen & Niskanen (2006) and Rodriguez-Rodriguez (2006) suggest older firms would use less trade credit than smaller and younger firms because of relatively smaller investment opportunities.

According to regression analysis results, there is positive relationship between SIZE of firm and account receivable of the firms. It means that if the firm's SIZE will increase, the Account receivable of the firm will also increase and if the firm's SIZE will decrease, the Account receivable of the firm will decrease. First, firm size is seen to be influencing factor to the accounts receivable. We found a positive and significant relationship between size and trade credit granted. Thus, larger firms provide finance to their customers more as compared to firm whose size is small. It is easier for large firms to get access to financial source from banks than small firms because they have large assets. However although our findings confirm (Garcia-Teruel, P. J., &Martinez-Solano, P. 2010) and Petersen and Rajan's (1997)



results for the US market and Chengke Zhu,& Ting Yang,(2016), they do not support the position taken by Long et al. (1993) with regards the trade credit granted to customers and the quality of the products sold.

According to regression analysis results, there is positive relationship between STF of firm and account receivable of the firms. It means that if the firm's STF will increase, the Account receivable of the firm will also increase and if the firm's STF will decrease, the Account receivable of the firm will decrease. The results also confirm that the availability of short-term finance (STF) is positive and statistically significant at a conventional level. Thus, access to bank credit may increase the firm's capability to afford trade credit. Hence, firms may play a financial intermediary role between banks and customers, as suggested by the financing motives theory (Schwartz 1974; Emery 1984; Smith 1987). The results also indicate the effect of the banking system on firm's ability to finance their investment as suggested by Bond et al, (2003). The impact of availability of short term bank loan is consistent with findings of Garcia- Teruel and Martinez-Solano (2010a), Niskanen and Niskanen (2006),Chengke Zhu,& Ting Yang,(2016)and Abuhommous, A.,& Mashoka, T.(2017).

As far as the results of the investigation relationship towards FCOST and Account receivable is concerned. It resulted in the form of negative relation. According to the negative relation it depends towards the direct relationship with each other if finance cost increases as compared to account receivable decrease and so on. It has been expected that the less trade credit will effect by having the process of high financial costs. Therefore, it is said customers are not having much interest towards the level of credit during this time period. Because these firms are trying to reduce their expenses. But it will not affect its account receivable. These all have been mentioned clearly by Abuhommous, A., & Mashoka, T.(2017) and Garcí'a- Teruel and Martí'nez-Solano (2010a). These scholars has researched upon trade credit very effectively.

In this research results shows that sales growth and account receivable are positively related with each other and significant. Negative relation shows that if sales growth decrease than investment in account receivable is increase and if sales growth increase than account receivable level is decrease. Their relation significance shows sales growth influence on account receivable. Firms with less growth in sales grant more financing to their customers .This could be interpreted as meaning that firms use trade credit in an attempt to stimulate

sales. Emery (1987) suggests that when a firm's sales are cyclical or are subject to fluctuations they can use trade credit to incentivize their customers to acquire merchandise in periods of low demand. By relaxing the credit terms, sellers can reduce the storage costs of the excess inventories that would accumulate if they kept production constant. This also allows firms to avoid the costs of changing their production levels. This is supported by Long et al. (1993), who found that firms with variable demand granted a longer trade credit period than firms with stable demand our result consistent with Garcia-Teruel and Martinez-Solano (2010b).

There is a positive but insignificant relationship towards the cash flow or internal financing and account receivables. Owing to positive results we interpreted that a firm whose internal financing generating capacity is more will grant more trade credit to their customer but its insignificance level shows less influence of this variable on account receivable results consistent with Niskanen and Niskanen (2006).

In results TURN variable is over the negative side but a significant relation between product quality and account receivable exist. A firm with a low level of sales turnover offer more account receivables. This variable shows the quality of the product its mean the firm's product has good quality grant more trade credit. TURN can highlight the progress and importance of the product quality. Lower TURN depicts the best quality system of products because it asserts about the high-quality products towards production cycle. These types of firm which are having good quality products. They ask for better trade credit for the customers. It is process to judge the examine product quality. Therefore, the relation between RECEIV for TURN is negative. Our result is consistent with Garcia-Teruel & Martinez-Solano (2010a) and Long (1993).

The relation between GPROF and account receivable is negative and significant. If profitability increase than an account receivable will be decrease and profitability decrease than account receivable level increase. This sign can be highlighted through the fact towards the distressed companies through the process of negotiation. In this way, they get fast payments from their clients. The results also highlights some important aspects towards the high-profit margin invest which is quite less in accounts receivable. The profit margin may be defined as the process of the profit which can be helpful for the profitable firms. As it does not generate any type of pressure towards the financial constrained customers. The result is according to the studies of Pike et al. (2005). In this particular studies, he has used

survey data and find best product quality and strategy for the extension of trade credit. Our result consistent with Abuhommous, A., & Mashoka, T.(2017) and Delannay, A.-F. and L. Weill (2004).

Finally, it talks about the effecting nature of the economic growth towards the provision of the trade credit. In this regard, the estimated coefficients considered as very good for the variable GDP. The estimated coefficients for the variable GDP are positive and insignificant. This shows that when economic growth is higher, firms finance more sales to their customers. This highlights when economic power generates and firms finance more sales to their customers. Martinez-Solano (2010b) and Niskanen (2006) show positive and significant results. Chengke Zhu, & Ting Yang (2016) show in their investigation negative and significant.

In literature we find positive and significant relation between market interest rate and account receivable. The reason behind this can be the demand for trade credit which can be expected to be high when the cost of alternative capita increases. But in our investigation Variable INT has positive but insignificant relationship with account receivable. its positive signs means if its high than account receivable high and when interest rate low than the level of account receivable decrease. With respect to sign our results consistent with KHAN, M.A (2012) and Niskanen & Niskanen (2006) but in our results insignificance shows that it will not influence on our variable.

## **5.2 Conclusion**

The purpose of the study was to identify the determinants of Account receivable in the non-financial firms of Pakistan enlisted on Pakistan Stock Exchange. Regression results indicated that there is positive and significant relationship between SIZE, STF and account receivable. Independent variable has positive but not significant relation with internal cash flow, GDP and market interest rate but there is negative and significant relationship between AGE, FCOST, TURN, GPROF, GROWTH and Account receivable. Results suggested that Pakistani investors need to review these variables before investing account receivables in the Pakistani non-financial firms because these variables have relationship with the Account receivables.

The findings of this study can help the firm managers to perk up the firm's sale growth by increasing their investment in account receivables for the developing countries i.e. Pakistan that have the problem the market imperfection. Moreover, this can be suitable when small

firms face the constraints of loan from the financial institutions. A supplier may have a closer relationship with a buyer than does a bank, and thus be better able than a bank to monitor its business and make effective credit assessments. Furthermore, and most importantly, supplying trade credit seems to increase sales as more payment options attract more buyers.

A firm's credit policy is directly associated with its sales strategies, and a firm's success seems to be related to its ability to collect and prevent default on investments in accounts receivable. Since the supply of trade credit is tied to both costs and benefits, managers should be concerned about how accounts receivable are managed. By adopting formal accounts receivable management routines in order to achieve or maintain an adequate accounts receivable level, non-financial sector can enhance their growth. However, it must be remembered that accounts manager must also pay attention to inventory and accounts payable.

Given the scarcity of research into trade credit in Pakistan, this study supplements the existing literature on trade credit in several ways. Given the methodological limitations of previous studies, this study uses a more reliable method to identify the impact of credit supply on growth. However, this study, like any other study, is subject to limitations. First, the current study sample includes just cement sector. In view of the differences found between sectors, it would be of interest to investigate other industry sectors, extending the current study by examining a larger sample including different firms and sectors. Second, this study focuses exclusively on the influence of investments in accounts receivable on growth. Future studies could productively investigate the relationship between investments in accounts receivable and other performance variables. Third, while the current study's emphasis is on the supply side of trade credit, it would be interesting to examine the demand side as well.

The study provides the valuable recommendations for the firm managers by increasing their investment in trade credit and to enhance their sale growth & profitability, especially for financially unconstrained firms, the firms that have capricious demand, and also for those firms with larger market share.

## 5.4 Recommendations

Following suggestions are considered as the analyzing aspects for the determinants of the Non-financial firms enlisted on Pakistan Stock Exchange is concerned.

1. The current study can be extended to cover the longer time periods and by adding more firms and more financial determinants such as, cash holding, inventory or stock, industry and demand of trade credit
2. Relationship between account receivable and factors that influencing in Pakistani context can also be determined because it has been seen in many foreign studies that account receivables plays an important role in influencing the sales of company. Further, a comparative analysis can also be done among different sectors by considering the determinants of this study to analyze the impact of these variables in different sectors.
3. Moreover, scholars should consider this should be applied on startup business and small and medium enterprises.
4. A comparative analysis should also be done between financial and non-financial sector with the variables of this study to identify the impact of these variables in these sectors.
5. Researchers should analyze the impact of these variables in each Pakistani manufacturing industry as individually. This study will give a clearer picture about how these selected variables are impacting the different industry in each Pakistani industry.
6. The study provides the valuable recommendations for the firm managers by increasing their investment in trade credit and to enhance their sale growth & profitability, especially for financially unconstrained firms, the firms that have capricious demand, and also for those firms with larger market share.

## **5.5 Limitations**

This research is about know about the study is carried out by having few variables, whereas three variables can be considered as not in the part of the study. So in this way, it provides great importance for the dependent variable such cash holding, inventory, and industry. While research is about the stress over the supply side of trade credit, which would be helpful for the research. The data was collected through difficult process by different types companies' websites. All these resources proved to be helpful for the data and research.

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