

# Does Islamic Label Indicate Higher use of Trade Credit? Evidence from Sharī‘ah Compliant Non-financial Firms in Pakistan

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## Abstract

This study attempts to investigate the behavior of non-financial Islamic label firms towards usage of trade credit. In line with the previous literature, it is hypothesized that Islamic label “Sharī‘ah Compliant” indicates higher use of trade credit by such firms, both demand and supply of trade credit. It is also hypothesized that trade credit is substitute of bank loan. The results are based on 338 non-financial firms listed on Pakistan Stock Exchange for 2008 to 2016 observation period. These include non-financial firms from all sectors. The study used random Generalized Method of Moment (GMM) estimation technique to explore the relationship of Islamic label and usage of trade credit as it is the most powerful method when sample size is large. The study found that Islamic label firms use more trade credit, as compared to conventional firms that have more access to bank loan. This study also found that firms with Islamic label prefer trade credit over the bank credit. The result of this study proves all stated hypotheses.

**Keywords:** Islamic label, trade credit, GMM, Sharī‘ah compliance.

**KAUJIE Classification:** H23, Q2

**JEL Classification:** G11, H81, Z12

## 1. Introduction

Trade credit is an external source of fund in corporate finance for a short time period. Brennan et al. (1988) defined the term trade credit as “an arrangement to buy goods or services on account, that is, without making immediate cash payment”. Firms use trade credit in two perspectives; firstly, accounts receivable are generated when funds are provided to customers in rendering goods or services to them on account. Secondly, accounts payable are generated when suppliers provide funds by providing goods or services on account. From the perspectives of accounts payable and account receivables, firms determine their trade credit policy.

Trade credit (TC) plays a significant role for firm financing & investment and thus it flows like supply and demand channel from one to another (Carvalho, and Schiozer, 2015). Trade credit is also considered as an alternative of bank credit when there are financial crises in

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an economy (Love, Preve, and Sarria-Allende, 2007). When there is a time span between supply of goods and payments for goods, then trade credit takes place. According to Paul and Guermat (2008), trade credit is one of important financial instruments for the business; however, sometimes the researchers neglect it.

Alphonse et al. (2003) found that trade credit increases when there is a shortfall in banks debt. The study further refers that firms or individuals having low access to banks or low availability of banks financing, use trade credits. The study by Schwartz (1974) analysed that trade credit had also an impact on money control. However, here a question may arise that, why do suppliers issue trade credit, whereas banks do not do so? The answer is that the suppliers have monetary advantages. Jain (2001) argues by answering the common question that trade credit by suppliers plays a role of financial intermediary between supplier(s) and borrower(s) and has advantages for both. The study further suggested that banks and suppliers both need evaluation and information about their customers to supply credit, whereas it is convenient for suppliers when compared with banks. Banks may have to get such information at a higher cost, while it is cheaper for suppliers because of long term relationship (Burkart and Ellingsen, 2004). The study of Frank and Maksimovic (2004) also determines that trade credit is helpful for both suppliers and the clients purchasing on credit for fulfilling their financing and investing needs, especially when financial market is inefficient.

Islamic firms, like the conventional firm, need external financing for their operations, survival and growth. However, the way of meeting their required financing is quite different from other conventional firm because of many reasons and modes. The use of interest-based funds is prohibited in Islamic perspective because of prohibition of interest according to Shari'ah (Islamic law). Islamic firms use different methods than the conventional firms for getting funds because of prohibition of interest on loan in Shari'ah and the promotion of profit and loss sharing (Ayub, 2007). In this regard, many scholars argue that Islamic label firms use a very low level of debt in their operations. The study of Hayat & Hassan (2017) indicates a very low level of debts on the financial statement of the Islamic label firms. This attribute of debt level on balance sheet differentiates Islamic label firms from conventional firms (Bhatt and Sultan, 2012; Adamsson et al., 2014). Of course, with a low level of debts, Islamic label firms may use high level of trade credits to meet their operational needs.

This empirical study explores the relationship between Islamic label 'Shari'ah compliant firms' and the behavior of non-financial sector firms towards higher use of trade credit. In this study, both the supply and demand of trade credit have been analyzed. Trade credit demand has been measured by account payable, while the trade credit supply by account receivable on sales, taking as proxy. The study also provides evidence of trade credit as substitute of bank loan in non-financial sector in Pakistan. By using GMM technique, it is found that the firms with Islamic label 'Shari'ah compliant firms' have significant impact on trade credit, that prefer trade credit over the bank credit or "conventional debt".

## **2. LITRATUREREVIEW**

### **2.1 Islamic Label Firms**

Islamic label firms are those firms or companies that are operating according to Islamic finance principles. Islamic finance is a system in which all the operations of any firms have to be according to Islamic laws (Salvi, Miglietta, 2013). Companies following rules and regulation of Shari'ah are called as Shari'ah Complaint. In the modern world, Islamic finance is an emerging segment for finance industry throughout the globe. The major goal of Islamic law is to maintain

justice in the society (Chapra, 2008). According to Sharī'ah, it is not possible to get success and prosperity in the nation without justice, and the prevalence of interest in the global finance is a big hurdle in doing justice with different groups and stakeholders in the societies (Ayub, 2007).

Some obligations implied by Sharī'ah on Muslims in the business activities are to be just, fair, honest and truthful towards other. According to the study by Wilner (2000), Muslims are obliged to be honest, just and fair in their all of business activities towards other. The businesses that may inflict harm to the society are strictly prohibited for the Muslims and the firms that claim to be Sharī'ah compliant. The major objective of Sharī'ah is to establish friendly relations in all economic and financial activities among stakeholders (Rethel, 2011).

The Holy Qur'ān and the sayings of the Holy prophet laid the foundation of social and just economic system. Some basic actions and activities that are forbidden according to Islamic law, as indicated by Islamic scholars from all school of thoughts are highlighted here. The most important is *ribā* as also including 'interest' that is strictly forbidden by Sharī'ah in business or non-business activities (Ayub, 2002). Along with *ribā*, excessive *gharar* (where the subject matter, the price, delivery to be made and outcome are uncertain), gambling or *maysir* and dealing in *ḥarām* products are strictly forbidden according to Sharī'ah. Investing in unethical business that is harmful for the society like alcohol, pornography and gambling is also strictly prohibited. However, Islamic law encourages investment in trade, but it should refrain from *ḥarām* products. The investments should not be risk free to earn interest income, and there must be a stake of equity in it.

The principles relating to Islamic finance have been discussed in numerous studies. Around the globe, Muslims and non-Muslim researchers analyzed these principles of Islamic finance and the model of Islamic businesses (Iqbal 2005). However, there are few or negligible studies focusing on corporate finance based on Islamic finance (Brealey, and Myers 2014). Basically, Islamic finance indicates some activities that cannot be done in the business because the same are not allowed and lawful according to Sharī'ah (Biancone 2012). The basic aim of Islamic finance as well as Sharī'ah is to encourage those activities, which could benefit the society and do not inflict any harm to the general public.

## **2.2 Trade credit**

Trade credit is the oldest type of financing accessible for the buyers by the suppliers / sellers (Emery, 1987). Trade credit suppliers have direct advantages over other financiers. One such advantage is that suppliers are in a direct contact to their clients or buyers and can easily evaluate and monitor credit worthiness of their clients. Besides, suppliers have a fast and effective way of liquidating their assets in trade credit than other institutional financiers.

According to Wilner (2000), the purpose of trade credit evidently shows liquidity motives for buyers and suppliers. Evans (2000) states that trade credit offered by suppliers are more profitable for supplier even in financial distress. Suppliers grant more concessions to buyers when there is distress in financial market and thus it should be marked as advantages for buyers as well. The findings of Petersen and Rajan (1997) and Evan (2000) further propose that seller opportunism also exists in trade credit, whereas buyers are dependent on suppliers (trade creditors). In the perspective of liquidity theory, a buyer's opportunism was firstly note by Peterson and Rajan (1997).

Trade credits have a cost advantage for both supplier and buyers, but may cause a problem of product quality for buyers. Smith (1987) highlighted that trade credit could be

maintained in firms only if they maintain the quality of the products. On the other hand, some studies have indicated that trade credits were more in those firms where quality of products was low. For example, Lee and Stowe (1993) and Deloof and Jegers (1996) studied trade credit, and found that the sellers in trade credit passed on low quality goods on high cost. According to Long Malitz & Ravid (1993) and Wei & Zee (1997), large firms sell products of low quality on trade credit as compared to small firm because small firms are more careful about their reputations. These studies further suggest that in trade credit many industries provide less about quality of the products.

Udell and Fernandez (2016) also studied relation of trade credit and bank credit and indicated that trade credit served as an alternative of bank credit for small businesses that face difficulties in availing finance from banks. Mc Guinness (2018) studied relationship between trade credit and financial distress and concluded that trade credit could be a source of alternative credit channel when banks loans are restricted. According to his study, trade credit availability reduces firms' financial distress by 21% on average for small and medium enterprises. Rabel A. Cole (2018) also studied credit usage of European firms. His interesting study relates to small firms. He found that 20% firms did not use credit at all, 20% firms used only trade credit, 20% used only bank credit, while remaining 40% used both trade credit and bank credit.

### **2.3 Islamic label and Trade Credit**

The link between Islamic finance and trade credit has not been explained by the literature, but trade credit is strongly linked to many business operations. As according to Jensen (1986), trade credit was to be considered as the main source of external financing for the firms. In finance, there is only one alternate for debt and that is trade credit. According to many empirical evidences of the studies, trade credit is an alternative of debt and a good source of financing for the firm's business operations. As the firms with Islamic label cannot borrow on interest, they have to get trade credit for their working capital needs. On the basis of above literature and past studies, following hypothesis are developed:

*Hypothesis 1: Islamic label firms have high level of trade credit demand.*

*Hypothesis 2: Islamic label firms have high level of trade credit supply.*

## **3 DATA & METHODOLOGY**

### **3.1 Data description and sample:**

The sample has been taken from PSX – from all non-financial companies listed in Pakistan Stock Exchange. The sample size consists of 338 firms and the period of observation involved 2008 to 2016. In this study, various industries in non-financial sector were kept in focus during sampling; such as oil & gas, steel industry, refinery industry, textile, telecommunication and cement industries.

### **3.2 Measurement of Variables**

For capturing the effect of trade credit demand and supply, accounts receivable and accounts payable both have been used. Trade credit demand (TCD) has been measured as accounts payable to debt, whereas trade credit supply (TCS) is measured as account receivable to sales ratio. The independent variable is Islamic label (ISL) captured by dummy variable that takes the value of 1 if the firm is Shari'ah compliant, or otherwise 0. The firms chosen as Shari'ah

compliant are those, which were listed as Sharī‘ah compliant at that point of time when data was collected.

To investigate the relationship of Islamic label and trade credit, some company-specific variables have been used as control variables, which are derived from the previous literature. Control variables consist of firm size, leverage, sales growth, profitability, inventory, liquidity and FIX (fixed assets).

Firm size has been measured as natural log of assets; Leverage (LEV) is measured as debt to equity ratio; Sales growth (SG) is the ratio of current year sales minus previous year sales divided by previous year sales. Profitability (PROF) is the ratio of Earning before interest and taxes (EBIT) to total assets. Inventory (INVT) is measured as inventory to sales ratio. Liquidity (LIQ) is measured as cash to total assets. FIX is the ratio of fixed assets to total assets.

### 3.3 Model specification:

The econometric technique that considers the unobserved impact changing the factors into first difference and uses the generalized method of moments (GMM) to deal with endogeneity issues. The following equations have been used in the study to measure the impact of Islamic label on trade credit.

$$TCD_{i,t} = \beta_0 + \beta_1 TCD_{i,t-1} + \beta_2 ISL_i + \beta_3 SG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 INV_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 LEV_{i,t} + \beta_8 LIQ_{i,t} + \beta_9 FIX_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$TCS_{i,t} = \beta_0 + \beta_1 TCS_{i,t-1} + \beta_2 ISL_i + \beta_3 SG_{i,t} + \beta_4 PROF_{i,t} + \beta_5 INV_{i,t} + \beta_6 SIZE_{i,t} + \beta_7 LEV_{i,t} + \beta_8 LIQ_{i,t} + \beta_9 FIX_{i,t} + \varepsilon_{i,t} \quad (2)$$

An interaction between LEVERAGE and ISLAMIC dummy is used in equation (3) and (4) to study how Islamic label affects firms' use of trade credit by influencing the availability of bank credit.

$$TCD_{i,t} = \beta_0 + \beta_1 TCD_{i,t-1} + \beta_2 ISL_i + \beta_3 LEV_{i,t} + \beta_4 ISL * LEV_{i,t} + \beta_5 PROF_{i,t} + \beta_6 INV_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 SG_{i,t} + \beta_9 LIQ_{i,t} + \beta_{10} FIX_{i,t} + \varepsilon_{i,t} \quad (3)$$

$$TCS_{i,t} = \beta_0 + \beta_1 TCS_{i,t-1} + \beta_2 ISL_i + \beta_3 LEV_{i,t} + \beta_4 ISL * LEV_{i,t} + \beta_5 PROF_{i,t} + \beta_6 INV_{i,t} + \beta_7 SIZE_{i,t} + \beta_8 SG_{i,t} + \beta_9 LIQ_{i,t} + \beta_{10} FIX_{i,t} + \varepsilon_{i,t} \quad (4)$$

## RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

The results of descriptive analysis of all variables for Islamic label firms and conventional firms are reported in table Table1 and 2 respectively.

**Table 1**  
**Descriptive statistics**  
**Islamic label firms and trade credit**

	<b>TCS</b>	<b>TCD</b>	<b>LEV</b>	<b>FIX</b>	<b>INVT</b>	<b>SG</b>	<b>PROF</b>	<b>LIQ</b>
<b>Mean</b>	0.1111	0.4111	1.4362	0.6922	0.1635	0.1504	0.1127	0.0567
<b>Median</b>	0.0734	0.3482	1.1017	0.6565	0.1434	0.1115	0.1041	0.0209
<b>Maximum</b>	1.1044	1.2049	9.3840	1.9404	1.6189	6.5415	0.6198	0.5759
<b>Minimum</b>	0.0005	0.0203	-6.7808	0.0532	0.0008	-0.7979	-0.2036	0.0002
<b>Std. Dev.</b>	0.1287	0.2657	1.4535	0.3449	0.1436	0.4486	0.1005	0.0874

**Table 2**  
**Descriptive statistics**  
**Conventional firms and trade credit**

	<b>TCS</b>	<b>TCD</b>	<b>LEV</b>	<b>FIX</b>	<b>INVT</b>	<b>SG</b>	<b>PROF</b>	<b>LIQ</b>
<b>Mean</b>	0.1096	0.1161	1.7668	0.1849	0.0292	0.0868	0.2136	0.7626
<b>Median</b>	0.0752	0.0646	1.4911	0.1058	0.0100	0.0773	0.1978	0.7467
<b>Maximum</b>	0.7524	2.9663	12.2266	8.1849	0.5806	1.4334	0.7228	3.4419
<b>Minimum</b>	0.0000	0.0000	-14.5377	0.0008	0.0001	-1.0931	0.0002	0.0054
<b>Std. Dev.</b>	0.1160	0.1916	2.3097	0.3582	0.0529	0.1278	0.1355	0.3546

Tables 1 and 2 show the statistical summary of all variables included in this study. The sample mean value of trade credit supply for Shari'ah compliant firms is measured by accounts receivable to sales, which shows that accounts receivables to sale ratio is about 11.11%, while for conventional firms it is 10.96%. The mean value of trade credit demand indicates accounts payable to debt ratio of about 41.11% for Shari'ah compliant firms and 11.61% for conventional firms.

The average ratio of leverage (lev) is 1.44 for Shari'ah compliant firms and 1.77 for conventional firms. The sample value of fixed assets to total assets is about 69.11% with a 34.49% standard deviation for Shari'ah firms and 18.49% with 35.82% for conventional firms. The average inventory rate (INVT) is 16.35% with standard deviation of 14.36% for Shari'ah firms and 2.92% for conventional firms with standard deviation of 5.29%. The average sales growth rate for Islamic firms is 15.04% and standard deviation 44.86% while mean value for conventional firms is 8.68% with SD of 12.78%. Profitability rate of Islamic firms is 10% while for conventional firms it is 13.55%.

#### 4.2: CORRELATION MATRIX AND MULTICOLLINEARITY

**Table 3**  
**Correlations among Variable**

	<b>TCD</b>	<b>TCS</b>	<b>LEV</b>	<b>LIQ</b>	<b>SG</b>	<b>INVT</b>	<b>PROF</b>	<b>FIX</b>
<b>TCD</b>	1							
<b>TCS</b>	0.2544**	1						
<b>LEV</b>	-0.1136*	0.0656*	1					
<b>LIQ</b>	-0.475**	0.1279*	0.0708*	1				
<b>SG</b>	0.0186	-0.0129	-0.0312	0.1349*	1			
<b>INVT</b>	0.1398**	-0.148*	0.0512	-0.0821	-0.0722	1		
<b>PROF</b>	0.2026**	0.0645*	0.0127	0.1768*	0.1058*	0.3569**	1	
<b>FIX</b>	0.2868**	-0.051*	-0.0512	0.59***	0.0150	-0.0698*	0.412**	1

\* 10% significance level, \*\*5% significance level, \*\*\* 1% significance level

Table 3 comprises a correlation analysis of all variables used in this study. The trade credit demand is positively correlated among TCS, SG, INVT and FIX, and negatively correlated with LEV, LIQ and PROF. Trade credit supply is also negatively correlated with LIQ, PROF, SG, and FIX. All other variables are in satisfactory correlation with each other.

#### 4.3 ISLAMIC LABEL AND TRADE CREDIT DEMAND

**Table 4**

**Islamic Label & Trade Credit Demand  
GMM**

<b>Dependent Variable: TCD</b>				
Method: Panel GMM EGLS (Cross-section random effects)				
Total panel (unbalanced) observations: 2209				
Instrument specification: C TCD(-1) LEV LEV(-1) FIX(-1) SIZE(-1) LIQ(-1)PROF(-1) SG(-1)				
<b>Variables</b>	<b>Co-efficient</b>	<b>Stranded-Error</b>	<b>t-Stat</b>	<b>Prob</b>
C	0.051895	0.016825	3.084394	0.0021
ISL	0.069272	0.021277	3.255701	0.0011
TCD(-1)	0.786956	0.027764	28.34428	0.0000
LEV	-0.00259	0.001236	-2.09595	0.0362
FIX	-0.06294	0.018591	-3.38556	0.0007
LIQ	0.120243	0.054808	2.193906	0.0283
SIZE	0.000909	0.001655	0.549242	0.5829
R-squared	0.773979	Instrument rank	9	
Adjusted R-squared	0.773364	J-statistic	1.960838	
Durbin-Watson stat	1.996661	Prob(J-statistic)	0.375154	

Table 4 explains the relationship between Islamic label and trade credit demand. In this model, leverage (LEV), FIX and liquidity (LIQ) are the control variable. The result of Islamic label shows positive and significant impact on trade credit demand at the level of (P-value  $\leq$  0.05) with coefficient value ( $\beta = 0.069272$ ). So, this analysis supports first hypothesis and proves that Islamic label firms tend to rely more on trade credit demand rather than conventional credit (interest-based loan).

The firms' specific variable leverage was found negatively related with TCD and statistically significant, indicating that Islamic firms demand more credit as they avoid interest based debt (Hayat, and Hassan, 2017). These financial screens create a sub-set of low debt firms with possibly diverse factor than their conventional counterparts (e.g. Bhatt and Sultan, 2012).

FIX and Liquidity have been found significantly related with trade credit demand with beta of -0.06294 and 0.120243 respectively.

#### 4.4 ISLAMIC LABEL AND TRADE CREDIT SUPPLY

**Table 5**  
**Islamic Label & Trade Credit Supply**  
**GMM**

Dependent Variable: TCS				
Method: Panel GMM EGLS (Cross-section random effects)				
Total panel (unbalanced) observations: 2125				
Instrument specification: C TCS(-1) LEV LEV(-1) LIQ(-1) SG(-1) INTSALES(-1) PROF(-1) FIX(-1)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.006615	0.013615	0.485848	0.6271
TCS(-1)	0.913474	0.014599	62.57149	0.0000
ISL	0.038906	0.014794	2.629825	0.0086
LEV	0.002198	0.00063	3.487712	0.0005
SG	-0.18898	0.058809	-3.21335	0.0013
INVT	-0.05778	0.029737	-1.94314	0.0521
PROF	0.082625	0.038888	2.124712	0.0337
FIX	0.003245	0.012339	0.262965	0.7926
R-squared	0.693031	Instrument rank	9	
Adjusted R-squared	0.692016	J-statistic	0.264812	
Durbin-Watson stat	2.113207	Prob (J-statistic)	0.606833	

Table 5 shows that Islamic label is positively and significantly related with trade credit supply at the level of ( $p \leq 0.05$ ) with coefficient value of  $\beta = 0.038906$ . This explains the impact of Islamic finance on accounts receivable, in a way that Islamic firms use trade credit channel as

compared to conventional firms. This analysis supports the second hypothesis and proves that firms with Islamic label (Sharī'ah compliance firms) tend to be relying more on trade credit supply rather than conventional credit (interest-based loan).

The firms' specific factors sale growth and inventories are found negatively and statically significant with trade credit supply, while leverage and profitability have positive and significant impact on trade credit supply. On the other hand, FIX is found to have insignificant effect on trade credit supply.

#### 4.5 ISLAMIC LABEL\*LEVERAGE AND TRADE CREDIT DEMAND

**Table 6**

##### **Moderating effect of Islamic Label on Trade Credit Demand**

##### **GMM**

<b>Dependent Variable: TCD</b>				
Method: Panel GMM EGLS (Cross-section random effects)				
Total panel (unbalanced) observations: 2185				
Instrument specification C TCD2(-1) LEV LEV(-1) FIX(-1) PROF(-1) LIQ(-1) SIZE(-1) SG(-1)				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	0.123957	0.032399	3.825902	0.0001
TCD2(-1)	0.701183	0.044086	15.90482	0.0000
ISL	0.197355	0.057636	3.424176	0.0006
LEV	0.015468	0.009391	1.647102	0.0997
ISL*LEV	-0.08749	0.04317	-2.02662	0.0428
FIX	-0.16676	0.039467	-4.22537	0.0000
PROF	-0.2021	0.120608	-1.67566	0.0939
SG	0.216261	0.13408	1.612927	0.1069
R-squared	0.561127	Instrument rank	9	
Adjusted R-squared	0.559716	J-statistic	2.587439	

Durbin-Watson stat	1.772279	Prob(J-statistic)	0.107714	
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The second keen interest of this study is to check the combined effect of Islamic label and leverage so that effect of Islamic label can be examined on firms' use of trade credit in the presence of availability of debt. For this purpose, an interaction between Islamic label firm dummy and leverage have been analysed.

The result of Islamic label and leverage interaction has been found statistically significant at level of ( $p \leq 0.05$ ) as the value of coefficient ( $\beta = -0.08749$ ) show inverse relationship between Islamic label dummy and leverage interaction with trade credit demand. This finding is consistent with Marc., and Wouter (2010). So, trade credit is a tool of financing in case of unavailability of bank credit (Marc., and Wouter., 2010).

#### 4.6 ISLAMIC LABEL LEVERAGE AND TRADE CREDIT SUPPLY

**Table 7**

##### **Moderating effect of Islamic Label on Trade Credit Supply**

##### **GMM**

Dependent Variable: TCS				
Method: Panel GMM EGLS (Cross-section random effects)				
Total panel (unbalanced) observations: 2157				
Instrument specification TCS(-1) LEV LEV(-1) LIQ(-1) INTSALES(-1)PROF(-1) SG(-1) SIZE(-1)				
<b>Variables</b>	<b>Coefficient,</b>	<b>Stranded Error</b>	<b>T-Statistic</b>	<b>Prob</b>
C	0.004297	0.008105	0.530108	0.5961
TCS(-1)	0.929582	0.021334	43.57323	0.0000
ISL	0.064124	0.038035	1.685925	0.0920
LEV	0.012551	0.005754	2.181328	0.0293
ISL*LEV	-0.05358	0.027044	-1.98134	0.0477
LIQ	0.00682	0.031559	0.216122	0.8289
PROF	-0.07148	0.028913	-2.47228	0.0135

SIZE	0.000144	0.000991	0.145189	0.8846
R-squared	0.625141	Instrument rank	9	
Adjusted R-squared	0.62392	J-statistic	0.743674	
Durbin-Watson stat	1.688833	Prob(J-statistic)	0.388486	

In table 7, Islamic label firms' leverage and Trade Credit supply have been examined. The interaction term is used to check the combined effect of leverage and Shari'ah compliance on trade credit supply. The above table shows that the P value of C is 0.5961, found statically insignificant, it means there is no omitted variable bias. The result of Islamic label and leverage interaction has been found statistically significant at level ( $p \leq 0.05$ ) as the value of coefficient ( $\beta = -0.05358$ ) which shows negative relation between Islamic label dummy and leverage interaction with trade credit supply. Therefore, this study proves that trade credit is substitute of bank credit. Results of the study are in line with the previous researches. According to Meltzer's (1960), trade credit can be substituted with the bank credit. Trade credit is the better option when financing from commercial bank is limited (Burkart and Ellingsen 2002). According to Marotta, 1997; Demirguç, Kunt and Maksimovic, 2001; Nilsen, 2002 trade credit is a good choice for short-term financing and building new customer relation.

The above result also shows the firms specific variable leverage ( $\beta = 0.012551$ ) and (P-value  $\leq 0.05$ ) found positive and significant relationship with trade credit supply. These results are in line with Molina and Preve., 2012 and Seifert., Seifert., and Sieke., 2013. Profitability is found significantly positively related with trade credit supply while liquidity and size are found insignificant.

As there is no virtually existing literature on this domain, this is first empirical study, which proves the positive and significant impact of Islamic label on trade credit, and may be a good sign for encouragement for Islamic banking. In fact, Islamic Banking is growing very fast. Hence, these findings will help to increase attention towards Islamic banking industry. So, this result confirms that Islamic label firms are interested to provide more trade credit to customers.

## CONCLUSION AND RECOMMENDATION

This empirical study explores the relationship between firm with Islamic label and use of trade credit. For this purpose, data of 338 non-financial firms listed on Pakistan Stock Exchange have been collected for analysis from the year 2008 to 2016. In this study both trade credit demand and supply of trade credit have been analyzed; while trade credit demand is measured by accounts payable to debt, for trade credit supply accounts receivable to sale proxy has been used. This study provides evidence of trade credit as substitute of bank loan in non-financial sector of Pakistan.

Moreover, after applying the GMM estimation technique, it is found that Islamic label or 'Sharī'ah compliant firms' have significant impact on trade credit, and also prefer trade credit over bank credit (conventional debt). This is one of the first study that established empirical evidence of higher usage of trade credit in Sharī'ah compliant firms. In addition, this study suggests that Islamic labels firms are significantly associated with both trade credit demand and supply. Furthermore, trade credit is significant source of financing for Sharī'ah compliant firms, as bank loan is not used in a way as conventional firms use it. It is also observed that firms which having higher level of inventory are less interested to promote trade credit, but more interested to collect goods on account from suppliers. As the study highlighted the use of other secondary sources of finance in Islamic label firms, it is suggested, for policy makers, that trade credit is a better substitute for conventional bank lending. Therefore, it is necessary to adopt other secondary sources of finance like trade credit.

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