

TRADE CREDIT FROM AN ETHICAL PERSPECTIVE IN UK¹

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ABSTRACT:

In the last decades the use of trade credit has been extended as a short-term financing, but this indiscriminate use has misleading consequences to suppliers that support the main disadvantages. In this research it has been analysed the use of trade credit in United Kingdom, concretely this paper establish a descriptive situation in Europe and then the situation of UK. The variables size and industry are contrasted through an empirical study made in UK companies of FTSE, and the use of the trade credit is questioned from an ethical perspective.

KEY WORDS:

Trade Credit, supplier payment, ethics in finance

ABSTRACT:

En las últimas décadas el uso del crédito comercial ha incrementado, especialmente como forma de financiación a corto plazo de las empresas, pero el uso indiscriminante del crédito comercial tiene consecuencias perjudiciales para los proveedores que son los que soportan de forma específica las principales desventajas. En esta investigación se analiza el uso del crédito comercial en Reino Unido, concretamente este trabajo establece la situación Europea de forma descriptiva para posteriormente exponer la situación de Reino Unido. Las variables tamaño e industria son contrastadas a través de un estudio empírico utilizando las empresas FTSE de Reino Unido, además el uso del crédito comercial es cuestionado desde una perspectiva ética.

KEY WORDS:

Crédito Comercial, pago a proveedores, ética en finanzas

1. INTRODUCTION.

In spite of its importance, finance figures relatively little in writing on business ethics (Boatright, 2008); and with the intellectual “capture” of finance by financial economics (Whitely, 1986), little consideration is given to ethics within finance literature either (Prindl & Prodhan, 1994). Thus few mainstream financial topics have been analyzed adequately from an ethical perspective, and some have barely been addressed at all. One such latter

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topic is trade credit. The authors are currently engaged in a project which seeks to remedy this deficiency. The paper will draw on that project's preliminary findings.

Trade credit is the provision of goods or services by one company to another in the expectation that payment will be made at some future date. It is a major source of finance for recipient companies (Van Horne & Wachowicz, 2001; Stern & Chew, 2003), while it puts a strain on the resources of suppliers. Although it helps to promote sales and support economic activity, it puts suppliers in a vulnerable position as they wait to discover when they will be paid (if at all), notwithstanding their setting of terms of payment and the underpinning of contract law. For, as finance textbooks (e.g. Ross et al., 2005; Brealey et al., 2006) and conventional commercial wisdom point out, it is (*ceteris paribus*) to the benefit of businesses to delay paying suppliers as long as possible in order to take advantage of a free source of finance. Such practices raise ethical issues. Delay (or, even worse, default) by customers, especially major ones, can have severe, if not financially fatal, consequences for suppliers, with repercussions in turn for their own suppliers and other stakeholders such as employees. Furthermore, such practices might be judged unethical in deontological terms, for reasons of unfairness or failure to keep a promise, for example.

The aim of this paper is to establish the situation of United Kingdom (UK) in the payment to suppliers. There are different aspects; macroeconomics variables (Meltzer, 1960; Brechling & Lipsey, 1963; White, 1964; Nadiri, 1969; Ng et al. 1999) and finance theories (Nadiri, 1969; Emery, 1987; Fisman & Love, 2003) that analyse the influence of the use of trade credit. But, specifically in this paper we have tried to analyse the situation of the use of trade credit in UK to establish an ethical perspective of the use of delay payments in the firms to finance in a short-term.

The main contributions of this paper are two. Firstly, the establishment of the situation of the use of trade credit in UK that previously has never been done from an ethical perspective. Secondly, open a window to the discussion of the consciously use of the trade credit as a free finance source.

The remainder of this paper is organised as follows: the first section provides an overview of previous researches and hypotheses to contrast. The next section describes the data and method. This is followed by the empirical results, a description of European situation and UK firm's situation. This paper concludes with a discussion of the key findings and the bibliographical references.

2. RESEARCH & HYPOTHESES

Several studies try to describe the type of firm that take more credit by their suppliers. The most use variables are size (Meltzer, 1960; Nadiri, 1969; Jaffee, 1971; Schwartz, 1974; Chant & Walker, 1988; Long et al., 1993; Petersen & Rajan, 1994; Gertler & Gilchrist, 1994; Nilse, 2002, Howorth & Reber, 2003) and industry (Nadiri, 1969; Herbst, 1974; Gertler & Gilchrist, 1994; Ng et al., 1999; Marotta, 2005; Huyghebaert, 2006), but other variables as the year season (Herbst, 1974; Emery, 1984), the type of the demand of the firm (Emery, 1984; Schwartz, 1974) or cycle or the life of the firm (Petersen & Rajan, 1994; Wilson & Summers, 2002; Huyghebaert et al., 2007) are used too.

Size

There are different contributions about the size of firms, but in most important finance and accountancy books they explain that short firms use more trade credit than large firms. They say that trade credit is the most use source of funds in a short-term period for small business enterprises (Frank & Scholefield, 1979; Altman, 1986;

Coollier et al., 1988; Brigham, 1992; Weston & Copeland, 1992; Emery & Finnerty, 1997; McMenamin, 1999; Van Horne & Wachowicz, 2001; Harvard Business Essentials, 2002; Stern & Chew, 2003). The principal reason of authors are their advantages, for example, Brigham, (1992) and Weston & Copeland (1992) explain that small firms have more financial problems than large firms when they go to financial entities asking for money, but they can stretch the payment of their supplier without specific restrictions. Emery & Finnerty (1997) agree with this reason, specificity that suppliers are often more liberal in extending credit than financial institutions because they have more financial, commercial and custom information of customers. Arnold (2005) argues that this short-term source is available of all size of firms and his principal advantages are that this short funding is obtained with convenient, cheap and informal structure. Theoretically is reasonable to think that for small firms are easy to borrow funds from their customers because they have more information than financial entities or because they have to know each other to negotiate and establish commercial contracts.

Theoretically, some works concluded that smaller firms tend to rely more on trade credit financing than do larger firms. When there are credit restricts (difference interest rate between different firms and credit rationalized) the small firms use more trade credit than bank credit. Normally, small firms have more problems to obtain funds in capital markets, financial restrictions and costs to obtain external money of banks than large firms (Whited, 1992; Fazzari & Petersen, 1993; Kim et al., 1998). It could be a reason that justifies the analysis of the influence of size in trade credit in different studies. Jaffee (1969) and Schwartz (1974) developed the first trade credit models in which the size variable was considered, but their study was theoretical without any empirical support. Then, other studies using different samples of different countries have corroborated empirically these theoretical conclusions about the influence of the size in the use of trade credit.

In USA the first empirical studies done by Meltzer (1960) and Nadiri (1969) conclude that small firms use more trade credit than large firms or in the same way, large firms give credit to small firms. Agree with the results Long et al. (1993), Petersen & Rajan (1994), Gertler & Gilchrist (1994) and Huyghebaert (2006) establish that smaller and younger firms use more trade credit than the rest. But other authors, as Chant & Walker (1988) using a sample of business of US, questioned these conclusions, saying that although small firms have a big credit demand for short-terms, because money and capital traditional market do not offers good conditions, this correlation between size and use of trade credit can not confirm. Continuing with this idea, Ng et al. (1999) and Nilsen (2002) determinate that their results are not consistent with theories of trade credit that suggests that smallest firms use more trade credit than biggest ones because have liquid problems and financial restrictions, therefore need.

The works carry on in UK argue that the relationship between supplier and customer is most important rather than the relative sizes of firms and the firms size is not a significant variable that determinate the use of trade credit (Pike & Cheng, 2001; Howorth & Reber, 2003), although some small firms prefer to use trade credit and late payment than bank debt as a source of finance, irrespective of the conditions of supply (Howorth, 2001). However, other studies realized in UK firms (Wilson & Summers, 2001) agree with the literature about trade credit, establish that the size of the firm directly impacts on credit, specifically this influence is bigger with young firms or companies which aim is economic grow.

In other countries, although there are less studies the results are similar. Marotta (2005) for Italian manufacturing firms determinate that the relation between size and use of trade credit is poorly significant and Rodriguez

(2006) for Spanish firms say that the results confirm the size effect, by indicating that the smallest firms mostly seek short term finance through suppliers.

Industry

Several papers considerate industry as a variable that influence in the use of trade credit, however; most of them conclude that there is no significant evidence to conclude that different sector influence in a bigger use of trade credit (Nadiri, 1969 and Herbst, 1974 in the manufacturing sector and wood industry respectively, and Petersen & Rajan, 1994; Gertler & Gilchrist, 1994; Ng et al., 1999 and Howorth & Reber, 2003 in a classification of industries).

Ng et al. (1999) study the industry impact in trade credit and they say that there are high variations between different industries but variations are low in intra industry. Moreover, they can not obtain conclusive findings about the correlation between the sector and a high use of trade credit. However, Fisman & Love (2003) that study the influence of the trade credit in several industries and their impact developing and growing of the sector, find that industries that are more dependent on trade credit financing grow relatively more rapidly in countries with less developed financial intermediaries.

Nowadays, the industry variable is use more as a dummy variable than as a determinate variable (Marotta, 2005; Huyghebaert, 2006), used to control but not to explain the effect, in this case in the use of trade credit. In this sense, Marotta (2005) focused his study in Italian manufacture companies and conclude that trade credit terms are rather uniform within and industry and possibly vary only across industries. Huyghebaert (2006), focused his study in the reason of transactional cost and in the use of trade credit of start-ups, concludes that trade credit is more extensively in industries with high turnover rates of raw materials. However, Pike & Cheng (2001) found that when seller operates in the Chemical industry and when there is customer concentration the late payments are less and Rodriguez (2006, p. 119) continuing with the relationship between industry and trade credit conclude that “always in connection with the commerce branch of activity, industrial firms most resort to deferred payment to suppliers”.

In this context, we have established the following hypothesis:

Hypothesis 1: The size of firm has a positive influence in the trade credit days.

Hypothesis 2: The industry of firm has a positive influence in the trade credit days.

3. DATA AND RESEARCH METHOD

3.1. SAMPLE

3.1.1. London Stock Exchange and FTSE All Share Index

One of the most important exchange market in Europe and one of the major exchanges in the world, the London Stock Exchange is consisted of two dissimilar stock markets: the Main Market and the Alternative Investment Market (AIM). For evaluating the London Stock Exchange, the autonomous FTSE Group sustains a series of indices comprising the FTSE 100 Index, FTSE 250 Index, and FTSE 350 Index. Other Indices of London Stock Exchange are FTSE All-Share, FTSE AIM-UK 50, FTSE AIM 100, FTSE AIM All-Share, FTSE SmallCap, FTSE Tech Mark 100, and FTSE Tech Mark All-Share. The total market capitalisation in June 2007 was £2,014 billion, but 136 companies represented 85% of the total, so the FTSE 100 companies dominate the listed market.

At 31 October 2007, FTSE All-Share Index, that includes FTSE 100, FTSE 250 and FTSE SmallCap, covers 680 companies with a combined value of nearly £1.85 trillion – approximately 98% of the UK’s market capitalisation.

3.1.2. UK analysis sample.

This study was conducted on UK firms. The sample used in this study was taken from FTSE All-Share Constituents & Weightings data (31 October of 2007), which is disclosing in FTSE 100 (will consist of the largest 100 UK companies by full market value i.e. before the application of any invest weightings), FTSE 250 (will consist of the next 250 UK companies ranked by full market value i.e. before the application of any invest weightings) and FTSE SmallCap (will consist of the UK companies within the FTSE All-Share which are not large enough to be constituents of the FTSE 100 and FTSE 250). In our sample we have selected 100% of FTSE 100 firms [really there are in October 102 firms but we have taken 100, we have eliminated Royal Dutch Shell B and Schrodgers N/V, because we have not information about them], 20% of FTSE 250 firms and 14% of FTSE SmallCap. The sample for FTSE 250 and SmallCap was selected randomly using systematic method after listing the population in alphabetical order, with no replacement of individuals. Eight of the firms selected (Dexion Absolute, Ferrexpo and Thomas Cook Group of FTSE 250 and Agcert International, Cineworld Group, The Local Shopping Reit, Sepura and Superglass of FTSE SmallCap) have been replaced for the next in the list because they have not Annual Report or they have not payment policy in their last Annual Report. The payment policy is the principal focus of our study and it is the reason for replacing these companies with others. Finally a random sample of 200 was selected.

Data were collected by means directly of their Annual Report or Financial Analysis Made Easy (FAME) database. The Annual Reports was taken principally to obtain the data about payment policy and FAME database was selected as it contained relevant information that was required for selecting a suitable sample (e.g. trade payable, cost of sales, closing stock, opening stock, trade debtors and depreciation).

The following table summarises the technical characteristics of the study:

Table 1: Technical characteristics of the study

UNIVERSE	UK Firms. FTSE All-Share Constituents & Weightings (100, 250, SmallCap)
SAMPLE	200 firms
SAMPLING	Systematic random probabilistic sample
TARGET GROUP	FTSE firms with payment policy in Annual Report (Directors’ Report)
DATA	The data of firms have been taken of the last Annual Report of FTSE firms (2006 or 2007) and FAME Database
TECHNIQUE	Review of Annual Reports
DATE PERFORMED	Field work was carried out on November 2007
MARGIN OF ERROR	$E_m = \pm 3.77\%$ with a confidence level of 95%, $p=q=0.5$, for overall data

The sample is significant at 95% level with an error of 3.77% and it takes approximately the 85% of capitalization of UK firms (see Table 2).

Table 2: The percentage of Capitalization of UK Stock Firms in the sample.

<i>FTSE</i>	<i>% of Capitalization of FTSE</i>	<i>% of Capitalization of UK Stock Firms</i>	<i>% of the Sample of Capitalization of UK Stock Firms</i>
FTSE All-Share	100%	98%	84.4%
FTSE 100	82.859960%	81.2027608%	81.2027608%
FTSE 250	13.849510%	13.5725198%	2.7450396%
FTSE SmallCap	3.290528%	3.224744%	0.4514641%

3.2. THE VARIABLES

In this paper we have used the information of Annual Report and FAME (UK) databases. We have taken the information about payment policy that appears in Directors' Report of Annual Report. The quantification of this data is realised in the following form. The information utilized is the following one (see Table 3):

Table 3: Codification of the data of Payment Policy.

Annual Report		FAME
VARIABLE	CODIFICATION	VARIABLES
Code	No:0, Yes:1, Nothing: 2	Trade Debtor t Thousand of £
Type of Code	CBI:1, BPPC:2, Other:3	Trade Credit t Thousand of £
Trade Credit	No:0, Yes: 1, Nothing:2	Cost of Sales
Average Trade Credit Days	No:0, Yes: 1, Nothing:2	SIC Code 2003 (we have elaborated with the help of Standard & Poors GICS Code of these firms because FAME have not this information)
Average Trade Credit Days t	Number of days	Inventories Thousand of £ t
Average Trade Credit Days t-1	Number of days	Inventories Thousand of £ t-1
Similar Words	No:0, Yes: 1, Nothing:2	Date Last Accounts
Explain how obtain Code	No:0, Yes: 1	Depreciation
		Amortization

3.3. METHOD

Methodology is basic in the investigation about ethics in business (Chami et al., 2002, p.1718) and trade creditors are not an exception.

In this context, it is possible to appear many problems related to business ethics that could improve very important challenges for investigation, as the related to liability, to the payment to the *suppliers* or the government. It is necessary then to compare if there is a significant difference between firms of different sizes

and industries. In this sense, the proposed hypothesis is that there are significant differences between firms with different sizes and firms in several industry sectors.

The empirical analysis, which we have used in this study, is conducted on UK firms, studying their last Annual Report (2006 or 2007) from their webs or asking for them. The sample was chosen by proportional allocation according to criteria of firm size. The total number of firms used was 200. And the statistical methodology used to compare the significant differences between size and industry in the use of trade credit was F Snedecor Test of means.

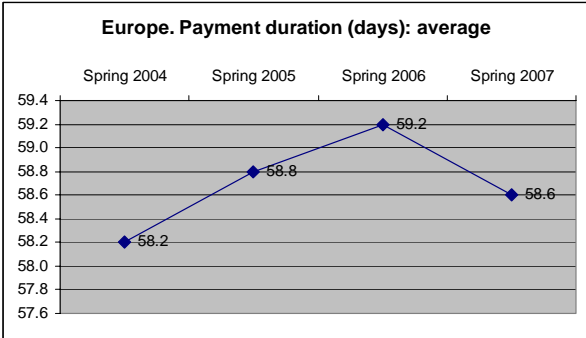
4. TRADE CREDIT: A DESCRIPTIVE ANALYSIS

4.1. TRADE CREDIT IN EUROPE

The 2007 European Payment Index (EPI) Report done by Intrum Justitia, reflects the opinion of thousands of companies in 25 markets. “European business and official bodies lose around 25 billion euros every year because they are obliged to finance unnecessary credits. Late paying customers put the company they are buying from at risk of suffering liquidity problems and in some cases going bankrupt. Furthermore, late and uncertain payment is a major trade barrier” (EPI, p.3).

Payment duration decreased on a Pan-European level compared to the previous two years (Figure 1), remaining above the spring 2004 value (Spring 2004: 58.2 days; Spring 2005: 58.8 days; Spring 2006: 59.2 days; Spring 2007: 58.6 days). After the number of days for settling invoices increased from 58.4 days in 2004 up to 59.2 days in 2006, the Pan-European average decreased to 58.6 days in 2007. This year the trend of later payment did not continue despite the positive economic growth.

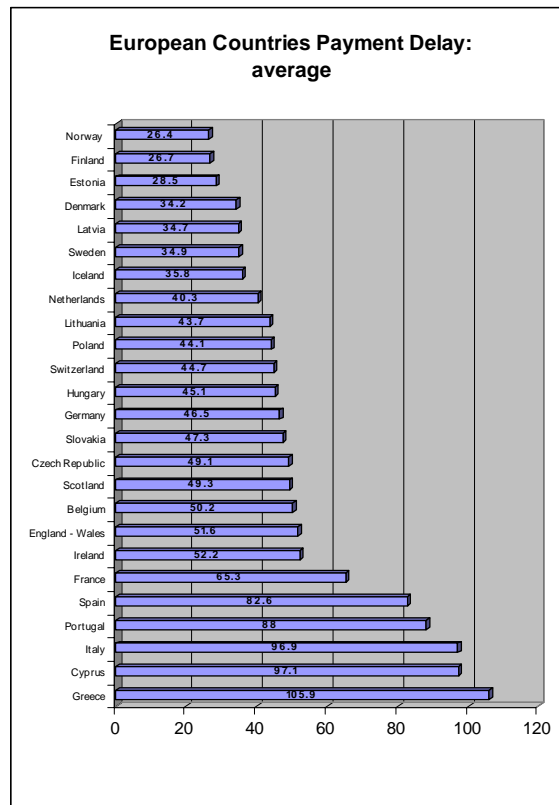
Figure 1: Payment duration in Europe.



Resource: European Payment Index (EPI). Economic growth masks poor payment. Intrum Justitia. Spring 2007. Available in www.europeanpayment.com.

In 2007 the Nordic countries are the better payment in Europe with an average of 31 days and the worst payment countries are Italy (96.9 days), Cyprus (97.1 days) and Greece (105.9 days) (See Figure 2). England-Wales is the 18th position with a delay payment average of 51.6 days.

Figure 2: European Payment delay by Country.



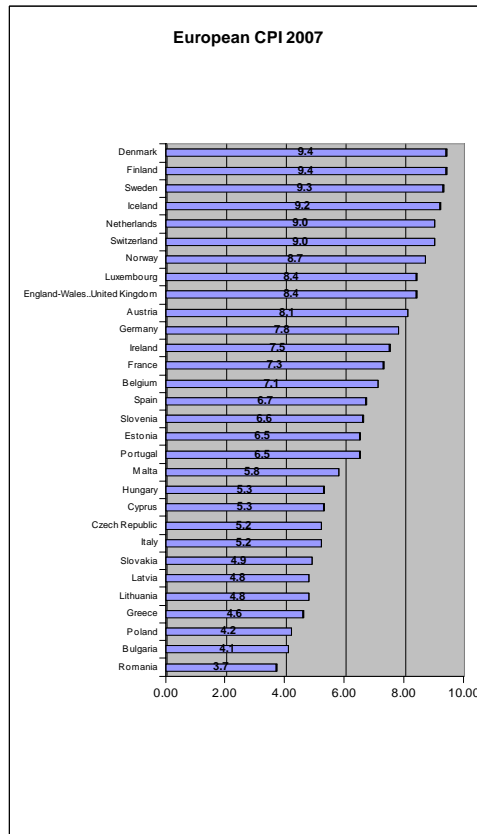
Resource: European Payment Index (EPI). Economic growth masks poor payment. Instrum Justitia. Spring 2007. Available in www.europeanpayment.com.

This index obtains some results which could correspond with Transparency International results in his Corruption Perceptions Index (CPI). The CPI, now in its 12th year, ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. It is a composite index, making use of surveys of business people and assessments by country analysts.

The CPI 2006 ranks 163 countries (an increase from 159 countries last year), and draws on 12 different polls and surveys from nine independent institutions, using data compiled between 2005 and 2006. Data from the following sources were included: Country Policy and Institutional Assessment by the IDA and IBRD (World Bank), Economist Intelligence Unit, Freedom House 'Nations in Transit', International Institute for Management Development (in Lausanne), Merchant International Group Limited (in London), Political and Economic Risk Consultancy (in Hong Kong), United Nations Commission for Africa, World Economic Forum (WEF), World Markets Research Centre (in London).

In the following figure (Figure 3) there is the rank of CPI in 2007. 2007 CPI score' relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt). Among the European Union and other Western European countries, Nordic countries dominate the top scorers in the 2007 Corruption Perceptions Index, with Denmark and Finland leading the overall ranking. But even in these countries, scandals in recent years have shown that there is sadly no such thing as a corruption-free zone.

Figure 3: European Union and West European Countries CPI 2007



In the following table (Table 4) there are the rank of the European Countries in EPI and CPI in 2007.

Table 4: Comparing European Country ranking in EPI and CPI in 2007.

EPI			CPI				Global Country Rank (Total 163)
Payment duration. Intrum Justitia	EPI Country Rank	Payment delay (average days)	CPI Country Rank	CPI Score 2007 a)	Confidence range b)	Survey Used c)	
<i>Norway</i>	1	26.4	7	8.70	8.0 - 9.2	6.00	9
<i>Finland</i>	2	26.7	2	9.40	9.2 - 9.6	6.00	1
Estonia	3	28.5	17	6.50	6.0 - 7.0	8.00	28
<i>Denmark</i>	4	34.2	1	9.40	9.2 - 9.6	6.00	1
Latvia	5	34.7	25	4.80	4.4 - 5.1	6.00	51
<i>Sweden</i>	6	34.9	3	9.30	9.1 - 9.4	6.00	4
Iceland	7	35.8	4	9.20	8.3 - 9.6	6.00	6
Netherlands	8	40.3	5	9.00	8.8 - 9.2	6.00	7
Lithuania	9	43.7	26	4.80	4.4 - 5.3	7.00	51
Poland	10	44.1	28	4.20	3.6 - 4.9	8.00	61
Switzerland	11	44.7	6	9.00	8.8 - 9.2	6.00	7
Hungary	12	45.1	20	5.30	4.9 - 5.5	8.00	39
Germany	13	46.5	11	7.80	7.3 - 8.4	6.00	16
Slovakia	14	47.3	24	4.90	4.5 - 5.2	8.00	49
Czech Republic	15	49.1	22	5.20	4.9 - 5.8	8.00	41
Scotland	16	49.3	9	8.40	7.9 - 8.9	6.00	12
Belgium	17	50.2	14	7.10	7.1 - 7.1	6.00	21
England - Wales	18	51.6	9	8.40	7.9 - 8.9	6.00	12
Ireland	19	52.2	12	7.50	7.3 - 7.7	6.00	17
France	20	65.3	13	7.30	6.9 - 7.8	6.00	19
Spain	21	82.6	15	6.70	6.2 - 7.0	6.00	25
<i>Portugal</i>	22	88	18	6.50	5.8 - 7.2	6.00	28
<i>Italy</i>	23	96.9	23	5.20	4.7 - 5.7	6.00	41
<i>Cyprus</i>	24	97.1	21	5.30	5.1 - 5.5	3.00	39
<i>Greece</i>	25	105.9	27	4.60	4.3 - 5.0	6.00	56

a '2007 CPI score' relates to perceptions of the degree of corruption as seen by business people and country analysts and ranges between 10 (highly clean) and 0 (highly corrupt).

b 'Confidence range' provides a range of possible values of the CPI score. This reflects how a country's score may vary, depending on measurement precision. Nominally, with 5 per cent probability the score is above this range and with another 5 per cent it is below. However, particularly when only few sources (n) are available, an unbiased estimate of the mean coverage probability is lower than the nominal value of 90 per cent. It is 65.3 per cent for n = 3; 73.6 per cent for n = 4; 78.4 per cent for n = 5; 80.2 per cent for n = 6 and 81.8 per cent for n = 7.

c 'Surveys used' refers to the number of surveys that assessed a country's performance. A total of 12 surveys and expert assessments were used and at least three were required for a country to be included in the CPI.

The countries in the top of European Payment Index and there are in the top of Corruption Perception Index, as Nordic countries, Norway, Finland, Denmark or Sweden. These countries are the better payment countries and the less corruption in Europe. They are countries in which the trust of payment exists and they do an effort to pay as soon as possible. Other countries, Portugal, Italy, Cyprus, Greece and Spain have a bad score of corruption; the costumes of these countries are bad and it would be reflect a delay in their payment to suppliers.

4.2. TRADE CREDIT IN UK: A DESCRIPTIVE ANALYSIS

We are going to establish the regulation around payment to supplier before start with the descriptive analysis of UK firms. Concretely, there is a regulation, named Company Act 1985 introduced by the Conservative Government in March 1997 as an amendment to the 1985 Companies Act requires the average time to pay their bills. Exactly Companies Act 1985 Regulations establish about the information about statement of Payment Practice in the Directors' Report that companies shall also state the number of days which bears to the number of days in the financial year the same proportion as X bears to Y where; X the aggregate of the amounts which were owed to trade creditors at the end of the years; and Y the aggregate of the amounts in which the company was invoiced by suppliers during the year (Vol. 8 (1991 Reissue), p. (4)8/84).

$$(\text{Period-end Trade Creditors} / \text{Total Invoiced by Suppliers}) * 365$$

The following table is a summary of the sample firms that continue this regulation.

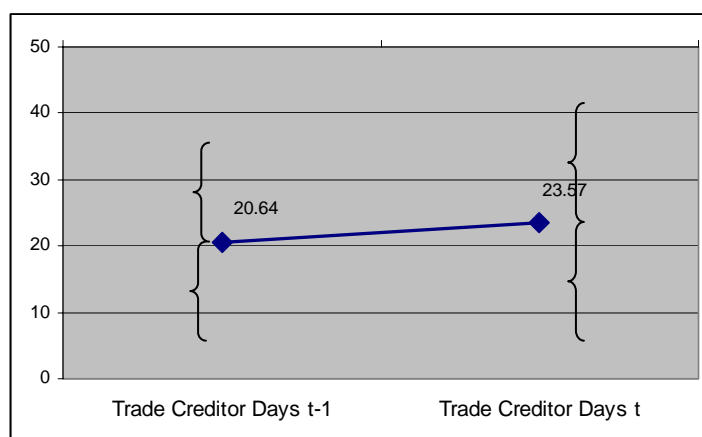
Table 5: The firms that determinate the average days in Annual Report

	N	Valid %
No	56	28%
Yes	139	69.5%
No Information	4	2%
Missing	1	0.5%
Total	200	100%

Most of the firms establish the average days as the regulation of Company Act 1985 applicable since 1997, concretely 139 firms (69.5%) determinate specifically the number of days in their Annual Reports. But there are other part of the firms that although they do not determinate exactly the number of days they say that they have not any trade credit (53 firms of 56 or 94.6%), so their trade credit days would be 0 for t period and for t-1 period and determinate that the 28% of the total firms (200) have no trade creditor days for t and t-1 periods. Others (2%) do not give us any information about their trade creditor days.

The average trade credit days has increase in the last year. The next figure shows us that the trade credit days has increase near of 3 days.

Figure 4: Trade Creditors days from t-1 to t.



The next table (Table 6) shows the descriptive statistics about the trade creditors disclosed by size of FTSE firms. There are firms that have not any trade credit but the maximum days are around 80 days. In average terms in FTSE firms the days to delay payment are around 22 days.

Table 6: Statistics of trade creditors disclose by FTSE 100, FTSE 250 and FTSE SmallCap.

	FTSE 100		FTSE 250		FTSE SmallCap	
	Trade Creditor Days t	Trade Creditor Days t-1	Trade Creditor Days t	Trade Creditor Days t-1	Trade Creditor Days t	Trade Creditor Days t-1
Mean	23.97	21.51	21.72	21.19	24.65	18.40
Std. Deviation	19.43	20.44	21.63	22.00	23.83	19.18
Minimum	0	0	0	0	0	0
Maximum	74	87	80	87	88	62
N	94	75	50	47	50	41

Specifically the previous table shows that in 2006 (Dayst) FTSE100 firms, biggest ones pays in 23.97 days to their suppliers, similar to smallest firms in FTSE that pays in 24.65 days. In 2005 (Daystbefore) the situation is similar, the biggest firms (FTSE 100) pay in 20.44 days and smallest ones in 19.18 days, the rest in 22.00 days. This analysis suggests that there is not any relation between the size in FTSE firms and the payment to suppliers.

The industry is other variable that have been used by financial literature to explain the more use of the trade credit. The next table shows the descriptive statistics about the days of trade creditors disclosed by industry of FTSE firms. The industry seems a highly visible within the industry and form an important element in perceived corporate image. Prompter payment is found where customer concentration is high and where the seller operates in Financials (14 days), Consumer Staples (16 days), Health Care (20 day) and Materials (23 days) in 2006 period and in Health Care (8 days), Information Technologies (12 days), Consumer Staples (14 days) and Energy (18 days) (See Table 7). In this descriptive analysis is difficult to say if there are significant differences between sectors, it is difficult to stress one of the industries as the prompt payer sector, although we could suggest that industrials firms and consumer discretionary firms are bad payables because they need around 30 days.

Table 7: The averages trade credit days by industry (the used code is GICS)

	Days t			Days t-1		
	Mean	N	Std. Dev.	Mean	N	Std. Dev.
Energy	24.1666667	6	21.9400699	18	5	16.8967452
Materials	23.8	13	25.2953224	22.01	10	29.4022089
Industrials	33.3235294	34	21.5529237	29.3666667	30	20.2543879
Consumer Discretionary	31.5925	40	21.1578486	29.1057143	35	21.8488786
Consumer Staples	16.35	14	21.0060339	14.4357143	14	18.4981333

Health Care	20.3333333	6	28.800463	8.8	5	12.0498963
Financials	14.10625	64	15.4931206	13.0132075	53	15.1315264
Information Technology	24.8571429	7	23.3554317	12	6	18.6010752
Telecommunication Services	42.5	2	2.12132034	-	-	-
Utilities	26.125	8	16.3657962	29.4	5	24.9158584

4.2.CONTRAST OF HYPOTHESIS: SIZE AND INDUSTRY

4.2.1. Size

The following table shows the summary about the contrast of hypothesis that size is a variable that influence in the number of days to do the payment to supplier.

Table 8: Statistics of trade creditors disclose by Size.

ANOVA			Sum of Squares	df	Mean Square	F	Sig.
Dayst * FTSE	Between-groups	(Combined)	245.797704	2	122.898852	0.27326021	0.76119173
		Linearity	1.89345205	1	1.89345205	0.00421001	0.94833376
		Deviation of linearity	243.904252	1	243.904252	0.54231041	0.4623803
	Within-groups		85902.3006	191	449.750265		
Total			86148.0984	193			
ANOVA			Sum of Squares	df	Mean Square	F	Sig.
Daystbefore * FTSE	Between-groups	(Combined)	276.578052	2	138.289026	0.3257553	0.72245954
		Linearity	227.430235	1	227.430235	0.53573741	0.46527541
		Deviation of linearity	49.1478165	1	49.1478165	0.11577319	0.7341111
	Within-groups		67922.8983	160	424.518114		
Total			68199.4763	162			

The test for linearity has a significance value not smaller than 0.05, indicating that there is not a linear relationship between FTSE size and trade credit days in Annual Report to 2006 (Dayst) and 2005 (Daystbefore) periods. These results coincide with the information observed in the first part of the table, where the average days to pay to suppliers does not tend to decrease with increased size to FTSE firms. The hypothesis null; size does not influence in the trade credit days, is not rejected at 5% level. In this way, in this paper we could not say that there is a positive influence between size and trade credit days to UK firm's sample, this means that there is not a size effect in the trade credit days.

4.2.2. Industry

The following table shows the summary about the contrast of hypothesis that industry is a variable that influence in the number of days to do the payment to supplier.

Table 9: Statistics of trade creditors disclose by Industry.

ANOVA			Sum of Squares	df	Mean Square	F	Sig.
Dayst * GICS	Between-groups	(Combined)	13116.8781	9	1457.4309	3.67195406	0.00030067
		Linearity	4073.58003	1	4073.58003	10.2632644	0.00159955
		Deviation of linearity	9043.29808	8	1130.41226	2.84804027	0.00524956
	Within-groups		73031.2202	184	396.908806		
Total			86148.0984	193			

ANOVA			Sum of Squares	df	Mean Square	F	Sig.
Daystbefore * GICS	Between-groups	(Combined)	10000.9689	8	1250.12111	3.30796544	0.00162408
		Linearity	3608.24921	1	3608.24921	9.54784586	0.00237603
		Deviation of linearity	6392.71969	7	913.24567	2.41655395	0.02245698
	Within-groups		58198.5074	154	377.912386		
Total			68199.4763	162			

The test for linearity has a significance value smaller than 0.05, indicating that there is a linear relationship between GICS industries and trade credit days in Annual Report to 2006 (Dayst) and 2005 (Daystbefore) periods. These results coincide with the information observed in the first part of the table, where the average days to pay to suppliers tend to be different depending of the industry of the firm. The hypothesis null; industry does not influence in the trade credit days, is rejected at 5% level. In this way, hypothesis 2 that establishes a relationship between industry and trade is supported; this means that there is an industry effect in the trade credit days.

5. CONCLUDING REMARKS

This paper explores the influence of size and industry in the use of trade credit as a short-term financing, using a sample of 200 UK firms of FTSE and it is focused into the discussion about the use of delaying the payments to suppliers.

The results of the study indicate that there is evidence to support the hypothesis that size has not a significant influence on the days of trade creditor that appear in Annual Report. Our results are not consistent with theories of trade credit that suggests that smallest firms use more trade credit than biggest ones; the reasons could be that big firms usually have liquid problems or financial restrictions too. The hypothesis of the influence of industry on the days of trade creditor that appear in Annual Report is not rejected, so our results support the existence of an industry effect, these findings provide qualified support to the hypothesis that trade credit terms are rather uniform within an industry and possibly vary only across industries. Despite a number of limitations as the using cross-sectional data, the specific geographical area, the results obtained are sufficiently significant, and they are evidence of the importance.

Finally, an ethical perspective of the use of trade credit is other contribution of this paper, because the substantial treatment of trade credit from ethical perspective is not developed before. In this way, the number of days' trade credit taken by business customers, while useful for drawing attention to the practice, is misleading if used to judge firms' behaviour out of context.

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