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Better payers? An empirical study of the trade credit practices of signatories of payment codes and members of FTSE4Good

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Abstract
In this paper we empirically analyze the use of trade credit in the United Kingdom in an ethically relevant manner. The main contributions of the paper are two. Firstly, we analyze the differences in trade credit practices between companies that sign a payment code and those that do not sign it. Secondly, we study if companies in FTSE4Good have a different behaviour related to payment policies. Using a FTSE sample in 2007, we find that signatories of a payment code do not have a substantially differentiate trade credit practices compared with those firms that have not signed a payment code. In the case of FTSE4Good companies, we show that indexed firms follow a clearly defined payment policy. However, although they use fewer days to pay suppliers than other companies, this difference is not statistically significant.

Keywords: Ethics in Finance, Trade Credit, Suppliers, Payment Policy, Payment Code, FTSE4Good.

JEL Classifications: G30, G38

1. INTRODUCTION
In spite of its importance, finance figures relatively little in writing on business ethics (Boatright, 1999; 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 topic is trade credit.

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 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.

There are different aspects of the literature on trade credit. Macroeconomic research (Meltzer, 1960; Brechling & Lipsey, 1963; White, 1964; Nadiri, 1969; Ng et al. 1999) and finance theories (Nadiri, 1969; Emery, 1987; Fisman & Love, 2003) analyze the influence of the use of trade credit. There is financial literature that analyzes the situation of trade credit in the UK (Kohler et al., 2000, Pike & Cheng, 2001, Wilson & Summer, 2002; Cheng & Pike, 2003;
Howorth & Reber, 2003; Guariglia & Mateut, 2006; Paul & Boden, 2008), but there are no works that substantially study the trade credit from an ethical perspective, although there are several technical and ethical questions that can be asked about trade credit.

The current credit crunch and economic downturn increase the financial problems of companies in terms of liquidity. The consequences of financial restrictions prompted by the credit crisis enhance firms’ cash flow problems principally because they do not get their money when they are expected to obtain it. Some characteristics, for example Payment Codes or the inclusion of firms on relevant indexes might help to provide signals about the quality of future expected payments; companies might think that those firms that sign a payment code are good payers, or that firms that fulfil criteria to be member of a well known ethical index, for instance the FTSE4Good are generally “good” companies and hence good payers.

In this paper, the focus is related to these two particular aspects. First, we will analyze the differences between companies that have signed a payment code and those that have not. In particular, do signatories pay suppliers more quickly? Second, is there any evidence that companies that might be seen as relatively “good”, in a general sense, pay their suppliers more quickly? We investigate this by comparing companies that are members of the FTSE4Good index with those that are not members (see www.ftse.com). FTSE4Good contains many criteria, but none tackles payment policy towards suppliers. Consequently in this paper we address the following question: are companies in the FTSE4Good index better payers than companies that are not included in this index?

The contributions of this paper are two. Firstly, we show companies that have signed a payment code are not statistically significantly better payers than firms that have not sign a payment code. Secondly, our findings provide evidence that companies indexed in FTSE4Good tend to follow a clearly defined payment policy, but they do not pay much quicker than firms that are not members of FTSE4Good; the difference in terms of used days to pay suppliers is positive but not statistically significant.

The remainder of this paper is organised as follows. The first section provides an overview of previous research and public policy initiatives and develops the hypotheses. The next section describes the data and method. This is followed by the empirical results, a descriptive analysis of the variables to show the situation of signatories of a payment code and members of FTSE4Good firms, and the results regarding the previously established hypotheses. The paper concludes with a discussion of the key findings.

2. RESEARCH & HYPOTHESES

2.1. BACKGROUND: PUBLIC POLICY INITIATIVES

Trade credit can be defined as a form of interfirm relationship in which suppliers lend money to their clients (Meltzer, 1960) or in a similar simple way as a part of a joint commodity and financial transaction in which the seller allows delayed payment for its good or service to their customers (Mian & Smith, 1992, 1994; Lee & Stowe, 1993). This means that when goods or services are delivered to a firm for use in its production they are not paid for immediately (McMenamin, 1999; Arnold, 2005; Brealey et al., 2006). Brought into sharper focus by current economic problems, the promptness and clarity of payments related to trade credit have been subject to various initiatives in the UK in recent years (since 1997).
Plcs (and Plc subsidiaries which qualify as ‘large’ companies) were required to disclose their policy on the payment of trade creditors in the United Kingdom[1] by the 1997 Regulation (See Appendix 1). The “Policy on the Payment of Creditors” (Part VI) establishes that companies should settle the terms of payment with suppliers when agreeing the terms of each transaction, ensure that those suppliers are made aware of the terms of payment, and abide by those terms (the 3 ideas in 1997 Regulation is used in our empirical analysis as a variable). Instead of using these 3 ideas some firms use some general phrases to describe their relationship with suppliers that are based on common logic, and less exhaustively than 3 ideas required in 1997 Regulation. Firms use phrases as “the group values its suppliers and recognises the benefits to be derived from maintaining good relationships with them”, “explain its payment procedures to its suppliers” or “the policy of the group is to agree terms of payment with suppliers prior to entering into a contractual relationship” (we have called this variable Similar Words and we have used it in our empirical analysis). The annual report should disclose the company’s policy to follow any code or standard on payment practice (sign a Payment Code is used as a variable in our empirical analysis), and if so, the name of the code or standard and the form to get copies of the code (how to obtain the Payment Code is used as a variable in our empirical analysis). These aspects of the 1997 Regulation have been active since 1997. Furthermore, it is now a requirement[2] that the directors’ report should make a quantitative statement relating the amount outstanding to suppliers to the total invoiced during the year (number of days in Directors’ Report [DR] is a variable that we have used in our empirical analysis):

\[
\text{No. of days (DR)} = \frac{\text{Trade creditors value at the end of the year} \times 365}{\text{Aggregate amount invoiced by suppliers during the year}}
\]

This latter figure gives an insight into company practice, to complement the policy statements they might also make. This requirement permits external analysts to use a ratio that is a better proxy of days that the firm takes to pay suppliers, because without this disclosure in the Directors’ Report, the only form to calculate the days is using the annual accounts (Balance Sheet and P&L Account). We have called this Proxy (we have used this variable in our empirical analysis).

\[
\text{No. of days (Proxy)} = \frac{\text{Trade creditors value at the end of the year} \times 365}{\text{Cost of Sales}}
\]

The payment codes that the companies in our sample sign are two[3]: “Prompt payers: in good company” and “Better Payment Practice”. The first one, “Prompt payers: in good company”, is the voluntary code of practice that was promulgated by the Confederation of British Industry (CBI) from 1991. A further development in 1997 was the publication of the Department of Trade and Industry (DTI) document “Better Payment Practice” (See Appendix 2), which contains guidance about giving and taking trade credit. This superseded the CBI code. More recently, in December 2008 the Institute of Credit Management (ICM), on behalf of the Department for Business, Enterprise and Regulatory Reform (BERR), has developed a further version of this, the “Prompt Payment Code” (See Appendix 2), which is focused on three main areas: a commitment
to pay suppliers on time; giving clear guidance to suppliers; and encouraging good payment practice.

The focus of the payment codes and 1997 Regulation relating to the policy on the payment of creditors is close. Both are concerned with establishing agreement about payment terms, with giving full and accurate information to suppliers, with making a commitment to pay suppliers on time and with describing conflict resolution steps. Those initiatives, at least theoretically, are designed to encourage “better” behaviour by companies in dealing with their suppliers.

2.2. LITERATURE REVIEW AND HYPOTHESES

There are studies that argue that trade credit is a useful financial instrument to obtain financial funds (Fisman & Love, 2003). The reasons are various; the reduction of transaction costs and financial costs (Nadiri, 1969; Schwartz, 1974; Emery, 1987), the reduction of the information asymmetry of buyer and seller with the guarantee of product quality or with the information of buyer’s creditworthiness (Lee & Stowe, 1993; Ng et al., 1999; Cheng & Pike, 2003), the positioning of monetary policies in which the use of trade credit correlates with financial restrictive policies (Meltzer, 1960; Brechling & Lipsy, 1963; Jaffee, 1971; Schwartz, 1974; Myers, 1977)[4], or others such as the better relationship between seller and buyer, marketing or competitiveness (See Ng et al., 1999; Cheng & Pike 2003 and Paul & Boden, 2008 for a review of the reasons). Descriptive analysis of the use of trade credit is the focus of others authors, as well. Using size and industry they describe the types of firms that use more trade credit (e.g. Meltzer, 1960; Nadiri 1969; Herbst, 1974; Chat & Walker, 1988; Nilsen, 2002; Howorth & Reber, 2003; Ng et al., 1999; Marotta, 2005, Huyghebaert, 2006).

However, no previous studies have systematically considered the ethics of trade credit, evaluated the effectiveness of measures to improve practice or investigated whether “good” companies are better payers. In this paper we empirically examine both Business Codes related to payments and the possible influence of membership of the FTSE4Good index.

With regard to Business Codes, they are a conspicuous feature of modern business organizations (Cowton & Thompson, 2000), thought their effectiveness of codes is a matter of debate. Some scholars argue that firms should have a code because it is the right thing to do, because the code shows the moral responsibility to help solve social problems, because it improves the reputation of the company, because codes increase the efficiency of the firm or because codes if are embedded in the organizational culture and communicated effectively, they can shape ethical behaviour and guide employees in ethical decision-making (L’Etang, 1992; Logsdon & Wood, 2005; Mezher et al., 2002; Stevens, 2008). However, other scholars against that Business Codes are mere window-dressing, they make stakeholders more suspicious, cynical and distrustful, their cost is much bigger than their yield, and even most important their effectiveness is inconclusive and without significant evidence (Cowton & Thompson, 2000; Hess et al., 2006; Kaptein & Schwartz, 2008; Moore, 2006; White and Montgomery, 1980). These opposite ideas show the dispersed opinions of scholars in terms of efficiency of codes. In this sense, it is interesting to analyze empirically their efficiency or not efficiency in other areas, such as finance, to give other added view about the use of Business Codes. In this case the considered Business Code is that related to payment to suppliers.

FTSE4Good was launched in July 2001 designed to identify companies that meet a range of corporate social responsibility criteria. A committee of independent practitioners review the indices periodically to ensure that the index reflect accurately the best practices (Hellstein &
Mallin, 2006). The inclusion of firms in the index is based on five criteria around environmental, social-stakeholder, human rights, supply chain labour standards and countering bribery. Moreover, companies with business interests in tobacco, nuclear weapons, whole weapons systems, nuclear power, and the extraction of uranium are automatically excluded. Theoretically, at least, and in general, firms included in this index should be “good” companies. There is empirical evidence that shows that this index has a significant effect on firms’ reputation and on relationships with specific stakeholder groups; though the results indicate a lack of evidence regarding changes in corporate behaviour (Collison et al., 2009). Other studies conclude that although the inclusion in FTSE4Good should bring a reward there is no evidence to confirm it, because this index is relatively unknown and not considered by many investors and analysts as a leading index for making investment decisions (Curran & Moran, 2007). Nevertheless, it is interesting to investigate empirically if FTSE4Good firms display “better” practice in terms of payment to suppliers.

In this context, we have established the following hypotheses:

### 1. Payment Code

| H1a: The number of days in Directors’ Report and Signing a Payment Code is independent. |
| H1b: The number of days using the Proxy to calculate the payment days and Signing a Payment Code is independent. |
| H2a: The similar words (a common but not exhaustive explanation about the policy to complete successfully payment terms with suppliers) used in Payment Policy in the Annual Report (Directors’ Report) about the relationship with suppliers and Signing a Payment Code is independent. |
| H2b: The explanation of the ideas of 1997 Regulation about the relationship with suppliers, explained in Payment Policy in the Annual Report (Directors’ Report), and Signing a Payment Code is independent. |

### 2. FTSE4Good

| H1: Signing a Payment Code and membership of FTSE4Good firms is independent. |
| H2: The type of Payment Code and membership of FTSE4Good firms is independent. |
| H3a: The number of days in Directors’ Report and membership of FTSE4Good firms is independent. |
| H3b: The number of days using the Proxy to calculate the payment days and membership of FTSE4Good firms is independent. |
| H4a: The similar words (a common but not exhaustive explanation about the policy to complete successfully payment terms with suppliers) used in Payment Policy in the Annual Report (Directors’ Report) about the relationship with suppliers and membership of FTSE4Good firms is independent. |
| H4b: The explanation of the ideas of 1997 Regulation about the relationship with suppliers, explained in Payment Policy in the Annual Report (Directors’ Report), and membership of FTSE4Good firms is independent. |
| H5: How to obtain the Payment Code and membership of FTSE4Good firms is independent. |
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 markets in Europe and one of the major exchanges in the world, the London Stock Exchange consists in 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, accordingly 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 shows the:

- FTSE 100 (consisting of the largest 100 UK companies by full market value i.e. before the application of any investment weightings),
- FTSE 250 (consisting of the next 250 UK companies ranked by full market value i.e. before the application of any investment weightings)
- and FTSE SmallCap (consisting 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[5] (really there are in October 102 firms but we have taken 100, we have eliminated Royal Dutch Shell B and Schroders N/V, because we do not have 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. Twelve of the firms selected (Dexion Absolute, Ferrexpo, Invesco Property, Merryl Lynch New Energy Technology and Thomas Cook Group of FTSE 250 and Agcert International, Cineworld Group, Cnhyt, F&C Property Investment, The Local Shopping Reit, Sepura and Superglass of FTSE SmallCap) have been replaced by the next in the list because they did not have 2007 Annual Report (in most of cases because firms are in liquidation or firms have been merged by other companies) or they have no payment policy in their 2007 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 firms was selected.

Data were collected by means directly of their Annual Report or Financial Analysis Made Easy (FAME) database. The Annual Report 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).

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 Annual Report of FTSE firms 2007 and FAME Database in 2007 |
TECHNIQUE | Review of Annual Reports 2007 |
DATE PERFORMED | Field work was carried out on November 2007 (choose sample and collect available 2007 Annual Reports) and November 2008 (collect the rest of 2007 Annual Reports, review data comparing information in Annual Reports and FAME, and clean the sample) |
MARGIN OF ERROR | Em= ± 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 accounts for approximately 85% of the capitalization of UK firms (see Table 2), so this group of firms are a good sample that represents statistically the UK firm population.

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

<table>
<thead>
<tr>
<th>FTSE</th>
<th>% of Capitalization on of FTSE</th>
<th>% of Capitalization of UK Stock</th>
<th>% of the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTSE All-Share</td>
<td>100%</td>
<td>97.99%</td>
<td>84.39%</td>
</tr>
<tr>
<td>FTSE 100</td>
<td>82.85%</td>
<td>81.20%</td>
<td>81.20%</td>
</tr>
<tr>
<td>FTSE 250</td>
<td>13.84%</td>
<td>13.57%</td>
<td>2.74%</td>
</tr>
<tr>
<td>FTSE SmallCap</td>
<td>3.31%</td>
<td>3.22%</td>
<td>0.45%</td>
</tr>
</tbody>
</table>

3.1.3. FTSE4Good firms in UK.

FTSE Group (FTSE) is a world-leader in the creation and management of over 100,000 equity, bond and alternative asset class indices. One of the indices is FTSE4Good, which groups firms that work towards environmental sustainability, develop positive relationships with stakeholders, up-hold and support universal human rights, ensure good supply chain labour standards and counter bribery.

In our sample 52% of the firms are included in UK FTSE4Good (see Table 3), or 38% of the total firms in this index in UK (104 firms from a total of 273). The following table shows the percentage of the total sample firms that there are in the FTSE4Good index.

Table 3. FTSE4Good firms.

<table>
<thead>
<tr>
<th>FTSE100</th>
<th>THE SAMPLE</th>
<th>FTSE4Good firms</th>
<th>FTSE4Good DR07&gt;0*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>70 (70%)</td>
<td>49 (70%)</td>
<td></td>
</tr>
<tr>
<td>FTSE250</td>
<td>50</td>
<td>19 (38%)</td>
<td>13 (68%)</td>
</tr>
<tr>
<td>FTSESmall</td>
<td>50</td>
<td>15 (30%)</td>
<td>12 (80%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>200</td>
<td>104 (52%)</td>
<td>74 (71%)</td>
</tr>
</tbody>
</table>
We have established a constraint; the days to pay suppliers in the Directors’ Report have to be positive, because the focal point of our analysis is the study of the utilisation of trade credit, so firms that are not using trade credit are excluded for this analysis.

3.2. THE VARIABLES

In this paper we have used the information from Annual Reports and the FAME (UK) database. 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 4):

<table>
<thead>
<tr>
<th>Table 4. Codification of the data of Payment Policy.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Report</strong></td>
</tr>
<tr>
<td><strong>VARIABLE</strong></td>
</tr>
<tr>
<td><strong>Payment Code</strong></td>
</tr>
<tr>
<td><strong>Type of Code</strong></td>
</tr>
<tr>
<td><strong>Ideas of 1997 Regulation</strong></td>
</tr>
<tr>
<td><strong>Similar Words</strong></td>
</tr>
<tr>
<td><strong>How to Obtain the Payment Code</strong></td>
</tr>
<tr>
<td><strong>Trade Credit</strong></td>
</tr>
<tr>
<td><strong>Average Trade Credit Days in 2007 (DR)</strong></td>
</tr>
</tbody>
</table>

3.3. METHOD

Methodology is basic in the investigation about ethics in business (Chami et al., 2002) and trade creditors are not an exception. The intention is to determine if signatories of a payment code behave significantly differently in aspects related to payment practices and if firms in FTSE4Good also behave “better” in relation to their payment behaviour. The proposed hypotheses reflect the different payment behaviour of companies that sign a payment code compared with those that do not sign it and between FTSE4Good’s firms and the rest.

The total number of firms used was 200, but using the constraint established previously (the days to pay to suppliers in the Directors’ Report have to be positive) the sample was reduced to 138 firms. Of these, 14 firms had signed a payment code [CBI or DTI] and 74 firms were membership of FTSE4Good.

The statistical methodology used is Kruskal-Wallis test in the K Independent Samples procedure (2 in this case), available in the Nonparametric Tests procedure. The reason for using this test is that we have studied the shape of each group’s distribution, but the groups are not normally distributed. The statistic of the Kruskal-Wallis test is built from the means of the ranks of the observations across the samples. This approach is similar to that of one-way ANOVA, but Kruskal-Wallis test does not assume normality or equal variances (ANOVA assumes the normal distribution of the sample). As a result it is an appropriate test for this case.

We have used SPSS statistical program in 15.0 and 16.0 versions.
4. PAYMENT POLICY: AN EMPIRICAL ANALYSIS

4.1. TRADE CREDIT PRACTICE BY SIGNATORIES OF CODES: A DESCRIPTIVE ANALYSIS.

There are 14 firms (approximately 10% of the sample) that signed a payment code. The majority of them signed the code supported by CBI and the rest of the firms the code supported by DTI. The CBI Payment Code is an old code that finished ten years ago, in 1997, which suggests the lack of continuous revisions of the payment codes that firms signed or maybe the little importance and relevance that these firms give to Payment Codes. More than 80% of the firms’ signatories of payment codes are FTSE100 firms, i.e. the largest firms in UK. The rest of firms, firms that do not sign a payment code are 124 (90%). There are no significant differences between firms that sign a payment code and those that do not sign a payment code in terms of industry.

The main focus of this paper is to analyze if signatories of payment codes pay their suppliers quickly. We could use two different ratios, the ratio required by the 1997 Regulation (DR) and the Proxy. We see in the following table (Table 5) that the days used by signatories of payment codes are close to those that are not signatories using DR ratio, around 30 days, but firms that sign a code use two days fewer than non-signatories of any payment code. Using the Proxy to make this analysis the difference is bigger, namely 10 days between signatories (they use 43.22 days) and no signatories (they use 53.18 days).

In terms of the ideas required in the 1997 Regulation, the differences between signatories and the rest are clearer because more than 90% of firms that sign a payment code explain all of the ideas and only 18% of firms that do not sign a payment code do that. But, there are no differences related to Similar Words and most of the firms use similar phrases to explain their intention and their consideration to the relationship with suppliers, but not specifically all of the ideas required in the law.

Regarding how to obtain the code nearly 75% of firms that sign a payment code explain in their Annual Report how obtain the code. Obviously, none of the firm that do not sign a payment code explains how to obtain it.

Table 5. Trade Credit practice by Signatories of a Payment Code: Descriptive statistics.

<table>
<thead>
<tr>
<th></th>
<th>Signatories of a Payment Code</th>
<th>Non-signatories of a Payment Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR2007 (days)</td>
<td>32.50</td>
<td>34.68</td>
</tr>
<tr>
<td>ProxyCS07 (days)</td>
<td>43.22</td>
<td>53.18</td>
</tr>
<tr>
<td>Mean</td>
<td>34.50</td>
<td>40.00</td>
</tr>
<tr>
<td>Median</td>
<td>32.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>18.81</td>
<td>37.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>Maximum</td>
<td>59</td>
<td>370</td>
</tr>
<tr>
<td>Similar words no</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>similar words</td>
<td>14</td>
<td>117</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>124</td>
</tr>
<tr>
<td>1997 Regulation ideas no</td>
<td>1</td>
<td>7.1</td>
</tr>
<tr>
<td>3 ideas of 1997</td>
<td>100</td>
<td>81.5</td>
</tr>
<tr>
<td>Regulation</td>
<td>13</td>
<td>92.9</td>
</tr>
<tr>
<td>1997 Regulation explain</td>
<td>14</td>
<td>23</td>
</tr>
<tr>
<td>ideas of 1997</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>
4.2. TRADE CREDIT PRACTICE BY SIGNATORIES OF CODES: CONTRAST HYPOTHESES

As we explain in the methodology section, to test the null hypothesis Kruskal-Wallis test was selected. The \( p \)-value of the Kruskal Wallis test represented the statistical method used to determine whether differences in the population means were significant. The test was used to consider the null hypothesis at a level of significance of 0.05.

The hypotheses 2b is rejected with a significant level higher than 95%, but the hypotheses 1a, 1b and 2a are not rejected (Table 6). The differences between signatories and non-signatories of payment codes are reflected in the ideas required by the 1997 Regulation (signatories explain correctly all of the ideas). The differences in terms of number of days to pay suppliers (using DR or Proxy) and similar words between signatories and non-signatories of codes are not clear. We can not say that there are statistically significant differences between firms that sign payment codes and those that do not sign them in terms of days taken to pay suppliers.

Table 6. Trade Credit practice in Signatories of a Payment Code: Contrast of Hypotheses.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Probability of the Kruskal-Wallis statistic</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: The number of days in Directors’ Report and Signing a Payment Code is independent.</td>
<td>0.941, greater than 0.05.</td>
<td>The null hypothesis is not rejected.</td>
</tr>
<tr>
<td>H1b: The number of days using the Proxy to calculate the payment days and Signing a Payment Code is independent.</td>
<td>0.878, greater than 0.05.</td>
<td>The null hypothesis is not rejected.</td>
</tr>
<tr>
<td>H2a: The similar word used in Payment Policy in the Annual Report (Directors’ Report) about the relationship with suppliers and Signing a Payment Code is independent.</td>
<td>0.363, greater than 0.05.</td>
<td>The null hypothesis is not rejected.</td>
</tr>
</tbody>
</table>
H2b: The explanation of the ideas of 1997 Regulation about the relationship with suppliers, explained in Payment Policy in the Annual Report (Directors’ Report), and Signing a Payment Code is independent.

The probability of the Kruskal-Wallis statistic is 0.000, which is less than or equal to the level of significance of 0.05. The H2b is rejected: We reject the null hypothesis and conclude that the analysis supports the research hypothesis that firms that sign a Payment Code explain the ideas of 1997 Regulation about the relationship with suppliers in Annual Report (Directors’ Report) and firms that do not sign a Payment Code do not.

4.3. TRADE CREDIT PRACTICE IN FTSE4Good COMPANIES: A DESCRIPTIVE ANALYSIS.

The majority of firms of the total sample are indexed in FTSE4Good, but a 21% of them have no trade creditors, so in this paper only 74 firms that fulfil this constraint are considered for the analysis. More than 60% of FTSE4Good firms are FTSE100 firms. There are no significant differences between FTSE4Good firms and those that are not FTSE4Good firms in terms of industry.

We use the two ratios to show the used days to pay to suppliers, the ratio required by the 1997 Regulation (DR) and the Proxy. The results are similar to previous ones (signatories’ case analyzed in previous section) in terms of DR, but not in terms of Proxy. In table 7 it is shown that firms indexed in FTSE4Good and those that are not indexed have a similar DR ratio, around 30 days. Using DR ratio, indexed firms use two days fewer than non-indexed firms. Using the Proxy the opposite is found, with members of FTSE4Good using slightly more days to pay suppliers.

Most of them are not signatories of a payment code, because only 11 firms members of FTSE4Good signed some payment code (4 firms sign the payment code supported by CBI and 7 firms the code supported by DTI) (there are another 3 firms that signed the payment code supported by CBI into firms that there are not indexed in FTSE4Good).

In terms of the ideas required in the 1997 Regulation, there are differences between members of FTSE4Good and the rest because more than 60% of FTSE4Good firms explain all of the ideas and only around 10% of firms that are not members of FTSE4Good do that. There are no differences relate to Similar Words.

The last variable to analyze is how to obtain the code. Nearly 12% of firms indexed in FTSE4Good explain in their Annual Report how to obtain the code and nearly 3% of firms non-indexed in FTSE4Good do that. But, in FTSE4Good, 9 of 11 signatories of a payment code explain how obtain the code and in firms non-indexed 2 of the 3 firms that sign a payment code. So, in both cases the majority of firms that sign a payment code explain how to obtain it.

Table 7. Trade Credit practice in FTSE4Good firms: Descriptive statistics.

<table>
<thead>
<tr>
<th>FTSE4Good firms</th>
<th>Not FTSE4Good firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>DR2007</td>
<td>ProxyCS07</td>
</tr>
<tr>
<td>Proxy2007</td>
<td>DR2007</td>
</tr>
<tr>
<td>ProxyCS07</td>
<td></td>
</tr>
</tbody>
</table>
### 4.4. TRADE CREDIT PRACTICE IN FTSE4Good COMPANIES: CONTRAST HYPOTHESES

In this section of the paper the established hypotheses about FTSE4Good are examined. The statistical results using Kruskal-Wallis test indicate that null hypotheses 1, 2, 4b and 5 are rejected with a significance level higher than 95%, however; null hypotheses 3a, 3b and 4a are not rejected (Table 8). The differences between members of FTSE4Good and those firms that are not indexed in FTSE4Good are reflected in signing payment codes, in the ideas required by the 1997 Regulation (which they explain correctly) and in the explanation about how to obtain the payment code, but there are no differences in terms of number of days to pay suppliers [using DR or Proxy]) and in terms of Similar Words. Thus, the results do not permit us to say that there are statistically significant differences between members of FTSE4Good and those that are not in terms of used days to pay suppliers. However, the differences in FTSE4Good firms are supported by the signing of payment codes, by the form to explain the ideas required in 1997 Regulation and by the form that they show how to obtain the payment code that they sign.

So, in terms of payment days there are no statistically significant difference between FTSE4Good firms and the rest of firms - perhaps because it is not a criterion to decide what firms include in this index. However, they are difference in terms of correct explanations about the relationships with suppliers and in terms of signing a payment code.

**Table 8. Trade Credit practice in FTSE4Good firms: Contrast of Hypotheses.**

<table>
<thead>
<tr>
<th></th>
<th>(days)</th>
<th>(days)</th>
<th>(days)</th>
<th>(days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>33.87</td>
<td>52.29</td>
<td>35.14</td>
<td>52.26</td>
</tr>
<tr>
<td>Median</td>
<td>30.00</td>
<td>37.00</td>
<td>33.00</td>
<td>48.10</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>17.59</td>
<td>58.06</td>
<td>19.45</td>
<td>33.26</td>
</tr>
<tr>
<td>Minimum</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Maximum</td>
<td>81</td>
<td>370</td>
<td>91</td>
<td>148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment Code</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>16</td>
<td>21.6</td>
<td>19</td>
<td>29.7</td>
</tr>
<tr>
<td>yes</td>
<td>11 (4 CBI and 7 DTI)</td>
<td>14.9</td>
<td>3 (3 CBI and 0 DTI)</td>
<td>4.7</td>
</tr>
<tr>
<td>no information</td>
<td>47</td>
<td>63.5</td>
<td>42</td>
<td>65.6</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Similar words</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>2</td>
<td>2.70</td>
<td>5</td>
<td>7.81</td>
</tr>
<tr>
<td>similar words</td>
<td>72</td>
<td>97.30</td>
<td>59</td>
<td>92.19</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1997 Regulation ideas</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>no 3 ideas of 1997</td>
<td>45</td>
<td>60.81</td>
<td>57</td>
<td>89.06</td>
</tr>
<tr>
<td>Regulation explain ideas of 1997</td>
<td>29</td>
<td>39.19</td>
<td>7</td>
<td>10.94</td>
</tr>
<tr>
<td>Regulation Total</td>
<td>74</td>
<td>100.0</td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How to obtain the code</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>65</td>
<td>87.84</td>
<td>62</td>
<td>96.88</td>
</tr>
<tr>
<td>yes</td>
<td>9</td>
<td>12.16</td>
<td>2</td>
<td>3.13</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100.0</td>
<td>64</td>
<td>100.0</td>
</tr>
</tbody>
</table>
H2: The type of Payment Code and membership of FTSE4Good firms is independent.

H3a: The number of days in Directors’ Report and membership of FTSE4Good firms is independent.

H3b: The number of days using the Proxy to calculate the payment days and membership of FTSE4Good firms is independent.

H4a: The similar word used in Payment Policy in the Annual Report (Directors’ Report) about the relationship with suppliers and membership of FTSE4Good firms is independent.
<table>
<thead>
<tr>
<th>H4b: The explanation of the ideas of 1997 Regulation about the relationship with suppliers, explained in Payment Policy in the Annual Report (Directors’ Report), and membership of FTSE4Good firms is independent.</th>
<th>The probability of the Kruskal-Wallis statistic is 0.000, which is less than or equal to the level of significance of 0.05. The H4b is rejected: We reject the null hypothesis and conclude that the analysis supports the research hypothesis that members of FTSE4Good explain the ideas of 1997 Regulation about the relationship with suppliers in Annual Report (Directors’ Report) and firms not indexed in FTSE4Good do not.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5: How to obtain the Payment Code and membership of FTSE4Good firms is independent.</td>
<td>The probability of the Kruskal-Wallis statistic is 0.050, which is very approximate to the level of significance of 0.05. The H5 is rejected: We reject the null hypothesis and conclude that the analysis supports the research hypothesis that members of FTSE4Good explain how to obtain the Payment Code and firms not indexed in FTSE4Good do not.</td>
</tr>
</tbody>
</table>

### 5. Conclusions

Payment to suppliers is an important aspect in the financial situation of firms. There are different points that could indicate a “better” payer, such as signing a Payment Code or being a member of FTSE4Good. Public policy initiatives have attempted to improve the form to complete firms’ behaviour. For example, 1997 Regulation requires firms to disclose their Payment Policy in their Annual Report (Director’s Report) describing some aspects to explain the relationship with suppliers, showing if they have signed a Payment Code and how to obtain that Code, and disclosing the days that they use to pay suppliers.

Using UK data from 2007, we find that the theoretical view that signing a payment code and being FTSE4Good firm are linked to being a better payer is not supported by statistical evidence. We show that firms that sign a payment code are more exhaustive comparing with the rest of firms in terms of complete the requirements of 1997 Regulation. However, although they give in their Annual Report correct explanations about the form to make relationships with suppliers it is not possible to say that signing a payment code implies a quick payment to suppliers, at least statistically. But, there is evidence that suppliers can have confidence in firms that sign a payment code that they will be paid within clearly defined terms, and that there is a proper process for dealing with any payments that are in dispute. The results for members of FTSE4Good index are similar, although theoretically we could think that firms in FTSE4Good follow better practices, such as being better payers, than others not included in this index. However, it is only possible to say that FTSE4Good firms are correct and exhaustive describing the relationship with suppliers, they show correctly if they have signed a payment code and they
explain how to obtain the code, and they disclose the payment days to suppliers as required in 1997 Regulation. Consequently FTSE4Good firms follow a clearly defined payment policy, but it is not possible to confirm that firms in FTSE4Good are better payers than other firms outside this index.

In sum, the results show that membership of FTSE4Good or Signing a Payment Code is enough to complete correctly the requirements of 1997 Regulation, but not for being a better payer and paying suppliers quickly. These findings raise a doubt related to the use of payment codes or the use of the inclusion in FTSE4Good of the firms as indicators to identify quick payers.

References


1997 No. 571 COMPANIES
The Companies Act 1985 (Directors’ Report) (Statement Payment Practice) Regulations 1997
PART VI
POLICY ON THE PAYMENT OF CREDITORS

12.—(1) This Part of this Schedule applies to a report by the directors of a company for a financial year if—
   (a) the company was at any time within the financial year a public company, or
   (b) the company did not qualify as small or medium-sized in relation to the financial year by virtue of section 247 and was at any time within the year a member of a group of which the parent company was a public company.

(2) The report shall, with respect to the financial year immediately following that covered by the report, state—
   (a) whether in respect of some or all of its suppliers it is the company’s policy to follow any code or standard on payment practice and, if so, the name of the code or standard and the place where information about, and copies of, the code or standard can be obtained,
   (b) whether in respect of some or all of its suppliers it is the company’s policy—
      (i) to settle the terms of payment with those suppliers when agreeing the terms of each transaction,
      (ii) to ensure that those suppliers are made aware of the terms of payment, and
      (iii) to abide by the terms of payment,
   (c) where the company’s policy is not as mentioned in paragraph (a) or (b) in respect of some or all of its suppliers, what its policy is with respect to the payment of those suppliers.

(3) If the company’s policy is different for different suppliers or classes of suppliers, the report shall identify the suppliers or classes of suppliers to which the different policies apply.

(4) For the purposes of this Part of this Schedule a supplier is any person whose claim on the reporting company in respect of goods or services supplied would be included under "trade creditors" within "Creditors; amounts falling due within one year" in a balance sheet drawn up in accordance with balance sheet format 1 in Schedule 4.

(6) Schedule 9 to the 1985 Act (form and content of accounts of banking companies and groups) is amended in accordance with Schedule 4 to these Regulations.

(7) Schedule 9A to the 1985 Act (form and content of accounts of insurance companies and groups) is amended in accordance with Schedule 5 to these Regulations.

(8) Schedule 11 to the 1985 Act (modifications of Part VIII where company’s accounts prepared in accordance with special provisions for banking or insurance companies) is amended in accordance with Schedule 6 to these Regulations.
Appendix 2: The Better Payment Practice Code

The Better Payment Practice Group urges all firms to adopt a responsible attitude to paying on time.

By adopting the following four point code you can apply to use the Better Payment Practice logo. The use of this logo will send a clear signal to your suppliers and customers of your responsible position on prompt payment.

As a business you must promise to:

• Agree payment terms at the outset of a deal and stick to them;
• Explain your payment procedures to suppliers;
• Pay bills in accordance with any contract agreed with the supplier or as required by law; and
• Tell suppliers without delay when an invoice is contested, and settle disputes quickly.

You can apply online by visiting www.payontime.co.uk or by detaching and completing the coupon below* and returning it to us. To use the logo simply detach the logo* … and pass it to your stationery supplier to be printed onto you letterhead or other materials.

* Not reproduced in this Appendix.

The Prompt Payment Code is sponsored, hosted and administered by Institute of Credit management (ICM) on behalf of BERR and supported by RBS (Royal Bank of Scotland) and NatWest. (12 December 2008) Recently, is supported by Barclays and HSBC too.

1. Pay suppliers on time
   • within the terms agreed at the outset of the contract
   • without attempting to change payment terms retrospectively
   • without changing practice on length of payment for smaller companies on unreasonable grounds

2. Give clear guidance to suppliers
   • providing suppliers with clear and easily accessible guidance on payment procedures
   • ensuring there is a system for dealing with complaints and disputes which is communicated to suppliers
   • advising them promptly if there is any reason why an invoice will not be paid to the agreed terms

3. Encourage good practice
   • by requesting that lead suppliers encourage adoption of the code throughout their own supply chains

------------------------------------
The Payment Policy “Better Payment Practice” has started since 1997, but some firms say that they sign the previous Payment Policy which was replaced by this one. In December 2008 there is another Payment Policy “Prompt Payment Code”, but our analysis has been done in 2007, so this new version of the Code is no consideration in our empirical analysis.

Although the importance of monetary policy is considered in terms of the financial opportunities that firms have to obtain funds in monetary market, in recent financial literature this aspect is not studied as isolate view.

There are other three firms Resolution, Umbro and Scottish and Newcastle without access to their Annual Report 2007 for different reasons: the acquisition by others (Umbro has being acquired by Nike and Scottish and Newxcastle by Heineken) or due to the fact that they are no longer a listed company and are not require to do so.