



University of Huddersfield Repository

San-Jose, Leire and Cowton, Christopher J.

El Crédito Comercial y la Crisis Crediticia: un Análisis Descriptivo en Europa; Reino Unido y España / The Trade Credit and Credit Crunch: a Descriptive Analysis in Europe, UK and Spain

Original Citation

San-Jose, Leire and Cowton, Christopher J. (2009) El Crédito Comercial y la Crisis Crediticia: un Análisis Descriptivo en Europa; Reino Unido y España / The Trade Credit and Credit Crunch: a Descriptive Analysis in Europe, UK and Spain. In: Administrando en entornos inciertos. ESIC, p. 217. ISBN 9788473566094

This version is available at http://eprints.hud.ac.uk/4714/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

http://eprints.hud.ac.uk/

XXIII Congreso Anual de AEDEM Sevilla

Administrando en entornos inciertos

3 al 5 de Junio de 2009

EL CRÉDITO COMERCIAL Y LA CRISIS CREDITICIA: UN ANÁLISIS DESCRIPTIVO EN EUROPA; REINO UNIDO Y ESPAÑA THE TRADE CREDIT AND CREDIT CRUNCH: A DESCRIPTIVE ANALYSIS IN EUROPE; UK AND SPAIN

Leire San-Jose

Research Fellow en la
University of Huddersfield Business School
y Profesora Asociada de la
Universidad del País Vasco (EHU/UPV)
Email leire.sanjose@ehu.es

Christopher J. Cowton

Dean

University of Huddersfield Business School

Queensgate

Huddersfield HD1 3DH

United Kingdom

Email c.j.cowton@hud.ac.uk

EL CRÉDITO COMERCIAL Y LA CRISIS CREDITICIA: UN ANÁLISIS DESCRIPTIVO EN EUROPA; REINO UNIDO Y ESPAÑA

THE TRADE CREDIT AND CREDIT CRUNCH: A DESCRIPTIVE ANALYSIS IN EUROPE; UK AND SPAIN

RESUMEN

El uso de crédito comercial como forma de financiar el corto plazo ha aumentando en los últimos años, las grandes empresas utilizan más días del que necesitan para realizar los pagos a las pequeñas empresas, lo que provoca fatales consecuencias financieras para los proveedores. Estos problemas financieros no son nuevos, pero con la restricción pronunciada del crédito los problemas se agudizan debido a que el uso masivo del crédito comercial repercute negativamente en los proveedores cuya insolvencia y riesgo de quiebra aumentan. En este trabajo se revisan de forma descriptiva el uso del crédito comercial en la crisis crediticia. Las principales contribuciones de la ponencia son dos. En primer lugar, mostrar las consecuencias financieras por la utilización del crédito comercial y, concretamente, en la crisis crediticia, y cómo el gobierno de Reino Unido desarrolla políticas públicas de pago para reducir el efecto negativo de los impagados. En segundo lugar, estudiar y comparar la situación de los países europeos en términos de pago a los proveedores y, en particular, el caso de Reino Unido, pero también el caso Español.

PALABRAS CLAVE: Crisis crediticia, Crédito Comercial, Proveedores, Iniciativas sobre Políticas de Pago.

ABSTRACT

The use of trade credit as a short-term financing is increasing in the last years; large firms use more days to pay small firms than they need, which causes financial fatal consequences to suppliers. These financial problems are not new, but with the credit crunch they are coming up because the massive use of the trade credit impacts negatively on suppliers whose insolvency and bankruptcy risks increase. In this paper we review in a descriptive way the use of trade credit in the credit crunch. The main contributions of the paper are two. Firstly, we show the financial consequences of the use of trade credit, and specifically in credit crisis, and how UK government develop public payment policies to reduce the negative effect of delete payments. Secondly, we study and compare the situation of European countries in terms of payment to suppliers, and in particular the case of UK, but also Spanish case.

KEYWORDS: Credit Crunch, Trade Credit, Suppliers, Payment Policy Initiative.

1. INTRODUCTION

Nowadays, the credit crunch and economy downturn financial problems of companies increase in terms of liquidity. The consequences of financial restrictions prompted by credit crisis enhance the firms' cash flow problems, principally because they do not get their money when they are expected to obtain. Some characteristics of the credit crisis affect directly the financial management of firms; the diminution of products and services sales, the difficulties in growth of firms, the banks restrictions in terms of lend money and the increase of charges to obtain the bank credit are some of them.

The trade credit is used by companies to finance their purchases. But, the form to use this financial tool, especially from large firms, is important in financial crisis because it could impact negatively in small firms more than ever, deteriorating their liquidity position and enhancing cash flow problems. Small firms are often suppliers of trade credit, despite the financial complications that this can cause them. Although empirical work has been done previously on trade credit, most of the studies are focused on large firms (Petersen and Rajan, 1997; and Ng et al., 1999) and only some of them analyze the use of trade credit from small firms perspective (Wilson & Summer, 2002).

In this sense, the aim of this paper is to establish the use of trade credit practice from small firm's position in credit crunch. Although trade credit helps to promote sales to small and large firms, and support economic activity, it

puts suppliers in a vulnerable position which damage specifically the financial sustainability of small firms, and consequently their survival. Thus, in this paper the focus is related to these two particular aspects. Firstly, analyze the consequences of the use of trade credit in a situation of global credit crisis, focusing our analysis in small firms. Secondly, describe the situation in terms of use of trade credit in Europe, and more concretely the situation of United Kingdom in which the government have applied specific measures to reduce the bad consequences of the use of trade credit in this crisis, apart of the voluntary actions as payment codes or "good" payer's rankings. So, the main contribution of this paper is provide knowledge in trade credit as Paul & Boden (2008) shown as useful in their paper. Concretely, in this work we contribute in the analysis of the form to use the trade credit and their financial consequences to small firms when it is used incorrectly.

Our findings demonstrate that credit crisis could affect negatively the financial situation of firms; all above small firms' liquidity is damaged. The average days used in European firms has maintained in the last years, but they are not reduced. In UK, more than in the rest of countries have tried to address the issue and in communicating on the use of trade credit. Although the own regulation to large firms (Plcs) about the payment policy, the European Directive to apply interests to deleted payers, and the voluntary actions carry on in UK promoting Payment Codes, their results in average days to pay suppliers are not reduce in the last years in large firms. It seems an indication that voluntary and compulsory actions, focused on large firms, are not enough to a reduction in the days used to pay suppliers. Moreover, our findings demonstrate that the Spanish case is one of the worst in Europe because there are no public or private actions neither voluntary nor compulsory ones to reduce the used days to pay suppliers. Furthermore the government and the public institutions in Spain are clear examples of late payers, so in Spain there are used more days to pay suppliers increasing funding and cash flow problems of firms, in special small and medium firms as more vulnerable in this situation.

The remainder of this paper is organised as follows: in the first section the credit crisis is explained using supplier's perspective. The next section provides an overview of previous studies focusing the review of literature in aspects in which the global credit crisis is affecting. This is followed by the empirical results; a descriptive analysis of the use of the trade credit in Europe showing the situation of Spain, and the results in UK firms more deeply. This paper concludes with a discussion of the key findings and the bibliographical references.

2. CREDIT CRISIS FROM A SUPPLIERS PERSPECTIVE

In 2008, after a growth economy period, started the credit crisis that affect all of the countries; but especially the most damaged countries are the most implicated in the causes, for instance United States, United Kingdom, Germany, France, Italy or Spain. The growth of the previous economy was based on corrupted actions and on speculation investments, and on greed of the people and managers of the most important financial institutions and firms, as well. There was a chain of movements interrelated based on the possibility to obtain easily money from banks and on the speculative investments. Banks, in a complex money market system, lend money as mortgages (subprime mortgages) based on complex financial instruments to individuals and firms acquiring high credit risks, which compensate by packaging these bad mortgages with other mortgages and reselling them as "investments". The facilities to obtain easily credits from banks makes to increase consume of products and services, thus, increase demand, prices, and production, as well; it was a Consumer boom. Moreover, the accessibility to obtain credit permits the purchase of houses and cars, and makes other semi-luxury purchases. But, the main problem was not specifically the use of the credit, the problem based on the form to use it. The credit was not used wisely (for start or expand a business or buy necessary houses or cars that increase jobs and growth economies), it was used to speculation and it was out of control. The crack of some of most important and large credit institutions started on September 2008, because many of them, with high volume of risky mortgage, could no longer afford to extend new credit. Unfortunately, their loans were not bringing in a positive cash flow and they could not lend new money to individuals and businesses, the main activity of the credit institutions.

The instability of the financial situation because of the credit crisis causes some changes and implications to enterprises: the reduction of the demand of products or services, the fall down of product and services' prices, and consequently, an unnecessary massive production in which the economy was based on. It implicates also the lost of miles of jobs. The reduction of sales reduces firms' cash flow, because there is a diminution of cash revenues caused not only for the reduction of current sales, but also for the liquidity problems of the past clients that have difficulties to pay their acquired goods, and the future liquidity problems of the potential clients. So, especially the current, but also the future offered credit to clients involve the

assumption of high credit risk for companies. In this sense, if suppliers assume more financial risk providing trade credit for clients than they could support, it probably will result in financial fatal consequences for suppliers. This problem increases with the generalization of the trade credit as financial tool, but is now with the credit crisis when is widely recognise for the financial consequences for suppliers and other stakeholders in case of clients delete or default their payments.

In this sense, companies could try to stop the effect of reduction in sales and respective reduction of revenues with injections of liquidity provided from the financial entities. The problem is that in this crisis situation, the negative cash flow of firms can not resolve with the obtaining of external funds as bank credit, at least in an easy way, because of the restrictive position that banks have acquired to extend credit to the companies and individuals. Thus, current financial restrictions of credit institutions cause difficulties for obtaining financial funds on firms (see, for example, Kaminsky & Reinhart, 1999; Eichengreen & Rose, 1998; Demirgüç-Kunt et al., 2006), not only for small and medium, but more rapidly. OECD composite measures of bank lending indicate that banks are massively restricting their lending to firms, either in the form of increased costs or other restrictions, such as demanding higher levels of collateral (although rather less in the Euro area than in the US). Moreover, bank credit is likely to decelerate around banking crises (Dell' Ariccia et al., 2008). So, in sum the accessibility of firms to affordable finance is difficult. But, the case of small firms is worst, because small firms have to support not only the problems relate to borrow funds from banks, but also the payment policies of large companies which do not have as objective be quick in their payment with suppliers. This payment behaviour does not help small firm's financial welfare.

These results could corroborate with real data about the number of firms that are closing down during the last year. The death of firms, some young, but others old, increases the unemployed persons. As many as 50 small businesses are closing every day in UK, (Federation of Small Business, www.fsb.or.uk, January 2009), and the poll suggests the rate could increase. Moreover, liquidity, solvency and bankruptcy problems in companies are appearing. For example, in UK last year, a total of 15,536 companies had to file for insolvency – 2,586 more than in 2007 (www.insolvency.gov.uk). That represents an increase of 19.94 percent, as compared with a reduction of 5.0 percent the year before. In Spain for example, the situation is worst because last year, a total of 2,092 companies had to file for insolvency (more than 80% with less than 50 employees) –1,262 more than in 2007 (www.ine.es). That represents an increase of 152.05 percent, as compared with a reduction of 2.7 percent the year before.

Small firms in particular, but maybe medium and large ones too, have introduced in a lack of liquidity which is difficult to resolve without measures or regulation from the governments.

3. REVIEW OF LITERATURE: ETHICAL POINT OF TRADE CREDIT AND ECONOMY THEORIES

Trade credit, a major source of finance for companies (Van Horne & Wachowicz, 2001; Stern & Chew, 2003) makes to negotiate and contract directly seller and buyer not only the goods and services, but also the form to pay them. Although trade credit helps to promote sales and support economic activity (Meltzer, 1960; Brennan et al., 1988; Petersen & Rajan, 1997), it puts a strain on the resources of suppliers because it is the provision of goods or services by one company to another in the expectation that payment will be made at some future date. This situation is more critic in case of small firms because of the lack of a strong credit risk analysis system or an expert credit management responsible (Cheng & Pike, 2003), which could get worst their financial situation without expect it.

However, evidence suggests that larger firms are, in aggregate, net credit providers (trade debtors exceed trade creditors) and provide an important financial system for channelling finance down to smaller firms, particularly those rationed by the financial institutions (Storey, 1994; Peel et al., 2000; Kohler et al., 2000). But, trade credit contracts by their nature are incomplete, and the well done of acquired financial positions depends on the information asymmetries of the contractors. In this sense, although maybe small firms could provide less net credit than larger firms their credit risk is probably bigger. In fact, the provision of credit from small firms can be a problem for them, because the

late payment of commercial debt usually precipitates their financial distress and/or constrains their growth, which is crucial for their survival (Grablowsky, 1984; Kargar & Blumental, 1994).

Walker (1991) and Smith (1987) argued that the state of the economy influences on the level of accounts receivable. So, the effects of the actual credit crisis could affect or aggravate the financial situation of firms, especially the situation of small ones. In this fragile financial system situation the vulnerability and the weak financial position of small firms do not help them in the obtaining of financial funds to maintain an effective management of working capital. In this sense, the changes in trade and financial markets in credit crisis make the survival of small firms more difficult than ever, and a generalized use of the trade credit is not an alternative for them.

One of the effects of actual credit crisis is the down of sales and the difficulties to growth. The trade credit is an alternative to increase sales (Schwartz, 1974; Emery, 1987; Brennan et al., 1988; Petersen & Rajan, 1997), but not only for small firms, but also for large companies, so all organizations could, at least theoretically as Meltzer (1960) concluded use more trade credit when the product sales decrease. But firms change their product sales for credit sales. In this sense firms have to be careful in giving more credit with the aim to increase their sales, because manage and offer trade credit is different particularly to small firms without being specialist in offering credit (Cheng & Pike, 2003).

The difficulties to obtain funds in the financial system increase with the credit crunch. In this sense, Walker (1991) and Petersen & Rajan (1997) showed that companies that are rationed on credit by the banks are more likely to take trade credit loans. More concrete, they argued that firms with better access to capital markets offer more trade credit and use less credit from their suppliers. In this sense, the trade credit could be considered as a bank credit substitute for some firms (Jaffee, 1971; Schwartz, 1974 and Nilsen, 2002). The substitution of bank credit with trade credit is interesting in case of banks and financial entities apply restrictive policies to lend money, in this situation the use of the trade credit increase (Mateut et al., 2006), and it is useful for all firms; small, medium and large companies (Meltzer, 1960). But the general use of this financial practice to get funds could increase especially the risk of small firms because probably, and with a restrictive financial situation concretely, suppose the imposition of terms of contracts from large firms to small ones, or the lack of commitment in fulfil the fixed terms in the contract. Again, this practice could be cause difficulties to financial situation of small firms. Regards these theories, other authors as Ng et al. (1999) argue that trade credit is given from firms with high liquidity to firms with low liquidity. In the case that the theory is true and liquidity firms extend credit to firms with liquidity problems, the trade credit could be a mechanism to distribute the money, and financial necessities between firms. But, in case that most of firms are in a no liquidity position the use of trade credit probably is not an instrument to inject liquidity to those firms that need it, it is more an abusive mechanism of firms that increase their liquidity and financial funds from others with less capacity to manage credit, with high necessity to increase sales, or globally to try to survive to a down turn economy. Peel et al. (2000) suggested that small firms are generally associated with a higher proportion of current assets when compared to large firms, and that the small firms also have less liquidity, more volatile cash flows and a reliance on short-term debt. So, the most affected firms are smallest ones and in general their liquidity problems are higher than biggest firms for the reason that large firms could obtain money, although with more difficulties than before the credit crunch, from their banks, and they have bigger mechanism to analyze the sales or the credit risk, as well.

In sum, in case that small firms offer more trade credit than ever is because they have not other choice; they are in a worst situation; in which their sales decrease, their growth is stopped and they have difficulties to obtain funds from others. Thus, the only form that they have to survive without consideration of the adverse selection, so supposing that their clients are good payers, is offering more trade credit than before the crisis. But it is real that they are assuming an unnecessary financial risk in this situation, because in the case that customers pay the products or services in the fixed day, or better, as soon as clients get the product this credit risk to suppliers disappear, but it is not the case in most of the situations. Moreover small firms are not experts in credit management, so the risk that they support could be much bigger than they could expect, what it means their financial distress, or worst, their bankruptcy, and close.

4. THE USE OF TRADE CREDIT IN THE CREDIT CRUNCH: A DESCRIPTIVE ANALYSIS

4.1. The trade credit in Europe.

Grant Thornton Company makes annually around 7000 interviews to medium size companies about business

management in European countries. One of their analyses involves the payments, in particular the used days in commercial transactions with suppliers. Furthermore, they use the required ratio in Companies Act 1985, in which instead of use cost of sales, use sales invoices with suppliers (we will explain in a next section the requirement of this ratio in large UK firms). The results (See Figure 1) show that the use of number of days in trade credit decreases in Europe in 1999, but then it is constant, around 54 days. So, it seeks probably to think that the last legislation of European Commission (for example 2000/35/EC) and some of the policies in European Countries do not reduce significantly the used days to pay suppliers as much as they expect to, because they need near of two months in average to pay suppliers.

Figure 1. Average payment period for sales invoices (days).

Source. Own elaboration with Grant Thornton International Business Report 2007.

Other analysis in term of number of days to pay suppliers has been done by *Intrum Justitia*. In their 2007 European Payment Index (EPI) Report they reflect 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. To be late in payments to suppliers is a cause of their liquidity problems, which could finish in the bankruptcy of the firm" (EPI, p.3). The used ratio to calculate the average days to pay suppliers in European Payment Index is not the required by Companies Act 1985 in UK. They calculate the days to pay suppliers using financial accounts.

In the following table there are represented the average days to pay suppliers of 25 countries in European area in 2007. The Nordic countries are the best payers in Europe with an average of 31 days and the worst payer countries are Spain (82.6), Portugal (88), Italy (96.9 days), Cyprus (97.1 days) and Greece (105.9 days). England-Wales is the 18th position with a delay payment average of 51.6 days, and Spain is not in a good position because it is the fourth worst one from the 25 European Countries in 2007.

Table 1. European Payment delay by Country.

			ľ			
EPI			EPI			
Payment	Payment	EPI	Payment delay	Payment	EPI	
duration.	duratio	Country	(average	duration.	Country	
Intrum Justitia	n.	Rank	days)	Intrum	Rank	
	Intrum			Justitia		
	Justiti					
	a					
Norway	1	26.4	Slovakia	14	47.3	
Finland	2	26.7	Czech	15	49.1	
			Republic			
Estonia	3	28.5	Scotland	16	49.3	
Denmark	4	34.2	Belgium	17	50.2	
Latvia	5	34.7	England -	18	51.6	
			Wales			
Sweden	6	34.9	Ireland	19	52.2	
Iceland	7	35.8	France	20	65.3	
Netherlands	8	40.3	Spain	21	82.6	
Lithuania	9	43.7	Portugal	22	88	
Poland	10	44.1	Italy	23	96.9	
Switzerland	11	44.7	Cyprus	24	97.1	
Hungary	12	45.1	Greece	25	105.9	
Germany	13	46.5				

Source: European Payment Index (EPI).

Among the European Union and other Western European countries, Nordic countries dominate the top scorers in the 2007 with Denmark and Finland leading the overall ranking. These European countries are quicker payers comparing with the rest, in particular with Portugal, Italy, Cyprus, Greece and Spain, probably because their payment culture is different and they have high responsibility and fixed commitments in relation to the payment to suppliers. However, it is interesting to mention that in Europe there is a directive (2000/35/EC) that regulates the payment to suppliers in terms of used day to pay them and in terms of punish with interest charges deleted pays. Each of European country has the obligation to develop this directive to get harmonization in payment. But, this harmonization is difficult because each country could develop in their law the directive requirements depending on their interests, circumstances, culture or behaviour in terms of payments, because some aspects are open to do that.

4.2. The trade credit in United Kingdom.

Although beyond credit crisis the initiatives of UK government take more effort than ever, in 1991 started some voluntary and public policies with the aim to reduce the negative impact of the use of trade credit in firms, in particular in small ones because they are more affected by this payment practice in a negative way.

Voluntary Payment Policy Initiatives:

Confederation of British Industry (CBI) developed a payment code called "Prompt payers: in good company" that started operating in November 1991. A further development in 1997 was the publication of the Department of Trade and Industry (DTI) document "Better Payment Practice", which contains guidance about giving and taking trade credit. This superseded the CBI code. This second voluntary code is more direct and clear. More recently, in December 2008 the Institute of Credit Management (ICM), on behalf of Department for Business, Enterprise and Regulatory Reform (BERR), has developed a further version of "Prompt Payment Code", which is focused on three main areas: a commitment to pay suppliers on time; giving clear guidance to suppliers; and encouraging good payment practice. One of the most important actions around this new version of the payment codes is that the summit follows a commitment by central Government to pay its suppliers within ten days, and that it is focused on good practice examples and discussed in detail what measures should be adopted to ensure suppliers are paid on time.

Compulsory Payment Policy Initiatives:

Apart of these voluntary initiatives there are some regulations in terms of payment to suppliers. Concretely, 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 Companies Act 1985. 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. These aspects of the Companies Act 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:

```
|No. of days (DR) = Trade creditors value at the | end of the year x 365 | Aggregate amount invoiced by suppliers during the year
```

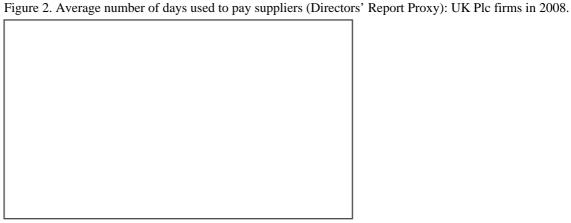
This latter figure gives an insight into company practice, to complement the policy statements they might also make. This requirement permit to external analysts use a ratio more close to the reality in terms of days that use the firm to pay supplier, because without the disclose in the Directors' Report about the number of days to pay supplier, the only form to calculate the days is using the annual accounts (Balance Sheet and P&L Accounts), accountability ratio of payment days to suppliers.

```
|No. of days (Proxy) = Trade creditors value | at the end of the year x 365 | Cost of Sales
```

There is also, some regulation on combating late payment in commercial transactions started forcing in 1998 in UK to reduce the effects of late payments. Firstly, The Late Payment of Commercial Debts (Interest) Act was introduced on 1st November 1998 to encourage purchasers to pay on time by giving businesses the right to claim interest if another business pays its bills late. Previously, businesses were only able to claim interest on late paid debts if it was included in the contract or if they pursued the debt through the courts and the courts awarded interest. Secondly, on 8 August 2000, Directive 2000/35/EC of the European Parliament and of the Council on combating late payment in commercial transactions was published in the Official Journal L 200. This Directive is in favour of small and medium enterprises (SMEs) and the focus of the European Parliament is to deal with the problem of late payment. If the customer does not pay the day fixed in the contract, or in case that the date or period for payment is not fixed in the contract in 30 days following the date of receipt of the invoice or the date of receipt of the goods or services, the debtor is obliged to pay a "penalty interest".

Following some of the results around UK payment situation is shown. The average payment days that Plc firms in UK are required to show in their Annual Report (Directors' Report) increase in the last years from 42 to 46 days (See Figure 3). The large firms in UK use 4 days more in 2008 comparing with the days used in 2007. There are different payment policies, not only voluntaries (payment codes), but also compulsories (Companies Act and regulations), but if the aim of these policies is to reduce the days that the largest firms in UK used to pay their supplier the made effort is not enough, or the results in terms of reduction of days to pay need more time to change because of the need of payment culture change. But, it is real that some of the actions are not new, they have been operative 10 years, a period enough big to impact in firm's society and change their payment systems with suppliers. The real impact of an abusive use of trade credit has not show before. It is now when firms in UK are showing externally the financial worst consequences of the culture to pay late, because with the credit crisis in which it is difficult to compensate their liquidity needs with other external funds and their sales decrease, their financial situation downturn rapidly, without any possibility to stop it.

Currently, more than the middle of large firms are using more than 40 days to pay suppliers, and 20% of them use more than 70 days (See Figure 2), but around 53% of the sample uses less than 40 days to pay suppliers and 36% of the sample less than 30 days, a significant data. The payment policies with the support of banks and firms association as Federation of Small Businesses (FSB) or Confederation of British Industry (CBI) are trying to reduce the days used to pay suppliers to 10 days, but only a 6.77% of Plc firms already use 10 or less than 10 days to pay suppliers, thus the change in the reduction of days used to pay suppliers have not to be easy. For the moment, the Government and some association as Universities have accepted this initiative, and they have committed to pay in 10 or less days to suppliers.



Mean 2006/2007: 42 days

Mean 2007/2008: 46 days

Source. Own elaboration using the data in Payment League Table of ICMR.

FTSE Sample

The sample used in this study was taken from FTSE All-Share data (31 October of 2007). We have selected 100% of FTSE 100 firms[3], 20% of FTSE 250 firms (randomly using systematic method) and 14% of FTSE

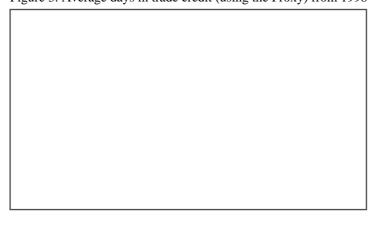
SmallCap (randomly using systematic method). Data were collected by means directly of their Annual Report or Financial Analysis Made Easy (FAME) database. The sample is significant at 95% level with an error of 3.77% and it takes approximately the 85% of capitalization of UK firms, and represents statistically the UK firm population (see Table 2).

Table 2. Technical characteristics of the study

Table 2. 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= \pm 3.77\%$ with a confidence level of 95%,				
	p=q=0.5, for overall data				

We have analyzed the progress since the regulation started to be operative in 1997 (Companies Act 1985) to 2007. The average days from 1998 to 2007 used for FTSE firms in UK are around 60 days (See Figure 3). However, comparing the days in 1998 with the days in 2007 using the Proxy, (the ration between trade creditors and cost of sales), in 2007 firms are using 13 days more than in 1998, there is an increase in used days to pay suppliers. This results indicate that the effort, not only voluntary but also compulsory ones, from Europe and from UK Government are not enough to reduce used days to pay suppliers. However, the UK culture, as we could see following is so different to Spanish one, in which the null payment policies make a big different in terms of used days to pay suppliers comparing not only with UK but also with most of European countries.

Figure 3. Average days in trade credit (using the Proxy) from 1998 to 2007: UK FTSE case.



In addition, the liquidity problems of UK firms increase because the availability to credit banking and capital markets has reduced with the credit crunch. The results of the survey made by Confederation of British Industry (CBI) to analyze the situation of firms in UK in terms of credit conditions show the availability problem to get external funds. The used sample in 2009 is 113 firms of difference size, small and medium (0-240 employees), large (250-4999 employees) and very large (more than 5000 employees). The results show that eight in ten very large firms reported deterioration in credit availability, and 63% of small and medium-sized enterprises and over half of large businesses have experienced a reduction in credit availability since the beginning of the credit crunch. So, the availability of credit to the corporate sector has worsened over the past quarter, and over the next months a further similar deterioration in the availability of credit is expected. Moreover, the weak accessibility to external funds

impact directly in business activity because six in ten businesses have stopped their plans for capital investment and nearly two fifths have been forced to cut jobs.

4.3. The trade credit in Spain.

In Spain the directive 2000/35/EC of the European Parliament and of the Council of 29 June 2000 on combating late payment in commercial transactions was established with the following law: Ley 3/2004 of 29/XII (BOE 30-XII). Continuing with the European directive, the Spanish law about late payment limits the used days to pay suppliers and the law develops a regulation to use interests to punish deleted payments. The days to pay suppliers are 30 days in general terms following the date of receipt by the debtor of the invoice or an equivalent request for payment, but the directive permits to European members to modify in specific terms these days, so in Spain there are permitted for example the use of 60 days in case of public administration payments, or in case of the used payment documents (cheques, notes and drafts) firms could use more days to pay. The Spanish law is not very restrictive and if the aim of the European directive is the harmonization of payments in European countries to change the payment culture, the payment behaviour in Spain has not been any significant change with the law. So, for the moment, the directive throughout the Spanish law has established the regulation to charge interests in case of delete the payments. So, in general, the payment behaviour in Spain is not very different than before the law but the suppliers could use the law as an instrument to reinforce their negotiation position when distributors want to postpone payments.

To analyze Spanish case we have used the exploratory data in BACH Database. The database was set up in 1987, in co-operation with the European Committee of Central Balance Sheet Data Offices ECCB, and they use non-financial firms from different countries (Belgium, Germany, Spain, France, Italy, Netherlands, Austria, Finland, Portugal, USA and Japan) to make their study. We have analyzed the evolution of payment days from 1997 to 2007 in Spain.

The used days in Spanish firms to pay are more than 79 days for all of the analyzed period (See Figure 4). Moreover, in the year in which the Spanish late payment law started, 2004, it is not any reduction in the days used by firms to pay their transactions, neither in the following years. The average days used in Spain in 2007 are near of 82, so, Spanish firms instead of use a month to pay commercial transactions, as the European Parliament try to establish with the directive, they use near of 3 months. The reasons to the difference in payment days could be diverse, but the permissible Spanish juridical system permit the use of more days to pay commercial transactions, with the bad consequences to suppliers' cash flow, specially in case to use the suppliers firms as financiers when their cost in permitting delete payments are bigger than the cost of clients to pay good and services in the terms of the contract, and no later than 30 days.

Figure 4. Payment delay (average days) in Spain.

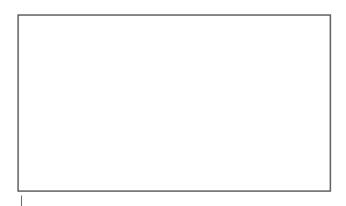


In financial restrictive situations, as in the present credit crisis, the consequences of this payment practices, delete payments to suppliers, worse the cash flow problems and liquidity difficulties of suppliers, and more significantly when they are small of medium firms. In Spain the "Camaras de Comercio" has made a questionnaire to 400 Spanish firms with less than 249 employees to analyze the financial situation of SMEs in 2009. The results show that the financial flow has reduce in more than the middle of the SMEs, the external financing charges and commission are increase in the last year for two in three of firms, the guaranties and warrants increase for 71% of questioned firms and a 25% have to add personal warranties to get funds, and the devolution period is shorter than before. These results in addition to an increase in the payment periods of clients in near of 80% of SMEs show the liquidity problems in which these firms are immerse. Furthermore, the government actions are not focused on a direct financing help of SMEs for the moment.

4.4. Comparing Europe; UK and Spain: B2C, B2B and Public Sector.

Using the *Intrum Justitia* data of the last year, from 2005 to 2008 which makes an analysis in European firms about the payment to suppliers the comparison in same terms is possible. The following figure (Figure 5) shows the results about the used days in business to consumer (B2C), business to business (B2B) and Public Sector (Public) in relation to the used days to pay suppliers in European countries, UK and Spain.

Figure 5. B2C, B2B and Public Sector: used days to pay suppliers in Europe; UK and Spain:



In three cases (B2C, B2B and Public Sector) the Spanish situation is the worst in terms of pay quickly. Spanish firms use more days to pay consumers, concretely 16 days more than the average used days in European Countries and 7 days more comparing with UK case. In case of payments between firms, the Spanish case is the worst, because Spanish firms use 34 days more than the rest of European countries and 38 days more than UK firms to pay other firms. But, the biggest gap is around payment of public sector, the payment behaviour between Spain and the rest of countries is different because the differentiation in days is near to 96 days in case of compare Spain and UK public sectors, and 79 days in case of compare Spain and European public sector. So, in Spain in general are used more days to pay commercial transactions, but the differentiation in Spanish public sector's payment is the biggest one because in Spain the public sector use near of 5 months to pay suppliers when in the rest of European countries are used 3 months less, and in UK 4 months less. Moreover, the progress of the used days in the last 4 years shows that there is a continues increase in the used days in Spanish case in public sector and business to business payment operations, but no in business to consumer operations. The average used days in Europe and UK are similar or few days in the last four years in these three payment categories (B2C, B2B and Public Sector).

In this sense, these results corroborate previous ones. It is obvious that in different countries the used days are different and some of the most important characteristics could be the payment culture or behaviour and the payment policies or actions, and regulation. In Spain the payment culture is different comparing with UK and with the average used days in European countries, so the Spanish situation in terms of payment days is worst. Moreover, these differences show that the gap in Spain comparing with other countries is bigger in terms of be quick payers and the regulation and the public payment activities not only compulsory ones, but also voluntary ones could be a developed aspects in the future if the aim is the reduction of used days to pay suppliers, to improve the cash flow of firms, specially small and medium ones to support the survival of the Spanish business network. But, at least, as important as the necessary change in the payment behaviour in general, is the change of the behaviour specifically in public sector in Spain, the worst one in terms of used days to pay suppliers in Europe.

CONCLUSIONS

This study analyzes in a descriptive way the use of trade credit in the last years because of the financial consequences to small firms based on the massive use of trade credit of large firms. With the credit crunch the cash flow problems increase, more intensively in case of small and medium firms, what it means insolvency, or even worst bankruptcy of firms.

This paper contributes to the debate by providing further evidence of the situation of payments to suppliers in terms of days in Europe, and specifically in UK and Spain. Firstly, we show the financial consequences of the use of trade credit, and specifically in credit crisis, and how UK government develop voluntary and compulsory public payment practices to try to reduce liquidity problems or financial distress and bankruptcy in worst cases. Secondly, we study the situation of European countries in terms of payment to suppliers, and in particular the cases of UK and Spain in which the gap in terms of used days to pay suppliers are so different. This research is particularly interesting due to the recent changes in the accessibility to external financing in actual credit crunch.

In this sense, in the financial crisis, the availability of credit and credit rationing due to their heavy

dependence on bank credit affects particularly SME firms of all European countries. However, it is clear that in some countries, as Nordic ones the use of the trade credit is less than in the rest of countries, and in other countries as in UK the public initiatives, not only voluntaries but also compulsory initiatives are different. The effort made by UK, although the results are not significant in the progress but they are different in the comparison with other countries. So, the results show a different public payment policy in UK in which the payment behaviour of firms is a significant characteristic.

In Spain the differences in terms of payment days are big comparing with European countries, even if we compare with UK. The weak juridical system could be a reason to a more use of the trade credit. In Spain as in other European countries as Portugal or Greece the juridical system is not strong, what could suppose an extend use of the trade credit. In Nordic countries, in which the juridical system is more rude the use of trade credit is less.

Finally, there is a clear government implication in the cause in UK, and more with the credit crisis situation, because they are trying to reduce as much as possible the used days to pay suppliers. In Spain the actions in terms of payment policies are inexistent. The results indicate that UK government and other public institutions are acquiring a commit to pay in less than ten days, in Spain this action does not seem possible because the government and public administration is the first one that use more than the average days that the rest of firms to pay their suppliers. In sum, we could say that Spanish policy is passive and UK policy is totally active.

References

- BACH Database. 2008. European Commission. Economic and Financial Affairs, in www.ec.europa.eu.
- Brennan, M.; Maksimovic, V. & Zechner, J. 1988. 'Vendor Financing.' Journal of Finance 2 (43): 1127-1141.
- Cheng, N.S. & Pike, R. 2003. 'The trade credit decision: evidence of UK firms.' *Managerial and Decision Economics* 24: 410-438.
- Dell'Ariccia, A.; Detragiatche, E. & Rajan, R. 2008. 'The real effect of banking crises.' *Journal of Financial Intermediation* 17: 89-112.
- Demirgüç-Kunt, A.; Detragiache, E. & Gupta, P. 2006. 'Inside the crisis: An empirical analysis of banking systems in distress.' *Journal of International Money and Finance* 25(5): 702–718.
- Eichengreen, B. & Rose, A.K., 1998. Staying afloat when the wind shifts: External factors and emerging market banking crises. *Working paper No. 6370, NBER*.
- Emery, G. 1987. 'An optimal financial response to variable demand.' *Journal of Financial and Quantitative Analysis* 22(2): 209-225.
- European Commission. 2008. Results of the public consultation on late payment in commercial transactions: still a problem in the EU?, in www.ec.europa.eu, 1-6.
- European Committee. 2002. 'Directive 2000/35/EC of the European Parliament and of the Council of 29 June 2000 on combating late payment in commercial transactions.' *Official Journal of the European Communities*, L200, 35-38.
- European Payment Info Index (EPI). 2007. European Payment Index Spring 2007. Economic growths mask poor payments. Intrum Justitia. (www.intrum.ie).
- Grablowsky, B. J. 1984. 'Financial Management of Inventory.' *Journal of Small Business Management* 22: 59-65.
- Grant Thornton. 2007. Grant Thornton International Business Report 2007.
- Jaffee, D. 1969. 'Credit Rationing and the Commercial Loan Market.' The Journal of Finance 24(4): 729.
- Kaminsky, G.L. & Reinhart, C. 1999. The twin crises: The causes of banking and balance-of-payments problems. *American Economic Review* 89 (3): 473–500.
- Kargar, J. & Blumental, R.A. 1994. 'Leverage impact on Working Capital in Small Business.'

- Kohler, M., Britton, E. & Yates, T. 2000. 'Trade Credit and the Monetary Transmission Mechanism.' *Working Paper Series, n°.115*, Bank of England.
- Mateut S.; Bougheas, S. & Mizen, P. 2006. 'Trade credit, bank lending and monetary policy transmission.' *European Economic Review* 50: 603–629
- Meltzer, A. 1960. 'Mercantile Credit Monetary Policy, and Size of Firms.' *The Review of Economics and Statistics* 42: 429-437.
- Ng, CK, Smith, J.K. & R.L. Smith. 1999. 'Evidence on the determinants of credit terms used in interfirm trade.' *Journal of Finance*, 54(3): 1109-1129.
- Nilsen, J. H. 2002. 'Trade Credit and the Bank Lending Channel of Monetary Policy Transmission.' *Journal of Money, Credit, and Banking* 34(1): 226-253.
- Paul, S. & Boden, R. 2008. 'The secret life of UK trade credit supply: setting a new research agenda.' *The British Accounting Review* 40 (3): 272-281.
- Peel, M. J.; Wilson, N. & Howorth, C. 2000. 'Late Payment and Credit Management in the Small Firm Sector: Some Empirical Evidence.' *International Small Business Journal* 18: 17-37.
- Petersen M. & Rajan R. 1997. 'Trade Credit: Theories and Evidence.' *The Review of Financial Studies* 10 (3): 661-691.
- Schwartz, R. 1974. 'An Economic Model of Trade Credit.' *Journal of Finance and Quantitative Analysis* 9(4): 643-657.
- Smith, J. K. 1987. 'Trade Credit and Informational Asymmetry.' Journal of Finance 42: 863-872.
- Stern, J.M. & D.H. Chew (Eds.). 2003. The Revolution in Corporate Finance, 4th Edition. Oxford: Blackwell.
- Storey, D. 1994. *Understanding the Small Business Sector*. New York: Routledge.
- Van Horne, J.C. & J.M. Wachowicz. 2001. Fundamentals of Financial Management, 11th Edition. Upper Saddle River, NJ: Prentice Hall.
- Walker, D. 1991. 'An empirical analysis on financing the small firm' in R. Yazdipour (Ed.), *Advances in Small Business Finance* pp. 47-61.
- Wilson, N. & Summers, B. 2002. 'Trade Credit Terms Offered by Small Firms: Survey Evidence and Empirical Analysis.' *Journal of Business Finance & Accounting* 29 (3–4): 317–351.

^[1] SI (Statutory Instrument) 1996/189.

^[2] Companies Act 1985 (Directors' Report) (Statement of Payment Practice) Regulations 1997.

^[3] There are other three firms Resolution, Umbro and Scottish and Newcastle without access to their Annual Report 2007 because of the acquisition by others (Resolution has being acquired by Pearls Group, Umbro has being acquired by Nike and Scottish and Newcastle by Heineken).