Journal of Contemporary Accounting & Economics 14 (2018) 235–253

Contents lists available at ScienceDirect

Journal of Contemporary Accounting & Economics

journal homepage: www.elsevier.com/locate/jcae

Product differentiation, market dynamics and the value relevance of trade payables: Evidence from UK listed firms☆

Godfred Adjapong Afrifa[a], Ernest Gyapong[b,*], Reza M. Monem[c]

[a] Kent Business School, University of Kent, Canterbury CT2 7FS, UK
[b] School of Accountancy, Massey University, Tennent Drive, Palmerston North 4410, New Zealand
[c] Griffith University, Department of Accounting Finance and Economics, Nathan Campus, Brisbane, Australia

ARTICLE INFO

JEL classification:
G30
G31
G32

Keywords:
Product differentiation
Market dynamics
Trade payables
Excess return

ABSTRACT

This paper provides a comprehensive evidence on how product and market dynamics affect the value relevance of trade payables. Using a sample of 2559 UK listed firms over the period 2005–2014, we find a positive relationship between trade payables and firm performance. Our evidence suggests that trade payables increase (decrease) performance in firms with differentiated products and demand uncertainty (larger market share). We demonstrate that the relative value relevance of bank credit versus suppliers' credit is dependent on the nature of the product, the level of sales volatility, and market share. We use an innovative approach to assess the robustness of our results to omitted variable bias.

1. Introduction

Suppliers' credit is the main source of finance for many firms around the world (Demirgüç-Kunt and Maksimovic, 1999). In fact, in the UK, firms buy over 80% of their merchandise on credit (Peel et al., 2000). However, the ubiquitous use of suppliers' credit is puzzling because relative to institutional finance, it is more expensive (Yang, 2011; Lin and Chou, 2015).

In explaining why firms use suppliers' credit, studies either argue from the effect on market valuation or on other operational imperatives. The market valuation argument mainly focuses on the information content of suppliers' credit and how it impacts upon market valuation by signalling the private information of one stakeholder to another. For example, Goto et al. (2015) argued that relative to financial institutions, suppliers have a significant information advantage about borrowers' future growth prospects. Consequently, their evidence suggested that suppliers' credit signals favourable information about the buying firm's future sales growth and improves subsequent stock returns. Similarly, arguing from a borrower's perspective, Aktas et al. (2012) opined that relative to cash credit, trade credit is illiquid and less likely to divert. Accordingly, trade credits may improve firms' market valuation by signalling managers' private information about their firms' investment quality to outside investors. On the contrary, studies that focus on the operational imperatives are mainly concerned with the centrality of suppliers' credit in firms that operate under certain product and market dynamics. For example, these studies mainly argue that trade credits are more important for the operations of firms with a greater need for inventory optimization management (Bougheas et al., 2009), long-term customer relationships (Wilson and Summers, 2002), and with demand uncertainty (Petersen and Rajan, 1997), among others. The central question in this paper is

☆ We thank the anonymous referee, and Professor Peter M. Clarkson (Editor) for their helpful comments and suggestions.

* Corresponding author at: School of Accountancy, Massey Business School, Massey University, Tennent Drive, Palmerston North 4410, New Zealand.

E-mail addresses: G.A.Afrifa@kent.ac.uk (G.A. Afrifa), e.gyapong@massey.ac.nz (E. Gyapong), r.monem@griffith.edu.au (R.M. Monem).

https://doi.org/10.1016/j.jcae.2018.06.001
Received 17 April 2018; Accepted 16 May 2018
Available online 27 June 2018
1815-5669/

whether these operational imperatives govern the market valuation of suppliers' credit. We show that the market valuation of suppliers' credit varies under different operational conditions and that the relative performance effects of trade credits and institutional finance are dependent on certain product and market dynamics.

Diversion motive theory suggests that suppliers' credit should impact positively on performance because it allows firms adequate time to assess the quality of inputs (Giannetti et al., 2011; Mateut et al., 2015). Similarly, from an operational motive theory perspective, suppliers' credit improves operating efficiency through the separation of payment from delivery (Ferris, 1981; Nelson and Nelson, 2002). Consequently, firms with demand volatility will require more trade payables (Martínez-Sola et al., 2014). Thus, with demand volatility firms face two peculiar problems: either to vary production to suit demand or fluctuate selling price to reflect demand (Martínez-Sola et al., 2014). However, each strategy is very costly. For example, a variation in production will lead to high production costs, while a variation in selling price will lead to a high information search cost for buyers (Martínez-Sola et al., 2014). All these will have implications for a firm's performance. As such, firms with variable demand can smooth production by demanding more credit from suppliers. In that case, a firm will enjoy stable production, which should minimise the cost of production and increase performance. Long et al. (1993) found a positive relationship between trade payables and demand uncertainty. We re-examine the value relevance of suppliers' credit and explore how this varies in firms with different levels of demand uncertainty.

Trade payables are crucial to the performance of firms vying for market share. This is because firms extend more credit to customers in order to increase market share (Nadiri, 1969; Hill et al., 2012). However, the amount of credit firms give to customers is a function of how much credit they receive from suppliers (Love et al., 2007; Burkart and Ellingsen, 2004; Hill et al., 2012). In other words, firms that give more credit to customers also demand more credit from their suppliers (Fabbri and Menichini, 2010). This is because firms finance part of their trade receivables with trade payables (Molina and Preve, 2009; Aktas et al., 2015). This means that trade payables may be more important to firms trying to increase market share through trade credit since they will need to finance credit to customers (Atanasova, 2007). Our study considers how market share may impact on the trade payables-market valuation relationship.

Firms with differentiated inputs may have a greater need for trade payables (Mateut et al., 2015). This is because firms need more time to verify the quality of differentiated inputs (Fabbri and Menichini, 2010). Further, sellers and producers of differentiated products have stronger supplier relationships because they have fewer alternative suppliers (Mateut et al., 2015) and thus receive more supplier trade credits than those with standardised goods (Giannetti et al., 2011). Accordingly, the diversion theory suggests that trade credit usage is correlated with the nature of goods being traded (Mateut et al., 2015). Trade payables are therefore expected to be more important for firms with differentiated products than those with standardised products (Burkart and Ellingsen, 2004). We study the value relevance of suppliers' credit in firms with differentiated products.

Using a comprehensive sample of 2559 UK firms for the period 2005–2014, this paper finds support for the conjecture that suppliers' credit positively impacts upon firm performance. The findings indicate that suppliers' credit is value relevant in firms with sales volatility and differentiated products, but value decreasing in firms with bigger market share. On the contrary, suppliers' credit only increases performance in firms with bigger market share during the crisis period. Further, although institutional finance is more value relevant than suppliers' credit, this is only conspicuous in firms with low demand uncertainty as well as those with small market share and standardised products. In firms with high demand uncertainty, larger market share and differentiated products, institutional finance is not value relevant. The results are robust to endogeneity and alternative proxies.

The first unique contribution we make to the trade credits literature is the finding that suppliers' credit is value increasing (value decreasing) in firms with sales volatility and differentiated products (bigger market share). The importance of suppliers' credit to firms with demand uncertainty, differentiated products and market share has long been recognized in the trade credits' literature (Emery, 1987; Hill et al., 2010, 2012; Bougheas et al., 2009; Fabbri and Menichini, 2010; Martínez-Sola et al., 2014; Mateut et al., 2015). However, research on how these may affect the performance effects of suppliers' credits remain scarce. Although we focus on market valuation, our findings are also germane to researchers and managers interested in other consequences of suppliers' credits. The result implies that in examining the effect of suppliers' credit on other firm-level outcomes, the different products and market dynamics that firms face should also be considered. In addition to its theoretical importance, Aktas et al. (2012) demonstrated theoretically how the performance effects of trade credits emanate from their ability to signal managers' private information to outside investors. They argued that relative to cash, suppliers' credit is illiquid and less likely to divert. Therefore, suppliers' credit may increase market valuation by signalling managers' commitment not to expropriate. By extension, our findings indicate that product differentiation and demand uncertainty (bigger market share) increase (reduce) the signal strength of suppliers' credit and ultimately enhance (diminish) its performance effects. This interpretation is in consonance with arguments in signalling and information asymmetry theory that signal honesty (dishonesty) increases (decreases) signal strength and improves (impair) the effect of the signal on the receiver (Connelly et al., 2011).

The second unique contribution we make to the literature is the finding that the relative value relevance of suppliers' credit versus institutional finance hinges on market share, nature of product and level of demand uncertainty. The existing literature is almost unanimous in finding that institutional finance is cheaper (Yang, 2011; Lin and Chou, 2015) and has greater performance effect (Du et al., 2012) than suppliers' credit. This is due to the argument that the reliance on suppliers' credit is more important to firms operating in developing countries because of the underdeveloped nature of the financial sector (Cull et al., 2009; Ge and Qiu, 2007). However, although other studies show that firms residing in developed countries equally rely on suppliers' credit (Petersen and Rajan, 1997; Peel et al., 2000, Ferrando and Mulier, 2013), the existing literature mainly focuses on trade receivables (see, Hill et al., 2012; Martínez-Sola et al., 2014). We contribute to the literature by documenting that institutional finance is more value relevant than suppliers' credit in firms with bigger market share. However, in firms with differentiated products and demand uncertainty, suppliers' credit is more value relevant than institutional finance. This finding has implications for managers in making inventory-