International Journal of Hospitality Management 70 (2018) 99–109

Contents lists available at ScienceDirect

International Journal of Hospitality Management

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

Research paper

Pecking order puzzle: Restaurant firms' unique financing behaviors

Kwangmin Park[a,*], SooCheong (Shawn) Jang[b]

[a] Department of Foodservice Management, College of Hospitality and Tourism Management, Sejong University, Seoul, South Korea
[b] School of Hospitality and Tourism Management, Purdue University, West Lafayette, IN, 47907-0327, USA

ARTICLE INFO

Keywords:
Pecking order theory
Pecking order puzzle
Financial behaviors
Financing deficit and surplus
Franchising

ABSTRACT

Since Myers (1984) and Myers and Majluf (1984) suggested the pecking order theory, it has frequently been examined by researchers. Recently Frank and Goyal (2003) have questioned its validity. Following De Jong et al.'s (2010) proposition about financing behaviors under financing deficit and surplus situations, this study examined restaurants to verify the validity of the pecking order theory and found that restaurants depend more on equity financing, which is in line with the pecking order puzzle. Specifically, restaurants with financing deficits rely more on equity financing than restaurants with financing surpluses. Further, this study confirmed that franchise funds alleviate financing deficits. Thus, franchise restaurants used less equity financing than non-franchise restaurants in cases of financing deficits. However, both franchise and non-franchise restaurants with financing surpluses showed similar financing behaviors and did not significantly rely on equity financing, which indicates that both types of firms follow the pecking order theory.

1. Introduction

Ever since Modigliani and Miller (1958) proposed that firm value is irrelevant in terms of capital structure, researchers have investigated how firms finance their operational needs. Under the capital market imperfection proposition, Modigliani and Miller (1963) suggested that firms have their own target debt-equity ratios where the trade-off between the costs and benefits of debt results in an equilibrium. This is referred to as the trade-off theory. Consistent with trade-off theory, Graham and Harvey (2001) reported that approximately 81% of firms consider their own target debt ratios when they make financing decisions. On the other hand, Myers (1984) and Myers and Majluf (1984) claimed that the empirical evidence does not consistently align with trade-off theory. Further, they argued that firms' financial behaviors are better accounted for using the behaviors described by Donaldson (1961), who established a hierarchical preference for internal funds over external funds. In the case of external funds, Donaldson (1961) explained that companies prefer debt first, then convertible bonds, and finally issuing equity. This is referred to as the pecking order theory. Similarly, Myers (1984) argued that firms prefer internal to external financing but when outside funds are necessary firms prefer debt to equity due to the lower information costs associated with debt. That is, equity is rarely issued and only used as a last resort.

However, Frank and Goyal (2003) later challenged the pecking order theory by examining firm size. They found that small firms primarily depend on equity financing and, thus, do not follow the pecking order. From the pecking order perspective Frank and Goyal (2003) claim is counter-intuitive because smaller firms usually have a higher potential for asymmetric information than larger firms and, thus, investors tend to avoid small firms' equity. Hence, this counter-intuitive claim is known as the pecking order puzzle. In line with the pecking order puzzle, De Jong et al. (2010) indicated that this size anomaly is due to the fact that financing deficits are much more common for small firms and financing surpluses are scarce.

Financing deficits are known to be a common characteristic of the restaurant industry. Although several past hospitality studies (e.g., Upneja and Dalbor, 2001; Jang and Ryu, 2006; Tang and Jang, 2007; Jang et al., 2008; Jang and Kim, 2009; Park and Jang, 2017) have investigated financing behaviors in relation to pecking order theory, the pecking order puzzle as it relates to financing deficits (or surpluses) has not been investigated in hospitality academia. Further, the restaurant industry incorporates unique financing features, such as franchise financing (Park and Jang, 2017). For example, to open a new Smoothie King franchise outlet the franchisor requires from $188,200 to $414,050, which includes a $30,000 franchise fee and other expenses such as rental deposits, marketing for the opening, training expenses, insurance. The franchise agreement also includes a 6% royalty fee and a 3% marketing fee based on monthly gross sales. In 2016, the Market-Realist.com reported that McDonald's requires a minimum of approximately $300,000 in non-borrowed start-up funds from potential franchisees. Thus, the franchising system could work as an alternative external financing tool for franchisors. The resource scarcity theory

* Corresponding author.
E-mail addresses: kmpark@sejong.ac.kr (K. Park), Jangjang12@purdue.edu (S.S. Jang).

https://doi.org/10.1016/j.ijhm.2017.10.014
Received 6 March 2017; Received in revised form 11 October 2017; Accepted 12 October 2017

developed by Oxenfeldt and Kelly (1969) posited that restaurant owners often decide to franchise when they have difficulty obtaining adequate financial resources (Caves et al., 1976; Ozanne and Hunt, 1971). Thus, when restaurant firms are suffering from financing deficits (or have financing surpluses), financing behaviors should differ between franchise and non-franchise firms because franchise firms have an additional financing (Park and Jang, 2017). Thus, it may not be possible to understand the financing behaviors of restaurant firms without considering franchising. Therefore, the objectives of this study were to examine (1) whether restaurant firms follow the pecking order puzzle in terms of using equity-financing before debt-financing, (2) whether restaurant firms show different financing behaviors under financing deficit or surplus situations, and (3) whether franchising moderates restaurants' financing behaviors in financing deficit or surplus situations.

2. Literature review

2.1. Conventional financing theories

Initially, Modigliani and Miller (1958) claimed that capital structure and firm value are not related. However, Modigliani and Miller (1963) later examined whether firm value is related to capital structure in situations where the capital market is imperfect. In the latter examination, they suggested that firms select target debt ratios where the trade-offs between the costs and benefits of debt are equal, which is called the trade-off theory. However, Myers (1984) later contradicted the trade-off theory with an updated version of Donaldson (1961) pecking order hierarchy. The pecking order posits that information asymmetries lead managers to perceive that the market generally underprices their shares. Thus, firms first finance investments with internally generated funds such as retained earnings, then firms issue debt if they lack sufficient internal funds, and finally they issue equity as a last resort. Shyam-Sunder and Myers (1999) also claimed that financing deficits should be matched dollar-for-dollar by a change in debt because the pecking order theory argued that the equity-financing is rare and thus the coefficient of net debt issued to finance deficits should be a unit in the regression analysis. Indeed, Shyam-Sunder and Myers (1999) found a coefficient of 0.75, which means that the pecking order accounts well for firms' financing behaviors. They concluded that firms plan to finance anticipated deficits with debt. Thus, pecking order theory implies that firms have no preferred target leverage ratios.

2.2. Pecking order puzzle and financing deficits and surpluses

In the real world, however, issuing and repurchasing equity are common, which makes the pecking order theory seem questionable. For example, Harrison et al. (2011) found that empirical predictions derived from market timing and trade-off theories were good for corporate financing behaviors, but they failed to support pecking order theory predictions. Likewise, Chinloy et al. (2014) found reversed pecking order financing behavior. Fama and French (2005) even went so far as to assert that it looks like the pecking order model is dead. Because equity is not a last resort in the real world, asymmetric information may not be a critical determinant of capital structures. However, as Fama and French (2005) indicated, although equity-financing is a phenomenon in the real world, that does not necessarily mean the issue of asymmetric information disappears. Rather, firms' financing decisions do not exactly follow the pecking order due to various situational differences.

As mentioned earlier, following pecking order preference Shyam-Sunder and Myers (1999) argued that firms issue an amount of debt equal to their financing deficit. Their regression analysis of the coefficient of net debt issued on financing deficits provides information regarding the financing ratio in firms with deficits. Thus, the pecking order expects the coefficient to be close to a unit because firms should finance one dollar of deficit with one dollar of debt. Later, Shyam-Sunder and Myers (1999) and Frank and Goyal (2003) examined the same model with more data to address prior limitations due to the small sample size. However, Frank and Goyal (2003) found a much smaller coefficient, which seriously challenges the pecking order theory. They also found that larger firms follow pecking order behavior more closely than smaller firms. This contradicts the pecking order, which assumes that small firms have greater potential for asymmetric information than large firms. Because managers of small firms feel their stock are underpriced due to this asymmetry they tend not to consider issuing equity first, which more closely fits the pecking order than the financing behaviors of larger firms. De Jong et al. (2010) referred to this size anomaly as the first pecking order puzzle. In addition, Frank and Goyal (2003) found that the pecking order coefficient had lost its explanatory power over a long period of time. From 1971–1989 the coefficient was 0.28, whereas from 1990 to 1998 it was 0.15, which means that debt-financing explains little about firms' financing over time. Contrary to the pecking order model, equity-financing plays a substantial role. Thus the findings by De Jong et al. (2010) could be an evidence for the second pecking order puzzle.

De Jong et al. (2010) argued that both pecking order puzzles are explained by financing deficits and surpluses. They concluded that small firms tend to have financing deficits but not financing surpluses, which explains the first pecking order puzzle. Such situations place small firms in a difficult position where they have no other choice but equity even though their stocks are underpriced. Similarly, they contended that the second puzzle can also be explained by deficits because financing deficits occurred more frequently in recent years. Smaller firms that have frequent financing deficits would not have sufficient debt because creditors or debt investors are usually more conservative than equity investors. Thus, unlike the pecking order theory, small firms get to consider issuing equity to finance their deficits despite the high cost of capital. On the other hand, firms with financing surpluses can more easily follow the pecking order hierarchy because they are in a better position to issue debt than firms with financing deficits. Thus, considering that the restaurant industry is often characterized as prone to financing deficits (Jang et al., 2011), it is reasonable to presume that restaurant firms are not exactly following the pecking order and use a considerable proportion of the equity they issue as a financing source.

Hypothesis 1. Restaurant firms finance considerable financing deficits by issuing equity.

In line with De Jong et al. (2010), we separated the second hypothesis into restaurant firms with financing deficits and surpluses. Based on the above explanations, if restaurant firms with financing deficits finance significant amounts of deficits by issuing equity, then they do not exactly follow the pecking order hierarchy. On the other hand, restaurant firms with financing surpluses do follow the pecking order and, thus, do not use significant amounts of equity for further financing.

Hypothesis 2.1. Restaurants with financing deficits show adverse pecking order financing behaviors and use more equity-financing.

Hypothesis 2.2. Restaurants with financing surpluses show pecking order financing behaviors.