European Management Journal xxx (2017) 1–15

Contents lists available at ScienceDirect

European Management Journal

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

Supply chain contamination: An exploratory approach on the collateral effects of negative corporate events

Mauro Fracarolli Nunes

ESCP Europe, Paris Campus, 79 Avenue de la République, 75543 Paris Cedex 11, France

ARTICLE INFO

Article history:
Received 1 March 2016
Received in revised form
29 July 2017
Accepted 6 September 2017
Available online xxx

Keywords:
Negative corporate events
Supply chain contamination
Collateral effects
Event study
Dissemination

ABSTRACT

The present work investigates the impact of negative events on supply chain partners. Through a contextualised discussion of the literature on supply chains and on the efficient market hypothesis, it is proposed that negative events negatively impact the market value of suppliers and customers. Following an exploratory approach, 307 companies (21 source companies, 158 suppliers and 128 customers) comprehending 20 cases of environmental disaster, corporate social irresponsibility, operational failure, corporate fraud and corruption were analysed. Results show that in 12 out of the 20 cases investigated supply chain partners indeed had their market value penalised, encompassing, to a greater or lesser degree, all five categories of cases considered. Yet, while both suppliers and customers absorbed the outcomes of negative events, suppliers seem to be at greater risk of sustaining such losses. Likewise, cases in which the source companies were also negatively affected seem to be slightly more prone to cause losses among suppliers and customers. In this sense, the concept of *supply chain contamination* is coined to address the observed outcomes. The study offers new insights into the applicability of the efficient market hypothesis and contributes to the assessment of the dissemination of negative events in supply chains, a theme that, despite its potential detrimental consequences for firms and stakeholders, has not yet been sufficiently treated in the Management literature.

1. Introduction

Negative events, understood as adverse or threatening occurrences (Taylor, 1991), have traditionally channelled the attention of the media (Bednar, Boivie, & Prince, 2013; Freudenburg, Coleman, Gonzales, & Helgeland, 1996) and general public (Zavyalova, Pfarrer, Reger, & Hubbard, 2016). Although diverse circumstances may correspond to such classification (e.g. earthquakes, landslides, tsunamis and accidents), from a business perspective, unfavourable news around corporate social irresponsibility (CSI) (Kölbel, Busch, & Jancso, 2017), the recognition of firms' detrimental impact on the environment (Harrison, 2016), or even their inability to provide customers with safe and quality products (Borah & Tellis, 2016), among others, have also concentrated a considerable portion of public debate. Beyond the arguable erosion of the reputational capital of firms, under the assumptions of the efficient market hypothesis (Fama, Fisher, Jensen, & Roll, 1969; Jensen, 1978), negative corporate events are expected to trigger correspondently negative reactions from investors, penalising the market value of firms in the adjustment or incorporation of such news (Fama, 1970).

The demands faced by organisations are not limited to their own operations, though (Gualandris, Klassen, Vachon, & Kalchschmidt, 2015). With the development of complex arrangements of trade and exchange, supply chains have been brought to the centre stage of the agitation (Pagell & Shevchenko, 2014; Zhu, Sarkis, & Lai, 2013). Within this set, it is possible that a negative event occurred in a firm comes to influence the perceptions and actions of customers, employees, investors and other related parties around one or more than one of its supply chain partners. Some of the most flagrant cases of corporate failures and setbacks (e.g. modern slavery, child labour and environmental damage) might be analysed inward this notion.

In that way, the perception that modern competition is not held among single companies, but rather, amidst supply chains (Lee, 2000), raises some pressing questions: (i) Do investors negatively react to announcements of negative corporate events related to a supply chain partner? and (ii) Do factors such as the nature of the event (i.e. environmental disaster, social irresponsibility, operational failure, fraud or corruption), the positioning of the partner in

E-mail address: m.fracarollinunes@gmail.com.

http://dx.doi.org/10.1016/j.emj.2017.09.003
0263-2373/© 2017 Published by Elsevier Ltd.

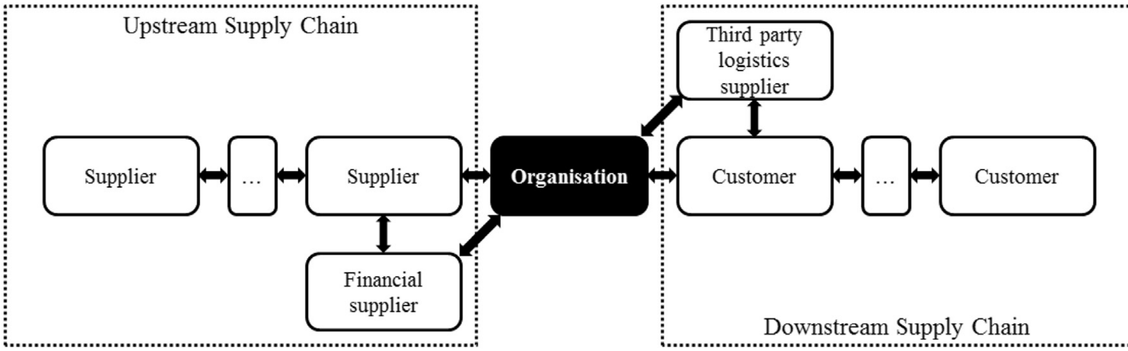

Fig. 1. Ultimate supply Chains.
Source: Adapted from Mentzer et al. (2001).

the supply chain (i.e. supplier/customer) and the fact of the source company (i.e. those originating the event) itself be affected influence the reaction of investors? In search to answer these questions, the present study is supported by the literature on supply chains and by the main arguments of the efficient market hypothesis on the adjustment of stock prices to new information (Fama et al., 1969). In this exploratory approach, the investigation concentrates on 20 cases of negative corporate events comprehending a total of 307 publicly traded companies (i.e. 21 source companies,[1] 158 suppliers and 128 customers). In face of the cases identified, the method of event study is applied to their market data.

Results show that in 12 cases, investors of suppliers and customers negatively reacted to such announcements, distributed, although unevenly, among all the categories considered. While all four cases of corporate social irresponsibility presented losses to suppliers and customers, similar results were only partially detected in cases of other natures. Yet, at the same time losses were also observed in source companies in seven of the 12 cases, market value damages were restricted to supply chain partners in five. Results also suggest that, although both suppliers and customers were found to be affected, suppliers seem to be more likely to present market value losses as a consequence of negative events. The empirical outcomes subsidize the conceptualisation of the term *supply chain contamination* to properly address the observed phenomenon. In this sense, this examination is expected to contribute not only to the literature on supply chains but also to a broader understanding of the adequacy or applicability of the efficient market hypothesis within supply chain contexts.

From a managerial perspective, it is hoped that the results offer new insights to an extended assessment of the risks in which single firms and supply chains may be embedded, potentially providing decision-makers with new factors to be considered in their investment and/or executive deliberations. After this introduction, this study is organised into four main segments: Section 2 presents the theoretical background, followed by a review of the methods employed in section 3. The results and discussion are then presented in section 4, with the concluding remarks in section 5.

2. Theoretical background

2.1. Supply chains

According to Mentzer et al. (2001), supply chains have emerged in response to the increasing focus on time- and quality-based competition. The demand from customers for products to be delivered 'consistently faster, exactly on time and with no damage' (Mentzer et al., 2001, p. 2) would have forced firms to build closer relations with their suppliers and manage more effective ways to coordinate the flow of products and services. As discussed by Chen and Paulraj (2004), however, the development of the supply chain concept occurred in a complex and multifaceted manner, with the direct influence of several fields, such as the quality revolution (Dale, Lascelles, & Lloyd, 1994), the notions of materials management and integrated logistics (Carter & Price, 1993; Forrester, 1961), industrial markets and networks (Ford, 1990; Jarillo, 1993), the notion of increased focus (Porter, 1987; Snow, Miles, & Coleman, 1992) and influential industry-specific studies (Lamming, 1993; Womack, Jones, & Roos, 1990). As a result, different and sometimes unrelated terminologies have been used by researchers to treat the issue. Expressions such as 'demand pipelines' (Farmer & Van Amstel, 1991) and 'value streams' (Womack & Jones, 1994), among others, would be common in that regard.

The literature around supply chains evolved in a perceivable path that seems to have started on the coordination of material streams among companies, leading to a more developed and complex idea that sources of competitive advantage may reside in the relationship among firms (Dyer & Singh, 1998). For La Londe and Masters (1994), for instance, supply chains are defined as a set of companies through which materials flow. They would typically include several partners, such as raw-material and component producers, product assemblers, wholesalers, retail merchants and transportation companies. Lambert, Stock, and Ellram (1998), in turn, define supply chains as a set of firms aligned to bring products and services to market. Christopher (1992) states that supply chains represent a network formed by organisations that, through downstream and upstream linkages, are involved in different processes and activities that may yield services and products, adding value to firms.

In advancing the idea, Mentzer et al. (2001:4) state that a 'supply chain is defined as a set of three or more entities (organisations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer'. They also define three degrees of supply chain complexity: direct supply chains, formed by a firm, a supplier and a customer; extended supply chains, including suppliers of immediate suppliers, and customers of immediate customers; and ultimate supply chains, from the ultimate supplier through to the ultimate customer (i.e. consumer). The latter is illustrated in Fig. 1.

Complementing the theoretical positioning of the study, the sub-section below explores the preeminent aspects of the efficient market hypothesis. The approach is relevant to the purposes of this investigation since, as along with theoretically supporting the eventual detection of negative reactions in face of negative events,

[1] Case 5 accounts for two parent companies analysed.

Please cite this article in press as: Nunes, M. F., Supply chain contamination: An exploratory approach on the collateral effects of negative corporate events, European Management Journal (2017), http://dx.doi.org/10.1016/j.emj.2017.09.003