Energy Policy 123 (2018) 230–239

Contents lists available at ScienceDirect

Energy Policy

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

Abandoned deals: the merger and acquisition process in the electricity and gas industry

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ARTICLE INFO

Keywords:
Mergers and acquisitions
Abandoned deals
Restructuring
Electricity industry
Gas industry
Regulation

ABSTRACT

High profile deals emphasize the costs of the merger and acquisition (M&A) process particularly when deals fail before closure. However, beyond anecdotal evidence, we do not know why some M&A deals in the electricity and gas industries are abandoned. We analyze a sample of over 5000 M&As in the electricity and gas industries. The three most important factors affecting M&A abandonment are if the acquirer engaged in a divestiture at the same time, whether the target firm was publicly owned, and if the acquirer already had a toe-hold (part ownership) in the target firm at the time of the M&A deal. An M&A deal is 10.17% *less* likely to be abandoned if the acquirer engaged in a divestiture at the same time. An M&A involving a publicly owned target firm is 9.87% *more* likely to be abandoned. Lastly, an M&A in which the acquirer had a toe-hold in the target company is 7.87% more likely to be abandoned. Our findings show that policy makers and practitioners should be aware that the M&A process is affected by often over-looked deal or firm specific factors.

1. Introduction

In June 2016, Energy Transfer Equity LP terminated its agreement to buy Williams Companies, Inc., a rival natural gas pipeline operator, after 18 months of negotiations. The deal was valued at nearly USD 33 billion. It fell apart after lawyers could not make a definitive conclusion about the deal's tax treatment, and Energy Transfer Equity LP opted out of its acquisition bid (Sider, 2016). Williams Companies claimed that the stalled deal would cost it between USD 4 billion to USD 10 billion in terms of lost value to shareholders (Sider, 2016). In 2005, the Spanish company, Gas Natural SDG, announced its acquisition of the Spanish electricity company, Endesa. Despite approval by the Spanish authorities, the takeover was later abandoned because Endesa opposed it (Barquin et al., 2006).

These are just two examples of mergers and acquisitions (henceforth M&As) in Europe and North America that made up the restructuring trend in energy markets[1] in the last decades. This trend has made issues of competition and industry concentration central topics in energy market research (Jamasb and Pollitt, 2005; Verde, 2008).

Structural changes in the energy industry created opportunities to obtain efficiencies through M&As that were previously infeasible or prohibited under regulation (Becker-Blease et al., 2007). Also, governmental stimulation of M&As created large national power blocks referred to as “national champions” (Verde, 2008). Furthermore, the number of diversifying M&As between gas and electricity firms has been increasing (Jamasb and Pollitt, 2005).

When competition authorities become concerned about increased market concentration and reduced competition, they intervene after the public announcement of an M&A in order to impose conditions for deal completion or to stall the deal entirely. However, the intervention of competition authorities is not the only reason that some M&As are stalled. In some cases, new information may be revealed after the public announcement of the deal that makes it less attractive than it originally seemed to be. In this case, one or both parties may voluntarily step out of the deal as in the Energy Transfer Equity LP and Williams Companies case mentioned earlier.

Even announcing an M&A deal may generate restructuring events that subsequently stall the deal. For example, BG Group from the UK, a multinational company in oil and gas, made a bid to buy Origin Energy, an Australian company active in natural gas exploration and

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[1] In this paper, we use the general term energy markets to refer to the electricity and gas markets; we have excluded the oil industry in our analyses. The oil industry is very different with limited and localized occurrence of oil resources and the role of OPEC and Russia in determining oil prices. Oil markets tend to be affected by geo-political issues; the recent oil price collapse is an example. Oil is a non-renewable resource, and its extraction, transportation, and use has greater environmental impact than gas and, in particular, electricity. Also, this paper focuses on the M&As that resulted from deregulation of the gas and electricity markets in North America and Europe.

https://doi.org/10.1016/j.enpol.2018.08.042
Received 11 December 2017; Received in revised form 5 August 2018; Accepted 19 August 2018

production, but later withdrew its bid. This happened after Origin Energy initiated a joint venture with ConocoPhillips shortly after the bid from BG was announced. The value of Origin Energy subsequent to this joint venture was much higher than what BG Group was intending to pay (Gribben, 2008).

However, other than anecdotal evidence and individual case studies, there is little empirical evidence on the progression of the M&A process in energy markets. How many deals in energy markets are derailed before completion? What are the factors that are associated with M&As being abandoned in process and why should this be of interest to policy makers and economists? M&As are studied by researchers in diverse fields such as industrial organization, finance, accounting, management and human resources. Despite our increased understanding of M&As, an empirical puzzle that remains is the prevalence and growth in M&A activity despite high failure rates. For example, in the worldwide utilities industry alone, the value of M&A activity rose from 134 billion euros in 2008 to 329 billion euros in 2016. In the first three months of 2017 alone, the Energy and Power sector had a value of 139 billions US dollars in M&A activity, making it the largest in terms of value. This is much larger than the next closest industries, Materials, which had a value of 94 billion US dollars and Healthcare, with a value of 85 billion US dollars (Thomsons Reuters, 2017).

Despite these enormous numbers, academic research paints a somewhat dismal picture - a meta-analysis of 93 studies documents that the majority of acquisitions fail to improve firm performance in the five years following acquisition completion (King et al., 2004). Also, Kaplan and Weisbach (1992) find that 44% of acquisitions are divested within the following 7-year period. While research has focused mainly on measuring M&A performance based on short term financial performance (usually based on event studies), other work has used alternative measures such as long-term financial performance, accounting performance, employee retention, acquisition survival etc. (Zollo and Meier, 2008). Most studies focus on the post-acquisition period while there are far fewer studies on the M&A process (that is, the period when the deal is initially announced). We hope that by understanding the factors that contribute to success (or failure) in this early stage may yield insights on why some M&As succeed or fail after the M&A has moved beyond this early procedural stage. For instance, this paper finds that M&A deals involving a publicly owned target are more likely to be abandoned. If future research finds that deals that involve publicly owned targets are more likely be divested *after* the M&A deal is completed, then public ownership of target firm could be an 'early' indicator of a deal that may not eventually succeed.

These are the questions we aim to answer in this paper through an investigation based on a large sample of data. We examine a comprehensive set of factors. We examine if they are associated with an M&A deal being abandoned after it has been publicly announced using a sample of 5692 M&A transactions originating in OECD countries involving at least one firm from the energy industry in the period 1997–2012. This time window covers a substantial merger wave that was initiated in the late 1990s in the energy industries of Europe and North America, which stabilized somewhat around 2005. Until the oil price collapse that started in June 2014, the energy industry had contributed substantially to overall M&A deal value, accounting for around eleven percent of all deal value per year (Mergermarket, 2014). By focusing on OECD countries, we can examine the European Union and North American energy markets, two regions with high volumes of M&A activity that underwent substantial changes during this time frame.

In addition to finding that the most important factors associated with deal closure are whether or not the deal involved a divestiture and whether the acquirer firm had a toehold in the target (a toehold means that the acquirer already has an ownership interest in the target firm before the deal), we also find that whether or not the target is a publicly owned firm makes a difference to the M&A process. These factors, in fact, are much more influential in determining whether an M&A is completed than whether the deal was hostile or friendly or how the deal was financed, which are frequently receive media attention and are termed 'deal-breakers'.

This paper makes two contributions. First, we contribute to the literature on restructuring in energy markets (Leggio and Lien, 2000; Newbery, 2007; Becker-Blease et al., 2007). This literature has examined important issues on the effects of legislation and the ensuing restructuring on prices and competition in energy markets (Craig and Savage, 2013; Mulder, 2015). For example, Leggio and Lien (2000) document how gains to acquirers and targets in the electricity industry vary depending on whether the merger was diversifying or not and compare the gains to non-regulated environments while Newbery (2007) discusses market design issues and differences in how mergers are treated across different European countries. Becker-Blease et al. (2007) examine these issues from the perspective of the utilities shareholder and on the basis of a number of measures, both long and short-term, find that the acquisition of utilities by other utility companies does not contribute to long-term value. More recent research (Kishimoto et al., 2017) in deregulated environments and across a range of countries, refute this finding and show that M&As improve operating performance and increase share value. These studies examine aggregate phenomena after industry-wide restructuring has occurred. Our study complements this body of literature by examining a micro phenomenon - a 'slice' of the M&A process which forms part of every M&A deal. Only deals that successfully pass this stage can contribute to overall industry phenomena that have been the focus of many studies in the energy literature. Second, we contribute to a stream of literature examining the M&A process in other industries (Wong and O'Sullivan, 2001; Muehlfeld et al., 2007; Caiazza and Pozzolo, 2014; Chakrabarti and Mitchell, 2015). Identifying factors that stall the M&A process implies that we also identify factors that can facilitate this process in energy markets.

Our findings have implications for practitioners involved in energy related M&As and can be used by them as a guide to identify key factors in the M&A process. It also serves to inform policy makers on the relative importance of factors leading to M&A abandonment. Although overall M&A abandonment rates in energy markets are similar to those found in other industries, our study finds that the specific factors affecting abandonment in the energy industry differ from industries examined so far.

M&As, both those that reach closure and those that do not, have economic and welfare implications. For example, M&As in the EU that create a so-called national champion firm are less likely to be abandoned. National champion firms capture a large part of a domestic market and are better able to compete in the international environment than other firms (Röller et al., 2007). The EC is not able to intervene in many of these M&As.[2] For example, the merger between Gaz de France and Suez suggests that European governments sometimes behave opportunistically in such deals. Similarly, any potential efficiency gains that were intended to be achieved by a merger will not be realized if a merger is abandoned in process, and in the short-term, target shareholders will not receive the positive returns that often accompany such a deal. So far, research has not examined the implications at the firm and at the industry level of the substantial percentage of M&As that do not reach closure. Our investigation in this paper seeks to contribute to an understanding of this phenomenon.

The rest of this paper is organized as follows. Section 2 provides an overview of the costs of abandonment and regulatory changes in the energy industry. In Section 3, we draw on both the economics and management literature to form expectation of the signs on the independent variables included in the model. Section 4 describes some details of the econometric model used. The data and methodology are

[2] If over two thirds of the combined turnover of the firms engaged in the transaction is within a single country, then the country's own regulatory authority is responsible for the transaction; this is referred to as the 2/3 rule.