Impact of Mergers on Repositioning of Services: Evidence from the French Hospital Industry

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Extended summary

Horizontal mergers policy for differentiated product industries derive generally from models of price competition giving rise to 'unilateral effects' (Gandhi et al. 2008; Werden and Froeb, 2008). A more aggressive pricing strategy by merging parties increases the marginal profits of non-merging parties leading to an overall increase in prices. Empirical evidence suggests, however, that firms might compete in a range of other dimensions than price, including product quality in hospitals (Propper et al, 2008), departure times of airplane flights (Borenstein & Netz (1999)), movie release dates (Corts (2001)), or the geographical location and product assortment in the movie theater market (Davis (2006)).

Models of single-dimension non-price competition suggest that horizontal mergers may be detrimental to merging parties (Salant et. al, 1983). In a setting where firms compete in quality, the merger internalizes the competition between products combined by the merger, causing the merged firm to prefer lower quality for any given quality of rivals. Non-merging rivals benefit from increases in their demands resulting from the merged firm's quality decrease, and they increase their qualities in accord with their unchanged best-response functions. A significant limitation of such a model, however, is that competition may occur in dimensions other than product quality, such as product repositioning.[1]

In this paper, we measure and explore firms product repositioning strategies after a merger in an industry engaged in quality competition: the french hospital industry. A recent wave of mergers in the French Hospital Industry combined with a fixed price reimbursement system makes this market a uniquely suited setting for product repositioning analysis. Since 2008, all hospitals (both private and public) are reimbursed at a fixed price, based on a Diagnosis Related Group system (from here onwards, DRG system). As prices for treating patients are fixed, hospitals have incentives to compete in quality with the aim of attracting patients and increasing their profits. Moreover, clinics are relatively free to open and close services. An in depth research on the institutional setting allowed us to construct a structural model that mimics closely the way clinics actually compete in this market.

Empirical literature studying the question of the impact of mergers on product positioning remains scarce. Berry and Waldfogel (2001) study the relationship between per-firm variety and market concentration in the U.S. radio broadcasting industry, focusing on the impacts of recent regulatory changes. They find that greater concentration of ownership in a market raises variety per firm, where variety

[1] We will use interchangeably product assortment and product positioning.

is measured by the number of different programming formats on air. George (2007) examines the effect of market structure on product variety in the market for US daily newspapers. More concentrated markets are characterized by more differentiated newspapers in terms of variety and topics covered. Draganska et al. (2009) develop an integrated empirical framework to investigate how firms make product-choice decisions in the ice-cream industry. Mergers simulations suggest that product assortment adjustments by merged firms reflect attempts to balance product cannibalization and higher margins captured by each product in the assortment. Fan (2012) develops a structural model of newspaper markets to analyze the effects of ownership consolidation, taking into account not only firms' price adjustments but also the adjustments in newspaper characteristics. She finds that ignoring adjustments of product characteristics causes substantial differences in estimated effects of mergers.

Similarly, Sweeting (2010) shows, on the example of the US music radio industry, that mergers between close competitors lead to important changes in product positioning. In particular, repositioning is used as a competitive tool. Mergers are shown to result in a higher degree of differentiation between the merging stations with the goal of limiting cannibalization. Furthermore, merging radio stations decide to position themselves closer to competitors to attract new listeners. repositioning is used to gain market shares at the expense of competitors. Argentesi et al. (2016) study the impact of retail mergers on prices and product variety. They show that choice of product assortment and product positioning play a key competitive role in the retailing sector. While they find no effect of mergers on prices, their results suggest that the merging parties reduced the depth of their assortment. They explain this finding by merging firms wanting to re-position their product offerings in order to avoid cannibalization. This reduced variety effect is partially (but not fully) outweighed by increased variety provided by competitors. .

To our knowledge, the question of product repositioning as a competitive tool in the context of the hospital industry has not been addressed in the existing literature. Meanwhile, health practitioners often underline that mergers between hospitals lead to repositioning of their services (so called "organizational re-engineering"). Past research has found that in situations when prices are set administratively, price declines, as well as mergers, had a significant detrimental impact on inpatient mortality (Cutler, 1995; Hamilton & Ho, 2000). Therefore, it seems reasonable to hypothesize that mergers and acquisitions may affect service re-composition as well (Dranove et al., 1992; Luft et al., 1986).

Our paper intends to contribute to the existing empirical literature by performing an empirical study of the impact of mergers occurring in the French hospital industry of medicine, surgery, obstetrics (hereafter, MSO) on the repositioning of services offered by private hospitals. Addressing this question in the context of the hospital industry is of particular public relevance, as the quality of services offered to patients is at stake. This paper provides insights on the impact of mergers on repositioning of hospital services by exploiting a rich and unique database on the French hospital industry for the years 2010–2014. We examine the effects of a change in ownership on positioning of health care services and market shares. Our results show that following a merger, private hospitals distance themselves from each other by repositioning their health services offered. Merging firms avoid market cannibalization by repositioning their products.

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