



CRA Insights: China Highlights

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MOFCOM takes a more sophisticated and transparent approach to economic analysis in recent decision

On January 15, 2014, the Ministry of Commerce of the People's Republic of China (MOFCOM) approved Thermo Fisher Scientific's \$13.5 billion acquisition of Life Technologies Corp. with conditions. For the first time, in its public announcement MOFCOM made clear that it considered a significant amount of economic analysis in reaching its decision. This is a big step forward in terms of transparency, as it helps practitioners and companies better understand MOFCOM's thinking process. The following is a summary of key points discussed in MOFCOM's announcement regarding the economic analyses it considered in evaluating this particular transaction.

- **Concentration thresholds:** In this decision, MOFCOM targeted 13 out of 59 product markets for closer scrutiny based on Herfindahl-Hirschman Index (HHI) criteria. The combined HHI was above 1500 and there was an HHI increase of at least 100 after the merger. This is the first time MOFCOM explicitly applied a concentration threshold to screen potential problem areas. These thresholds follow the general standards specified in the US 2010 Horizontal Merger Guidelines, indicating that MOFCOM is taking steps toward conformity to the international standards of merger review.
- **Specific measures of unilateral effects:** In this decision, MOFCOM used two different methodologies to estimate the potential price increase after the merger. These two methodologies are as follows:

Price increases based on Margin-HHI regression: This methodology uses regression models to estimate a relationship between profit margins and HHI using historical, pre-merger data, and then uses that estimated relationship to predict the post-merger profit margin for the combined firm based on the post-merger HHI. Under the assumption of fixed marginal costs, the merger-related increase in margin implied by the regression model, i.e., from the actual pre-merger margin to the predicted post-merger margin, can be used to calculate a predicted merger-related price increase.¹

Although these approaches are frequently used in the US, they have been criticized and are viewed with skepticism by many practitioners and scholars. In particular, these methods generally suffer

¹ Alternatively, a similar approach where prices are directly regressed on HHI (or other measures of competition such as the number of competitors within a given distance, or indicators for the presence of specific types or individual competitors) is also commonly used. In this case, historical data are used to estimate a relationship between price and local competition. Post-merger prices are then predicted from the model based on post-merger measures of local competition.

from the problem that firms will locate in places that *a priori* are low cost or support high prices because of high demand. If the regression analysis does not adequately control for supply and demand factors, then this will lead to either an understatement or overstatement of the effects of local competition on price and, as a result, biased estimates of the effect of a merger on price. Recent academic literature and practical applications identify possible solutions to the problem of endogeneity. However, given this context, it would be helpful to know more precisely what models MOFCOM economists may have run and how, if at all, they have controlled for this kind of bias. Continued use of this model by MOFCOM suggests that merging parties may wish to demonstrate the potential biases those models create, how alternative models may generate more favorable results, how changes in the underlying data lead to different predictions, and how careful measurement of margins is critical when estimating merger-induced prices under this approach.

Indicative Price Rise (IPR): This measure is used primarily in the UK and rooted in the same economic framework as the Gross Upward Pressure Pricing Index (GUPPI) and Upward Pricing Pressure (UPP). Its basic premise is that a unilateral price increase by the merging firms that would be unprofitable without the merger, may become profitable as a result of the merger. This happens because a fraction of lost sales following a price increase by one of the merging firms is recaptured by the merging partner. Hence, these sales are not ultimately lost from the perspective of the merging firm. The IPR relies on information about prices, margins, relative shares, and diversion ratios between the merging firms.² With certain assumptions on the shape of the demand curves faced by the merging firms, one can calculate price increases due to changes in incentives after the merger. A key concern with using this IPR measure is that it often imposes some strong assumptions, e.g., that the two merging firms are symmetric (same price, margin, share, and diversion ratio) and demand curves are linear or exhibit constant elasticity. These assumptions may not be good approximations in certain industries, so it would be useful to see if MOFCOM economists considered those limitations in their analyses.³

It is encouraging to see MOFCOM become more sophisticated and incorporate more economic analysis of competition into its merger review. Like many past transactions, MOFCOM's competitive analysis in Thermo Fisher/Life Technologies focuses on market definition and unilateral effects, but is silent on coordinated effects and efficiencies. In the future, it would be helpful for MOFCOM to share more details on how specific measures are calculated as in many situations, the same analysis in principle, but with different assumptions and specifications, can lead to very different results. We are also looking forward to learning more about MOFCOM's treatment of efficiencies.

CRA and our China expertise

CRA combines deep knowledge of local laws and regulations with extensive experience in merger reviews in all major jurisdictions, including Asia, Europe, and North America. Many CRA economists have held leading positions in European, American, or Canadian government regulatory agencies. We offer firms with multinational interests a specialized point of contact in each region to coordinate the work of tightly integrated transnational teams. Read more about our China expertise [here](#).

² The diversion ratio from Firm A to Firm B is the fraction of Firm A's lost sales that is recaptured by Firm B following a price increase by Firm A.

³ Antitrust agencies in the UK have recently used asymmetric IPRs.

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