Regional Competition Center for Latin America presents guidelines on quantitative techniques for competition analysis

Prepared by the CRCAL*

*David Card, Class of 1950 Professor of Economics, University of California at Berkeley; Kostis Hatzitaskos, Senior Manager, Cornerstone Research; Vandy Howell, Vice President, Cornerstone Research; and Brad Howells, Associate, Cornerstone Research.

With newly developed empirical methods and increased data availability, quantitative analyses can play an important role in antitrust and competition investigations undertaken by competition agencies. Quantitative analyses can complement the conclusions from qualitative or theory-based analyses, and provide an empirical basis to choose between competing conceptual or theoretical conclusions. Building on advances in the academic and policy literatures, the range of techniques used in competition analysis has expanded rapidly in the past two decades, and there is now an accumulated body of knowledge that is routinely brought to bear in competition matters in the United States and Europe.

One of the key aims of the Regional Competition Center for Latin America (CRCAL) is to enhance and support the technical capabilities of competition agencies in the region. An understanding of cutting-edge empirical methods and quantitative best-practices will improve the efficiency and efficacy of competition policy and regulation. With this in mind, the CRCAL commissioned a set of guidelines intended to provide a selective overview of current *best-practice* empirical methods, focusing on those that are most widely used and readily applicable. These guidelines provide competition agencies with an accessible and relatively complete introduction to the methods commonly used at each stage of an empirical analysis involving competitive issues.

The guidelines begin with an introduction to general best practices. Quantitative analyses usually involve many steps, including the collection of data, the careful checking of the reliability of the data, and the development of an economic model that will guide the analysis. Since an entire analysis can be undermined by errors or omissions at any stage, it is critical that the procedures at each step meet best-practice standards. The guidelines outline the various stages of a typical empirical analysis that might be used by a competition agency, and highlight for each step the procedures and best-practices that will support the accuracy, reliability, and ultimate quality of the analysis.

The next section of the guidelines focuses on development of an economic model that will guide the analysis. Quantitative analyses for competition matters are normally conducted within the framework of an economic model that informs the empirical analysis and provides the basis for the legal or regulatory conclusions of the exercise. There are a number of best-practices that are helpful when developing a model and these apply to a wide range of economic problems encountered in competition analysis. This section discusses in detail the importance of starting simple, running checks of model validity early in the process, and undertaking robustness checks to understand what drives the salient results.

The guidelines then describe a set of methods used to address the most common questions that arise in competition cases. For example, a necessary step in the analysis in most investigations regarding competition matters is to assess whether a certain firm, or group of firms, has market power. Defining the scope of the market in which the firm or firms compete for sales is frequently a first step in this assessment. The guidelines provide a detailed discussion of the many methods used for market definition; address the advantages and disadvantages of each; and explain how the best choice for any particular case will depend on the context, time constraints, and available data.

Since competition agencies are often faced with the task of evaluating the competitive effects of a proposed merger, another section of the guidelines is devoted to merger analysis and, in particular, to analysis of the potential for unilateral and coordinated effects that might give rise to concern that a proposed merger will have an anticompetitive impact. The goal of the agency should be to challenge mergers that are likely to harm competition while avoiding interference with those that are competitively neutral or beneficial. To do this, competition agencies can employ a variety of empirical methods to evaluate the unilateral and coordinated effects of a merger. These range from a simple examination of industry concentration to complex and detailed merger simulations. The challenge for competition agencies is to determine the simplest available method that can provide an accurate evaluation of the impact of a merger.

In addition to challenging anticompetitive mergers, effective competition agencies identify, challenge, and eliminate horizontal conspiracies. The guidelines discuss some of the market outcomes that economic theory predicts might indicate a horizontal conspiracy and how one might empirically test for them. The indicators of collusion might include higher prices, reduced price variation, price leadership, capacity constraints, or stable market shares. Which indicators are relevant in a particular case will depend on how the alleged collusion is implemented.

These guidelines for quantitative techniques in competition analysis are expected to be an important reference for the members of the CRCAL. The document will become available for Latin American countries and the public in the first quarter of 2013.

The views expressed in this article are solely those of the authors, who are responsible for the content, and do not necessarily represent the views of Cornerstone Research.