Unobserved Factors In Antitrust Class Certification

Law360, New York (May 14, 2014, 4:11 PM ET) -- The battle of the experts at the class certification stage of antitrust cases often focuses on analyses of price dispersion. While the technical arguments about statistical tests performed by the experts may seem arcane, the key question about the reliability of the analysis often depends on what is not in the model as much as what is in the model.

Antitrust class actions often involve allegations of monopolization or price-fixing where the alleged outcome is supracompetitive prices. The parties often retain expert economists to opine on whether the record supports a view that “questions of law or fact common to class members predominate over any questions affecting only individual members” as stated in 23(b)(3) of the Rules of Civil Procedure. Because different buyers often pay different prices for the good or service at issue, the legal language is suggestive of a statistical analysis of price dispersion. Recent court decisions including by the U.S. Supreme Court in Dukes v. Wal-Mart and Comcast v. Berhrend, have continued to put an emphasis on rigorous analysis in class certification.

In antitrust cases in which collusive behavior on the part of firms is alleged to affect the prices paid by class members, the plausibility of measuring damages on a classwide basis turns on the commonality of impact across class members. To analyze commonality, economists often perform a regression analysis of the prices paid by individual buyers or groups of buyers in the market. The aim of the regression analysis is to estimate to what extent prices individual buyers paid are determined by common factors versus individualized factors. Both sides often find something to like in their results, and the “battle of the experts” now routinely begins at the class certification stage. While experts may debate technical points about statistical models, the salient point is how the researcher interprets unobserved factors that affect transactions and to estimate how they would change in a counterfactual market. Said differently, the discussion about what is not in the model is at least as important as the discussion of what is in the model.

Economic theory provides a framework to conduct an analysis of price formation in the market. Specifically, reduced form economic price equations are used to describe the relationship between price
and factors that affect price from the intersection of supply and demand. While opposing experts are unlikely to agree on the specifics of the price equation, they may agree on what their competing models represent. This reduced form price equation thus represents an economists’ standard view of price formation within a market.

A reduced form model is summarized by an equation that has the price paid by the buyer of a transaction set equal to the sum of observable and unobservable factors. Among the observable factors may be the identity of a particular buyer or group of buyers. One standard statistical test examines whether all the individual effects are identical. Rejecting this hypothesis serves as evidence against a particular form of common effects in price formation. That is, we may interpret the results of a test that rejects the hypothesis as saying the data are consistent with the notion that some customers pay systematically higher (lower) prices than others for similar products.

The unobserved factors are often collected within a “disturbance” or an “error” term. A second test is the so-called “R Squared” or R2 statistic that expresses the fraction of the variation that is due to the observable factors in the price equation. Rejecting a hypothesis test that the explained variation is below 50 percent may be read as evidence that common factors predominate in the formation of prices. The interpretation of competing statistical tests such as these is likely to form the crux of the “battle of the experts” at class certification.

As a practical matter, both experts may be correct. This is because both tests consider straw men that are extreme views of the real world. A more realistic view of the market is that unobserved factors vary across buyers and that observable factors largely determine prices. The mere fact that unobserved factors are present does not render inferences from a reduced form price equation unreliable. Modern empirical research in economics anticipates that unobserved factors will be present and provides standard statistical techniques to account for them.

The question is whether they have been properly handled in a way as to insure that the inferences that are drawn are reliable. A key question about the reliability of the analysis of a price equation involves the interpretation of what the unobserved effects are and how they would change in a counter factual “but for” state of the world. If the unobserved factors can be expected to change when the market functions in the absence of anti-competitive effects (rather than the alleged actual history), then the measured impact on prices may be incorrectly measured, because the effects of the unobserved effects and the antitrust impact are confounded. That is, it will be difficult to untangle the two effects on prices.

On the other hand, if the unobserved factors are constant in both counterfactual and the realized history, then they will not confound the measured impacts. Research into the facts of the case should help to determine which view is more likely to be true. Testimony from buyers and sellers, for example, may give the court a sense of what the unobservable factors are likely to be and if they would likely change (and how) in a counterfactual case. Economic analysis may help in these inquiries, but the important point is that a careful economic analysis can highlight for the court where and why a factual inquiry is relevant to interpreting the econometric results.