Abstracts Keynote Lectures

Joseph Harrington *(University of Pennsylvania)* “Defining the Boundaries of Unlawful Collusion”

Within competition policy, there is a consensus that price fixing, market allocation, bid rigging, and other methods by which firms coordinate to suppress competition should be prohibited. In practice, coordination can take varied forms that range from the egregious - firms expressly exchanging assurances using verbal communication (in other words, the proverbial smoke-filled room as, for example, caught on film by the FBI with the lysine cartel) - to the subtle - one firm raising its price as an "invitation to collude" and the other firm matching that price increase as an "acceptance of that invitation" (as famously described by U.S. Appeals Court Judge Richard Posner). The operational challenge lies in drawing the line between those practices deemed unlawful and those that are not. While this challenge has largely been the domain of lawyers, judges, and legal scholars, this lecture will explore this issue through the lens of game theory with the objective of providing a logically sound definition of unlawful collusion.

Michael D. Whinston *(Northwestern University)* “Horizontal Mergers: New Approaches and Open Issues“

The lecture will discuss recent developments in the analysis of horizontal mergers, as well as some open issues needing further attention from researchers.

Michael Katz *(University of California, Berkeley)* “Competition Policy in Network Markets”

Network markets potentially pose several competition policy issues that are novel or unique to such markets.

I will begin by discussing the assessment of market power and the diagnoses of predatory and exclusionary behavior in markets subject to one-sided network effects. I will also discuss whether suppliers should have an affirmative duty to deal with rivals, possibly in the form of mandatory standards. The appropriate treatment of horizontal agreements among suppliers will also be examined.

Recently, the antitrust of markets with two-sided network effects has been topic of particular interest. I will examine market definition and the assessment of market power in two-sided markets, and I will address the question of whether it can be appropriate to challenge practices that might be viewed as harming competition on only one side of the market. Particular attention will be paid to the existence of competitive bottlenecks and the possibility of a “terminating-access monopoly.” Somewhat provocatively, I will ask if there is really anything new about two-sided markets.

Lastly, there are industries in which one or more dimensions of a network's scope are critical elements of quality from the customer's perspective and scope is chosen directly by the network service provider. Examples include airlines' route structures and mobile phone networks. For these markets, too, I will address issues of agreements—or their lack—among horizontal competitors.

Patrick Rey *(Toulouse School of Economics)* "Buying patterns and cross-subsidization"

The literature on oligopoly pricing often tends to ignore customers' transaction costs (with a notable exception for search costs, which do have received substantial attention). I will show that accounting for heterogeneity over these transaction costs brings interesting insights, in particular in connection with below-cost pricing strategies.

I will first consider the case of large retailers, competing with smaller stores that carry a narrower range, and show that large retailers can exercise their market power by pricing below cost some of the products also offered by the smaller rivals; this is not to eliminate the smaller stores, but rather, to discriminate multi-stop shoppers (i.e., those with low shopping costs, who are prone to "mix-and-match") from one-stop shoppers (those with higher shopping costs, which thus tend to concentrate their shopping in a same store). Loss leading thus appears as an exploitative device rather than as an exclusionary instrument, although it hurts the smaller rivals as well; in this context, banning below-cost pricing increases consumer surplus, rivals' profits, and social welfare. These insights extend to industries where established firms compete with entrants offering fewer products. They also apply to complementary products such as platforms and applications.

I will then turn to competitive cross-subsidization by multi-product firms. In a setting where each firm has a comparative advantage on some of the products, but all firms are equally effective in serving one-stop shoppers, cross-subsidy arises in equilibrium, and allows again firms to better screen consumers according to their shopping patterns. Firms earn positive profits from multi-stop shoppers, while fierce price competition dissipates any profit from one-stop shoppers. In this context, banning below-cost pricing leads to higher prices for one-stop shoppers and may or may not reduce consumer surplus as well as total social welfare, depending on the total value of the assortment.

Mark Armstrong *(University of Oxford)* "Consumer Protection Policies"

This lecture gives an overview of some of my recent work on consumer protection. I present three theoretical models which illustrate the merits and drawbacks of a number of common consumer protection policies, namely: policies which prevent firms from setting unduly high prices; policies which prevent firms requiring on-the-spot decision making by prospective customers, and policies which prevent suppliers from paying commission payments to sales intermediaries.

In addition, there will be a **Plenary Panel** with practitioners of competition policy, including Kai-Uwe Kühn (European Commission and University of Michigan), Jorge Padilla (Compass Lexecon), and Justus Haucap (Monopolkommission and University of Düsseldorf). The topic is "Challenges in Competition Policy and Regulation in a Globalizing World."