## ASSA JMP Talk

## Mark Agerton

## 2–3 minute intro example

My dissertation examines the RTE cereal industry. Why is this industry interesting? (1) It is interesting in its own right: sales of nearly 9\$ billion per year in the US, T.V. advertising second only to car manufacturers, and a long history of examination by regulation agencies; (2) But more importantly, much about what I claim for this industry can be generalized to other differentiated-products industries. The industry is considered the classic example of a differentiated-products industry that has channeled away from price competition into other modes of competition (new product introduction and advertising).

Before I proceed let me tell you a bit about the industry. It is characterized by: high concentration, high price-cost margins, high advertising-to-sales ratios, and numerous introductions of new brands. This has been used to claim that this industry is a classic example where price competition has been suppressed and channeled towards others modes of competition. My job-market paper examines this claim.

Just to be clear, the question that I am asking: is pricing in the industry collusive? The bottom line is that I find no evidence for collusive pricing.

So why are PCM high? A different way of asking the question of collusion is to ask what part of the markup is due to product differentiation (local monopoly power. You like K CF I like Cherrios we are each willing to pay a premium for our favorite product), multi-product firm pricing (portfolio effect, or cannibalization. If 2 brands are substitutes then a firm producing both would charge a higher price than two separate manufacturers), and finally potential price collusion. I find that the first two effects explain observed markups.

How do I do this? Three steps. First, I estimate a brand level demand system. This is easier said than done. Need to deal with heterogeneity (with-out it there is no differentiation) and the problem of dimensionality (many brands imply many substitution parameters). I solve these with the aid of a great data set (this data is rarely available for academic research. I can talk about it more latter) and using a demand system that reduces the dimensionality problem yet does not apriori restrict the substitution patterns.

Second, given this demand elasticities I compute what the markups would be under different models of conduct. Specifically, I examine Nash-Bertrand pricing under three industry structures: single product firms (each brand is priced by a manager that maximizes only the profits from that brand), multi-product firms (current ownership) and joint profit maximization (cartel or monopoly). Single product firms gives the part of PCM due to differentiation. Multiproduct adds also the portfolio effect. Finally, joint maximization bounds the effect of collusion.

Finally, I compare these results to observed markups to determine which model of conduct best fits the data. The result is that multi-product Nash-Bertarand pricing seems to fully explain observed prices and therefore there seems to be no evidence of collusive pricing.

What this paper does not do – (a) These results should not be used for policy analysis. For example, the markups computed under the single-product firm structure are not the prediction of PCM that would prevail under such a structure. This is because advertising and new brand introduction would not stay fixed at their current levels. In my current work I deal with these issues. (b) I do not explain how it is that Cheerios is perceived as being so different from its competition (including generic imitations).

My future work. Short-run: describe the three projects. Long-run: examine market power and strategic behavior in different industries. Concentrate on the innovation process and the decision to introduce new brands. My other side is that of an econometrician. I have done work on sample selection, and GMM estimation of production functions (I have been working on methods that would offer alternatives to work like Olley-Pakes).

Teaching interests. IO course concentrate on empirical side, but could also do the theory side. Various econometric courses ranging from a basic course to several advanced courses. Finally, could teach some "low-level" micro courses.