# Comment on "Public Communication and Collusion in the Airline Industry" by Aryal, Ciliberto, and Leyden (2018)

Gloria Sheu

US Department of Justice

FTC Microeconomics Conference November 2018

The views expressed herein are entirely those of the author and should not be purported to reflect those of the US Department of Justice

### **Paper Summary**

#### Two main goals

- 1. Document an interesting empirical finding, that when legacy carriers say they will engage in "capacity discipline," capacity then falls in markets where they overlap
- 2. Argue that this empirical pattern is evidence of collusion between legacy carriers

## **Empirical Strategy**

- The authors rightly spend a lot of time working to rule out alternative explanations for their findings
  - Very helpful to see cases where no effect is found, such as with LCCs
  - But difficult to prove a negative
- Rather than add to the stack of empirical suggestions the authors have surely already received, my comments today are about the antitrust context for this research

#### Collusion and Coordinated Effects in Antitrust

# Important to encourage antitrust-relevant research on collusion and coordinated effects

- Practitioners and courts are converging on generally accepted frameworks for how to model the unilateral effects of horizontal mergers
- There is far less consensus on the appropriate ways to model the coordinated effects of mergers or to model collusion in non-merger cases
  - The quantitative or empirical work that exists is often highly specific to the case at hand

#### What Model Could Generate this Collusion?

- Although not the focus of this paper, it is helpful to consider the types of strategic interactions that could generate the observed behavior
  - Adding some mild exposition to this effect in the paper would be useful
- A model would have to rationalize several key points
  - 1. Only certain geographic markets are affected at any given time
  - 2. Firms do not participate in all time periods
  - 3. Certain firms (LCCs) are excluded
- Suggests a model of partial collusion, where not all firms, markets, and time periods are affected

#### How Was the Set of Markets Chosen?

- Perhaps the legacy carriers would have liked to include additional markets
- Does the presence of markets that are unaffected hint at an incentive compatibility constraint at work?
  - For example, firms may have wanted to collude in markets where legacy carriers overlap and only one announced capacity discipline, but may not have because it would have induced cheating

#### What Sort of Punishment Would Sustain This?

- Measures of capacity are publicly observed (perhaps with a lag), so monitoring may not be an issue
- Are the periods when a carrier does not talk about capacity discipline times where collusion broke down?
  - If so, why did it start up again? Did market conditions change?

#### What is the Role of LCCs?

- Do they prevent even more collusion, akin to a maverick firm?
- Or are they simply not enough of a competitive constraint to bother colluding with?
  - Perhaps the answer varies by market?

#### A Few Final Questions

- Did mergers play any role?
  - Did the amount of talk about capacity discipline change?
  - Did the affected markets change?
- What happened to prices and welfare?