The Agency Model and MFN Clauses

Justin P. Johnson

Johnson Graduate School of Management
Cornell University

FTC Microeconomics Conference

The Agency Model and e-books

- An *agency model* combined with

Background facts| Economics

- Two distinct sales models:
  - Wholesale| very traditional
  - Agency| suppliers set nal retail prices, and split pro ts
- Most-favored-nation (MFN) clauses| restrict suppliers to charge the same price to di erent retailers
  - Frequently considered anti-competitive

Background Facts — the e-book market

- Amazon — the larger player and first mover
- Apple — entered the market at the same time it released the iPad
- Apple and Amazon standards are incompatible
- Apple demanded publishers move to the agency model (with an MFN) as a condition of entry
- Book prices increased significantly

Answers to Key Questions

1. Is the agency model an anticompetitive tool? **Possibly**
2. Are MFNs anticompetitive tools? **Maybe Not**
3. Does the fact that prices went up in the e-book market solid evidence that consumers were harmed? **Definitely Not**

Sketch of Model

- Imperfectly competitive upstream and downstream markets
-

The Effect of Agency on Retail Prices and Profits

- Agency eliminates double markup and lowers retail prices
  - (Under certain complementarity assumptions on prices)
  - Industry profits could go up or down

The Effect of Agency on Retail Prices and Profits

- Agency eliminates double markup and lowers retail prices
  - (Under certain complementarity assumptions on prices)
  - Industry profits could go up or down
- What happens if revenues rather than profits are shared? Each supplier i with marginal cost $c > 0$ maximizes

$$
\begin{aligned}
rp_i D_i(p_i, p_{-i}) - cD_i(p_i, p_{-i}) &= r\left(p_i - \frac{c}{r}\right) D_i(p_i, p_{-i}) \\
&= \left(p_i - \frac{c}{r}\right) D_i(p_i, p_{-i})
\end{aligned}
$$

The Effect of Agency on Retail Prices and Profits

- Agency eliminates double markup and lowers retail prices
  - (Under certain complementarity assumptions on prices)
  - Industry profits could go up or down
- What happens if revenues rather than profits are shared? Each supplier i with marginal cost $c > 0$ maximizes

$$
\begin{aligned}
r p_i D_i(p_i, p_{-i}) - c D_i(p_i, p_{-i}) &= r \left(p_i - \frac{c}{r} \right) D_i(p_i, p_{-i}) \\
&= \left(p_i - \frac{c}{r} \right) D_i(p_i, p_{-i})
\end{aligned}
$$

- Because $r < 1$, $\frac{c}{r} > c \Rightarrow$ Agency can raise retail prices

MFNs and Entry in the Agency Model

- There is an incumbent (I) and a potential entrant (E)
- Suppose that life is very bad for suppliers if no entry occurs
- Suppliers want entry but face a \problem" convincing E to enter

MFNs and Entry in the Agency Model

- There is an incumbent (I) and a potential entrant (E)
- Suppose that life is very bad for suppliers if no entry occurs
- Suppliers want entry but face a \problem" convincing E to enter

Dynamic Incentives in the Agency Model

- Goal: understand observed price increases in the e-book market
- Goal: understand welfare implications
- Remember: Apple and Amazon have incompatible e-book standards
- Model change: two periods with consumer lock-in, set marginal costs $c = 0$

Main Results

- The agency model raises first-period prices but lowers second-period prices

Main Results

- The agency model raises rst-period prices but lowers second-period prices
- Consumers prefer the agency model

Main Results

- The agency model raises rst-period prices but lowers second-period prices
- Consumers prefer the agency model
- Hence, can not conclude consumers were harmed

Conclusion

- Agency eliminates the double markup and can (but need not) lower retail prices
- MFNs can encourage retail entry under the agency model
- In dynamic models, initial price increases are not solid evidence that consumers are harmed
- Final thoughts on the e-book case...

The Agency Model and MFN Clauses

Justin P. Johnson

Johnson Graduate School of Management
Cornell University

FTC Microeconomics Conference