

The Economics of Enforcement: Carrots, Sticks, and Social Benefit

Dr. Brett Danaher

Three Key Takeaways

- There are very good empirical studies on which policies and strategies are effective in converting pirates into paying consumers
 - No one strategy or policy is a panacea
 - Strategies/policies should be evaluated on costs vs. benefits, not purely philosophical grounds
-

Three Key Takeaways

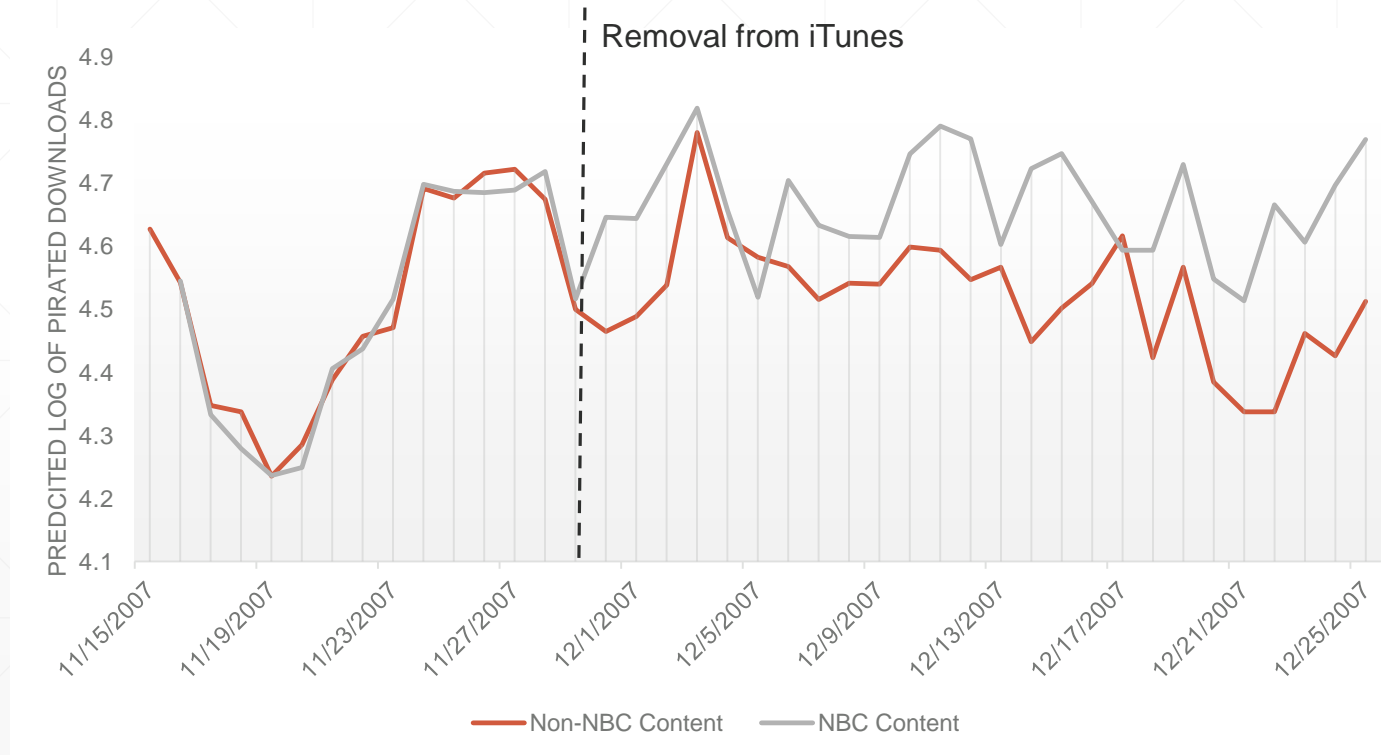
- There are very good empirical studies on which policies and strategies are effective in converting pirates into paying consumers
 - No one strategy or policy is a panacea
 - Strategies/policies should be evaluated on costs vs. benefits, not purely philosophical grounds
-



“Carrots” – Strategies to Make Legal Content More Attractive

- Availability and convenience of legal alternatives can reduce piracy
 - Removal of NBC content from iTunes caused a 12% increase in piracy of that content
 - Addition of ABC content to Hulu cause a 20-25% decrease in piracy of that content
 - Shortening release windows can reduce piracy and increase sales
 - Each additional 10 days between piracy availability and the international DVD release is correlated with a 2-3% decrease in sales (and an increase in pre-release piracy)
 - Increasing priority in search engine results can increase legal behavior
 - In a controlled experiment, subjects who viewed search results that prioritized legal links increased legal consumption from 80% to 95%
-

Piracy of NBC Content Before and After Removal from iTunes





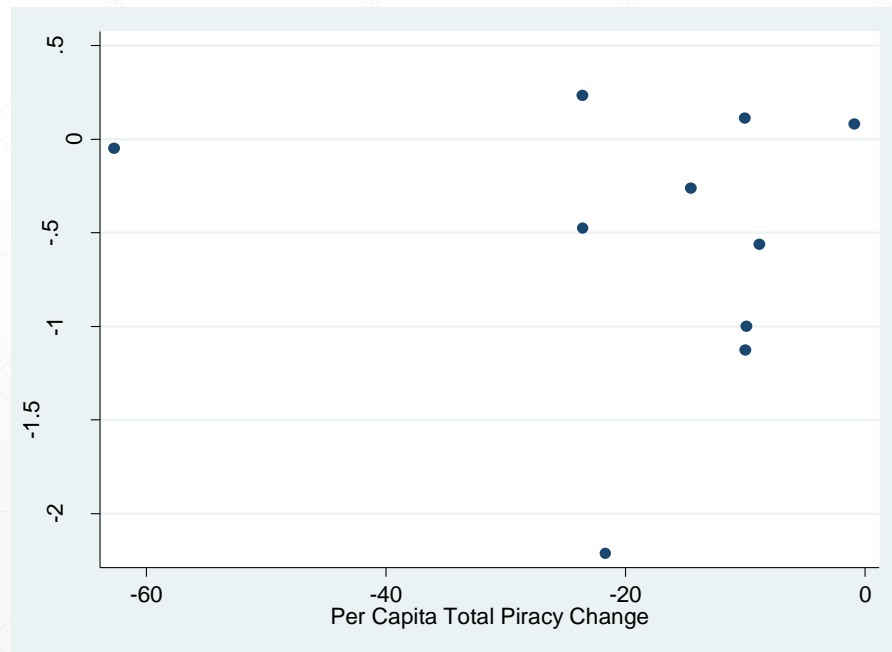
“Sticks” – Strategies to Make Illegal Content Less Attractive

- Demand-side anti-piracy policies can be effective if enforcement is credible
 - HADOPI in France caused a 20-25% increase in digital music sales
 - IPRED in Sweden caused a 35% increase in music sales but the effect only lasted six months
 - Supply-side policies can be effective if they sufficiently increase the cost of piracy
 - Shutdown of Megaupload.com caused a 6-8% increase in digital movie revenues
 - UK ISP blocking of The Pirate Bay caused piracy to disperse but no increase in legal
 - UK ISP blocking of 19 major piracy sites cause a 12% increase in paid legal streaming
 - Third party anti-piracy enforcement can be effective as well
-

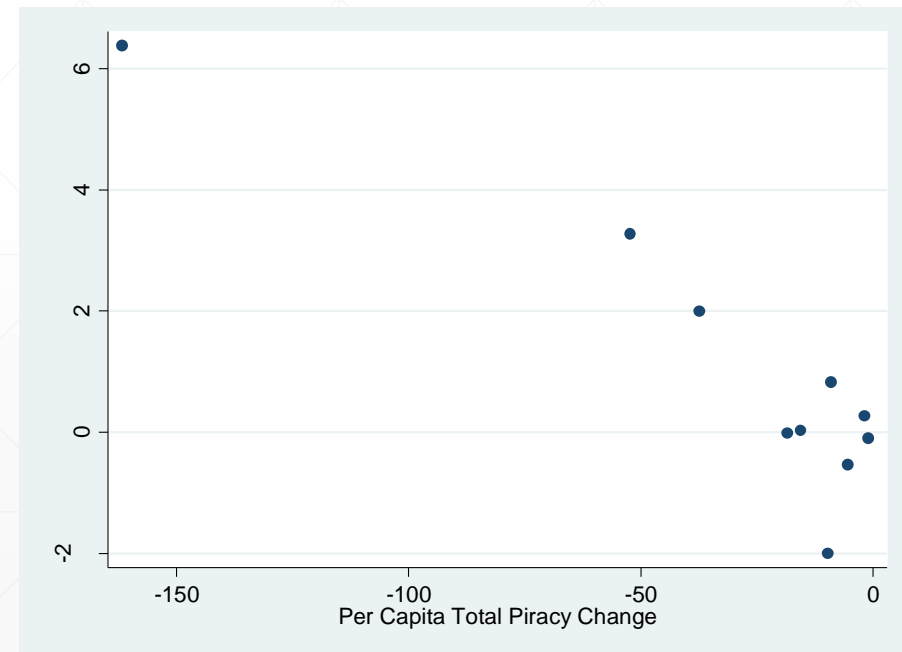
Antipiracy Enforcement Can Influence Consumers

Site Blocking in the UK

Pirate Bay Site Block - Ineffective



19 Simultaneous Site Blocks - Effective



Summary

There is really good evidence on the effectiveness of various carrots and sticks.

Three Key Takeaways

- There are very good empirical studies on which policies and strategies are effective in converting pirates into paying consumers
 - No one strategy or policy is a panacea
 - Strategies/policies should be evaluated on costs vs. benefits, not purely philosophical grounds
-

Combined Efforts Required

- No study finds an action that causes a lasting reduction in piracy of more than 25%
 - No study finds a lasting increase in sales of more than 23%
 - It seems likely that we required a number of carrots and sticks, and that antipiracy actions need to adapt over time
-

Three Key Takeaways

- There are very good empirical studies on which policies and strategies are effective in converting pirates into paying consumers
 - No one strategy or policy is a panacea
 - Strategies/policies should be evaluated on costs vs. benefits, not purely philosophical grounds
-

Example – Graduated Response

- Largest sustained increase in sales
- Less risk of “whack-a-mole



- Difficult political climate
- Potential losses from penalties
- High cost of enforcement

Example – ISP Website Blocking

- Less drastic than shutdowns
- Has not “broken the internet”



- Higher ISP costs?
- Requires continuous blocking
- Smaller gains in legal

Summary

- Evaluate copyright enforcement efforts for net social benefit
 - This requires measurement and solid methodology
 - Fortunately there are people doing exactly this
-



Dr. Brett Danaher
danaher@chapman.edu
