

Background:

File-sharing and on-line piracy have caught great public attention. There is a public debate on whether or not we should close torrenting sites like Piratedbay.com. Copyright holders argue yes and claim substantial loss due to filesharing while Pirates claim that file-sharing is welfare-improving and the effects on sale are negligible. Right now no consensus has been reached on how file-sharing affects industry revenue in economics literature.

Methods:

Using a novel dataset of downloads from Bit-Torrent network, this paper quantifies the effects of file-sharing on movie box-office revenue. I estimate a random coefficient demand model of movies to quantify the effects of file-sharing.

Results:

I also quantify pirated consumption's spillover effect on box-office. Current version of estimation result show that replacement rate of piracy on box-office is not negligible. In addition, spillover effect from pirated consumption is of limited contribution to movie box-office revenue.

Discussion & Conclusion:

This paper estimate the effect of file-sharing on box-office revenue and consumer welfare. The result confirm that there're indeed loss due to file-sharing and file-sharing also substantially improve consumer welfare. However I did not find evidence of a strong spillover effects.

Interdisciplinary Reflection: Concepts and techniques from the Economics and Computer science is combined.