

An empirical analysis of blockbuster video games

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Blockbusters

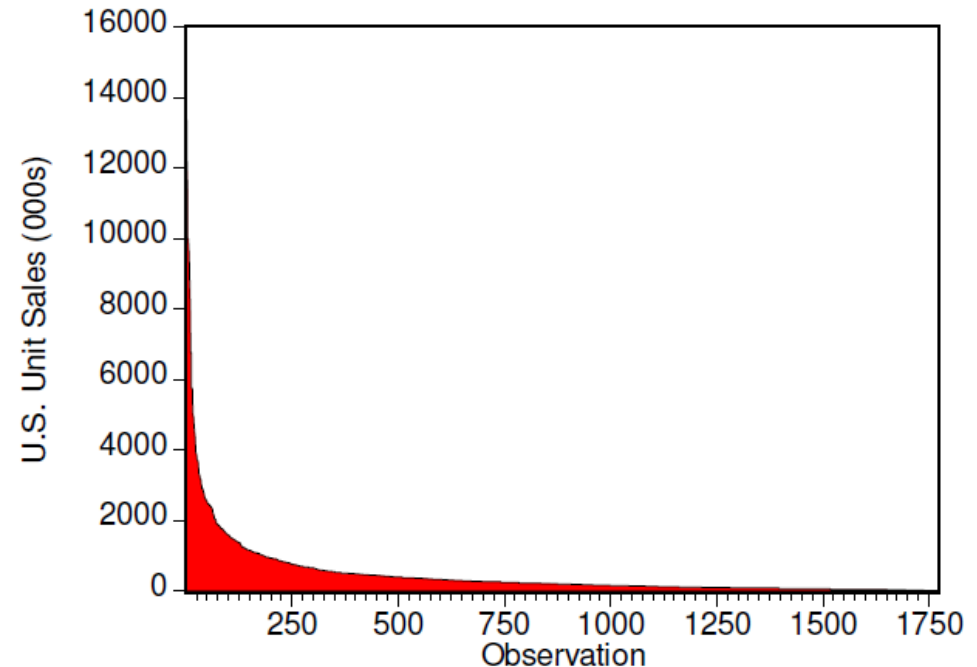
- Hollywood 'blockbusters'
 - Harry Potter and the Deathly Hallows (Part 2) (2011): \$169m in opening weekend
 - Avatar (2009): \$1bn revenue in 17 days since release
- Video games 'blockbusters'
 - Grand Theft Auto 4 (2008): highest revenue launch in entertainment history
 - Call of Duty: Modern Warfare 3 (2011): \$750m in first five days, \$1bn revenue in 16 days since release
 - Call of Duty franchise: lifetime sales revenues exceed Star Wars and Lord of the Rings
- Motivation for study: to better understand the phenomenon through statistical analysis of unit sales versus observable characteristics.

Literature

- Literature on blockbusters tends to focus on Hollywood movies, using a similar statistical approach to that used here.
 - See De Vany & Walls (1999); Collins *et al.* (2002).
 - Success determinants: star power, critical reception, budget, sequel, genre etc.
- Gallagher & Park (2002); Evans *et al.* (2005): ‘killer-apps’ more likely to be developed by hardware manufacturers themselves.
 - Gretz (2010) emphasises the wide variation in video games sales across titles and calls for further study into ‘killer-apps’.
- Clements & Ohashi (2004) – top 5% titles generate more than 50% of sales.
 - Shankar & Bayhus (2003) – only 10% of games earn a profit and half of all titles sell fewer than 10,000 copies.

Data

- Sep 2011 dataset consisting of 1770 titles.
 - Control for review score, platform, publisher, franchise, multi-platform, licenced, rating etc.
- Dependent variable: US unit sales (thousands).
- Modelling via OLS and binary logistic regression



Results

- Largest influence: metacritic review score.
- Higher sales associated with sequels and multi-platform titles.
- Passage of time only increases sales by a small amount.
- Hardware platforms: handheld titles associate on average with fewer sales than those for home consoles.
- Major publishers generally associate with higher sales, especially Nintendo, Sony and Microsoft.

Conclusions

- Findings broadly consistent with literature on movie blockbusters.
 - Critical reception, developer, sequels all found to increase sales.
- Magnitudes differ.
 - Review scores found to have a greater relative effect than Collins *et al.* (2002), while sequels reduced.
- Additional consideration: platform of release
 - Evidence suggests multi-platform releases increase the probability of sales success, but presumably can't be 'killer-apps'.
- Most influential publishers also console manufacturers (Nintendo, Sony, Microsoft)
 - Consistent with Gallagher & Park (2002); Evans *et al.* (2005).