

Lecture 1.

Film as a Commodity

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Figure 1. Film as a Commodity

(System of provision arrangements)

Producer —————> **Distributor** —————> **Exhibitor**

(Film transacted as strips of celluloid)

Film consumption
as a material
transaction:
consumers pay
price of
admission;
exhibitor activates
projector



Film
consumption as
a sequence of
immaterial
images
consumed in the
mind

Film as Mass Art-work

- Carroll has given the following functional definition of mass art work:
- x is a mass artwork if, and only if,
 - 1. x is a multiple instance or type artwork
 - 2. produced and distributed by a mass technology
 - 3. which artwork is intentionally designed so as to promise accessibility with minimum effort, virtually on first contact, for the largest number of untutored (or relatively untutored) audiences

An Ontology of Film as a Commodity

1. The non-diminishable, indivisible, indefinitely enlargeable, infinitely reproducible, but excludable nature of the film image.
2. The slow physical deterioration of the means of producing the film image.
3. The rapidity with which pleasure derived from consumption declines relative to the anticipation of new pleasures - rapidly diminishing marginal utility.

An Ontology (continued)

4. Uniqueness
5. Short product life cycles, particularly in the era before the mass diffusion of television.
6. The dedicated expenditure of time and attention on the part of consumers which could be put to alternative uses

1. The non-diminishable, indivisible, indefinitely enlargeable, infinitely reproducible, but excludable nature of the film image.
 - Think of how cinema exhibition exploits these commodity characteristics, in a way that the mutoscope didn't.
 - Think of why gramophone recordings were consumed in the house, when film was consumed in the cinema.

2. The slow physical deterioration of the means of producing the film image.

- During the 1907-8 season 1,107 films were released in Britain, half of which were of foreign origin. Almost all of these were sold by the foot.
- Between May 1912 and April 1913, approximately 4,800 films were marketed in Britain – over four times that of 1907-08.
- Of these we have the lengths of 4,446 films, with a combined length of over 4 million feet – 10 times that estimated for new releases in 1907-08.

Table 1 Annual Statistics of British ‘Entertainment’ film production

| Year | Number of films | Aggregate Length (feet) | Number of Films? 1000 feet | Number of Films? 2000 feet | Longest Film (feet) | Mean length (feet) | Mean running time (minutes) |
|------|-----------------|-------------------------|----------------------------|----------------------------|---------------------|--------------------|-----------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1895 | 3 | 80 | | | | 27 | 0.44 |
| 1896 | 31 | 1,343 | | | | 43 | 0.72 |
| 1897 | 44 | 2,171 | | | | 49 | 0.82 |
| 1898 | 89 | 6,398 | | | | 72 | 1.2 |
| 1899 | 104 | 6,933 | | | | 67 | 1.11 |
| 1900 | 121 | 9,877 | | | | 82 | 1.36 |
| 1901 | 94 | 10,021 | | | | 107 | 1.78 |
| 1902 | 135 | 16,444 | | | | 122 | 2.03 |
| 1903 | 128 | 20,879 | | | | 163 | 2.72 |
| 1904 | 224 | 42,664 | | | | 190 | 3.17 |
| 1905 | 246 | 60,734 | | | | 247 | 4.11 |
| 1906 | 277 | 83,757 | 1 | | | 302 | 5.04 |
| 1907 | 314 | 97,294 | 1 | | | 310 | 5.16 |
| 1908 | 341 | 131,754 | 2 | | | 386 | 6.44 |
| 1909 | 369 | 150,485 | 5 | | 1,630 | 419 | 6.98 |
| 1910 | 362 | 191,302 | 5 | | 1,500 | 528 | 8.80 |
| 1911 | 409 | 231,687 | 15 | 2 | 2,500 | 571 | 9.52 |
| 1912 | 583 | 440,675 | 128 | 15 | 4,300 | 770 | 12.83 |
| 1913 | 666 | 675,244 | 216 | 79 | 7,500 | 1050 | 17.50 |
| 1914 | 831 | 1,033,380 | 360 | 190 | 5,749 | 1260 | 21.00 |

Note: A number of films are not given a length by Gifford and do not contribute to the estimates found in columns 6 and 7. A reel of film - 1,000 feet in length - was screened at 60 feet per minute and hence lasted for 16.67 minutes.

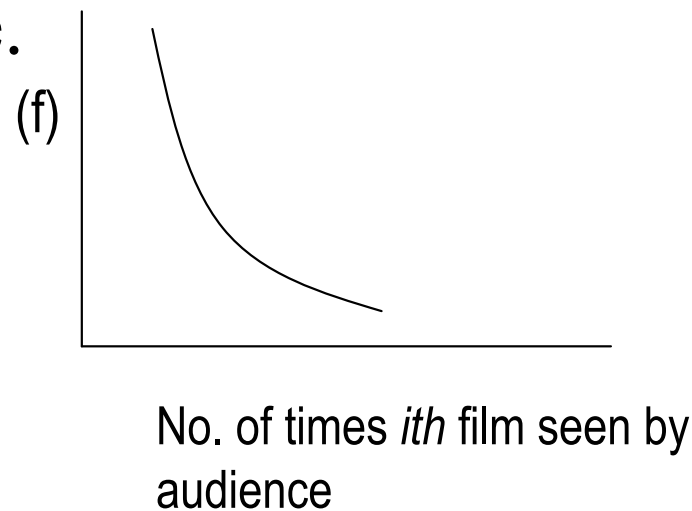
Source: Gifford (1973).

Think of the supply bottleneck problem

- Long films were almost exclusively dramas.
- Long films became 'exclusives' and required different distribution arrangements.
- Between 1909 and 1911 the mode of distribution changed from sales to rentals.

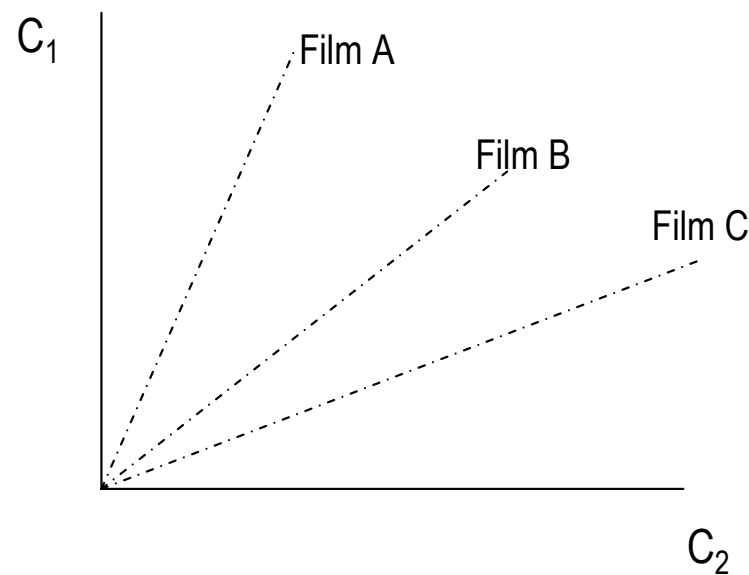
3. The rapidity with which pleasure derived from consumption declines relative to the anticipation of new pleasures - rapidly diminishing marginal utility.

- As a general rule audiences do not repeat view films
- We all have on occasions done this, but such events are exceptional.
- The mode number of times individuals consume any particular film is one.



4. Uniqueness

- No two films are identical
- Each film has its own set of unique characteristics
- Audiences are attracted strongly by uniqueness
- That is why audiences rarely revisit films
- The film industry grew once producers, distributors and exhibitors understood this and acted upon it.



5. Short product life cycles

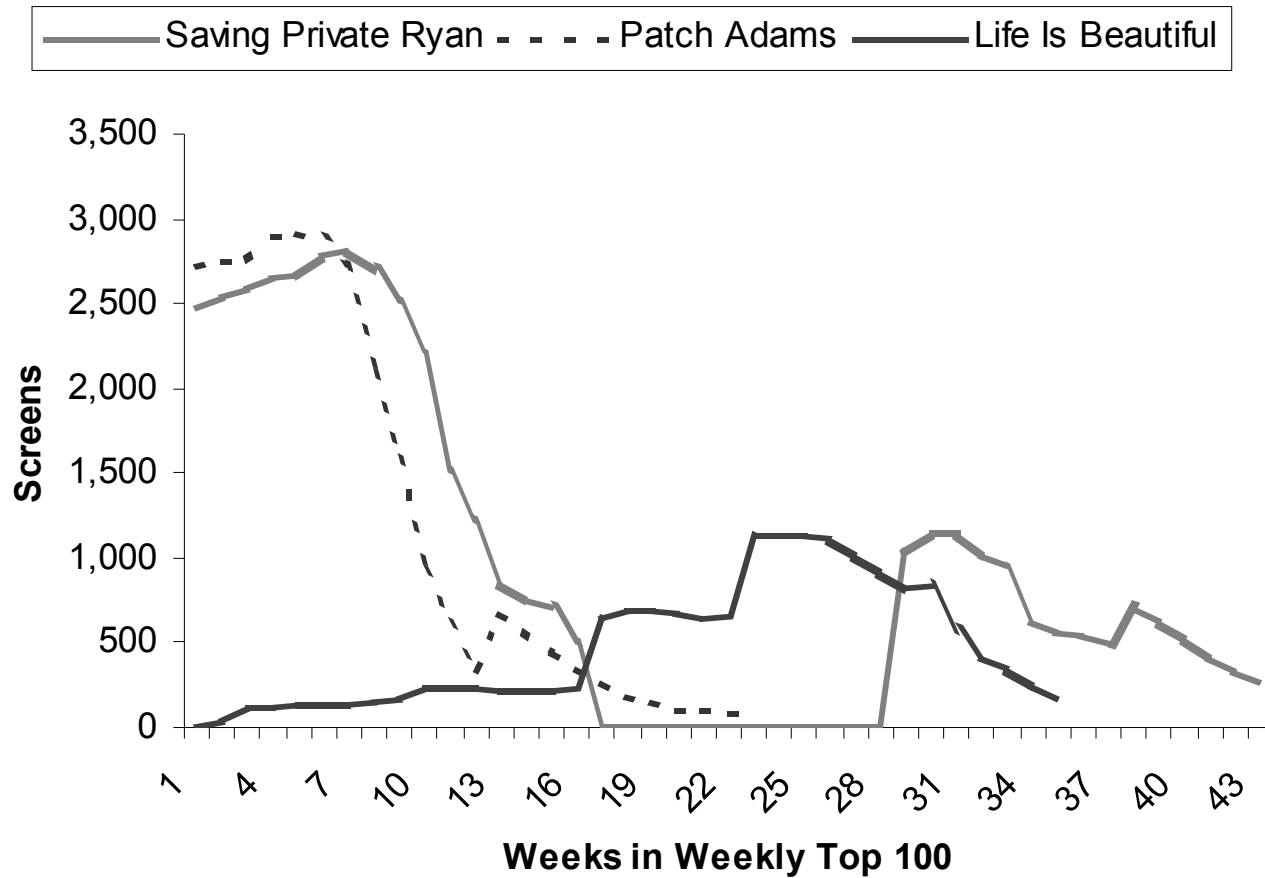
- Typically the life and death processes of films is rapid.
- Keep a log of the life and rank of films in the weekly Top 20 and plot their demise.

Rank
order
from
20th
to 1st



Weeks chronologically sequenced

The screen life of three movies in 1998



6. The dedicated expenditure of time and attention on the part of consumers which could be put to alternative uses

TABLE 2: SELECTED PERSONAL CONSUMPTION STATISTICS, 1946-1970
(All money values in U.S. \$millions, 1958 prices)

| Year | Total Personal Consumption Expenditure | Recreational Expenditure | Total US Box-Office | Average Weekly Cinema Attendance (millions) | Households with TV sets (000s) |
|------|--|--------------------------|---------------------|---|--------------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| 1946 | 203404 | 12112 | 2400 | 90 | 8 |
| 1950 | 230409 | 13446 | 1660 | 60 | 3,875 |
| 1955 | 274117 | 15170 | 1429 | 46 | 30,700 |
| 1960 | 316075 | 17779 | 924 | 40 | 45,750 |
| 1965 | 397830 | 24171 | 852 | 44 | 52,700 |

Source: Historical Statistics of the United States: Chapter G, Series 416 and 452; Chapter H, Series 874 and 884; Chapter R, Series 93-105. The price deflator used throughout the study is that given for Total Consumer Expenditure, Chapter E, Series 2.

Urbanisation + the ‘baby boom’

TABLE 1
SELECTED U.S. POPULATION STATISTICS, 1946-1970

| Year | US Population (000s) (1) | Urbanised Areas-Central Cities (000s) (2) | Urbanised Areas-Urban Fringe. (000s) (3) | Persons aged under 5 (000s) (4) | Ages 5-14 (000s) (5) | Ages 15-24 (000s) (6) | Ages 25-34 (000s) (7) |
|------|-----------------------------------|---|--|---|----------------------------|-----------------------------|-----------------------------|
| 1946 | - | - | - | 12,974 | 21,844 | 23,382 | 22,954 |
| 1950 | 151,684 | 48,337 | 20,872 | 16,331 | 24,477 | 22,260 | 23,932 |
| 1960 | 180,671 | 57,975 | 37,873 | 20,341 | 35,735 | 24,576 | 22,919 |
| 1970 | 204,879 | 63,922 | 54,525 | 17,156 | 40,733 | 36,496 | 25,293 |

Source: Historical Statistics of the United States, Chapter A, Series 29-42; Series 82-90; Series 288-319.

Empirical Regularities

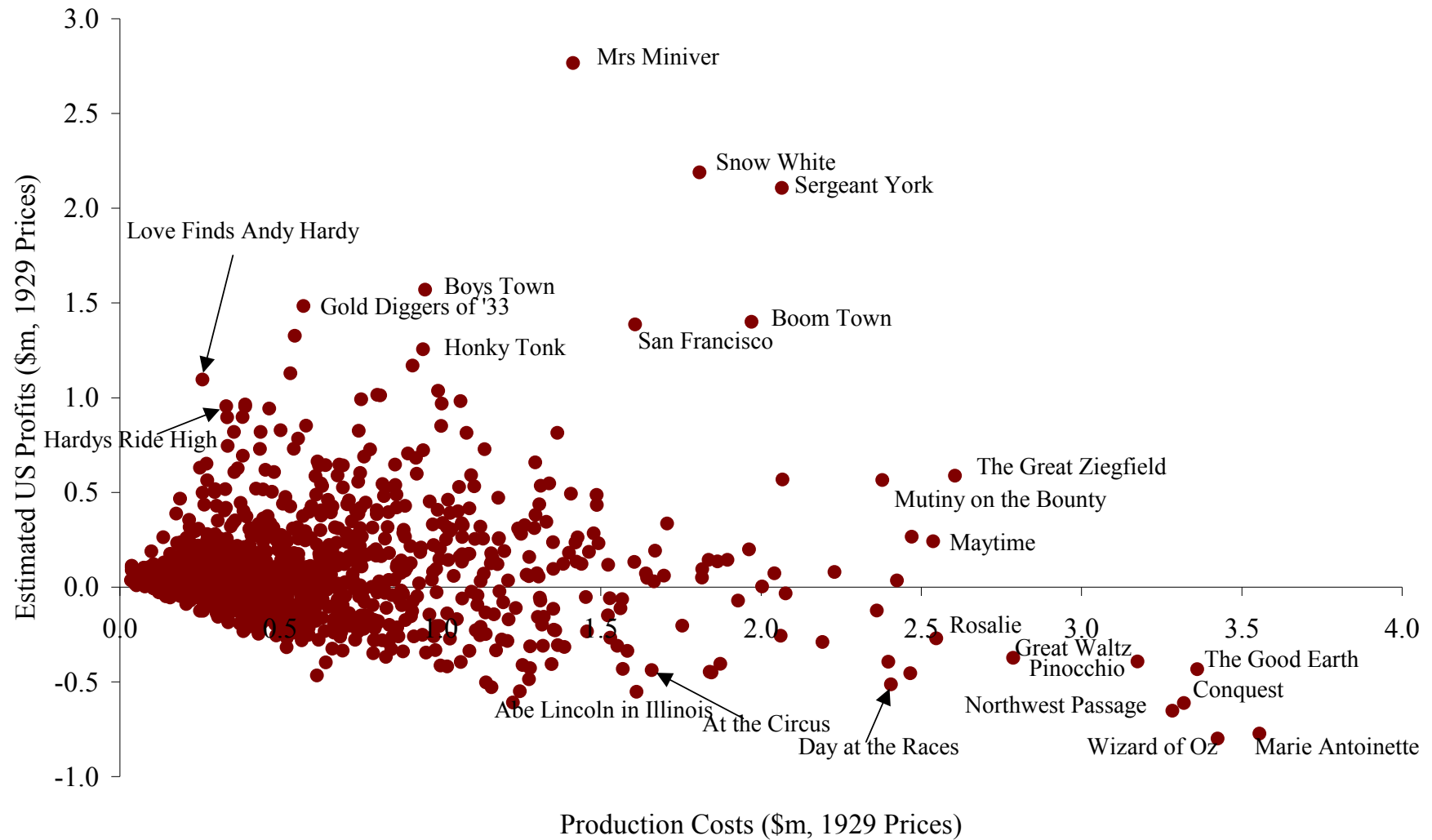
- The distribution of box-office revenue is highly skewed - only a very small number of films can expect to enjoy the considerable revenues available to the 'hits' of the year.
- The mode, median and mean revenue of films released during any one season fall in the lowest decile band of the distribution.

- The life cycle of individual film subjects - when confined to theatrical release - is short
- There is a positive relationship between the cost of production and the revenue generated by films, but this relationship is heteroscedastic - it becomes increasingly unstable the higher the production budget.
- Risk taking can be attenuated where studios place portfolios of films onto the market.

Statistical Distributions

- We start the paper proper with four empirically derived decile distributions of attendances.
- a) the Regent, Portsmouth, 1931 to 1938
- b) all Portsmouth cinemas, 1934
- c) sample of UK and US first-run cinemas in leading cities, 1934 to 1936.

Scatter of U.S. Profits against Film Costs, 1929 Prices, 1929/30 to 1941/42



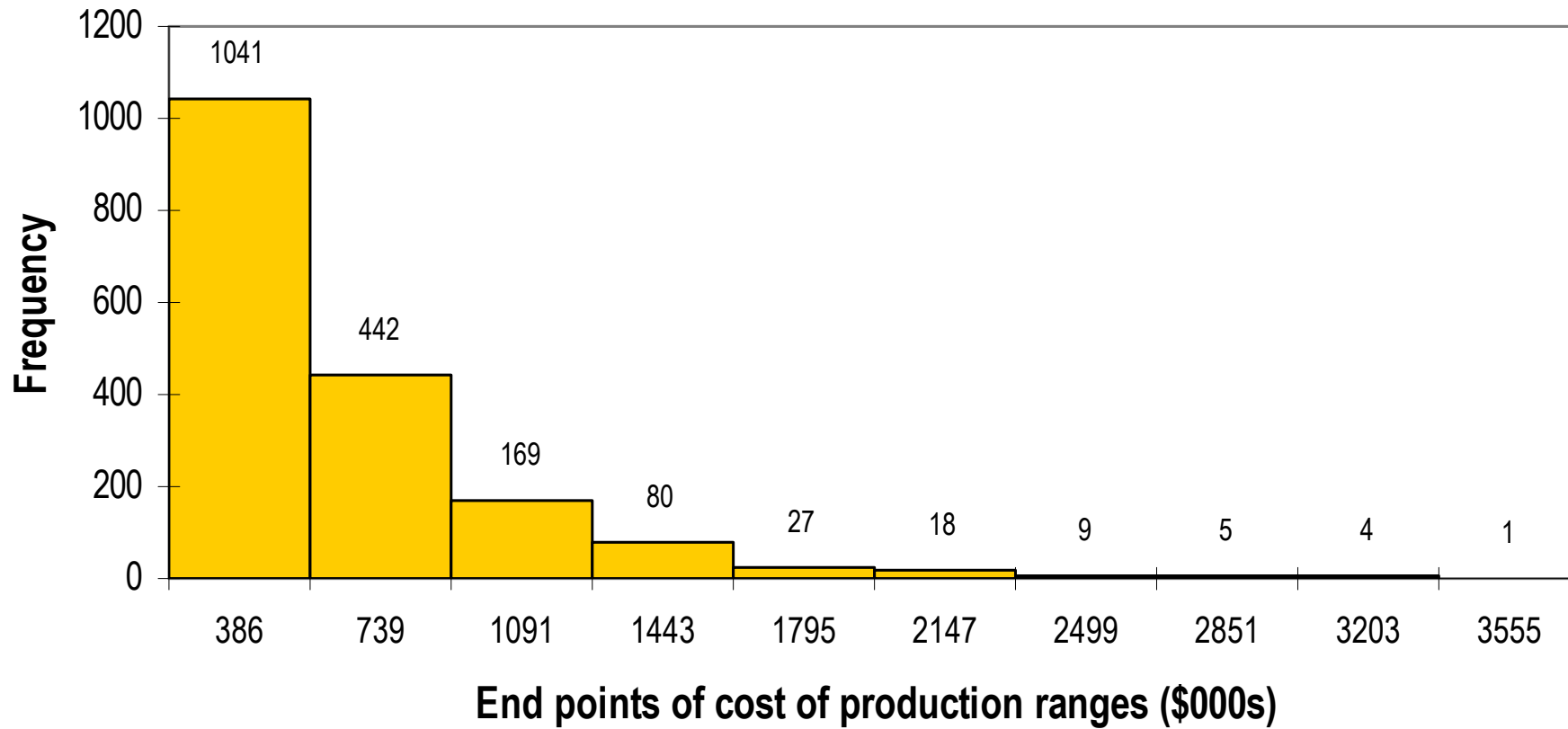
Rates of return

- The apparent randomness of profits against production costs is made clearer in the next series of slides in which film budgets, broken into decile groups, exhibit an apparent random pattern of returns to the studio.

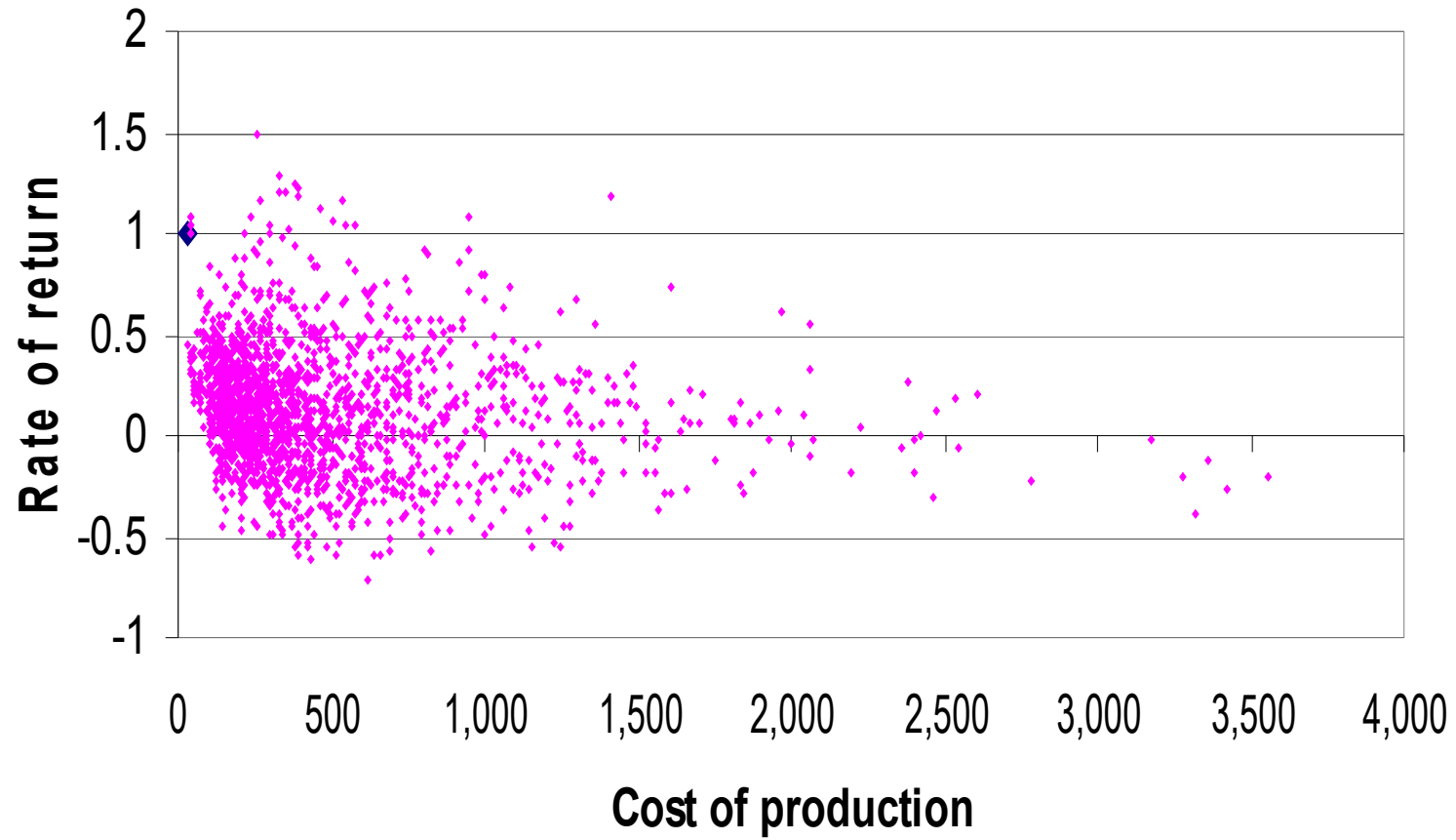
- The rate of return for the i th film is given as

$$(R_i - C_i) / C_i$$

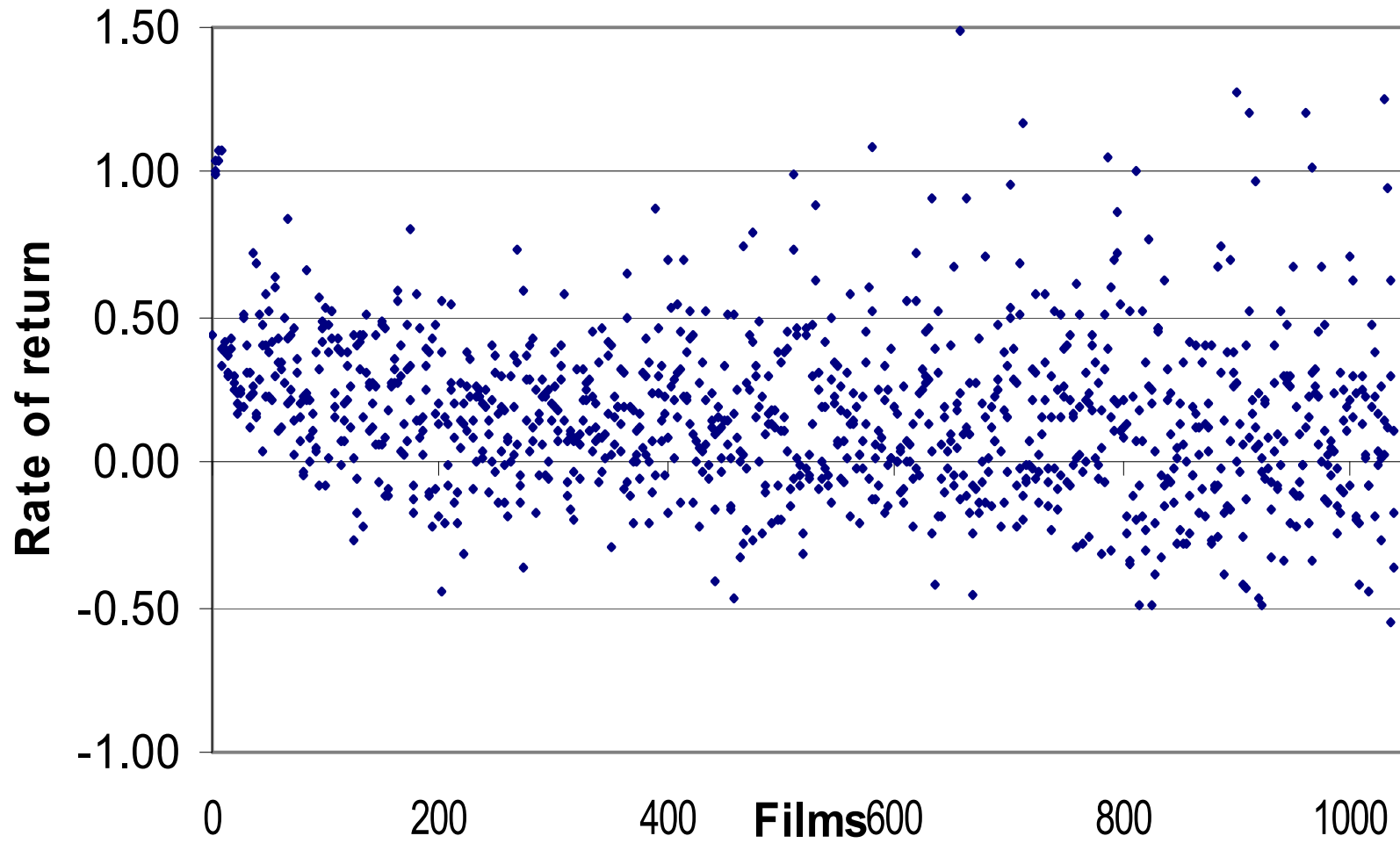
Frequency distribution of cost ranges for US studios 1929-41



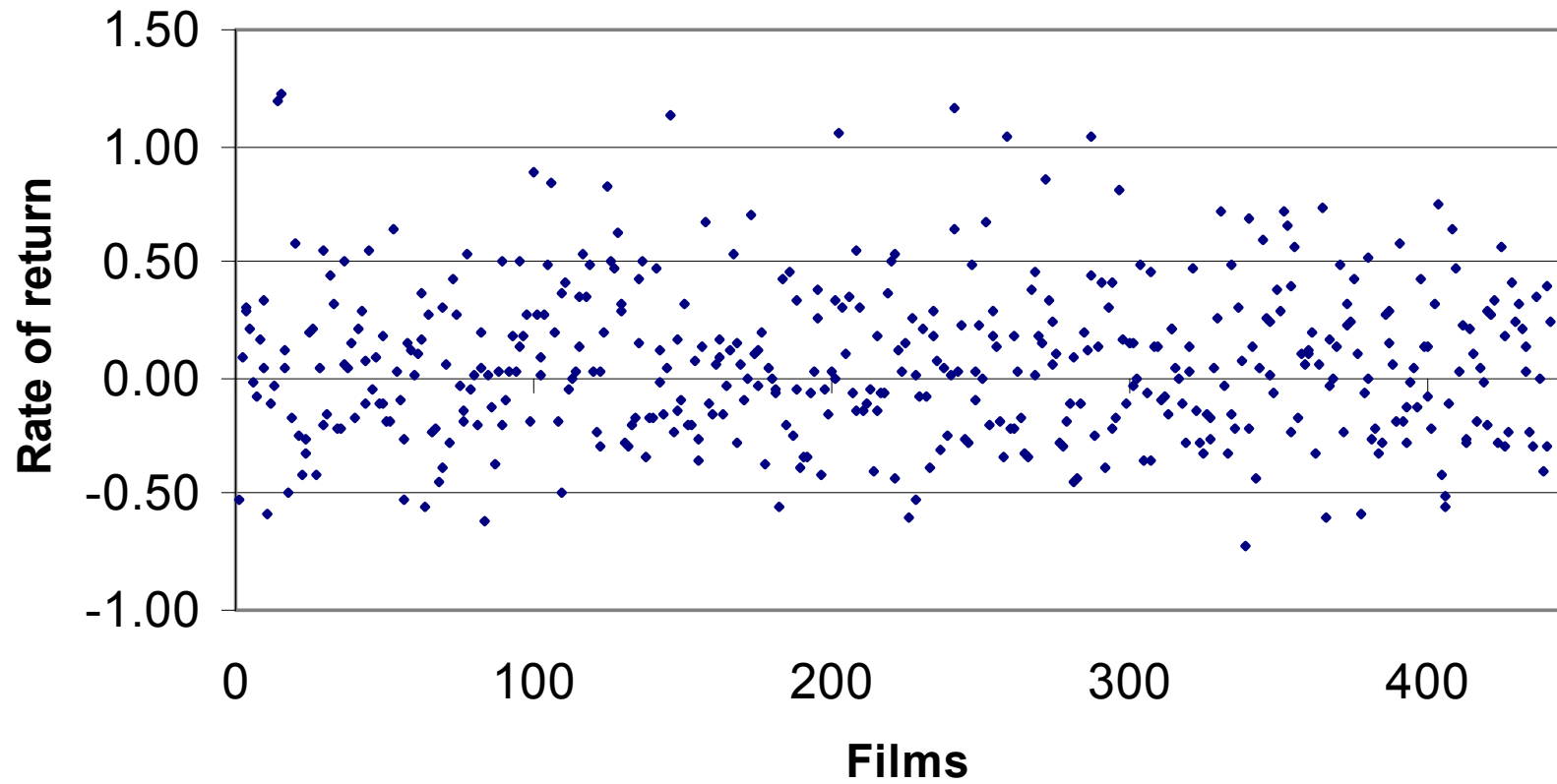
Scatter of Rates of Return on Production Cost



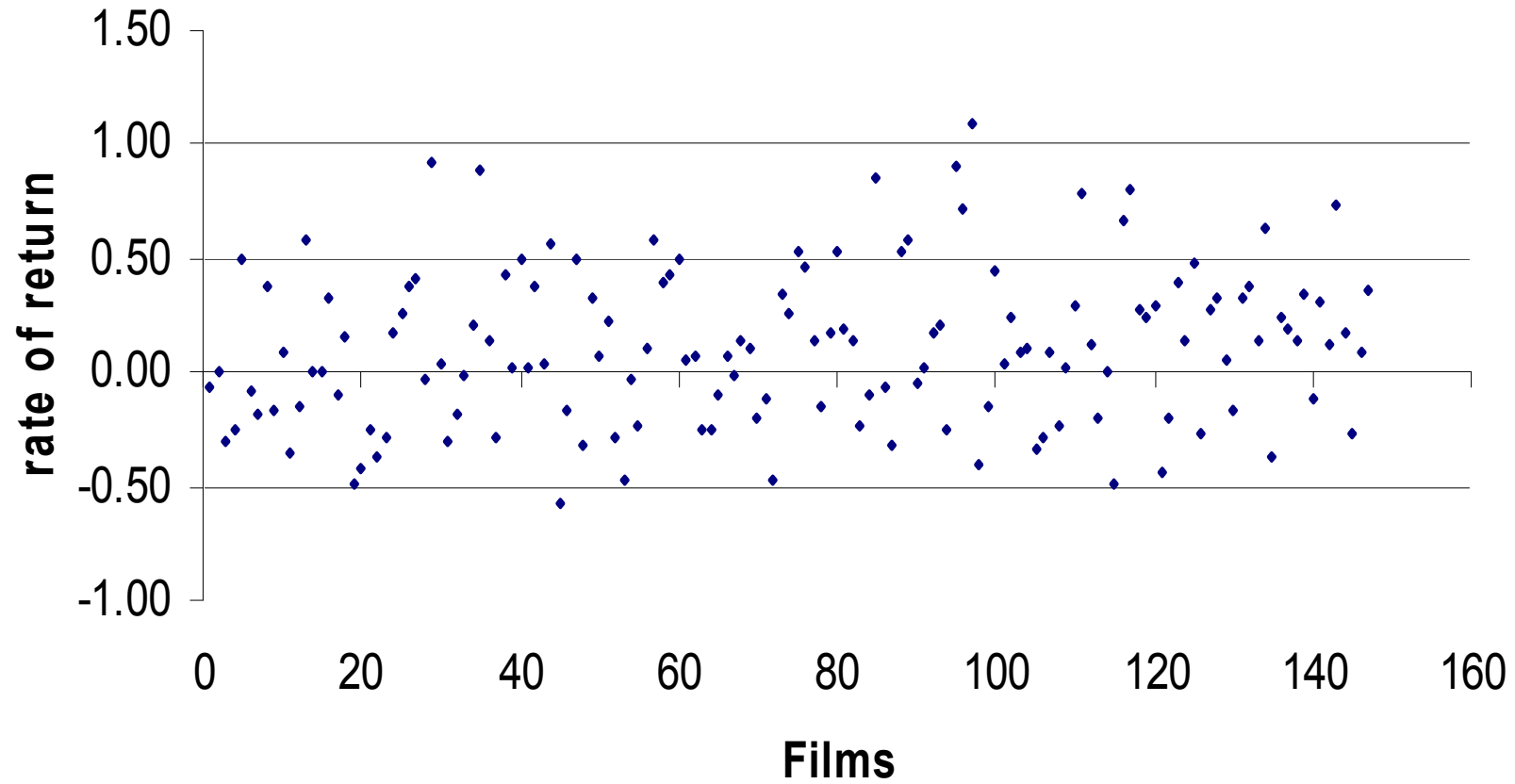
1st cost decile (1041 films costing between \$34,000 and \$386,000)



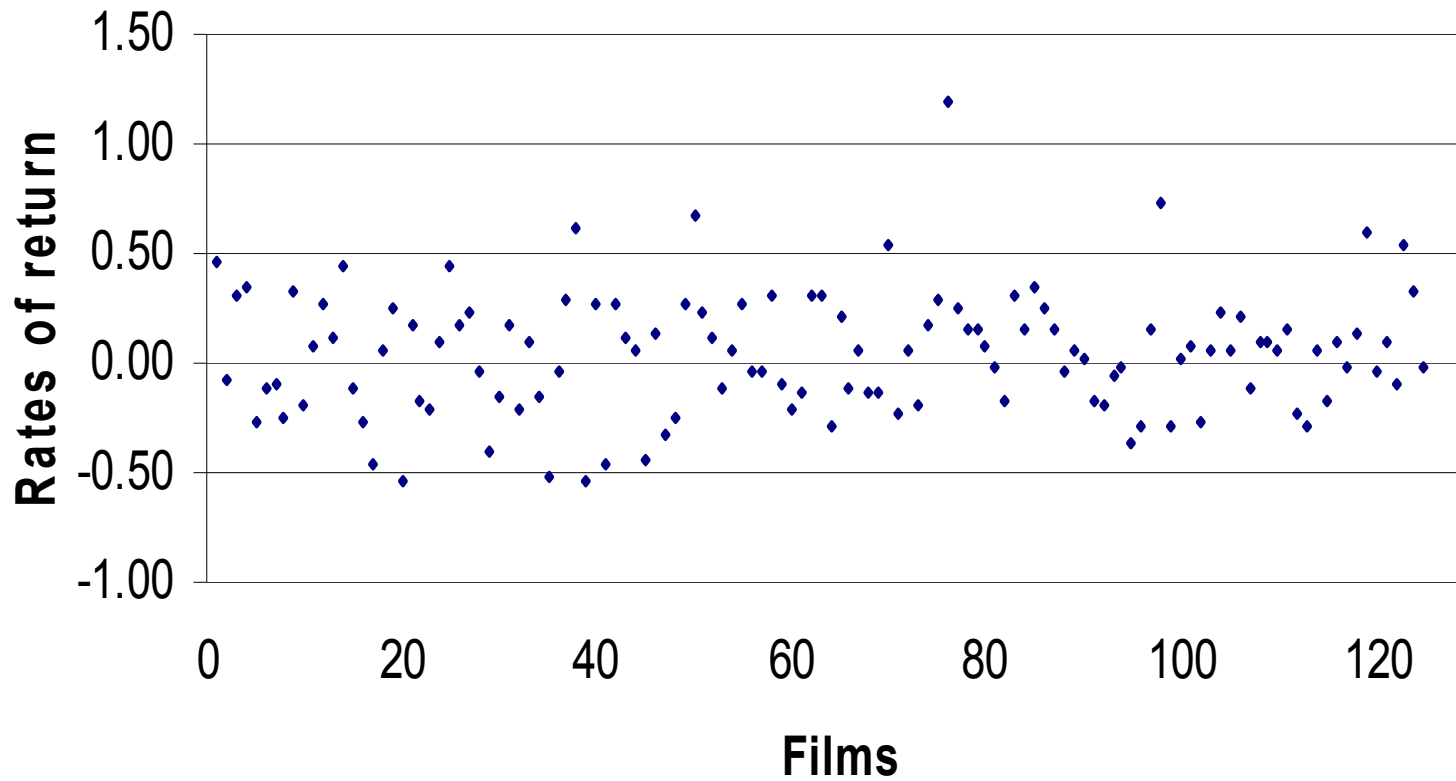
2nd cost decile (442 films costing between \$387,000 and \$738,000)



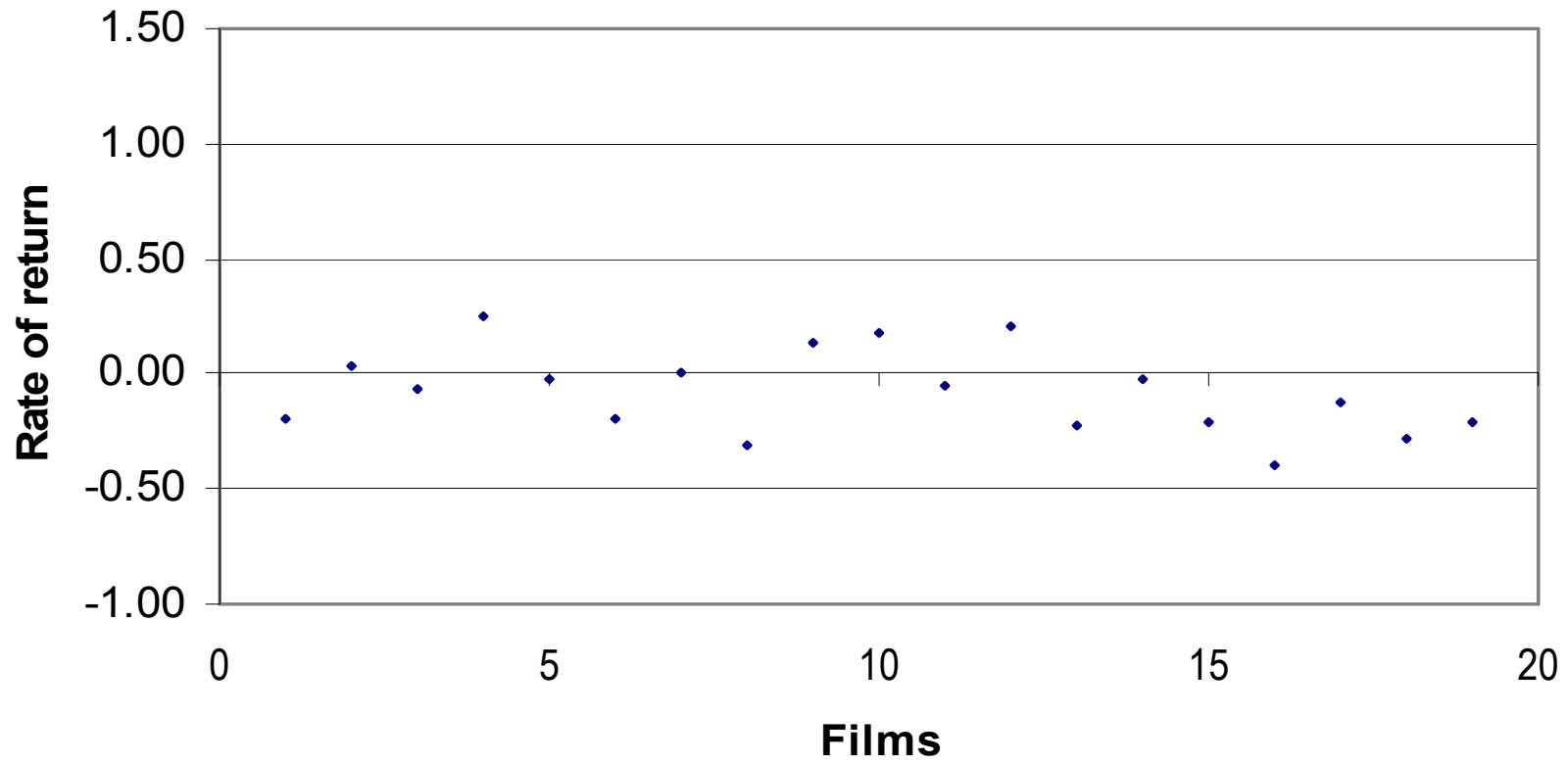
3rd cost decile (169 films costing between \$739,000 and \$1,000,000)



4-6th cost deciles (125 films costing between \$1,001,000 and \$2,146,000)



7-10th cost deciles (19 films costing between \$2,147,000 and \$3,555,000)

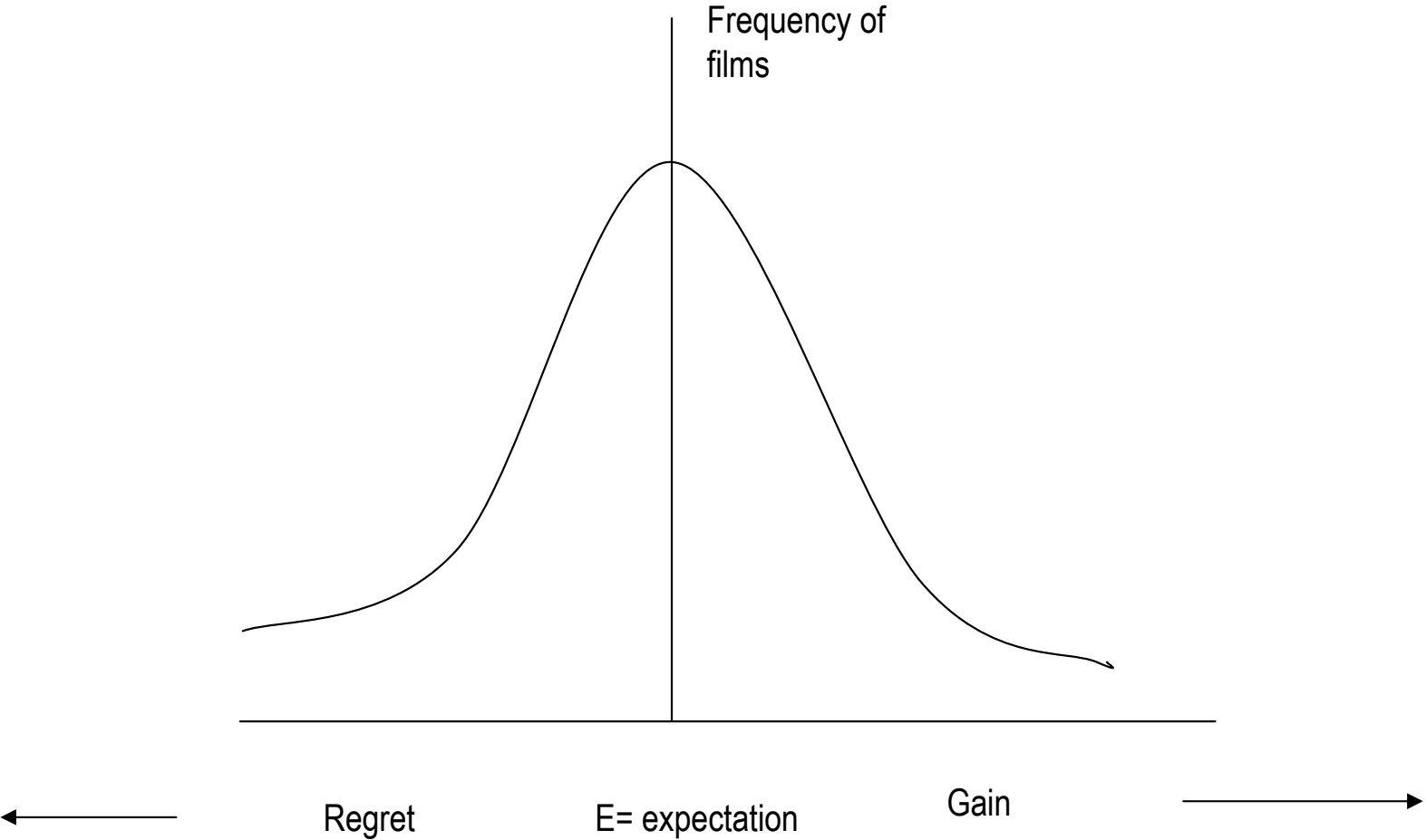


Conjectures

- Both consumers and producers form, *ex ante*, an imaginary conception of the film product and its likely rewards for them.
- Both groups know from experience that they can be disappointed, in that experience does not always live up to expectation.
- Films, are 'experience' goods: audiences can form a full assessment of the product only when the act of consumption is complete.

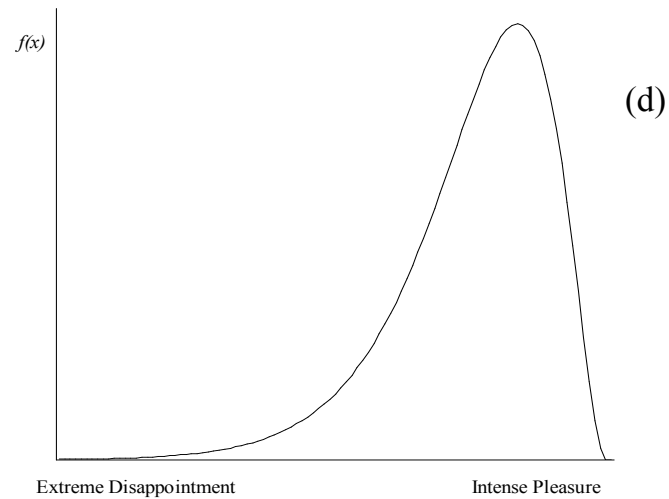
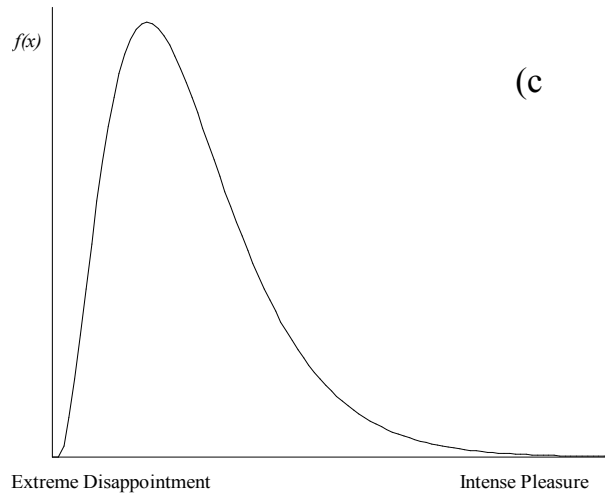
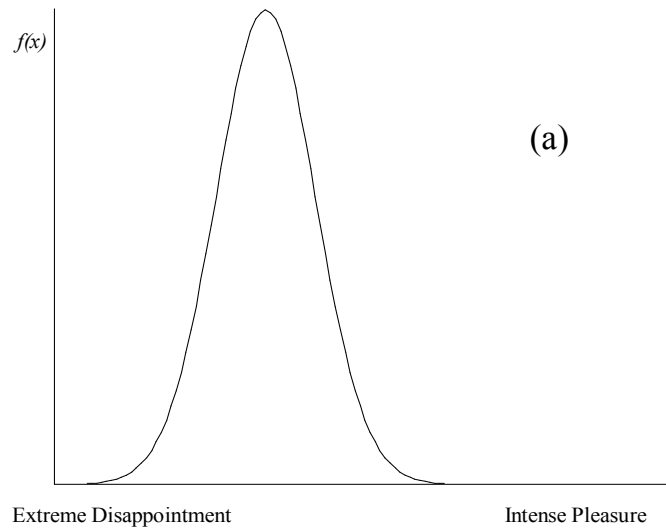
- In tackling the risk inherent in the act of consumption, audiences can be expected to use their personal history of filmgoing when making current decisions about what to watch, where, and in what quantity - consumers develop heuristics and markers to aid choice.
- Accordingly, it may be supposed that consumers have accumulated a bank of experience, which may be expressed in the form of a frequency distribution of the difference between the expectation and realisation of cinematographic pleasure.

A hypothetical frequency distribution of the difference between the expectation and realisation of the filmgoing experience



- The hypothetical distribution of the differences between realisation and expectation is accumulated over a filmgoer's life.
- This provides a framework for understanding the manner in which films become 'hits' or 'flops'.
- Take the following four frequency distributions imagined by potential cinemagoers choosing between an array of films.

Hypothetical distributions of anticipated pleasures from the consumption of a film



- If a sufficient number of consumers experiences high levels of gain from a particular film, and if that film is at the early stage of its distribution/exhibition history, such as in panels a) and c) then we might expect a 'tipping effect' to take place, whereby word-of-mouth builds a momentum that is reinforced by subsequent audience cohorts.
- 'Flops' occur in much the same way, but this time engendered by disappointed expectations

Conclusion

- Some films prove to be outstanding attractions and offer audiences in general, higher than expected levels of pleasure, which somehow is communicated to subsequent cohorts of filmgoers.
- These films constitute the long tail of the revenue distribution, and for audiences they are vertically differentiated from the bulk of films released onto the market.

- Such films are likely to contain some element of novelty/innovation, which the producer has invested in the film.
- Such films are also likely to be subject to considerable marketing activity, partly connected to the producer's original conception of, and plan for, the film, and partly as a result of the film's success.

- The data presented allows us to form a clear idea of the pattern of film preferences during the 1930s.
- The data allow us to support Sutton's theoretical conception of an industry characterised by heterogeneous goods and high levels of investment in endogenous sunk costs, by demonstrating the degree to which the market for film was vertically differentiated

Publications

- Sedgwick, J. and Pokorny, M. (2005). 'The film business in the U.S. and Britain during the 1930s', *Economic History Review*, 58.
- Sedgwick, J. and Pokorny, M., eds. (2005). *An Economic History of Film*, London: Routledge.
- Glancy, M., and Sedgwick, J. (2005). 'Cinema Going in the United States in the mid-1930s: A Study Based on the *Variety* Dataset', in *Hollywood and the Social Experience of Movie-going*, edited by Melvyn Stokes, Bobby Allen and Richard Maltby. To be published in 2005 by Exeter University Press and California University Press.
- Sedgwick, J. (2002). 'Product differentiation at the movies: Hollywood, 1946-65', *Journal of Economic History*, 62 (2002): 676-705.
- Sedgwick, J. (2000). *Filmgoing in 1930s Britain: A Choice of Pleasures*, Exeter: Exeter University Press.