Lecture 4

Characteristics of the Film Business in the 1930s – Local, National and International Comparisons

Introduction

- During the mid-1930s filmgoing was integral to the way of life of the people. In the words of A.J.P. Taylor filmgoing was 'the essential social habit of the age…[which] slaughtered all competition.'

- Admissions in Britain = 900,000,000+ per annum which works out at 19 visits per capita

- Admissions in the U.S. = 2,225,000,000 per annum - 18 visits per capita.

- It was the dominant paid-for leisure activity in both countries, making up approximately two-thirds of admissions to all entertainments (including sport).

Simon Rowson

- In Britain, in 1936, Simon Rowson published industry data on the industry, estimating that on average there was one cinema for every 10,600 persons in Britain in 1934 (one seat for every 15 persons)

- He wrote: 'It would be difficult to quote another figure more eloquent of the hold that the cinema now has on the masses of the population... (and that) the modern institution is one of the sociological wonders of the century.'

Comparative seating statistics in the 1930s

- 1 seat for every 15 persons in Great Britain and the US
- 1 seat for 16 persons in Belgium,
- 1 for 18 in Sweden
- 1 for 20 in France
- 1 for 22 in Spain (before the Civil War),
- 1 for 26 in Italy (somewhat distorted by the fact that 1,400 halls were owned by, and served the purposes of, the Fascist party)
- 1 for 32 in Portugal,
- 1 for 33 in Switzerland,
- 1 for 39 in Germany,
- 1 for 39 in Denmark,
- 1 for 40 in Norway,
- 1 for 53 in Holland,
- and 1 for 60 in Finland.

Statistical Distributions

- We start the paper proper with four empirically derived decile distributions of revenues.

- a) the Regent, Portsmouth, 1931 to 1938

- b) all Portsmouth cinemas, 1934

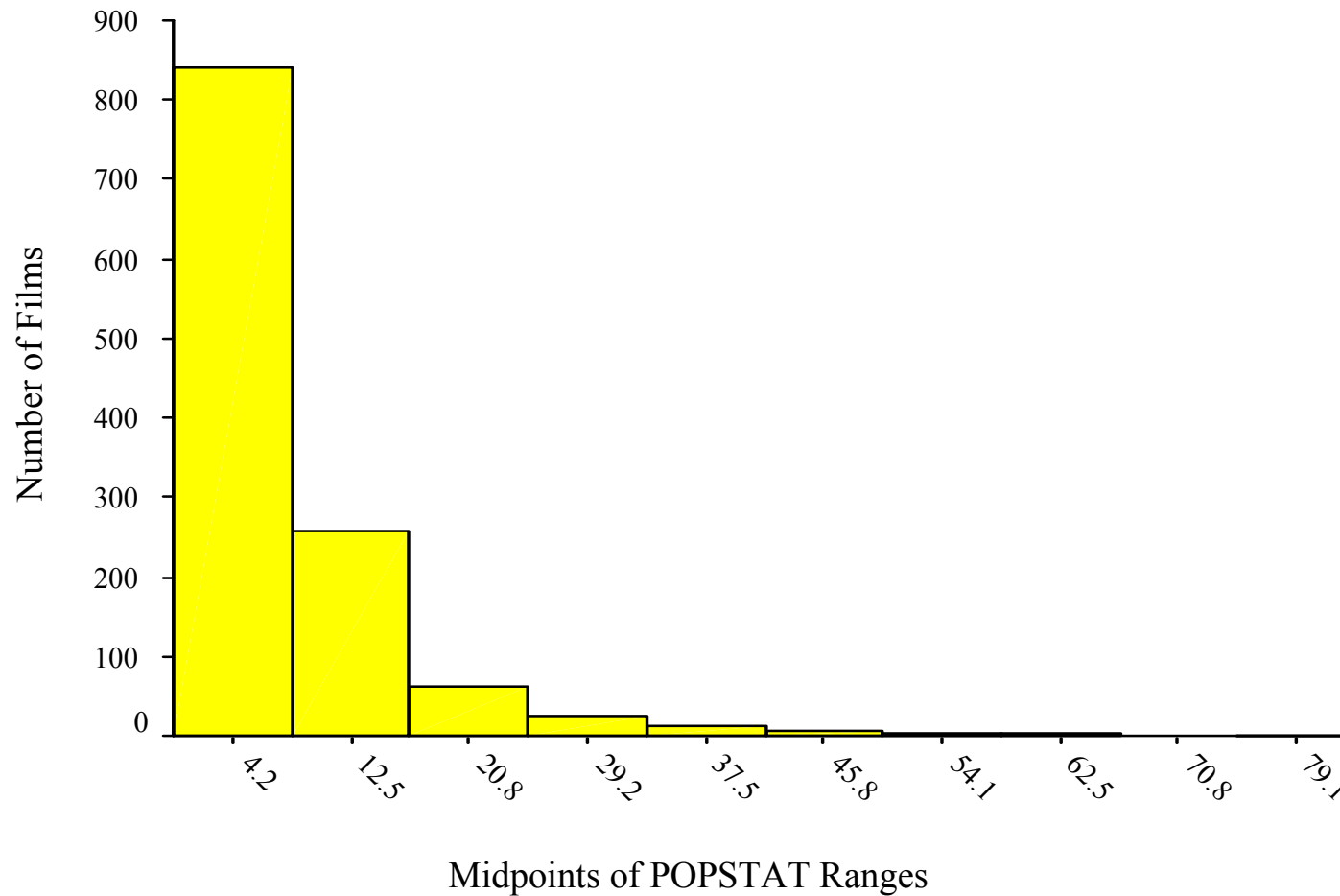- c) sample of UK and US first-run cinemas in leading cities, 1934 to 1936.

Figure 1. The decile frequency distribution of weekly cinema attendances at the Regent, 1931 to 1938
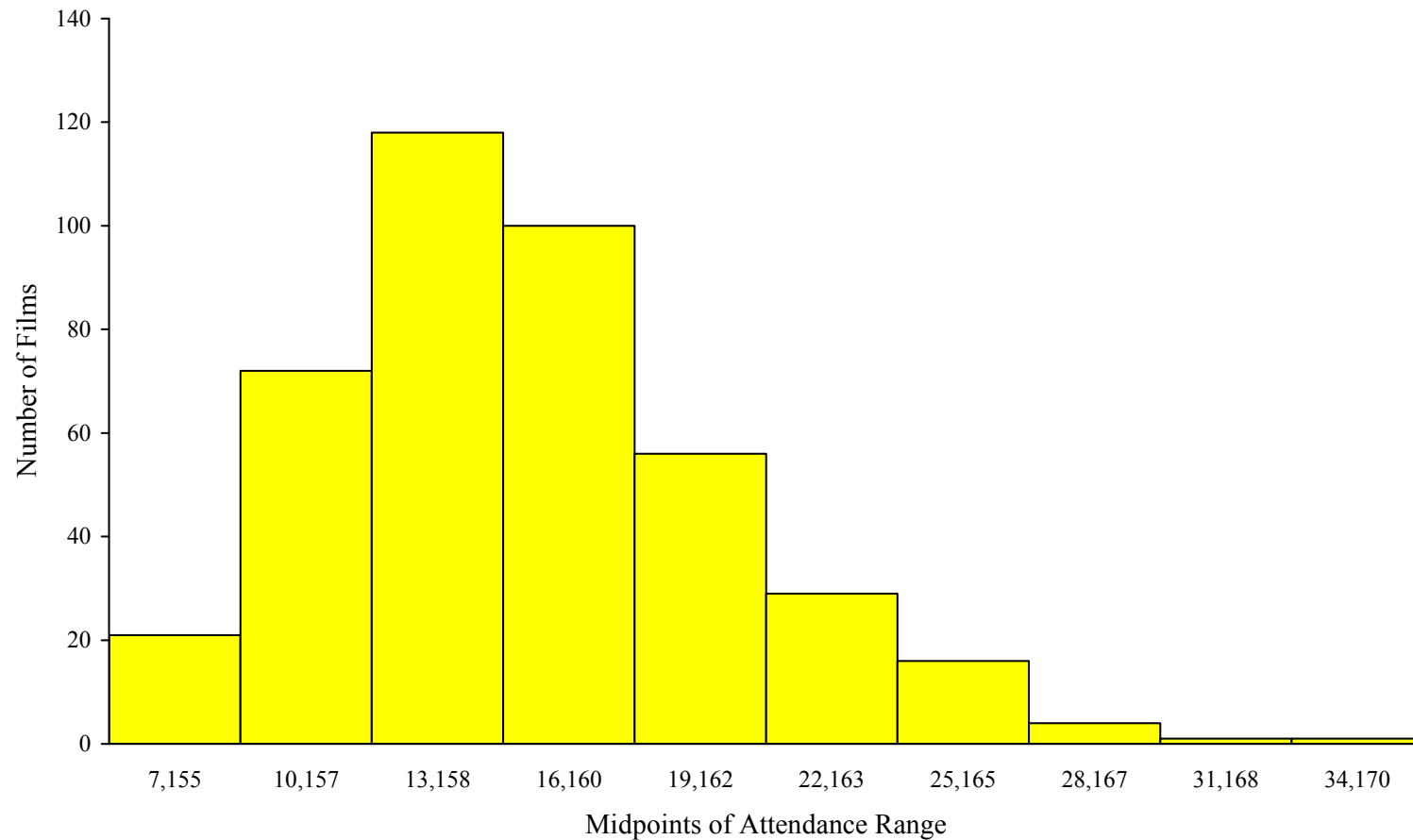
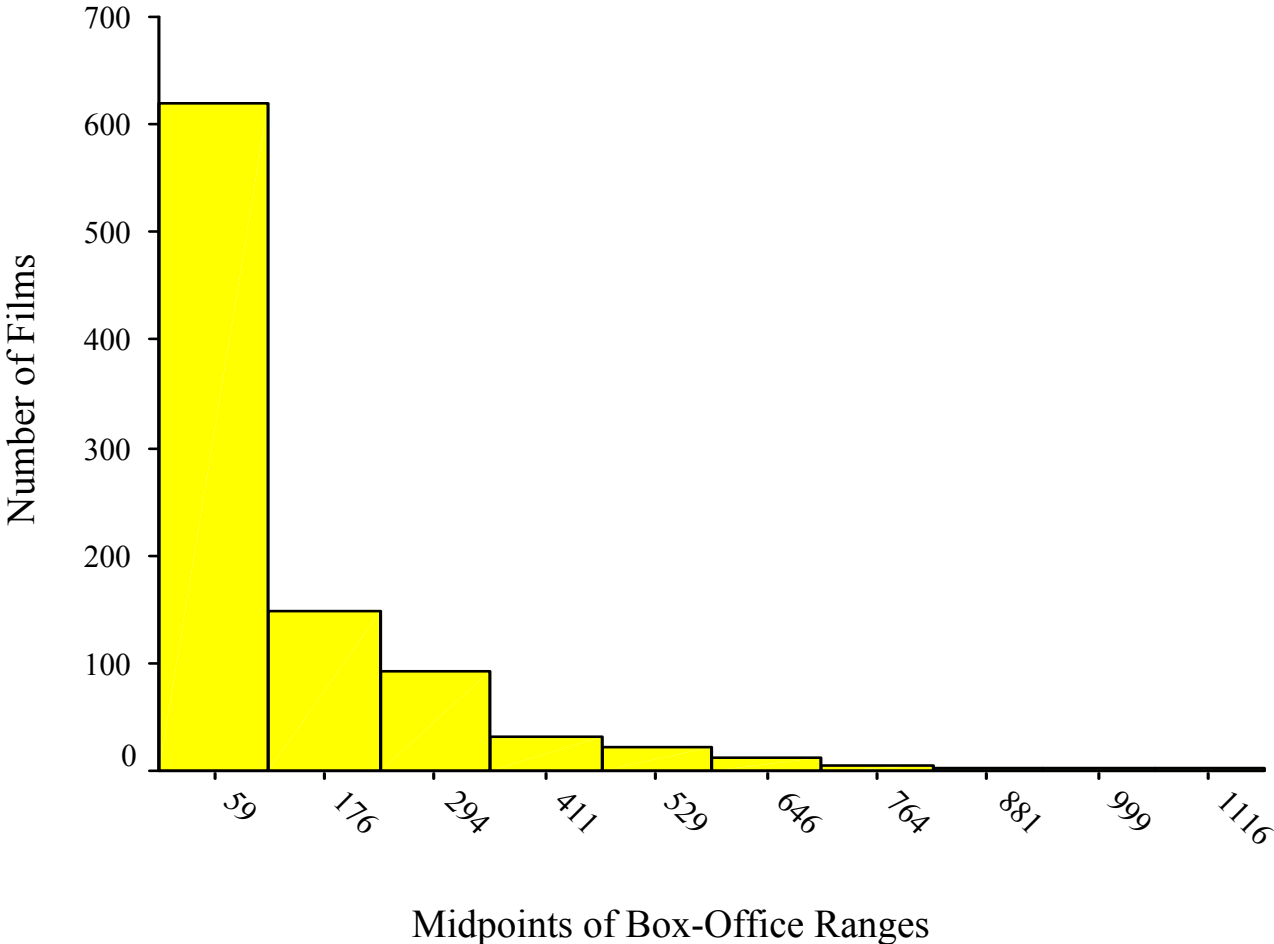Figure 2. Frequency distribution of POPSTAT data for Portsmouth in 1934
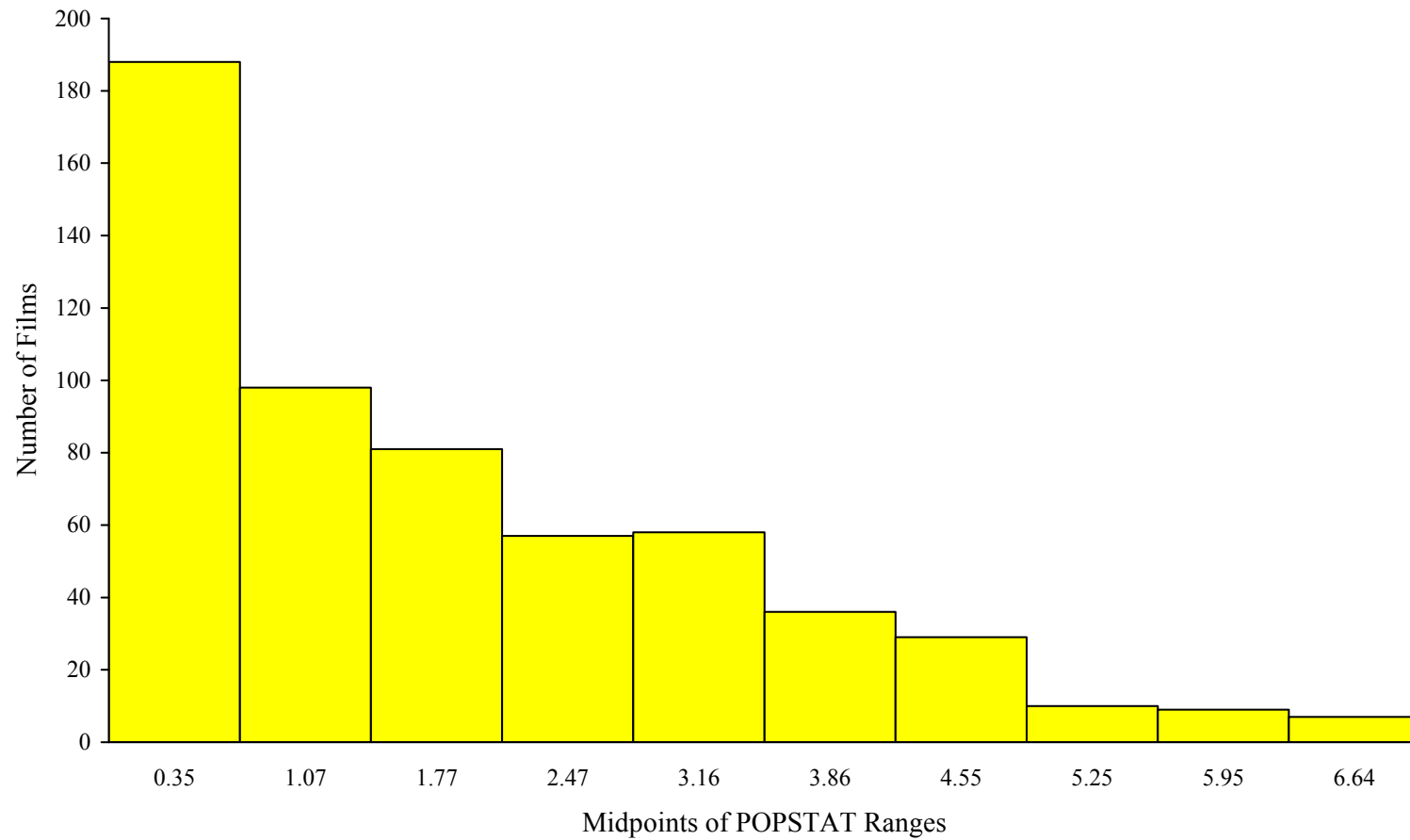
Figure 3. Frequency distribution of POPSTAT data in Britain, 1935-36

Figure 4. Distribution of Revenues in the U.S., 1934-36

Number of Films (y-axis): 0, 100, 200, 300, 400, 500, 600, 700

Midpoints of Box-Office Ranges (x-axis): 59, 176, 294, 411, 529, 646, 764, 881, 999, 1116

# 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.

- In the national studies, the mean, median and mode revenue of films released during any one season fall in the lowest decile band of the distribution.

- These revenue characteristics prevail over time.

- The degree of inequality in the distribution increases with the size of territory. Hence the Regent data is less skewed than the Portsmouth data which is less skewed than the two sets of national data.

- Films that were popular at a particular cinema were likely to be popular with audiences at other cinemas in the locality and if true of the locality this magnification process would produce even more skewed results at the level of a national market.

The Regent Data

- The Regent data was collected from a ledger that recorded the attendance, box-office, matinee box-office, confectionery, tobacco and ice cream sales (from 1934), for the period 1931 to 1948.

- The ledger is held by Portsmouth City Museum and Records Office.

Weekly attendances at the Regent, 1931 to 1938
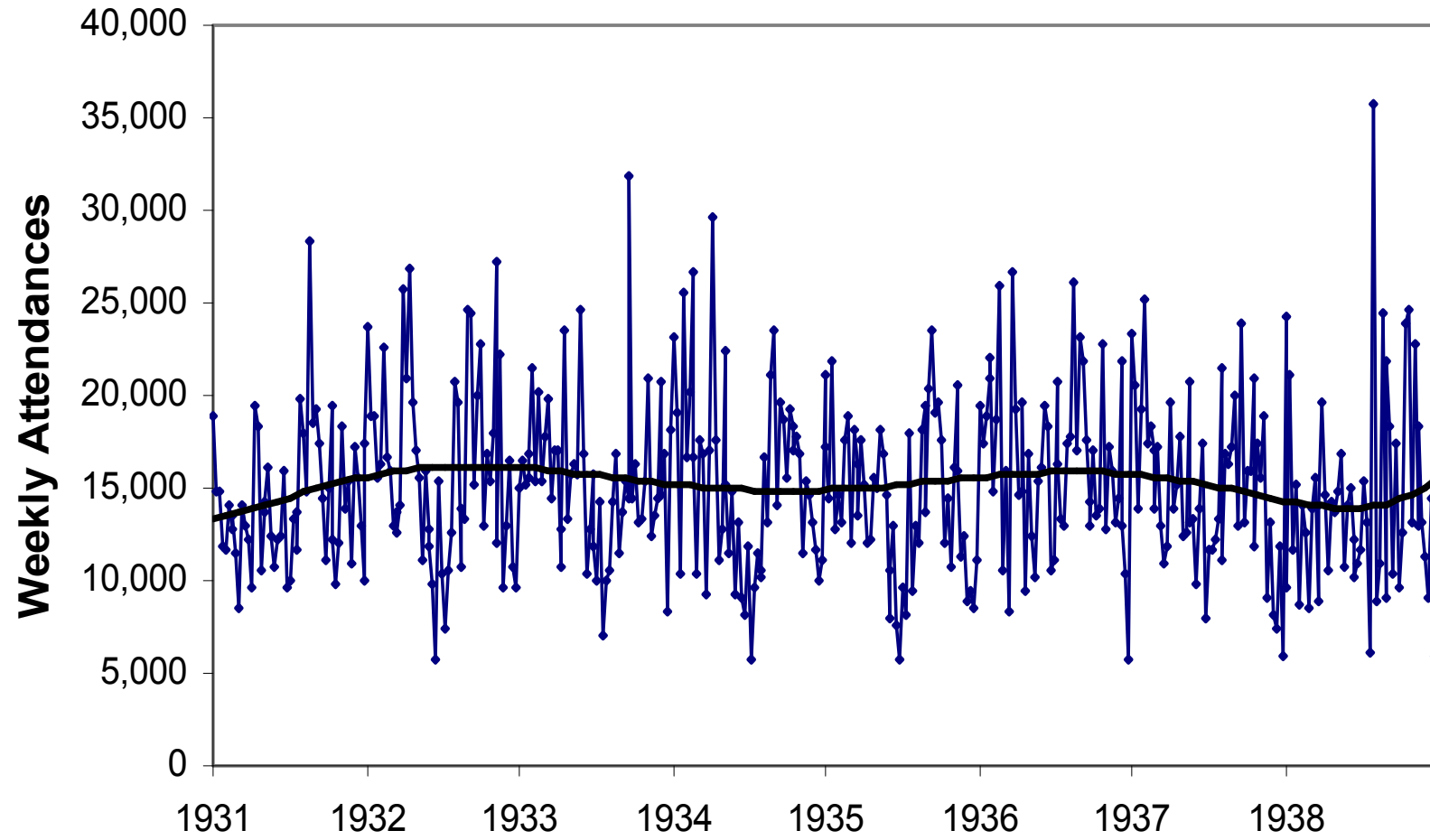
Annual Mean Weekly Attendance at the Regent, 1931-1938

Year	No. of First-named Features	Whole-year Attendance	Mean Weekly Attendance	Standard Deviation of weekly attendance
1931	52	740,485	14,240	3,599
1932	53	853,138	16,097	5,087
1933	52	805,421	15,489	4,230
1934	52	803,522	15,452	5,136
1935	52	745,726	14,341	4,076
1936	52	851,116	16,368	4,597
1937	52	783,890	15,075	4,335
1938	53	766,689	14,466	5,534

Portsmouth Cinemas, 1934

- Information was sourced from:
- Kine Weekly (trade journal) annual year books
- Local evening newspaper – The Portsmouth Evening News.

Frequency distribution of film bookings in Portsmouth and Bolton for those films released in 1934

Number of distinct bookings	Portsmouth	Bolton
	Number of films	Number of films
1	573	555
2	504	450
3	407	332
4	297	199
5	199	115
6	112	59
7	55	25
8	21	10
9	4	2
10	0	1

POPSTAT Index of Film Popularity

- In the absence of box-office records, I have devised a proxy measure of box-office revenue which I call POPSTAT.

- POPSTAT is computed for each ith film on the basis of
  - 1) the box-office potential of each cinema at which it plays
  - 2) its billing status at each cinema
  - 3) the length of run at each cinema

$$POPSTAT_{it} = \sum_{j=1}^{n} a_{jt} * b_{ijt} * l_{ijt}$$

Where *n* is the number of cinemas in the sample set.

a_{jt} is a weighting factor for cinema *j* during period *t*, reflecting the relative revenue generating potential of cinema *j*.

b_{ijt} reflects the exhibition status of film *i* at cinema *j* during period *t*. That is, b_{ijt} takes on the value 1 if film *i* is presented as a single bill programme, 0.5 if it is part of a double bill, and 0 if it is not shown at cinema *j*.

l_{ijt} is the length of exhibition of film *i* at cinema *j* during period *t*, measured to the nearest half week.

Portsmouth Cinemas in 1934

Cinema	Owner	Weekly Changes	Seating Capacity	Lowest Price (pence)	Highest Price (pence)	Mid-Price (pence)	Revenue Potential (£)	Cinema Weight
Apollo	Local Circuit	Once	1257	6	18	12	62.85	1.07
Arcade	Local Owner	Twice	504	5	12	8.5	17.85	0.30
Carlton	Local Circuit	Twice/Once	1294	7	18	12.5	67.40	1.15
Commodore	ABC	Once	1000	7	18	12.5	52.08	0.89
Cosham/Waverley	Local Owner	Twice	545	4	22	13	29.52	0.50
Empire	Local Owner	Twice	574	7	15	11	26.31	0.45
Gaiety	ABC	Once	1382	7	18	12.5	71.98	1.23
King's Hall	Local Group	Once	2064	6	18	12	103.20	1.76
Majestic	Local Owner	Once	1095	7	18	12.5	57.03	0.97
New Princes	Local Owner	Once	1488	7	18	12.5	77.50	1.32
New Queen's	Local Owner	Twice	452	6	12	9	16.95	0.29
Palace	Local Circuit	Once	626	6	15	10.5	27.39	0.47
Plaza	APPH	Once	1770	7	24	15.5	114.31	1.95
Regal	Local Owner	Twice	828	7	15	11	37.95	0.65
Regent	APPH	Once	1972	7	24	15.5	127.36	2.17
Rialto	Local Owner	Twice	1250	7	15	11	57.29	0.98
Scala	Local Owner	Twice	743	7	24	15.5	47.99	0.82
Shaftesbury	Local Circuit	Once	1127	7	16	11.5	54.00	0.92
South Parade	Local Owner	Twice	496	4	18	11	22.73	0.39
Theatre Royal	Local Circuit	Once	1418	6	18	12	70.90	1.21
Tivoli	Local Owner	Once	1752	9	15	12	87.60	1.49
Victoria	Union Circuit	Twice	1407	3	18	10.5	61.56	1.05

Market shares of Studios in Portsmouth in 1934

| Studio	Films	Aggregate POPSTAT	Market Share	Mean POPSTAT	Films ranked 1-10	Films ranked 11-20	Films ranked 21-50	Films ranked 51-100	Total Top 100 entries
MGM	54	160.76	15.34	2.98	1	3	3	14	21
Paramount	64	139.20	13.28	2.18	0	0	4	10	14
Warner Bros.[1]	55	101	9.60	1.83	1	1	3	1	6
Gaumont-British[2]	23	100.49	9.59	4.37	7	2	7	0	16
RKO	41	68.12	6.50	1.66	0	0	1	3	4
Fox	43	64.36	6.14	1.50	0	0	2	4	6
Columbia	41	61.20	5.84	1.49	1	0	0	2	3
Universal	37	53.26	5.08	1.44	0	0	2	1	3
British International Pictures	20	37.19	3.55	1.86	0	0	1	1	2
Twentieth Century	10	34.01	3.24	3.40	0	1	2	2	5
British and Dominions	10	29.44	2.81	2.94	0	0	0	3	3
Twickenham	7	19.20	1.83	2.74	0	0	2	1	3
Associated Talking Pictures	6	19.19	1.83	3.20	0	1	0	2	3
Goldwyn	3	14.31	1.37	4.77	0	1	1	1	3
Monogram	16	13.32	1.27	0.83	0	0	0	0	0
Real Art	12	12.12	1.16	1.01	0	0	0	0	0
British Lion	8	10.84	1.03	1.35	0	0	0	0	0
London Films	2	8.24	0.79	4.12	0	0	1	1	2
Chesterfield	7	3.12	0.30	0.45	0	0	0	0	0
Others	114	99.22	9.47	1.15	0	1	1	4	6
Total	573	1048.18	100.00	1.83	10	10	30	50	100

Four-firm Concentration Ratio (CR4) = 48%

Eight-firm Concentration Ration(CR8) = 71%

Herfindahl Index = 0.08

Sample of British Cinemas

- Based on the programmes of a sample of 88 London West End and provincial city first-run cinemas between 1932 and 1937.

- The film distribution system was based on price discrimination practices as films were distributed out in time and space from higher order to lower order cinemas.

- Hence, my sample captures the top end of the distribution system.

Scatter of Film Attendances at the Regent against the
POPSTAT Index values of all features shown there in 1934
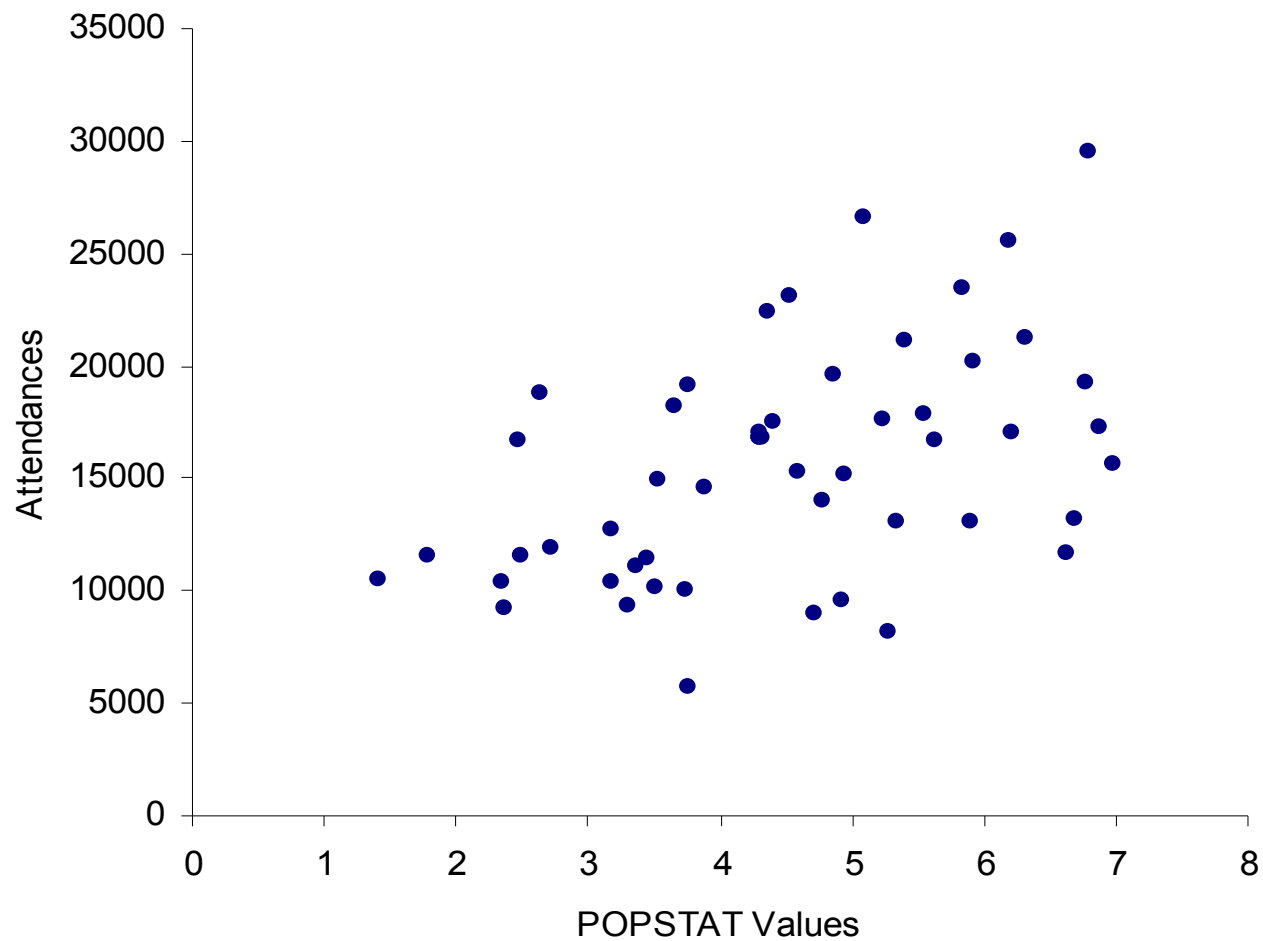
Sample of North American Cinemas

- Based on the weekly box-office receipts of 104 first-run North American cinemas, including four in Montreal, Canada, for the 25 months from week ending 4 October 1934 to week ending 29 October 1936, published in the trade journal *Variety*.

Conclusion

- Some films prove to be outstanding attractions and offer audiences in general, higher than expected levels of pleasure.

- These films constitute the long tail of the revenue distribution

- Film distribution was built around this knowledge - supply adjusted to demand through a combination of hold-overs and cascade-like diffusion of films from higher to lower level exhibition runs over time.

- The pattern of diffusion was based upon price discrimination principles.

- filmgoers in urban locations had a wide choice between movies.

- cinema prices did not vary with film popularity

- industry arrangements were designed to maximize revenue for popular films, irrespective of who produced them.