FEATURES

Defying gravity or failing to launch?

The Broadway stage is viewed a risky place to try and make money, but there's been scant data to demonstrate this – until now. **Allan S. Detsky**, **Samuel C. Gutekunst** and **Christopher Kopac** measure the profitability of Broadway musicals for investors

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For potential Broadway producers and investors, recent headlines might not inspire confidence. At the end of 2024, the *New York Post* reported “Elton John’s $25 million Broadway show announces closing — just five days after opening night” (bit.ly/3Xxydux). That show, *Tammy Faye*, grossed less than $3 million (bit.ly/4h9rFZV) in ticket sales and lost investors tens of millions of dollars. Even just days after the 2024 Tony Awards, as shows were celebrating “Tony bumps”, The *New York Times* reported “Huey Lewis musical to close on Broadway as new shows struggle” (bit.ly/4ivMHDj). That musical ran for less than 100 shows, and investors likely lost almost all of their $19 million investment (bit.ly/42ghVri). All in, theatre website *Broadway World* estimates that “over $200 million was lost on new musicals last season” (bit.ly/4i6tIiN).

Today, the standard estimate is that only one in five Broadway musicals recoup their investment, and similar estimates can be traced back to musicals from as early as the 1930s.[1] For nearly a century, then, investing in Broadway has come with a substantial risk of losing money. At the same time, the costs of producing musicals are growing by millions of dollars.[2]

All of this raises the question: why invest in Broadway musicals? One answer might be a love of art. Another might be the perceived glamour of the role. As Leo Bloom croons in the iconic musical *The Producers*, “I wanna be a producer” to “lunch at Sardi’s every day”, “sleep until half past two” and “wear a tux on opening nights”. But many could also be drawn by the spectacular financial successes of a few shows: *Hamilton*, *The Lion King*, *The Phantom of the Opera* and *Wicked* have all grossed more than a billion dollars in ticket sales. While only a 20% chance of making back your investment sounds lacklustre, it is comparable to other risky ventures like sports betting. As of February 2025, for example, US gambling company Draft Kings reports that 20% of its players made money or broke even over the last 30 days (bit.ly/41KXhk4).

Unfortunately, there’s very little public data about the profitability of investing in Broadway. Our goals in this article are thus twofold: first, to use publicly available data to give meaningful estimates on the actual proportion of Broadway musicals that make back their investment; and second, to estimate the proportion of Broadway musicals that make a substantial profit (e.g., doubling an investor’s money or more).

To the best of our knowledge, we present the first analysis of Broadway musical recoupment that is both comprehensive and based on publicly available data

Historical estimates and our study

While the one-in-five estimate is often repeated, very little data exists to back it up. Sometimes that figure is attached to insider sources, and sometimes it is traced back to a 1969 study of shows produced between 1938 and 1960, which found that just two of the 12 large-scale musicals in their study made a profit.[1] More recent analyses suggest that 21% of musicals from 1994 to 2014 (bit.ly/43r1Zoh) and 22.6% of musicals from 1952 to 2017 (bit.ly/3RlvTDn) recouped. However, neither gives comprehensive classifications of individual shows to support these rates, and neither provides complete public data to support its estimates.

To the best of our knowledge, we present the first analysis of Broadway musical recoupment that is both comprehensive and based on publicly available data. Specifically, we looked at every musical that opened from 2008 to 2017 with investors. We selected this period as the most recent contiguous decade’s worth of shows that would have had a chance to recover their investment before the Covid-19 pandemic closed theatres in 2020. Indeed, every show in our study either (a) recouped its investment before the pandemic (in one case taking nearly 3 years) or (b) closed before (and for reasons unrelated to) the Covid-19 pandemic. To estimate recoupment and profitability, we used public data: weekly gross ticket sales and press reports. Our data, together with links to the supporting press releases, is publicly available (bit.ly/43qtjDh).

We begin with a quick primer on the finances of Broadway production. Then we describe our process for estimating recoupment and show success. We note that our analysis focuses solely on Broadway ticket sales, and doesn’t address profits from spin-off productions like North American tours (which may be substantial), as they may have different producers and investors.

A primer on investing in Broadway

A Broadway show starts with a *lead producer* who drives the production. They raise the initial investment for the show, known as the *capitalisation* or *cap*. The cap primarily covers the upfront costs to produce the show ▶

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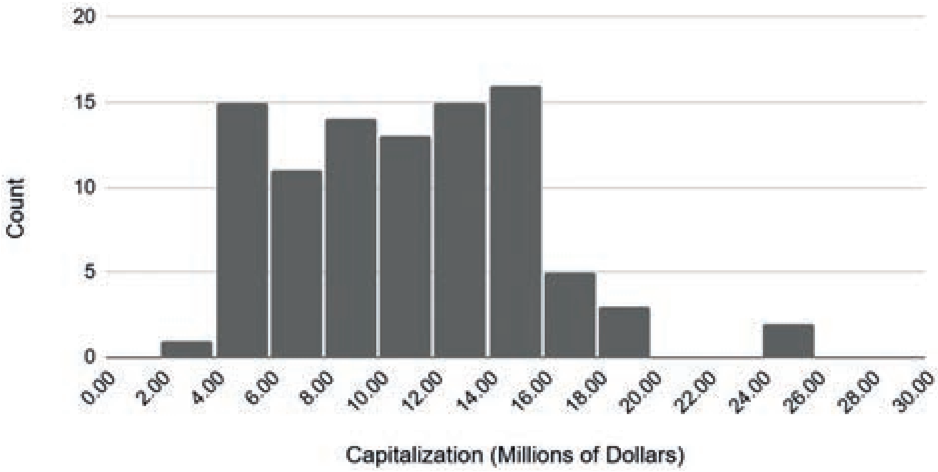

Figure 1: Press-reported capitalisations for 95 Broadway musicals opening from 2008 to 2017. One musical, *Spider-Man: Turn Off the Dark*, with a press-reported capitalisation of $75 million, is excluded for readability. See bit.ly/43qtjDh for sources.

(e.g., for a set, initial advertising campaign, and salaries during rehearsal), but also may include a reserve fund to offset the costs of running the show in weeks where it is not profitable. From 2008 to 2017, press-reported caps generally ranged from $4 million to $25 million, with two exceptions: *Glory Days* (a tiny musical with a cast of only four) at $2.5 million and *Spider-Man: Turn Off the Dark* at $75 million. See Figure 1.

The lead producer and any other producers they recruit are responsible for raising money from *investors*; producers may or may not invest their own money. If the investors completely make back their initial investment, the show is said to have *recouped*. After rehearsals, a show enters a short period of previews where it begins to earn revenue from ticket sales but is still being fine-tuned; after previews, it officially opens. The exact terms and conditions for a given show's investors may vary, but in general, from previews on, weekly profits are accumulated to pay back investors as follows:

- Ticket sales provide revenue. While these sales are public, ticketing platforms take varying commissions so a show's exact revenue from ticket sales is not publicly known.
- Each show has *weekly running costs*. These include salaries, rent, advertising, and a guaranteed minimum royalty payment to "creatives" (writers, directors, choreographers, source materials, etc.). The guaranteed minimum royalty is paid even in weeks where the running costs exceed ticket revenue.
- In weeks where the net profit (i.e., ticket revenue minus running costs) is positive, the net profit is split. A fixed percentage (e.g., around 30%) goes to additional royalties, and the rest is returned to the investors.

To put this in perspective, imagine a hit Broadway musical with an eight-figure capitalisation, weekly running costs of $750,000, and $1 million in weekly ticket sales. With a 10% ticket commission, the show would net $150,000 each week. After 30% additional royalties (amounting to $45,000), only $105,000 might be returned to the investors each week – the show would have to maintain its popularity for years to recoup. And indeed, one show in our study (*Memphis*) recouped only after running for nearly 3 years! In contrast, just over half (67/133) the musicals from the period 2008–2017 closed within 26 weeks (including previews).

One show in our study recouped only after running for nearly 3 years

After recoupment, the formula gets worse for investors. The royalty percentage increases and what remains is instead typically split 50–50 between producers and investors. In weeks where the net profit is positive, the portion of those profits returned to investors could fall from 70% to 30%.

Building a comprehensive data set

We began by identifying every Broadway musical that opened between 2008 and 2017 inclusive. This gave us 158 musicals, from which we discarded musicals that were not open to investors: 14 musicals that opened at non-profit theatres or were produced by non-profit production companies and three musicals that were solely produced by Disney without outside investors. We also discarded two shows that were better classified as concerts than musicals (e.g., *Springsteen on Broadway*), three musicals

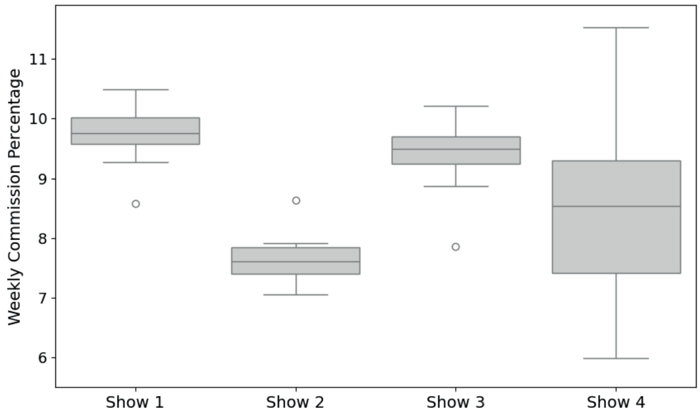

Figure 2: Commission percentage taken by ticketing platforms over 57 weeks of four shows.

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that were limited return engagements and effectively amounted to stops on a national or international tour, and one musical that never opened or found a Broadway theatre. This left us with 133 musicals. Our supporting data set (bit.ly/43qtjDh) includes more details on this process and the specific shows excluded in each category.

While weekly gross ticket sales are public, ticketing commissions are not. To estimate commissions, we looked at data from four shows in which one of the authors of this article invested. Over 57 weeks of data from these shows, the commission ranged from about 6% to about 11.5%, with a median of 9.26%. See Figure 2. Part of the variance here is that the exact mix of sales from different ticketing platforms changes each week. Generally speaking, lower selling weeks saw a higher commission.

To determine show recoupment and capitalisation costs, we first investigated each of the 133 shows in our data set extensively. We found press reports about potential recoupment for 85 shows: 57 for failing to recoup and 28 for recouping. We also found press-reported capitalisation costs for 96 of the shows in our data set. Full sources for both are in our supporting data set.

Classifying recoupment

In addition to the 85 musicals whose recoupment we could classify with press reports, 20 other musicals were easy to unambiguously classify: four never opened (but had a planned theatre and would have spent a substantial amount of their cap), and 16 failed to gross their press-reported capitalisation (so without even considering running costs or ticketing commissions, they would have failed to recoup). Figure 3 shows the *longevity* of the 105 shows in our data set that we could unambiguously classify. Here and throughout, by "longevity" we mean the number of weeks where the show reported weekly grosses, from previews until the close of theatres in 2020. Four shows in our analysis (*Come from Away*, *Dear Evan Hansen*, *Hamilton* and *The Book of Mormon*) continued running once theatres reopened in 2021, but those additional weeks are not included in our profit estimates.

Unsurprisingly, shows that recouped typically had a much greater longevity: the median longevity of shows known to recoup was 140 weeks, compared to just 18 weeks for shows known to have failed. Only one show that recouped closed within a year: *Sunday in the Park with George*, a planned 10-week limited engagement headlined by Jake Gyllenhaal and Annaleigh Ashford.

Of the 28 shows with press-reported recoupment, we were able to find the week in which 22 recouped. For those 22 successful shows, the median time to recoup was 44.5 weeks, with just three shows recouping within half a year: *Sunday in the Park with George* (in 10 weeks), *Hedwig and the Angry Inch* (in 17 weeks) and *Once* (in 25 weeks).

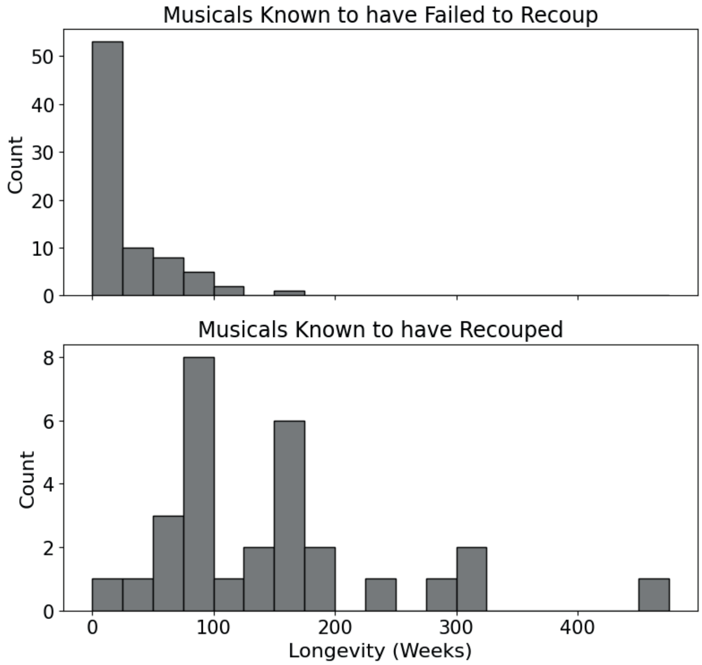

Figure 3: Longevity of shows by recoupment status.

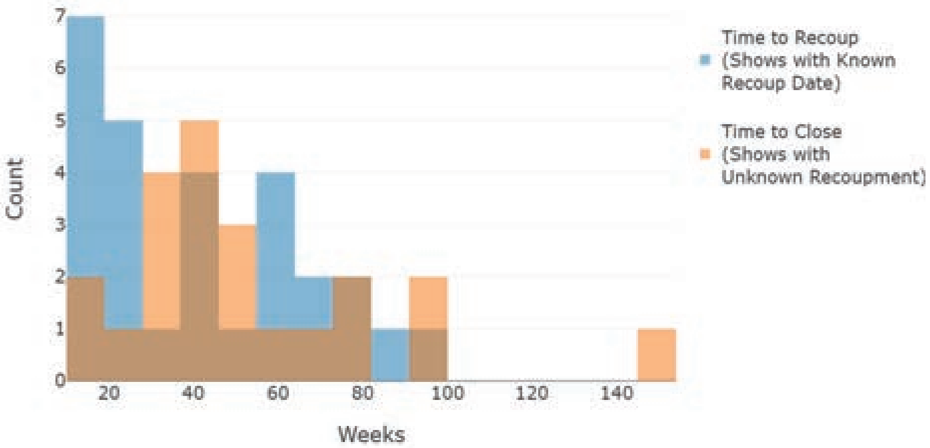

Figure 4: A comparison of time to recoupment (for shows with press-reported recoupment dates) and the total longevity of shows with unknown recoupment.

Only one show that recouped closed within a year

After analysing the 105 musicals of our original 133 that could be unambiguously classified (with 28 press-reported recoupments, 57 press-reported recoupment failures, and 20 shows that failed to open or gross their press-reported capitalisation), we were left with 28 final shows whose recoupment status had to be manually classified. Figure 4 compares the total running times of these shows to the recoupment times of the 22 shows with known recoupment dates, suggesting that many likely did not last long enough to recoup.

To estimate which of these 28 shows recouped, we needed to better understand typical running costs. Unlike capitalisations, weekly running costs are rarely reported in the press, and they change from week to week. Our supporting data summarises the limited press-reported running costs we could find for shows in our data set. Generally speaking, these are in the mid to high six figures, excluding two low-budget musicals with very small casts.

For the 28 shows whose recoupment status was unknown, we estimated the maximum weekly running cost under which the show would have recouped using the following idea: for a show that recouped,

$$\text{money spent on show} \leq \text{money returned to show.}$$

Then we can estimate that a show running for n weeks recouped if

$$\text{capitalisation} + n \times (\text{weekly running costs}) \leq \text{total ticket sales after commission}$$

Thus the show would have recouped if the weekly running costs are at most

$$\frac{\text{total ticket sales after commission} - \text{capitalisation}}{n}. \qquad (1)$$

Table 1: Shows likely to have recouped from 2008 to 2017.

Press-reported recoupments	
A Gentleman's Guide to Love & Murder	*Les Misérables* **(2014)**
***A Little Night Music* (2009)**	*Matilda the Musical*
Beautiful: The Carole King Musical	*Memphis: A New Musical*
Billy Elliot: The Musical	*Motown the Musical*
Come from Away	*Next to Normal*
Dear Evan Hansen	*Once*
Fun Home	*Pippin* **(2013)**
***Hair* (2009)**	*Rock of Ages*
Hamilton	*School of Rock*
Hedwig and the Angry Inch	*Sunday in the Park with George* **(2017)**
***Hello, Dolly!* (2017)**	*The Band's Visit*
***How to Succeed in Business Without Really Trying* (2011)**	*The Book of Mormon*
In the Heights	*Waitress*
Kinky Boots	*West Side Story* **(2009)**
Shows with a plausible chance of recoupment	
A Bronx Tale: The Musical	*Irving Berlin's White Christmas*
***Cats* (2016)**	*Promises, Promises*
***Falsettos* (2016)**	***Sunset Boulevard* (2017)**

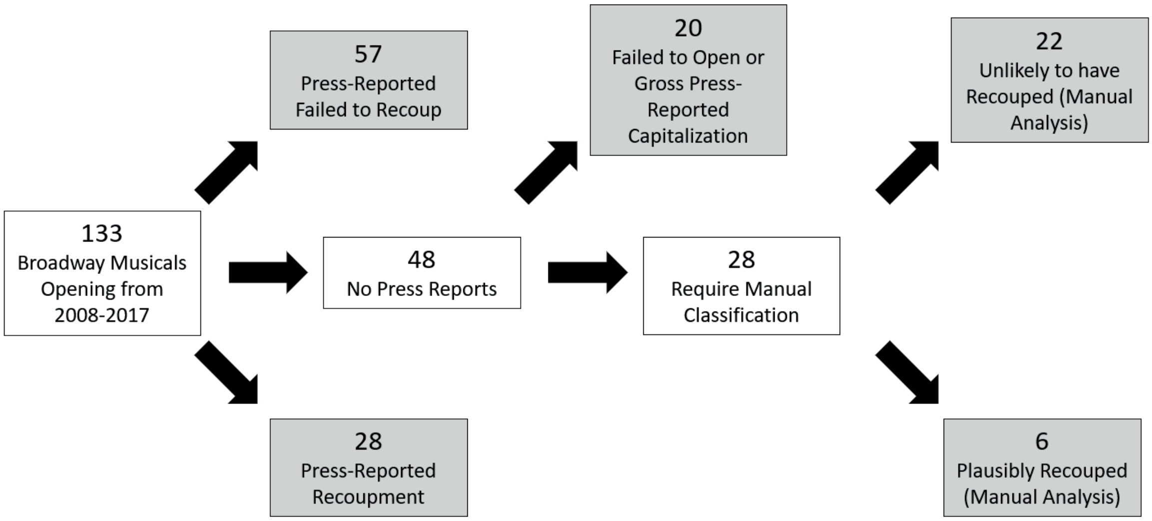

Figure 5: Flowchart of analysis.

Investors from 2008 to 2017 may have beaten the classic one-in-five estimate, but not by much

We call (1) the *maximum weekly running cost* under which the show would have recouped. Note that this is just an approximation as, for example, some of the capitalisation may not have been spent.

We also did extensive additional research on the 28 shows with unknown recoupment status. For instance, for some shows we found producer comments about the show's path to recoupment or how much progress the show had made towards recoupment by a certain date; shows that expected to recoup before closure; partial information about running costs (e.g., that they fell into a given range); and trajectories in weekly grosses. We used this research, together with our maximum weekly running cost estimate, to classify the remaining 28 musicals as either unlikely to have recouped or as plausibly to have recouped. Full details on each classification with sources and gross data can be found in our supporting data set, but here are two illustrative examples.

- *Godspell* (2011). *Godspell*'s 2011 production reportedly had a $5 million capitalisation and grossed $11,106,035 over 37 weeks. With the median 9.26% ticketing commission, the maximum weekly running costs would have been $137,233. Since the running costs were reported to be much greater at around $300,000, it's highly unlikely that the show recouped.
- *Cirque du Soleil Paramour*. This production had a $25 million capitalisation and grossed $50,071,361 over 53 weeks. This gives a maximum weekly running cost of $385,561, and given that *Cirque du Soleil Paramour* was a massive production, weekly running costs were almost certainly more than this. Moreover, producers reported "We need to be in that million-dollar club to be comfortable," and average weekly grosses were under a million dollars. Based on these factors, it's unlikely that the show recouped.

R.D. Smith/Unsplash

Ultimately, we found that just six of the 28 remaining musicals plausibly recouped. Taken with the 28 shows with press-reported recoupments, this gives a recoupment rate between 28/133 = 21.1% and (28 + 6)/133 = 34/133 = 25.6%: investors from

2008 to 2017 may have beaten the classic one-in-five estimate, but not by much. See Table 1 and Figure 5.

Estimating highly profitable musicals

Recall that, after recoupment, investors see much less of the weekly profits: royalties increase and the remaining profits are now split 50–50 between producers and investors. This means that, in order for investors to double their money, they would need the show's total profits to be at least three times the capitalisation: once to recoup, and then at least twice more for investors to re-earn the capitalisation (and actually more, given increased royalties). As a rough estimate, this would suggest that a show that recouped after n weeks would need to run for more than $3n$ total weeks for investors to double their money (assuming stable weekly grosses). We can also modify equation (1) to get an estimate of the *maximum weekly running costs to double investment*:

$$\frac{\text{total ticket sales after commission} - 3 \times \text{capitalisation}}{n}$$

Note that this does not account for the increase in royalty percentages (as the specific percentages depend on the show). Thus the net profits after recoupment would generally need to actually exceed twice the capitalisation for investors to double their money, and the actual maximum weekly running costs to double the investment are likely even smaller than the upper bound our formula provides.

To identify musicals that could plausibly have doubled investor's money, we looked at both (1) the maximum weekly running costs to double investment (relative to the scale of the musical) and (2) the show's longevity relative to its time to recoup (generally looking for a longevity of at least three times the recoupment time, unless weekly grosses changed substantially after recoupment). We also used context from press reports; details can be found in our supporting data. This left us with just eight musicals where investors had a good chance of doubling their money from ticket sales: *Beautiful*: *The Carole King Musical*, *The Book of Mormon*, *Come from Away*, *Dear Evan Hansen*, *Hamilton*, *Kinky Boots*, *Once* and *Waitress*. Table 2 gives a rough estimate of the return of these shows for investors with different potential running costs, using the formula:

$$1 + \frac{\text{total ticket sales after commission} - \text{total show running costs} - \text{investment}}{2 \times \text{investment}}$$

This return is based purely on Broadway ticket sales up until the onset of the Covid-19 pandemic, so returns for shows that continued after the pandemic would be higher. This formula again does not account for increased royalty percentages after recoupment and thus also estimates an upper bound based on ticket sales up until the Covid-19 pandemic.

Table 2: Estimates of show profitability until March 2020 at different running costs. A profitability of 2 means that investors doubled their money (e.g., an investor put in \$100, got that back at recoupment, and earned an additional \$100 in profits). Profitability is based purely on ticket sales up until the onset of the Covid-19 pandemic. Starred shows reopened after the pandemic and earned additional revenue.

	Profitability estimate with given weekly running cost		
	$500,000	$850,000	$1,000,000
*Hamilton**	19.27	15.89	14.45
*The Book of Mormon**	16.40	9.15	6.05
*Dear Evan Hansen**	7.49	4.32	2.96
Kinky Boots	5.33	1.21	Not Profitable
*Come From Away**	3.80	1.48	Not Profitable
Beautiful: The Carole King Musical	4.00	Not Profitable	Not Profitable
Waitress	2.74	Not Profitable	Not Profitable
Once	2.83	Not Profitable	Not Profitable

Recall that, after recoupment, investors see much less of the weekly profits: royalties increase and the remaining profits are now split 50–50 between producers and investors

Still wanna be a producer?

Where does that leave us? For musicals opening between 2008 and 2017, public data suggests that the actual recoupment rate was between 21.1% and 25.6%, just barely beating the classic estimate. At the same time, we estimate that the chances of investors even doubling their money on Broadway ticket sales are at most 8/133, or just about 6% – and even the biggest successes pale in comparison to the biggest wins of ventures like sports betting.

That is all to say, for readers considering investing in Broadway purely for profit: *caveat emptor*. ■

Acknowledgements

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