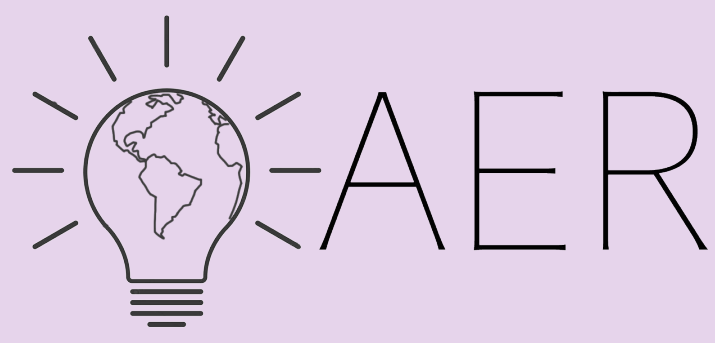




What Is Really Driving Post-Pandemic Box Office Decline and How Studios Can Respond



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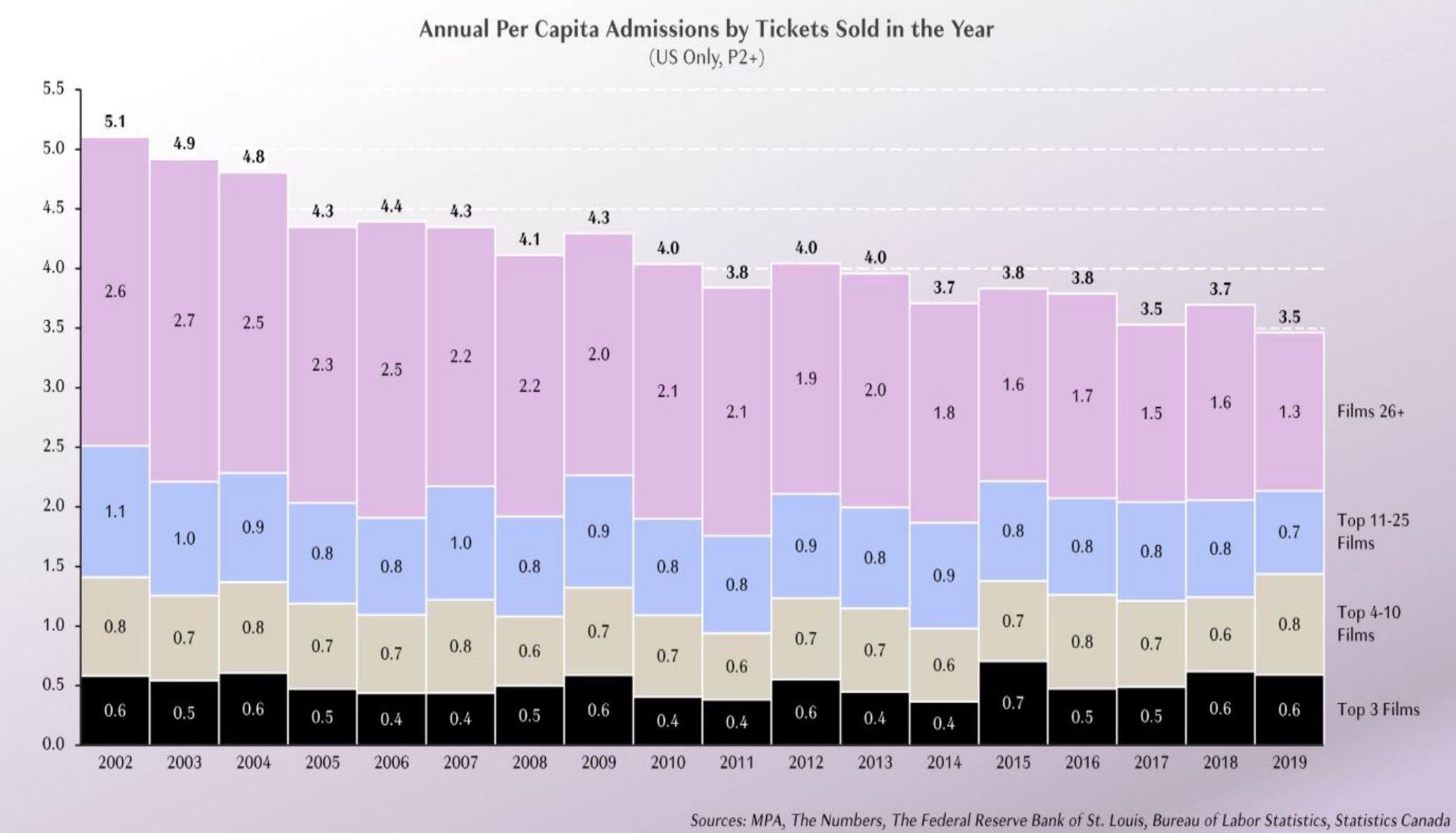
INTRODUCTION

Post-pandemic box office revenue has not recovered to pre-pandemic levels, with theatrical attendance declining across the industry and streaming becoming the dominant way people watch films. As someone pursuing a career in film, I noticed a pattern: mid-tier films were underperforming dramatically and theaters were increasingly empty even for well-reviewed releases. This study investigates whether the decline is driven by audience disinterest in the films themselves, or by broader cultural and behavioral changes in how people consume media. It also explores what studios can realistically do to bring audiences back.

RESEARCH METHODOLOGIES

Data was collected from Box Office Mojo across two eras: 2017-2019 (pre-pandemic stability) and 2023-2025 (post-pandemic recovery). Rather than analyzing the top 25 domestic grossing films, which prior research shows remained relatively consistent in performance, this study focuses on films ranked 26th through 50th domestically per year. This is where attendance volatility is most visible, yielding 75 films per era, 150 total. Variables recorded for each film include total domestic gross, estimated production budget, opening weekend gross, RT critic score, RT audience score, franchise or IP status, MPAA rating, days between wide theatrical release and VOD release, and release scale.

From 2002-2019, U.S. moviegoers reduced their annual attendance by 1.6 tickets. All the decline was via (mostly non-franchise) outside the top 25



MatthewBall.co analysis of U.S. per capita admissions from 2002-2019 found that long-term decline in theatrical attendance came from films ranked 26th and

beyond, while the top 25 remained relatively stable. This study targets that same volatile segment to isolate where behavioral and market shifts have the most measurable impact.

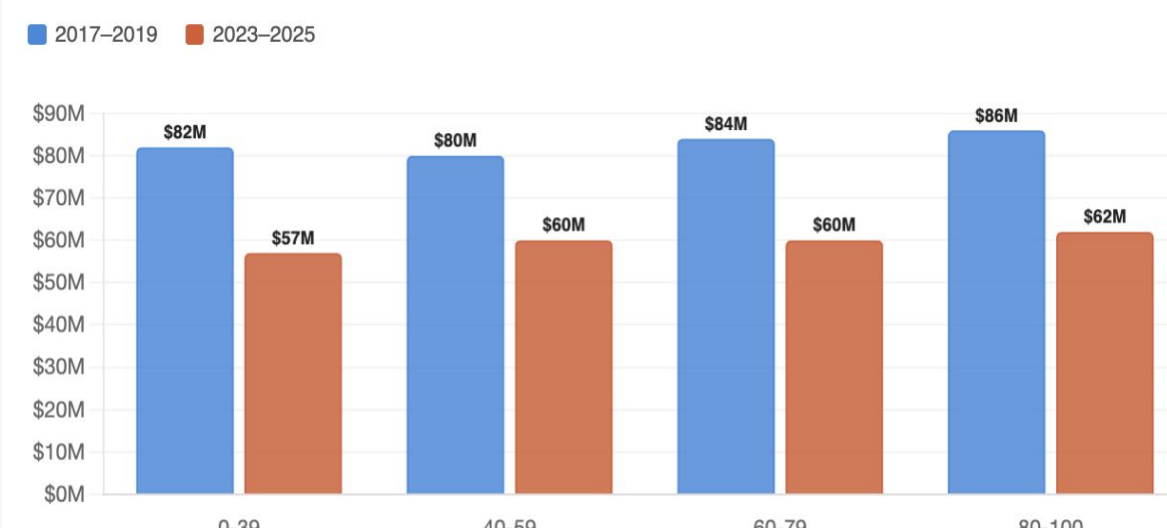
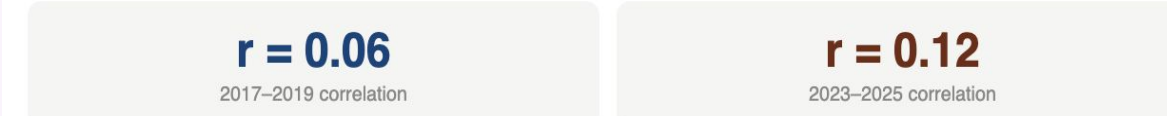
CONCLUSIONS, IMPLICATIONS, AND NEXT STEPS

The decline is behavioral, not attitudinal. Streaming normalization and compressed VOD windows removed the conditions that once made theaters the default choice. Studios should protect the theatrical window, scale budgets to match the current market, and invest in premium formats streaming cannot replicate. When audiences can pay to watch a film at home just weeks after release, the urgency to see it in theaters disappears before word of mouth has had time to build. Current data suggests the compressed window is hurting theatrical returns without clearly replacing that lost revenue through VOD sales. The theater is not disappearing, but the industry needs a model that treats theatrical as a genuine event and home viewing as a later, separate release rather than a quick alternative to buying a ticket.

DATA AND FINDINGS

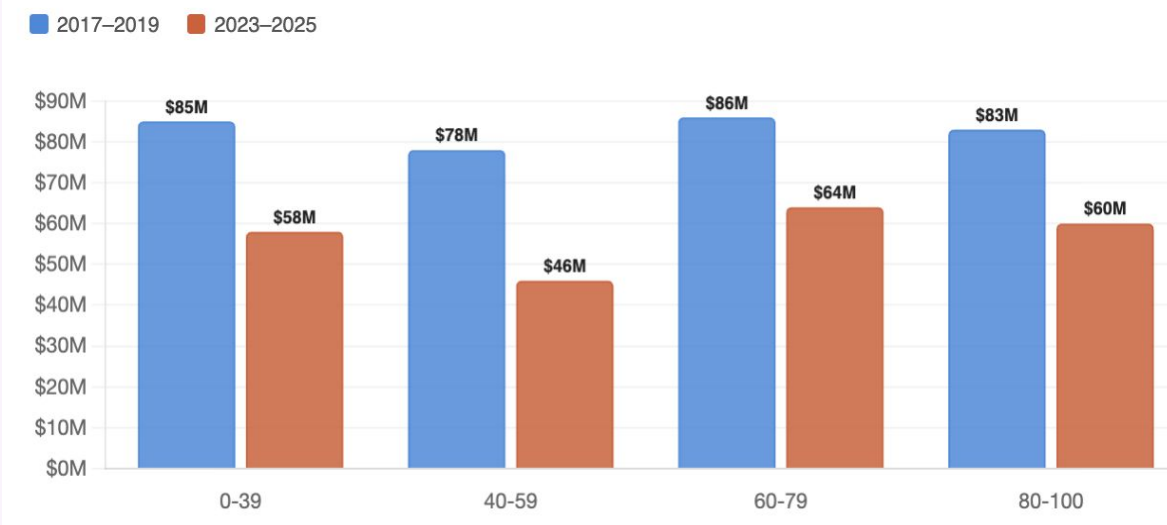
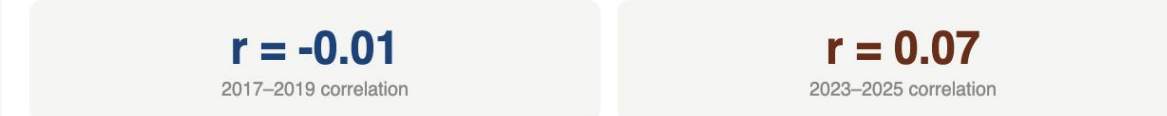
Do critic scores predict box office?

Average domestic gross per RT critic score band. Correlation grew slightly post-pandemic but remains very weak in both eras. Critical reception is not a reliable driver of attendance.



Do audience scores predict box office?

Average domestic gross per RT audience score band. Correlation also grew slightly post-pandemic, suggesting a more selective theater audience. However, the effect is small and not a primary driver of the overall decline.



Franchise vs original: average gross

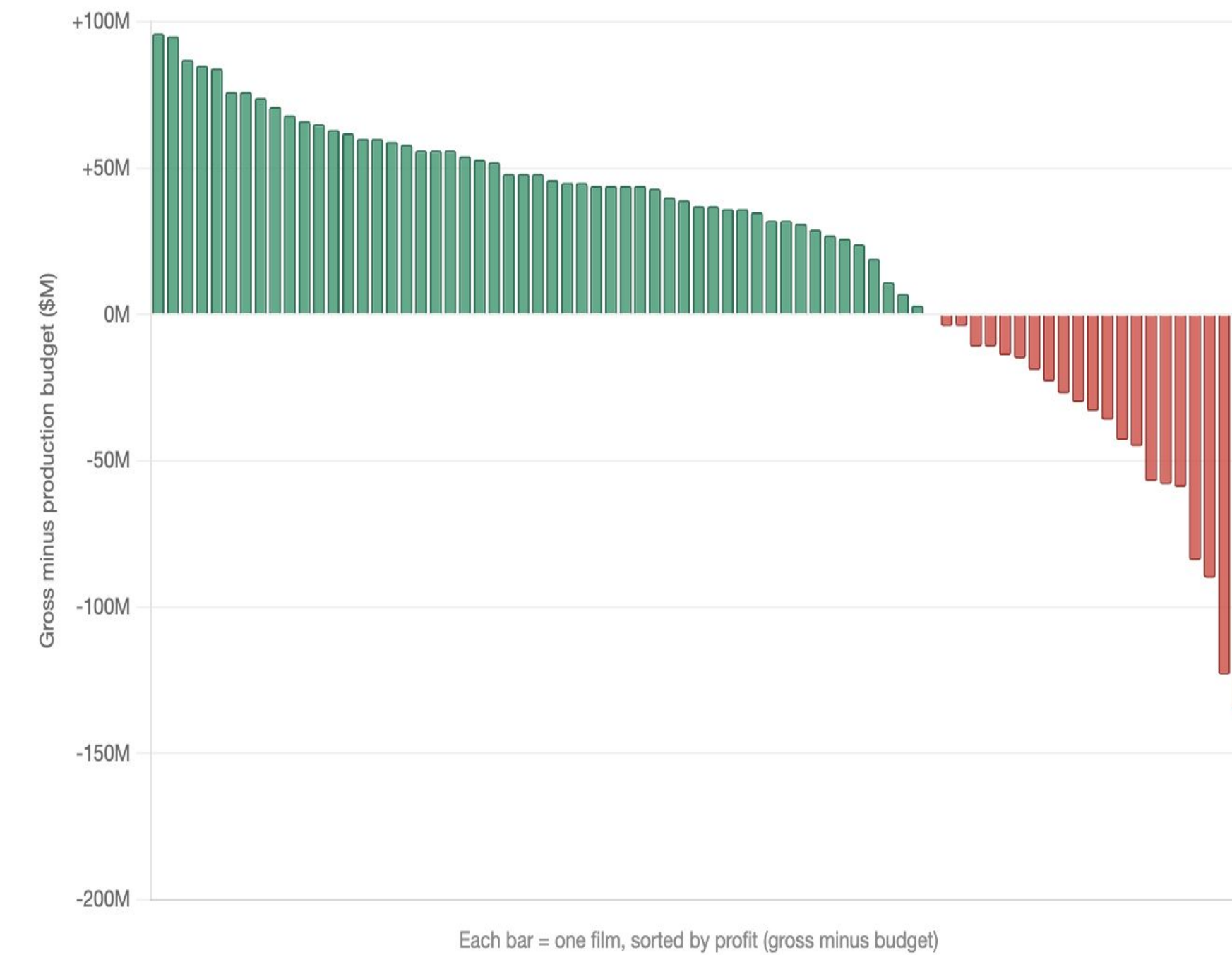
Franchise films averaged \$85M pre-pandemic vs \$65M post-pandemic. Originals fell from \$81M to \$56M. Both types declined sharply, with originals falling slightly harder.



Budget vs gross: 2017-2019 (all 75 films)

Each bar = one film. Gross minus production budget, sorted highest to lowest. 72% of pre-pandemic films earned back their production budget in domestic gross alone.

Gross exceeded budget (green) Gross fell short (red)

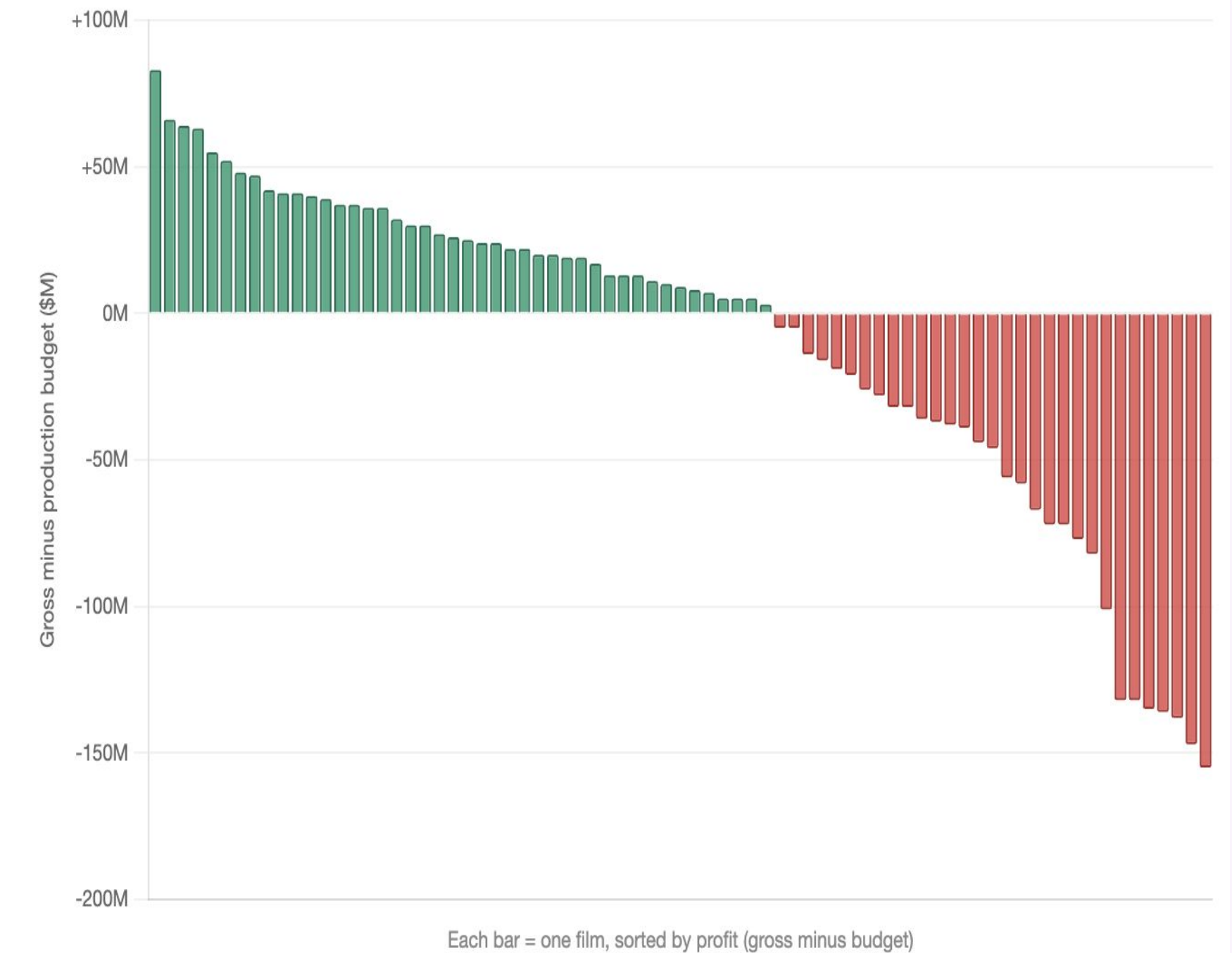


Each bar = one film, sorted by profit (gross minus budget)

Budget vs gross: 2023-2025 (all 75 films)

Each bar = one film. Gross minus production budget, sorted highest to lowest. Only 59% of post-pandemic films were domestically profitable, down from 72%.

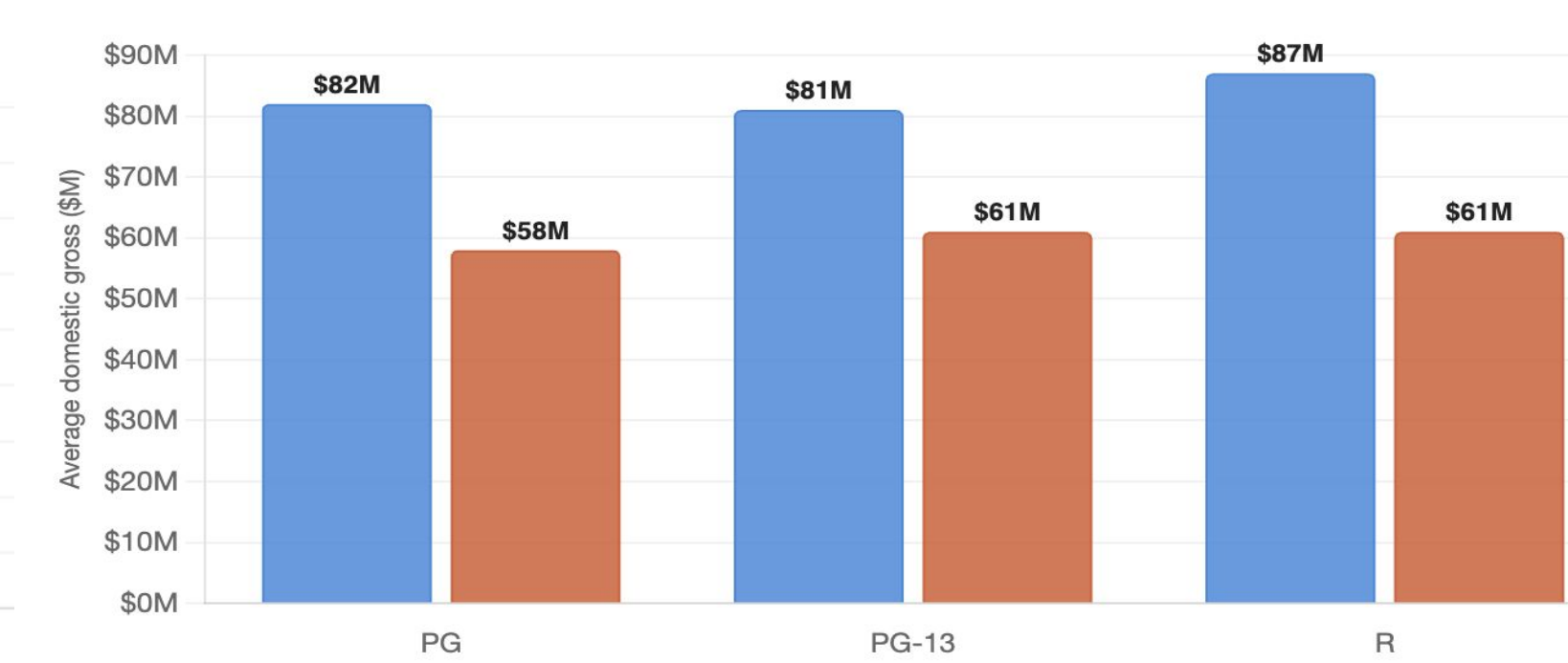
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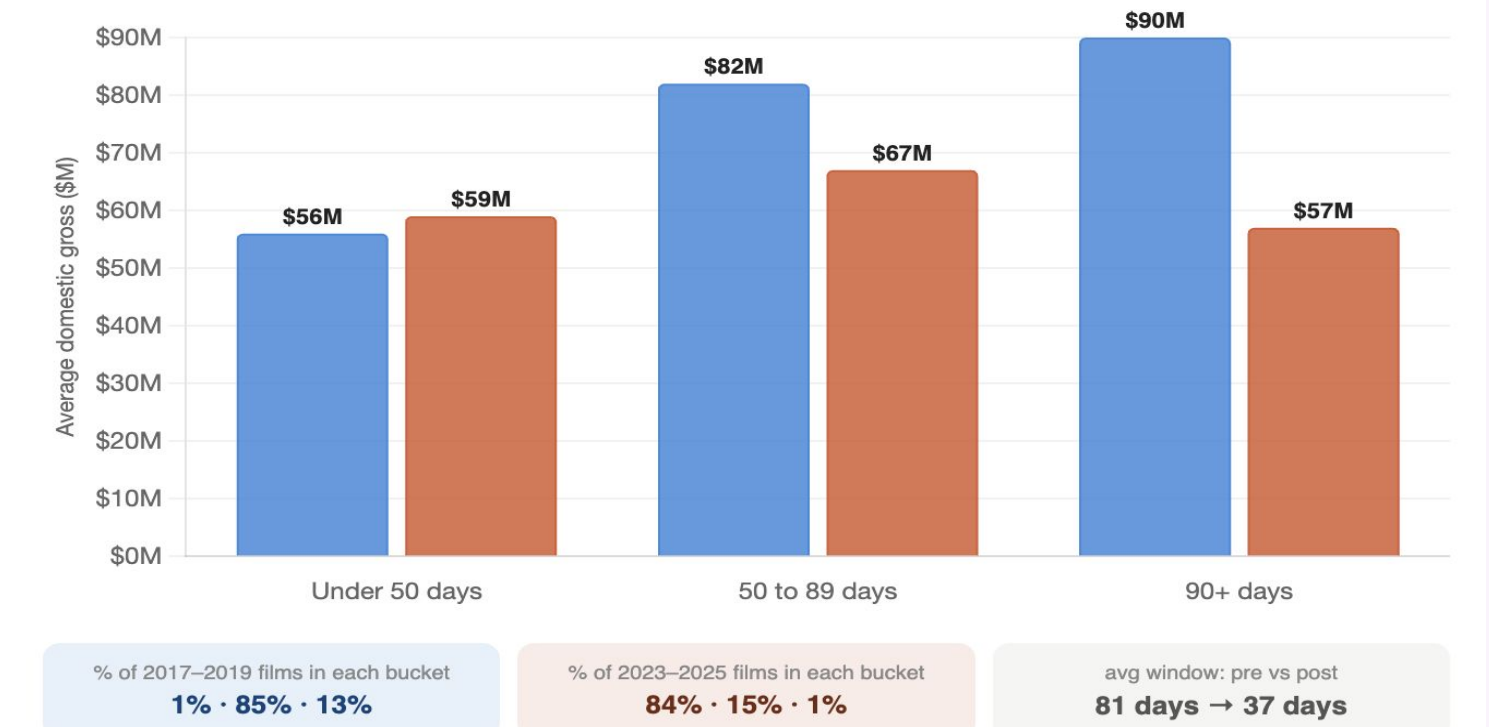
Rating vs average gross by era

All ratings fell significantly across the board. PG dropped from \$82M to \$58M, PG-13 from \$81M to \$61M, and R from \$87M to \$61M, showing a universal attendance decline rather than one rating-specific trend.



Shorter theatrical windows earned less at the box office

Average domestic gross per window bucket by era. Pre-pandemic films were spread across all three buckets. Post-pandemic, 84% of films were pushed into the under 50 days bucket — the lowest earning category in both eras.



DISCUSSION, ANALYSIS, AND EVALUATION

- Both critic and audience score correlations with gross grew slightly post-pandemic, suggesting the audience still going to theaters is becoming more deliberate and quality-selective. However, the effect is small and is not the main driver of decline.
- The theatrical window data is the strongest finding. Films with longer windows still earn more in both eras, confirming that keeping a film exclusively in theaters does generate more box office. However the 50 to 89 day window, which covered 85% of pre-pandemic films and averaged \$82M, now only covers 15% of post-pandemic films and averages just \$67M. That same window length

is producing \$15M less than before. Meanwhile 84% of post-pandemic films are now in the under 50 day bucket. This suggests that even when studios protect the theatrical window, audiences are not responding the same way they once did, pointing to a deeper behavioral shift toward staying home regardless of how long a film is exclusively in theaters.

3. Pre-pandemic, the gap between average franchise gross and average original gross was only \$4M, meaning both types performed nearly equally. Post-pandemic, that gap widened to almost \$10M, with franchise films at \$65M and originals at \$56M. This shows that as overall attendance declined, audiences choosing to go to theaters increasingly favored familiar IP over original films. Originals fell \$25M on average while franchises fell \$20M, suggesting familiarity now provides more protection than it did before, even if it cannot offset the broader contraction. All ratings fell roughly equally, ruling out an single demographic as the source of decline.

4. Finally, budget data plays a role. Studios are still spending at pre-pandemic levels while the market has contracted. The share of domestically profitable films dropped from 72% to 59%, with high-budget films driving most of the losses, revealing a fundamental mismatch between studio investment and what the current theatrical marketplace can return.

ACKNOWLEDGEMENTS

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