A Study Finds a Money Gap Behind Movie-Making Decisions

Films with women screenwriters often earned more, but the biggest budgets still mostly went to male-only creative teams.

An empty movie set shows director chairs and scripts under uneven lighting, suggesting unequal access to filmmaking opportunities.

A new study of film finances found a puzzle: movies with women in key writing roles often performed strongly, but the largest production budgets still overwhelmingly went to films whose directors and screenwriters were men.

According to reporting by Phys.org on a study published in Frontiers in Communication, researcher Anja Huwiler analyzed nearly 200,000 movies released from 1994 through 2023. For a smaller group of more than 4,200 films, the study also had production budgets and worldwide gross revenues, which allowed comparisons of financial performance. The study found that films with a woman screenwriter but no woman director had **median** profits 34% higher than films with only men in those roles, even though their budgets were similar.

That finding matters because movie studios often describe big-**budget** films as risky bets. A production budget is the money spent to make a film before marketing and distribution, and worldwide gross **revenue** is the money a movie takes in from ticket sales around the world. A median is the middle value in a group, so it is less likely than an average to be thrown off by one giant hit or one major flop. In this study, films written but not directed by women had a median **profit** of about $35.9 million, compared with $26.8 million for male-only productions.

The study also looked at return on **investment**, or ROI, which compares how much money a project brings in with how much it cost to make. A positive ROI means a film brought in more than its production budget. The study reported that films with a woman screenwriter but no woman director had an ROI of 1.1, compared with 0.88 for male-only films. The article notes an important limit: ROI in this study did not include marketing costs, distribution costs, or other revenue sources, so it is not the same as a studio's final accounting.

The sharpest contrast showed up at the top of the budget ladder. Among the 44 films in the top 1% of production budgets, 39 were male-only productions, and none had a woman director. In other words, women were not just underrepresented overall; they were especially absent from the most expensive directing opportunities. The study found that from 1994 to 2023, the share of films crediting at least one woman as a director or screenwriter rose from 21.5% to 29.4%. That is movement, but after nearly 30 years, fewer than one in three films in the **dataset** included a woman in either role.

The tension is not simply whether studios should hire more women because it is fair. The study frames the issue as a business question too: if some films involving women screenwriters are earning equal or higher returns, why does the industry still steer so much **capital** toward familiar male-only teams? One possible answer, raised in the article through previous research, is that decision-makers in uncertain industries often prefer familiar choices. A blockbuster can cost enormous amounts of money, and when the outcome is hard to predict, executives may see known networks and past **patterns** as safer, even when the numbers suggest those patterns are not always the best financial bet.

At the same time, the study does not prove that adding a woman screenwriter automatically causes a movie to make more money. It describes patterns in a large dataset, but it did not test every possible reason behind them. For example, a film's performance can be shaped by genre, release timing, stars, franchise recognition, audience taste, competition, and many other factors. The article also notes that the financial subset was mainly U.S. theatrical releases, and that some groups, such as women directors, were small enough that some findings should be read as descriptive rather than definitive.

There is another limitation in how the study identified gender. In the full dataset, gender was inferred from first names. That method can misclassify people, especially people with names that are used by more than one gender or names from backgrounds less represented in the reference data. The researcher noted that women from some backgrounds may have been undercounted. That does not erase the pattern, but it does mean the numbers should be treated as **evidence** to investigate, not as the final word on every filmmaker.

The study also found that after the #MeToo movement in 2017, a public movement demanding accountability for workplace misconduct and inequality, women's participation continued to rise but did not show a lasting acceleration. That detail suggests that public attention alone may not be enough to change who gets trusted with large budgets. The researcher suggested that change may require altering how people get opportunities in the first place, so that looking beyond familiar circles becomes normal rather than exceptional.

For classrooms, the disagreement worth noticing is not between art and money. It is between two ideas of **risk**. One says studios protect themselves by trusting the kinds of teams they have trusted before. The other says that ignoring financial evidence can itself be risky, because it may cause studios to overlook profitable projects and talented filmmakers. The study does not settle every argument about film hiring, but it asks a pointed question: if an industry says it follows the money, what should happen when the money points somewhere the industry has been slow to go?

Written from reporting by Phys.org.

THINK IT THROUGH

1. If a studio executive says familiar creative teams feel safer for big-budget films, how should that concern be weighed against evidence that other teams may perform as well or better?

> **A strong answer:** A strong answer should weigh uncertainty, responsibility to investors, evidence from past outcomes, and the risk of repeating biased patterns.

2. What kinds of additional evidence would make this study more persuasive to someone who doubts that hiring patterns are a problem?

> **A strong answer:** A strong answer should identify missing variables, limits of correlation, better gender data, and comparisons across genres, budgets, and release types.

3. Should an industry change its decision-making process when data shows a possible bias, even before researchers can prove the exact cause of the pattern?

> **A strong answer:** A strong answer should grapple with the trade-off between acting on imperfect evidence and waiting so long that unfair or inefficient practices continue.

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A	F	S	M	S	V	T	U	A	E	U	I	R	T	D	A	N	W
D	E	N	S	T	E	E	I	E	A	B	I	E	T	A	U	M	S
H	E	C	L	E	K	O	U	U	I	U	E	V	A	T	E	S	A
A	N	E	H	E	V	N	A	M	T	D	F	E	I	A	Y	E	E
F	E	D	M	E	D	I	A	N	A	G	E	N	E	S	C	I	C
E	D	N	D	A	F	R	D	E	T	E	T	U	R	E	R	I	T
N	K	O	R	P	I	N	V	E	S	T	M	E	N	T	F	E	E
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A	M	E	N	T	T	A	C	E	S	C	I	A	S	E	E	A	L
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U	T	R	N	P	E	R	P	P	F	A	D	P	I	E	U	E	V
D	O	R	H	H	J	V	T	T	S	A	C	E	A	T	G	T	S
E	E	O	V	I	V	A	R	R	I	L	N	R	E	U	G	E	D

BUDGET CAPITAL DATASET EVIDENCE INVESTMENT

MEDIAN PATTERNS PROFIT REVENUE RISK

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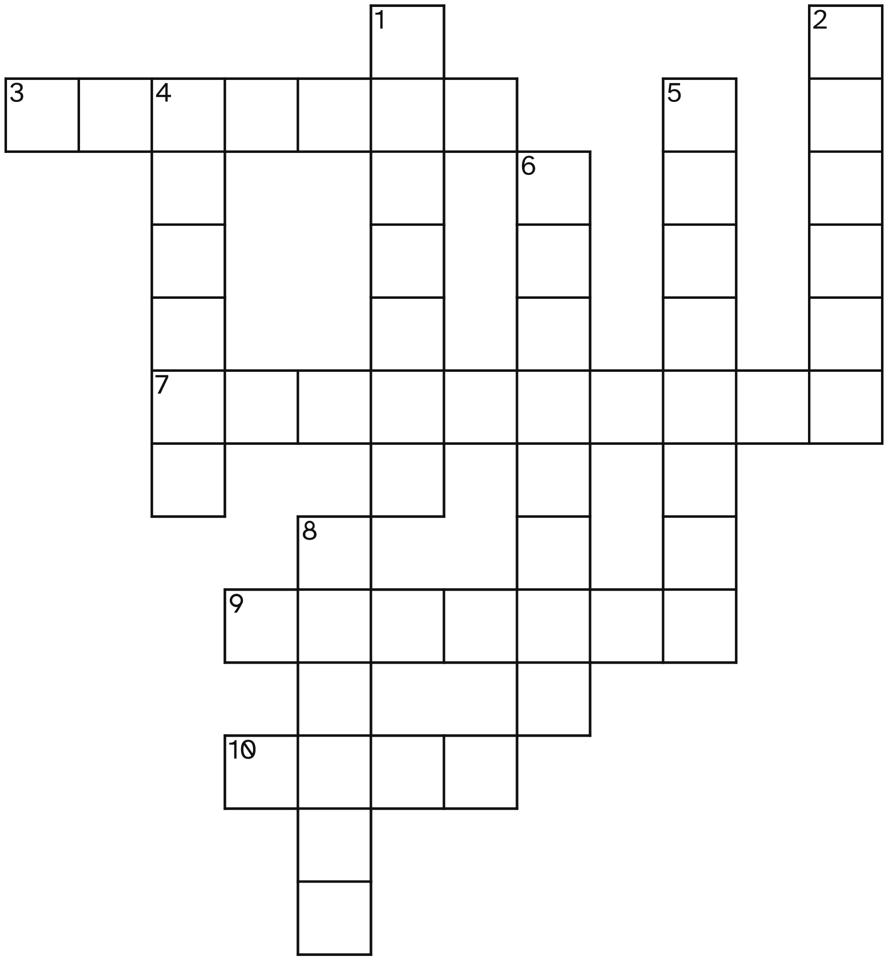

ACROSS

3 Funds available to support a business or major project

7 Funds put into a project to gain more money later

9 Money brought in from ticket sales and other sources

10 Chance that a choice or project will end in loss or failure

DOWN

1 Organized collection of information for analysis

2 Planned film-making funds before marketing and release costs

4 Money remaining after expenses are subtracted from earnings

5 Information that backs a claim or helps answer a question

6 Repeated trends or relationships in information

8 Middle value after numbers are arranged from least to greatest

A Study Finds a Money Gap Behind Movie-Making Decisions — answer key

A	F	S	M	S	V	T	U	A	E	U	I	R	T	D	A	N	W
D	E	N	S	T	E	E	I	E	A	B	I	E	T	A	U	M	S
H	E	C	L	E	K	O	U	U	I	U	E	V	A	T	E	S	A
A	N	E	H	E	V	N	A	M	T	D	F	E	I	A	Y	E	E
F	E	D	M	E	D	I	A	N	A	G	E	N	E	S	C	I	C
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E	T	H	E	I	E	I	E	H	N	D	R	I	H	N	V	C	I
A	M	E	N	T	T	A	C	E	S	C	I	A	S	E	E	A	L
N	P	S	T	E	L	P	P	A	T	T	E	R	N	S	A	A	P
R	Y	E	A	R	B	A	R	D	P	U	I	I	S	N	F	D	C
V	E	T	D	A	N	R	O	A	R	I	D	S	U	O	I	S	F
M	O	S	P	R	A	A	F	M	E	T	T	K	E	M	G	H	T
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U	T	R	N	P	E	R	P	P	F	A	D	P	I	E	U	E	V
D	O	R	H	H	J	V	T	T	S	A	C	E	A	T	G	T	S
E	E	O	V	I	V	A	R	R	I	L	N	R	E	U	G	E	D

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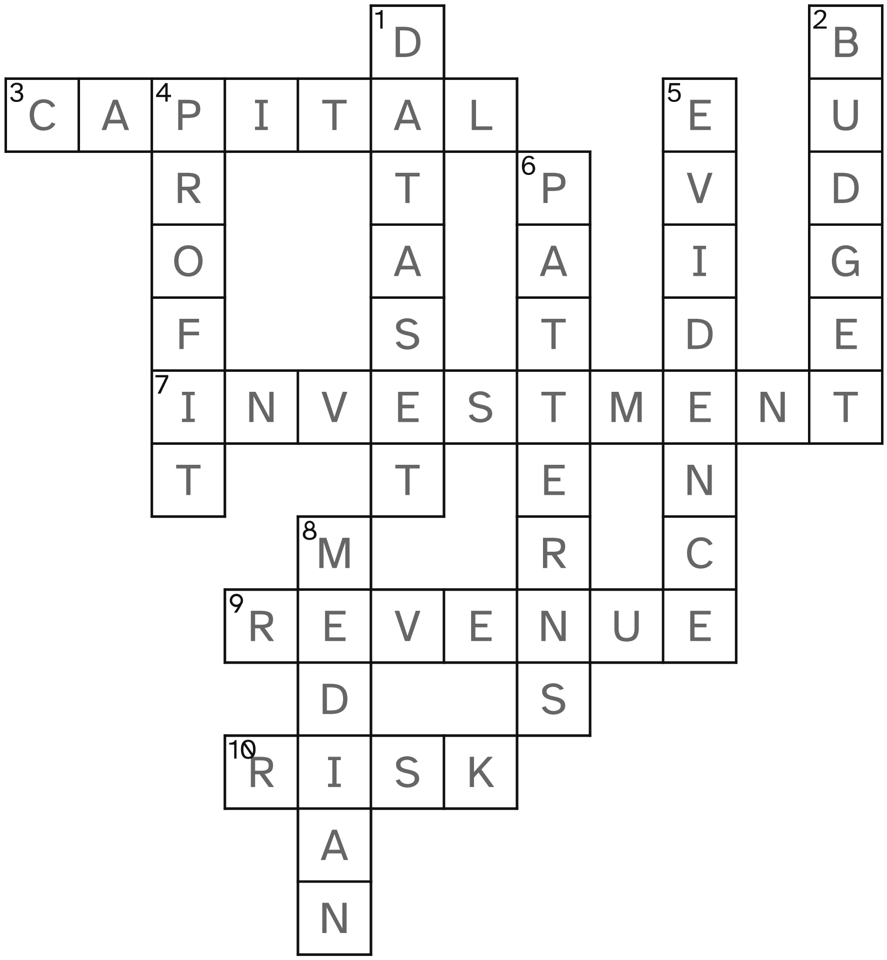

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Where this came from

This article was written for 3andB from the reporting below. It is not a reprint — the wording is ours and the facts are theirs.

Phys.org

“Films written by women make studios the most money, but budgets go to male filmmakers: Study”

Published	Tuesday, September 22, 2026
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https://phys.org/news/2026-09-written-women-studios-money-male.html

WHAT IS IN THIS PACKET

The article with a note on each question, a word search, a crossword, and the answer key to both.

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