Who Pays for the Extra Knockout Round at the 2026 World Cup?

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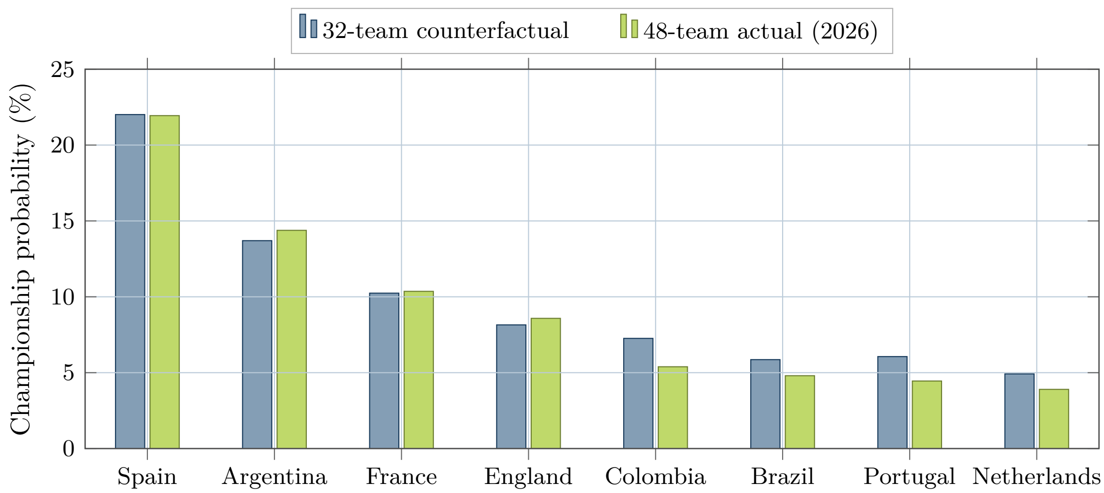

Figure 1: **The headline result.** Championship probability for the top eight teams by World Football Elo rating, under the actual 2026 tournament (gold) and under a 32-team counterfactual drawn from the same Elo pool (blue). Spain, Argentina, France, and England barely move. The four teams ranked fifth through eighth (Colombia, Brazil, Portugal, the Netherlands, names in red) each lose roughly one percentage point of championship probability under the expanded format. This paper traces that loss back to its structural source.

Abstract

The 2026 FIFA World Cup expands from 32 to 48 teams, requiring a new Round of 32 in the knockout phase. The champion's knockout path thus runs through five games rather than four. What is the impact of this format expansion on the distribution of possible champions? Three Monte Carlo simulation models, each with 10^5 tournaments, are constructed. The first is the actual 2026 tournament, with the field as drawn on December 5, 2025. The second is a counterfactual 48-team tournament in which teams are seeded by their Elo ratings rather than FIFA's official rankings. The third is a counterfactual 32-team tournament also drawn from the Elo-ranked pool. Team strengths are taken from the World Football Elo Ratings; individual matches follow independent Poisson goal processes; the format follows FIFA's published Annex C. The favorite (Spain) wins a statistically identical share in each scenario, approximately 22 percent. The width of the champion distribution changes little: the effective number of potential champions increases by less than 9 percent. A narrow set of teams bears the cost of the expanded format, ranked roughly fifth through eighth in Elo (Colombia, Brazil, Portugal, the Netherlands), each losing about one percentage point in championship probability. Decomposing every team's championship probability into conditional win probabilities through each round identifies the structural reason: the additional knockout round imposes a greater relative penalty on candidates who must overcome difficult matches to become champion, compared to favorites with a built-in advantage in the group stage and compared to long shots with paths too narrow for the extra round to compound. The finding holds when varying the home-field-advantage bonus (at 0, 75, and 100 Elo points) and the match-model scale (at 200, 250, and 300).

1 Why Does an Extra Knockout Round Matter?

Every FIFA World Cup since 1998 has had the same basic structure. Thirty-two teams play in eight groups of four. From each group, two teams advance into a Round of 16, followed by a Round of 8, semifinals, and a final. A World Cup champion has played seven matches in total: three in the group stage and four in the knockout phase.

The 2026 tournament breaks from tradition. There are now forty-eight teams, with twelve groups of four. Two teams from each group advance, plus the eight third-place finishers in those groups with the best records, advancing into a knockout stage of thirty-two teams. These teams then play a new Round of 32 before the rest of the familiar progression leads to the final. A 2026 champion, therefore, needs to play eight matches to win the World Cup. Figure 2 sets the two formats side by side.

The usual narrative about the impact of the expanded format is simple. It opens the field to more countries, which means a greater chance of surprises. The logical conclusion is therefore that the distribution of champions will become more variable, with a larger number of potential winners and hence fewer percentage points allocated to the favorite.

We find in this paper that the change does indeed make the champion distribution somewhat wider, but only marginally. It does not impact the probability of the favorite becoming champion at all; it does impose a cost in championship probability on second-tier teams; and it does increase the number of teams able to claim some championship probability through the third-place qualification mechanism.

The key question, then, is: who precisely bears the cost of the expanded format? The structural answer turns out to be very specific. The favorite (Spain) wins with equal probability in all formats. The second-tier teams (Colombia, Brazil, Portugal, and the Netherlands) each lose about one percentage point of championship probability. Long shots benefit a little from the third-place qualification mechanism.

The reason behind this pattern is structural, and we can explain it without appeal to specific choices of seed distribution made by FIFA during the draw for the 2026 World Cup. Inserting an extra knockout round into an otherwise unchanged single-elimination tournament penalizes contestants whose paths to the championship go through difficult matches disproportionately more than it penalizes favorites (who enjoy a built-in advantage in the group stage) and disproportionately more than it penalizes contestants whose paths were not complicated enough for an extra knockout round to affect.

This structural story is supported by quantitative models in Sections 2 through 8. We begin by presenting the team-strength measure in Section 2, a goal model for individual matches in Section 3, the bracket format of the 2026 tournament in Section 4, and a Monte Carlo experimental design to compare formats in Section 5. Then comes the main empirical result in Section 6 and the corresponding structural explanation in Section 7. Finally, Section 8 reports a few robustness checks.

2 How Do We Measure Team Strength?

As a metric of team strength, we take the World Football Elo Ratings, published at `eloratings.net`. Unlike the classic Elo formulation for chess [1], this application includes two tweaks tailored to football. The first is an importance weighting, which reduces the rating update for a friendly match to some fraction of what it would be for a World Cup knockout match. The second is a goal-adjustment factor, which makes a large winning margin worth more than a slim one.

Figure 2: What changed for 2026. The 48-team format inserts an additional knockout round (the new Round of 32, in red) between the group stage and the familiar Round of 16, quarterfinal, semifinal, and final. A champion in 2026 plays eight matches in total, one more than any World Cup champion since 1998. This paper asks who bears the cost of that extra round.

The base update rule states that a team of rating R that achieves result W in a match against an opponent of rating R' updates to

$$R_{\text{new}} = R + K\,G\,(W - W_e), \tag{1}$$

with $W = 1$ for a win, 0.5 for a draw, and 0 for a loss; W_e the expected result given by

$$W_e = \frac{1}{1 + 10^{-\Delta R/400}}, \qquad \Delta R = R - R', \tag{2}$$

K an importance-based weight, and G a goal-adjustment factor. The expectancy formula implies that a team leading by 100 rating points should expect to score approximately 64 percent in the next match; a 200-point lead implies 76 percent; and a 400-point lead implies 91 percent. Figure 3 plots the full curve. These numbers calibrate our intuition for the size of the Elo gaps that appear in the 2026 tournament.

Why do we use Elo ratings rather than the FIFA ranking? According to a study by Lasek et al. [2], conducted in 2013 and based on nearly a thousand international matches, the World Football Elo Ratings produced the lowest log-loss and the lowest mean squared error among the eight methods evaluated, outperforming the official FIFA ranking and several popular commercial alternatives. The FIFA ranking still plays a distinct role in our analysis: FIFA used its own ranking, not Elo, to seed the 2026 draw. Our findings below show that the choice between the two for seeding turns out to matter much less than expected, as Section 6 demonstrates.

Table 5 (Appendix A) lists the top twenty teams according to their Elo ratings as of the publication of January 19, 2026. Spain leads with $R = 2171$; Argentina follows at 2113; then France at 2063 and England at 2042. Colombia sits in fifth place at 1998. This detail is crucial later, because FIFA's own ranking placed Colombia in thirteenth position and assigned them to Pot 2 of the 2026 draw rather than Pot 1.

For teams not included in the top twenty, we calibrate our estimates against the published group-average Elo values from FootRankings [3], computed for each of the twelve 2026 groups. These estimates

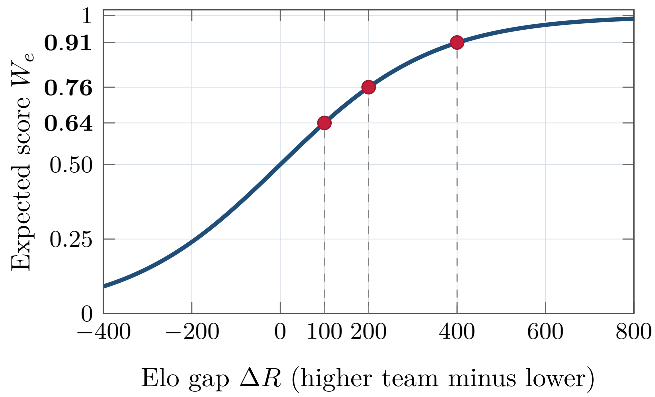

Figure 3: The Elo expected-score function from Eq. (2). The three highlighted points correspond to rating gaps of 100, 200, and 400 points, yielding expected scores of 0.64, 0.76, and 0.91 respectively. These figures calibrate intuition for the Elo gaps that appear in the 2026 field: Spain's lead over the rest of the top four sits in the 58 to 129 point range, and its lead over the bottom of the bracket is well over 700.

are accurate within 20 Elo points for most groups and within 80 points in the worst case, which is sufficient for the comparative analysis here. The complete list of estimates appears in Appendix A.

3 How Do We Simulate a Single Match?

For a pair of teams of Elo ratings R_A and R_B, the simplest conceivable model of a football match posits that the goals scored by both teams follow independent Poisson distributions. We write the expected goals for the two teams as

$$\lambda_A = \max\left(0.15, \frac{\mu + \delta}{2}\right), \qquad \lambda_B = \max\left(0.15, \frac{\mu - \delta}{2}\right), \tag{3}$$

where $\mu = 2.5$ is the expected total goals in an international match, $\delta = (R_A - R_B)/s$ is the expected goal-difference, and $s = 250$ is a scale parameter. The minimum of 0.15 prevents expected goals from being zero or negative in extreme mismatches. The actual number of goals scored in a match is then sampled from Poisson(λ_A) and Poisson(λ_B).

The scale s captures how strongly an Elo difference translates into a score difference. It was determined as follows. For each of nine representative Elo differences (50, 100, 150, 200, 300, 400, 500, 600, 800), we simulated 10^5 matches and computed the empirical win probability, with draws counted as half-wins. The choice $s = 250$ produces win probabilities that approach but slightly undershoot the Elo expectancy across this range. Since small upsets occur slightly more often than Elo alone would suggest, the model is sufficiently conservative for our task: properly allocating championship probability among the second-tier and underdog teams.

If a knockout match ends in a draw after extra time, FIFA's rules dictate a penalty shootout. Shootout outcomes are highly random, but the higher-rated team enjoys a slight empirical advantage, winning about 52 percent of shootouts. So if two teams have identical Elo ratings the shootout is decided by a true coin flip; whenever there is an Elo difference, the higher-rated team gets a 52 to 48 edge.

Extra time itself is not simulated as a separate phase. Doing so would require either a second Poisson process with a smaller mean (since extra time is shorter and teams play more defensively) or a discrete probability distribution for added goals. In either case, the influence on tournament-level outcomes is small compared to the format effects we report, so we do not pursue it further.

Table 1: Round of 32 pairing structure for the 2026 World Cup, with each match labeled by its position in the bracket. The notation $1X$ denotes the winner of Group X, $2X$ the runner-up, and $3(\cdot)$ a third-place finisher drawn from the listed groups according to FIFA's Annex C.

Match	Pairing
M1	$1E$ vs $3(A, B, C, D, F)$
M2	$1I$ vs $3(C, D, F, G, H)$
M3	$2A$ vs $2B$
M4	$1F$ vs $2C$
M5	$2K$ vs $2L$
M6	$1H$ vs $2J$
M7	$1D$ vs $3(B, E, F, I, J)$
M8	$1G$ vs $3(A, E, H, I, J)$
M9	$1C$ vs $2F$
M10	$2E$ vs $2I$
M11	$1A$ vs $3(C, E, F, H, I)$
M12	$1L$ vs $3(E, H, I, J, K)$
M13	$1J$ vs $2H$
M14	$2D$ vs $2G$
M15	$1B$ vs $3(E, F, G, I, J)$
M16	$1K$ vs $3(D, E, I, J, L)$

The home-field-advantage bonus is set to +75 Elo points for the United States, Mexico, and Canada whenever they play a match scheduled at home. This applies to each host's three group-stage games and through the Round of 32 for any host that qualifies as a group winner. The value 75 sits in the middle of the range of home-field bonuses typically used for international football, between the 100 Elo points in the original Elo formulation and the more modern empirical estimates closer to 50. Section 8 confirms that the results are robust to variation of this parameter across 0, 75, and 100.

4 What Does the Bracket Actually Look Like?

Forty-eight teams are divided into twelve groups of four, labeled A through L. Each team plays three games against the other teams in its own group. The top two teams in each group go straight to the Round of 32. From among the twelve third-place finishers, the eight with the best records advance to fill the remaining Round of 32 slots, with ranking determined by points, then goal difference, then goals scored, with FIFA Fair Play points as a further tiebreaker that we approximate as a small random perturbation.

The Round of 32 bracket can then be calculated deterministically according to the rules laid out in FIFA's Annex C. There are $\binom{12}{8} = 495$ distinct ways for exactly eight of the twelve groups to produce a qualifying third-place finisher, and Annex C explicitly lists, for each combination, all eight group-winner-versus-third-place pairings. Sixteen Round of 32 matches result. Eight of them pair a group winner against a third-place team: the winners of Groups A, B, D, E, G, I, K, and L take this path. The remaining four group winners (of Groups C, F, H, and J) instead face specific runners-up of other groups, and the other eight runners-up pair off against each other. The complete pairing structure is summarized in Table 1. We approximate Annex C's 495 hand-curated scenarios by a bipartite matching that respects the same structural constraints, namely that no team faces an opponent from its own group, and that the eight group-winner-versus-third-place pairings respect the allowed-group sets given in Table 1.

From the Round of 32 onward, the bracket takes the standard single-elimination form. The sixteen Round of 32 winners pair off into eight Round of 16 matches in the order M_1–M_2, M_3–M_4, and so on. The eight Round of 16 winners pair off for four quarterfinals. The four quarterfinal winners pair off for two semifinals. The two semifinal winners play in the final.

FIFA also imposed a seeding constraint at the time of the draw: the four top-ranked teams (Spain, Argentina, France, England) were placed in groups whose paths through the bracket cannot intersect before the semifinals. Spain and France share the upper half of the bracket and can meet only in a semifinal; Argentina and England share the lower half. None of these four can meet any of the others before the semifinal stage. This constraint matters because it protects the top four teams' path probabilities at the expense of the next tier, a structural feature we return to in Section 7.

5 How Do We Compare Formats?

To separate the effect of the format change from the effect of FIFA's seeding choices, we run three independent Monte Carlo experiments and compare their results pairwise. In each case, we generate $N = 10^5$ trials of the full tournament bracket starting from the group stage onward. This gives a standard error on champion probabilities below 0.16 percentage points near the 50 percent level and below 0.05 percentage points near the 5 percent level.

Experiment 1: The actual 2026 tournament (48-actual). The forty-eight teams sit in their actual Group A through L positions as drawn on December 5, 2025. Each trial simulates the full tournament from the group stage onward, including the bipartite matching that resolves third-place qualifiers into Annex C bracket positions.

Experiment 2: The 48-team format with Elo-based seeding (48-EloSeed). The forty-eight teams are placed in twelve groups of four, but the seeding rule is modified. Pot 1 contains the three hosts plus the top nine teams by Elo rating (rather than the top nine by FIFA ranking). The remaining pots draw teams in descending Elo order, and groups are formed by drawing one team from each pot subject to the standard confederation constraints (no more than two UEFA teams per group, no more than one team from any other confederation). Each trial generates a fresh random draw before simulating the tournament. This experiment isolates the format effect from the seeding effect.

Experiment 3: A counterfactual 32-team tournament (32-team). The top thirty-two teams by Elo from the same forty-eight-team pool are placed in eight groups of four. Pot 1 contains the top eight by Elo; the remaining teams are randomly assigned to Pots 2, 3, and 4 by descending Elo and drawn into groups. The bracket follows the standard structure used at the 2014, 2018, and 2022 World Cups.

The two pairwise differences between these scenarios isolate two distinct effects:

$$\underbrace{P_A(t) - P_C(t)}_{\text{net change}} = \underbrace{P_B(t) - P_C(t)}_{\text{format effect}} + \underbrace{P_A(t) - P_B(t)}_{\text{seeding effect}}, \tag{4}$$

where P_A, P_B, and P_C are the championship probabilities for team t under Experiments 1, 2, and 3 respectively. The format effect is the difference that arises when seeding is held fixed at the cleaner Elo-based version but the field expands from 32 to 48. The seeding effect is the difference between using FIFA's ranking and using Elo for Pot 1, with the format held fixed at 48 teams. Their sum recovers the net change between the actual 2026 tournament and the 32-team counterfactual. Figure 4 shows the design schematically.

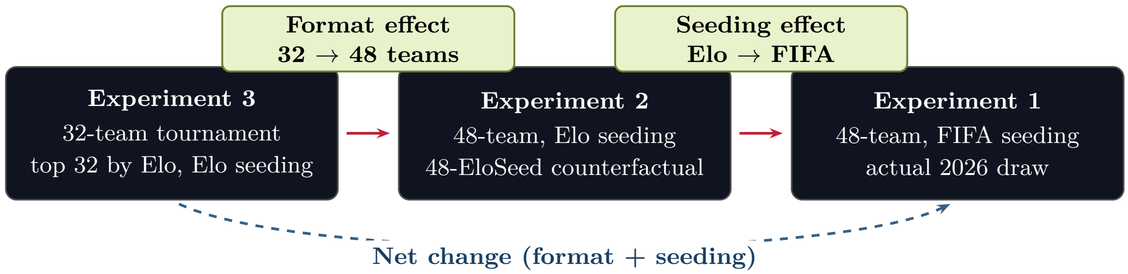

Figure 4: The three-experiment design. The pairwise difference between Experiments 3 and 2 isolates the effect of expanding from 32 to 48 teams while holding the seeding methodology fixed at Elo-based (the format effect). The pairwise difference between Experiments 2 and 1 isolates the effect of switching seeding from Elo to FIFA's own ranking while holding the format fixed at 48 teams (the seeding effect). Their sum recovers the net change between the 32-team counterfactual and the actual 2026 tournament, as in Eq. (4).

6 What Did the Simulations Find?

6.1 The Favorite Barely Notices

Spain wins the actual 2026 tournament in 21.8 ± 0.1 percent of trials. Under the 48-team Elo-seeded counterfactual (48-EloSeed), Spain's championship probability is 22.5 percent. Under the 32-team counterfactual, it is 21.8 percent. To within the standard error of the simulation, all three numbers agree.

This is inconsistent with the popular reading of the format change, which holds that more rounds in the knockout bracket should dilute the favorite's championship probability through greater variance. The simulation indicates the opposite, or rather that the dilution is not large enough to be detected against statistical noise at our sample size.

The reason is that the 48-team format has two competing effects on the favorite. On one hand, it adds an extra knockout round at the start of the bracket. On the other hand, the extra sixteen teams include many of the weakest sides in the tournament, which makes both the group stage and the initial knockout round easier. The two effects largely cancel.

The aggregate dispersion of the championship distribution is therefore only modestly different across formats. The effective number of plausible champions, defined as $\exp(H)$ where H is the Shannon entropy of the champion distribution, rises from 14.3 in the 32-team format to 15.5 in the 48-team format: an increase of 8.7 percent. The probability that the champion is one of the top five teams by Elo falls from 61.3 to 60.4 percent. The probability that the champion is one of the top ten falls from 83.2 to 79.4 percent. These are real changes, and they sit well within the range of normal year-to-year tournament variation.

6.2 The Second Tier Pays the Bill

The action is in the second tier. Figure 5 shows the per-team decomposition of championship-probability change for the top sixteen teams by Elo. The pattern is sharp and consistent. Four teams stand out as the big losers:

- Colombia takes the biggest hit, losing 1.6 percentage points: from 7.1% in the 32-team format to 5.5% in the actual 2026 tournament.
- Portugal loses 1.4 percentage points: 5.8% → 4.5%.
- Brazil loses 1.2 percentage points: 5.9% → 4.7%.

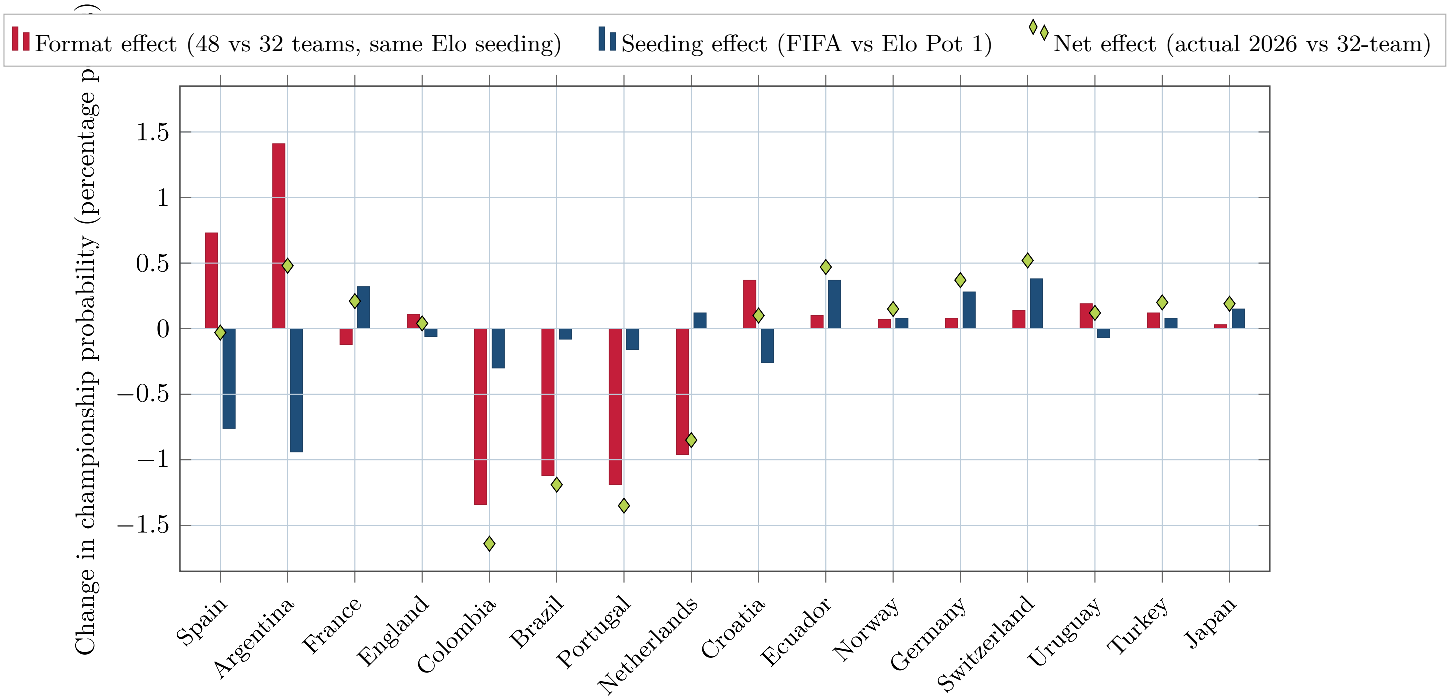

Figure 5: Per-team decomposition of championship-probability change for the top sixteen teams by World Football Elo rating, sorted left-to-right by Elo. Red bars show the effect of expanding from 32 to 48 teams while holding seeding methodology fixed (Pot 1 set to top 9 by Elo plus 3 hosts in both formats). Blue bars show the effect of using FIFA's official world ranking instead of Elo to determine Pot 1, holding the 48-team format fixed. Green diamonds show the net effect, equal to the sum of the two bars. Among the four teams ranked fifth through eighth by Elo (Colombia, Brazil, Portugal, Netherlands), the format itself accounts for the bulk of the loss, while the seeding choice plays only a secondary role. Estimates from 10^5 Monte Carlo simulations per scenario; standard error approximately 0.05 percentage points at the 5 percent level.

- The Netherlands loses 0.9 percentage points: 4.8% → 3.9%.

The same four teams form a tight cluster in Elo ranking: they hold positions 5, 6, 7, and 8 on the published list. Every team ranked above them and every team ranked ninth or lower below them shows either a small positive change or essentially zero change.

The decomposition in Eq. (4) tells us where this loss comes from. For Colombia, the total −1.6 percentage points breaks into a −1.34 point format effect (the change from 32-team to 48-team with Elo-based seeding) and a −0.30 point seeding effect (the change from Elo-based seeding to the actual FIFA-based seeding). For Brazil, Portugal, and the Netherlands, the format effect dominates by an even larger margin. Across these four teams, the format expansion alone accounts for roughly eighty percent of the loss.

This is surprising because the public debate around the 2026 draw revolved around FIFA's decision to use its own world ranking when allocating teams into pots. According to Elo, Colombia was ranked fifth; in the FIFA ranking, it sat thirteenth. By placing Colombia in Pot 2, FIFA handed them a tougher group-stage draw, and it would be natural to expect that this is where Colombia's loss comes from. The simulation indicates otherwise. The format expansion itself, holding the seeding constant, costs Colombia and the others most of their championship probability.

Table 2: Per-round conditional win probabilities estimated from 5×10^4 Monte Carlo simulations per format. The columns are q (probability of advancing from the group stage), and p_k for the five knockout rounds in order (the 32-team format has no p_{R32}). The final column shows the implied championship probability $P_t = q_t \prod_k p_k$.

Team	Format	q	p_{R32}	p_{R16}	p_{QF}	p_{SF}	p_F	P_t
Spain	48-team	0.996	0.765	0.734	0.794	0.725	0.682	21.94%
	32-team	0.923	—	0.726	0.678	0.674	0.720	22.01%
Argentina	48-team	0.989	0.673	0.769	0.700	0.666	0.603	14.38%
	32-team	0.883	—	0.650	0.574	0.624	0.668	13.70%
France	48-team	0.948	0.738	0.686	0.675	0.564	0.567	10.36%
	32-team	0.840	—	0.650	0.633	0.471	0.630	10.24%
England	48-team	0.968	0.686	0.665	0.621	0.574	0.546	8.58%
	32-team	0.812	—	0.614	0.600	0.454	0.600	8.15%
Colombia	48-team	0.930	0.640	0.592	0.568	0.549	0.490	5.39%
	32-team	0.766	—	0.611	0.612	0.588	0.431	7.26%
Brazil	48-team	0.963	0.621	0.605	0.560	0.492	0.482	4.80%
	32-team	0.738	—	0.582	0.584	0.560	0.417	5.86%
Portugal	48-team	0.913	0.616	0.562	0.543	0.538	0.482	4.45%
	32-team	0.733	—	0.596	0.595	0.547	0.426	6.06%
Netherlands	48-team	0.910	0.589	0.637	0.532	0.457	0.468	3.90%
	32-team	0.716	—	0.570	0.571	0.524	0.403	4.92%

7 Why Does the Second Tier Pay?

Structural intuition emerges most clearly when we decompose each team's championship probability into per-round conditional win probabilities. Writing P_t for the championship probability of team t, we have

$$P_t \; = \; q_t \prod_{k=1}^{n} p_k(t), \tag{5}$$

where q_t is the probability that t advances out of the group stage, $p_k(t)$ is the probability that t wins round k of the knockout bracket conditional on having reached round k, and n is the number of knockout rounds: $n = 4$ in the 32-team format (Round of 16, quarterfinal, semifinal, final) and $n = 5$ in the 48-team format (the same four rounds plus an additional Round of 32 at the start).

To estimate each $p_k(t)$, we ran 5×10^4 tournament simulations per format and counted how often each team appeared in each round, taking ratios of successive counts. The result appears in Table 2 for ten representative teams.

Taking logarithms of Eq. (5) converts the product into a sum, which is easier to manipulate. The change in log championship probability between the two formats decomposes naturally into three terms:

$$\Delta \log P_t \; = \; \underbrace{\log p_{R32}(t)}_{\text{cost of extra round}} \; + \; \underbrace{\sum_{k=R16}^{F} \log \frac{p_k^{(48)}(t)}{p_k^{(32)}(t)}}_{\text{opponent-quality changes}} \; + \; \underbrace{\log \frac{q_t^{(48)}}{q_t^{(32)}}}_{\text{group-stage change}} \; . \tag{6}$$

The first term is the unavoidable cost of the new Round of 32, since this round simply does not exist in the 32-team format. The second term captures how the four shared rounds (Round of 16 through final) change between formats: it is positive when 48-team opponents in those rounds are weaker on average than the corresponding 32-team opponents, and negative when they are stronger. The third

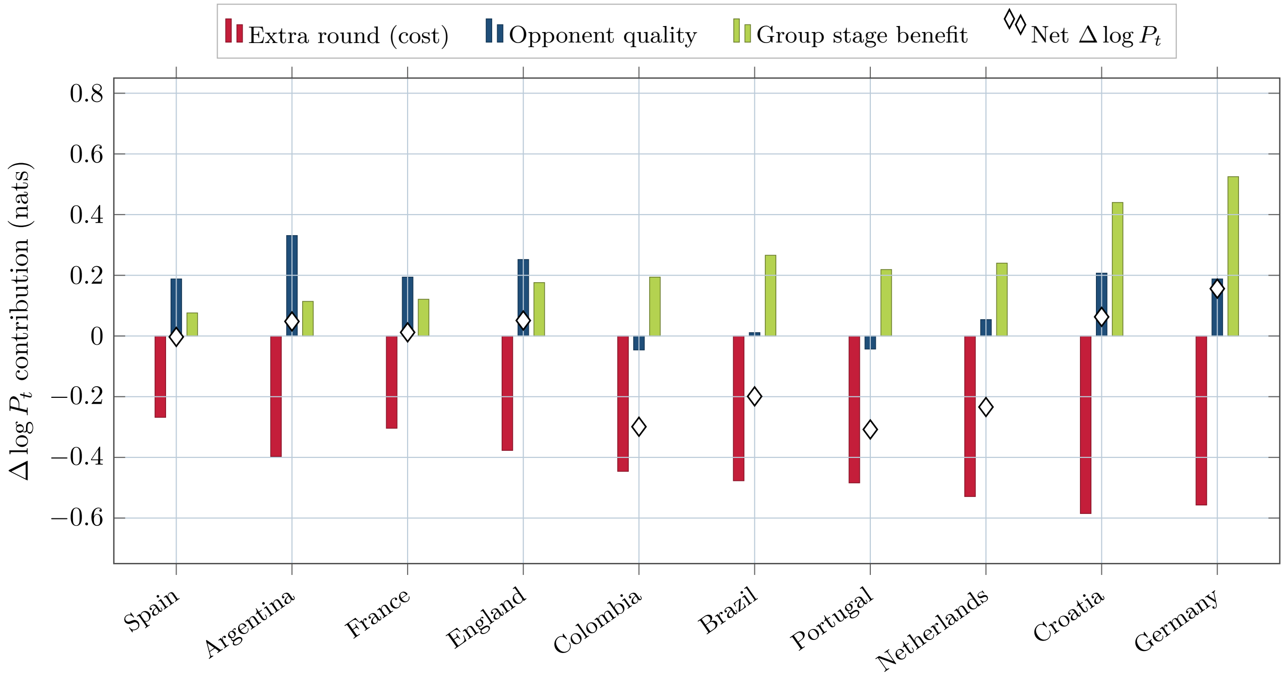

Figure 6: The three-term decomposition of $\Delta \log P_t$ between the 32-team and 48-team formats, evaluated team by team using the per-round probabilities of Table 2. The extra-round cost (red) is universal but worse for weaker teams. The opponent-quality benefit (blue) is large and positive for the top four, near zero or slightly negative for teams 5 through 8, and positive again for the long shots. The group-stage benefit (green) is positive for every team and largest for the lower-ranked teams. The net change (white diamond) is essentially zero for the top four, sharply negative for the four big losers, and small positive for the long shots. The structural diagnosis is in the asymmetric opponent-quality column.

term captures how group-stage advancement is easier in the 48-team format, where three of every four teams advance instead of two of every four.

Computing these terms for each team yields the diagnosis summarized in Table 3 and visualized in Figure 6.

Three patterns visible in Table 3 together explain why the second tier pays.

The cost of the extra round depends on team strength. Spain pays −0.268 nats, equivalent to a factor of 0.77 multiplied onto its championship probability. Colombia pays −0.446 nats, equivalent to a factor of 0.64. The logic is straightforward: Spain wins its first-round knockout match 76.5 percent of the time, while Colombia wins its first-round match 64.0 percent of the time. Stronger teams pay less for the extra round, but every team pays something.

The opponent-quality benefit is highly uneven. For Spain and Argentina, the opponent-quality term is large and positive, between +0.19 and +0.33 nats. Their later-round opponents in the 48-team format are substantially weaker than the corresponding opponents would have been in a 32-team format. For Colombia and Portugal, the same term is essentially zero or slightly negative. Their later-round opponents are roughly equally difficult across formats. The reason is the seeding constraint described in Section 4: the four top teams (Spain, Argentina, France, England) follow protected paths through the easier regions of the bracket, while teams in positions 5 through 8 receive no such protection and find themselves in random bracket positions that, in the actual 2026 draw, place them in the same half of the bracket as one of the top four.

The group-stage benefit is large for every team, but it cannot offset the other two. Every team gains in q_t when moving from a 32-team to a 48-team format, because three of every four teams in a group

Table 3: Decomposition of the change in $\log P_t$ from the 32-team to the 48-team format, evaluated using the per-round probabilities in Table 2. Column "Extra" is the cost of the new Round of 32; column "Opp" is the net change from opponent quality in the shared rounds (Round of 16 through final); column "Group" is the easier group-stage advancement. The sum recovers the total $\Delta \log P_t$ to numerical precision.

Team	$\Delta \log P_t$	Extra	Opp	Group
Spain	−0.003	−0.268	+0.188	+0.076
Argentina	+0.048	−0.397	+0.331	+0.114
France	+0.012	−0.304	+0.194	+0.121
England	+0.051	−0.377	+0.252	+0.176
Colombia	−0.299	−0.446	−0.046	+0.194
Brazil	−0.199	−0.477	+0.011	+0.266
Portugal	−0.308	−0.484	−0.043	+0.219
Netherlands	−0.234	−0.529	+0.054	+0.240
Croatia	+0.063	−0.585	+0.207	+0.440
Germany	+0.156	−0.557	+0.188	+0.525

advance rather than two of every four. The benefit is largest for the lower-ranked Pot 1 teams (Croatia, Germany) and the medium-ranked teams in general. For all four big losers (Colombia, Brazil, Portugal, the Netherlands), the group-stage term lies between +0.19 and +0.27 nats, but the extra-round cost more than wipes it out.

Putting the three terms together: for the favorite, $-0.27 + 0.19 + 0.08 = 0.00$, a wash. For Colombia, $-0.45 - 0.05 + 0.19 = -0.31$ nats, equivalent to a championship probability ratio of 0.73 between the two formats, exactly what the headline numbers show. The mechanism is mechanical. The same seeding rule that protects the top four also denies the next tier of teams (positions 5 through 8) the benefit of opponent-quality improvement in the rounds beyond the Round of 32, leaving them exposed to the full extra-round cost.

The long shots, ranked ninth or lower, escape the loss for a different reason. Their group-stage benefit is the largest of any tier, because they would frequently fail to advance from a 32-team group but reliably grab one of the third-place qualification slots in a 48-team group. For Croatia, the group-stage term alone adds +0.44 nats to its championship probability, which dominates everything else and produces a small net gain.

8 How Robust Is the Result?

The effect on the second tier remains robust to reasonable variation of the two free parameters in our match model. The first is the home-field-advantage bonus, set to 75 Elo points in the baseline; the second is the match-model scale s, set to 250 in the baseline. Table 4 presents the change in championship probability for the eight top teams across five scenarios: the baseline (HFA bonus 75, scale $s = 250$), the HFA bonus reset to 0 and 100, and the scale parameter reset to 200 and 300.

The sign of the format effect is the same in all five scenarios for all four big losers. The magnitude varies, with Colombia losing between 1.33 and 2.02 percentage points and the Netherlands losing between 0.71 and 1.05. The aggregate pattern (top four break-even or slightly positive, top five through eight lose approximately one percentage point, top nine and below marginally positive) holds across the full parameter range.

Table 4: Sensitivity of the format effect $\Delta = P_t^{(48-\text{actual})} - P_t^{(32-\text{team})}$ in percentage points to the home-field-advantage bonus and to the match-model scale s. Each scenario uses $N = 3 \times 10^4$ trials, giving standard errors of roughly 0.15 percentage points. The four big losers (Colombia, Brazil, Portugal, the Netherlands) lose between 0.7 and 2.0 percentage points in every scenario.

Team	Base	HFA=0	HFA=100	$s = 300$	$s = 200$
Spain	−0.23	+0.18	−0.49	−0.17	+0.88
Argentina	+0.67	+0.67	+0.61	+0.60	+1.46
France	+0.47	+0.25	−0.07	−0.18	+0.53
England	+0.20	+0.12	+0.14	−0.41	+0.37
Colombia	−1.59	−2.02	−1.55	−1.33	−2.00
Brazil	−1.36	−1.09	−1.37	−0.94	−1.19
Portugal	−1.70	−1.60	−1.33	−1.54	−1.92
Netherlands	−1.05	−0.80	−0.71	−0.82	−0.95

Figure 7: Three numbers summarize the headline findings: the favorite is indifferent to the format, the second-tier loss is a clean one percentage point per team, and the bulk of that loss comes from the extra knockout round rather than from FIFA's seeding choices.

9 Discussion and Conclusion

The 2026 World Cup expansion produces a much smaller effect than its public discussion suggests. The dispersion of the championship distribution barely increases: a 48-team field with one extra knockout round produces only 8.7 percent more effective plausible champions than a 32-team alternative drawn from the same Elo pool. The favorite's probability remains essentially unchanged, near 22 percent in either case. The "more chaos" interpretation of the new format is absent in our simulations at any sample size we have run.

Instead, the cost of the expansion is concentrated on a specific subset of teams: the second tier comprising positions 5 through 8 (Colombia, Brazil, Portugal, the Netherlands). Each loses approximately one percentage point of championship probability. The cause is structural. FIFA's decision to seed the draw by its own world ranking rather than Elo accounts for only about twenty percent of the effect; the remaining eighty percent comes from the combination of the extra round and the seeding restriction that protects the top four. Teams in positions 5 through 8 inherit a single-elimination path that lacks the opponent-quality benefits granted to the top four and faces the full cost of the extra round.

Two extensions seem natural. The first is to repeat the calibration using a Bayesian posterior over Elo ratings rather than point estimates, since several team ratings outside the top twenty carry nontrivial uncertainty. The second is to compare our Elo-based predictions with the market consensus from prediction-market platforms. As of submission, the model assigns Spain a 22 percent championship probability against a market consensus near 17 percent, and assigns France an 11 percent probability against a market consensus also near 17 percent. The disagreement is consistent with the markets incorporating information that Elo does not see, including team form, injuries, and tournament-specific tactical considerations. The format-effect comparison reported in this paper is robust to such adjustments, because it is apples-to-apples within a fixed strength model.

The headline finding is striking for its implications about the politics of the expansion. Tournament organizers and football commentators have argued that the new format democratizes the championship, creating a meaningful path to the final for more teams. Our analysis finds no support for that claim. The top of the distribution looks essentially unchanged. The long shots gain only a small share. And the cost is borne overwhelmingly by one tier of genuine contenders, whose championship probabilities each fall by roughly fifteen percent in relative terms. Whether this redistribution is desirable is a policy question for FIFA. Quantifying it is the question this paper answers.

A Full Elo Table

Table 5: World Football Elo ratings used in the simulation, sorted by rating. Teams ranked 1 through 20 are real values published by `eloratings.net` on January 19, 2026 (excluding teams not qualified for the tournament, namely Italy and Denmark at original ranks 18 and 19). Teams ranked 21 and lower are real values where available and estimates calibrated against published group-average values from FootRankings (April 2026) otherwise. Numbers in the Pot column denote the FIFA-ranking pot in which each team was placed for the December 2025 draw. Host countries are marked (H).

Top 24				Bottom 24			
Rank	Team	Elo	Pot	Rank	Team	Elo	Pot
1	Spain	2171	1	25	Iran	1750	3
2	Argentina	2113	1	26	Sweden	1740	4
3	France	2063	1	27	Paraguay	1730	3
4	England	2042	1	28	Algeria	1728	3
5	Colombia	1998	2	29	Scotland	1720	3
6	Brazil	1979	1	30	Egypt	1720	3
7	Portugal	1976	1	31	Australia	1720	3
8	Netherlands	1959	1	32	Bosnia	1700	4
9	Croatia	1933	2	33	DR Congo	1700	4
10	Ecuador	1933	2	34	Czechia	1690	3
11	Norway	1922	3	35	Ghana	1680	4
12	Germany	1910	1	36	Tunisia	1670	3
13	Switzerland	1897	2	37	South Africa	1670	3
14	Uruguay	1890	2	38	Uzbekistan	1660	3
15	Turkey	1880	4	39	Canada (H)	1660	1
16	Japan	1879	2	40	Iraq	1620	4
17	Senegal	1869	2	41	Saudi Arabia	1610	3
18	Morocco	1850	2	42	Panama	1600	4
19	Belgium	1849	1	43	Qatar	1580	3
20	Austria	1820	3	44	Cape Verde	1550	4
21	USA (H)	1810	1	45	Jordan	1540	4
22	Ivory Coast	1780	3	46	New Zealand	1500	4
23	Mexico (H)	1770	1	47	Haiti	1500	4
24	South Korea	1750	2	48	Curacao	1450	4

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