

The Price of a Bet: Measured Bookmaker Margins Across 52 Bookmakers, 22 Leagues and Player-Prop Markets

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ABSTRACT. The bookmaker's margin (overround) is the price of a fixed-odds bet, yet systematic public measurements of it are scarce, and none existed for player-proposition markets. Using 4.27 million odds observations recorded between 29 June and 2 August 2026, I measure margins on 2.7 million cleaned markets across 52 online bookmakers, 22 competitions and three market types. Four regularities emerge. First, a market-type price ladder: two-way head-to-head margins average 4.77%, spreads 4.90%, totals 5.45%, three-way (soccer-style) match betting 7.67%, and player props 7.93% — to my knowledge the first public measurement of prop-market margins. Second, margins carry a term structure, peaking one to three days before the event (5.23%) and compressing to 4.71% in the final six hours. Third, licensing regions price differently: Australian-licensed operators average 5.25% against 4.72% for US-licensed and 4.55% for offshore/international books. Fourth, operator dispersion is large — mean two-way margins range from 3.16% to 5.78% across books, an 83% difference in the cost of identical bets. Margin compounding in multi-leg parlays reconciles these ~5% quoted prices with the ~10% realized hold reported by US state regulators: a five-leg parlay of average-margin legs carries a built-in hold of 20.8%. All aggregate data are openly published (CC BY 4.0).

KEYWORDS: sports betting; bookmaker margin; overround; vigorish; market microstructure; player props; gambling economics. **JEL:** L83, G14, D40.

1. Introduction

Fixed-odds bookmakers do not charge an explicit fee; their price is embedded in the odds as the amount by which a market's implied probabilities sum beyond one — the margin, overround or vigorish. The margin determines the expected loss of an uninformed bettor and is therefore the central consumer price in a market where Australians alone lose roughly A\$31.5 billion per year (QGSO, 2024 edition). Despite this, systematic public measurement is thin: industry trackers report *realized hold* (revenue over handle) from regulator filings, but realized hold conflates pricing with product mix, and the quoted price itself — particularly for the player-proposition markets that modern advertising promotes — has not, to my knowledge, been publicly measured at scale. This paper provides that measurement and documents four empirical regularities.

2. Data and method

Between 29 June and 2 August 2026 (35 days), 4.27 million odds observations were recorded from the publicly displayed prices of 52 online bookmakers across 22 competitions in 15 sports, licensed from a commercial odds aggregator. For every pre-match market observation, all priced outcomes were converted to implied probabilities (1/decimal price) and summed; the excess over unity is the margin. Cleaning excludes in-play observations, markets without a complete outcome set, implausible margins indicating suspended or near-settled prices (<0% or >20% two-way; >35% three-way), and betting exchanges, whose commission-based pricing is not comparable. This yields 2,002,681 main-market observations and 699,733 two-sided player-prop observations. Prop margins are computed only where both sides of the same player-line were quoted simultaneously by the same operator. Two-way and three-way markets are analysed separately throughout.

3. Results

3.1 The market-type price ladder

Table 1. Mean margin by market type (market-weighted).

Market type	Markets	Mean margin
Head-to-head, two-way	454,720	4.77%
Spread / handicap	481,584	4.90%
Totals (over/under)	607,348	5.45%
Head-to-head, three-way (soccer)	459,029	7.67%
Player props (two-sided)	699,733	7.93%

The ladder rises monotonically with distance from the headline market. Player props — the market family most heavily promoted in contemporary advertising and the dominant component of same-game parlays — carry 66% more margin than head-to-head bets. Within props, families range from 6.68% (batter doubles) to 8.25% (batter RBIs).

3.2 Term structure

Two-way head-to-head margins are not constant in event time: they average 4.68% more than seven days out, rise to a peak of 5.23% one to three days before the start, and compress to 4.71% inside the final six hours, when liquidity and price competition are greatest. Bettors who transact early in the final week pay measurably more than those who transact near the start.

3.3 Licensing region

Aggregating operators by licensing region, Australian-licensed books average 5.25%, US-licensed books 4.72%, and offshore/international books 4.55% on identical two-way market types — Australian bettors pay roughly 11% more margin than US bettors for equivalent bets. Operator-level dispersion is wider still: mean two-way margins span 3.16% to 5.78% across the 52 books (operator-level statistics are published in the companion web study).

3.4 Reconciling quoted margins with realized hold

US state regulators report realized hold near 10% and rising (industry aggregations of state commission filings, 2025–26). The gap to the ~5% quoted price is product mix. An n -leg parlay of independent legs each carrying margin m has built-in hold $1 - (1+m)^{-n}$: at the measured 4.77%, two legs yield 8.9%, three 13.0%, five 20.8% and seven 27.8% — before the higher prop-leg margins and correlation repricing typical of same-game parlays, which raise it further. Realized hold is thus a weighted average over product mix, and its secular rise is consistent with the documented growth of parlay betting rather than with changes in headline prices.

4. Limitations

The window is 35 days in one part of the sporting calendar; coverage per operator varies by competition; head-to-head is the tightest product bookmakers offer, so the ladder's base is a floor on the cost of betting generally. De-vigging and margin measurement treat displayed prices as simultaneously available, abstracting from bet-size limits and account restrictions. The collection continues; quarterly updates are planned as the Bet Better Margin Index.

5. Data availability

Aggregate panels (day $\times$ league $\times$ region $\times$ market type $\times$ time-to-start, and the prop-market panel) are published under CC BY 4.0: Zenodo doi:10.5281/zenodo.21755380 (mirrors: OSF doi:10.17605/OSF.IO/Q8XHF; B2SHARE doi:10.23728/b2share.8rwvn-zz892; Harvard Dataverse doi:10.7910/DVN/DPPU80). No individual odds, prices or operator-level observations are redistributed. Companion analyses: betbetter.world/studies/bookmaker-margins and betbetter.world/studies/price-vs-hold. A companion dataset on market calibration is published separately (Zenodo doi:10.5281/zenodo.21764674).

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Disclosure: the author operates Bet Better, a sports analytics service; the odds data underlying this study is licensed from a commercial provider whose terms permit publication of derived analysis but not redistribution of prices; all published data are irreversible aggregates. This paper is descriptive and is not betting advice. 18+; most people lose money gambling.