

Personal Finance Tools

Technical Guide

Prepared by

Kadharmoideen Fadurudeen



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■ Rent vs. Buy: The Math Nobody Shows You

Rent vs. Buy: The Math Nobody Shows You

Renting isn't 'throwing money away' and buying isn't automatically building wealth. Here's the actual math — opportunity cost, appreciation, and the breakeven year — behind the decision.

Every few months someone tells me renting is "throwing money away," usually right before telling me buying is the smartest financial decision they've ever made. Both statements are doing the same thing: skipping the math. I've spent enough time modeling this — including building the [rent vs. buy calculator](#) on this site — to know the honest answer is "it depends on inputs you can actually name." This is the article that names them.



The Frame Everyone Gets Wrong

"Rent is money you never see again" treats buying as if it has no ongoing costs, and it treats renting as if the money saved by not buying just evaporates. Neither is true. The real question isn't which option costs less per month — it's which option leaves you with more net worth on a specific future date, after accounting for what happens to every dollar in both scenarios.

⚖️ You're Not Comparing Monthly Payments

The instinct is to compare rent to a mortgage payment and call it a day. That comparison is missing most of the picture on both sides.

On the buying side, your actual monthly outlay is:

- Principal and interest on the mortgage

- Property tax, which in the U.S. runs roughly 0.5%–2.5% of home value per year depending on where you live
- Homeowners insurance
- Maintenance — a reasonable rule of thumb is about 1% of home value per year, and it doesn't happen in neat monthly installments, it happens as a roof or a water heater
- HOA dues, if applicable

And that's before you even get to the two numbers people forget entirely: the cash you hand over on day one, and what happens to that cash if you never buy at all.

The Opportunity Cost Nobody Puts on a Sticky Note

A down payment plus closing costs on a typical home is real money — often \$60,000, \$90,000, sometimes far more. The moment you decide to buy, that money stops being available to do anything else. It's not "spent" in the sense of being gone, but it is committed, illiquid, and no longer compounding in an index fund.

The only honest way to compare renting and buying is to ask: what if the renter took that exact same amount of cash — the down payment and the closing costs — and invested it on day one instead? That invested balance grows for the entire time horizon you're comparing, completely independent of what rent or home prices do. This is the single biggest thing a "rent vs. buy" gut check leaves out, and it's often the deciding factor in the math.

The Monthly Difference Has to Go Somewhere Too

Here's the part that makes this a genuinely fair comparison instead of a biased one: in any given month, either owning or renting is going to be cheaper. If owning costs more that month, the renter is effectively "saving" the difference by not paying it — and for the comparison to be apples-to-apples, that saved difference needs to go somewhere too. The only consistent assumption is that it gets invested alongside the initial down-payment money, growing at the same assumed rate of return.

Some months this cash-flow difference favors the renter, some months (especially once a fixed-rate mortgage stays flat while rent keeps climbing) it can flip. Rent

typically rises every year — historically averaging somewhere in the 2%–4% range annually, though local markets vary wildly — while a fixed-rate mortgage's principal and interest payment never changes. Property tax, insurance, and maintenance still drift upward for the owner, but the biggest line item on the buying side is frozen the day you sign.

The Two Investment Accounts

Picture the renter's side of the ledger as a single brokerage account. It opens with the money not spent on a down payment and closing costs. Every month afterward, it either receives a deposit (when renting is cheaper that month) or, in the calculator's model, absorbs the difference either way — the point is that every dollar not spent on housing is assumed to be invested, not spent elsewhere or left in cash. That account compounds for the entire holding period at whatever return rate you assume for a diversified portfolio.

The Breakeven Year Is a Race, Not a Fixed Number

At whatever future date you pick to compare, the buyer's side of the ledger is home equity: current home value, minus whatever's still owed on the mortgage, minus what it would realistically cost to sell (agent commissions and closing costs typically eat 6%–8% of the sale price — money that's easy to forget exists until you're the one paying it). The renter's side is simply the balance of that invested account.

The "breakeven year" — the first year the buyer's home equity overtakes the renter's invested net worth, or vice versa — isn't a fixed property of owning a home. It's the outcome of a race between two growth rates that have nothing to do with each other:

- **Home appreciation, net of selling costs**, compounding on the buyer's side
- **Investment returns** compounding on the renter's side, starting from a larger initial balance (the down payment that never left the market)

If you assume home prices appreciate 3.5% a year and a diversified portfolio returns 7%, the math tilts toward renting-and-investing over a long horizon, almost regardless of rent — because compounding at a higher rate on a head-start balance is hard to catch up to. Flip those two assumptions, or shorten the time horizon so the upfront transaction costs of buying (closing costs going in, selling costs coming out) don't have time to amortize, and buying can pull ahead well before either investment return dominates.

This is exactly why anyone who tells you "buying always wins after N years" or "renting always wins" is quietly assuming a specific appreciation rate and a specific investment return rate, usually without saying so.

The Inputs That Actually Move the Answer

Not every number in this model matters equally. From building and stress-testing the calculator, these are the ones that actually swing which side wins:

- **Investment return assumption vs. appreciation assumption.** This is the single biggest lever. A one or two point gap between these, compounded over a decade, is larger than most people expect.
- **How long you stay.** Upfront closing costs and eventual selling costs are fixed hits that only get diluted over a longer holding period. Buying and selling within 2–3 years is one of the most reliable ways to lose money regardless of what home prices do.
- **Mortgage rate.** It changes the split between interest (a pure cost) and principal (equity you're building) in every payment, and higher rates push more of the early payments toward interest.
- **Rent increase rate.** Rent that climbs faster than inflation erodes the renter's cash-flow advantage year over year, sometimes flipping which side is cheaper on a monthly basis by year five or six.
- **Local property tax rate.** It's a recurring cost that's easy to underestimate when you're focused on the mortgage payment, and it varies by more than 4x between low-tax and high-tax states.

Run Your Own Numbers

None of this means the decision is unknowable — it means it's specific to you, and the variables that matter are all things you can actually put a number on: your local property tax rate, the rate you can realistically get on a mortgage right now, how long you actually expect to stay, and a reasonable long-run return assumption for whatever you'd otherwise invest in.



Try It With Your Numbers

I built the [rent vs. buy calculator](#) to run exactly this model — down payment, mortgage terms, property tax, maintenance, appreciation, rent increases, and your assumed investment return — and show you the year-by-year breakeven point instead of a single yes/no answer. It's free, runs entirely in your browser, and takes about a minute to plug in your real numbers.

There's No Universal Answer

I'm not going to tell you renting or buying is correct, because it genuinely isn't a fixed answer — it's a function of inputs that are different for every person, every city, and every point in the interest rate cycle. What I will say is that once you've seen the actual mechanics — the opportunity cost of the down payment, the cash-flow difference compounding on the renter's side, and the race between appreciation and investment returns — you're no longer choosing based on a slogan. You're choosing based on numbers you picked on purpose, which is the only version of this decision worth making.