Rental Property Investing Math

Idea In Short

Calculate return on equity before buying any rental property. Interest rates, rent estimates, and repair costs determine whether a deal creates wealth or destroys it. In a high-rate environment, the math that worked at four percent fails at seven and a half.

The Economics of Rental Properties

Rental properties offer a path to financial independence, but only when the math works. The following analysis examines four different properties in the Atlanta area, exploring the advantages and disadvantages of each. These examples reveal what a good Return on Equity [ROE] looks like in a mid-size United States city. All dollar figures assume you manage the properties yourself. 1

The original analysis was written in 2018 when the federal funds rate sat at 1.5 to 2.25 percent. The 2023 update reflects a federal funds rate of 5.30 percent. That massive increase in marginal interest rates changes the mathematics dramatically. What looked like a solid investment at four percent becomes marginal or unprofitable at seven and a half percent.

Property Four: University Area Renovation

This in-town property sits close to a university in what qualifies as a B-plus class area. Although built in 1956, the interior has been completely renovated and will rent easily. The asking price is $338,000 for 2,600 square feet. The property appeared to offer a 12 percent ROE with potential upside, but feedback revealed concerns.

The location on a major road creates traffic problems. The main road becomes a parking lot during morning and evening commutes. Students prefer apartments on bus routes, and the schools rate as mediocre. A friend cautioned that getting in and out of the driveway is tricky

because it drops five to six feet quickly from the road.

The modern kitchen features recessed lighting, stainless steel appliances, and granite countertops. Three bedrooms upstairs measure roughly 11 by 11 feet, which is common for the era. A finished basement downstairs adds significant living space with a large living area, bedroom, bathroom, and laundry area. The deck runs the full length of the house and could entertain a dozen people.

The numbers tell a different story. With a purchase price of $350,000, a $90,000 down payment, and a $260,000 loan at four percent, the monthly payment equals $2,200. Rent at $2,200 produces zero monthly cash flow. The yearly return comes entirely from $800 monthly principal paydown, yielding an ROE of 9.7 percent. 2

In November 2023, a 15-year mortgage for investors with good credit exceeds 7.5 percent. The monthly payment jumps above $2,700, creating a $500 monthly difference absorbed entirely by interest. The math that barely worked at four percent definitely fails at 7.5 percent. Separately, that same property is now worth about $500,000 in 2023, which changes the equation entirely in hindsight.

Property Three: Overpriced and Underwhelming

This house represents what investors should avoid. Listed at $225,000 for four bedrooms and three bathrooms across 3,400 square feet, it met initial criteria for location and low price per square foot. However, visiting the property quickly confirmed that listings hide critical flaws.

The neighborhood contains perhaps 50 to 60 homes with no swim or tennis amenities. Half the neighborhood consists of duplexes with freestanding carports, which is unusual for Georgia. Schools rate as elementary 10, middle 8, and high 7, which is acceptable but not outstanding.

Inside, the house needs extensive work. The kitchen is painted lime green with original 1990s white appliances. The washer and dryer sit in the kitchen, which no tenant wants. The great room has 20-foot ceilings that waste space and are difficult to heat. Carpet needs replacement, walls need painting, and the basement features cheap laminate with water damage.

A minimum of $30,000 to $40,000 in repairs is needed to meet quality expectations. The house fails the ultimate sniff test of whether you would be happy living there. A smaller rental in the same neighborhood rents for $1,500 per month. This house needs to rent at $1,700 to justify the investment, but the upfront fixing costs make it unwise. This is a pass.

Property Two: Solid Value Near Georgia 400

This stucco property in OTP North Atlanta sits one mile from Georgia 400. Built in 1996, it features a nice lawn front and back with excellent proximity to shopping and restaurants. Schools rate as elementary 9, middle 8, and high 8.

Inside, the house has no carpet, with original hardwoods downstairs. The kitchen is functional with granite countertops and stainless steel appliances. Four bedrooms upstairs each measure about 11 by 11 feet with a Jack and Jill bathroom. The major selling feature is the deck and downstairs patio that comfortably seats 10 to 12 people.

The analysis assumes a purchase price of $270,000 with a $70,000 down payment and a $200,000 loan at four percent interest. Estimated rent of $1,900 to $2,000 per month produces $22,000 in gross rents for 11 months. After subtracting $8,000 in interest, $1,000 in insurance, and $2,500 in taxes, the net is $10,500. Divided by the $70,000 investment, this yields a 15 percent ROE with approximately $230 monthly cash flow.

The property earns high marks across area, condition, and ease of renting. Capital appreciation potential rates as C, and rent-raising potential is B. This represents a solid investment at the right price point and interest rate. 3

Property One: Good Bones With a Wildcard Basement

This northern suburb property sits roughly 40 miles north of the airport in a neighborhood of 20 to 30 homes. At 2,800 square feet excluding a large unfinished basement, the asking price of $270,000 comes to $100 per square foot. Schools rate as elementary 10, middle 9, and high 6.

The floor plan is traditional with a dining room, living room, and large open living space connected to the kitchen. One bedroom on the main floor provides flexibility for an elderly parent or a private office. The kitchen features dark cherry cabinets with granite

countertops. The master bathroom exceeds average quality with ample tile and space.

The house has six bedrooms total, which provides options for families with multiple children or people working from home. The downstairs unfinished basement is the wildcard. Only 25 percent complete, it features cedar planks throughout like a mountain cabin, which is peculiar for a suburban basement. The previous owner started building a bar from cedar but left much work unfinished.

The math works as follows. At $270,000 with a $70,000 down payment and a $200,000 loan at four percent, yearly interest is $8,000. Gross rents of $20,900 minus interest, insurance, and taxes of $12,500 leaves $8,400. Divided by $80,000, which includes $10,000 in fixup, the ROE is 10.5 percent annually. This assumes self-management, because property managers charge 8 to 10 percent annually.

Lessons Across Four Properties

These four analyses reveal consistent themes for rental property investors. Always visit the property before committing because listings hide flaws in traffic, layout, and condition. Drive the commute during rush hours to understand what tenants will experience. Stress-test rent estimates conservatively because overestimating rent is a rookie mistake.

Interest rates transform the entire equation. The difference between four percent and 7.5 percent can eliminate all cash flow and turn a 9.7 percent ROE into a money-losing proposition. Property values appreciate over time, but relying on hindsight is not a strategy. The investor who buys at the right price and rate builds wealth through principal paydown, cash flow, and appreciation combined.

- 1How To Analyze Real Estate Investments, University Of San Diego
- 2Rental Property Analysis Tutorial, Tactica RES
- 3How To Analyze A Rental Property, Property Analysis Tools

Summary

Rental property investing rewards those who run the numbers honestly. Interest rates

transform the entire equation, and what worked in 2018 fails in 2023. Visit properties, stress-test rent assumptions, and never buy without a clear path to positive returns.