REIT NAV Models 101: How to Set Them Up, and What Makes Them Tricky

What Cap Rate Would You Like for Your Unconsolidated JV NOI?

*"I've looked at examples of Net Asset Value (NAV) Models online and in various articles, but they seem **too easy.**"*

"You re-value the REIT's Assets and Liabilities, and then subtract Liabilities from Assets. What's so hard about it?"

The Short Answer

- **Yes,** the basic idea behind a NAV Model for REITs is simple – just like anything else in accounting/finance

- **But…** as with a DCF, there are some tricky parts, and it's challenging to come up with reasonable assumptions in some cases

- The NAV Model is mostly about **judgment** – how much is Item X worth? What about Item Y?

- So, we'll start with the basic idea using a **simplified example** and then show you **two more-complex examples** that illustrate why this analysis is more complicated than it seems at first glance

NAV Model: The Basic Idea

- A REIT's Properties are **recorded at historical cost minus accumulated Depreciation**

- But unlike factories/equipment that wear down and need to be replaced, buildings and land **rise** in value over the long term

- So, the book value of Property on the Balance Sheet *dramatically* understates its fair market value

- **Only U.S.-Based REITs:** IFRS-based REITS *do* mark their properties to fair market value, so the NAV Model is far less useful – there might be minor adjustments, but nothing massive in most cases

NAV Model: The Basic Idea

- **First:** Project the forward "Net Operating Income" (operating income from properties) and divide by an appropriate "Cap Rate" or "Yield"

- **Second:** Value the other assets; small premium for Construction, set Goodwill/Intangibles to 0, and the rest should stay about the same

- **Third:** Adjust the Liabilities – main adjustment is to take the fair market value of Debt if interest rates or credit risk have changed

- **Fourth:** Subtract the adjusted Liabilities from the adjusted Assets to calculate Net Asset Value (NAV), and then NAV per Share

Why NAV Models Can Get More Complex

- **Complication #1:** How do you project the forward NOI? Do you need to adjust it for Replacement Reserves or other items?

- **Complication #2:** How do you handle the REIT's Acquisition, Development, Redevelopment, and Disposition activity?

- **Complication #3:** How do you pick the Cap Rate or range of Cap Rates to use?

- **Complication #4:** How do you handle Joint Ventures and the fact that Debt associated with them does not appear directly on the Balance Sheet?

Why NAV Models Can Get More Complex

- **Forward NOI:** Typically, you annualize the most recent quarter's NOI, adjust for non-cash items, and assume a growth rate – or you could create segment-level projections and use them instead

- **Acquisitions, Developments, Dispositions:** Detailed projections, or adjust the MRQ NOI, and reflect the cost in the Assets and Liabilities

- **Cap Rates:** Use brokerage firms like Jones Lang LaSalle (JLL) and their industry data; you could Google much of this information

- **JV Assets/Liabilities:** Must separate out the JV Assets and Liabilities, re-value them, and multiply by the ownership percentage(s)

The AvalonBay [AVB] NAV Model

- **Forward NOI:** We built projections for the 6 established (same-store) segments and then forecast NOI from other activities; deducted Replacement Reserves

- **Acquisitions, Developments, Dispositions:** We projected the NOI from these directly; *excluded* the assets from Construction in Progress!

- **Cap Rates:** We used JLL data for Class-A properties in different geographies as of the time of this valuation

- **JV Assets/Liabilities:** We created a "mini-projection" for the JVs, capped the NOI and multiplied by AVB's ownership, and then adjusted the JV Assets, Debt, and Other Liabilities

The Digital Realty [DLR] NAV Model

- **Forward NOI:** Annualized the most recent quarter's NOI, adjusted for non-cash items, dispositions, and new developments, and assumed a growth rate over the next 12 months

- **Acquisitions, Developments, Dispositions:** Adjusted annualized NOI for these *and* reflected the costs on both the Assets and L&E sides

- **Cap Rates:** Googled for Data Center Cap Rates; seemed to be in the 6.5% – 7.5% range nationwide; Northern VA and CA a bit lower

- **JV Assets/Liabilities:** No separate projections in this case – we just took the company's disclosures at face value and used the numbers in their quarterly report

What's the "Best" Approach?

- **Question:** How much time and energy can you devote to the analysis? How important is it?

- **Question 2:** How much data do you have? Cap Rates by region?

- **Quick Analysis / Not Much Data** → The Digital Realty approach is better because you don't need detailed projections, regional Cap Rates, etc.

- **In-Depth Analysis / More Data** → The AvalonBay approach is better because property values differ significantly by region, even within similar areas like "Coastal U.S."

Recap and Summary

- **Part #1:** The Basic Idea Behind a NAV Model (Park Hotels)

- **Part #2:** Why NAV Models Can Get More Complex

- **Part #3:** Two More-Complex NAV Examples for AvalonBay [AVB] and Digital Realty [DLR]