

Timing, timing: Discounted cash flow analysis

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When you're reviewing a project for development, what is your measure of its success? Do you do a simple cap rate analysis on current net income? Do you simply say you need to double your equity over the project holding period? We typically push a project into a discounted cash flow analysis (DCF), programmed for a 20% internal rate of return, and see where the purchase price comes out. Last week we were working on such a project, a rehab of an older building in the 150,000 s/f range. This is our bread and butter, the kind of project that, after 25 years in the business, we ought to be able to figure out in our heads. For the most part that is true, but when we were running the DCF on this project, we relearned something that always astounds us.

We were projecting rent-up, since it is an empty building and needs at least six months worth of rehab before any tenant would take space. We made some reasonable projections about the six months of rehab, six months for the first major tenants, and 12 months thereafter for the rest. Our price came out lower than what we knew the sellers wanted, and since we wanted to do the project, we fiddled with the numbers to see if we could justify a higher price. Sound familiar? We decreased the rent-up period by about three months, and miraculously the purchase price/value jumped several hundred thousand dollars. Mission accomplished: we could afford to pay what the seller wanted!

However, being conservative, thorough analysts, we looked at the worst case scenario. Using the original projection, we then delayed the rent-up by nine months. The purchase price was nearly cut in half! As often as we have run these projections, we were shocked by the huge swing in potential purchase price. How could the rate of rent-up shift by six months to a year, and cause such dramatic swings in what we ought to pay for the property? We went over the numbers again, dug beneath the key computer program, and found no fault with our logic. What we discovered was what should have been obvious: not only had we hypothetically lost significant rent in the first year of the project, but we had to carry all of the operational expenses of the "vanished" tenants. We were, in effect, doubling our losses in the first two years of a very time sensitive accruing projection. We realized that by taking all the losses so early and accruing the benefits so late, we had caused a violent swing in our perception of the property.

We fiddled with the other variables, to see if we could justify some upside to this downside scenario. We increased the projected sales price at the end of the project, but our discount of that sales price was so far out that it had a small effect on our net present value. We increased the rent amount that we would get by a few dollars, with some but not so significant a difference. We changed overall vacancy, leasing commission, interest rates, all with very little effect.

The lesson was once again clear: if you incur substantial losses in the first two years, due to delayed permits, delayed rent-up, higher rehab expenses, it is extremely hard to make it back later on in discounted basis.

Sometimes we don't fully delve into these details, because we don't really want to know. We want to

do the project, and we rely on our instincts well-honed over these 30 years. Often we are right, and the things we could not foresee in the future also included better conditions than projected, and sometimes better luck. In all cases, the timing has been critical to the success of our project. When to buy, how long for the permits, whether there is a downturn which periods now seem much deeper and more volatile, all of these are timing issues which are so critical to our return on investment.

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