Pro Forma analysis explanation

To illustrate the elements of a pro forma analysis, the following alternative case study examines a typical three-story, late 19th century commercial building. The property is for sale at an asking price of $395,000. It is located in an area with good potential for growth for offices, stores, or residences. The property has not been improved in more than forty years.

The following analysis assesses the feasibility of investing in the rehab of this property and presents, item by item, the factors to consider. This financial datasheet gives a detailed overview of the analysis.

Final price

The first piece of information needed about the project is how much it will cost to purchase. Assume the final price will be $365,000.

Costs of rehabilitation

The costs of rehabilitation can be calculated in a number of ways. Initially, a project architect gives preliminary estimates based on prices from similar projects and figures from cost-estimating books. (Contractors' bids provide more accurate estimates but are difficult to obtain until the project is actually designed and plans and specifications available, a process that follows rather than precedes the feasibility analysis.) Typically, a preliminary cost estimate is based on an overall dollar-per-square-foot value based on comparable work. This "quick and easy" approach generalizes many of the project details—one factor may be estimated low, another high—but if good comparables are used the result should be reasonable. An estimated square-foot cost can also be obtained by talking with builders or realtors in the area who can provide a reasonable estimate based on their experience with similar projects.

Rehabilitation construction costs can be grouped into three general categories. Level 1 work is basic cleaning and fix-up of the structure in its current condition. It would have the same or similar use(s) on each floor, with similar floor arrangements. An example of the cost for this level of work would be $60-100 per square foot. For instance, a 1,000 square foot structure with few changes, estimated at $80 per sq. ft., would cost $80,000 to rehabilitate.

Level 2 rehabilitation might include more comprehensive work to update the structure. In this instance, the heating, plumbing and electrical systems are updated to meet current codes, an enclosed stair added to meet fire safety codes, and an elevator, an entrance ramp and handicapped restrooms added to satisfy accessibility guidelines. A rule-of-thumb cost for this work would be in the range of $120-160/sq. ft.

Level 3 rehabilitation would be more inclusive, adding significant structural work to the above work, including major repairs, possible areas of reconstruction, and changes to the floor plan. The costs for this extent of work could range from $160 to 200/sq. ft. With a three-story structure with floors of 2,000 square feet each, and an estimated construction cost of $180/sq. ft, the total project construction costs would be just over $1 million. For comparison, the cost of a new structure could be approximately $200 per square foot. For each of these estimates, additional costs are incurred for items such as architect and attorney fees (soft costs) and general administrative costs. These may add 10 to 12 percent to the basic construction costs.

For this case study, a preliminary cost estimate was established at $120 per square foot Level 2 rehab for each of the three floors. As shown on the spreadsheet, this gives the project's "hard" costs at $730,000. Add to this the soft costs and administrative costs, and the total cost for rehabilitation is $839,751.

The "soft" costs for the project include non-construction costs—professional fees for the architect, appraiser, and attorney; costs of the mortgage during construction (assumed to be six months); closing costs, permits, and start-up costs. For this project, these total $92,751. Administrative costs, which include advertising, marketing, and office expenses in finding initial tenants, amount to $17,000. Adding all these costs with the original purchase cost gives a total project cost of just over $1.2 million.

Loan-to-value (LTV) ratio

To raise the $1.2 million total project amount, two investment sources were used—the investment you (and your partners) make and the loan/mortgage amount from a lending agency. Investors are individuals willing to put up their own money in the hope of a significant return or for tax advantages. Lenders are institutions, such as banks, who lend money as a business.

Banks and other lenders generally are unwilling to put up all the money for a real estate venture. They insist some funds be developed through other resources, so if the project fails they will recoup enough in value to cover their portion of the investment. The percentage of the total costs a lender is willing to risk is established as the loan-to-value (LTV) ratio. Typically, this is 75 to 90 percent of the project's value if the project is determined to have a sound financial basis. This determination is decided on the basis of a feasibility analysis, such as this example. Based on an LTV ratio of 80 percent, the case study project could expect a mortgage from the bank of $963,801, requiring $240,950 in cash from investors. This means that although the total project costs over $1.2 million, your cost is approximately $241,000. In other words, you are purchasing $1.2 million worth of real estate for $241,000 of your own money. The remainder is the mortgage, and its cost will be covered as part of the project's annual income and expenses.

Annualized income and expenditures

Calculations of ongoing income and expenditures must now be added to the analysis. Their impact must be determined on an annual basis (referred to as *annualizing*)—that is, converting all information into an income or expenditure over a one-year span.

Total gross rent

The annual rental income derived from the project is projected based on market data figures for the local area. For this case study community, the typical rate for ground-floor commercial space in the downtown area is currently $16 to $28 per square foot per year. Because the property is located just off the main shopping street, a rate of $26/SF is assumed for ground-floor rental. The second and third floors could be leased for offices at an estimated $22/SF (the basement is assumed to have no rental value). Based on the square footages for each floor as shown in the Pro Forma spreadsheet, a total gross rent (annualized) of $140,000 is anticipated.

Projected vacancy rate

Not all of a project's space can be leased all the time, even in a very good market. Initially it takes months or years to come up to full occupancy at full market rates. An average vacancy rate of 5 percent is assumed, subtracting $7,000 annually from the potential gross rent. By reducing the gross rent figures by the projected vacancy rate, the expected annual income, called the *gross effective income*, is shown as $133,000.

Operating expenses

Balanced against the gross effective income are ongoing project expenses. These include taxes, insurance, project management costs, legal and accounting fees, and normal repair and maintenance. The cost of utilities may either be included as a project expense or passed along to tenants if the lease so specifies. (The case study assumes the tenant pays for utilities.) Your annual operating expenses are projected at $47,514 for a typical year.

Debt service

The annual debt service is based on the total mortgage amount (in this case, $963,801), the mortgage interest rate, and the number of years of payments. This case study uses an interest percentage rate of 6.5 percent paid over thirty years, or 360 months. A monthly payment is derived using an amortization calculation and then converted to an annual payment. Such calculations can be done quickly by a bank loan officer or by one of many uncomplicated

computer programs now available. This monthly payment is converted to an annual payment by multiplying by twelve, which in this example totals $73,103.

Return on investment (ROI)

The whole purpose of a pro forma analysis is to determine how much an investor can expect to get as a return on an initial investment. This is referred to as Return on Investment (ROI). Will it be as much as could be expected from other types of investments, such as the stock market or a money market bank account? Is the return high enough to be worth the extra risk involved, especially if the money may be tied up for an extended period? What are the local market conditions? How are they likely to change over the course of three, five, or ten years? Changes in some of these factors can dramatically alter the financial outlook of a project, while others will have surprisingly little impact on the total return. Thus, there is always some element of financial risk, however minimal it may be.

A rewarding aspect of investing in real estate is that there are three ways to make a return on the initial investment. The three types of ROI found in real estate are cash flow, return on taxes, and appreciation. Together, these three types of ROI can add up to a significant total return—one that justifies the greater risk and involvement.

Before-tax cash flow (ROI #1)

Cash flow is the amount returned annually to an investor as cash. This represents the most direct type of return, although it is typically lowest in the early years of a project. It initially may even be negative, meaning additional cash must be put into the project over the short term.

Cash flow is determined by deducting the annual amounts for operating expenses and debt service from the annual gross effective income. In this case, the annual cash flow is $12,383, not a lot for an initial investment of $240,950, but at least a positive, rather than negative amount.

ROIs can be evaluated better if converted to a percentage. To determine the percentage return for ROI #1, the annual cash flow return ($12,383) is divided by the amount of the original cash investment, which was $240,950. This represents a return of 5.1 percent. (Note that the mortgage amount is not included as part of the cash investment, as this was not part of the investor's capital and was previously accommodated in the calculations under debt service.) Is this amount satisfactory? One rule of thumb is that the cash return should be at least double the percentage that could be earned in a bank savings account, so the cash return for this example is minimal. But also remember, there are two additional returns on your investment to add to this amount.

Return on taxes (ROI #2)

Many investors, especially those in high tax brackets, are less concerned with cash return than they are with the tax advantages of real estate investment. For them, historic building rehabilitation provides some of the best tax opportunities available.

The calculation of the return on taxes is shown on the datasheet in Box E. Annual tax return is based on the depreciable value of a property. The depreciable value is the total value of the property less the value of the land (a basic assumption of tax law is that a building depreciates (decreases) in value over time, but the land it is on does not decrease). With a land market value of $100,000 (established through local appraisal), the case study example has a depreciable base value of $1,104,751. A building's value, under current tax law, can be depreciated over 39 years. This allows an annual depreciation of $28,327 in this example.

To calculate the investor's actual return on taxes, this annual depreciable amount ($28,327) is multiplied by the individual's tax bracket. We assume here that the total state and federal tax is 28 percent, giving an annual tax return of $7,932. As with ROI #1, this amount is compared to the initial cash investment of $240,950, for an ROI #2 of 3.3 percent annually.

In addition, the rehabilitation costs of a historic building designated as a Certified Historic Structure (CHS) or contributing in a Certified Historic District[1] can be partially recovered through the Rehabilitation Investment Tax Credit (RITC) provisions. The rehabilitation of such a building could make investors eligible for a tax credit totaling 20 percent of the rehab costs.[2] Assuming the case study building is a CHS, there is an additional total credit of $167,000 (20 percent of the rehabilitation cost of $839,751). Because most individuals don't need this much of a credit on their personal federal taxes in one year, this credit can be spread over multiple years. In this example, it is taken over a 5-year time span, with an annual RITC credit of $33,590. This amount is added to the previously calculated tax return based on depreciation (now calculated less the rehab credit), which is $6,726, for a total of $40,316 for each of five years. For ROI #2, the annual return is now 16.7 percent instead of the previously calculated 3.3 percent return without the historic tax credit. In addition, some states give additional state tax incentives to complement the federal tax credit, giving even greater tax benefits. As is shown here, there is a direct and significant financial gain possible through the use of the rehab tax credit program.

Appreciation (ROI #3)

The greatest return on investment is typically from the continuing appreciation of the property's value. If properly maintained and regularly updated, properties increase significantly in market value over time. This assumption initially seems contradictory, given the explanation that tax law assumes a decrease in the value of property over time, but depreciation is a theoretical assumption, while appreciation represents the true market value over time.

The amount of increase based on appreciation varies with local and regional market conditions. The case study example assumes an annual increase in the total value of the property of 3 percent. Thus, if the project is worth $1,204,751 upon completion, its value one year later will be $1,240,894, or a 3 percent increase of $36,143. Although the appreciation increase is based on the total value of the property, ROI #3 compares this increase in value only to the cash investment made by the investor (e.g., $36,143 divided by $240,950 initial cash investment), showing ROI #3 to be 15.0 percent annually. In other words, the investor gains the value of appreciation not only on his or her own money (the initial $240,950), but on the bank's money (the $963,801 mortgage) as well. Certainly, this is a beneficial situation, since it effectively converts a 3 percent gain into one of 15 percent!

This relatively high ROI due to appreciation represents one of the primary reasons for investing in real estate. However, this return is realized only on the sale of the property and is dependent on an investor's willingness to tie up their own money for an extended period. In summary, real estate investment is not for those who need a regular, predictable return, but it can be rewarding for investors who can commit relatively large amounts and wait for favorable market conditions.

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[1] Certified Historic Structures have been nominated and approved by the state and/or federal government.

[2] Some states allow additional tax credits in addition to the federal credits.