ANCILLARY INCOME

Notice how in Figure 6.5 the 7% increase in the vacancy rate from Year 1 to Year 2 causes an 8% drop in ancillary income. This is not unexpected, for two main reasons. First, amenities such as your health club are predominantly used by your tenants. Hence, as vacancy increases, there are fewer tenants to join the club. Second, if the increased vacancy is due to a weak economy (rather than excess supply), tenants may not renew their memberships due to having less disposable income. During more prosperous times, such as the recovery period, the opposite is true. As a result, ancillary income often moves with greater volatility than rental income.

Leslie Court Apartments Cash Flow Projection									
	Decline	Stage	Recovery Stage		Stable a	Forward			
	Year 1 Year 2		Year 3	Year 4	Year 5	Year 6	Year 7		
Base Rental Revenue Growth		-5.0%	1.0%	2.5%	3.5%	3.5%	3.5%		
Base Rental Revenues	1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784		
Expense Reimbursement Revenue	0	0	0	0	0	0	0		
Gross Revenues	1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784		
Vacancy % Gross Revenues	7.0%	14.0%	12.0%	10.0%	7.0%	5.0%	5.0%		
Less: Vacancies	(77,021)	(146,341)	(126,689)	(108,214)	(78,401)	(57,961)	(59,989)		
Net Base Rental Revenue	1,023,284	898,949	929,054	973,923	1,041,610	1,101,251	1,139,795		
Ancillary Income Growth		-8.0%	-7.0%	-3.0%	5.0%	3.0%	3.0%		
Plus: Ancillary Income	6,052	5,568	5,178	5,023	5,274	5,432	5,595		
Effective Gross Income (EGI)	1,029,336	904,517	934,232	978,945	1,046,884	1,106,683	1,145,390		

FIGURE 6.5



Online Companion Hands On: Layer in the Ancillary Income Growth rate assumption line, inputting the values as shown. Next, enter the <u>Year 1</u> value for **Plus: Ancillary Income**. Then calculate the **Plus:** Ancillary Income values for the subsequent years as (Prior year value) * (1 + current year's Ancillary Income Growth rate). Last, calculate Effective Gross Income (EGI) as: Net Base Rental Revenue + Plus: Ancillary Income.

OPERATING EXPENSES, REPLACEMENT RESERVES AND CAP EX

As discussed in Chapters 4 and 5, property operating expenses include costs such as insurance, real estate taxes, utilities, management fees, and marketing, among others. While operators always attempt to lower costs, this is particularly true during a recession. If the debt covenants for your loan require a minimum **debt service coverage ratio**, also known as **DSCR** (annual NOI divided by total annual **debt service expense**), there could be a violation in years when NOI is weak. As a result, operators will avoid flirting with breaking loan covenants by always seeking ways to squeeze out every dime of operating costs.

In weak markets, increased vacancy reduces **variable operating expenses**. The utilities expense, for example, will not be as high because there are not as many tenants using computers, hot water, lights, etc. In addition, you may reduce certain operating expenses by mowing the lawn yourself instead of using a gardener, or perhaps by mowing once every three weeks instead of every two weeks. **Fixed operating expenses**, such as insurance, do not change with the state of the market or the property's occupancy level. Cost-cutting measures should be assessed carefully. If the property deteriorates from a lack of maintenance, you may have greater repairs with which to contend in the future, attract lower quality tenants, or destroy the image of a brand that you spent years building.



As the market strengthens, operating expenses will increase. For example, you may need more staff to deal with greater tenant demand. It will take time to train new staff, and you may not hire the right people, so there may be employee turnover until you put the right team in place. These inefficiencies need to be reflected in your model. If the building requires a new roof or plumbing system, capital expenditures will be quite large. For this reason, **replacement reserves** are regularly funded into a dedicated account (with minimum amounts required by the lender). In weak markets, you may not have enough capital to pay for these essential, but expensive repairs. As a result, in weak markets, operators tend to postpone as much cap ex as possible. In the Leslie Court Apartments model, \$10,000 of cap ex due to water damage is not made in Year 2. Therefore, it is expected that in Year 5, the typical \$70,000 in cap ex is, instead, \$92,000 to make up for this deferral. What if the damage is worse than expected and it is necessary to make repairs in Year 3? You may default on your loan! Also, if the water damage causes unhappiness with tenants, your vacancy may further increase. Figure 6.6 displays line items through cap ex.

In this example, we assume that \$225,000 is contributed from equity at closing to pre-fund the Replacement Reserve ("RR") account, which resides at the mortgage lender's bank. This contribution is assumed to be a necessary condition of the funding of the acquisition loan. Seeding the RR account with funds at closing assures the lender that Year 1 cap ex will have a sufficient amount of dedicated funding from day 1 of property operation. The total annual contribution shown in the Less: Replacement Reserve (RR) line will be automatically swept monthly from revenues deposited into the property's main operating account (which also resides at the mortgage lender's bank) into the RR account. When cap ex needs arise, ownership will draw the required funds from the RR account. As such, in contrast to what we showed starting in Figure 5.11, the annual cap ex spend amounts do not in fact reduce the property's Adjusted NOI (unlevered cash flow), assuming that the RR account balance is sufficiently funded at the time of the draw. If there are insufficient funds, then Adjusted NOI will indeed be impacted, as the property cash flow will be used to pay the cap ex bills. In the year of sale, any remaining RR account balance will be refunded to equity. A Replacement Reserve Account Detail Backup table is provided in the Online Companion.

	Decline	Stage	Recovery Stage		Stable a	Forward	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Base Rental Revenue Growth		-5.0%	1.0%	2.5%	3.5%	3.5%	3.5%
Base Rental Revenues	1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784
Expense Reimbursement Revenue	0	0	0	0	0	0	0
Gross Revenues	1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784
Vacancy % Gross Revenues	7.0%	14.0%	12.0%	10.0%	7.0%	5.0%	5.0%
Less: Vacancies	(77,021)	(146,341)	(126,689)	(108,214)	(78,401)	(57,961)	(59,989)
Net Base Rental Revenue	1,023,284	898,949	929,054	973,923	1,041,610	1,101,251	1,139,795
Ancillary Income Growth		- 8.0%	-7.0%	-3.0%	5.0%	3.0%	3.0%
Plus: Ancillary Income	6,052	5,568	5,178	5,023	5,274	5,432	5,595
Effective Gross Income (EGI)	1,029,336	904,517	934,232	978,945	1,046,884	1,106,683	1,145,390
Operating Expense Growth		-2.0%	-1.0%	0.0%	4.0%	3.5%	3.0%
Less: Operating Expenses	(102,934)	(100,875)	(99,867)	(99,867)	(103,861)	(107,496)	(110,721)
Less: Real Estate Taxes	(110,031)	(113,332)	(116,732)	(120,234)	(123,841)	(127,556)	(131,383)
Less: Replacement Reserve (RR)	(49,514)	(47,038)	(47,508)	(48,696)	(50,400)	(52,165)	(53,990)
Total Expenses	(262,479)	(261,245)	(264,107)	(268,797)	(278,103)	(287,217)	(296,094)
Net Operating Income (NOI)	766,857	643,272	670,125	710,149	768,782	819,466	849,295
Change in TI		8.6%	10.4%	- 9.9%	-10.0%	- 8.2 %	-8.1%
Less: TI	(35,000)	(38,010)	(41,963)	(37,809)	(34,028)	(31,238)	(28,707)
Change in Leasing Commissions		27.0%	10.8%	18.0%	-1.7%	-14.8%	-3.3%
Less: Leasing Commissions	(20,458)	(25,982)	(28,788)	(33,969)	(33,392)	(28,450)	(27,511)
Change in Cap Ex		-8.9%	8.5%	3.6%	19.5%	-21.9%	-2.4%
Less: Cap Ex	(75,264)	(68,566)	(74,394)	(77,072)	(92,101)	(71,931)	(70,204)

FIGURE 6.6

Leslie Court Apartments Cash Flow Projection



Online Companion Hands On: Continuing on the same Excel tab, make inputs in the Operating Expense Growth rate assumption line for the amounts shown in Figure 6.6 on the previous page. Next, enter the Year 1 value for Less: Operating Expenses. Then calculate the values for the subsequent years as (Prior year value) * (1 + current year's Operating Expense Growth rate). Do the same for the Less: Real Estate Taxes line, growing it at 3% annually, and the same for the Less: Replacement Reserve (RR) line, set at 4.5% of Gross Revenues. Calculate Total Expenses as the sum of the three expense lines. Lastly, calculate Net Operating Income (NOI) as the sum of Effective Gross Income (EGI) and Total Expenses. Note that how by Year 5, NOI has recovered and exceeds the Year 1 amount, and in Year 6, it has grown by almost 7% over the Year 1 level.

TIS AND LEASING COMMISSIONS

If you experience high vacancy, you will focus a great deal of energy on attracting tenants. One way to accomplish this is to increase marketing efforts. You may increase leasing commissions to motivate your sales force, hire additional leasing agents, increase advertising, or a combination of the three. For this reason, leasing commissions generally increase as vacancy increases.

The for office and retail properties will also increase with greater vacancy, as when tenants leave, you have to offer competitive TI allowances to attract tenants to re-lease the space. If leases are renewed, you will pay lower TIs than for new leases. For apartments, you may give away toasters or TVs or put in new appliances to attract customers, and as the market recovers, these costs will drop substantially. Again, these costs must be reflected in your analysis.

Figure 6.7 shows the Less: TI and Less: Leasing Commissions lines above Change In Cap Ex and then extends the analysis all the way through After-Tax Cash Flow (the steps of which were discussed in detail in Chapter 5). As mentioned, it is important to note that the Year 7 values impact before- and after-tax cash flow only in that the Year 6 sale proceeds are valued off of the Year 7 adjusted NOI amount. Additionally, note that unlike the Kathy Center property in Chapter 5, Leslie Court has income tax liabilities it must pay.



Online Companion Hands On: Build in the lines for **Change in TI**, **Less: TI**, **Change in Leasing Commissions**, **Less: Leasing Commissions**, **Change in Cap Ex**, and **Less: Cap Ex**. For each of these sets of lines, enter the Year 1 amount shown in Figure 6.6, and calculate the values for the subsequent years as (Prior year value) * (1 + current year's **Change in** rate). The lines from **Adjusted Net Operating Income** down are already programmed for you. We note that the **Adjusted Net Operating Income** line references the Replacement Reserve Account Detail Backup table, which starts at row 147 on the tab.



FIGURE 6.7

		Leslie Court Apa	in unientis casif	Flow Flojection				
	Acquisition	Decline Stage		Recovery Stage		Stable and Sale		Forward
	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Base Rental Revenue Growth			-5.0%	1.0%	2.5%	3.5%	3.5%	3.5%
Base Rental Revenues		1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784
Expense Reimbursement Revenue		0	0	0	0	0	0	0
Gross Revenues		1,100,305	1,045,290	1,055,743	1,082,136	1,120,011	1,159,211	1,199,784
Vacancy % Gross Revenues		7.0%	14.0%	12.0%	10.0%	7.0%	5.0%	5.0%
Less: Vacancies		(77,021)	(146,341)	(126,689)	(108,214)	(78,401)	(57,961)	(59,989)
Net Base Rental Revenue		1,023,284	898,949	929,054	973,923	1,041,610	1,101,251	1,139,795
Ancillary Income Growth			- 8.0 %	-7.0%	-3.0%	5.0%	3.0%	3.0%
Plus: Ancillary Income		6,052	5,568	5,178	5,023	5,274	5,432	5,595
Effective Gross Income (EGI)		1,029,336	904,517	934,232	978,945	1,046,884	1,106,683	1,145,390
Operating Expense Growth			-2.0%	-1.0%	0.0%	4.0%	3.5%	3.0%
Less: Operating Expenses		(102,934)	(100,875)	(99,867)	(99,867)	(103,861)	(107,496)	(110,721)
Less: Real Estate Taxes	3.0%	(110,031)	(113,332)	(116,732)	(120,234)	(123,841)	(127,556)	(131,383)
Less: Replacement Reserve (RR)	4.5% of GR	(49,514)	(47,038)	(47,508)	(48,696)	(50,400)	(52,165)	(53,990)
Total Expenses		(262,479)	(261,245)	(264,107)	(268,797)	(278,103)	(287,217)	(296,094)
Net Operating Income (NOI)		766,857	643,272	670,125	710,149	768,782	819,466	849,295
Change in TI			8.6%	10.4%	-9.9%	-10.0%	-8.2%	-8.1%
Less: TI		(35,000)	(38,010)	(41,963)	(37,809)	(34,028)	(31,238)	(28,707)
Change in Leasing Commissions			27.0%	10.8%	18.0%	-1.7%	-14.8%	-3.3%
Less: Leasing Commissions		(20,458)	(25,982)	(28,788)	(33,969)	(33,392)	(28,450)	(27,511)
Change in Cap Ex			- 8.9%	8.5%	3.6%	19.5%	- 21.9%	-2.4%
Less: Cap Ex		(75,264)	(68,566)	(74,394)	(77,072)	(92,101)	(71,931)	(70,204)
Adjusted Net Operating Income (1)		711,399	579,280	599,374	638,371	701,362	759,778	793,077
Less: Loan Points	(51,938)	0	0	0	0	0	0	
Less: Debt Service Payment		(414,650)	(414,650)	(414,650)	(414,650)	(414,650)	(414,650)	
Before-Tax Levered Cash Flow		296,749	164,630	184,724	223,721	286,712	345,129	
Less: Depreciation (Purchase Price)		(201,818)	(201,818)	(201,818)	(201,818)	(201,818)	(201,818)	
Less: Depreciation (TIs)		(35,000)	(38,010)	(41,963)	(37,809)	(34,028)	(31,238)	
Less: Depreciation (Cap Ex)		(10.752)	(20.547)	(31.175)	(42.185)	(55.342)	(65.618)	
Less: Leasing Commissions Amortization		(20,458)	(25,982)	(28,788)	(33,969)	(33,392)	(28,450)	
Less: Loan Points Amortization		(7.420)	(7.420)	(7.420)	(7,420)	(7.420)	(14.839)	
Plus: Cash Transfer to RR account (2)		49.514	47.038	47.508	48.696	50,400	52.165	
Plus: TIs		35.000	38.010	41.963	37.809	34.028	31.238	
Plus: Leasing Commissions		20.458	25,982	28.788	33,969	33.392	28,450	
Plus: Principal Amortization		52.759	56.573	60.662	65.047	69.750	74,792	
Taxable Income (Loss)		179.032	38.456	52.482	86.042	142.282	189.810	
Less: Application of Suspended Losses		0	0	0	0	0	0	†
Net Taxable Income (Loss)		179,032	38,456	52,482	86,042	142,282	189,810	İ.
Less: Tax Liability	21.0%	(37,597)	(8,076)	(11,021)	(18,069)	(29,879)	(39,860)	
Plus: Refund at sale of RR acct. bal. (3)		0	0	0	0	0	60,995	
After-Tax Cash Flow		259,1 <u>52</u>	156,554	173,7 <u>03</u>	205,652	256,8 <u>33</u>	366,264	t
								I

1. Adjusted Net Operating Income (a.k.a. Unlevered Cash Flow) is defined as NOI (which is already net of the Replacement Reserve contribution) - TI -Leasing Commissions - only the Cap Ex amount NOT covered by the Reserve Balance available (if any). As a result, if there are <u>sufficient</u> Replacement Reserves to fund the annual Cap Ex, the Adjusted NOI will <u>not</u> be reduced by the Cap Ex amount.

2. Based on the presence of a Replacement Reserve account and how we define Adjusted NOI, instead of carrying the "Plus: Cap Ex" line as shown in Chapter 5, we replace that line with the "Plus: Cash Transfer to RR account" line, which adds back only the Replacement Reserve contribution amount.

3. This line is for the sweep to equity of any Replacement Reserve account balance remaining at sale.



SALE VALUE

The calculation of the value upon sale, or the **residual value**, is critical, as a dominant portion of your cash flow derives from disposition. Figure 6.8 (which we display starting from NOI) shows in the very bottom right cell that over 72% of the property's cash flow is due to its residual value. To understand this residual value and how it is impacted by market conditions, it is necessary to determine how **net sales proceeds** are calculated.

Leslie Court Apartments Cash Flow Projection									
	Acquisition	Decline	Stage	Recover	opet2 v	Stable a	nd Sale	Forward	
	Time 0	Year 1	Year 2	Year 3 Year 4		Year 5 Year		Year 7	
Net Operating Income (NOI)		766.857	643.272	670.125	710.149	768.782	819.466	849.295	
Change in TI			8.6%	10.4%	-9.9%	-10.0%	-8.2%	-8.1%	
Less: TI		(35.000)	(38.010)	(41.963)	(37.809)	(34.028)	(31.238)	(28,707)	
Change in Leasing Commissions			27.0%	10.8%	18.0%	-1.7%	-14.8%	-3.3%	
Less: Leasing Commissions		(20,458)	(25,982)	(28,788)	(33,969)	(33,392)	(28,450)	(27,511)	
Change in Cap Ex			-8.9%	8.5%	3.6%	19.5%	- 21.9%	-2.4%	
Less: Cap Ex		(75,264)	(68,566)	(74,394)	(77,072)	(92,101)	(71,931)	(70,204)	
Adjusted Net Operating Income (1)		711,399	579,280	599,374	638,371	701,362	759,778	793,077	
Less: Loan Points	(51,938)	0	0	0	0	0	0		
Less: Debt Service Payment		(414,650)	(414,650)	(414,650)	(414,650)	(414,650)	(414,650)		
Before-Tax Levered Cash Flow		296,749	164,630	184,724	223,721	286,712	345,129		
Less: Depreciation (Purchase Price)		(201,818)	(201,818)	(201,818)	(201,818)	(201,818)	(201,818)		
Less: Depreciation (TIs)		(35,000)	(38,010)	(41,963)	(37,809)	(34,028)	(31,238)		
Less: Depreciation (Cap Ex)		(10,752)	(20,547)	(31,175)	(42,185)	(55,342)	(65,618)		
Less: Leasing Commissions Amortization		(20,458)	(25,982)	(28,788)	(33,969)	(33,392)	(28,450)		
Less: Loan Points Amortization		(7,420)	(7,420)	(7,420)	(7,420)	(7,420)	(14,839)		
Plus: Cash Transfer to RR account (2)		49,514	47,038	47,508	48,696	50,400	52,165		
Plus: TIs		35,000	38,010	41,963	37,809	34,028	31,238		
Plus: Leasing Commissions		20,458	25,982	28,788	33,969	33,392	28,450		
Plus: Principal Amortization		52,759	56,573	60,662	65,047	69,750	74,792		
Taxable Income (Loss)		179,032	38,456	52,482	86,042	142,282	189,810		
Less: Application of Suspended Losses		0	0	0	0	0	0		
Net Taxable Income (Loss)		179,032	38,456	52,482	86,042	142,282	189,810		
Less: Tax Liability	21.0%	(37,597)	(8,076)	(11,021)	(18,069)	(29,879)	(39,860)		
Plus: Refund at sale of RR acct. bal. (3)		0	0	0	0	0	60,995		
After-Tax Cash Flow		259,152	156,554	173,703	205,652	256,833	366,264		
Net Sales Price							9,143,710		
Less: Tax Liability							(678,594)		
Less: Outstanding Mortgage Balance							(4,814,167)		
Less: Initial Equity Investment	(1,783,188)	4050 450	4480 884	4470 700	4005 650	4050 000			
After-Tax Levered Cash Flow	(\$1,783,188)	\$259,152	\$156,554	\$173,703	\$205,652	\$256,833	\$4,017,212	l	
		· · · · · · · · · · · · · · · · · · ·						1	
	Net Cash Flow	\$3,285,919		Total Positi	ve After-Tax C	Cash Flows	\$5,069,107		
Equity Investment	IRR	22.51%		Net Sal	es Proceeds %	Total	72.02%		
Performance Indicators	NPV at 15%	\$656,778							
	Multiple	2.84x							

FIGURE 6.8



GROSS SALES PRICE, SALE INCOME TAX AND NET SALES PROCEEDS

As noted, the negotiated **gross sales price** (line A in Figure 6.9) is generally estimated by capping future stabilized NOI. Analysts often mistakenly use the same cap rate to estimate the **residual** (reversion) **value** upon exit as what they used to determine their purchase price. The problem with this approach is that at sale, the building is older, and perhaps, not as competitive as when it was acquired years ago. It also can justify wishful and nonsensical pricing. For example, using a 1% cap rate for both acquisition and disposition may seem like a good deal, but as the Japanese buyers of the 1980s painfully learned, there may be no one who is willing to pay the same crazy cap rate as you. So if you enter at a 1 cap, and exit at an 8 cap, you are dead.

For a stabilized property, the **exit cap rate** is generally somewhat higher than your **going-in cap rate**, reflective of it being an older and less sought-after building in the current competitive set. Interestingly for Leslie Court Apartments, while the going-in cap is a 10.6 (adjusted NOI of \$711,399 / purchase price of \$6.7 MM), the exit cap is an 8.5. Isn't this contrary to what we just said? No. Specifically, you are purchasing while income is low and falling, and exiting after the building is stabilized. That is, your **purchase cap rate** is for a **non-stabilized property**, while your exit cap is for a stabilized property. Figure 6.9 shows the sale calculations for both **sale income tax liability** and net sales proceeds.

The first step to determine the income tax liability specific to the property sale is to arrive at the property's **net sales price** (line C), which is the gross sales price (line A) less **selling costs** (line B). Selling costs are primarily comprised of the sales **brokerage commission**, but also include jurisdictional property transfer taxes. Commissions for investment sales brokers are negotiated amounts generally taken as a percentage of the gross sales price. A fee of less than 2% is assumed for this analysis, but if the transaction is a difficult sale, commissions can increase significantly. A weak market or property may not be the only reason for a challenging sale. If you have considerable deferred cap ex or have done a poor job of leasing the property, you may need to pay larger brokerage fees in order to sell the building.

The second step to determine sale income tax liability is to solve for the property's **adjusted cost basis** at the point of sale (line G). Adjusted cost basis is the original acquisition cost of the property (line D; the contract Purchase Price and transaction costs), plus capital expenditure amounts made (which include both tenant improvements and property-wide cap ex; line E), less **accumulated depreciation** (all depreciation taken to date) on the purchase price, TIs, and cap ex (line F).

Once we have the adjusted cost basis in line G, we can calculate the **gain-on-sale**, or **capital gain** (line H), as the net of the net sales price in line C and the adjusted cost basis in line G. There are two components to capital gain (and thus **capital gains tax**): **depreciation "recapture"** (line I, the negative of F) and property **appreciation** (the gain in property value; line J). Depreciation recapture is the total accumulated depreciation amount from which the property owner benefited by shielding taxable income. Depreciation recapture is currently taxed at 25%, producing the \$413,644 capital gains tax amount in line L. The property appreciation capital gains tax basis in line J is the gain-on-sale (line H) less the depreciation recapture amount (line I). The property appreciation amount is currently taxed at 15%, producing the property appreciation capital gains tax amount is the **total sale income tax liability** (line N).

To solve for **net sales proceeds** (line T) the net sales price (line Q, which is the same as line C) is reduced by the sale income tax liability (line R, which is the same as line N) and any outstanding mortgage balance (line S). In our example, net sales proceeds are \$3,650,948.



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Leslie Court Sale Income Tax an				
			Line	Notes
Sale Income Tax Liability Accounting				
Gross Sales Price = (Year 7 Adjusted NO	А			
Less Selling Costs	2.00%	(186,606)	В	-% * A
Net Sales Price		9,143,710	С	A + B
Less Adjusted Cost Basis:				
Acquisition Cost		6,700,000	D	
Plus Tenant Improvements and Capital	Improvements	677,373	Е	
Less Accumulated Depreciation		(1,654,575)	F	
Adjusted Cost Basis		5,722,798	G	D + E + F
Gain-on-Sale (Capital Gain)		3,420,912	н	C - G
Components of Capital Gain:				
Depreciation Recapture		1,654,575	1	-F
Property Appreciation		1,766,337	J	H - I
		3,420,912	К	+ J
Capital Gains Tax on Sale:				
On Accumulated Depreciation	25.00%	413,644	L	Rate * I
On Property Appreciation	15.00%	264,951	М	Rate * J
Total Sale Income Tax Liability		\$678,594	N	L+M
Net Sales Proceeds Calculation				
Gross Sales Price		9,330,317	0	А
Less Selling Costs		(186,606)	Р	В
Net Sales Price		9,143,710	Q	0 + P
Less Sale Income Tax Liability		(678,594)	R	-N
Less Outstanding Mortgage Balance		(4,814,167)	S	
Net Sales Proceeds		\$3,650,948	Т	Q + R + S



Online Companion Hands On: Complete the formatted, blank version of this Figure 6.9 found in Chapter 6 of the Online Companion, using the description on the prior page and the Notes in the Figure as your guide. The **Less Outstanding Mortgage Balance** amount is the Year 6 Ending Balance, which you can reference from the amortization schedule on the Figure 6.2, 6.7, 6.8 tab.

Once you have completed Figure 6.9, return to the Figures 6.2, 6.7, 6.8 tab and look at the results in rows 132-135. If your values do not match those printed in Figures 6.7 and 6.8, you will need to retrace your steps to find your mistake(s), which can either be on your Figures 6.2, 6.7, 6.8 tab, or on the Figure 6.9 tab, or both.



You will often search in vain for cap rates for **comparable transactions (comps)**, as they may not exist particularly in weak markets. Plus, not all comps will be at the same cap rate, and there is no guarantee you will realize the mean or median cap. Further, no website or professor can tell you exactly what to assume. Yet, you must assume something intelligent and defensible (which will be wrong), understand what can go wrong, and live with it. As Figure 6.10 shows, just a 50-bp increase in your exit cap to 9% can reduce your net cash flow to equity by more than \$400,000 (\$2,854,133 versus \$3,285,919), your IRR by ~200 bps (~21% versus ~23%), your NPV by around \$200,000 (\$470,104 versus \$656,778), and your multiple on equity by ~10% (2.60x versus 2.84x).

Leslie Court Apartments Cash Flow Projection - 9.00% Exit Cap									
	Time 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
After-Tax Levered Cash Flow	(\$1,783,188)	\$259,152	\$156,554	\$173,703	\$205,652	\$256,833	\$3,585,426		
	Net Cash Flow	\$2,854,133		Total Positiv	ve After-Tax C	ash Flows	\$4,637,320		
Equity Investment	IRR	20.62%		Net Sale	es Proceeds %	Total	69.42%		
Performance Indicators	NPV at 15%	\$470,104							
	Multiple	2.60x							

FIGURE 6.10

CLOSING THOUGHT

Never simply change a single line item or entry and think you are conducting a worthwhile sensitivity analysis. True insight requires a clear understanding of the ramifications and interdependencies between various line items. Focus on the "disease" that causes things to be worse and carefully work through each line item in view of the disease. You will focus more on bad outcomes, because you can always live with things turning out better than expected. But even a meaningful analysis, complete with well-conceived scenarios, will never be right. You will always either be too low or too high, but your model allows you to systematically think about the property in a critical manner. As you gain business experience, you will be better at evaluating potential risks and how to best reflect those risks through financial models. Be patient. Your professional insight will improve over time.



Online Companion Audio Interview: To hear a conversation about this chapter's content, go to the Online Companion and select the link for Chapter 6. Scroll down to the Audio Interview section and listen.

