

PROJECT VIABILITY ANALYSIS

FUTURE VALUE ANALYSIS: Compare TI Future Cash Value (Net Worth) after sale to Investing Contributed Equity in Alternative Investments

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Future Cash Value After Sale (Net Worth)		198,743	239,351	285,197	335,097	388,550	445,728	506,809	571,983	641,444	715,400	794,063	877,661	966,427	1,060,608	1,160,461
Contributed Equity Capital	214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Accumulated Contributed Equity	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000
Future Value of Contributed Equity:																
Invested @ Oppt Cost of Eq Capital	10.00%	235,400	258,940	284,834	313,317	344,649	379,114	417,025	458,728	504,601	555,061	610,567	671,624	738,786	812,665	893,931
Invested @ Oppt Cost of Eq Capl - 5%	5.00%	224,700	235,935	247,732	260,118	273,124	286,780	301,119	316,175	331,984	348,583	366,013	384,313	403,529	423,705	444,891
Invested @ Oppt Cost of Eq Capl + 5%	15.00%	246,100	283,015	325,467	374,287	430,430	494,995	569,244	654,631	752,826	865,749	995,612	1,144,954	1,316,697	1,514,201	1,741,331
Opportunity Cost of Equity Capital		10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Modified Internal Rate of Return (MIRR)		-7.13%	5.76%	10.05%	11.86%	12.67%	13.01%	13.11%	13.08%	12.97%	12.83%	12.66%	12.48%	12.30%	12.11%	11.93%

PRESENT VALUE ANALYSIS: Compare the Present Value of Total Contributed Equity to the Present Value of TI Future Cash Value (Net Worth)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Future Cash Value After Sale (Net Worth)		198,743	239,351	285,197	335,097	388,550	445,728	506,809	571,983	641,444	715,400	794,063	877,661	966,427	1,060,608	1,160,461
PV of Future Cash Value:																
Discounted @ Op Cost of Eq Capital	10.00%	180,675	197,811	214,273	228,876	241,259	251,602	260,073	266,834	272,035	275,817	278,314	279,650	279,939	279,291	277,805
Discounted @ Op Cost of Eq Cap - 5%	5.00%	189,279	217,099	246,364	275,685	304,439	332,609	360,180	387,140	413,481	439,193	464,272	488,714	512,517	535,679	558,202
Discounted @ Op Cost of Eq Cap + 5%	15.00%	172,820	180,984	187,522	191,593	193,178	192,700	190,528	186,982	182,338	176,836	170,679	164,041	157,071	149,894	142,614
Equity Contributions:																
Contributed Equity Capital	214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV of Annual Equity Contributions	214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated PV of All Equity Contributions		214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000

Note 1: Opportunity Cost of Equity Capital is the after tax return that you can expect to earn on alternative equity investments of similar risk.
 Note 2: MIRR is the after tax return on your contributed equity. MIRR assumes an explicit re-investment rate.
 Note 3: Present Value of Equity Contributions are discounted at the Opportunity Cost of Equity Capital.

VALUATION ANALYSIS OF INVESTOR CASH FLOWS WITH & WITHOUT REVERSION (Sale)

VALUATION WITH REVERSION (with sale):

This method Values the Project based on Cash Dividends plus Tax Savings on Personal Income Plus Cash from Sale

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SPENDABLE CASH															
Cash Dividends to Investors	0	14,171	9,416	31,032	22,422	23,954	25,538	27,178	28,873	30,626	32,439	34,312	36,248	38,247	40,312
Plus Total Tax Savings on Personal Income	4,964	1,424	234	0	0	0	0	0	0	0	0	0	0	0	0
Spendable Cash (for investors)	4,964	15,595	9,650	31,032	22,422	23,954	25,538	27,178	28,873	30,626	32,439	34,312	36,248	38,247	40,312
TL Cash From Dissolution of Project	193,734	218,518	254,252	272,286	301,988	333,442	366,739	401,975	439,251	478,674	520,356	564,417	610,984	660,191	712,179
PV of TOTAL CASH FLOW TO INVESTOR															
Discounted @ 5%	189,236	217,075	246,842	276,750	306,923	337,001	366,966	396,799	426,484	456,004	485,348	514,502	543,454	572,195	600,715
Discounted @ 10%	180,635	197,994	215,675	231,822	247,280	261,510	274,591	286,599	297,605	307,676	316,878	325,270	332,910	339,850	346,141
Discounted @ 15%	172,781	181,339	189,629	195,877	201,485	205,856	209,172	211,592	213,255	214,284	214,783	214,843	214,542	213,950	213,123
Discounted @ 20%	165,582	166,715	167,688	166,827	165,889	164,218	162,027	159,484	156,723	153,848	150,939	148,057	145,247	142,541	139,961
Discounted @ 25%	158,959	153,803	149,070	143,132	137,906	132,640	127,497	122,586	117,976	113,707	109,794	106,240	103,036	100,164	97,605
Discounted @ OCEC	180,635	197,994	215,675	231,822	247,280	261,510	274,591	286,599	297,605	307,676	316,878	325,270	332,910	339,850	346,141
Opportunity Cost of Equity Capital =	10.00%														
Equity Contributions:															
Contributed Equity Capital	214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV of Annual Equity Contributions	214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated PV of All Equity Contributions	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000
INTERNAL RATE OF RETURN - icf	-7.15%	5.76%	10.30%	12.34%	13.50%	14.17%	14.57%	14.81%	14.95%	15.02%	15.05%	15.05%	15.03%	15.00%	14.95%

VALUATION WITHOUT REVERSION (assumes infinite cash flow streams):

This method Values the Project solely on it's cash generating ability and will prevent the Greater Fool Trap

PV of Investor Cash Flow	
PV of Spendable Cash: yrs 1-15	175,651
PV of Spendable Cash: yrs 16 to Infini	96,795
PV of Cash Investmnt Account in yr 15	0
TI PV of Investor Cash Flow	272,446
PV of TI Contributed Equity	214,000
PV Investor Cashflow to PV Equity	1.27
Opportunity Cost of Equity Capital =	10.00%

CAPITALIZATION OF NOI (assumes no sale):

This method Values the Project solely on Net Operating Income projected into infinity. It helps prevent the greater fool trap.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
NET OPERATING INCOME (NOI)															
Net Operating Income	58,320	65,645	68,271	71,001	73,841	76,795	79,867	83,062	86,384	89,839	93,433	97,170	101,057	105,099	109,303
PV of Net Operating Income (NOI)															
PV of NOI for years 1-15	633,831														
PV of NOI for yrs 16 to Infinity	333,422														
Capitalized NOI	967,253														
Asking Price of Property	800,000														
Amount Over(Under) Priced	(167,253)														
Market Capitalization Rate	9.00%														
Average Yearly Growth of NOI	4.37%														

VALUATION ANALYSIS OF MAX. POTENTIAL CASH FLOW

VALUATION WITH REVERSION (with sale):

This method Values the Project Based on Maximum Potential Cash Flow plus Cash from Sale

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PV of Adjusted Potential Cash Flow															
Cash Available for Distribution	9,315	16,790	9,454	21,111	22,504	24,039	25,627	27,270	28,969	30,726	32,543	34,420	36,360	38,364	40,434
Plus Total Tax Savings on Personal Income	4,964	1,424	234	0	0	0	0	0	0	0	0	0	0	0	0
Max. Potential Spendable Cash	14,279	18,215	9,688	21,111	22,504	24,039	25,627	27,270	28,969	30,726	32,543	34,420	36,360	38,364	40,434
Less After Tax Interest Income	67	157	180	90	0	0	0	0	0	0	0	0	0	0	0
Adjusted Max. Potential Spendable Cash	14,212	18,058	9,509	21,021	22,504	24,039	25,627	27,270	28,969	30,726	32,543	34,420	36,360	38,364	40,434
TL Net Cash from Dissolution of Project	184,419	206,583	242,279	270,234	299,854	331,223	364,431	399,575	436,755	476,078	517,656	561,609	608,064	657,154	709,021
Less Cash Account (checking)	1,840	1,935	1,973	2,052	2,134	2,219	2,308	2,400	2,496	2,596	2,700	2,808	2,920	3,037	3,159
Less Cash Investment Acct. (savings)	7,475	10,000	10,000	0	0	0	0	0	0	0	0	0	0	0	0
TI Cash frm Dissolution less Cash Accts	175,103	194,648	230,306	268,183	297,720	329,003	362,123	397,175	434,259	473,482	514,956	558,801	605,144	654,117	705,862
PV of Adj. Potential Cash Flow & Sale															
Discounted @ 5%	180,301	206,466	237,076	276,057	306,326	336,500	366,560	396,487	426,264	455,877	485,311	514,555	543,597	572,426	601,034
Discounted @ 10%	172,105	188,710	208,021	232,518	248,180	262,602	275,865	288,046	299,214	309,440	318,788	327,317	335,087	342,150	348,558
Discounted @ 15%	164,622	173,195	183,695	197,618	203,492	208,102	211,635	214,251	216,092	217,281	217,925	218,116	217,934	217,449	216,719
Discounted @ 20%	157,763	159,556	163,166	169,356	168,715	167,301	165,332	162,983	160,389	157,659	154,876	152,103	149,387	146,763	144,255
Discounted @ 25%	151,452	147,501	145,712	146,253	141,336	136,327	131,398	126,666	122,204	118,058	114,248	110,779	107,646	104,833	102,323
Discounted @ OCEC	172,105	188,710	208,021	232,518	248,180	262,602	275,865	288,046	299,214	309,440	318,788	327,317	335,087	342,150	348,558
Opportunity Cost of Equity Capital = 10.00%															
Equity Contributions:															
Contributed Equity Capital 214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV of Annual Equity Contributions 214,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated PV of All Equity Contributions	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000	214,000
INTERNAL RATE OF RETURN - pcf	-11.53%	3.07%	8.89%	12.52%	13.70%	14.38%	14.78%	15.02%	15.16%	15.23%	15.25%	15.25%	15.23%	15.19%	15.14%

VALUATION WITHOUT REVERSION (without sale):

This method Values the Project solely on it's cash generating ability and will prevent the Greater Fool Trap

PV of Adj. Potential Cash Flow into Infinity

Discounted @ 5%	650,488
Discounted @ 10%	276,375
Discounted @ 15%	163,099
Discounted @ 20%	111,562
Discounted @ 25%	83,178

Disc. @ Oppt Cost of Eq Cap	276,374
Opportunity Cost of Equity Capital =	10.00%

PV of TI Contributed Equity 214,000

Internal Rate of Return 12.87%