

RE 618 / Fin 618 – Real Estate Investment Analysis

Homework – Valuing Leasehold Interests – Solutions

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- 1) Six years ago you entered into a 10-year lease for 8,000 sf at \$15.00 psf gross. Now market rent for this space is \$13.00 psf. You would like to move to a new location. If your landlord's cost of capital is 11 percent, what is the minimum amount he will require in order for you to buy out your existing lease?

The total required lease payment is $\$15.00 \times 8,000 = \$120,000$. Market rents would be \$104,000, so that the difference between market and contract rent is \$16,000 per year. Since there are four more years left on the lease, the smallest buyout the lender would accept is $P/Y = 1, N = 4, I = 11, FV = 0, PMT = (16,000) \Rightarrow PV = \$49,639$.

- 2) Five years ago you entered into a 15-year lease on 28,000 square feet of space at \$5.50 psf. You have found alternative space that will cost you only \$4.00 psf for the next ten years. You have found a tenant that will sublease your current space for \$5.00 psf for the next four years and \$5.25 psf in the following six years. You estimate your total cost of moving to the new location to be \$110,000. Your cost of capital is 12 percent. What is the incremental return from moving and subleasing your space? Should you make this move?

If you stay in your existing space, you will be required to make lease payments of \$154,000 per year for the next ten years.

If you move, your new lease payment will be \$112,000. Of course, you will still be required pay your currently lease payments of \$154,000 per year. However, your subtenant will pay you \$140,000 per year in the first four years and \$147,000 in the final six years.

Thus, the incremental cash flows are as follows:

<u>Year</u>	<u>Sublease</u>	<u>Keep space</u>	<u>Difference</u>
0	(110,000)	– 0 –	(110,000)
1-4	(126,000)	(154,000)	28,000
5-10	(119,000)	(154,000)	35,000

These cash flows “look like” an investment, with an IRR of 24.56%. This seems to be a very good return on the \$110,000 moving costs investment. As a result, unless the new location is significantly worse for some other reason, it probably makes sense to do the move.