

**Discounted Cash Flow Modeling in a Distressed Market:
Investment Value vs. Market Value**

Martin A. Skolnik, MAI
5304 Reno Road, NW
Washington, DC 20015

MSkolnik@realestate-consulting.com

Discounted Cash Flow Modeling in a Distressed Market: Investment Value vs. Market Value

Summary: Appraisers are taught early in their careers that there are differences and nuances between the different types/concepts of value such as insurable value, assessed value, investment value, use value, and market value. One area in which appraisal methodology has blurred the distinction between market value and investment value is in the valuation of income-producing properties that have vacancy/absorption issues. This paper discusses the conceptual difference between market value and investment value for lease-up properties.

The purpose of this paper is to demonstrate that a discounted cash flow (DCF) analysis that models the absorption of a partially leased income-producing property¹ does not produce *market value* as most appraisers believe, but rather yields *investment value*.

Although this is contrary to current appraisal practice, this conceptual change in fundamental appraisal practice aligns the definitions of both market value and investment value with the concept of the Principal of Anticipation. In this time of economic uncertainty, it is important for those involved in real estate transactions such as primary lenders or the secondary mortgage market, to be provided with accurate representations of the true market value of a distressed property.

For a property at stabilized operation, a properly documented discounted cash flow should produce an estimate of market value -- this discussion is not about those types of properties. The issue lies in the analysis of properties that do not exhibit stabilized operations (that is, properties that have material vacancy issues).

Relevant definitions used in this paper include:

Market Value: The most probable sales price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;

¹ Partial occupancy of a property might occur due to economic distress in the real estate market, or due to initial lease-up, or to the vacating of a large tenant.

2. Both parties are well informed or advised, and each acting in what he considers his own best interest;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereof; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.²

Investment Value: Investment value represents the value of a specific property to a particular investor.³ Investment value is the price an investor would pay for an investment in light of its perceived capacity to satisfy that individual's desires, needs, or investment goals. Criteria to evaluate a real estate investment are not necessarily set down by an individual investor; they may be established by an expert on real estate, i.e., an appraiser.⁴ Investment value may coincide with market value, if the client's investment criteria are typical of successful buyers in the market. In this case, the two opinions of value may be the same number, but the two types of value and their concepts are not interchangeable.⁵

Background

Discounted cash flow analysis (DCF) is a much-used analytical tool in the appraiser's skill set, mostly applied to the valuation of multiple tenant income-producing properties. It can be used either as a stand-alone valuation technique in the Income Approach or it can be used in conjunction with a direct capitalization analysis. Buyers, sellers, developers, managers, and lenders of multiple tenant properties (retail, apartment, office, flex/warehouse, subdivision) use this analytical technique in their day-to-day due diligence and decision-making processes. The appraisal community applies DCF analyses to try to mirror the methodologies and thought processes of the real estate community, and this is where the misconceptions between market value and investment value begin.

There are two primary uses of discounted cash flow analyses for distressed properties: 1) for appraisers and buyers to model the future income potential of an

² OCC Regulation 12 CFR Part 34, Section 34.44.

³ Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (Chicago: The Appraisal Institute, 2008), pages 28-29

⁴ Appraisal Institute, *The Appraisal of Real Estate*, 12th ed. (Chicago: The Appraisal Institute, 2001), pages 26-27

⁵ Op. Cit., page 450

unstabilized property in an attempt to estimate its market value; and 2) for owners and asset managers to model the *on-going* operations of a property to ascertain the value to the existing user. For a single unstabilized property, there could be two completely different values derived from a DCF – one produced by the appraiser or buyer that represents the value in transfer (i.e., *market value*) and one produced by the owner or asset manager that represents the value in continued use by that specific owner (i.e., *investment value*).

Have appraisers been calling the results of their discounted cash flow analyses for properties with vacancy *market value* all these years when, in fact, it is *investment value*? As a buyer recently asked, “Why would I pay the seller for some mythical lease-up that they won’t even be involved with? I will only pay the seller a price based on current occupancy, i.e., that which the seller has brought to the table, and any lease-up that occurs because of my marketing abilities is profit that accrues to me. Why should your appraisal of market value be based on anything but current income?”

The Principle of Anticipation, which is the cornerstone of the Income Approach, states, “value is created by the anticipation of benefits to be derived in the future.”⁶ Further, “value is based on the market participants’ perceptions of the future benefits of acquisition.” In its definition of Anticipation, *The Appraisal of Real Estate* does not distinguish between market value, investment value, or use value. Unfortunately, it is a well-entrenched misconception in the appraisal industry that the Principle of Anticipation implies that *any* future benefits accrue to yield market value. That is not true. Anticipated benefits can accrue to the buyer of a property, or to the seller, or to both.

The current application of the discounted cash flow methodology in estimating market value for partially or wholly vacant properties erroneously allocates the entire future benefit of cash flow solely to the seller (i.e., current owner) and none to the buyer (i.e., the entity that creates the future cash flows). The future benefits of absorption are produced by the buyer and accrue to the buyer, not to the seller, so this should be

⁶ Appraisal Institute, *The Appraisal of Real Estate*, 13th ed. (Chicago: The Appraisal Institute, 2008), p. 35.

termed the *buyer's* investment value not its market value. DCF models do not distinguish between future income from actual leases procured by the seller versus hypothetical income that might be procured by the buyer in the future. In the DCF model, future income from all leases is treated the same – as if it equally contributes to the market value of the property. This is not true. The difference between these two scenarios is the distinction between market value and investment value.

Asset managers and owners use discounted cash flow analyses to model a property's future operations and prospective leasing of currently vacant space to understand a property's potential cash flow, both before and after debt service. For them, the DCF provides a snapshot of net income potential through their prospective holding period. It is the value that the owner, itself, creates over the holding period. The owner is not implying a transfer of the property on the date of value; the owner will continue managing and marketing the property. The cash flow analysis represents its stewardship of the property.

Appraisers, on the other hand, model the transactional value of the property. That is, appraisers (and lenders) should be interested in the value of the property as-is. Leasing of currently vacant space in a distressed property after the date of value is due to the buyer's entrepreneurialism, not the seller's. If a prudently and knowledgeable seller had been able to lease the vacant space, it would have done so prior to the valuation date. As such, the incremental value of any leasing after the valuation date should accrue to the buyer, not the seller. That is, any incremental value (i.e., leasing) after the date of value does not contribute to market value

If the seller is not the procuring cause of the future prospective tenants, the present value of this future cash flow should not be part of the price that the buyer pays the seller. Market value is value-in-exchange, so if a buyer is not paying for it, then it is not part of market value. Therefore, the result of a DCF that models certain-term current leases along with income resulting from prospective future leasing procured by the buyer is actually *investment value* to the current owner. As mentioned above, this is

the typical DCF model for asset managers and owners. However, in today’s appraisal practice, this is erroneously called *market value*. So, market value for a distressed, partially occupied property is the present worth of certain-term leasing, not from prospective leasing that occurs in the future only due to the marketing and management efforts of the buyer.

Valuation Scenario

Assume a simple valuation scenario for demonstration purposes: the subject property is a 60,000 square foot office building with 40,000 square feet occupied at \$16.00 per square foot with three vacant suites: 10,000 square feet, 7,000 square feet, and 3,000 square feet. The vacant 10,000 square foot suite is anticipated to be at the beginning of the Quarter 3 of Year 1 of the analysis, the 7,000 square foot suite is anticipated to be leased at the beginning of Quarter 1 in Year 2, and the 3,000 square foot suite is anticipated to be leased at the beginning of Quarter 3 in Year 2. The simple assumptions for this analysis are listed in Table 1.

Table 1
Basic Valuation Assumptions

Market rent	\$16.00
Inflation	0%
Rent increases	None
Fixed operating expenses	\$3.00 per sq. foot
Variable operating expenses	20% of gross income
Leasing expenses	10% of first year’s rent
Management fees	5% of gross income
Current capitalization rate	6.0%
Reversion capitalization rate	6.0%
Internal Rate of Return (IRR)	7.5%

The typical, current solution to this valuation problem for the appraiser is to develop a cash flow model and estimate the lease-up/absorption of the vacant space, and then discount the income (net of operating expenses) to present value. Table 2 is an example of the cash flow model and it yields a cash flow value of \$8,530,000, rounded.

Table 2
Discounted Cash Flow Model with Lease-Up of 33% Vacancy
Currently labeled “market value” by the appraisal community

	Year 1				Year 2			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Income								
40,000 sf occupied	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000
10,000 sf vacant	0	0	40,000	40,000	40,000	40,000	40,000	40,000
7,000 sf vacant	0	0	0	0	28,000	28,000	28,000	28,000
3,000 sf vacant	0	0	0	0	0	0	12,000	12,000
Gross Income	\$ 160,000	\$ 160,000	\$ 200,000	\$ 200,000	\$ 228,000	\$ 228,000	\$ 240,000	\$ 240,000
Expenses								
Fixed Expenses \$3.00	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000
Variable Expenses 20%	32,000	32,000	40,000	40,000	45,600	45,600	48,000	48,000
Leasing Expenses 10%	0	0	16,000	0	11,200	0	4,800	0
Management 5%	8,000	8,000	10,000	10,000	11,400	11,400	12,000	12,000
Total Expenses	\$ 85,000	\$ 85,000	\$ 111,000	\$ 95,000	\$ 113,200	\$ 102,000	\$ 109,800	\$ 105,000
Net Operating Income	\$ 75,000	\$ 75,000	\$ 89,000	\$ 105,000	\$ 114,800	\$ 126,000	\$ 130,200	\$ 135,000
Reversion Cap. Rate 6.0%								\$ 9,000,000
Quarterly Cash Flow	\$ 75,000	\$ 75,000	\$ 89,000	\$ 105,000	\$ 114,800	\$ 126,000	\$ 130,200	\$ 9,135,000
Discount Rate 7.5%								
Total Value by DCF	\$ 8,530,000							

It is important to note that the lease-up of the currently vacant space over the absorption period (20,000 square feet in two years) is only going to occur due to the buyer’s marketing and management skills and, more importantly, it will occur during the buyer’s ownership period. If the buyer is creating occupancy over the next two years, why would it reward the seller by paying the seller the incremental value achieved by the buyer’s marketing/management efforts? What has the seller done to “earn” this incremental amount in its market value estimate?

Contrary to currently accepted appraisal practice, this \$8,530,000 cash flow value does not represent *market value*; it is the property’s *investment value*. The prospective leasing will be created by the buyer due to its ownership of, and its investment in marketing and management of, the property beginning on Day 1 of the analysis (i.e., the ownership period of the buyer). It is the value that the buyer creates for itself; that is the essence of investment value.

Even though the absorption estimate is market-based and could be achieved by a competent ownership entity with the requisite management and marketing skills, it is not value that a seller/owner has achieved as of the date of value. It is value that the *next* owner would achieve if it owned the property on Day 1 of the analysis and would follow through on the marketing and management expectations of the market. The seller is not the owner of the property on Day 1 of the cash flow analysis; the buyer is. The buyer is the owner at the beginning of the cash flow analysis and, as such, the incremental value resulting from absorption and lease-up after Day 1 is the value to that particular buyer, i.e., investment value. The buyer's investment value could, of course, be based on market assumptions of lease-up and absorption but that does not necessarily mean that the buyer's value conclusion is market value (see previously presented definition of *investment value*).

If the appraiser's valuation scenario holds true, the buyer in this example would be paying the seller \$8,530,000 for a 67% occupied property -- essentially giving the seller the present value of the net rental income received during the buyer's ownership period due to the buyer's marketing and management expertise. This is not a reasonable.

Consider the difference between the lease-up scenario described above for the property at 67% occupancy that yielded an \$8,530,000 value and a valuation example as if the same property is 100% leased at the time of the appraisal. At 100% occupancy, the value of the subject is \$9,000,000 as shown in Table 3. This represents market value of the leased fee interests at 100% occupancy.

Table 3
Valuation Example at 100% Occupancy

<u>100% Occupancy Valuation (Stabilized)</u>		
		<u>Stabilized 12-month Cash Flow</u>
Income		
40,000 sf occupied		\$ 640,000
10,000 sf vacant		160,000
7,000 sf vacant		112,000
3,000 sf vacant		<u>48,000</u>
Gross Income		\$ 960,000
Expenses		
Fixed Expenses	\$ 3.00	\$ 180,000
Variable Expenses	20%	192,000
Leasing Expenses	10%	0
Management	5%	<u>48,000</u>
Total Expenses		\$ 420,000
Net Operating Income		\$ 540,000
Capitalization Rate	6.0%	
Indicated Market Value		\$ 9,000,000

The difference in value for the subject between 100% occupancy (\$9,000,000) and 67% occupancy with a two-year lease up (\$8,530,000) is only \$460,000. That is, in the traditional DCF analysis that is currently erroneously called market value, the ownership risk of 33% vacancy translates to only a 5% reduction in value. Does this seem reasonable? No.

Consider the as-is valuation scenario outlined in Table 4. Assume that market value for the subject is based solely on the leasing currently in-place at the subject as of the valuation date, all other assumptions being equal to the valuation scenarios outlined in Tables 2 and 3. That is, the incremental value of any leasing after the valuation date would accrue to the buyer, not the seller, and are not part of the value that the buyer would pay the seller for the property. The valuation would result in a \$5,000,000 value, rounded. (Note: In addition to the base \$5,000,000 value, there might be some incremental contributory value for existing office space finish, building “reputation”, and the like. The enumeration of this incremental contributory value is beyond the scope of

this paper, but the appraiser should determine if such incremental value exists in the subject property.)

Table 4
Valuation As-Is at 67% Occupancy
Distressed Occupancy

<u>Valuation Capitalizing Certain Term Income</u>		
	<u>12-month Cash Flow</u>	
Income		
40,000 sf occupied		\$ 640,000
10,000 sf vacant		0
7,000 sf vacant		0
3,000 sf vacant		<u>0</u>
Gross Income		\$ 640,000
Expenses		
Fixed Expenses	\$ 3.00	\$ 180,000
Variable Expenses	20%	128,000
Leasing Expenses	10%	0
Management	5%	<u>32,000</u>
Total Expenses		\$ 340,000
Net Operating Income		\$ 300,000
Capitalization Rate	6.0%	
Indicated Market Value		\$ 5,000,000

In this as-is example, the seller has only achieved 67% occupancy. Why would a prudent and knowledgeable buyer pay the seller more than the value of the property as-is for its current cash flow?

The key to determining if these scenarios are really investment value or market value can be found in the most widely accepted definition of market value for transaction purposes, previously presented. The important phrases in this definition are: “the buyer and seller each acting prudently, knowledgeably...” and “...both parties are well informed or advised, and each acting in what he considers his own best interest.” A prudent, knowledgeable, well-informed buyer acting in its own best interest would not willingly pay the seller for value that it, the buyer, creates itself. The monetary benefit of the absorption of vacant space should accrue to the entity that facilitates that absorption. The hypothetical property discussed in this paper has an as-is value of

\$5,000,000 based on current leases in-place and a 100% occupied value (i.e., investment value) of \$9,000,000, which is a \$4,000,000 difference between *as-is* and 100% leased.

However, an appraiser applying current valuation terminology and a discounted cash flow analysis would say that the *market value* for the 67% occupied property is \$8,530,000, which is incorrect. In actuality, the appraiser's \$8,530,000 estimate is investment value to either 1) the owner holding the property through the stabilization period or 2) the buyer if it purchases the property and realizes the management and marketing goals, but it is not market value. Why would a buyer pay more than value from certain-term income for leasing that the seller has not accomplished itself? What has the seller contributed after the date of sale to merit a reward for lease-up with which it has not been involved?

How does this dichotomy between market value, investment value, and total value relate to a wholly vacant property? Using this methodology, one might imply that the market value would be zero because there is no current leasing. Is this possible? Is this reasonable? Part of the answer is "it depends"... it depends on the local market conditions and available market data. However, consider this: if a buyer purchases a fully vacant building, why would the value created by the efforts of the buyer go to the price achieved by the seller? Why would that increment of value not accruing to the buyer after sale?

The correct discounted cash flow model for a partially vacant income-producing property might consist of a series of two cash flows with two distinct rates of return:

- 1) the cash flow of certain-term income to the seller discounted to present value at X%, and
- 2) the cash flow of future prospective income to the buyer discounted to present value at Y%, which would represent a greater risk since the lease-up is uncertain. The rate differential between the certain-term income and the

future prospective lease would depend on the appraiser's judgment of the depth of leasing demand in the local market, as well as property or region-specific factors such as amount of space available currently and prospective in the market, the amount of space available at the subject property, the property's condition and configuration, population growth, income growth, changes in employment, and the like.

Table 5 demonstrates this dual discount rate (IRR), modeled to reflect the additional risks of future leasing; specifically the risk of vacancy at expiration of the certain term lease, and the risk of lease-up of the currently vacant space. These additional investment and ownership risks have been modeled in this example as:

- The certain-term leasing reversion capitalization rate is increased from 6.0% to 8.0% to reflect the uncertainty of re-leasing the space at the current rent when the lease expires in the future
- The discount rate (IRR) for certain-term leasing is decreased from 7.5% to 6.5% to reflect the limited risk of default on an existing, signed lease
- The prospective future leasing reversion capitalization rate is increased from 6.0% to 12.0% to reflect the uncertainty of achieving this income
- The discount rate (IRR) for future prospective leasing is increased from 7.5% to 9.5%, also to reflect the uncertainty of achieving this income

The DCF model with dual rates of return (Table 5) is presented to demonstrate the perceived risk of ownership/investment from certain-term income and from prospective future leasing in a distressed property in comparison to the DCF model that appraisers generally apply, as shown in Table 2. Note that the proper identification of ownership/investment risk in the dual IRR model results in a value similar to that shown in Table 4 (As-Is Occupancy Valuation / Distressed Example). This then gives the appraiser two methodologies to model the ownership risks of uncertain future, prospective leasing of a distressed property.

Table 5
Cash Flow Model with Dual Rates of Return
Market Value Model with Certain Term Income and Prospective Future Leasing

Leasing from Certain Term Income									
		Year 1				Year 2			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Income									
40,000 sf occupied		\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000
10,000 sf vacant		0	0	0	0	0	0	0	0
7,000 sf vacant		0	0	0	0	0	0	0	0
3,000 sf vacant		0	0	0	0	0	0	0	0
Gross Income		\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000
Expenses									
Fixed Expenses	\$ 3.00	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000
Variable Expenses	20%	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000
Leasing Expenses	10%	0	0	0	0	0	0	0	0
Management	5%	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Total Expenses		\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000	\$ 70,000
Net Operating Income		\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000
Reversion Cap. Rate	8.0%								\$ 4,100,000
Quarterly Cash Flow		\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 4,190,000
Discount Rate:									
Certain Term Income		6.5%							
PV of Certain Term Income		\$ 4,274,000							
Prospective Future Leasing									
		Year 1				Year 2			
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Income									
40,000 sf occupied		\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
10,000 sf vacant		0	0	40,000	40,000	40,000	40,000	40,000	40,000
7,000 sf vacant		0	0	0	0	28,000	28,000	28,000	28,000
3,000 sf vacant		0	0	0	0	0	0	12,000	12,000
Gross Income		\$ 0	\$ 0	\$ 40,000	\$ 40,000	\$ 68,000	\$ 68,000	\$ 80,000	\$ 80,000
Expenses									
Fixed Expenses	\$ 3.00	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Variable Expenses	20%	0	0	8,000	8,000	13,600	13,600	16,000	16,000
Leasing Expenses	10%	0	0	16,000	0	11,200	0	4,800	0
Management	5%	0	0	2,000	2,000	3,400	3,400	4,000	4,000
Total Expenses		\$ 15,000	\$ 15,000	\$ 41,000	\$ 25,000	\$ 43,200	\$ 32,000	\$ 39,800	\$ 35,000
Net Operating Income		-\$ 15,000	-\$ 15,000	-\$ 1,000	\$ 15,000	\$ 24,800	\$ 36,000	\$ 40,200	\$ 45,000
Reversion Cap. Rate	12.0%								\$ 1,370,000
Quarterly Cash Flow		-\$ 15,000	-\$ 15,000	-\$ 1,000	\$ 15,000	\$ 24,800	\$ 36,000	\$ 40,200	\$ 1,415,000
Discount Rate:									
Income from Future Leasing		9.5%							
PV from Future Leasing		\$ 726,000							

Conclusions

There is a fundamental flaw in basic appraisal methodology when valuing distressed properties, i.e., properties that are not achieving stabilized operations. The traditional discounted cash flow model that appraisers use when analyzing income-producing properties was originally an owner's investment or asset management model, not a model to demonstrate the appraised market value of a property for a transaction.

The distinction between market value and investment value is not just a minor nomenclature issue or only a definitional disagreement. This is a potentially serious problem that has ramifications throughout the appraisal and lending communities. We, as appraisers, are taught very early in our careers that there are differences and nuances between the different concepts/types of value (i.e., market value, investment value, use value, assessed value, insurable value) and that we need to be clear in our appraisals of which type of value that our clients have asked us to estimate for the subject property.

Lenders need to rely on market value – that is their mandate and requirement. If appraisers say something is market value then it should, in fact, *be* market value and not some other type of value. A lender would not lend on insurable value or assessed value, why would it lend on investment value?

In the demonstrative scenarios outlined in Tables 4 and 5, there is a very large difference between as-is value by a direct capitalization (\$5,000,000), market value by a dual discount rate cash flow (\$5,000,000), and investment value (\$8,530,000). If the appraiser mislabels his/her value definition and reports investment value instead of market value to the lender, and then if the buyer defaults on that loan, the lender is could be stuck with a very large loss between actual value and the amount on which it lent (\$8,530,000).

The real test of these conclusions is not that a buyer and a seller agree on a purchase price, and that a banker will lend on that price in the normal course of

business lending. If the deal is consummated based on an *investment value* DCF model, as is the current appraisal practice, what happens if lease-up does not occur as modeled? Can the owner cover debt service without the income from lease-up? No, which will necessitate a default on the mortgage. Then, in foreclosure, what will the *next buyer* pay for a distressed property that had not achieved lease-up? It is the contention of this paper that the true market value of the property in lease-up should overwhelmingly be based on certain-term income, not future prospective income.

During the Resolution Trust Corporation (RTC) period of the late 1980s and early 1990s many of its foreclosed properties were originally appraised using the technique outlined in Table 2, i.e., mislabeling investment value as market value. However, when the RTC had to resell these properties after default, the market only recognized that the value of the property was derived from the leases in-place, not on market projections. In these current economic times, we are seeing a return to this philosophy by purchasers.

We owe it to the lending community and public at large to accurately report our values and not to erroneously repeat the mistakes of the past. Lenders need an accurate estimate of market value, not investment value, from discounted cash flow analyses. The appraisal community needs a fundamental change to one of its basic analytical techniques, the discounted cash flow analysis, to reflect that it has been promulgating incorrect terminology, methods, and techniques. Textbooks, teaching materials, and seminars should reflect that there is a difference between generating a market value estimate versus investment value in the application of the discounted cash flow model.

Biography

Martin A. Skolnik (Marty) is a MAI-designated real estate appraiser living in Washington, DC (USA). He has earned a Masters of Business Administration (MBA) from the University of Baltimore and had been working on a Ph.D. in Public Policy from UMBC (University of Maryland, Baltimore County), where is ABD. With over thirty years of real estate valuation experience, Marty's specialties include commercial appraisal review, valuation for property tax assessment purposes, for litigation, and for mortgage financing. He has authored articles for *The Appraisal Journal* and for the International Association of Assessing Officers (IAAO) on a variety of appraisal topics including discounted cash flow methodology, market analysis for residential subdivisions, the valuation of affordable housing, big box retail valuation, and measurement techniques of apartment vacancy. Currently, he is a review appraiser specializing in the analysis of multifamily properties.

Certification

I, Martin A. Skolnik, hereby certify that this manuscript (Discounted Cash Flow Modeling in a Distressed Market) is an original work and that publication is permitted without restriction.

Martin A. Skolnik August 29, 2010

Martin A. Skolnik, MAI