

Short- and Long-Term (Sustainable) Property Valuation

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Summary

Why are long-term investments based on short-term value analysis? Can short-term analysis support sustainable real property investment and lending decisions? Market value, a short-term premise, has been the dominant yardstick by which investors and lenders have measured property value for both short-term (compliance, transaction policing) and longer-term (lending and investment) purposes. We are generally aware that current conditions can move current market values in either direction from long-term norms, and that such values are to some degree subject to unexpected events. This notion has been made abundantly clear as a result of the subprime debacle. Still, it has largely been left to the investor or lender to make judgments about risk exposure, and there has been precious little effort to enroll valuation experts in supporting anything but an often meaningless snapshot of value as of a specific date.

This paper reviews notions of short-term and long-term (sustainable) value, makes a case for using both to better understand risk to the long-term investor and lender, and provides a few examples of data trending and existing long-term valuation techniques. It makes an appeal to the valuation community to extend beyond its market-value orientation – the bounds imposed by today’s market participants – to move beyond current market thinking and address the *sustainable* property and market conditions that influence value. It suggests that expanding valuation techniques to provide useful perceptions of long-term value is not as abstract as it might seem.

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1. INTRODUCTION

The current state of the world's financial affairs is surprisingly fragile and confused. We generally acknowledge that an enormous asset bubble is deflating, causing dislocation and disruption. We worry that the conditions that allowed it to form in the first place have not changed, and indeed, many are forecasting another bubble. The press reports various statements, analyses and prognostications by economists, bankers, politicians; everyone but valuers/appraisers. Isn't it the job of appraisers to be neutral arbiters of value? Shouldn't we have been relied upon during the most egregious asset price inflation of our time? Why didn't our opinions help to push against the tide of ever-inflating "values?" Maybe it is because our opinions are typically offered for a single point in time, and point values are not really helpful when it comes to understanding overall property risk.

Interpreting property conditions during, say, 2005, relied upon low capital market rates and high expected growth, which led to even lower (single-period) capitalization rates, and it *looked* like risk was low as a result. However, the market (buyers and sellers) were acting based on self-reinforcing beliefs/stories that had no support from any reasonable long-term analysis. Risk had, in fact, increased greatly. What was being missed?

As valuers, we interpret the actions of typical buyers and sellers in property markets. However they reach decisions is ours to observe, but rarely to judge. When the valuation problem involves determining the price that a property would have sold for on a particular date, for, say, regulatory purposes, or to settle disputes, the valuation process with its market-based interpretation of value is on the mark. No problem. But what if an investor or lender intends to be in the deal for five or 10 or more years? Isn't the risk of value decline (or potential value recovery from depressed conditions) material?

One consequence of relying on a market value premise is that a leveraged property may appear to be a safe investment at one point in time, but its reliance on continued low capital market rates and increasing rents can cause the position to be highly susceptible to unexpected events. One currently observable effect of the (unexpected?) worldwide financial meltdown is that this perceived safety has vanished. Property owners who had financed recent purchased with at least 60% debt are now very close to zero equity. According to Fitch, a ratings agency, the delinquency rate for U.S. commercial real estate loans packaged as collateralized debt obligations (CDOs) is expected to reach 25% by the end of 2010.

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There has been a great deal of angst expressed in the financial and popular press about recurring asset price bubbles, but little or no serious recommendations for how to counter their rise, and cope with their collapse. However, it should be possible for the valuation profession to provide a lot of help. After all, valuers are perhaps the only players in real property markets with no agenda – they are ethically bound to be neutral arbiters of value.

The valuation profession does indeed have the tools and expertise to address long-term conditions; they've just been deployed in other applications. It will take a concerted effort and a lot of agreement to create new valuation processes and perspectives, but what else is being proposed or is even possible to counter property bubbles?

2. LONG-TERM/SUSTAINABLE VALUATION

We have learned numerous consequences of short-term thinking with regard to the natural environment, and many now embrace sustainable long-term thinking. Financial beliefs have achieved no such enlightened status, and we allow institutions to continue to function on the basis of unsustainable premises. One such premise, the concept of market value, is inherently a short-term proposition. We interpret the actions of buyers and sellers on *their* terms, to find how they would price a property on a particular date. Lending and other long-term positions are not well-served by this information, as conditions will change over the life of the loan/investment, and it is largely exposure to changes that determine its risk. The problem we face in addressing this dilemma is that the future is not known, and forecasts are both arguable and malleable. Thus, valuations based on any kind of forecast are uncertain; however, as we shall see, they are necessary.

We valuers feel pretty good about discovering what market participants are using in their forecasts and mirroring those in the appraisal, which does produce market value. What if we base our forecasts on other conditions; say, expected long-term trends in incomes and rents? We cannot hope to achieve the kind of precision and general agreement over values that we can for the market value premise. Nonetheless, the long-term value can be taken as a sort of baseline, which exhibits a relatively low risk. A positive margin between long-term and market values would then represent an increased risk. (Conversely, a negative margin might represent a decreased risk, at least from a valuation perspective. There may be reasons external to the property to ascribe additional risk in depressed markets.) Parsing market and long-term values would suggest caution under certain conditions, and might have the effect of pushing against price bubbles. We will take a look at some ways this might work, but first need to expand the concept of risk.

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2.1 The Future *Will* Serve Up Unexpected Events

There are unseen attributes to all investments, and risk can be appropriately viewed as an investment's vulnerability to unexpected events (as eloquently presented by Nassim Taleb in "The Black Swan"). Of course, unknown events are just that: unknown, and cannot be removed entirely from any risk profile or directly incorporated in the opinion of value. But, exposure can still be accommodated to some degree by taking a long-term view.

The short-term view usually includes only very recent history, and thus excludes past events that may have had profound value impacts. Short horizons can also be baked into the decision-making process of market participants, who might think, say, "if prices are going up, then I can always refinance to cover a cash flow shortfall, or flip the property" (unless prices don't). The property or its market may have been subjected to past unexpected events, and the fact that they *can* exist could be included in a model that looks back far enough. The dimensionality of facts that are considered increases greatly, and the likelihood that a random event will change the outcome is substantially reduced. Some examples might include rezoning, in/out migrations, earthquakes/floods, big city riots; how long do value effects persist, and which events produce lasting changes? We know the equities market can crash, we know rents can decline, we know overbuilding can occur, we know mortgage rates can be held down by central bank policy, we know interest rates can spike...

The business valuation discipline (as distinguished from the real property valuation discipline) routinely considers historic performance to understand correlations between economic and industry changes and their effects on subject company revenues, costs and margins. Changes internal to the company may have had demonstrated effects as well. The property valuer could, likewise, look back to see what has happened with this property type (this neighborhood, business conditions, retail sales, or whichever measure is most germane), in addition to the other local and macro influences noted above, to tie/correlate future values with observable trends.

One advantage of a long-term analysis is not necessarily that it will produce an easily agreed-upon value, but that it will capture more potential value influences, and lessen the position's vulnerability to future unexpected events.

2.2 Mortgage Lending Value

The Basel II Accord provides for consideration of two valuation approaches for commercial real estate. One is, of course, Market Value. The second is Mortgage Lending Value (MLV). MLV is designed to be a more conservative figure than Market Value; the proportion of a loan

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secured that is below 50% of the Market Value carries a lower risk weighting, but this threshold is raised to 60% of the Mortgage Lending Value.

Mortgage Lending Value is considered a long-term, risk assessment technique, and is defined as: “The mortgage value of a property is the value that can be expected with a high level of surety, derived from the historic perspective of market events at the time of the valuation, on the basis of the durable characteristics, and which will be achieved in normal property transactions over a long period in the future.” The mortgage banks using this system of valuation (for example, German Pfandbrief mortgage banks for collateral used with highly rated covered bonds) may lend over the threshold allowed by a property’s MLV (60%, above), but the excess cannot be used as security for covered bonds. Thus, a two-tier risk/cost structure for loans is created, which is exactly appropriate as an institutional structure for countering the destabilizing effects of frothy property markets. MLV is now included as part of International Valuation Standard 2.

The rules under which MLV is determined in Germany are stated with some specificity. “In determining the gross income only the income may be taken into consideration that the property is capable of yielding to any owner on a sustained basis assuming proper management and permissible use.” (See Federal Law Gazette.) Also explicitly considered are risk to the revenue stream, the relationship of income value to replacement cost, sustainability of demand, and other elements. Specific expense bands are applied for management and maintenance costs, risk of loss of rental income (vacancy & collection loss), and modernization risk. Useful life and capitalization rate ranges are also stated in the statute.

The MLV standard is intended to assure a “conservative” basis for loan underwriting, but does not completely solve the short-term/long-term problem. First, there is no explicit effort to address long-term trendlines for determining MLV. Second, what if values are depressed for reasons that are currently obvious: an excess supply of foreclosure properties on the market, an economic recession, or highly restricted financing? Deviation from normative values in both directions would be a more general application of long-term value estimation. Identifying depressed value may not suggest that a “conservative” value would be greater than market value. This may not help much with loan origination, but such understanding might be of some use in managing existing loan portfolios, and could inform holders of commercial properties, as well as rationalize balance sheet fair value (mark-to-market) accounting.

2.3 Value Trending

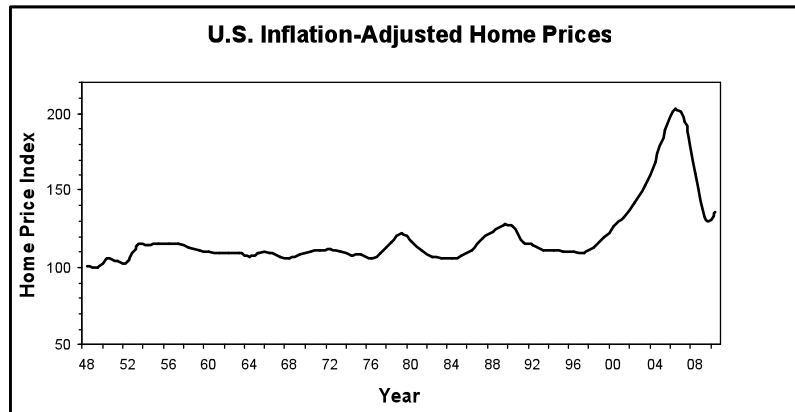
The purpose of using MLV is to rely on conditions believed to be sustainable over the long term. Can we be more explicit about what to expect? How would we know if values were *below* their long-term trend?

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Some measures of value have been developed and could be used for this purpose, at least in a broad way. One of the most interesting and well-established examples of a long-term property value trend is the Case-Shiller Index of residential values in the U.S. The index shows a remarkable stable (inflation-adjusted) trend over 100 years; Figure 1 shows the postwar period (see Shiller).

Figure 1 – Case-Shiller Index



In this presentation, inflation is the key. According to Dr. Shiller, the long-term growth attributable to real property over the last 100 years has largely been due to inflation. Nominal prices have increased at a compound rate of 4.1% over the 50-year period from 1948 to 1998, but after adjusting for inflation, the rate drops to 0.2%. Although local market trend analysis would necessarily take into account other long-term influences, this simple example suggests that long-term values are inherently stable, laying very bare the recent conventional wisdom that prices always increase.

One advantage of exploring long-term trendlines is that they reveal the market's responses to *past* unexpected events. Thus, viewing the trend gives us at least a subjective notion of the effects of the unexpected. While certainly not a predictor of specific future events, it does incorporate a recognition that such things do occur, especially useful when the market is in the midst of a bubble.

Broad trends are not sufficient for local market analysis, and we might want to demonstrate cause and effect based on local incomes, rents and perhaps other indicators. Application of an index to the subject property could readily suggest whether its market value is above- or below-trend.

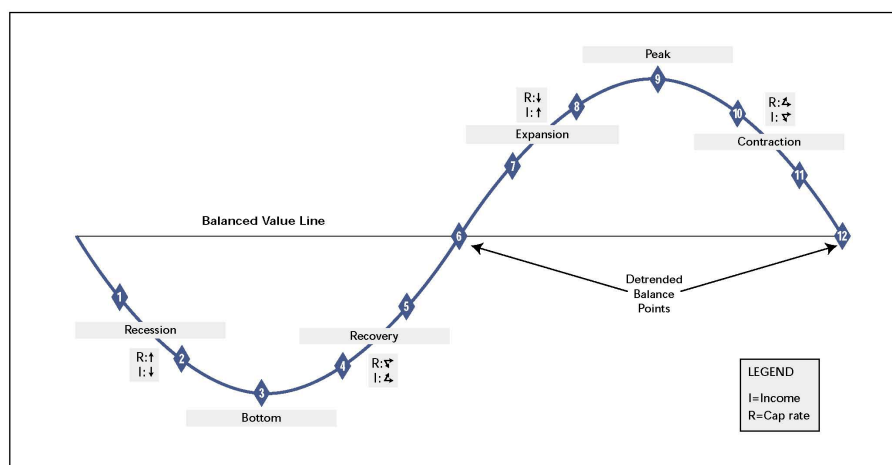
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2.4 Cycle Analysis

There are many approaches to interpreting market data over time. Shorter periods can give helpful views of cyclical trends, particularly for income-generating properties. PricewaterhouseCoopers provides cyclical analysis for 58 property markets and five property types. Their Real Estate Value Cycles (see PWC *Korpacz*) analysis is a combination of physical (real estate economics – demand and supply that impacts occupancy rates and rents) and capital market (redistribution from sellers to buyers and new construction) cycles. The methodology tracks historic vacancy as a proxy for values, and is applicable for many markets and property types within markets. It produces simple sine-wave charts (Figure 2) that can be used with local market data to support reasonable consideration of risk, rent and vacancy rate trends, lease terms, tenant retention, and capitalization rate assumptions.

Figure 2 – Real Estate Value Cycle Analysis



2.5 Value Impairments

The valuation process for addressing a long-term premise is only partly developed, as it has been designed to look at only above-trend conditions. However, there is no reason we cannot deal with below-trend conditions as well. We have well-established valuation technology for all manner of value impairments, from construction defects to site contamination to marketability and control impairments, and others. Some consider very long-term conditions, and all look at market responses from the impaired phase through cure and normalized conditions. Why not employ these in some agreed fashion to get at both price premia and price discounts?

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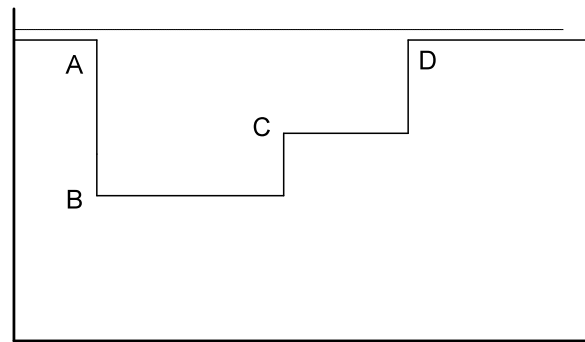
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One good example is the field of real estate damages, whose principles and techniques can be adapted to address value impairments generally. Damages can include value effects of transactional conditions, distress and sociological conditions, legal, building, site/infrastructure, environmental/biomedical conservation, and natural/climate conditions. In each instance, an event or discovery occurs at time = 0, various stages of assessment and repair/remediation occur, and value (usually) returns to market value at time = n years (Figure 3; see Bell, Anderson and Sanders.)

Figure 3 – Detrimental Conditions Model



Value is unimpaired at (A), then, say, on-site contamination is discovered and the initial market reaction is to reduce value to (B). Investigation reveals the extent of the contamination, removing some uncertainty, and value increases to (C). Remediation continues for a time until value returns to its unimpaired level (D). Risk and time are primary elements in the analysis, which ranges from simple to quite complex.

The technique is broadly applicable, and could certainly be used to accommodate short-term/unexpected capital market impairments and others. It is also related to impairments associated with ownership conditions (the business valuation domain). (See Bell, page 266, Case Study: Dennis A. Webb, ASA, MAI FRICS *Nonphysical Damage – Fractional Discounts*.) With shared ownership (deeded interests, or shares of property holding companies), control and marketability attributes normally associated with the entire property are diminished, sometimes to a very great extent. Discounts from the value of the property (or the net asset value of the property holding company) are frequently valued. Income methods are similar to damages, relying on risk and the holding period until the interest holder receives its pro rata share of net owners' equity.

These same impairments are recognized for minority interest-holders of operating companies, and such impairment analysis has been developed over many years. Besides an income

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method (risk over time, above), other methods involve direct market observations of the value effect of impairments from studies of transactions involving restricted stock issues (paired sales of shares of public companies, one publicly traded and one restricted from trading), and application of options trading models. (See Webb, *Advanced Modeling for Holding Company Valuation*.) These processes can be expanded to include value impairments resulting from excess supply (large numbers of foreclosures), inadequate demand (impaired access to lending, or abnormally high interest rates/impaired capital markets), and others. Risk and the period leading to “cure” of the condition are the principal questions to be addressed by the valuer.

3. CONCLUSIONS

Long-term views can be incorporated in to the valuation process, influencing our current understandings of risk, and revealing whether current valuations are supported, depressed, or riding on a bubble. Short-term analysis, on the other hand, has no relative perspective, being only a narrow slice of market activity. This is of particular concern when the “typical” buyer and seller are projecting unsustainable conditions into the future, and making inflated pricing decisions accordingly. Looking only at the current behavior of market participants leads to a market value conclusion, but perhaps not a useful one.

Long-held views have been dismantled by the recent financial market meltdown, and new thinking is called for (definitely *not* the type of thinking that got us here). While unexpected events will occur, their effects are likely to be muted if a long-term perspective informs the valuation analysis, and sustainable value levels are identified.

Valuers should be in a position to bring a more comprehensive and detailed treatment of long-term trends and influences to support decisions by lenders, investors and others. Much progress has been made by German Pfandbriefe banks in using MLV analysis for underwriting highly-rated covered bonds. Something like this system should be expanded to other countries and institutions, and the technology to support even more detailed and rigorous methods for understanding long-term sustainable value needs to be developed by the valuation profession.

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BIOGRAPHICAL NOTES



Dennis A. Webb, ASA, MAI, FRICS is the owner of Primus Valuations, a valuation firm with offices in Los Angeles and Denver. Primus is a member of the American Business Appraisers® National Network, a consortium of independently owned and managed business appraisal practices, which includes many nationally known valuation experts.

Mr. Webb's practice is concentrated on real estate holding entities and value impairments. He has authored "Undivided Interests in Real Property: Partnerships and Cotenancies," published by the Appraisal Institute, as well as numerous articles on impairment-related topics. He teaches extensively on partnership and common tenancy interest valuation.

Prior to specializing in valuation, Mr. Webb was co-owner of an NASD broker/dealer firm which provided real estate investment syndication, analysis and consulting services. He held licenses as a Registered Representative and General Securities Principal, and was also responsible for due diligence investigations. Mr. Webb received his Bachelor of Science degree in Engineering from the University of California at Los Angeles with a Minor in Economics, and worked as a systems and design engineer.

He is a past President of the Los Angeles Chapter of the American Society of Appraisers, and Chair of the Rocky Mountain Chapter of the RICS. He is on the editorial board of the Journal of Business Valuation and Economic Loss Analysis. He is a State Certified General Real Estate Appraiser in California and Colorado, and a member of the Appraisal Institute, the American Society of Appraisers, the Institute of Electrical and Electronics Engineers, and a Fellow of the Royal Institution of Chartered Surveyors.

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