

A Pendulum Theory

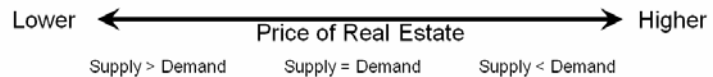
Understanding Commercial Real Estate Market “Swings”

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Many times we have heard someone say “the pendulum has swung too far” when describing the commercial real estate market. Whether referring to a market cycle peak when prices have reached levels that seasoned practitioners find it difficult to rationalize or, alternately, the bottom of a market when prices reach levels well below the cost of creation of vertical improvements, “pendulum” has long been used to describe market swings.

Traditional economic models hold that when all other factors are held even, supply and demand determine pricing. The caveat of “all other factors being equal” has always been the rub, although clearly, supply and demand are primary drivers of real estate value.

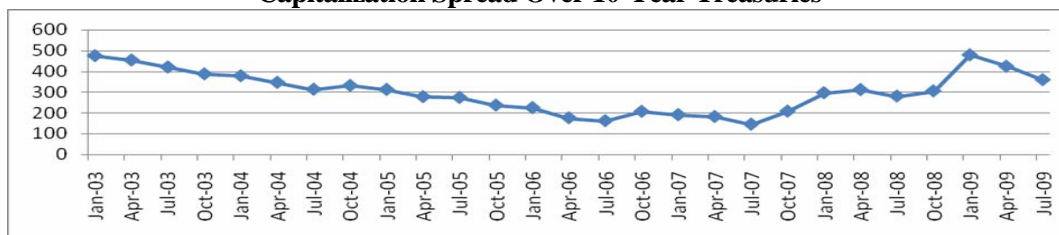
In simple supply and demand theory, when supply exceeds demand, prices experience downward pressure; equilibrium between supply and demand supports stable pricing; and demand outpacing supply often results in higher prices. If a rational market’s best scenarios are either supply and demand in balance or a disciplined control of supply in order to maintain upward pressure on prices, what other factors create market cycles?



Does a pendulum theory serve as a model for describing long-term cycles in commercial real estate? We believe it does. To make our case, we will apply the pendulum concept to the most recent market swings occurring between 2003-2009 in order to better understand these market shifts.

If we use average capitalization (CAP) rates as the benchmark for market pricing and compare the average CAP rate to the 10-year Treasury Bill (T-Bill) to reflect risk premiums and factor out the relative interest rate impact on CAP rates, we are able to track market cycles to the month. The difference, or gap, between the 10- year T-Bill and the CAP rate represents the risk premium that the market assigns commercial real estate investment. At a market peak, the gap is compressed and market prices, as measured by CAP rates, are at a high point in the cycle. At a market valley, the gap is exaggerated, with CAP rates rising in inverse relation to prices falling.

Capitalization Spread Over 10-Year Treasuries



The chart above shows the risk premium spread between capitalization rates and Treasuries began at over 475 basis points (bps) in January of 2003 and narrowed to 145 bps in June/July of 2007, marking the **PEAK** of the most recent market cycle.¹ Not coincidentally, the bond market peaked on June 13, 2007 when the spread between bond prices and the 10- Year T-Bill was at its lowest point.

¹(source: Real Capital Analytics and US Treasury, provided by Ralph Spencer, CCIM, SIOR)

Cap rates move primarily because of the prevailing expectations of the investing community. Investors generally adjust return expectations based on:

- Alternative investments in the capital markets
- **Perceived** risk
- Financing availability and terms
- **Expectations** for rental growth
- **Expectations** for reversion value growth
- **Expectations** of treatment for income taxes

In June of 2007, commercial real estate was seen as a superior alternative, with **perceived** risk very low, there was an over supply of financing dollars available, and the prevailing expectation that rents and values would continue to increase. There was no discussion (yet) of increasing capital gains tax rates. The market was clearly peaking!

Now, let's apply the pendulum and attempt to determine **WHY** prices went so high and the risk premium fell so low. If left alone, a pendulum would hang straight down in a central position from the pivot point. A pendulum's movement, however, is the result of two forces, momentum and gravity. Momentum pushes a pendulum past the central position until gravity overcomes this momentum and pulls it back the other way. In describing commercial real estate (CRE) market cycles using the pendulum analogy, we must then identify what causes the momentum and what acts as the gravity point.

Generally, momentum in the CRE market is caused by:

- Expectations (Perceptions) – we established this point in the Cap Rate discussion above
- Financing / Capital Market Liquidity – availability of inexpensive debt allows more buyers to play and provides positive leverage to increase overall yields
- Emotion (Fear & "Irrational Exuberance") – to borrow Alan Greenspan's descriptive phrase for a market without limits
- Economic Shifts (User Demand, Rent Levels, Etc.) – in other words, the demand side of Supply and Demand
- Barriers to Entry / Lag Time – the lag between the decision to add supply and the ability to actually deliver that supply to the market; this lag allows the supply/demand pressure time to enjoy supply less than demand.

In 2006, based on our Cap Rate Spread Chart, the pendulum was clearly moving towards the rising prices side of the model, and supply/demand remained slightly imbalanced with demand exceeding supply. Momentum was toward higher prices and the supply engine was in full swing. The development community could build new inventory and sell that product at a profit to the investment community.



The pendulum continued to swing to the right until mid- to late 2007, when something happened. The Cap rate spread began to widen, price increases slowed and then stopped altogether before eventually starting to fall. Buyers

were once again pricing "risk" into the market.

As of summer 2009, it is clear that the pendulum has passed the mid-point and has moved well left-of-center to a market of rapidly declining prices and cap rate spreads once again above 400 bps. The dominant factor in this cycle is the virtual shutdown of the financing market and the massive deleveraging that will continue to result in a significant number of reluctant



sellers selling in a soft market. Prices are under continued pressure and the prevailing **expectation** in the buyer/investor community is that prices will continue to decline in the near term. The dominant emotion in today's market cycle is **fear**. With mounting job losses, user demand is abysmally low, and subsequently, so are rents.

Another factor not helping the current market cycle, is the increase in supply that continued even after demand started to show signs of slowing, due primarily to projects already in the pipeline when the market began to cool. By all measures, today's pendulum momentum is clearly toward the "left".

What will be the gravity force that stops the current market decline and pulls the pendulum back to center? To begin to answer that question, let's consider that the price of real estate is estimated using three primary methods, 1) the income approach; 2) comparable sales approach and 3) the replacement cost approach. In a "normal" market, the results of these three approaches have a relatively high correlation. When a market "heats up", the comparable sales and income approach tend to outpace replacement cost, since, although it would be cheaper to build the property, the time factor pressures investors to pay an in-place premium. Admittedly, this is an over-simplification of the relationship between these various approaches, although for the purposes of this illustration, the point stands that investors are willing to pay more for a property than it would cost to produce it.

Replacement cost changes over time, due to inflation, as well as supply and demand factors on labor, materials and debt. Construction costs in 2009 are approximately 20% lower than they were in 2007 primarily because labor and material costs have declined. Land prices also vary widely between market cycles, and are generally cheaper in down markets and more expensive in strong markets. It is important to remember that replacement cost is not a fixed number, but rather a range of cost or a replacement cost zone.

The gap between cost of production (replacement cost zone) and price represents the developer's profit. When the pendulum is "right" of the replacement cost, the development community increases supply. When the price is "left" of the replacement cost, the development community is unable to make a profit and, consequently, the supply conduit is turned off.



When investors state they are buying property at X cents on the dollar, the "dollar" they should be referring to is the replacement cost dollar. When prices fall low enough, more buyers jump into the game, which serves to slow the pendulum's movement towards the "left" and eventually, by means of competition, begins the momentum back toward the "right" allowing the market to reach a bottom point.

If there is too big a gap on the right, strong profits will stimulate the supply side, and when factoring in the lag time to deliver, will likely result in overbuilding in excess of real demand. Once the pipeline is shut off (the entire time the pendulum is left of the RCZ), however, the development community has ceased building, allowing demand to catch up to supply.

Over the long term, the center point of market cycles roughly describes the replacement cost zone, with the peaks and troughs representing the swings past center of the pendulum. Determining the direction and gauging the amount of momentum, helps guide both buyers and sellers identifying the most advantageous moment to act. It is not necessary to buy at the bottom of a market to make a good long term investment. Although the pendulum may move a little more left in the near term, if you assume that healthy demographic and economic trends will prevail, it will eventually swing back to the right. No one will build until they can sell the building for more than it cost to develop. Buying for less than replacement cost is a long term safe bet, albeit not for the faint of heart (or wallet) when the momentum is moving in the wrong direction.



The capital markets will be in turmoil for the near term as they sort out the trillions of dollars of ballooning commercial debt that will come due over the next three years. Until both equity and debt capital flows are repaired and return to “normal”, prices will remain depressed. Most industry practitioners who experienced the late 1980’s/early 90’s Savings and Loan crisis remember smart investors capitalized on market conditions by acquiring commercial real estate at deep discounts to replacement cost, and made an enormous profit when the market corrected. Realizing that similar opportunities may exist today has investors raising capital and gearing up to once again reap market gains . It will be interesting to see how far to the left the pendulum must go before capital jumps in and pushes the momentum back to the right.