

# Value Sustainability

## Real Estate Values in an Era of Pandemic Pandemonium

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In collaboration with the National Council of Commercial Real Estate Fiduciaries (NCREIF).

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In the current crisis caused by Covid-19, the real estate industry and its professionals are challenged with the task of accurately estimating market value so that proper investment decisions can be made now and in the future. As an industry, we will be required to adapt traditional valuation and underwriting procedures to provide more forward looking and sustainable valuation (both debt and equity) results.

The following study reflects a commercial property macro analysis of the various historical recessions and unemployment data, with goal being to better understand and forecast accurate real estate underwriting criteria within a turbulent economic (Covid-19) environment.

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## Introduction

Real estate experts around the world are attempting to understand the impact Covid-19 will have on all aspects of human activity “post-Covid-19”.

Yet, how is this possible given its unprecedented nature in a highly advanced global economy? In the real estate market how can we understand “value” to make wise investment decisions both now and in the future?

Will those decisions be based on the “old paradigm” or the new, unknown post Covid-19 paradigm? What will be the magnitude of the value loss? How long will recovery take? Just as importantly, how can investors be sure of “value sustainability” in real estate after seeing such a value decimation on Wall Street since February 2020?

In this paper, Archstone, in a unique collaboration with the National Council of Commercial Real Estate Fiduciaries (NCREIF), Archstone Appraisal Group, Enriched Data, and ValueXpose sought to answer these questions from a variety of viewpoints.

## Historic Perspective

The unprecedented economic fallout from the COVID-19 pandemic prompted our team to study previous market corrections for guidance on how to value commercial real estate moving forward.

After analyzing the Great Recession, Post-9/11, Dot-Com Bust, Real Estate Crash of 1990, market corrections of the 1970s and 1980s and the Great Depression, we concluded that the Real Estate Crash of 1990 is the most analogous prior period because it was very widespread, there were no bailouts and overall it took five to seven years for the real estate industry to recover.

We rejected comparisons to the other market corrections for the following reasons:

### Great Recession:

Not analogous due to the fact that it was largely focused on the Wall Street and finance industry. Post-crash, there were also massive corporate bailouts that are not likely this time. Such corporate bailouts virtually eliminated any financial pain for individual asset owners, many of whom survived due to “extend and pretend” measures. Market values were **not fully** reset to market but were, in effect, allowed to maintain much of their pre-crash value.

### Post-9/11:

Not analogous due to the fact that it was a one-time event, and largely a “local” tragedy (NYC Metro; DC Metro). Recovery period? A 2-to-3 year period was needed.

### Dot-Com Bust:

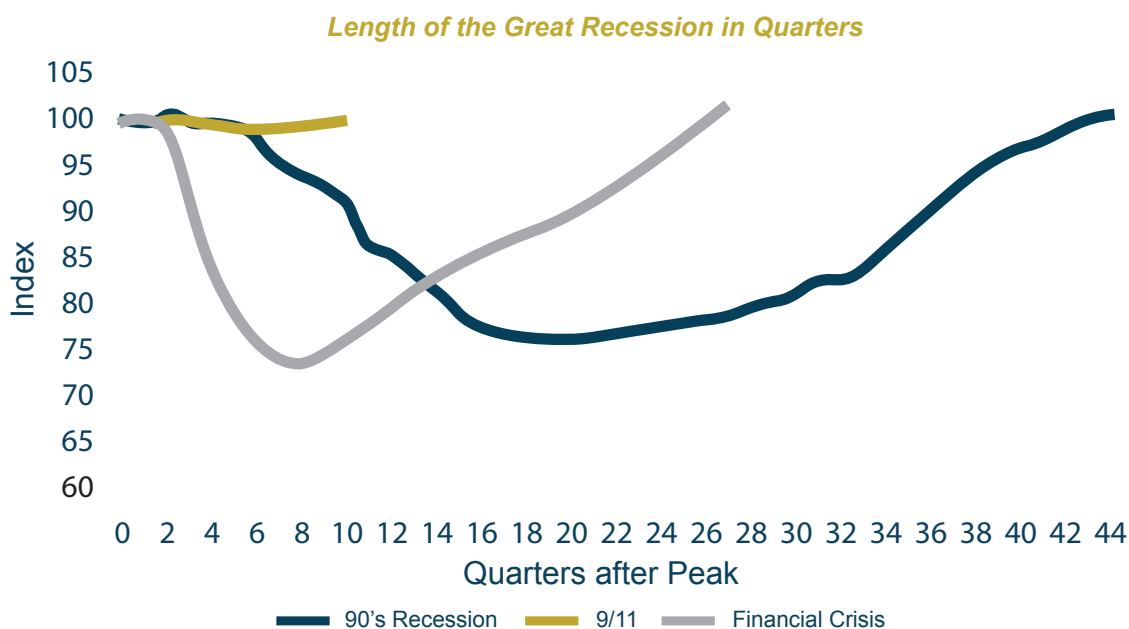
Not analogous due to the fact that it was concentrated on only a few industries. Recovery period? Again, a +/- two year period was needed.

### Prior “Market Corrections” in the 1970’s/1980’s:

Not analogous due to the fact that these were largely underwriting issues on the debt or syndication side. Recovery period? Again, +/- three years was needed.

### Great Depression:

Not analogous due to time gap, level of financial engineering capability (tools) now available, and completely different key industries today. In the 1930’s, the US was largely an agricultural/manufacturing economy. Today, it is primarily “services”-oriented. That said, unemployment at the time of publication (May 2020) is at 14.7%, and still climbing. It is the largest increase since the 1930’s and more than 50% above the “Great Recession” level, the second highest unemployment cycle.



Source: NCREIF

A NCREIF comparison in macro terms, of both the magnitude and duration on the most recent “Great Recession” (2008/09):

In this timeline, when comparing real estate value loss and recovery time to other financial indexes, on a macro level, real estate was a much more stable (“sustainable”) asset when compared to the S&P 500 and REIT stock prices.

Real estate withstood a macro and significant 10-25% value loss and endured a seven-year recovery. REIT stock pricing had to withstand a +/- 70% value loss and required an added 12 months to recover. S+P Stocks withstood a +/- 45-50% value erosion but recovered faster (in +/- 6 years).

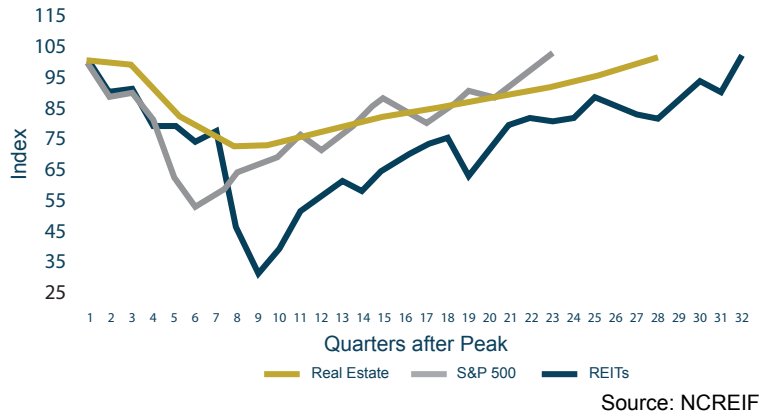
Based on key historic real estate metrics, it would appear that the real estate industry is facing a minimum five-to-seven-year recovery period.

When metrics outside of real estate (specifically, unemployment) are viewed, a longer time period can be expected. Only the Great Depression rivals the current situation in terms of unemployment. During that era, unemployment ranged between 15-25% for a decade.

Today, Covid-19 is pushing unemployment to the **+15% level now, with further increases to come**. Will that level remain that high, for that long? Unlikely.

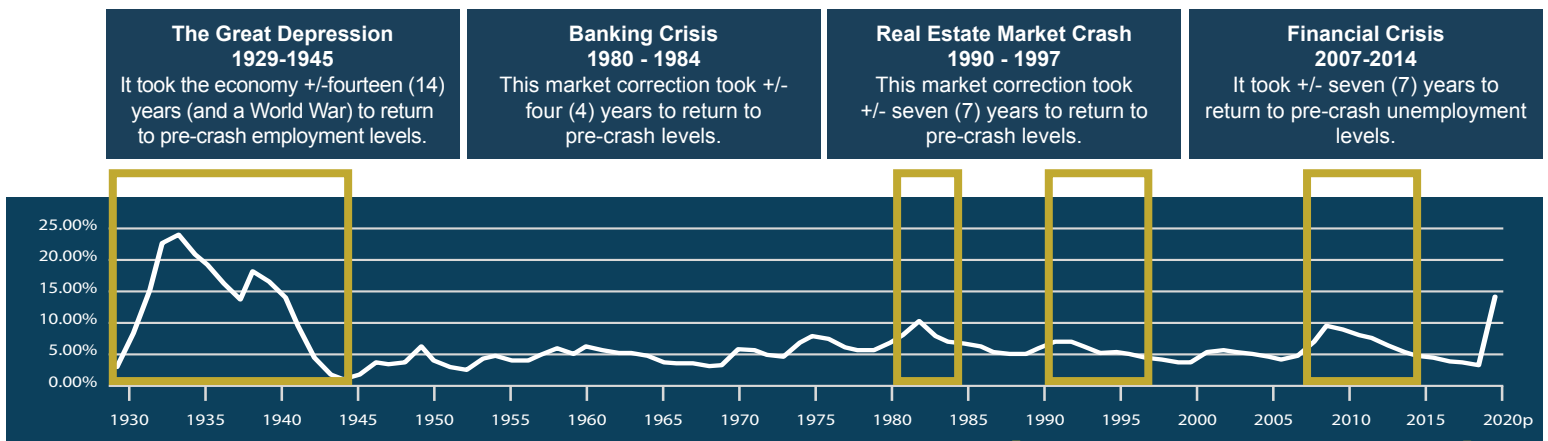
What it does indicate, however, is that a longer period of recovery is likely as many employers will take advantage of this opportunity to “streamline” (i.e., reduce staff overhead) their business.

### Great Recession Recovery Timeline Impact on S&P 500, REITs and Private Real Estate



The April 2020 unemployment rate rose to a record 14.7% and payrolls dropped by an unprecedented 20.5 million as the coronavirus pandemic hit the economy. This reflects the quickest and sharpest labor downturn in U.S. history. New unemployment insurance claims showed that more than 33.5 million people lost their jobs in the seven weeks since the Covid-19 crisis halted huge swaths of the economy. Until the economy opens back up, the date of the start of a recovery period cannot be accurately predicted. In the event a second round of Covid-19 increases comes about in latter summer to fall 2020, that will again re-establish a new timeline to evaluate the dating of the start of a recovery.

### Average Unemployment Rates - 1929 - 2020p



Source: US Bureau of Labor Statistics

2020 Unemployment Rates	
January	3.60%
February	3.50%
March	4.40%
April	14.70%

**1989-2020**  
Unemployment rates increased during the indicated market downturns by 50-200% of stabilization. Recovery periods were, again, +/- seven (7) years in both examples.

**Cost of Capital (Interest Rates)** This aspect of the macro market influences recovery periods and impacts all industries. The Fed significantly reduced rates 30-200% of pre-crash levels in all cases so as to “cushion” the free-fall. **As it relates to Covid-19, rates are, in effect, zero. Thus, this has an impact on recovery since there is no other option on strictly on the rate front.** A corollary is that rates **must** remain low – **for an extended period**. Otherwise, any recovery may be short-circuited if they rise too quickly.

The following is an array of interest rate charts covering pre/post market correction periods:

### Average Mortgage Rate - 1971 - 2020p

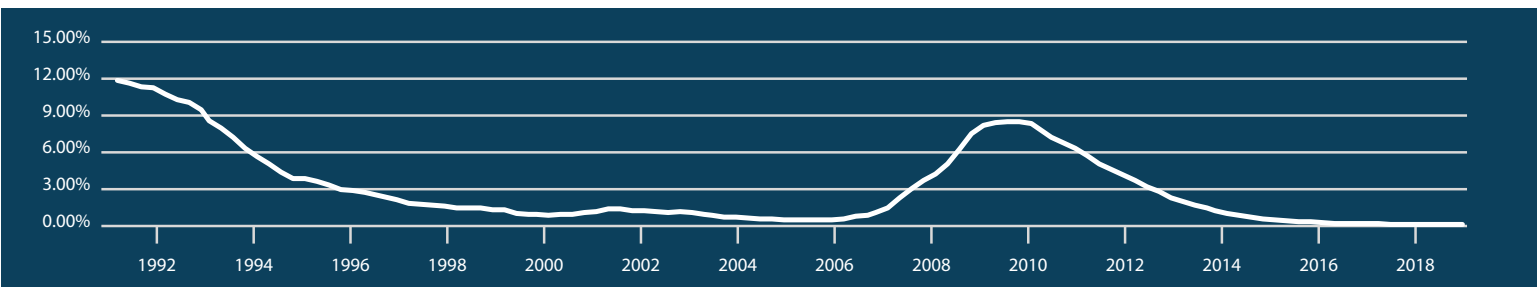


Source: Board of Governors of the Federal Reserve System (US)

### Default Rates in Commercial Real Estate

Historical default rates also are important in that they reflect the desire for owners not to lose their projects. In good times, the default rate is very low (1-2% of all loans). During duress periods, it spikes. In the early 1990’s it spiked to more than five times a normal range (11+% from an ordinary 2%) and took +/- seven years to recover. During the Great Recession, it spiked from 2% to 8%, more than four times that level, and took a similar time +/- seven years to recover.

### Average Commercial Real Estate Defaults - 1991 - 2019



Source: Board of Governors of the Federal Reserve System (US)

# Real Estate Value Change Expectations as a Result of Covid-19

In this initial Covid-19 stage, investors and analysts have no hard data that reflects current market conditions. All rents and sales that are in contract or have occurred over the past few years reflect market conditions pre Covid-19.

Very few transactions are being negotiated at this time. It should take three to six months before new leases and sales are closed that reflect our new, albeit maybe temporary, market conditions. Although current market data lack support from closed transactions, values are widely expected to be lower than what is indicated by data from the pre-Covid-19 era.

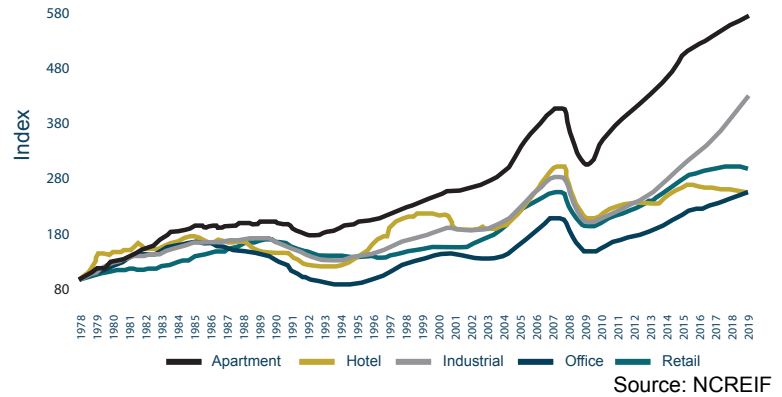
A flight to quality is now occurring worldwide. U.S. Treasury Bonds and the U.S. Dollar have been beneficiaries during this crisis. In real estate, Net Lease properties appear to be the only property immune to a decline in value. However, the Net Lease market appears to be bifurcated. Most of the investor interest is directed towards corporate tenants that have top tier credit ratings (Moody's - A3 and better; S&P - A- and better). These properties are experiencing cap rate compression and thus higher prices. At the other end of the spectrum are corporate tenants with credit ratings in the B's or lower. Analysts are forecasting that 40% of corporate bonds rated investment grade will be lowered to junk status. These properties are subject to negative price adjustments as credit ratings are lowered and cap rates rise accordingly.

Yet the two-key question(s) still remain: How far will values erode? How long will the recovery take? Most analysts have reported the following to date as a general range:

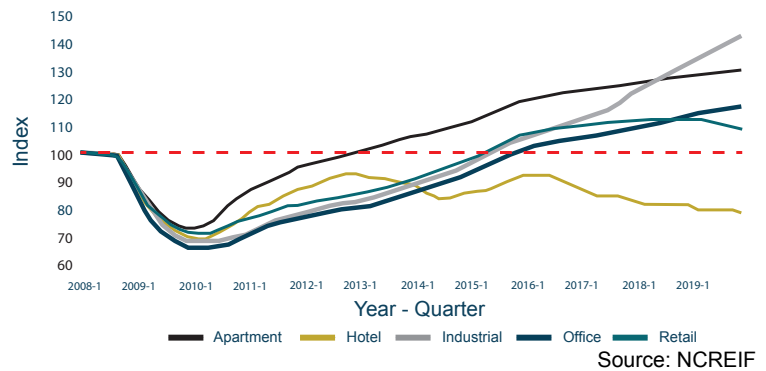
5%-10% for residential; 10% for apartments; 30% for hotels (economy 20%); 5%-10% for industrial; 20%-30% for office; and 25%-35% for retail. The deficiency here is that no recovery timeline is reported.

To these "base" value loss figures, we note that some level of "conversion costs" are likely to be needed post Covid-19 which is not being noted in the marketplace.

Market Value by Property Type (1978-2019)



ODCE Properties: Value Change after Financial Crisis



## Expected Market Value Change and Required Recovery Period

Anticipated Pricing Change	Most Volatility	Least Volatility	Medium Volatility	Nominal Change
<b>Commercial Asset Class</b>	Lodging, Office, Malls, Strip Retail	Student Housing, Manufactured Housing	Health Care, Apartments, Storage	Net Lease Assets
<b>Value Loss Expected</b>	20-35%	10-20%	+/-10%	Nom/Flat
<b>Recovery Period (years)</b>	5-7; Hotels at upper end	3 to 5	+/-2	<1
<b>Key Economic Factors</b>				
<b>Vacancy</b>	+3 to 7%	+3 to 5%	+1 to 3%	Lease expiration only
<b>NOI Growth</b>	-3 to 10%	<+1.0%	+1.0% to +3.0%	Lease expiration only
<b>Capitalization Rate</b>	+20 to 30%	+10 to 20%	<10%	Nom
<b>Anticipated PV Change</b>	-25 to 40%	-15 to 30%	-5 to 10%	Short term only
<b>Comments</b>	Combo of NOI/R <sub>0</sub> change	Nominal NOI Change; R <sub>0</sub> change	Largely NOI change	Short term; nominal R <sub>0</sub> change

Notes: Assumes Covid-19 Restrictions are Eased by August 2020.



## Future Variables

Will the historical data drive values in the future? In many cases, yes. In other cases, no. Real estate is very site-specific and must be judged accordingly.

There are two major factors to consider in underwriting real estate moving forward are:

- **What are the macro/systemic factors impacting this property or property type?**
  - Is this industry/asset sustainable “as is” moving forward? Or will there be structural change?
  - Key examples, such as, in retail, are
    - Sticks and bricks retail is clearly adversely impacted by e-commerce.
    - Will sticks and bricks retail have to be re-designed (physically) to allow for “drive-by” shopping or pickup?
    - Further examples of greater risk within retail are “luxury” or discretionary users. Examples here include: gyms; non-essential consumer goods; high priced goods; etc.
    - What technological changes are coming that will further impact this asset category?
  - For office uses, what will happen to:
    - SF/employee space moving forward? Increase? Decrease?
    - What about commuting patterns?
  - Each major real estate category (e.g., retail, industrial; hotel; multi-family; special use; etc.) will have different value drivers. All need to be viewed via a “tri-focal” analysis: Macro market; micro market...and now, due to Covid-19, timing/structural market (i.e., recovery period).
- **On a local “micro” basis, does this property or industry:**
  - Have creditworthy tenants?
  - Is the operating cost of tenant (rent) within acceptable ratios, especially in view of the current pandemic or similar “force majeure”?
  - Is the tenant, or their space, capable of adaptation?
  - What are the regulatory rules in terms of change in use or occupancy? Or operation?
  - What is the conversion (frictional) cost (in terms of time/\$\$) within any adaptation?
  - Are current conditions temporary or more long-term?
  - What technological changes are coming that will further impact this asset category?
- **Unemployment Trend**

In our opinion, unemployment data will be the main driver. Interest rates have already been brought to near zero. Consumer and industry/company bailouts have occurred. Thus, this is the key benchmark. All other tools have already been employed. Companies clearly need employees to operate, but at what salary level, and at what employee level? Technology dramatically altered the industrial sector 100 years ago. Covid-19 will force companies to do the same in the “white-collar” or service sector today.

## Other Macro Investment Conclusions

Overall, our view is that the most common forecasts are understated for several reasons. First, the pandemic is more widespread than prior market downturns. Second, a greater recovery period is expected to be required due to staggering unemployment – the need for companies in a “new economy” to understand how to operate their business. Finally, there are other factors that may be unique to Covid-19 that are outlined in the following section, that are not noted elsewhere.

Closely tied to “value sustainability” forecasts are **new underwriting challenges**. Several are noted as follows:

- Financial pain must and will be allowed to occur this time as compared to the “Great Recession”. Prior bailouts did not fully “re-set” market values to true value/cost. Such government actions must be carefully targeted and driven by long-term benefit.

The most obvious choices here are re-building an improved (digital) manufacturing/industrial sector, along with material infrastructure upgrades. A 21st century economy cannot function properly with a 19th century infrastructure. This biases real estate value to suffer larger value re-sets as a result of Covid-19.

- Concern must be expressed about the following as it relates to unprecedented Federal “bailouts”:
  - Many of these “loans” are unlikely to be repaid. Thus, they are simply “grants” which is very different from past “loans” (which were eventually repaid). This is a MAJOR capital creation (eventual inflation) risk. **It will mandate that interest rates remain at nominal levels for a long time.**
  - Nearly all such “bailout” funds are going to be allocated to payroll or operations, thereby adversely and severely impacting “research and development” investment. Further, near-term, companies themselves will have more limited “R+D” funds as they recover. **This has long-term, adverse impacts on the macro US economy, especially from an international viewpoint.**
- Will there be “forbearance” across the board? Yes. Will it be easy? No. In fact, it will be harder than in the past, as entire industries will have to be re-analyzed not to mention “re-structured”. Past market crashes have had a more limited impact on the economy at large.

More specifically, such crashes were heavily focused on real property issues. This pandemic has adversely impacted nearly every industry, in a material way. **Again, this biases recovery to a longer period, and individual property value losses to a greater level.**

- The current pandemic has shed a glaring light on any number of systemic problems within all aspects of the US economy that will need to be re-underwritten and changed moving forward to reflect a “digital (21st century) economy” versus an “analog” (20th century) economy”.

Prior solutions to prior crashes - may not apply here. Simple examples here include:

- The health care system will need to be (entirely?) re-vamped (finally?).
  - The various distribution systems will be re-examined.
  - Use of space, by sector, will require physical re-design and will re-structure all real estate costs.
  - Education delivery will need to be altered; etc.
- As an industry, real estate will have to look very hard at property design. All uses will require a re-design, and the cost of retrofitting all uses to the new paradigm will be material in terms of either cost or time. Again, this biases asset values down for functional space reasons.

- Overarching all these points is the need for a new regulatory structure. Similar to infrastructure, this old paradigm needs an upgrade, with a greater focus on all industries fundamentals and speed to market. Moving forward, such changes will be required, as follows:
    - Zoning must, universally, be more flexible/much faster to adjust to faster/shorter property life cycles. More specifically, “form-based” codes, where interior uses can vary, will become more important than “use-based” codes. This is needed to keep properties fully occupied for the greatest duration, and to prevent “zombie (substantially vacant) assets”.
    - If government bailouts are now occurring more frequently, then more stringent reporting requirements (accountability) by recipients are needed to ensure that tax dollars are being spent wisely.
    - “Public health factors” will now have to be designed into all new projects. This may change the supply/demand ratios for mixed use projects; high-density properties; common areas; and even SF/employee requirements.
    - Global trade/regulations will become an even more important factor, if for no other reason than national security - and pandemic protection.
    - Oligopoly industries will need to be re-structured to minimize future “concentration risk” and, hence, major bailouts.
  - As noted in this paper, on how properties are underwritten (valued) moving forward, more accuracy will be required as follows:
    - Single point valuation, as of a specific date, is no longer viable/valuable. Thus, any number of value scenarios must be reported.
    - “Value sustainability” and superior underwriting requirements will be needed to protect the most capital intensive of all industries. New projects/investments will have to be **underwritten with automatic, built-in stabilizers** moving forward.
- As an example, in the event that forecast revenues are not achieved, automatic capital calls will be required by the debt side to be put in escrow accounts. This is similar in concept to “pre-packaged bankruptcy” provisions created following prior market corrections. This keeps everyone focused on operating execution, and minimizes risk to a project and the economy.
- Given the shorter “economic life” of all real estate properties today, H&BU analysis must be required in all cases.... for the next “turn” (next five-10 years)...or the following “turn” (years 10-20) that underwriting has a more formal, better defined exit strategy. Loan terms need to be written around such analysis.

### How long will it take to recover?

In the author’s view, a full five-to-seven-year period of recovery will be needed as this pandemic is so widespread, and impacts 100% of the economy, as compared to prior market crashes which were more narrowly focused or temporary. A longer period will be expected if there is another “extend and pretend” plan, or unemployment does not rebound quickly on a par with prior recoveries.

Other than some levels of regulatory relief, the US economy will be re-structured in many ways post pandemic that have nothing to do with pre-pandemic events. This will take time; and economic pain will have to be endured and studied, with on-going corrections made. Now is the time to undertake all these actions.

Investors across the economy need to plan for this time period, think through how to completely re-position their business or industry so that future pandemics (yes, there will be others) are less destructive than the current one is. Wise investors must plan for this much longer “recovery period” than has been reported.

## Methodology

### Value Foundation

Currently, and contrary to current belief, the finance industry does have sufficient methodologies and tools to measure and forecast future real estate activity and values that may result from Covid-19. Here, an ordinary “before and after” analysis is a required valuation starting point to measure Covid-19 impacts. Unfortunately, as of today, there is no “after” scenario since we are still in the current spin cycle, with no clear outcomes visible on the horizon.

### Simple Useful Tools

Thus, interim steps need to be applied. Investors and analysts should apply:

1. A simple “present value” analysis whereby if no material changes to the property are likely, then the pricing adjustment is simply the recovery time required at a market yield rate for each asset. Assets in this category are likely to be in the top-tier industrial or multi-family category.
2. If more complex factors exist (pending debt maturity; tenant rent payment issues; vacancy spike; etc.), then the “present value” concept applies. However, it must be adjusted for those added factors that are at risk.

This can be accomplished on a “percentage basis” (adjusting the risk rates) or on a “cash basis” (defining and quantifying all the various loss factors). In this analysis, these value adjustments are subtracted from the prior reported value (“before” the pandemic) to arrive at a “Covid-19 impacted value”.

In this context, a simple analysis of the relative weights of cash flow value (and duration) to aggregate property value would be helpful here.

Real estate value is a combination of two components: 1) Cash flows (operations); and 2) Capital Markets (cap and yield rates). Today, most industry analysts are reporting that cap/yield rates are expected to increase 25-100 bps, with specific assets and “food groups” having different changes based on industry as well as property specific factors.

When such a simple change is divided by, say, a 5% benchmark rate, a value swing of 5-20% ( $.25/5$ ;  $1/5$ ) occurs. If added analysis illustrates that cash flow would result in a 5-10% net revenue loss, and cash flow is, say, 40% of PV, combined (and added loss of 4% say) value loss of 10-25% can be expected and defended readily.

3. From the lending side, all loans and equity partnerships moving forward will need to be “tranching”, as compared to just those that have historically gone through Wall St. Examples here include splitting all aspects of the investment into categories (both debt and equity) and weighting the outcome probabilities within such categories.

Each component of an investment will have a different risk profile and will need to be “tranching”. In effect, this is a weighted cost of capital structure, and applying it to key project variables. Overall, this will have the net effect of lowering loan to value ratios...or increasing investor yield requirements. In the aggregate, we note that Covid-19 impacts are expected to be greater than historical levels.

### Real Estate Prospects for “Value Sustainability”

Real estate is very capital intensive and requires long-lead times. In the past, either “overvaluation” or “overleveraging” created economic mayhem in the macro economy for several years. This can no longer be acceptable - for any reason.

The stakes are now too high, as correction (bailout) tools are now stretched beyond recognition. Current research data, computer software, subsidy tools, and timing of data are better and faster now than ever. Thus, underwriting must follow suit.

Moving forward, “value sustainability analysis” needs to be a significant lending or project requirement. In substance, this tool is a highly functional “sensitivity” analysis that can be used to model risk, loan and investment metrics, real estate cycles and loan term in a single window and in real time.

This tool is scalable to an enterprise level or can be used to pluck single asset metrics from a portfolio. The key, however, is that all real estate factors (i.e., demographics) must be tied more closely to each property's underwriting so that unnecessary speculation cannot occur.

More specifically, investors must accurately value assets today, fully underwrite down periods, and forecast whether that "fundamental" value is "sustainable" over the survey window.

### **Credible Valuation and Risk Forecast Modeling Through 'Value Sustainability'**

"Sustainable Value" is described in Guide Notes 10 & 12 of USPAP. It is not a new concept, nor is Value Sustainability hard to conceptualize. Simply place yourself in the position of a lender, buyer or investor and ask whether that purchase will hold its value over the time you plan to own/lend on it.

Unlike a new car, which is expected to depreciate from the moment it is driven off the lot and is treated as a consumable, real estate values are expected to be durable, or 'sustainable' over a loan term or hold period. "Value Sustainability", developed correctly, and used at each stage of the real estate transaction period will help investors, lenders and analysts navigate this market blind spot that we now face as a result of the COVID-19 pandemic.

### **What is the Value Sustainability Analysis?**

Value Sustainability Analysis is a forward-looking yield capitalization model that compares market value and its implied reversion to "fundamental value" and its implied reversion over a cycle period and along a market equilibrium line.

Detachment from equilibrium created by fundamental value and its fundamental reversion value by a margin of 15% or more implies either that the surrounding market fundamentals will not support that valuation through its holding period (the asset is over valued by the collective market and not necessarily an appraisal and potentially in a market 'bubble'), or that market fundamentals are pointing to an undervalued asset (by the collective market and not necessarily an appraisal) - and a buying opportunity exists.

### **The Sustainable Value Model**

The starting point of sustainable value analysis is market value. Appraised value, (presumably well supported and reflective of a stabilized value at market rents) is identified. Note that sustainable value is also a functional model for stress testing list prices, screening offers, or identifying loan risk.

Under such scenarios, the start point is a target, contract or offering price. Carefully sourced investor all cash yield rates then fuel sustainable value calculations. The all cash yield is most appropriate as a factor that encompasses the full spectrum of investor criteria and risk; is forward looking; and which is fluid enough to have priced in market downside (or upside) expectations.

It is important to understand that the starting point, (appraised or target value), should still incorporate market support and real time assumptions of typical risk, (i.e. market rent and trends, vacancy and collection loss, expense trends and overall capitalization rates).

The known market value or target benchmark is presumed to be credible. Its value sustainability over a cycle, then, is the target measurement and the true opportunity or downside risk barometer.

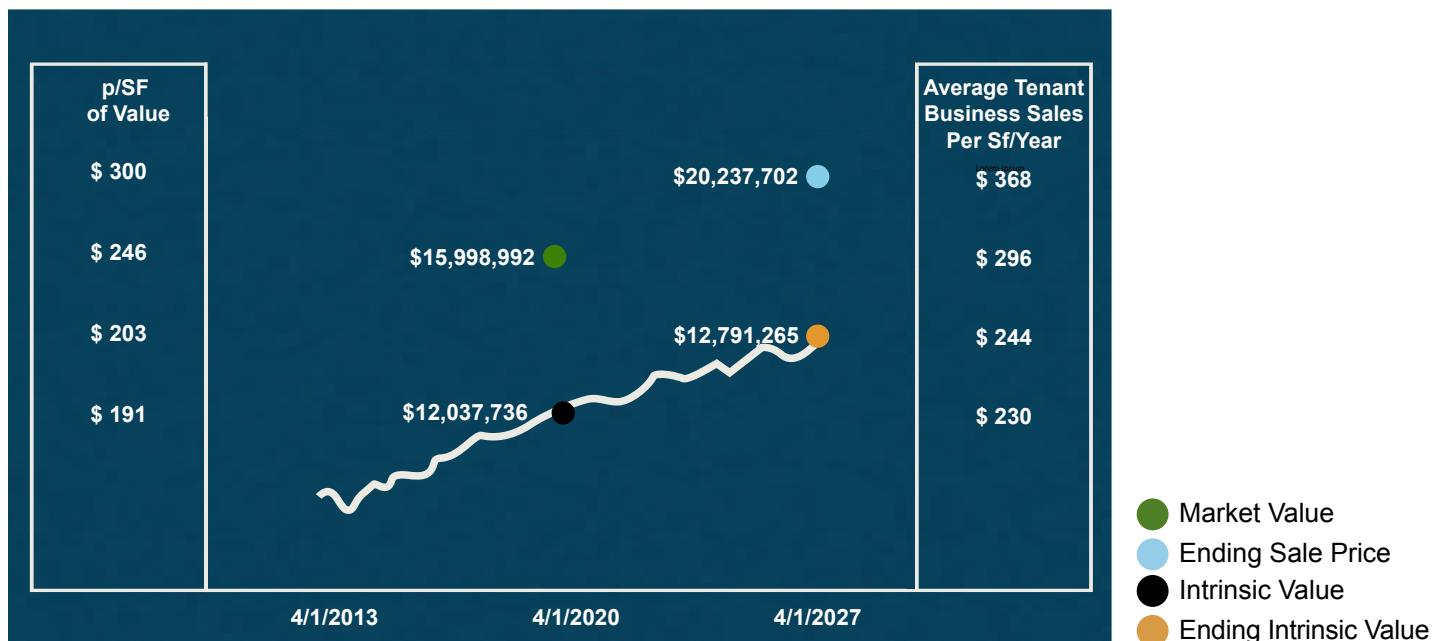
Net Operating Income, (NOI) and its growth (or movement) over a hold period are known or a forecast annuity. An all cash yield (ACY) is then applied in place of a terminal rate to calculate Fundamental Reversion.

Use of the ACY as a residual rate along the fundamental value equilibrium line filters out irrational market exuberance or fear and is then used to "reverse engineer" the "as is" fundamental value. The same yield expectation is used to trend the appraised value reversion.

## Key Metrics and Measurements

### Sustainable Value Analysis

This chart illustrates a Sustainable Value Analysis with a starting point (appraised or benchmark value); its projected reversion and the fundamental as is value and its reversion. In the chart above, a seven-year cycle is shown, and an implied equilibrium line connects the fundamental values.

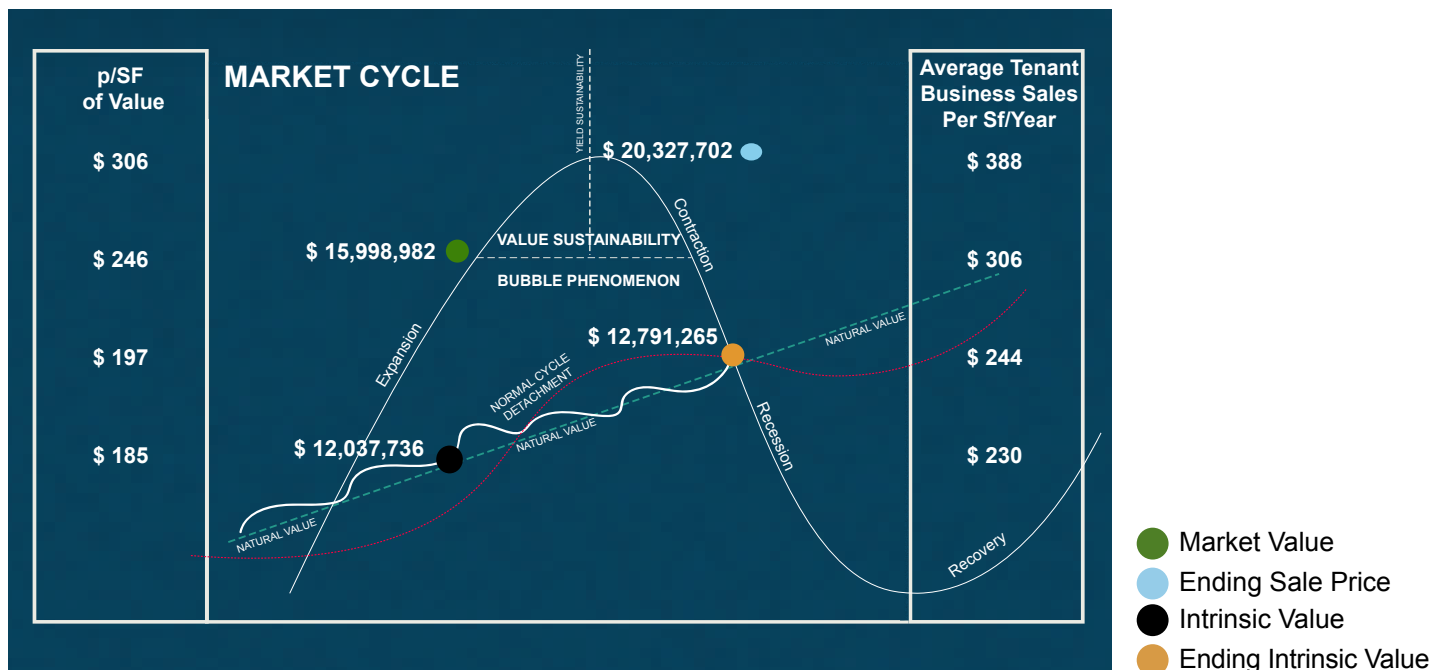


### Economic Fabric Overlay

The position of appraised value relative to its as is fundamental value and reversion in the above chart, does imply that over the course of the surveyed cycle, market gravitational forces will work to pull the appraised value downward to its fundamental reversion.

Normal cyclic activity is shown within the window but a de-coupling from the equilibrium line by 15% or more is an indicator that the current appraised value is not sustainable over the term under study.

Post Covid-19, this type of underwriting will be required to prevent ongoing value losses.



## Perspectives from Value Sustainability

The test case presented above should be a warning sign to lenders or investors. The impact on/to yield of a value moving downward to fundamental reversion is dramatic. Lender deliverables from this methodology include an overlay of loan terms and the ability to track risk metrics including LTV, DSCR and refinance risk.

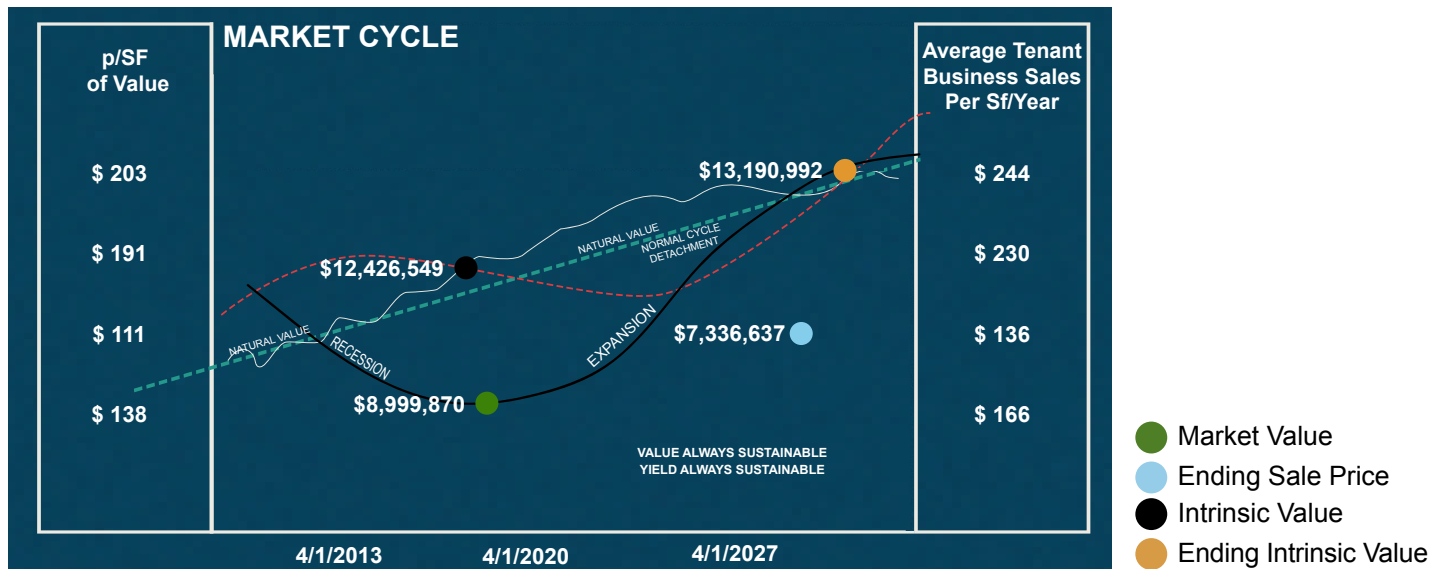
Coupled with a probability of default model and simple market metrics survey / forecast for scenario and corridor views, (of interest rates, market rent, vacancy, etc.) this process can be used to identify risk and market choke points within a loan term or market cycle. Post Covid-19, any or all these variables for each property will be extremely difficult to underwrite accurately.

Multiple market “recovery” scenarios can easily be explored within the same window, (‘V’, ‘U’ or ‘Nike Whoosh’ views) and credit terms, refinance risk or workout parameters can be efficiently analyzed.

Value Sustainability is a scalable model and enterprise users have latitude to isolate or group assets for the same risk metrics. From a portfolio, fund or REIT perspective, assets can be logically grouped by characteristics or performance akin to a periodic table to readily assess real estate analytics.

Investor perspectives for Value Sustainability are interesting. Smaller investors can identify upside quickly or stress test multiple offerings using an automated model to identify the best upside yield potential.

The graph shown below for example illustrates a strong buy opportunity with appraised value well below the asset potential as indicated by the fundamental reversion and its equilibrium line over the hold period.



As a scalable tool, portfolio analysis for investment purposes puts a weighty and cost efficient process in the hands of brokers and investors alike. Enterprise users (i.e. institutional advisors or investors) might use this methodology to chart a baseline value and diminution from the current COVID-19 pandemic impact, then chart recovery to baseline.

The current pandemic has most certainly had an outsized impact on niche asset sectors such as hotels with some REITS losing 50 – 80% of stock price within the past 30 days. That said, NOI loss over the same period (and likely true asset values), have not moved that nearly that far (yet).

NAREIT, TREPP, LLC data on REIT sector pricing and NOI impact for Q1/2020, suggests a detachment of stock price movement from fundamentals to a substantial degree. Essentially, irrational fear is being priced into the REIT stocks. The ability to chart (and forecast accurately a date of) recovery to baseline would be truly powerful in more accurately pricing these sector stocks or identifying buy and sell opportunities.



## Conclusion

Value Sustainability Analysis is extremely well suited to address the challenges of appraising, lending and investing in the aftermath of COVID-19. While lessons learned from prior crisis events do imply a likelihood of conditioned market responses, it is, in fact, difficult to isolate enough variables from historic data to create meaningful support for current forecasts.

Value Sustainability is a logical and mathematically credible process that is accessible and scalable. The application potential of Value Sustainability Analysis is obvious in the aftermath of a Black Swan event like COVID-19; however, this model should be viewed as part of standard valuation and risk management practice moving forward. Massive amounts of “dry powder” (uninvested funds) are currently on the sidelines, waiting for deployment. Over the next 24 months, material opportunities for acquisition will exist.





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