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A RAND SPECIAL REPORT

WHAT'S NEXT FOR THE HOUSING MARKET IN THE PANDEMIC ERA?

Case Studies of Housing Market Resiliency and 7 Reasons for Optimism

BY JOE RAND

INTRODUCTION

The Housing Market in the Age of the Coronavirus

At the beginning of March 2020, the real estate market was thriving. Sales were up. Prices were up. And all the economic indicators were positive: rates were near historic lows, unemployment was down near a historic low, the economy was strong, and prices were still pretty attractive given that they were still near 2004 levels – without even controlling for inflation.

We all know what happened next. Starting in early March, the Coronavirus Pandemic that had plagued much of Asian and Europe started to spread throughout the tri-state area. In addition to the devastatingly severe public health implications of the Pandemic, the coronavirus also had an immediate and dramatic impact on the economy, including widespread layoffs and a 30% drop in the stock market. And in late March, the governor issued an "Essential Services Order" that closed most of the businesses in the state in an attempt to "flatten the curve" on the spread of the virus and reduce the immediate burden on our health care infrastructure.

The Essential Services Order put severe restrictions on the real estate industry, requiring the closure of real estate offices and discouraging or forbidding any live showings of properties for sale. This was necessary to help flatten that curve, but it did have a stifling impact on the housing market, leading to an immediate sharp decline in new listings and new deals going into contract. Moreover, the Pandemic itself chilled the housing market: many potential buyers had little interest in going to look at properties, and many sellers hunkered down in their homes had little interest in showing them to strangers.

At some point, though, this Pandemic will ease up. The curve will flatten, infections will decline, and businesses will get back to work – including the real estate industry.

So what can we expect of the housing market after the Pandemic? How will the market recover after a life-threatening public health crisis coupled with a severe economic crisis and a disruption in business and government operations?

Maybe the economic fallout from the Pandemic will be so severe as to cause a massive housing market correction, with declining sales and prices. Maybe too many potential buyers will be out of the market, having lost their jobs from layoffs or too much of their life savings in the stock market downturn.

Or maybe the housing market will pick up where it left off in March, with (1) pent-up demand from potential buyers cooped up in their homes for two months with nothing to do but surf www.randrealty.com for listings, and (2) the return of inventory from sellers who took their homes off the market because they had to turn their living rooms into Zoom video - conference studios?

To give us some idea of what to expect from a post-Pandemic housing market, we thought it would be helpful to look for analogous catastrophic events from recent history, and examine how they impacted real estate sales and values. Unfortunately, in just the past 20 years, the New York metro area real estate market has endured three distinct catastrophic shocks: the 9/11 Terrorist Attacks, the 2008 Financial Crisis, and Superstorm Sandy in 2012.

In all three cases, observers often predicted that the catastrophic events would derail the housing market, causing demand to fall, driving down both sales and prices.

But did they? We looked at each of these crises, we are going to break them down so that we can assess their comparison points to the Pandemic.

PART 1

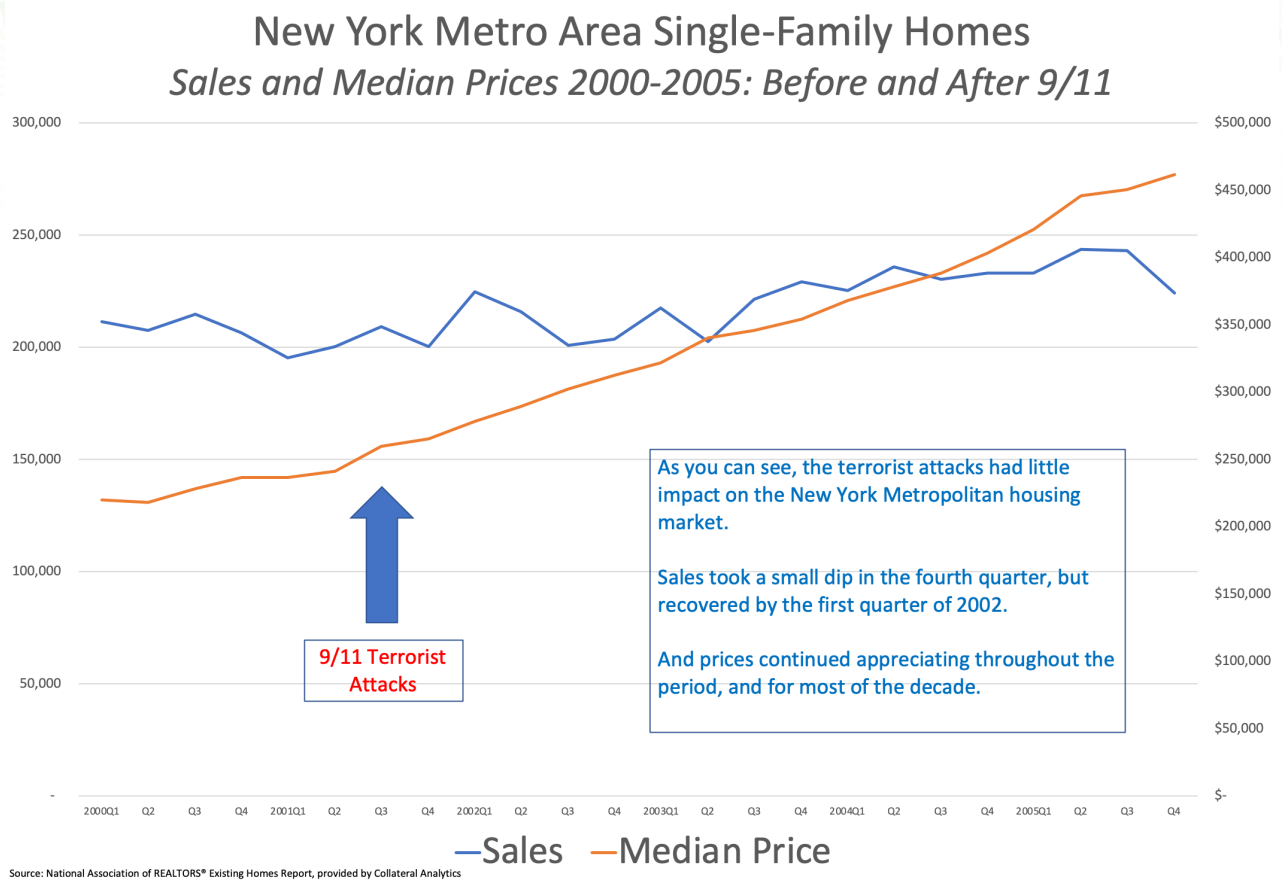
Case Studies of Crises and the Housing Market

1. 9/11 Terrorist Attacks

On September 11, 2001, terrorists attacked the United State by hijacking three passenger planes and flying them into government and landmark buildings, including the iconic World Trade Center in lower Manhattan. The loss of life was unbearable, and the attacks had a devastating impact on our national psyche, and in our way of life. 9/11 temporarily shut down the airline industry, most government and business operations in Manhattan, and many municipal operations throughout the tri-state area. And the destruction of the Twin Towers created a "Ground Zero" area in lower Manhattan that took years to remediate and rebuild.

The attacks also had a damaging impact on our economy, with the Dow dropping about 7% for the year, unemployment rising from 4% to 5.8%, and the GDP growth rate falling from 4% to 1%. Some observers thought the weakening economy would also bring down the housing market, particularly in the New York region. But the regional real estate market was relatively unaffected: prices and sales climbed for the next seven or eight years, developing into a historic seller's market.

This graph shows sales and median prices for single-family homes throughout the New York City metropolitan area. As you can see, sales bounced up and down every year, but mostly trended up, and prices inexorably moved up throughout the period after the 9/11 attacks.



9/11 Terrorist Attacks

Operational Disruption	Pre-Crisis Economic Condition	Impact on Economy	Pre-Crisis Housing Market Condition	Impact on Housing Market
Short-term but significant. Government offices and business operations closed temporarily, but quickly got back to normal.	**Weak.** The economy was already struggling following the 2000 Internet stock bust.	**Considerable.** Dow falls over 25% in two years, unemployment climbs from 4% in 5.8%, GDP falls from 4.1% to 1.0%.	**Strong.** Market was in beginning of seller market cycle that lasted several more years.	**Minimal.** Closings slowed in the fourth quarter of 2001, but caught up by early 2002.

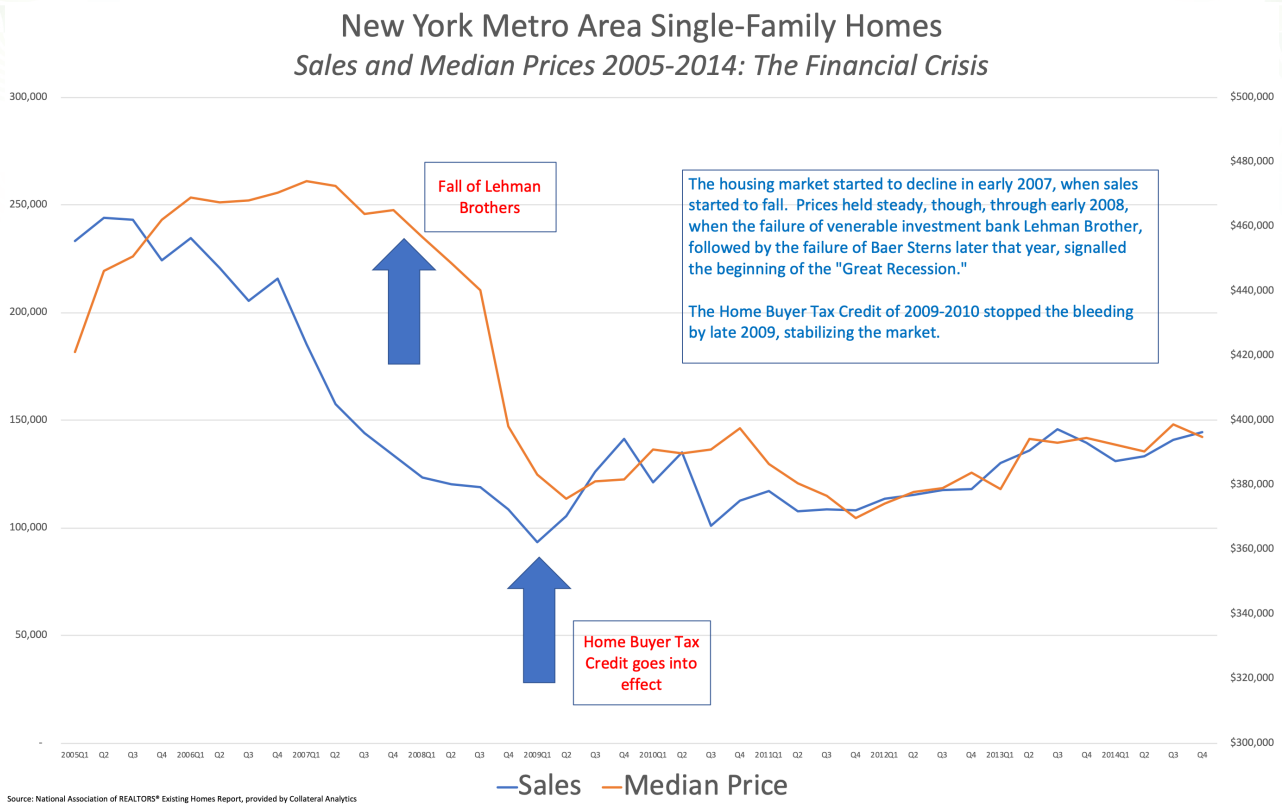
2. The Financial Crisis of 2008

By the mid-2000's, the housing market was nearing the end of a 10-year growth cycle. Sales were up, prices were up, rates were at historical lows, and faith in the American Dream of owning a home was never stronger. Unfortunately, some of that faith was misplaced, as the proliferation of "sub-prime mortgages," incentivized by Wall Street speculation on housing prices, expanded the potential buyer pool for homes and inflated a housing bubble that continued to drive prices up from 2005 though 2008.

When that housing bubble popped in 2008, the overall economy popped with it The Dow Jones and S&P 500 fell over 50% over two years, and unemployment rose from 4.6% in 2007 to over 9% by 2010. Similarly, GDP fell dramatically, with the country entering a recession in 2008 and then bottoming out at a -2.5% decline in 2009.

Unlike the 9/11 attacks, though, the problems with the economy extended into real estate. After all, the fundamental problem with the economy was that (1) Wall Street was over-leveraged in housing, and (2) housing was significantly overpriced. So when the economy went down, it took housing down with it. Indeed, more precisely, when housing went down, it took the entire economy down with it.

You can see the carnage in the graph below, showing the entire New York Metro area. Sales and prices both plummeted from 2008 through 2009, stopping only when federal intervention in the form of a "Home Buyer Tax Credit" arrested the decline and stabilized the market.



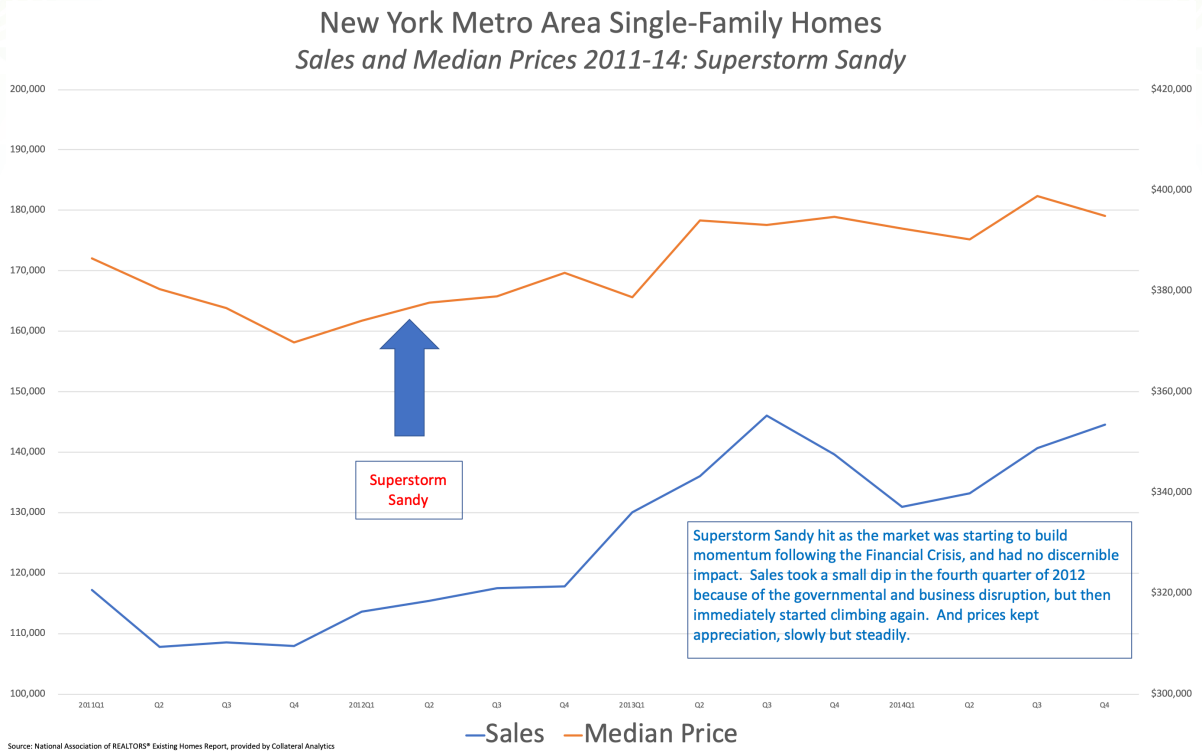
The Financial Crisis of 2008

Operational Disruption	Pre-Crisis Economic Condition	Impact on Economy	Pre-Crisis Housing Market Condition	Impact on Housing Market
None. No impact on government operations, and no shut down of business operations (other than bank failures).	**Weak.** The deteriorating economy led to bank failures that spurred the crisis.	**Extensive.** Stock markets down over 50% in two years, unemployment climbs from 4.6% to over 9% , GDP falls into recession.	**Weak.** Housing was long overdue for a correction, had been artificially extended by credit expansion.	**Extensive** Housing prices fell over 20% and sales fell over 40% within two years.

3. Superstorm Sandy

Only a few years after the Financial Crisis, the regional economy took another hit, this time in the form of "Superstorm Sandy," a "once-in-a-lifetime" hurricane that pounded New York and New Jersey in late October 2012. The hurricane devastated the entire east coast, destroying more than 650,000 housing units nationwide and causing over $70B in economic damage. The storm completely shut down the New York Metro area for over a week, and in some cases longer, with power outages, governmental closings, and even the first two-day closing of the New York Stock Exchange in over 120 years. Unlike the 9/11 attacks or the 2008 Financial Crisis, though, Hurricane Sandy had little overall economic impact. The economy was in the midst of that ten-year streak of growth following the financial crisis, and the hurricane was little more than a short-term blip.

Similarly, the hurricane had little lasting impact on the housing market. The storm came right as the market was in the midst of a slow but steady recovery from the Financial Crisis, and did little to interrupt that continuous growth. If you look at the graph below, which measures the regional sales and prices for single-family homes from 2001-2013, the three-year period surrounding the hurricane, you can't even tell when the storm happened. Sales kept inexorably moving up, and prices were basically flat throughout the period – a dynamic that would continue until the market started to pick up steam in 2016-17.



Why did the hurricane have so little lasting impact on the housing market? Most likely, it was because the overall economy, and the housing market, were all on the upswing. The hurricane was a short-term interruption in a longer-term economic and housing recovery.

Superstorm Sandy

Operational Disruption	Pre-Crisis Economic Condition	Impact on Economy	Pre-Crisis Housing Market Condition	Impact on Housing Market
Short-term but extensive. Government and many businesses shut down for several weeks for lack of power and physical infrastructure damage.	**Stable.** The economy was growing out of the Financial Crisis.	**Negligible.** Dow rose the next year, unemployment fell, GDP grew.	**Stable.** Market was recovering slowly but steadily from the Financial Crisis.	**Minor.** Housing continued its steady recovery from the 2008 Financial Crisis.

4. The Pandemic

The Coronavirus Pandemic has had a devastating economic impact. At the time that the Pandemic hit, the economy had been enjoying an unparalleled ten-year streak of job and GDP growth, with the stock market reaching a series of all-time highs. Similarly, the housing market was in the midst of a growth cycle, with an ascending seller market driving sales and price growth for first quarter of 2020.

By the end of March, though, the world changed. The major stock indices at one point fell about 30% from their pre-crisis highs, and a record 10 million Americans filed for unemployment claims early in April. The unemployment rate went from 3.5% in February to 4.4% in March and 14.7% in April, and most observers felt that this was undercounting the true damage to the economy. And the GDP fell 4.8% in the first quarter, the biggest decline since the Financial Crisis.

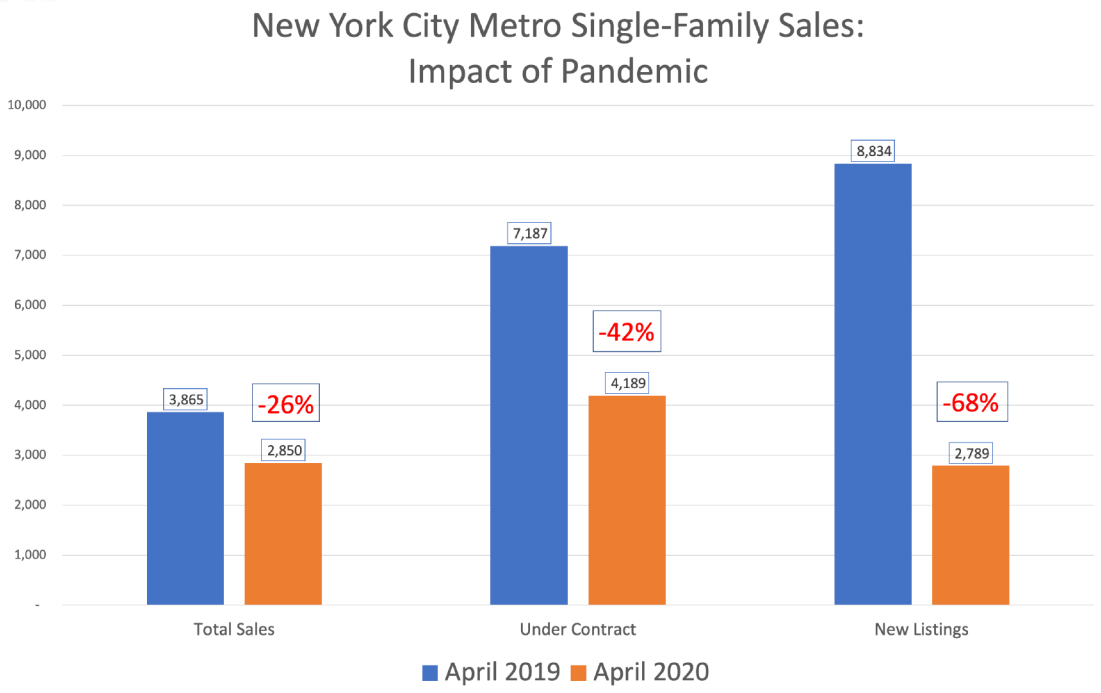
Most observers also expect the impact on the real estate market to be considerable, since (1) the public health emergency is compelling consumers to stay home rather than look for new housing, (2) the Essential Business Order has either forbidden or at least strongly discouraged real estate agents from working outside their homes, and (3) many government offices are shut down, making it difficult to process transactions that require access to municipal records.

You can see the Pandemic's impact on the housing market in the April sales figures, which showed a dramatic decline from April of 2019. Closings held relatively close to last year's numbers — down "only" 26% in the New York Metro region. But that's because the market had built a pretty big pipeline in the first quarter, and real estate professionals were creative in finding ways to close transactions even with so many municipal offices closed.

On the other hand, the flow of new business slowed considerably, with new contracts of sale falling 42% and new listings 68%. Why? Because the real estate agents who feed that pipeline were mostly sidelined. They still managed to put together new deals, and put some listings on the market, but their work was severely hampered by the Essential Services Order and the general anxiety buyers and sellers felt because of the coronavirus.

Going forward, we expect closings to slow in the remainder of the second quarter, because the "easy closings" from the first quarter probably got done in April. Moreover, the pipeline going into May and June is not nearly as strong as the pipeline going into April. Until the public feels comfortable getting back into the housing market, we're not likely to see new contracts or listings get near the 2019 numbers.

At some point, though, probably by the summer, the public's anxiety will diminish, and the Essential Services Order will relax a bit. The question is, what happens to the housing market then?



That makes sense. By the end of March, agents were no longer able to do in-person listing appointments. And even if they were, most potential sellers had other issues on their mind than putting their homes on the market, especially when buyers would likely not be able to see them anyway.

Going forward, we expect the slowdown in listings to continue. People are cocooned in their homes right now, disinclined to put them on the market until buyers are actually able to see them in person. Accordingly, we believe that the numbers will be significantly lower until real estate agents are back to work.

The question, of course, is what happens then?

Pandemic

Operational Disruption	Pre-Crisis Economic Condition	Impact on Economy	Pre-Crisis Housing Market Condition	Impact on Housing Market
Long-term and extensive. Many government offices closed down indefinitely. Many businesses closed due to essential business order.	**Robust.** The economy was in the 10th year of consistent growth following the Financial Crisis.	**Considerable.** Dow falls 25% in one month, unemployment claims hit record high, GDP predictions are dire.	**Robust.** Housing was in the middle of a strong seller market cycle, with sales gains and price appreciation.	**Undetermined.** We don't know yet, but business order has shut down industry in the short-term.

PART 2

Seven Reasons for Optimism

The key question we need to answer is this: which of the three crises -- the 9/11 attacks, the Financial Crisis, or Hurricane Sandy -- is the best analogue for the Pandemic? Will the Pandemic end up being more like the 9/11 attacks or Hurricane Sandy, which had only short-term impacts on the housing market? Or will it be more like the 2008 Financial Crisis, which caused a 20% decline in pricing and 40% decline in transactions over a two-year period?

In the table below, we've laid out some comparison points for all of the crises, breaking out the various elements for more instructive side-by-side comparison.

So what's the best point of comparison? No one can say for certain how the market will respond to the challenges of the pandemic, the economic fallout, and the shutdown of business and government operations. But looking at the history of how prior crises have affected the housing market, we see some reasons to be cautiously optimistic about the housing market in the third quarter and beyond.

	9/11 (2001)	Financial Crisis (2008)	Hurricane Sandy (2012)	Pandemic (2020)
Disruption of Government and Business Operations	**Short-term but significant.** Government offices and business operations closed temporarily, but quickly got back to normal.	**None.** No impact on government operations, and no shut down of business operations (other than bank failures).	**Short-term but extensive.** Government and many businesses shut down for several weeks for lack of power and physical infrastructure damage.	**Long-term and extensive.** Many government offices closed down indefinitely. Many businesses closed due to essential business order.
Pre-Crisis Economic Conditions	**Weak.** The economy was already struggling following the 2000 Internet stock bust.	**Weak.** The deteriorating economy led to bank failures that spurred the crisis.	**Stable.** The economy was growing out of the Financial Crisis.	**Robust.** The economy was in the 10th year of consistent growth following the Financial Crisis.
Impact on Economy	**Considerable.** Dow falls over 25% in two years, unemployment climbs from 4% in 5.8%, GDP falls from 4.1% to 1.0%,	**Extensive.** Stock markets down over 50% in two years, unemployment climbs from 4.6% to over 9% , GDP falls into recession.	**Negligible.** Dow rose the next year, unemployment fell, GDP grew.	**Considerable.** Dow falls 25% in one month, unemployment claims hit record high, GDP predictions are dire.
Pre-Crisis Housing Conditions	**Strong.** Market was in beginning of seller market cycle that lasted several more years.	**Weak.** Housing was long overdue for a correction, had been artificially extended by credit expansion.	**Stable.** Market was recovering slowly but steadily from the Financial Crisis.	**Robust.** Housing was in the middle of a strong seller market cycle, with sales gains and price appreciation.
Impact on Housing Market	**Minimal.** Closings slowed in the fourth quarter of 2001, but caught up by early 2002.	**Extensive.** Housing prices fell over 20% and sales fell over 40% within two years.	**Minor.** Housing continued its steady recovery from the 2008 Financial Crisis.	**Undetermined.** But essential business order has mostly closed activity.

1. The market disruptions are temporary.

As we've discussed, the pipeline of new real estate transactions is going to be disrupted by the Essential Services Order, which is keeping real estate agents from in-person showings and has also shut down government operations essential to closing transactions. But those disruptions are only temporary. They might last a few months, and some restrictions might linger well beyond that, but they will eventually ease up. And when they do ease up, we believe that agents and brokers will be able to get back to business relatively quickly.

By way of comparison, the 9/11 attacks and Sandy caused temporary disruptions in the housing market by interrupting business and governmental operations, but neither had any sustained impact on buyer demand. Of course, the disruptions caused by 9/11 and Sandy were probably a lot shorter than what we will see with the Pandemic, which could stretch on for months rather than weeks, and could even re-emerge in the fall. But the dynamic is the same: temporary disruptions in operations that create a short-term slowdown in transactions, but don't necessarily have a long-term impact on housing demand. Moreover, as terrible as the Pandemic is, it hasn't caused any damage to infrastructure that would impair business or government operations once the Essential Services Order is lifted.

2. The Pandemic's Economic Damage is Disconnected From Housing

Although the Pandemic's overall devastation of the economy could spread to the housing market, we see no reason to think that the Pandemic will have a particularized effect on housing. This is not to minimize the severe impacts that the Pandemic has already had on the stock market and unemployment, but only to say that those impacts are not specifically related to housing as an asset class.

We see this as a significant distinction from the worst-case-scenario Financial Crisis. The Financial Crisis was unique in that it was intrinsic to the housing market -- housing itself was the overleveraged asset that spurred the entire correction. The economy didn't bring housing down; housing brought the economy down. That's what makes the Financial Crisis so different from the other catastrophic events like 9/11, Hurricane Sandy, and the Pandemic. They had significant economic consequences, but they didn't particularly affect housing.

Indeed, the housing market does not always track the path of the overall economy. In 2001, for example, the economy was struggling even before 9/11, and declined significantly through 2002, but the housing market was on the upswing throughout that entire period and beyond.

Now, the economic effects of the Pandemic might be so severe that housing will unavoidably suffer. People who lose their job in the recession or their life savings in the stock market are unlikely to go looking for a new home, which could severely depress demand in a way that would drive down both sales and prices. But even in that case, the housing decline will be a secondary effect of the overall economic downturn, not the cause. That's a pretty important distinction from the from the Financial Crisis.

3. The economy was strong when the pandemic hit.

When the Pandemic hit, the economy had been enjoying an unparalleled ten-year streak of job and GDP growth, with the stock market reaching a series of all-time highs. Given what we see in the previous crises, that's a pretty good indicator that the economy could bounce back after the Pandemic eases.

If you look at the three prior crises, you can see that the pre-crisis state of the economy and the housing market significantly influenced the post-crisis results. In 9/11, for example, the economy was after weakening after the "dot.com" bust of 2000, and the attacks simply accelerated the decline: the Dow fell about 25% over two years, unemployment went up almost 2 percentage points, and the GDP growth rate fell from 4.1% to 1.0%. Similarly, in 2008, the economy was overleveraged and propped up by a housing bubble that was about to pop. When it burst, it blew up the whole economy, driving stocks down by over 40% and unemployment up to over 9%.

By comparison, though, Hurricane Sandy hit at a time when the economy was in the midst of a slow-but-steady recovery from the financial crisis. Even though the hurricane caused over $70B in physical damage, the overall economy bounced right back. The Dow rose over 7% in 2012, then rose by almost 27% in 2013. Unemployment went down from 9.1% in 2011 to 8.3% in 2012, and then down again to 8% in 2013. Similarly, the GDP growth rate stayed steady throughout the period: growing 1.6% in 2011, 2.3% in 2012, and 1.8% in 2013.

Will we see the same thing when the Pandemic eases? It's difficult to say. Three prior data points are not necessarily conclusive, and the longer-term effects of the Pandemic might undermine the economy for several years. But at the very least, we think it's important that the Pandemic hit while the economy was in a strong position, and believe that this strength will help stabilize the economy even in the face of strong Pandemic headwinds.

4. The housing market was also strong when the pandemic hit.

Similarly, the housing market was in robust shape when the pandemic hit. We had experienced over ten years of sales growth, to the point that transactions had reached the heights of the last seller's market. And even though prices weren't all the way back to their historical highs, they were up sharply in the first quarter of the year.

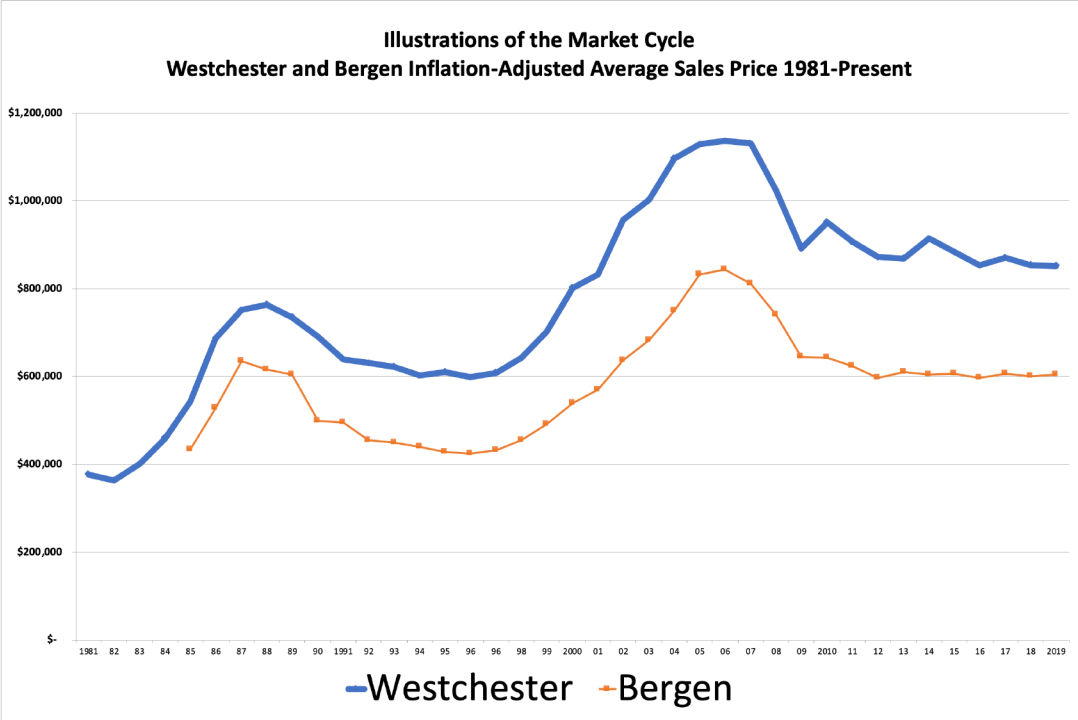
Again, we think that's important. The 9/11 attacks and Hurricane Sandy also came at a time when the housing market was in pretty good condition. The 9/11 attacks came in 2001, when the housing market was in a rising seller's market, and Hurricane Sandy hit in 2012, when the housing market was experiencing slow-but-steady growth. In both cases, the crises had only a minimal, short-term negative impact on real estate.

Only the financial crisis of 2008 occurred at a time when the housing market was in weakened condition. Indeed, the overvaluation of housing caused by the artificial expansion of financial credit created by the "Sub-prime mortgage market" was a precipitating factor in the financial crisis itself.

But that's not what's happening now. Real estate might be a victim of the overall decline of the economy caused by the pandemic, but it's not going to be a precipitating factor. And given how strong the market was going into the crisis, we might see the housing market shrug off even a weakened economy and a multi-month operational shut down.

Indeed, unlike the Financial Crisis, the Pandemic is hitting us right at the strongest part of the market cycle – in the heart of a seller's market. In modern history, the housing market has moved in roughly 15-year cycles, with 7 or 8 years of growth followed by 7 or 8 years of weakness. For example, we saw one such cycle start in 1981 or so, with a seller's market that lasted until the late 1980s, when it was followed by a buyer's market that ran for another 7 or 8 years until the late 1990s. That was one cycle. The next cycle started as the market started to heat up in the late 1990s, and should have lasted until sometime in the mid-2000s. That seller market extended all the way to 2008, though, because the sub-prime market artificially expanded buyer demand and kept the seller market going – until it all came crashing down.

You can see the market cycle play out in this graph, which shows the inflation-adjusted average sales price for our bell-weathers Westchester and Bergen going back to the early part of that 1980's market cycle. You can see the first cycle of growth in the 1980s, followed by the cycle of decline in the 1990s, then the big incline in the 2000s that was partly cyclical and partly artificial, and then the crash in 2008.



But if we were to continue following that cycle, we'd expect to see those prices start to turn up right about now, the way they did in the early 1980s and late 1990s. But we haven't seen anything yet.

That's why we believe that the housing market was poised for significant appreciation growth when the Pandemic hit. That differentiates the Financial Crisis of 2008, which came at the low point of the market cycle. It also differentiates Hurricane Sandy, which came while the market was in a tentative recovery. Indeed, among these precedential events, the Pandemic seems closest to the 9/11 attacks, which came at a similar point in the market cycle and had a minimal impact on the housing market.

5. We might see significant pent-up demand.

If the economy stabilizes, and if the housing market disruptions are temporary, we could see a real rush of buyer demand once the market opens back up. Potential buyers who have been cooped up in their homes for several month could jump immediately into the housing market. Assuming they still have their down payment and a job, those people who were planning on moving in April or May haven't gone away. They're just been locked out of the market by the Essential Services Order -- and their own good judgment to stay at home. And if the restrictions ease by June, the market will be opening up precisely when home buyers who want to close on a new home in time for the new school year will have to start looking.

Similarly, we will certainly see a flood of new inventory from the people who kept their home off the market during the lockdown. Indeed, the unique experience of the lockdown could help drive more inventory on the market -- after all, what could make you want to move out of your house more than two months of never being able to leave it?

Moreover, we've seen some speculation that the experience of the Pandemic and the lockdown could increase overall demand

for housing in the suburbs. For one thing, some people who have been spooked by the coronavirus might start thinking seriously about moving to a somewhat less-dense environment. For another, the lockdown has certainly taught millions of people how to work remotely -- how to have meetings through videoconferences, how to set up a home offices, how to work productively from home. We wouldn't be surprised if some businesses realize they can cut down on their urban office space costs by hiring people to work from home, which would allow those employees to expand their home search to cheaper areas further from the urban core.

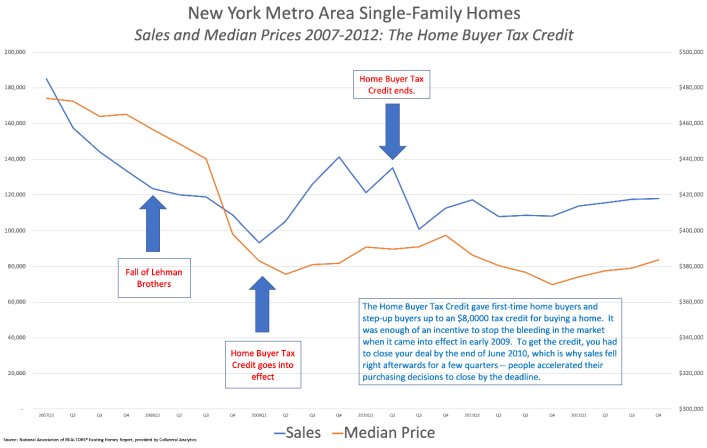
6. Government assistance might stabilize the economy and housing.

Finally, don't discount the potential impact of governmental intervention. The federal government has already passed three phases of programs designed to mitigate the economic damage from the Pandemic, including relief checks, expanded unemployment assistance, and forgivable small-business loans designed to incentivize businesses to retain their employees. The extent to which the government has acted with a sense of urgency reminds us of how the government responded in 2008-10 with the TARP acts, which helped preserve the banking industry and kept the economy from falling into a depression.

People who doubt the efficacy of government rescue programs should consider how the Home Buyer Tax Credit ("HBTC") truly saved the housing market in 2009-2010. The HBTC was an attempt to jump-start buyer demand with a $8,000 tax credit for first time home-buyers, later expanded to lower-priced move-up buyers. It was a complicated mess that was often derided as insufficient to incentivize serious buyers.

But it worked. The HBTC arrested the decline in home sales following the financial crisis of 2008. Starting in the first quarter of 2008, regional sales went down precipitously for six straight quarters.

You can see that once the HBTC started to kick in, the decline slowed, and sales started to bounce back. Buyers had to close by June 30th of 2010, which is why we saw such a spike in the second quarter of 2010. Sales did fall a little for a few quarters after the deadline, because of all the buyers who accelerated their closings to be able to get the cedit. But the HBTC stabilized the market, and within a year sales started a quarter-by-quarter run of growth that lasted for most of the rest of the decade.



In other words, government intervention can work. And the extent to which the government is being proactive to ease the pain of job loss and keep businesses hiring is promising.

7. Homes are More Affordable Than in a Generation.

Finally, we are also optimistic because the Pandemic has hit at a time when, by one important measure, homes are more affordable in our region than they've been at any time in the past 40 years. Unlike the Financial Crisis, which came when homes were historically overpriced, homes right now are priced at a 40-year low, at least when you measure by the monthly payment required to purchase them.

Now, just to be clear, we're not saying that homes are cheaper than they've ever been. That's not true. Depending on the year, homes have appreciated, and if you go back more than 15 years, they've appreciated pretty dramatically. We're just saying that if you control for inflation, the monthly payment buyers need to make to buy the average-priced home is about as low as it's been in a generation. After all, affordability is not just a matter of the sales price – it's a matter of the monthly payment you have to make if you buy that home, which depends not just on price but on the prevailing interest rate.

Here's what we mean. In these graphs, we've plotted the monthly payment required to purchase the average-priced home in each county by measuring these data points:

- The average price of a single family home in each county for as many years as we have data – from local MLS systems. Assuming 20% down, that gives us the mortgage amount needed to buy a home in that market for each year.

- The average interest rate for a 30-year fixed-rate mortgage for every calendar year – from Freddie Mac. With that interest rate, we can compute the monthly payment required to pay that mortgage.

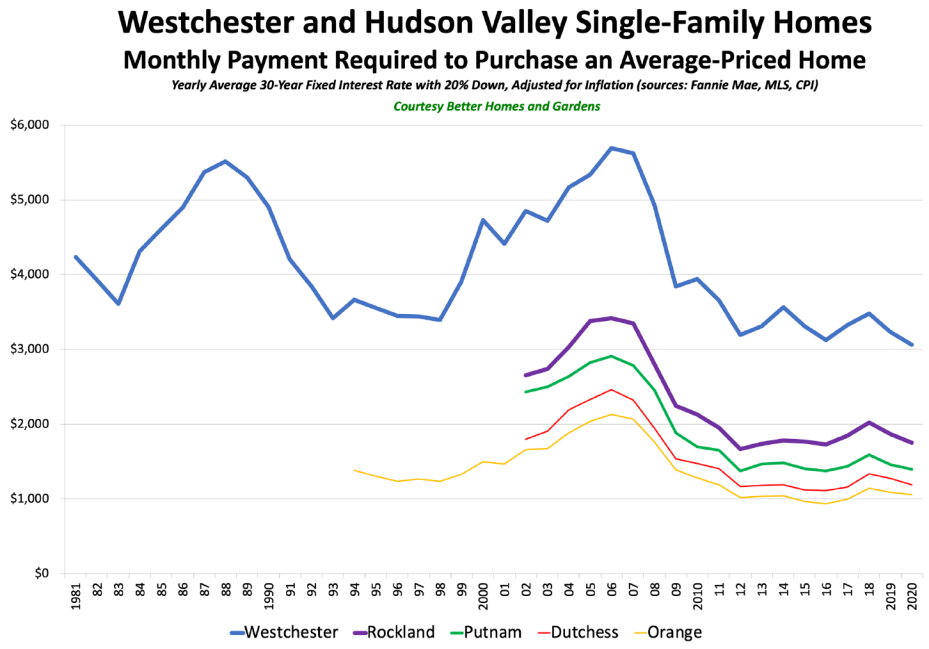
- The prevailing inflation rate for every calendar year up to 2019 – from the US Department of Labor. By factoring in the rate of inflation, we can express that monthly payment in 2020 dollars, to show how the true cost of that payment has changed over time.

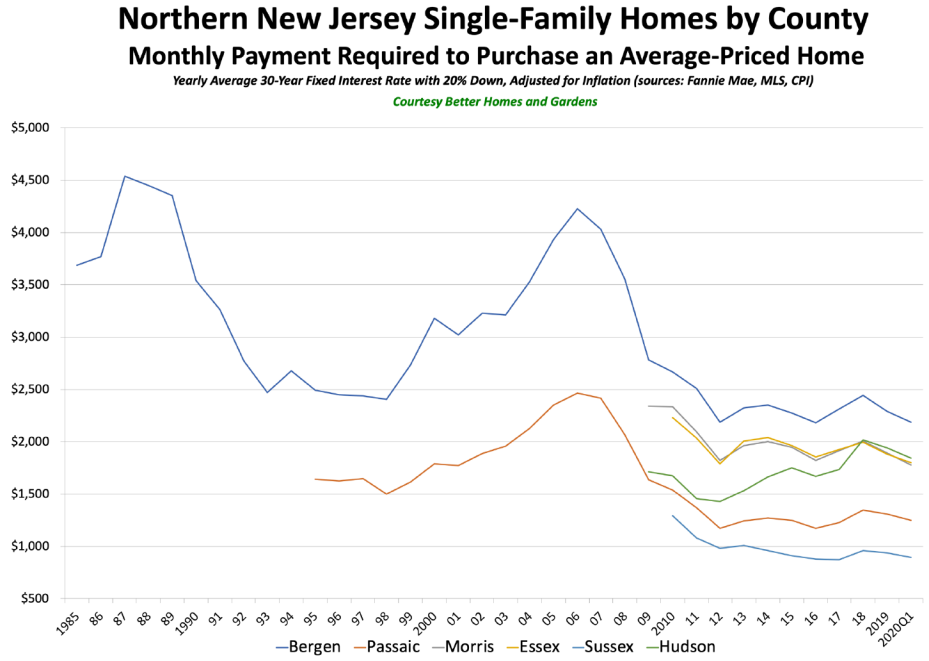
In other words, we've calculated the inflation-adjusted monthly payment required to purchase an average-priced home in each county over the years.

You can see the results. The monthly mortgage payment required to purchase the average-priced home in the region is just about as low as it's been in years. The graphs have bounced around the past few years, as prices and rates have crept up a

little, but the monthly payment is way below what buyers would have had to make 15 or 20 or 30 years ago.

One caveat: we have average sales price data going back to the 1980s for Westchester, but our data goes back either 10-20 years or so for most of the other counties. But all the counties have been relatively uniform over the past 10-15 years, so we think it's fair to assume that all those markets have behaved like Westchester for most of the past 30 years. (Moreover, the graphs in nearby markets like Northern New Jersey are very similar).





So why are monthly payments lower than they've been in a generation? A couple of reasons:

- **Prices.** Regional prices have still not fully recovered from the bottoms reached during the Financial Crisis, and are still at 2004-05 levels. And that's just in nominal dollars, not inflation-adjusted dollars.

- **Inflation.** The value of money goes down a little bit each year as inflation takes a bite. Inflation rates have been pretty low over the past 15 years from historical standards, but that little bit each year does make a difference. If you had $10 in 1981, you had the equivalent of $28 today. It adds up.

- **Rates.** The biggest reason we're seeing monthly mortgage payments lower than they've been in a generation is that rates are still at historic lows. After all, about ten years ago, the average interest rate was about 6%. For the past few years, it's been below 4%. That's a huge difference in a buyer's monthly payment.

So what does this all mean? It means that home prices might be resilient even in the face of the economic shock of the Pandemic, simply because interest rates and relatively low prices make homes a pretty good deal. By comparison, if you look at the graph, you can see where the inflation-adjust monthly mortgage payments were in 2001 (slightly higher), 2008 (way higher), and 2012 (about the same). Again, it seems that 9/11 or Hurricane Sandy are much better comparison points than the Financial Crisis.

CONCLUSION

The Resilience of the Market – And the American People

The point of this analysis has been to point out why we have some reasons for optimism that the market can overcome the economic impact of the Coronavirus Pandemic. Specifically, if we look at the Pandemic in the context of other catastrophic shocks this region has experienced in the past 20 years, the Pandemic looks more like the 9/11 attacks or Hurricane Sandy than the much more debilitating Financial Crisis of 2008. And that gives us reason to be hopeful.

That said, we've been assuming through this analysis that the economic damage from the Pandemic will be similar to what we experienced at the time of 9/11 or the Financial Crisis. Is that reasonable? Well, as of this writing, the Dow had recovered a little from March, and was down about 20% from its heights, which is lower than the 25% drop in the two years following 9/11 and the 50% fall after the Financial Crisis. And although we expect that unemployment will skyrocket in the next few months, much of that might be the temporary result of "essential service" and "stay-at-home" orders that have cut off demand for most business services. Maybe the economic impact of the Pandemic will be worse than anything we've ever seen, or maybe it will be more in line with some of these other events. Obviously, if the economy deteriorates beyond what we saw in the Great Recession, the housing market will be under severe pressure.

Moreover, we do have some room for optimism that the federal government is being responsive to the economic conditions. As of this writing, multiple pieces of legislation have been passed to reduce the economic pain, including loans to incentivize businesses to retain workers. These kinds of programs do remind us of the 2009-10 home buyer tax credit program, which we think was an important step in stabilizing the market after the Financial Crisis. As housing professionals, we remember how scary things were in 2008-09, when it seemed that home prices would be falling forever, and that no one in their right mind would ever want to buy a house again. But prices stopped falling, and eventually people started buying again.

And that's the lesson of this analysis. The day after 9/11, the month after the Financial Crisis, the week after Hurricane Sandy – when you're in the midst of the crisis, when you can't see the other side, it's natural to think that it might never end. But it does. It always does.

In other words, this might seem unprecedented, but we've been through crises like this before. We got through it then; we will get through it again.

Finally, a personal note. If you're cocooned at home, please stay safe, secure and healthy. If you're working in essential services to keep the economy going, you have our deepest gratitude, respect, and best wishes. And if you're a first responder or a health professional on the front lines of this horror, please know you have our deepest gratitude and prayers for your continued safety and health. You inspire all of us.

On behalf of the Rand family, and our extended family of agents and employees, you all have our very best wishes. Stay safe, stay home, stay strong.

J.R.