

Episode 60

## Anatomy of a CRE correction

Andrew Korz and Lara Rhame discuss the commercial real estate market, troubling headlines around the office sector in the financial news, and what lies ahead for the CRE market.

Lara Rhame (00:03):

Welcome back to Fireside, a podcast from FS Investments. I'm Lara Rhame, Chief U.S. Economist. Today's episode of Fireside is gonna focus on the commercial real estate market, and lately there have been a lot of troubling headlines in the financial news, including defaults on office buildings, and combined with recent bank failures. Suddenly it feels alarmingly similar to conditions ahead of the financial crisis. Spoiler alert, so that we don't all get too negative going into this podcast: My guest's view is that we are not likely to get a repeat of the late 2000s, but I want to know why and what is in store for the CRE market in the coming year. So I am joined today by Andrew Korz, a director in our research team, and an expert on all things real estate. Welcome, Andrew.

Andrew Korz (00:56):

Thank you, Lara. I am excited to be here with you.

Lara Rhame (00:57):

This is going to be a great episode. I want everyone to know that today we're recording May 2nd, 2023. Markets are expecting the FOMC to raise rates 25 basis points tomorrow, and that would mean 500 basis points of rate hikes in about a year. That is a huge number in just 14 months and we've seen interest rates rise across the curve. We've seen mortgage rates jump higher and there is probably no sector of our economy that is more interest rate sensitive than the real estate market. So knowing that this fast and furious rate hike cycle has kicked real estate markets in the teeth, let's talk about where we are right now in the cycle. And I want to just take a step back and remind everyone that when the Fed raises rates, when interest rates, mortgage rates all spike, we expect some correction and price, but it doesn't happen right away. What we get initially is this freeze because we get buyers expecting prices to come down a lot and sellers not wanting to meet them there. That's a tough thing. We do see it correcting a little bit faster, but it's already a slow process. In residential real estate, it's extremely slow in commercial real estate. So we get this frozen market transactions and then we get a thaw. Buyers and sellers slowly start to feel each other out and transactions very slowly pick up with prices at a lower level. Where are we right now?

Andrew Korz (02:40):

Yeah, Lara, that's a great place to start and I think you framed it perfectly. I mean, when you think about the equity market and matching of buyers and sellers, it happens in real time. There's an order book on an exchange there, there's bids, there's asks, and you know, the exchange just kind of matches the bids and asks. The other thing is that every share of Apple is the same. If I'm gonna go buy a share of Apple today, you're gonna go buy a share of Apple tomorrow. It's the same exact financial asset. Real estate, we're inherently dealing with real physical assets here. And the reality of them living in the physical world is that they're all different. So they're all going to have different fundamentals based on the age of the asset, the tenants, you know, what metro area it's located in.

So real estate is just inherently going to be a much slower, more bespoke type of market than what we're used to in a lot of financial markets. So, it makes pricing difficult because, you know, what a property trades for in California might be very different than what it trades for in New York. So, it's sometimes challenging to really make broad generalizations about the market. But

I think one generalization we can make today, as you pointed out, is that as the Fed has raised interest rates by 5% in a 14 month period, the market has dropped everything and is in the process of just reassessing. What are the economics of deal making today? Clearly they're extremely different than they were really over the past 15 years. So we're, in this period, I think of, as you mentioned, buyers and sellers trying to figure out where the value is.

What is that equilibrium? You have, on one hand, and I've mentioned this before, but sellers or potential sellers of property saying, "Hey, I got this office building, or I got this retail property that I own, you know, appraised 12 months ago I was told it was worth a hundred million dollars and now you're telling me I should be selling it for 75 or 80 million. There's just no way that I've lost 20 or 25% in just a year." You have prospective buyers saying, "well, what do you mean the financing costs for me to acquire this property have gone up by three, 400 basis points and over that time, rent growth has slowed." So you have this sort of dance going on between buyers and sellers and to answer your question, it's hard to say exactly where we are in this cycle. Every cycle is different. Sometimes it takes over a year for a new equilibrium to form, and sometimes it takes a shorter amount of time. A lot of that's gonna depend on what the Fed does over the next six months or so, what interest rates do, what the economy does. But I think right now we're really in the thick of that feeling each other out. We're sort of in the thick of figuring out where that new equilibrium is.

Lara Rhame (05:20):

So are we frozen or are we thawing?

Andrew Korz (05:22):

I think right now we are frozen, but in the process of thawing, you've seen appraisals come down. You've seen in the transactions that have occurred, prices are anywhere from 10 to 15% lower than they were in the middle of last year. So we are seeing prices fall and eventually when prices fall to a certain level, more buyers will be interested in coming in and meeting that sort of ask price.

Lara Rhame (05:49):

So let's talk about, you just mentioned a decline of 20%, and one of the things that is really a hallmark of this particular market is how diverse and varied these properties are across geography, across usage. I also know that broadly they've seen a massive runup in value over the past 10 years. So when we talk about a correction, sort of frame out where fundamentals are today.

Andrew Korz (06:18):

The word we've been using is correction. Because when you think about broadly asset markets over the past couple years, whether it's IFLY and growth stocks, whether it's treasuries, whether it's commercial real estate, a lot of these asset classes are very interest rate sensitive. Let's just step back and remember what folks were thinking about interest rates in 2021. The assumption was that the Fed was gonna hold for a couple years at zero. At least, the 10 year bond was at I think, covering between one and one and a half percent for much of the year. There was this, you know, assumption even as inflation started to come up, people were wondering if they were ever going to even get back to pre-covid levels. So you had this just incredible ground swell of demand for these assets that are tied to lower interest rates. And then you got to 2022 and you know, as the Fed hiked, a lot of those excesses started to get unwound. And in the more liquid markets like the Kathy Wood architect world, that happen instantaneously, right? Because like we said, those are liquid securities that can be traded in an instant notice. Treasury is the same way, but with commercial real estate, it's different.

Lara Rhame (07:29):

Takes four quarters.

Andrew Korz (07:30):

Exactly. And we're sort of seeing the impacts flow through now. So I think what we're seeing is more of a correction of those excesses because when we look at fundamentals and when you

ask that question, fundamentals are pretty strong. And for a lot of people, for a long time office has been sort of the poster child of commercial real estate, right? When you think about big real estate investors, you think about them buying trophy properties in Manhattan. And really office is just one relatively larger sector, but it's certainly not the majority.

Lara Rhame (08:04):  
What percentage is Office of Commercial Real estate?

Andrew Korz (08:05):  
It kind of depends, you know, what way you look at it from a transaction standpoint. It equated to about 14% of total transaction volume 14 last year. You know, from an asset value standpoint it might be closer to 20%, uh, but it's certainly, you know, in the minority compared to the rest of the market. So, you know, let's just take a tour around the different sectors, if that works for you, let's sort of leave office for later because I do think it truly is the outlier.

Lara Rhame (08:31):  
Give me the good news first.

Andrew Korz (08:32):  
So I think the good news is that when you think about pure kind of consumer plays like retail, like hotel, the fundamentals there look pretty good. So retail, when you think about it, it's sort of had its bearish moment, if you will.

Lara Rhame (08:46):  
I feel like we've been talking about the correction in retail well before this runup or before Covid that was going on for 10 years.

Andrew Korz (08:54):  
It's been going on for 10 years and then you hit Covid when everybody started extrapolating this insane growth in e-commerce out into perpetuity. And all of a sudden, like every store would close and Amazon would employ all of us, I think was the idea, but really if you look at the data, e-commerce is still, it's grown to 17 or 18% of retail sales, but it's kind of stopped there. And actually the consumer is really driving the global economy in the US you could argue. So when you look at retail, it's actually pretty healthy. Vacancy rates have fallen and continue to fall, which is obviously a great sign. We've seen more store openings and store closures in recent years. So the retail space actually looks pretty good. And then you look at hotel, you know, hotel is famously cyclical because lease terms are one night versus a year or more in other sectors. But people want to travel, people want to do the things they didn't get to do during Covid.

Lara Rhame (09:51):  
Services spending, It's very strong.

Andrew Korz (09:53):  
Exactly. And these more cyclical, consumer-oriented parts of the market from a fundamental standpoint look pretty good. Then we sort of moved to multi-family, which is generally a bit more defensive. I think people have gotten pretty bearish on multi-family for various reasons. But when we think about the core reason is probably the supply that's coming online, right? So you saw this incredible rent growth during Covid, you know I think we're somewhere around 28% higher rents today than we were at in 2019. And we've seen it in CPI for two years now. Rent growth has been really strong and I think that brought a lot of new construction into the market and people see that and they get skittish and certainly we're seeing vacancy rates come up a bit.

But one thing I want to remind people is that, you hear the stat that there's more units under construction than there has been at any time since the 1970s. Well, there's more than double the number of housing units today than there were in the 1970s. So it's sort of this denominator effect. And actually, if you look at the number of units completed in the past three years, plus

the ones that are under construction today, it only equals about 1.4% of the U.S. housing stock that's close to average over the past five decades. So yeah, there are supply issues in certain metros that we need to certainly watch that, but there's also real tailwinds in the apartment market. So you have awful home buying affordability right now.

Lara Rhame (11:14):  
Terrible.

Andrew Korz:

So, actually if you look at the worst since the 1980s. And if you look at actually the difference between the cost of renting versus the cost of buying a home today, it's never been more in favor of renting despite the rent growth that we've seen. That's interesting. So I think you have to look at, you know, shelter is a necessity, everybody needs somewhere to live. And I think when you think about the options for, especially for younger people right now, people who might consider buying their first home, they've just been priced out of the market. Not to mention there's no supply on the market for homes, really. So I think there are secular tailwinds for apartments from a demographic standpoint and from the fact that we've just underbuilt homes for years mm-hmm. <affirmative>, and now we're seeing the sort of the unfortunate side effects of that. So I think multi-family is gonna be okay, we're gonna need to sort of look at where we are from a metro standpoint there. And then industrial, you know, it's this e-commerce secular story, right? We can't build enough of it. Vacancy rates are below 2% nationally, rents there are almost 40% higher than there were pre covid. I think supply and demand are coming a bit more in line, but industrial is this beast right now that we really have this insatiable appetite for logistics, for warehousing capacity and you know, we can't build enough of it fast enough.

Lara Rhame (12:21):

Interesting. Okay. So looking sector by sector, I think something that really stands out to me is not just the differences between the use, the differences between geography, but what we're now, as we look ahead to the coming year and to the correction that's coming because of interest rates. There's this whole issue of price, right? That's something that's, I feel like very visceral to all of us, the price of a building. But one of the deeper parts of the CRE market that has changed so much from the financial crisis and has really evolved over the last 10 years is the capital market side. And when I ask you as I probably do every week because it makes me anxious, like, are we gonna have another crisis related to CRE? And your answer is no, we're going to be okay. I know that you really dive into the key reasons why we are facing a very different capital markets landscape than we were 12, 15 years ago. Take me through the pitfalls that we're facing, because I hear that there is a maturity wall coming, floating rate, mortgages are very challenged right now, given this shock in interest rates. Where's the good news and why aren't we going to see the same kind of fallout given that we are going to see some correction in price?

Andrew Korz (13:51):

Yeah, absolutely. And I think it's probably worth diving quickly into what kind of went on during the global financial crisis and why we think it's different this time around. So I think during the global financial crisis, first of all, you had commercial real estate debt that was originated for the acquisition of properties that sort of hit a fever pitch in the mid two thousands where you had this insatiable appetite for real estate among investors. And that debt was originated at very high LTVs, right? So loan to value. So basically the amount of leverage put on the property. Very high LTVs, you know, what we would now consider very low debt service coverage ratios of how covered is the property's debt service by the income that it's generating on an annual basis. So there was not much leeway in terms of just the property fundamentals versus how the debt was structured.

And then you also had a much more fragile capital markets where you basically had banks and CMBS, were the two providers of capital to the CRE market. And that was pretty much it, right? So as we kind of went through the global financial crisis, we had this combination of not much of a buffer if property values fell because leverage was so high and also not many lenders to

step in and sort of fill the liquidity vacuum that sort of occurred. So as property values fell, you sort of had equity holders wiped out of their investment in properties and they said, "gee, well, okay, I guess I'll just give the property to the lender now I don't have any skin left in the game, so I'm not gonna sit here and operate this property if I don't have any skin in the game."

So that put a bunch of non-performing loans on bank balance sheets, they pulled back. They said, we need to sort of triage our balance sheets and make sure everything's okay, so we're not gonna make any new loans. And then prices continued to fall because of that, and nobody wanted to step in and provide liquidity.

Lara Rhame (15:47):

So there was no dry powder for this.

Andrew Korz (15:49):

No and nobody knew where value was and no lender was willing to go out there and lay on any more risk, right? So you had this two or two and a half year period where there was really no price discovery and values just kept falling right. Until finally they hit a point and came out of the global financial crisis. And in 2011 we saw the new bull market start. It's completely different this time around.

Lara Rhame (16:11):

Thank goodness, I didn't enjoy that walk out of memory lane.

Andrew Korz (16:15):

That's a little too negative for a Monday here. So, you know, when we think about today. To your point, everybody's worried about the maturity wall because they remember during the global financial crisis when you had these properties that were actually fundamentally okay, they were cash flowing, they were occupied, but they couldn't get refinancing capital. And they were forced to kind of fire sell right at these prices that really weren't indicative of the fundamentals at the property. So people are worried about that, I think when they hear maturity wall. And I think I would sort of put forward three things that make this time very different. The first is the underwriting standards that we talked about. You fixed what was broken last time. What was broken last time was bad underwriting standards. And I think the market by and large fixed that over the past 10 or 12 years, we learned our lesson.

Yes, exactly. Good. Where leverage levels that were 70% to 80% pre global financial crisis have been in the low sixties to high 50% range for much of the last decade. Completely different, right? Debt service coverage ratios, which were 1.2, 1.3 on average at the height of the pre GFC bubble have been closer to two and even above two for the most part over the past 10 years. So, you're coming in, there's just much more cushion for a property to sort of take a price decline while keeping equity holders in the game. And also on the debt service side for interest rates to go up and the property still to be able to service its debt. So you have much more of a cushion there. The second thing is a lot of this refinancing is coming from long-term loans from CMBS pools. So those are generally 10 year loans. So, if they're coming due in 2023, a lot of those were originated in 2013. So, when you think about that, if there's a 2013 loan that originated at a 60% LTV on an apartment building. Apartment values, even despite the recent declines, apartment values are up almost double over that period. So that loan that was originated at 60% LTV leverage on that is now only 30%.

Lara Rhame (18:16):

I think that what you're saying is so important to remember because if we've had a recent decline in price, and we see this in so many areas of our economy, the run up in value has been so significant prior to covid and then even the year and a half sort of after the pandemic ended, did it end? The year. In 2021, you know you've really seen this dramatic run up in price. So even if we have a correction, it's nowhere near or close to undoing this massive appreciation we've seen.

Andrew Korz (18:48):

Prices in every sector are still, you know, we can leave some of the CBD office proper properties, you know, out of this.

Lara Rhame (18:57):

But we're getting there, I promise.

Andrew Korz (18:58):

By large, most sectors prices are still well above where they were even in at the end of 2019. So you have these loans that have seasoned, right? They've seen the collateral properties underlying them increase significantly in terms of value. So when those loans are coming up for refinancing. Lenders are being very cautious right now, they only want to do a maybe 50% LTV loan. They want less leverage and they want more cushion again, just in case because they don't know what the future holds. The good thing is that if you have that loan that needs to be refinanced, now the owner of that property can refinance at a 50% LTV and take out some equity. Like you might take out equity of your home, right? And they don't need to give a fresh infusion of capital. That's where some of the risks lie.

If you did need property owners to, in order to refinance, they would need to inject new capital. That's sort of where it can throw salt in the gears and kind of come up the process. A lot of these loans are very seasoned. They've seen significant appreciation and that's going to help grease the wheels of this refinancing process, I think. And then the final thing is the complexion of the debt markets. Like I mentioned pre GFC, it was really banks and CMBS and there were some insurance companies, but largely banks and CMBS. So, in the CMBS market sort of seized up and a lot of the banks pulled back, there was nobody left to sort of pick up the mantle. Today it's completely different. So if you look at over the past five years, anywhere between 30 and 40% of the growth in CRE debt has been outside of those two lender types.

If you look at the sheer number of different lenders in the market today, depending on the sector, it's between two and four times as many as there were 10 years ago. So, the market is much more diverse. Obviously, banks have an issue on the liability side of their balance sheet with deposits. CMBS has an issue on the liability side with just higher bond spreads that are being demanded from the public markets. But you have a lot of these lenders like debt funds, like mortgage rates, like insurance companies that have much more stable funding sources. And I think as we see banks retrenched, which I think we generally expect.

Lara Rhame (21:12):

Just some, some continued tightening in lending standards. That's appropriate given. You know, the background of what's happening in the financial sector.

Andrew Korz (21:19):

I think that's probably a good baseline assumption. And then in the CMBS side, issuance is, is as we know, much lower you do have this cohort of alternative lenders that can step in. Now it's not gonna be terms that are particularly attractive to borrowers, but you do have capital available and that is probably the biggest difference, you know, around today's cycle than it was during the global financial crisis.

Lara Rhame (21:43):

And I think, you know, what I'm hearing you describe from the financial crisis was sort of the first domino falls and a lot of other do sort of kicks off of a string of, you know, dominoes all around, up and down the table traveling across the whole room. This time around, we've had a couple dominoes fall, but there's enough buffer in place that it's not going to just pass through into this vicious downward cycle.

Andrew Korz (22:07):

I think there are circuit breakers and the circuit breakers will be that property borrowers will have, you know, more skin in the game because the loans that they took out are, weren't much

more conservative standards and there's going to be liquidity in the debt markets and that is crucial.

Lara Rhame (22:23):

Okay. All right. So now let's talk about office. And here I'm gonna make the first of several plugs for your recent publication, the chartbook that you just put out, Anatomy of a CRE correction. And I want to look, you know, specifically at what your thoughts are because that's where the headlines are coming at us Fast and Furious. We talk a lot about return to office. I think it's still something that we're all really trying to work out and to settle on a new normal. There is not one yet. So how is this affecting office valuations and in particular, the headlines that we're seeing about some recent defaults?

Andrew Korz (23:26):

I think this is probably the biggest question that we get around commercial real estate office is an important part. It's always been an important part of the commercial real estate market.

Lara Rhame (23:36):

Let me ask you very specifically, so you said office was 14% of transactions. I know that varies. So 20% of overall valuation. What about central business district CBD office space? What percentage of that is that?

Andrew Korz (23:50):

So CBD office used to be, and I'm looking at the chart right now, it used to hover around 50% of transaction volumes. It's at 25% of total office. So, so it's only about a fourth of the properties being transacted today in the office sector are central business district,

Lara Rhame (24:09):

Which makes it one 20th of the entire CRE market.

Andrew Korz (24:12):

3% Okay. Right now. All right. And, and that's this past quarter. So that tells me there is little to no liquidity specifically in Central Business District office right now. So I think any price index that we look at for office is just not particularly useful right now because ultimately value is what buyers and sellers say it is. And when there's no transactions, it's very challenging to, to assign a true value.

Lara Rhame (24:39):

And office leases are long term.

Andrew Korz (24:43):

You're in this sort of unique place where the economic occupancy of a lot of these buildings is still pretty okay because you might of had your tenants signed leases in the late 2010s and those leases are 10 years long, so they're still paying rent even if their workers are only coming in twice a, you know, twice a week and, and your physical occupancy is only 40 to 50% on a given day, they're still paying the rent that was contracted. Now, property owners are gonna have to really work and really give some concessions, maybe upgrade the property to try to keep that company there. But the current pay actually is still pretty okay. Obviously the concern is around the terminal value in the asset class and, and what happens five, ten years down the road when these leases roll and companies look to downsize.

So, you know, I think it's challenging, you know, there's a ton of dispersion in the market right now. If you look at sort of just the different downtowns and we pulled some neat data from actually the University of Toronto the other day, their School of Cities it's called, and they did this research where they looked at cell phone activity in central business districts this past year compared to the pre covid baseline. And it is incredibly disparate across the different metros, and it actually tracks very closely with the increases in vacancy rates that we've seen in these different metros. So, if you look at places like Tampa, Jacksonville, Miami, you know, these sort of Sunbelt metros, they are much closer to pre covid norms.

Lara Rhame (26:18):  
Close to 90%.

Andrew Korz (26:20):  
Actually, pretty good. And they've seen the lowest increase in vacancies actually. We measure vacancies plus sublease space, so call it availability rate. And then you look at your Seattle, your San Francisco is way off to the right there. It's not good. San Francisco's only between 30 and 40% of pre covid baseline. I mean, obviously the issues in the tech sector haven't helped in a lot of those west and Pacific northwest markets. So, I think there's a ton of dispersion across metros and then there's a ton of dispersion across just properties. So, you have your class A property that might have been built in 2015 that's got everything that the modern worker might want amenity spaces and beanbag chairs and stuff, but it suits what the modern worker wants.

Lara Rhame (27:09):  
I need a pickleball court in my office space now. It's a new amenity that I'm requiring.

Andrew Korz (27:13):  
It's a deal breaker. So, you know, these offices, they, they fit what the modern worker wants and you know, companies might be able to bring workers back into an environment like that. And then you have your buildings that were built in the 1970s that have old school cubicles and beige walls that just not many people are going to want to go into if they have any sort of choice. And those are the properties that I think are gonna be problematic. It's the smaller footprint buildings that are older and not renovated, that don't have amenities and are, I think this is a crucial one, poorly located in CBDs. CBRE recently did a research project that actually showed that the best predictor of distressed office assets is actually location and specifically two things.

It was number one, what was the crime rate in that area. Mm-hmm. And number two, how many restaurants were there in the immediate surrounding area? So those were the two sort of best explanatory variables in terms of poorly performing office buildings. So, I think there's still so much we don't know, and I think we need to allow for that. We have no idea what the employment world is gonna look like in five years. We do I think we would agree probably that that work from home to some extent is here to stay, but we don't know to, to what extent quite yet I don't think. So, I think what we can say is that this slice of office that I just sort of described, that's gonna be where the problems are and certainly look like we expect like we had in malls during the 2010s. We expect there to be distress and issues and investor losses in these parts of the market. I mean, public office rates are down about 50% since the beginning of 2022. Is that gonna be the ultimate, you know, where kind of value ends up? We'll see, we don't know yet. Frequently the, the public markets overshoot the private markets and I think we'll just have to watch throughout this year and next year and kind of see where the market goes with this.

Lara Rhame (29:21):  
That's so interesting. I mean, I think your graph showing the different localities was very surprising to me in your chart broke. And I think, more than anything, I just want to pull the thread of when we see some of these scary headlines about office space in downtown Seattle or San Francisco or another large metropolitan, we shouldn't necessarily paint the entire CRE market with fat brush. This is an area where I think it's, as we have talked about before, is really at the, at the center of a lot of different changes that are being experienced because of the pandemic and that we'll continue to see. And there are lots of other important areas where there are good value, low vacancy rates, and a lot of demand that are not seeing or expected to see the same kind of correction, just given secular changes that may well have occurred in office.

Andrew Korz (30:11):  
What I always like to say is this isn't necessarily value destruction that we're seeing happen here. A lot of it is value redistribution. So, what are people doing when they are not in the office,



they're working from home. So, people are putting a higher value on their shelter, on their home space.

Lara Rhame (30:34):

I remember you saying that early on during the pandemic and you were spot on. If people are spending 25% more time at home, they're going to value their square footage 25% more.

Andrew Korz (30:43):

And they're performing their highest value add activities working, which is how they pay the bills. They're doing that at home. So, I think it's a redistribution of value from office to a certain extent to residential. It's a redistribution of value from we're seeing people flock from San Francisco to a certain extent in New York from Chicago down to some of the Sunbelt cities. It's a redistribution from a metro area standpoint as well. And I think from an investment standpoint, when we think about opportunities in the market follow where that value's going, not where it's been,

Lara Rhame (31:15):

There's a lot of office that's not in central business district and I think an extraordinary part of the building that's gone on has been office in suburban areas, multi-family construction and suburban areas. What we think of as sort of the quintessential suburb that has really changed.

Lara Rhame (31:33):

I want to finish up by looking and zeroing in on the last graph in your chartbook, they say a picture says a thousand words. So I'll do my best in less than.

Andrew Korz (31:44):

Please don't say a thousand words...

Lara Rhame (31:45):

Much less than a thousand words. It looks at the contribution to e property price growth and breaks it out between net operating income and capital and price appreciation, equity appreciation. And it's stunning that the NOI growth has been very stable over years and you've just had this explosion in valuation growth from cap rates. And that has started to correct down on the cap rate side. The NOI side has stayed very steady. So, take me through, and I love your title of it. It says a new investing era. I think that is what really can give value to people over the year ahead and beyond that, where is the value now going to be?

Andrew Korz (32:35):

Let's just kind of break it down and how are real estate returns driven. There's sort of three components. There's number one, there's NOI or net operating income, as you said, that's the annual yield that's bit off by a property. So, that's that that income is the first sort of source of return. The second would be the price growth that is driven by just the increase in that income. So if I have a property that's generating a hundred dollars of cash flow in one year and the next year it generates \$110 of cash flow, that property is probably gonna be worth 10% more percent more. And then the third source comes from changes in cap rates. So the valuation put on future cash flows. If we look at sort of 2016 onward, a lot of the price cart that we saw came from cap rates coming down. If you kind of look at the chart here from 2020 through really the middle of 2022, it was almost all cabarets coming down.

Lara Rhame (33:38):

It's really been explosive.

Andrew Korz (33:39):

So that's sort of analogous to what we've seen in equity markets over, over the past 15 years, where valuations have come up because interest rates have been so low. I think I investors sort of got, I would say complacent with the idea that there would be cheap debt forever and you've had investors relying on that cheap debt, financing them at three and a half percent while the cap rate was 6% and you can make a really nice return. I think we're seeing a

complete shift in that, where that third source of return is gonna be much less prominent over the coming years. The first two, which are current income and then income growth, that drives some price appreciation. Those are gonna be the components that drive real estate and really what should drive real estate returns over the long term.

So, when we think about that, it's been a great time to be a property owner over the past 10, 15 years because of what we just talked about. I think as we transition into an income-driven environment, you're going to want to be a lot more diversified across capital structure. Who is first in line to pick up that income? It's the lender, it's the debt holder. You're also insulated from the oscillations that we see from a price standpoint. So, I think as we transition here after we sort of get out of this price correction that we're seeing, we're going to see a much different investing environment and I think real estate investors who have gotten used to the past 10 or 15 years and that environment, I think are gonna really have to rethink their commercial real estate allocations.

Lara Rhame (35:10):

All right. Well thank you so much for your time and your insights today. I think more than anything, this remains an important asset class and we are going to see a lot of changes in the market. We're seeing a lot of corrections in the prices, but we should look past the headlines and think a lot more about not only where we're invested in CRE, but what part of the capital flow trucks we're invested in.

Andrew Korz (35:34):

Absolutely.

Lara Rhame (35:36):

And if you have 15 minutes, go to our website, [fsinvestments.com](https://fsinvestments.com), insights tab, look for that chartbook, Anatomy of a CRE, correction. Tons of great information and phenomenal charts. This has been great. Thank you so much, Andrew. I really appreciate it. Yeah, this has been fun. Thanks Lara. Yeah, this episode is recorded at the FS Investments headquarters in Philadelphia's historic Navy Yard. It was produced by the investment research team. It was edited and engineered by Aaron Sherman. Special thanks to show coordinator Ellie Zang. If you enjoyed this episode, be sure to like and subscribe wherever you get your podcast. Thanks for listening.