

Frankenstein's Monster

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Frankenstein's Monster

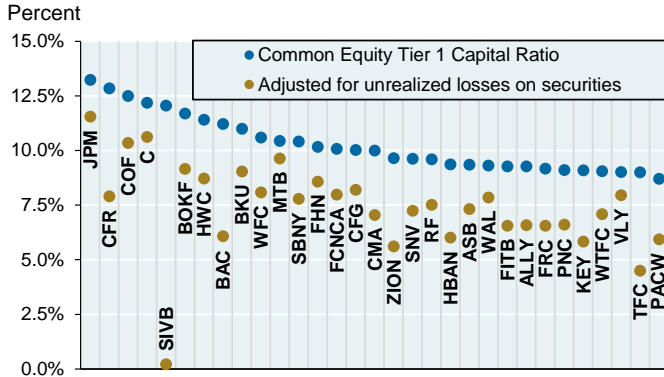
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MR. MICHAEL CEMBALEST: Good morning and welcome to the April Eye on the Market podcast, entitled Frankenstein's Monster. In the 1800s, there was an Italian scientist named Luigi Galvani that was experimenting with electricity and, and frogs to see if he could generate movement in them after they died. And it was the inspiration for the Frankenstein—Dr. Frankenstein novel. And that's a metaphor that I was thinking about this week is creating life in inanimate body parts, that, that he happened to source from deceased criminals, using energy from a lightning storm, might have sounded great on paper. But the invention, obviously, ended up having some negative consequences that Dr. Frankenstein didn't think about. And I think the same is true for the Fed. They were very excited and convinced the 10 years of negative policy rates—10-year treasury yields below 1% and a doubling of the balance sheet from four and a half to nine trillion was, in just two years recently, was the right thing to do and was the largest monetary experiment US history. Turns out that has negative, unintended consequences, as well.

And like the townspeople all fleeing Frankenstein's monster, some depositors are now very wary of US banks with substantial underwater loans and securities whose yields the

Impact of unrealized securities losses on capital ratios

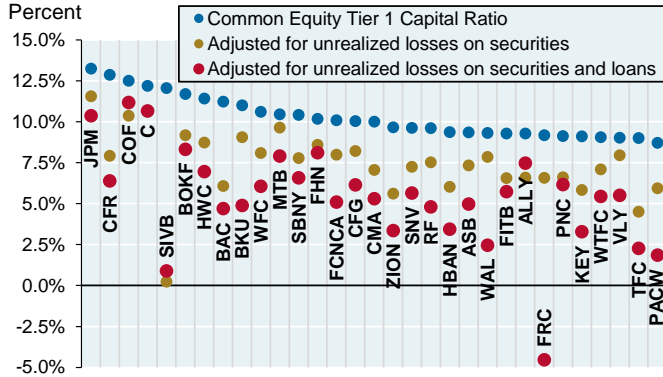


Source: JPMAM, Q4 2022. All calculations based on 10-K reports

Fed had manipulated. So in our March 10th piece, we had a chart that, that went viral for all of the obvious reasons. It was a chart that showed the pro forma impact of unrealized securities losses on bank capital ratios. But in the rush to write something on the day that Silicon Valley Bank failed, I neglected to mention another casualty based on the Fed policy, which is, all

the residential mortgage loans and other loans that were underwritten at perfectly reasonable loan to value and debt to income, but at very low coupon rates. And now that mortgage rates have doubled from three to six percent, there's another issue to think about here, which is the unrealized losses on loans due to higher interest rates.

Impact of unrealized securities and loan losses on capital



Source: JPMAM, Q4 2022. All calculations based on 10-K reports

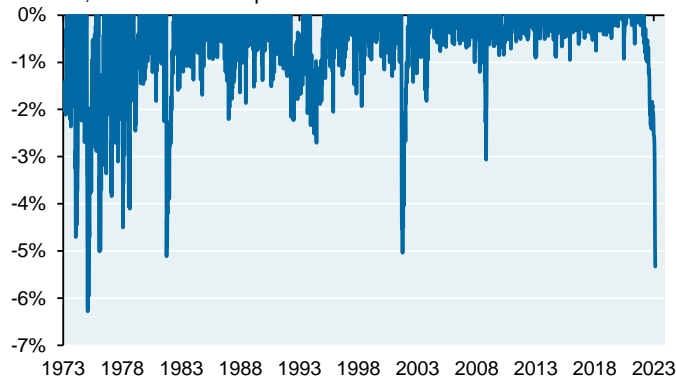
So the—we have an adjusted chart in this week's piece on that issue. And so then you see the common tier one capital ratio for each bank, adjusted then for losses on securities, like last time, and then also adjusted for additional losses, unrealized losses on loans. And there's a couple of charts in here showing that the more—that certainly banks differed in terms of how well their management teams

navigated this monetary experiment. But the more you got flooded with deposits from 2019 to 2021, the bigger the challenge was. Because a lot of those banks just had so much money to put to work. And a lot of their preferred stocks are now trading at distressed levels, reflecting that. Now to be clear, the presence of unrealized losses on a balance sheet of a bank is not abnormal and is consistent with what happens when rates go up. The problem this time is that some banks got so many stimulus related deposits at a time of low rates that their balance sheets are stuffed with these low yielding assets.

And then to reiterate, this is only a problem when large deposit outflows cause unrealized losses to be realized. So the new rules at the discount window that allows for banks to borrow against securities at original book value rather than lower market value should help, but it doesn't address all the problems for all the banks. Many system indicators are now stabilizing. But that could change. And we have some

Drawdown of US commercial bank deposits

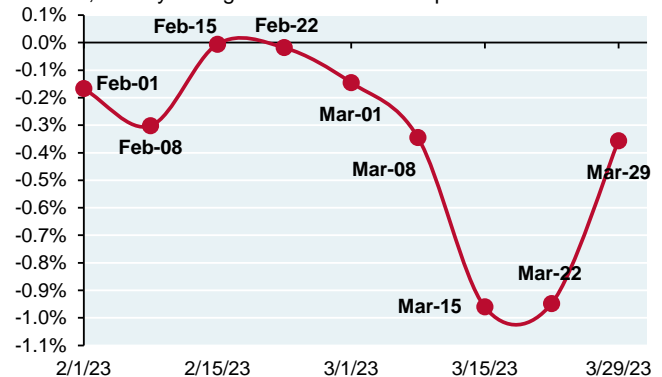
Percent, drawdown from peak levels



Source: Bloomberg, JPMAM. March 29, 2023.

Change in drawdown of US commercial bank deposits

Percent, weekly change in drawdown from peak levels



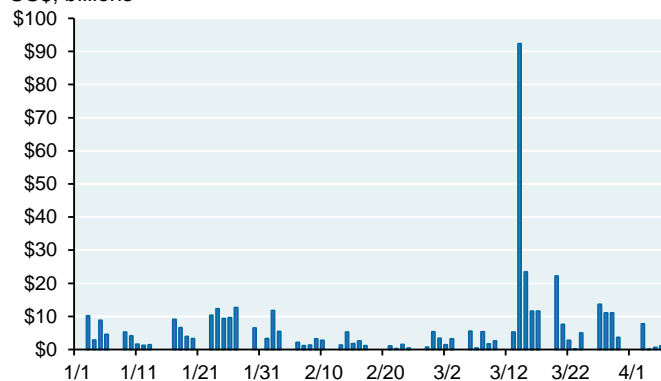
Source: Bloomberg, JPMAM. March 29, 2023.

charts in here showing that the drawdown in commercial bank deposits is now one of the largest on record. The pace of the drawdown has slowed. The drawdown has been concentrated obviously in smaller regional banks. The discount window borrowing has stabilized. It looks like the money—the money market fund inflow surge has stabilized, as well.

Again, we have charts in here on all of this. Borrowing by

Federal Home Loan Bank daily debt issuance in 2023

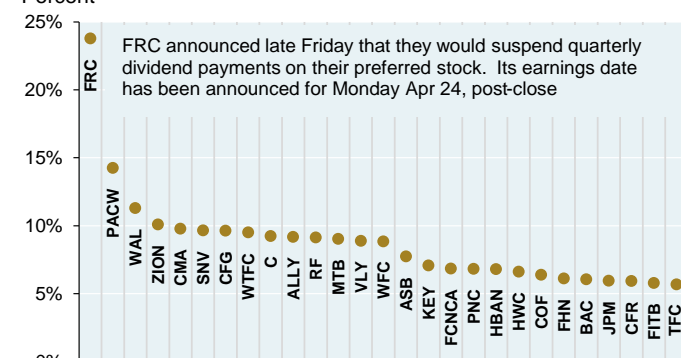
US\$, billions



Source: Bloomberg, JPMAM. April 6, 2023.

Preferred stock yield

Percent



Source: Bloomberg, JPMAM. April 10, 2023 10:42 AM.

the Federal Home Loan Bank reflects member banks borrowing from it, that's also come down from peak levels. And regional bank stocks have stabilized. That said, Friday after the—last Friday, after the close, First Republic announced that it was suspending payments on its preferred stock. And so obviously, some of these stresses are ongoing. But I thought it was important to give everybody an update in this week's piece on the issue of the unrealized losses on loans, because that's a peculiar issue in this cycle that we have to think about, as well.

In addition to Frankenstein, there was another

monster sighting recently. Swiss Regulators reenacted a scene from Struwwelpeter, if you don't know who he is, you'll have to look him up, and completely wiped out Credit Suisse contingent capital securities, and delivered even larger losses to those holders than those experienced by owners of the Credit Suisse common stock. I won't go into detail here. This is an issue that's not of interest to everyone. I looked into the European CoCos market in 2016, with Anton, my colleague, Anton Pil, and we were really skeptical about their investment merit in times of stress. And we wrote that buyers are essentially selling a bunch of short options on the bank's earnings power, its capital base, the business cycle and regulatory discretion. And we thought this optionality was extremely underpriced. We were concerned that incentives might even prompt issuers or governments to wipe out these contingent capital securities in advance of a cap-in advance of a capital raise. And we included it in this month's Eye on the Market, the text we wrote at the time.

The bottom line is that the Swiss—the Credit Suisse CoCos prospectus clearly states that what could—what happened to the contingent capital securities was part of the risk from the beginning, write down events, viability events, it was all there. And as unorthodox as some of this may seem, the risks that were highlighted in the prospectus, and it's entirely consistent with what we wrote about at the time, which is that there's a lot of regulatory discretion involved in investing in these European contingent capital securities.

A lot of people are arguing, I've been reading that, well, the, the UK and the other European versions of these are not the same as the Swiss versions. Well, technically, that's true. There are some circumstances when European or UK banks would be undercapitalized. And instead of seeing these securities written to zero, they would simply have their payments suspended for some period, or maybe converted into common equity. But all those provisions are only applicable in cases where the bank is still a going concern and has breached its capital ratio trigger. And that's possible. But look at Credit Suisse. They went from viable on Thursday, to unviable on Sunday, without any undercapitalized phase in between. And these days, when banks fail, it can happen so rapidly that you don't get that intermediate phase

where there's a time to think about what's going on, and okay, let's convert the preferreds to something else.

With all of those other CoCos securities in other countries in Europe, if those banks went from viable to unviable quickly, they would be written down to zero, as well. So we have a couple of pages in here that explain these issues. And in some ways, the most concerning thing is, you know, I joined J.P. Morgan in 1987, and consider myself someone who understands the financial sector. It's, it's, it's unnerving that the capital and liquidity statistics that, that everyone relies upon, ended up being of such little use in assessing

Credit Suisse ranked at or near the top vs other EU banks on capital/liquidity ratios, but this was of no help in assessing its insolvency risks

For each indicator, higher is "better"

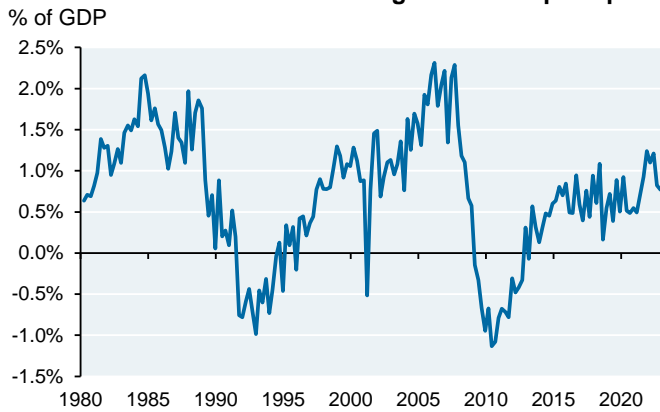
Indicator	Credit Suisse	Peer group
Liquidity coverage ratio	144%	129%-165%
Leverage ratio	5.5%	4.3% - 5.9%
Common equity T1 ratio	14.1%	12.3%-14.2%
Risk based capital ratio	20%	16%-21%
Net stable funding ratio	132%	113%-137%

Source: S&P Global, Bloomberg, JPMAM. Q4 2022.

the insolvency risks of Credit Suisse. We have a table in here showing how Credit Suisse ranked at or near the top versus all of the other EU banks on all sorts of capital liquidity ratios. And they failed anyway. So profitability is something that those ratios don't capture, and is one of the reasons why we focus a lot on profitability and balance sheet strength when we're trying to figure out how healthy these banks are.

The longer section in this month's Eye on the Market is on commercial real estate. And everyone's talking about it. And there's a good reason that everybody's talking about commercial real estate, given the post-COVID occupancy shock that's taking place in the office sector, on top of the adjustments that have already taken place in retail over the

Commercial real estate borrowing well below prior peaks



Source: Federal Reserve Board, BEA, JPMAM. Q4 2022.

last few years. So at first glance, the commercial real estate excesses don't look that bad in this cycle. There were two prior cycles that were much worse. One took place in the mid-1980s, and the other one, obviously, right before the financial crisis in 2008. We have some brief descriptions of what the catalysts were in both of those prior periods. The amount of commercial real

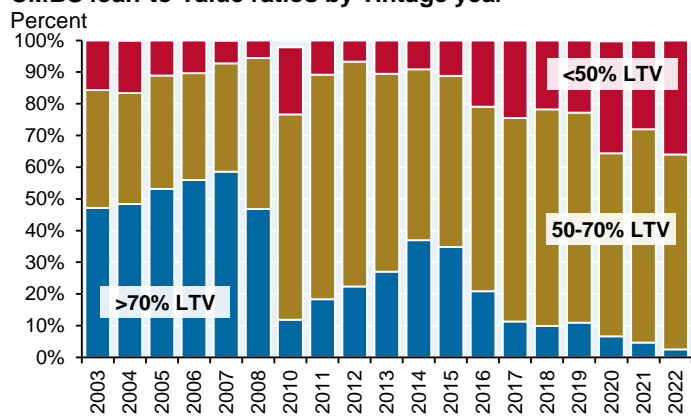
estate borrowing as a percentage of GDP is roughly half of those peaks this time around. The underwriting in the commercial mortgage-backed securities markets are also much better than they were before the financial crisis in terms of loan to value and credit enhancement, and the rating agencies and investors and the legal system has done a much better job this time around.

CMBS weighted average loan-to-value by vintage year



Source: JPMAM. 2023.

CMBS loan-to-value ratios by vintage year



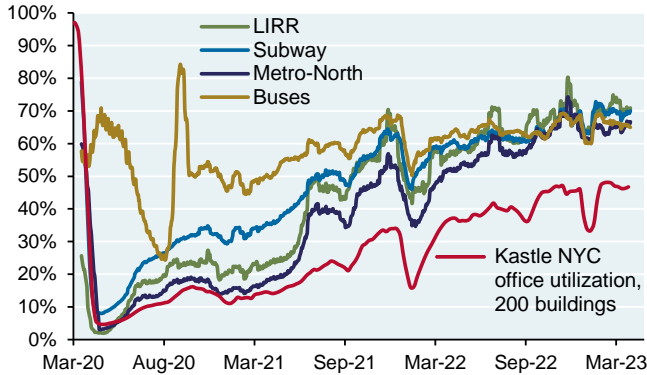
Source: JPMAM. 2023.

There's three big butts here. First, commercial real estate-commercial mortgage-backed securities may be underwritten better this time around, but they're only 10 to 15 percent of all commercial real estate lending. The vast majority comes from regional US banks, which have accounted for 90% of the increase in bank lending since 2015. So what the regional banks are doing, in terms of their underwriting standards, that, that, that's what matters, that's point number one. Point number two is that there are some structural post-COVID occupancy problems in the office market that may result in extremely conservative lending standards, even to trophy properties. And then the third issue is, it just turns out that the next couple of years are peak years for commercial real estate maturities across the whole spectrum of CMBS, banks, insurance and other lenders.

So the issue of the-of the stresses in the office market are interesting. Right? You can look at vacancy, you can look at shadow vacancy, which is space under construction, or space which is where the leases are expiring soon and things like that. The controversial part is the estimate of the-of the third thing, which is underutilized space. And when COVID started, we started tracking Kastle data, Kastle with a

K. It's a company that looks at all the key fob swipes and looks at that as a measure of office utilization. Now, some Kastle utilization statistics feel really low to us. New York City is an example.

Mind the gap: NYC transit use vs office utilization
 % vs pre-pandemic baseline, 3-week average



Source: Kastle, MTA, JPMAM. April 4, 2023.

According to the Kastle data, New York office utilization is only back at 50%. That feels low. Because when we look at the Long Island Railroad, subway, Metro North and buses, all of those things are back up at about 70 to 75% in terms of utilization compared to pre-COVID levels. And so—and all of those people, or most of those people, are coming into work.

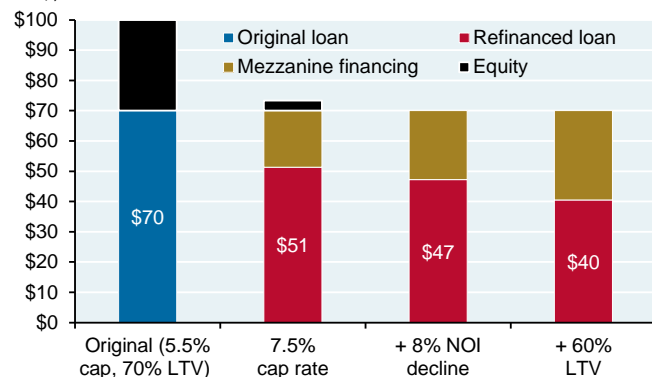
And so it's an imperfect measure. That said, these key fob swipes is one way to start in terms of thinking about the pressure on the office market.

And we've got some statistics here, most of which, a lot of which, not all of which, but a lot of which looked pretty gruesome for the office markets in terms of really high levels of vacancy, increasing amounts of sublet space and then the work from home trends which are—which are kind of unrelenting. So the share of hours worked remotely is now about 30%. It was 60% at the peak, during COVID. But much higher than the pre-pandemic levels, I don't know why my computer keeps doing that. I apologize. Then 4%. So 4% was the amount of hours worked remotely before the pandemic peaked at 60, now at 30, and has been stable there for quite some time. And employees in surveys continue to, to desire something like two and three-quarters work from home days a week, compared to two and a quarter from employers. That, that implies that this work from home stuff is, is here to stay.

And so we have information here on office rent growth and leasing activity. And then, some of the—some of the expectations from some of the sell side reports are, are pretty dire. There was a Morgan Stanley REIT report that assumed underwriting at 40%, LTVs continued in declines, and net operating income is seven and a half percent cost of

Property value as a function of cap rate, NOI and LTV

US\$, millions



Source: JPMAM. 2023. NOI = Net Operating Income.

debt. All of which would result in cap rates for office of almost 10%, and a 40% decline in office values from current levels over the next couple of years. That sounds really dire to me. But as an exercise, we do have a chart in here that shows how property underwritten a few years ago, if it's debt happens to come to-due today, and the cap rates 200 basis points higher, NOI

has declined and a modestly lower loan to value, you could quickly see the debt, let's say it was 70% of the property value before, would now be underwritable only at 40% today. So that's a lot of pressure on properties that are seeing their debts mature.

And then the last part of this section looks at what's going on with the regional banks and how they're the largest lenders in hotels, retails, industrial, and office. And we have a chart in here that looks by bank at commercial real estate as a percentage of total loans, and then office as a percentage of those commercial real estate loans. And obviously, some of the-some of the smaller regional banks really stick out here. J.P. Morgan's Investment Bank did a stress test that assumed some pretty severe delinquency and low recovery rate assumptions for office and for retail. They only ended up with about a .4% at most hit to the tier one capital ratios, which doesn't sound that bad. The problem is that their analysis also assumed that 2022 levels of pre-provision income would persist over the next few years. So if you make a lot of money, it's easy to absorb write offs on bad loans. But something tells me that a weakening economy and higher deposit rates are going to squeeze those pre-provision income levels, in which case, the hit to capital would eventually be higher.

So that's a lot of information already in this podcast. There's a-there's a two-page summary of our economic and market views in here in terms of how the US data looks very good contemporaneously for q1. But what are some of the weakening indicators that we see for q2, q3. And then, at the-at the back, we have a one-pager on a table on San

Francisco, which is kind of incredible to see. It looks at downtown recovery rankings for the largest 60 cities in all of North America. And San Francisco comes in dead last in terms of its downtown recovery compared to pre-COVID levels. And there are some big questions here about municipal solvency, public transit, the impact of rezoning and a bunch of other things that will be focused on in the years ahead. But this was a—this is a very stark table when you look at what's going on in San Francisco versus the rest of the country.

So that's it for this month. If you missed it, our 13th annual energy paper was released at the end of March, and—along with a podcast and a webcast and things like that. And, and so make sure that you take a look at that, as well, if you're interested in the subject matter. Thanks for listening, and we'll talk to you again next time.

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