### APOLLO

## Mid-Year Outlook: High Inflation Expected to Keep the Cost of Capital Elevated Until 2024

#### June 2023

### By Torsten Sløk, PhD

Partner, Apollo Chief Economist

### **KEY TAKEAWAYS**

- The outlook for the US economy worsened in the past six months; the consensus view now points to negative Gross Domestic Product (GDP) growth over the next nine months. Why? Because just as the Federal Reserve's aggressive rate hikes seemed to be cooling economic activity as intended, a side effect erupted: The collapse of Silicon Valley Bank in March put pressure on regional banks to tighten lending standards, further reducing the availability of credit, especially for small- and mid-size businesses.
- The main question today is whether we will experience a soft landing or a hard landing.
- The argument for a soft landing is that the commercial real estate sector (CRE)—which depends in no small part on regional-bank lending—is much smaller than residential housing, and hence the negative effect of CRE market dislocation would be smaller than during the Global Financial Crisis (GFC) in 2008. Also, the US banking sector's share of total lending to corporates and consumers is now smaller than it used to be.

- The argument in support of a hard landing is that the lagged macro effects of the ongoing banking turmoil are larger than the consensus thinks. Inflation is also stubbornly high because of continued labor shortages and a recovering housing market, and that means higher rates for longer.
- We agree that a recession is coming, with the odds currently tilted towards it being deeper or longer than the consensus expects (we see a 60% chance of a hard landing).
- With inflation still at an annualized 5% (because of tight labor markets and a recovering housing market), we expect the Fed will need to destroy more demand in the economy to get price increases down to its 2% target. If so, the cost of capital will likely stay higher for longer than the market is currently pricing. We now expect the Fed will only start cutting rates in 2024.
- In this environment, portfolio positioning, in our view, argues for exposure to asset classes that have historically shown lower levels of volatility relative to public equities and lower sensitivity to inflation, such as private equity, private credit, and real assets.<sup>1</sup> Investors who can act as providers of capital—especially debt and equity financing—can benefit from opportunities generated by an environment where regional banks remain under pressure and primary high-yield issuance continues to face headwinds.

<sup>&</sup>lt;sup>1</sup> O'Mara, Matt; Black, Keith. "Beyond Beta: How to Use Alternatives to Replace Public Equity," May 2023.

Available at: https://apolloacademy.com/beyond-beta-how-to-use-alternatives-to-replace-public-equity/.

### Introduction

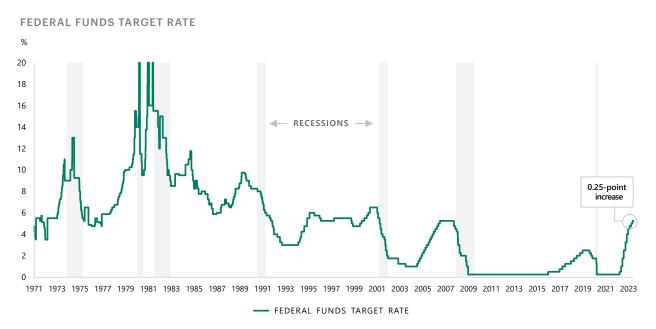
### The outlook for the US economy has deteriorated compared

to six months ago. Why is this slowdown happening and at risk of becoming worse? The main reason is clear: The Federal Reserve has been rapidly tightening monetary policy for the last 15 months (Exhibit 1) with the intent of cooling capital expenditures, hiring, consumer spending, and ultimately the economy as a whole. No one should be surprised by the slowdown. It is happening by design.

### In fact, the Fed's tightening campaign was working as

textbooks would have predicted: Interest-rate sensitive sectors, such as housing, autos, and other durable goods started slowing down first. But they account for just 20% of the overall economy. By the end of last year, the service sector—the remaining 80%—had finally begun to slow as well.<sup>2</sup> For a period, it seemed that the question was whether we would have a soft landing or no landing. But a new dimension has been added to this story: Mounting pressure on regional banks triggered by the collapse of Silicon Valley Bank (SVB) in March.





Source: Federal Reserve Board. Data as of June 6, 2023.

Caught flat-footed by the rapid rise in rates and poor assetliability management, SVB failed after a bank run prompted by fears of potential losses on uninsured deposits. **But this is not the story of just one bank.** SVB's demise sparked a contagion, and the collapse laid bare a widening chasm between the health of the nation's largest and smallest banks. Investor and depositor flights to safety and a widespread downward re-rating of the health of the nation's regional banks led to the shutdown of Signature Bank and regulators' seizure and subsequent sale of First Republic Bank to JPMorgan Chase & Co. The turmoil also spread to weaker but systemically important banks, like Credit Suisse, which was purchased by larger rival UBS through a deal brokered by the Swiss government in March. The ensuing turmoil put pressure on regional banks to tighten lending standards, further reducing the availability of credit, especially for small- and mid-size businesses. The scarcity of credit exacerbated the effects of the Fed's ongoing tightening campaign and moved the conversation from a no-landing scenario to a soft- versus hard-landing scenario.

There are good arguments on both sides, and we explore them in detail in this paper. But everyone seems to agree on one point: We're in for a period of negative growth over the next several quarters.

<sup>&</sup>lt;sup>2</sup> Source: Statista. Data as of 2022.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions and views expressed reflect the current opinions and views of the authors and Apollo Analysts as of the date hereof and are subject to change. Please see the end of this document for important disclosure information.

Additionally, while we may have turned the corner on inflation, it continues to prove much "stickier" than most market watchers expected. As of this writing, inflation was around 5% annually, still way above the Fed's 2% target. In our view, that means higher rates for longer, and an elevated cost of capital through the remainder of 2023 and well into 2024. We agree that a recession is coming, with the odds currently tilted towards it being deeper and longer than the consensus expects (we see a 60% chance of a hard landing). We now expect the Fed won't start cutting rates until 2024.

Private capital has a role to play in helping buffer the effects of the credit crunch by acting as a vital provider of both debt and equity financing as the nation's banks bring their balance sheets back in order. That creates opportunities for investors to allocate capital to private equity and private credit strategies that benefit from the combination of a tighter credit conditions, slow growth, and higher costs of capital.

In the remainder of this paper, we provide an analysis of the arguments in support of a hard landing and the arguments in support of a soft one, both of which hinge on the as-yetunknown final implications of ongoing turmoil in the banking system. After analyzing the possible outcomes, we shift the discussion to the Fed and when it can finally move its focus away from the threat of inflation and toward the health of the economy. At that point, with our interest rate forecast in hand, we will address the implications for the capital markets and for investors' asset allocations.

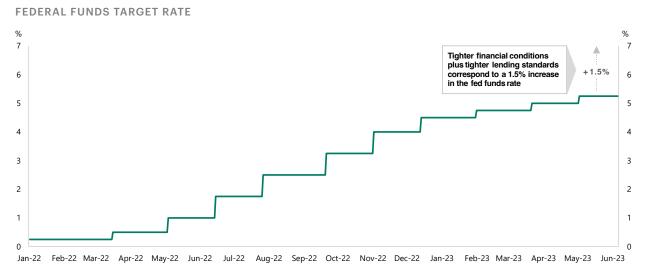
### There are arguments to be made for both a hard and a soft landing

In our previous economic and capital markets outlook in December 2022, the prognosis for the economy, inflation, and interest rates seemed straightforward. The Fed's dual mandate is to achieve full employment and fight inflation. At the time, inflation, while stubborn, was finally starting to show some signs of easing. While the probability of a recession wasn't zero, we did see a possibility of a soft landing, which would have been bullish for both equity and credit markets in 2023.

What changed our view was the unexpected tightening in credit conditions that the collapse of Silicon Valley Bank unleashed. In just a few months, we witnessed three of the

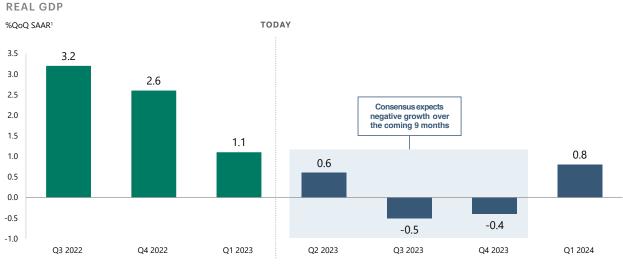
four largest bank failures in US history, and measures of credit conditions have tightened to levels last seen in 2008. While the failure of Washington Mutual in September 2008 still holds the top spot (\$307 billion in assets), the start of this year has delivered the next three: First Republic (\$212 billion), Silicon Valley Bank (\$209 billion), and Signature Bank (\$110 billion).<sup>3</sup> What are the implications for the broader economy? Credit conditions are tighter, regardless of the absolute level of interest rates (**Exhibit 2**). And because of that, the consensus now forecasts negative growth in the economy over the next nine months (**Exhibit 3**, next page).

Exhibit 2: The fed funds rate is in effect 1.5% higher than the stated Fed target because of tighter financial conditions and tighter lending standards after the failure of SVB



Sources: Bloomberg, Apollo Chief Economist. Note: Two regression models were run to quantify the effect from tighter financial conditions and tighter lending standards, and the estimated coefficients show 0.5% higher fed funds rate from tighter financial conditions and 1% higher fed funds rate from tighter lending standards. Data as of June 6, 2023.

<sup>3</sup> Source: https://www.bankrate.com/banking/largest-bank-failures/. As of May 1, 2023.



#### Exhibit 3: The consensus sees negative GDP growth in the US for the coming three quarters

1. Percentage change quarter-over-quarter, seasonally adjusted annual rate. Sources: Bloomberg, Apollo Chief Economist. Data as of June 6, 2023.

What makes the coming recession so unusual is that it is likely to be a combination of a mild economic recession and a sharper asset-price recession. In other words, the primary "correction" will not be in the economy but in asset prices as the Fed continues to deflate the "buy everything" bubble created due to global easy money. Our analysis of GDP and unemployment rate changes during recessions (Exhibit 4) places the current consensus somewhere between a soft and a hard landing. But the ongoing correction in asset prices will continue as the costs of capital are expected to stay elevated well into 2024 (more on that later).

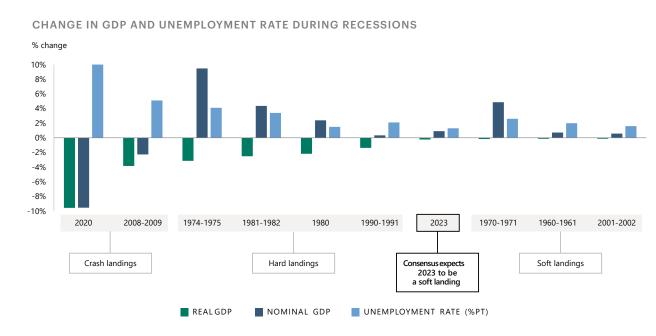


Exhibit 4: Expectations are for a soft landing... but a hard landing is still possible

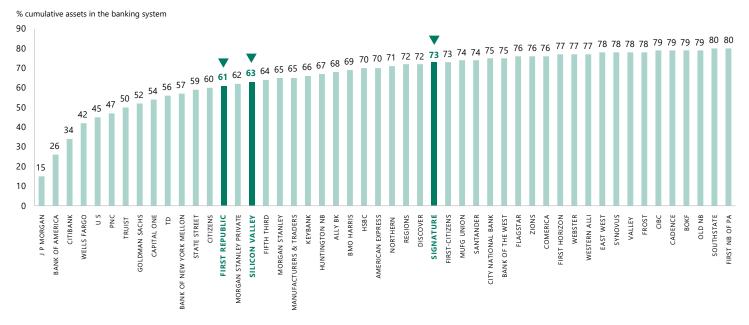
Sources: BEA, Haver Analytics, Apollo Chief Economist. Note: Estimates shown for real GDP and nominal GDP are for the period covering the peak-to-trough decline in real GDP. Unemployment rate is trough to peak. Data as of June 5, 2023.

### THE ARGUMENT IN SUPPORT OF A HARD LANDING

The collapse of three large regional banks has led to fears of even more contagion, as higher interest rates triggered a hemorrhaging of value of the liquid assets on banks' balance sheets, and the specter of further turmoil hangs in the air. Regional and community banks are likely to now spend several quarters repairing their balance sheets (Exhibit 5). This means much tighter lending standards for firms and households as well as increased risk of recession (**Exhibit 6**). In short, a financial accident has happened, and we have moved from a potential no-landing scenario at year-end 2022 to a potential hard-landing scenario in mid-year 2023.

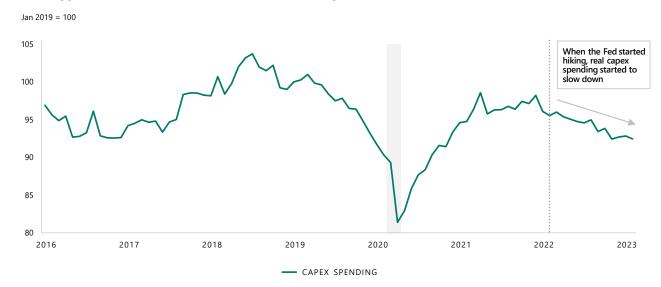
### Exhibit 5: Even tighter credit conditions are coming as banks shore up their balance sheets

BANKS "TO THE RIGHT" OF SVB ARE LIKELY TO IMMEDIATELY START REORGANIZING THEIR BALANCE SHEETS



Sources: Federal Reserve Board, Haver Analytics, Apollo Chief Economist. As of Q4 2022. Represents the views and opinions of Apollo's Chief Economist.

#### Exhibit 6: The lagged effects of Fed hikes combined with banking turmoil have tilted risks to the downside



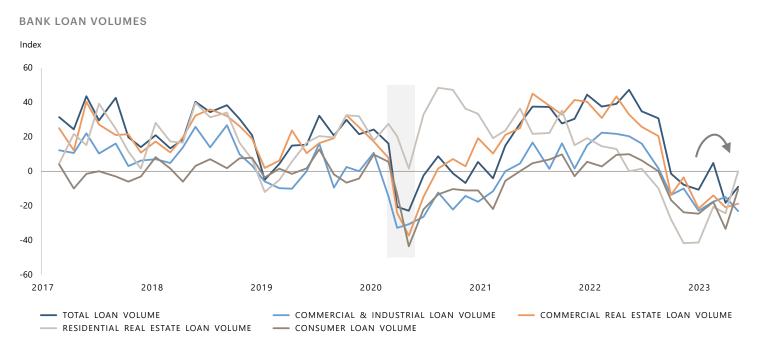
Sources: Census Bureau, Bloomberg, Apollo Chief Economist. Note: Capex spending is real capital goods orders and nondefense ex-aircraft deflated by private capital equipment PPI. Data as of April 2023.

**IT'S IMPORTANT TO NOTE** THAT BANKS IN GENERAL, AND REGIONAL BANKS IN PARTICULAR, FACE TWO SEPARATE BUT RELATED CHALLENGES:

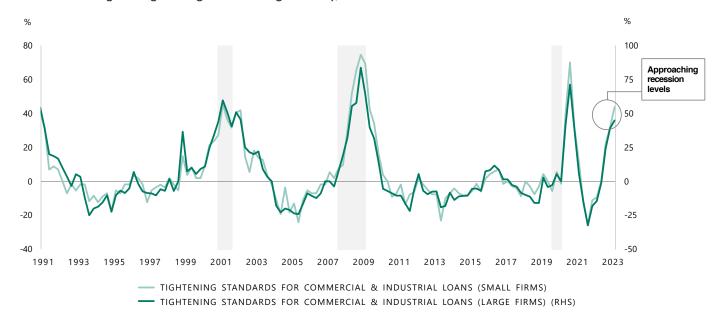
- They continue to grapple with an asset-liability management (ALM) problem. Amid growing uncertainty about the stickiness of their deposits, the cost of borrowing has gone up everywhere—from Federal Home Loan banks, from the Fed, from the money markets. Complicating matters further, a lot of the banks to the right of SVB shown in Exhibit 5 have been downgraded, so their cost of borrowing has increased further. At the same time, the value of their tradable assets has gone down; when rates went up, the price of the fixed-income securities they own went down. The consequence of that is that many banks have seen their held-to-maturity books and available-for-sale books decline in value.
- The economic cycle is about to turn against them, with increased likelihood of defaults across the board, which could hurt long-term assets in lending portfolios (e.g., car loans, commercial and residential real estate mortgages, commercial and industrial loans, etc.) and further exacerbate the fragility of their balance sheets.

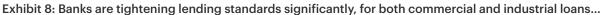
Will the banking sector's problems be big enough to crash the economy and engender an even harder landing than analysts expect? The risks seem tilted to the negative, as bank lending has begun to contract significantly. A survey of 71 banks in the Dallas Fed district done after SVB went under shows a dramatic reversal in loan volumes (Exhibit 7). Banks are tightening lending standards across the board (Exhibits 8 and 9, next page) and demand for loans has responded accordingly, approaching 2008 levels across the board (Exhibit 10 and Exhibit 11, page 8).

#### Exhibit 7: Bank lending rolled over in the wake of SVB, exacerbating already tight conditions



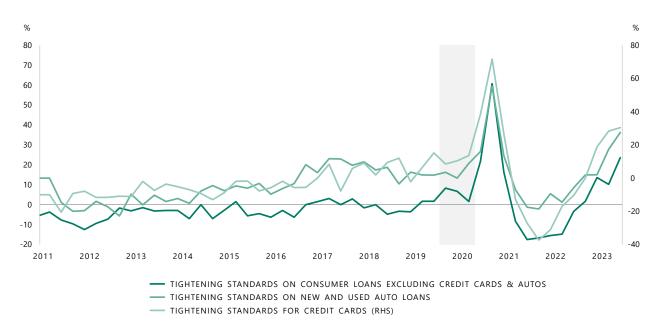
Sources: Banking Conditions Survey, Federal Reserve Bank of Dallas, Apollo Chief Economist. Note: 71 banks and credit unions headquartered in the Eleventh Federal Reserve District responded to the survey. Data as of May 15, 2023.





Sources: FRB, Bloomberg, Apollo Chief Economist. Data as of Q2 2023.





Sources: FRB, Bloomberg, Apollo Chief Economist. Data as of Q2 2023.

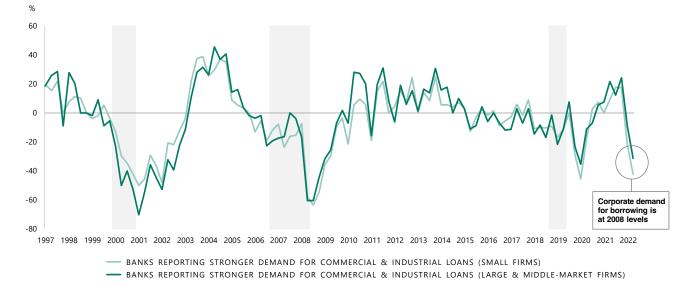
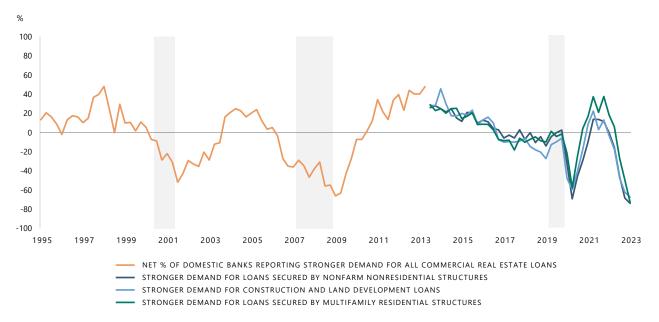


Exhibit 10: As a result, demand for corporate loans is at 2008 levels...

Sources: FRB, Bloomberg, Apollo Chief Economist. Data as of Q2 2023.

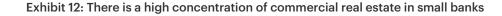


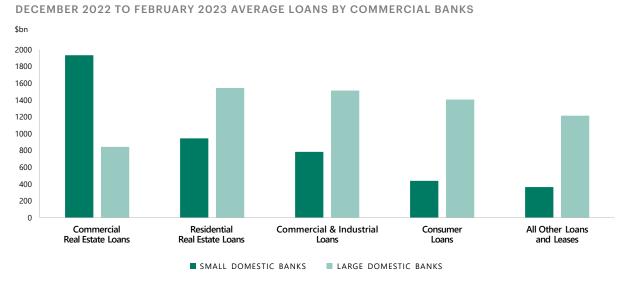


Sources: FRB, Bloomberg, Apollo Chief Economist. Data as of Q2 2023.

Smaller banks are particularly focused on commercial real estate (Exhibit 12), or non-residential construction spending, making them particularly vulnerable. Those who see a hard landing coming think challenges in commercial real estate could drag the rest of the economy down with it. In short: The bulk of banks' mortgage books were financed at low rates, with high valuations that have since fallen dramatically. In the event of defaults, the banks will be receiving collateral that's worth much less than what's on the books, and significant losses could hit their balance sheets. All-told, the era of expanding balance sheets seems over; the banking system will likely get smaller, not larger, in the near future, and the economy will feel the pinch in terms of reduced credit across-the-board.

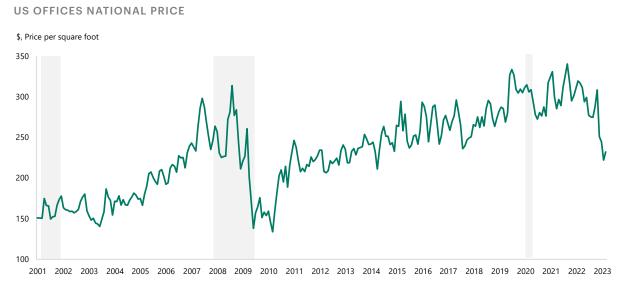
The market value of commercial real estate is not only under pressure due to the vagaries of the economic cycle, but also due to the seemingly permanent post-Covid changes in the demand for office space during any economic conditions. As shown in **Exhibits 13** and **Exhibit 14** (next page), the price per square foot of US office space is in a pronounced downward trend, at the same time that the US office vacancy rate is on the rise.



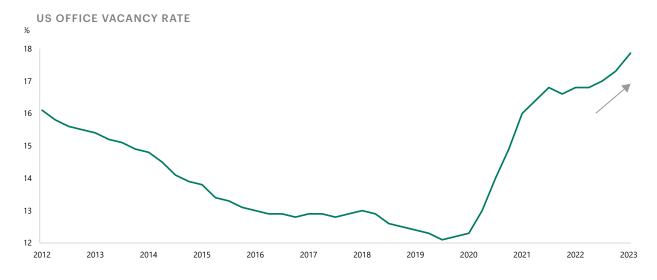


Sources: Federal Reserve Board, Haver Analytics, Apollo Chief Economist. Note: Data covers average from December 2022 to February 2023.

### Exhibit 13: The price of office space is already down 30% and the risks are to the downside



Sources: RCA, Bloomberg, Apollo Chief Economist. Data as of April 2023.



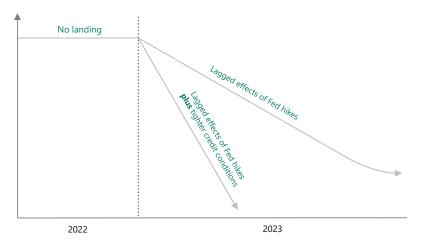
### Exhibit 14: What does this start to look like when the economy worsens?

Source: Coldwell Banker Richard Ellis (CBRE), Apollo Chief Economist. Data as of Q1 2023.

What can we take away from the above discussion about the prognosis for the availability of credit going forward? Put simply: Expect it to be tight with the possibility of becoming tighter. With the Fed keeping interest rates elevated because of continued high inflation, the potential for further bank turmoil is significant. The central bank was already stepping on the brakes, credit conditions were already tightening, and then we added banking turmoil to the equation. Monetary conditions have tightened to a degree where the risks of a sharper slowdown in the economy have increased (Exhibit 15).

### Exhibit 15: The lagged effects of Fed rate hikes combined with tighter credit conditions will likely create a sharper slowdown in the economy

GDP GROWTH



Fed rate hikes are supposed to slow GDP growth, but tighter credit conditions threaten to bring it to a halt.

Source: Apollo Chief Economist. Represents the views and opinions of Apollo's Chief Economist.

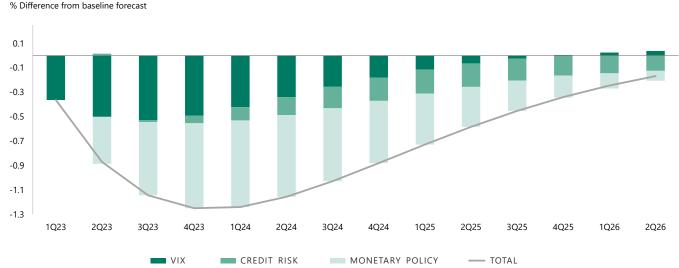
What does it all mean for GDP growth? It is difficult to forecast the duration of this banking turmoil and its impact on economic growth, but we have tried. The chart below assumes that investment-grade credit spreads stay at their current level around 150 basis points, the Chicago Board Options Exchange's Volatility Index, or VIX, is two standard deviations higher than historical average, and the effective fed funds rate is 150 basis points higher than the stated Fed policy rate because of tighter credit conditions (Exhibit 16). If bank funding costs remain elevated and banks tighten lending

standards further over the coming guarters, this may prove to be a severe shock to the economy.

Our calculations point to a negative impact on GDP at around 1.25%. That would be only a third of the roughly 4% decline in GDP during the 2008 GFC. But under the baseline assumption of growth already slowing because of the lagged effects of Fed hikes, if the ongoing banking turmoil results in tighter bank lending standards over the coming quarters, the risks of a harder landing are higher.

### Exhibit 16: Even if things stay the same, there will likely be a dramatic shock to GDP

SHOCK TO GDP LEVEL COMPARED WITH BASELINE FORECAST



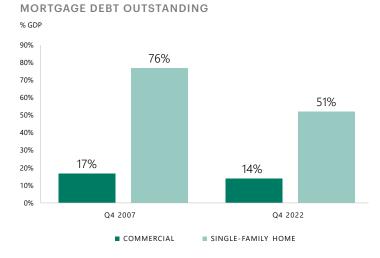
Sources: Bloomberg, Apollo Chief Economist. Note: The chart shows difference in baseline forecast adding a 150bps shock to the fed funds rate and 30bps to credit risk and a two standard deviation shock to VIX, all starting in 1Q23. VIX is currently two standard deviations from its mean since 2010. Data as of April 2023.

### THE ARGUMENT IN SUPPORT OF A SOFT LANDING

The argument in support of a soft landing takes as its starting point the fact that the stock of commercial real estate debt outstanding today is significantly smaller than the stock of residential mortgage debt outstanding in 2007 (**Exhibit 17**). As a result, this recession could be milder than in 2008, but it would likely be longer because the required correction in CRE prices will be spread out over a longer period.

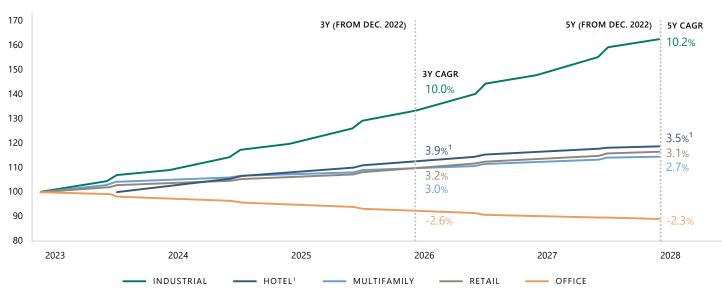
It's important to remember, though, that not all commercial real estate subsectors are created equal. Even as offices struggle, demand for industrial, hotel, multifamily, and retail real estate have all held up relatively well (Exhibit 18).

### Exhibit 17: Less real estate leverage points to a potentially milder recession than in 2008



Sources: BEA, FRB, Haver Analytics, Apollo Chief Economist. Data as of Q4 2022.

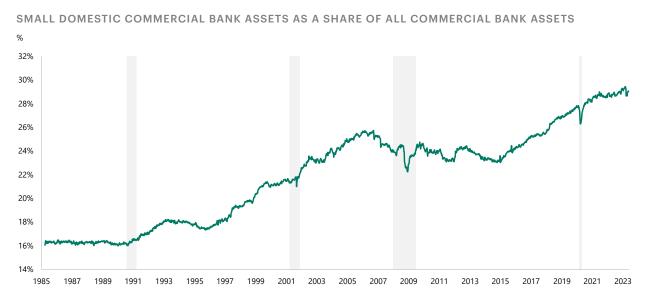
Exhibit 18: Commercial real estate income growth varies significantly by subsector



NET OPERATING INCOME GROWTH

Source: GreenStreet. Note: GreenStreet forecasts NOI growth through a performance model that incorporates data from key demand and supply drivers such as employment, office-using employment, real GDP, retail sales, ecommerce, real disposable income, brick & mortar retail sales, corporate profits, and recession indicators to adjust demand and supply for each sector. 1. Hotel NOI growth excludes data from prior to Q4 2023 given hotel growth was recovering from Covid-19. CAGR calculation assumes base 100 as of December 2022.

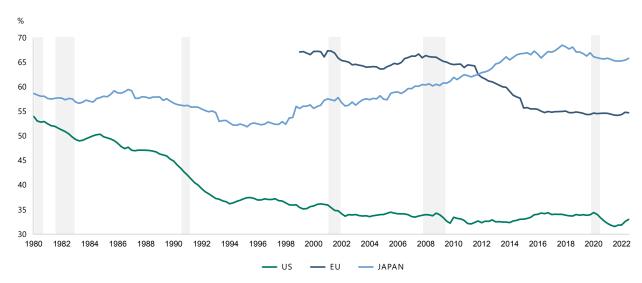
Much of the concern about contagion from the banking sector has centered around the notion that small banks account for 30% of the assets in the banking sector (**Exhibit 19**). If those assets are at risk, the argument goes, then the entire economy is at risk. But the impact of regional banks on overall lending in the US economy is now relatively small, as the provision of credit has become much more diffused due to the rise of new non-bank lenders, such as private credit asset managers, securitization, money markets strategies, and others. To frame it in numbers: The banking sector today accounts for roughly 33% of all lending in the US (**Exhibit 20**). Of that total, about 40% is intermediated by regional banks, or roughly 13% of total lending. Although not insignificant, this reduced share might signify a lower overall impact on the economy as a whole (despite the more concentrated sector risk we discussed previously, i.e., CRE). Adding perspective: Securitization alone is now a bigger market than US corporate debt (**Exhibit 21**, next page).



### Exhibit 19: Small banks' share of banking sector assets has risen...

Sources: Federal Reserve Board, Haver Analytics, Apollo Chief Economist. Data as of May 24, 2023.

#### Exhibit 20: ...but banking's share of total lending is much smaller than it used to be...



CREDIT TO NONFINANCIAL PRIVATE SECTOR: BANKS

Sources: Bank of International Settlements (BIS), Haver Analytics, Apollo Chief Economist. Data as of Q3 2022.

### Exhibit 21: ... as the market for out-of-banking-system lending has grown

### TOTAL OUTSTANDING (\$ TRILLION)



Today, the total securitized debt outstanding in the US exceeds that of the corporate debt market.

Sources: Barclays Research, Morgan Stanley Research, SIFMA Research. Data as of December 31, 2022.

### Economic Outlook: The cost of capital will likely stay higher for longer than the market currently expects

We have yet to see the ultimate effects of the credit crunch. Even before the SVB situation, credit conditions had tightened to levels last seen in 2008. Indeed, the share of the population that says its credit conditions are "bad" is higher than it was in 2008—and this is before the effect of SVB has even worked its way into the data (**Exhibit 22**).

It's also important to note that that decline in the availability of credit is coming on the heels of a significant drawdown in personal savings that doesn't seem likely to last much longer than late 2023 or early 2024. A May 2023 report published by the Federal Reserve Bank of San Francisco titled *The Rise and Fall of Pandemic Excess Savings* estimated that after accumulating an unprecedented \$2 trillion-plus in excess savings during the pandemic, consumers have been in drawdown mode since late 2021 (**Exhibit 23**, next page). If the pace of drawdowns over the past three, six, and 12 months persists, consumers' ability to keep spending will likely dwindle by the end of this year.

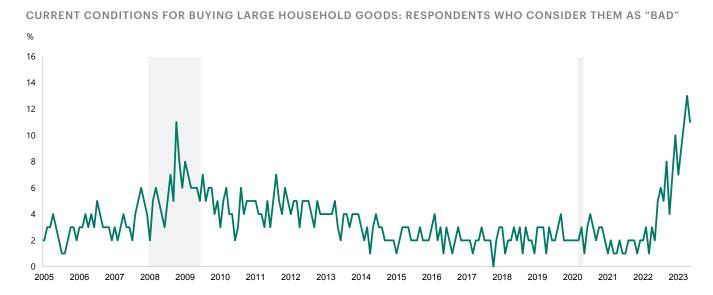


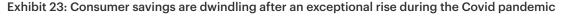
Exhibit 22: Credit conditions were already tight before the collapse of SVB and are currently much tighter than 2008 levels

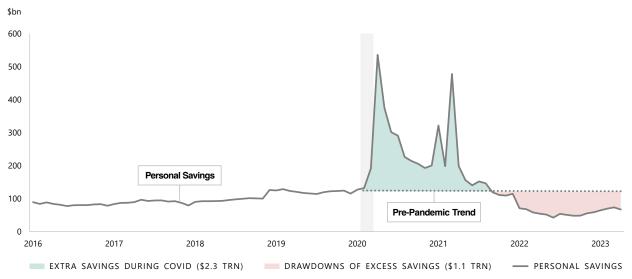
Sources: University of Michigan, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

Additionally, the cost of capital for banks themselves is also on the rise. **Exhibit 24** looks at how much borrowing costs have increased for regional banks and money-center banks since Silicon Valley Bank collapsed. The chart shows that since SVB failed, IG credit spreads for regional banks have widened 200 basis points against 50 basis points for diversified banks.

For all banks, the spread widening has stayed at a new higher level because many banks have been downgraded. Spreads first moved up to a higher level after SVB and then another higher level after First Republic Bank, showing that the ongoing banking turmoil is having a lingering negative effect on the economy.

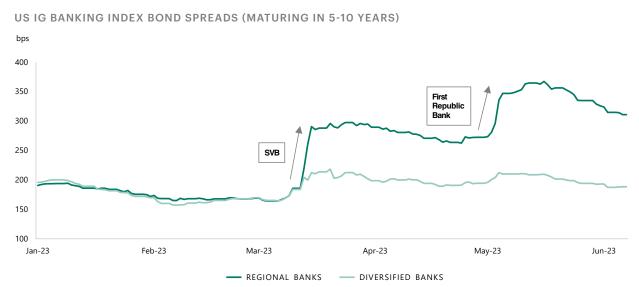
Put differently, the increase in borrowing costs since SVB failed corresponds to a 200-basis-point Fed hike for regional banks and 50-basis-point increase for large banks. Weighing these estimates together using the shares of loans and leases accounted for by small and large banks, respectively, gives an economy-wide Fed tightening equivalent of a bit more than 100 basis points for the entire banking sector.





Sources: FRBSF, Bureau of Economic Analysis. Excess savings calculated as the accumulated difference in actual de-annualized personal savings and the trend implied by data for the 48 months leading up to the first month of the 2020 recession as defined by the NBER. Data as of April 2023.

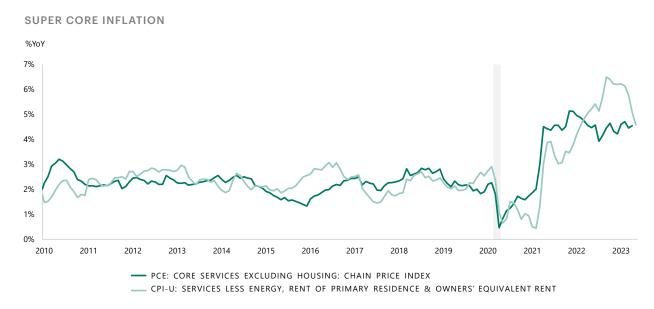




Sources: ICE BofA, Bloomberg, Apollo Chief Economist. Note: Unweighted average spreads of bonds from ICE 5-10 Year US Banking Index, C6PX Index for bonds issued before January 1, 2023. There are eight banks in the Regional index and 41 banks in the Diversified index. Regional banks include BankUnited, Citizens Financial, Huntington, and Zions, and Diversified banks include JP Morgan, Citibank, and Bank of America. Data as of June 6, 2023.

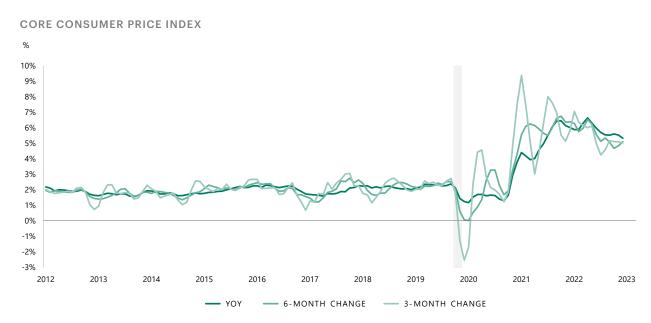
Given this "extra" squeeze, why is the Fed not cutting rates right now? Because inflation has remained stubbornly high, even in the face of all the recent financial turmoil. The Fed would like inflation to be at 2% annually. Although it has receded significantly from its 9.2% peak last year, it's still at around 5% (Exhibits 25 and 26).





Sources: BEA, Haver Analytics, Apollo Chief Economist. Data as of May 2023. Super core inflation equals the inflation of a basket of goods and services, minus food, energy, and housing inflation.

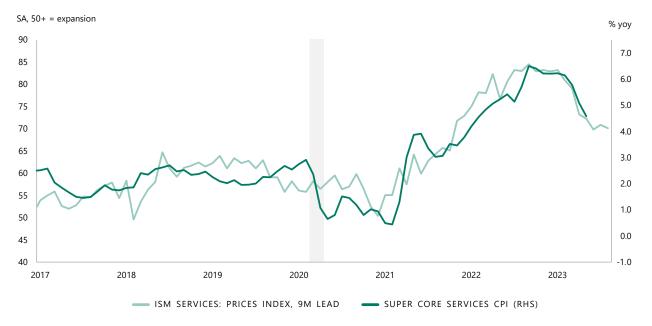




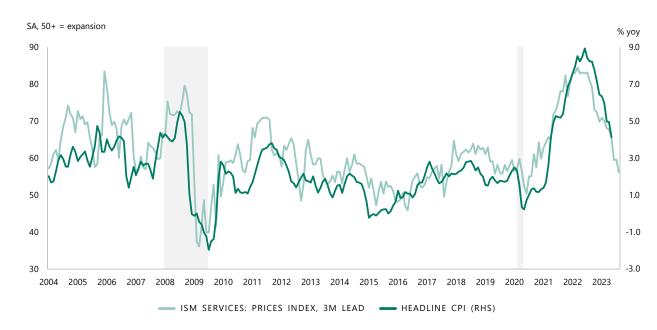
Sources: BLS, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

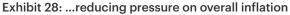
So how long will the Fed need to keep interest rates high to crush demand and get inflation under control? We believe that this inflation episode will soon be over. During the pandemic, we were all at home buying things online and supply chains were constrained, and goods inflation went up. Then, when the pandemic was over, goods inflation came down, and service sector inflation went up as we started spending money on restaurants, hotels, and airline tickets. Now the service sector is in the process of cooling down (Exhibit 27), and as a result, overall inflation is declining (Exhibit 28).

#### Exhibit 27: Inflation in the service sector is finally declining...



Sources: ISM, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

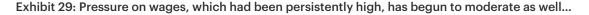


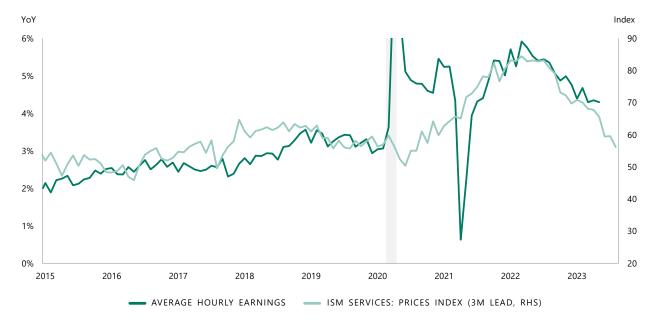


Sources: ISM, BLS, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

Wage inflation was elevated because we were working through a decline in the supply of labor. But over the past two and a half years, immigration into the US labor market has increased by 4 million workers, and the working age immigrant population is now back at its pre-pandemic trend (Exhibits 29 and 30). High immigration contributes not only to solid job growth, including in leisure and hospitality, but also to increasing the participation rate and limiting the upside pressures on wages. High immigration is helpful for the Fed as it tries to cool down the labor market and slow down inflation.

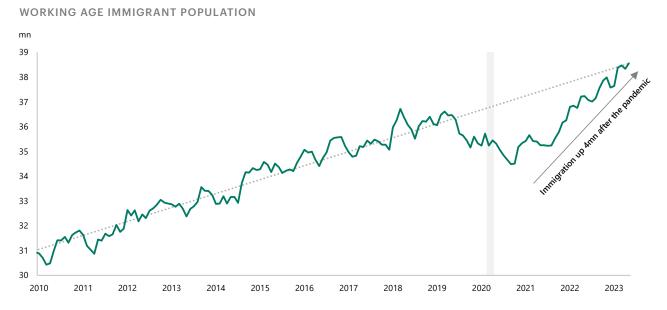
So, all-in, what does this mean for the Fed going forward? Given the sharp central bank rate hikes—plus the "extra" squeeze generated by the banking turmoil—we believe that we are getting close to "peak rates" from a monetary policy perspective. Indeed, after its June 13-14 meeting, the Federal Open Market Committee (FOMC) announced that it would





Sources: ISM, BLS, Haver Analytics, Apollo Chief Economist. Data as of June 2023.





Sources: BLS, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

maintain the target range of the fed funds rate at 5% to 5.25% While the Committee reserved the right to "adjust the stance of monetary policy...if risks emerge that could impede the attainment of [its] goals," it nevertheless declined to increase rates for the first time after 10 consecutive meetings that ended with rate hikes.

That said, we clearly haven't seen the end of high rates. That will depend on where inflation goes from here. On that front, one potential problem lurking for the Fed is that the housing market has started to recover (**Exhibit 31**). More demand for housing will boost home prices and rents, and housing has a weight of 40% in the Consumer Price Index (CPI).<sup>4</sup> That being said, while new-home sales have gone up, the inventory of new homes has stayed low because of sluggish new construction. What's more, the inventory of existing homes for sale has fallen dramatically, as homeowners are disinclined to give up their low-rate mortgages. While home prices might "recover," the volume of houses sold

remains depressed. In other words, it's a supply-driven recovery rather than a demand-driven one. Still, that "recovery" will show up in inflation numbers, posing a dilemma for the Fed.

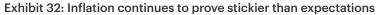
All-told, though, inflation has consistently proven stickier than FOMC expectations (**Exhibit 32**). This argues for higher costs of capital for longer, which increases the probability of a harder landing. Put differently, sticky inflation requires more demand destruction, which increases the downside risk to corporate earnings.

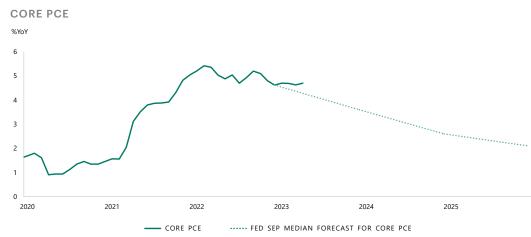
**THE BOTTOM LINE:** A recession is coming. But with inflation sticky at 5% (because of a tight labor market and the housing market recovering), the Fed still needs to destroy more demand in the economy to get inflation down to its 2% target. As a result, we believe the cost of capital is going to stay higher for longer than the market is currently pricing. We now expect the Fed will only start cutting rates in 2024.

### Exhibit 31: The average number of offers received per sold property is staring to recover



Sources: NAR, Apollo Chief Economist. Data as of April 2023.





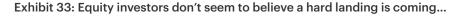
Sources: BEA, FRB, Haver Analytics, Apollo Chief Economist. Data as of April 2023.

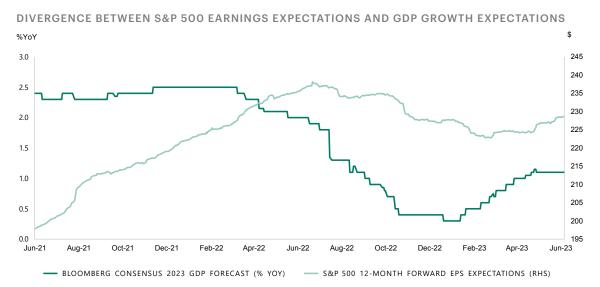
<sup>4</sup> Source: https://www.corelogic.com/intelligence/the-role-of-rent-in-inflation-measurement/.

# Capital markets outlook: What are the implications for public and private markets?

As of this writing, capital markets appear to be in a paradoxical state, with equity and bond investors viewing the world through two very different lenses (**Exhibits 33** and **34**). Equity investors, riding high on persistently strong earnings, have yet to price a steep recession into their outlooks

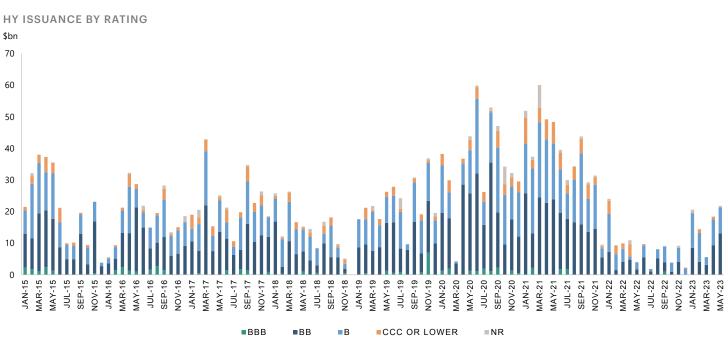
(meaning, they seem to be in the soft-landing camp), whereas the high-yield market remains depressed (suggesting a harder landing), with all but the highest-rated companies being shut out of not just bank lending but the high-yield bond market itself.





Sources: Bloomberg, Apollo Chief Economist. Data as of June 5, 2023.

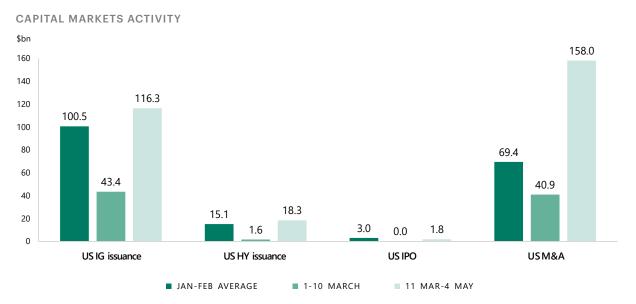




Sources: Pitchbook LCD, Apollo Chief Economist. Data as of May 2023.

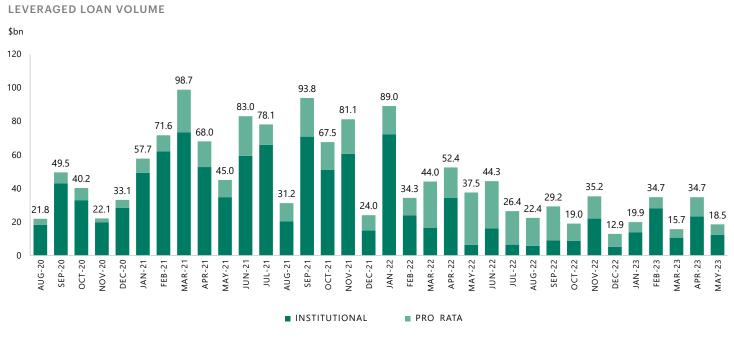
Additionally, although bond issuance (both investment-grade and high-yield), leveraged loans, and other parts of the capital markets (including initial public offerings and mergers & acquisitions) have begun to slowly come back since the end of March after the SVB shock, levels remain below historical averages, suggesting stresses remain in lending markets (Exhibits 35 and 36). It is also surprising to see how narrow high-yield credit spreads are given the ongoing tightening in credit conditions in the banking sector. We expect to see high-yield spreads widening in the coming months (Exhibit 37, next page).

#### Exhibit 35: Capital markets activity has slowly started to recover...

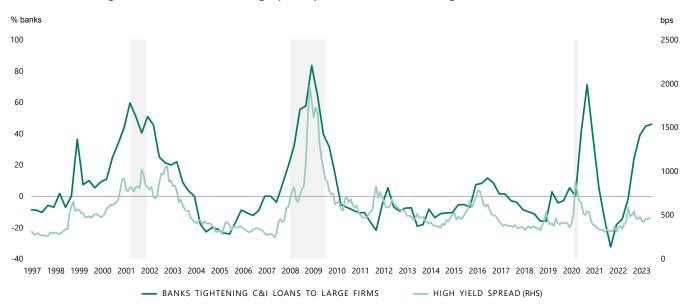


Sources: Pitchbook LCD, S&P Capital IQ, Bloomberg, Apollo Chief Economist (Note: Jan-Feb numbers are the average of the sum of those two parts). Data as of May 4, 2023.

### Exhibit 36: ...but lending, especially to riskier companies, remains below historical average levels



Sources: Pitchbook LCD, Apollo Chief Economist. Data as of May 2023.



#### Exhibit 37: As banks tighten credit conditions, high-yield spreads should be trading wider

Sources: FRB, Haver Analytics, Apollo Chief Economist. Data as of May 2023.

In this light, it seems likely that non-banking sources—from money markets to asset-backed finance to private credit—will remain a significant source of funding for firms. With bank lending and public capital markets still facing headwinds, private capital can play an important role in supporting the economy by acting as a vital provider of both debt and equity financing.

As rates stay higher for longer, the need for finance will only increase.

In fact, long-duration asset valuations—traditionally derived from discounted cash-flow models—have come under pressure as discount rates rose quickly due to tightened monetary conditions. The combination of rising borrowing costs and eroding equity has rendered many corporate capital structures—built on years of low rates and designed for a world of continued cheap financing—too debt-heavy for the new economic and business reality.

As a result, many corporations will likely have to restructure their balance sheets (i.e., they will have to de-leverage), a process that, in our view, creates an array of opportunities for price-minded private-equity investors, especially those with the ability to secure financing at a time when capital remains scarce.<sup>5</sup> Specifically, we see opportunities in distressed situations defined here as companies with good businesses and attractive growth prospects but whose balance sheets are over-levered. Restructuring the balance sheet can add flexibility for the company to invest in the business and position itself to realize its growth potential. We also see strong promise in take-privates and carve-outs, as companies—unable to raise equity on favorable terms on their own—will be forced to seek a buyer or divest non-core assets to shore up their balance sheets.

We also see relative value in private debt, underlining the need for flexibility to invest across capital structures.

Buying senior debt at sharp discounts, for instance, can provide downside protection (from being higher in the capital structure) and upside potential if the company is able to refinance. On the other hand, one can also convert debt to equity. That, in turn, would help to shore up the company's balance sheet, add flexibility to invest in the business, and position the company to realize its future growth prospects.

<sup>&</sup>lt;sup>5</sup> Nord, Matt and Sambur, David. "Private Equity Investing in a New Paradigm: Dislocation Creates Opportunity," May 2023. Available at: https://apolloacademy.com/private-equity-investing-in-a-new-paradigm-dislocation-creates-opportunity/.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions and views expressed reflect the current opinions and views of the authors and Apollo Analysts as of the date hereof and are subject to change. Please see the end of this document for important disclosure information.

## Investment Implications: How can investors position themselves for the remainder of 2023 and beyond?

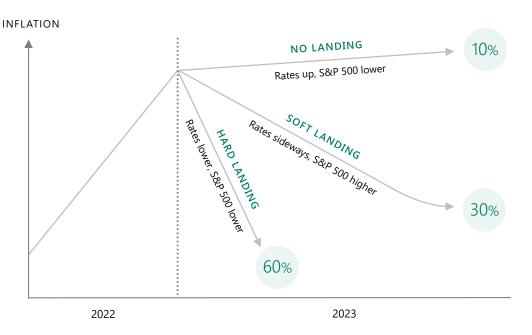
What does the combination of a slowdown in the economy plus a credit crunch and higher rates for longer mean for asset allocations? As of this writing, we weigh the odds as following: We see a 10% chance of no landing, a 30% chance of a soft landing, and a 60% chance of a hard landing (**Exhibit 38**).

There is still a slight chance that the economy experiences "no landing" by the end of 2023, and that we find our way to more stable economic and inflationary ground without too much more turmoil. But the likelihood of that happening seems to decline by the day. In this unlikely event, rates will rise even further, as the Fed continues to try to cool the economy, and the S&P 500 will likely migrate lower, due in large part to ongoing uncertainty about rates.

The scenario that seemed likely at year-end 2022—a soft landing—still seems plausible, but less likely today. In that scenario, rates go sideways while the S&P 500 Index tracks higher. The most likely outcome at this point seems to be a hard landing (i.e., a recession that is deeper or longer than the consensus expects), in which both rates and the S&P 500 head down. The combination of higher rates, a slowing economy, and tighter lending conditions (because of the banking turmoil) has raised the likelihood of a hard landing to 60%.

Against this backdrop, portfolio positioning, in our view, argues for exposure to asset classes that have historically shown lower levels of volatility relative to public equities and lower sensitivity to inflation, such as private equity, private credit, and real assets. Investors who can act as providers of capital—especially debt and equity financing—can benefit from opportunities generated by an environment where regional banks remain under pressure and primary high-yield issuance continues to face headwinds.

### Exhibit 38: The likelihood of a hard landing now outweighs other possibilities



Source: Apollo Chief Economist. Represents the views and opinions of Apollo's Chief Economist.

### **ABOUT THE AUTHOR**



Torsten Sløk, PhD Partner, Apollo Chief Economist

Torsten Sløk joined Apollo in August 2020 as Chief Economist, and he leads Apollo's macroeconomic and market analysis across the platform. He is also an Apollo Partner.

Prior to joining, Mr. Sløk worked for 15 years as Chief Economist at Deutsche Bank where his team was top ranked in the annual Institutional Investor survey for a decade. Prior to joining Deutsche Bank, Mr. Sløk worked at the IMF in Washington, DC and at the OECD in Paris.

Mr. Sløk has a PhD in Economics and has studied at the University of Copenhagen and Princeton University.

#### **Important Disclosure Information**

All information herein is as of June 2023 unless otherwise indicated.

This presentation is for educational purposes only and should not be treated as research. This presentation may not be distributed, transmitted or otherwise communicated to others, in whole or in part, without the express written consent of Apollo Global Management, Inc. (together with its subsidiaries, "Apollo").

The views and opinions expressed in this presentation are the views and opinions of the authors of the White Paper, speakers of the video and Apollo Analysts. They do not necessarily reflect the views and opinions of Apollo and are subject to change at any time without notice. Further, Apollo and its affiliates may have positions (long or short) or engage in securities transactions that are not consistent with the information and views expressed in this presentation. There can be no assurance that an investment strategy will be successful. Historic market trends are not reliable indicators of actual future market behavior or future performance of any particular investment which may differ materially, and should not be relied upon as such. Target allocations contained herein are subject to change. There is no assurance that the target allocations will be achieved, and actual allocations may be significantly different than that shown here. This presentation does not constitute an offer of any service or product of Apollo. It is not an invitation by or on behalf of Apollo to any person to buy or sell any security or to adopt any investment strategy, and shall not form the basis of, nor may it accompany nor form part of, any right or contract to buy or sell any security or to adopt any investment strategy. Nothing herein should be taken as investment advice or a recommendation to enter into any transaction.

Hyperlinks to third-party websites in this presentation are provided for reader convenience only. There can be no assurance that any trends discussed herein will continue. Unless otherwise noted, information included herein is presented as of the dates indicated. This presentation is not complete and the information contained herein may change at any time without notice. Apollo does not have any responsibility to update the presentation to account for such changes. Apollo has not made any representation or warranty, expressed or implied, with respect to fairness, correctness, accuracy, reasonableness, or completeness of any of the information contained herein, and expressly disclaims any responsibility or liability therefore. The information contained herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice or investment recommendations. Investors should make an independent investigation of the information contained herein, including consulting their tax, legal, accounting or other advisors about such information. Apollo does not act for you and is not responsible for providing you with the protections afforded to its clients.

Certain information contained herein may be "forward-looking" in nature. Due to various risks and uncertainties, actual events or results may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking statements may be identified by the use of terminology including, but not limited to, "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology.

The Standard & Poor's 500 Index (S&P 500) is a market-capitalization weighted index of the 500 largest US publicly traded companies and one of the most common benchmarks for the broader US equity markets.

Additional information may be available upon request.

Past performance not necessarily indicative of future results.

The information herein is provided for educational purposes only and should not be construed as financial or investment advice, nor should any information in this document be relied on when making an investment decision. Opinions and views expressed reflect the current opinions and views of the authors and Apollo Analysts as of the date hereof and are subject to change. Please see the end of this document for important disclosure information.

### To learn more, visit ApolloAcademy.com.

© 2023 APOLLO GLOBAL MANAGEMENT, INC. ALL RIGHTS RESERVED.