Morgan Stanley | RESEARCH

IDEA

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US Rates Strategy | North America

Equity Funding Implies a Tumultuous Quarter-End

Into quarter-end, one-way equity financing costs and restrictive balance sheet provision suggest the risk of a deleveraging event is rising. Should these micro pressures manifest and tighten macro financial conditions, markets will place less weight on hawkish Fed tail risks; hold Z6M7 flatteners.

Key Takeaways

- Conditions in equity funding have worsened after earnings in the semiconductor sector and suggest a tumultuous quarter-end, with more risk of deleveraging.
- 1m equity financing costs prior to a quarter-end rapidly nearing those hit ahead of year-end in December 2024 encapsulate current stresses in equity funding.
- AXW futures are 2+ standard deviations above trailing 12m levels. Historically, these extremes were followed by mean reversion in S&P 500 performance.
- In that outcome, we think investors would conceivably lose conviction in the economic overheating narrative, something 1Q consumption clearly contrasted.
- We see two other paths to a flatter SOFR Z6M7 curve: 1) A Fed policy mistake; 2) Less risk of a permanent oil risk premium - maintain Z6M7 flatteners.

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Short Duration Strategy

United States | Equity funding implies a tumultuous quarter-end

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A tale of two very different quarter-ends

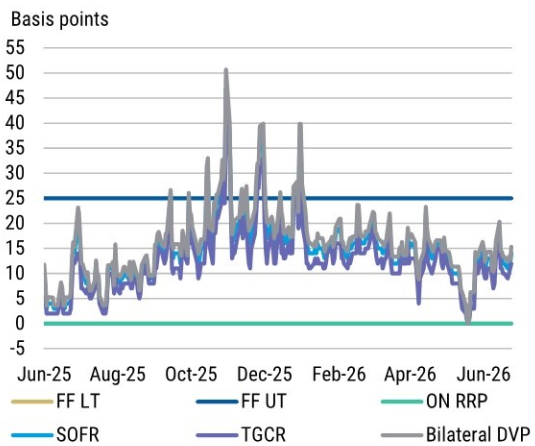
The dichotomy between conditions in Treasury vs. equity funding has continued into June quarter-end and remains a popular conversation point for market participants.

- With overnight UST GC repo over the quarter-end turn quoted at 3.75/3.72, market pricing implies a fairly benign quarter-end for Treasury repo.

As shown in Exhibit 1, it suggests somewhat similar funding pressures in Treasury funding markets as experienced on June 2025 quarter-end and on the April tax date this year.

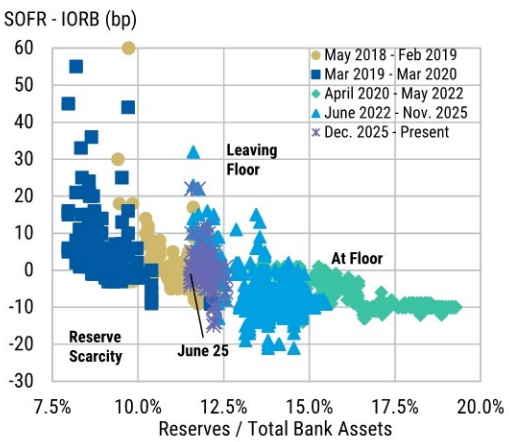
- This suggests SOFR - while not explicitly targeted by the Federal Reserve - should remain within the target range and possibly 'well within' if the quarter-end turn implied funding contain an excessive premium, like it often does.

Exhibit 1: Bilateral DVP, SOFR, TGCR within the fed funds target range over the past year



Source: Federal Reserve Bank of New York, Bloomberg, Morgan Stanley Research

Exhibit 2: Reserves / Total Commercial Bank Assets and SOFR - IORB spread over different Fed balance sheet regimes



Source: Federal Reserve Bank of New York, Bloomberg, Morgan Stanley Research

In Why So Soft, Repo?, we discussed the confluence of factors that drove such soft conditions in Treasury repo markets during late May.

- As shown in Exhibit 2, this scatter plot helps contextualize current conditions in Treasury funding by comparing the SOFR – IORB spread in relation to levels of reserves as a % of total bank assets across different Fed balance sheet regimes.

Current conditions are consistent with prior periods of abundant reserves, with the start of Fed reserve management purchases in December 2025 dampening pressures in repo.

At the other end of the funding spectrum, pressures in equity funding are only percolating into quarter-end (for more on the specific drivers, see The Canary in the Coal Mine?).

AXW futures capture the spread between the implied equity financing rate for S&P 500 total return futures and a floating rate, such as SOFR or fed funds.

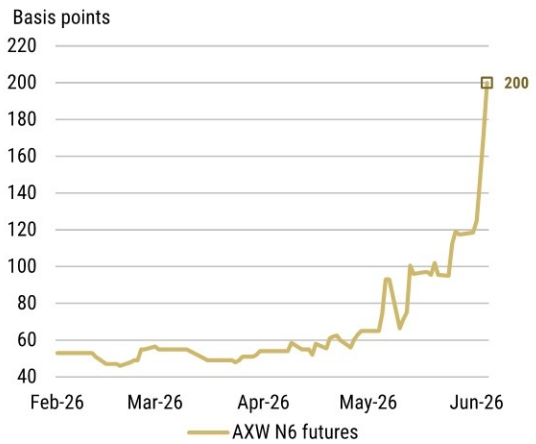
- As shown in Exhibit 3, the 1-month AXW futures contract for July 2026 catapulted to +200bp on Friday, heading into the weekend before quarter-end on June 30.

The fact that 1-month equity financing rates prior to a quarter-end are rapidly nearing record highs hit ahead of a year-end in December 2024 - the previous equity funding squeeze episode - encapsulates the degree of equity funding stress (see Exhibit 4).

- We show the 10-day moving average to help smooth the roll impact on the front-month futures contract.

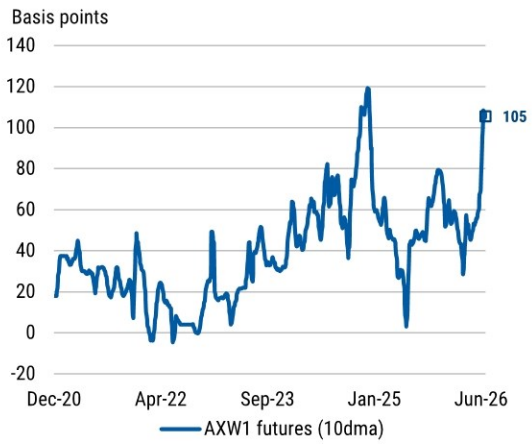
Record equity financing costs, measured by AXW futures, reflect a growing imbalance between the demand for levered long equity exposure and dealer balance capacity.

Exhibit 3: July 2026 1-month AXW futures contract since February 23



Source: Morgan Stanley Research, Bloomberg

Exhibit 4: Generic front 1-month AXW futures contract since December 2020



Source: Morgan Stanley Research, Bloomberg

Several factors are likely also contributing to rich AXW levels, including issuance-related balance-sheet demand, leveraged ETF growth, and elevated futures positioning.

- But persistence of elevated equity financing costs alongside record dealer equity repo exposure and narrow breadth suggests greater reliance on equity financing.

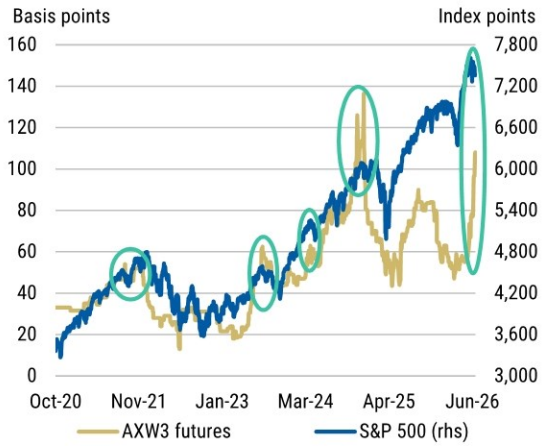
Parabolic advances in risky asset prices – particularly with narrow market breadth (Technology: Semis, Memory, and Global AI, especially in Korea) – have meant the size of dealer-intermediated exposures have expanded faster than capital allocation.

- These larger, more concentrated exposures consume finite leverage capacity (due to onerous GSIB surcharges), regulatory capital, and internal risk budgets.
- A large liquidity event two weeks ago only made the GSIB-related balance sheet management process into quarter-end more complex.

The result has been a higher shadow price of balance sheet. As dealer balance sheet resources become increasingly scarce relative to client demand for leverage, financing costs rise, increasing the hurdle rate for maintaining leveraged long positions.

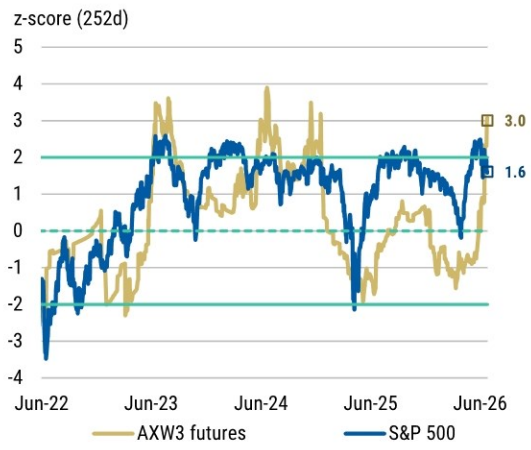
If financing costs are too prohibitive, they may ultimately limit the ability of levered investors to further increase gross exposure. In that scenario, a market that has benefited from financing-supported demand could become more vulnerable to deleveraging.

Exhibit 5: Generic third 1-month AXW futures contract and the S&P 500 since December 2020



Source: Morgan Stanley Research, Bloomberg

Exhibit 6: Generic third 1-month AXW futures contract and the S&P 500 since June 2022, rolling 252-day z-score



Source: Morgan Stanley Research, Bloomberg

We think risk of a tumultuous quarter-end that produces a deleveraging event has risen, following the market reaction to earnings in the semiconductor sector this week.

- This subsector of the market is one where hedge fund levered long equity exposure has become more and more concentrated over the past year.

Given close proximity to quarter-end, prime brokers may become increasingly conservative with balance sheet provision in order to avoid entering the next GSIB surcharge bucket.

- For hedge funds, this means less financing availability and more prohibitive pricing.

As shown in Exhibit 5 , more prohibitive equity financing costs tend to coincide with peaks in the S&P 500. For the broader market, its marginal buyer is no longer present.

The implication is financing costs for hedge funds to put on levered longs becomes so prohibitive it caps further increases in leverage, leading to position unwinds.

- Accordingly, the same technical forces that amplified upside momentum in risky assets – through leverage expansion – could begin to cut in the other direction.

In Exhibit 6, we show that there is indeed a statistical relationship between equity funding costs and the S&P 500. When equity funding proxies reach local extremes (>2 z-scores), the S&P 500 moves lower back towards its more normal distribution.

- Said another way, when the degree of equity financing stress reaches statistically unusual levels, subsequent equity returns have historically tended to normalize.
- As AXW3 futures reach exceed 2 z-scores over a rolling 252-day time horizon, the S&P 500 falls below a z-score of 1, within the next three months:
  - This implies downside in index level prices, relative to its recent highs.

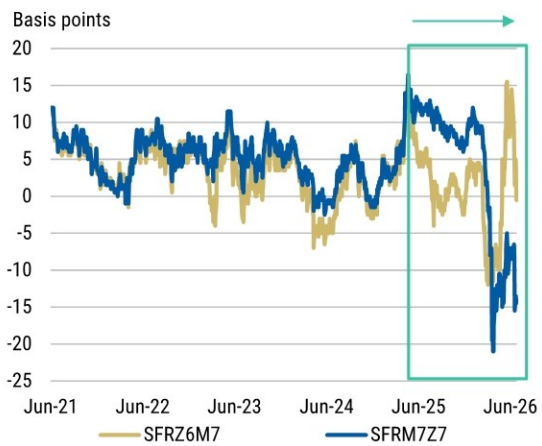
Should equity funding costs in later-dated contracts (such as AXW3) not normalize on the other side of quarter-end on June 30, we think it signals that equity financing costs are going to remain high until a rather significant deleveraging event does occur.

Investors may then conceivably lose conviction in the consensus optimistic outlook for the US economy as well as their expectations for growth. That calls for a rethink of the skew of risks priced for Fed policy, with less weight assigned to scenarios where the Fed hikes.

- As investors are forced rethink their priors on financial conditions in that environment, we think it lends to less weight placed on hawkish Fed tail risks.

Less insurance premium against the risk of hikes would allow for M7 outperformance against Z6, as the curve flattens closer to where its historical relationship with M7Z7 implies (see Exhibit 7 and Exhibit 8).

Exhibit 7: SFRZ6M7 and SFRM7Z7 futures contracts over the past five years



Source: Morgan Stanley Research, Bloomberg

Exhibit 8: SFRZ6M7 and SFRM7Z7 futures contracts over the past year



Source: Morgan Stanley Research, Bloomberg

Two paths to a flatter Z6M7 curve post-FOMC

1. Perception of a Fed policy mistake

The June FOMC meeting and subsequent press conference were hawkish on the surface, but we do not think they signaled a forthcoming structural reset in Fed policy setting.

- The reason for that is the degree with which the Fed's reaction to the conflict in Iran has already effectively tightened monetary policy, via financial conditions.

In Exhibit 9 , we show our Morgan Stanley proxy effective fed funds rate (**MSUSPRXY Index** on Bloomberg) and the actual effective fed fund rate since June 2006.

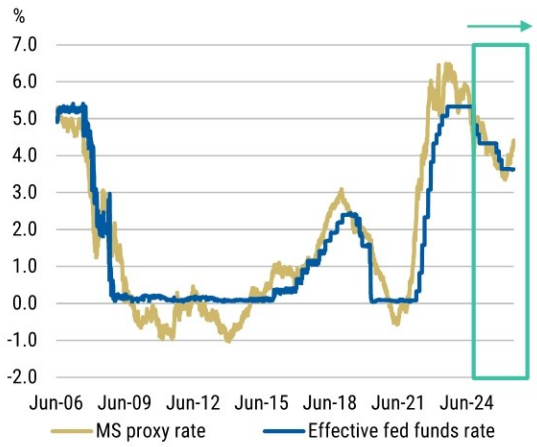
We use the same methodology published by the San Francisco Fed to create an index that incorporates a set of 12 financial variables, including Treasury rates, mortgage rates, and borrowing spreads to assess the broader stance of monetary policy on a daily basis.

- The proxy rate can be interpreted as indicating what level of federal funds rate would typically be associated with prevailing financial market conditions.

Since the onset of the Iran conflict, financial conditions have effectively tightened in a manner that is consistent with nearly 4 x 25bp rate hikes (see Exhibit 10).

- Effectively, the prevailing set of financial market conditions has the broader stance of monetary policy equivalent to 75bp tighter than just deemed appropriate by a 12 - 0 vote at the June 16-17 FOMC meeting, less than two weeks ago.

Exhibit 9: Morgan Stanley proxy effective fed funds rate and actual effective fed fund rate since June 2006



Source: Morgan Stanley Research, Federal Reserve Bank of San Francisco, Bloomberg

Exhibit 10: Morgan Stanley proxy effective fed funds rate and actual effective fed fund rate since June 2024



Source: Morgan Stanley Research, Federal Reserve Bank of San Francisco, Bloomberg

In the press conference, Chairman Warsh noted there was only one proposal on the table for the meeting and there was no discussion of any other proposals.

- That is consistent with how our economists, who expect the Fed remains on hold this year, view the appropriate reaction function as well.

The Fed need not deliver on the tightening in financial conditions in response to *backward-looking* data to retain credibility, it just needs to react to incoming information. Here's Chairman Warsh on the role of financial markets for the Federal Reserve:

> *"So I think financial markets perform best when they react to incoming data. I think the financial markets work less efficiently when they ask a question. How will the Federal Reserve react to that incoming information?*
>
> *The more that markets are paying attention to what's happening in the real economy, deciding what's good data and what's less good data, the more financial markets can price what they believe is the most likely and what are the tail risks.*
>
> *Financial market prices are probably the most important source of information to guide central bankers. But when all the financial markets are doing is reflecting back what we've said, then we're taking the most important source of information and we're being blind to it."*

In terms of the *forward-looking* set of inflation data, our economists forecast an average monthly pace of 0.17% m/m in core PCE for the remainder of the year.

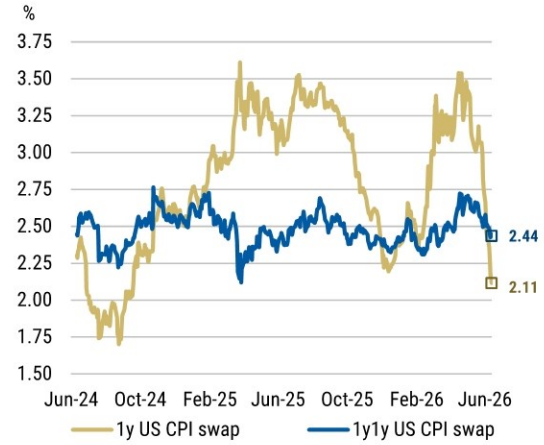
- That compares to the SEP-implied 0.21% pace which is just 2bp below the April–December 2025 run rate, when tariff pressures were pushing goods prices higher.

Despite foreshadowing of an end to the dot-plot, market participants still took meaning from the dot plot upon its release last Wednesday. As the saying goes: *old habits die hard*.

If the Fed were to follow the dots and deliver a rate hike this year, we think the market will eventually view this as a **policy mistake** for two reasons:

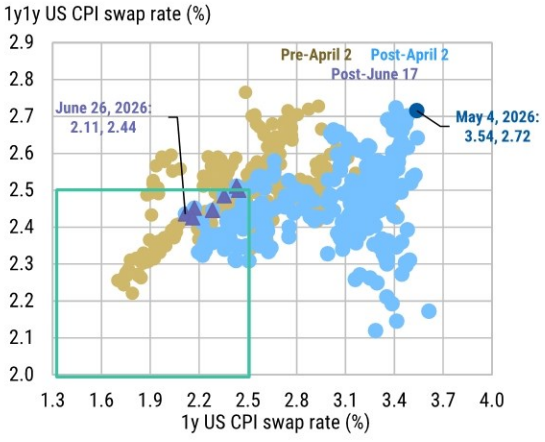
1. ***Forward-looking* inflation is set to soften:** Our economists' forecast suggests US core PCE inflation annualizes at 2.0% over the last six months of this year.
2. **Market-implied inflation measures are much lower:** US CPI inflation swaps have rapidly repriced lower, with both 1y and 1y1y inflation swaps now below 2.5%.

Exhibit 11: 1-year forward 1-year USD CPI swap rate and 1-year USD CPI swap rate since June 2024



Source: Morgan Stanley Research, Bloomberg

Exhibit 12: 1-year forward 1-year USD CPI swap rate and 1-year USD CPI swap rate since June 2024



Source: Morgan Stanley Research, Bloomberg

As shown in Exhibit 11, market participants have begun to assess fewer upside risks to inflation over the next year, with 1y US CPI inflation swaps almost back at 2.00%.

- We think investors should also come around to the view that more FOMC participants will begin to see that upside inflation risks have diminished and thus see less need to raise rates, as indicated in the dot-plot (see Exhibit 12).

Here is Federal Reserve Bank of New York President Williams on why the current policy stance is well positioned to restore the 2% longer-run inflation goal on a sustained basis:

> *"In coming quarters, however, I expect inflation readings to edge down for several reasons. First, the direct effects of existing tariffs on prices appear to have mostly played out. Any new tariffs would replace those that were curtailed or will soon expire, implying that we should not see a significant additional impulse on prices.*
>
> *Second, assuming the supply disruptions owing to the closure of the Strait of Hormuz are resolved relatively soon, energy and related goods prices should stabilize, then start to come down later this year.*
>
> *Third, modest increases in market rents indicate that shelter inflation should continue to slow. And finally, we are not seeing evidence that the labor market is adding to inflationary pressures."*

2. Less risk of a permanent oil risk premium

As it relates to the dot-plot, Warsh disclosed he declined to provide his economic projections and individual assumption of projected appropriate monetary policy (i.e., a dot) in the Summary of Economic Projections (SEP).

We think this likely foreshadowed the end of the dot-plot, pending task force review:

- The dot-plot was introduced when rates were at the zero lower bound (ZLB) to anchor investor expectations – and avoid an undesired tightening in financial conditions – about when the Fed would eventually exit the ZLB.

Clearly, that form of forward guidance is less relevant with the current level of policy rates, but we highlight two implications for investors of less forward guidance:

1. **Improved signaling qualities of markets:** The more the Fed lets markets speak, the more clarity it may get when evaluating financial conditions.
2. **More policy surprises and higher realized volatility:** If Warsh follows the Greenspan toolkit, it could set up for the nosiest front-end in a generation. But with more volatility, therein lies more opportunity.

And despite foreshadowing of an end to the dot-plot, market participants continued to take meaning from the dot-plot upon its release last Wednesday.

With Warsh's lack of forward guidance - by design - in the press conference, market participants took his lack of pushback as a green light to align with the hawkish dots.

- In actuality, there remain two camps of FOMC participants, only divided by where they put their longer-run dot. One camp thinks the higher neutral rate is higher and the other thinks the neutral rate is 3.0% or below, like our economists.

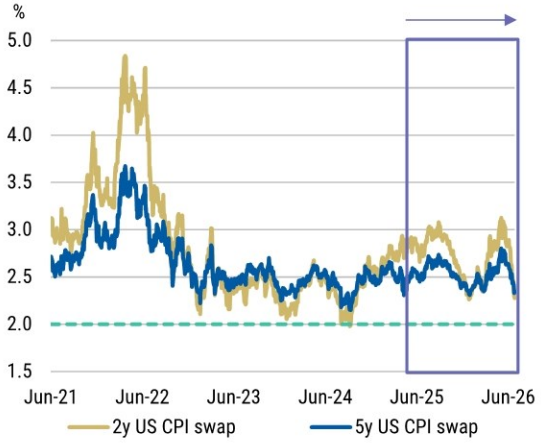
Accordingly, we interpret the sell-off in front-end US Treasuries in reaction to the hawkish distribution of dots as an overshoot for three reasons:

1. In the press conference, Warsh noted the committee wrote their submissions with "big erasers," which implies a lack of conviction.
2. Had Warsh submitted a projection, it could have meant the median dot remained at 3.625% and therefore not showed one rate hike this year.
3. Participants did not feel bound by their dots, which implies flexibility. Brent crude oil prices have declined after the US-Iran MOU and this suggests downside risks to the inflation forecasts and policy rate projections submitted by some participants.

Our Global Commodities Strategist, Martijn Rats, provided context on the outlook for Brent crude oil prices, following the US-Iran MOU: the earlier agreement makes the **disruption shorter and less price-supportive.**

- Indeed, market-implied inflation measures have repriced lower rapidly, reflecting **less risk of a persistent oil risk premium** (see Exhibit 13 and Exhibit 14).

Exhibit 13: 2-year and 5-year US CPI inflation swaps since June 2021



Source: Morgan Stanley Research, Bloomberg

Exhibit 14: 2-year and 5-year US CPI inflation swaps since June 2025



Source: Morgan Stanley Research, Bloomberg

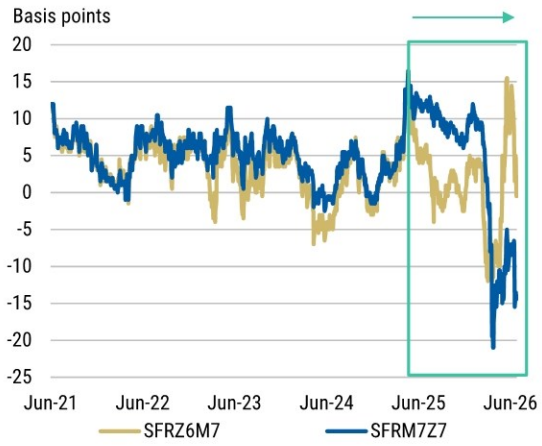
We continue to think SFRZ6M7 curve flatteners offer a compelling way to express the view that market pricing still places too much weight on hawkish Fed tail risks.

- Investors seemingly discount the continued declines in Brent crude oil prices (as well as its distillates), but overweight investor optimism about US growth.

That said, fantasies of high-growth may soon start to fizzle should equity funding costs prove to be The Canary in the Coal Mine?. Our economists also do not read US GDP revisions as consistent with an economy that was already overheating in 1Q26:

- Between the ~1ppt cut to 1Q consumption and similar trimming of our 2Q tracking estimate, the 1H consumption path no longer looks nearly as strong as it did.

Exhibit 15: SFRZ6M7 and SFRM7Z7 futures contracts over the past five years



Source: Morgan Stanley Research, Bloomberg

Exhibit 16: SFRZ6M7 and SFRM7Z7 futures contracts over the past year



Source: Morgan Stanley Research, Bloomberg

We suggest investors tighten trailing stops on SFRZ6M7 curve flatteners to 10bp and see payback from May strength in June employment data next week as a near-term catalyst for continued M7 outperformance against Z6 (see Exhibit 15 and Exhibit 16).

- **Trade idea: Maintain SFRZ6M7 curve flatteners at -0.5bp with a target of -10bp and a trailing stop of 10bp.**
- **Trade idea: Maintain long 2-year (Sep '27) UST SOFR swap spreads at -10.4bp with a target of -9bp and a trailing stop of -15bp.**

Valuation Methodology and Risks

Below you will find a list of our current trade ideas, entry levels, entry dates, rationales, and risks.

Interest Rate Strategy				
TRADE	ENTRY LEVEL	ENTRY DATE	RATIONALE	RISKS
Maintain SFRZ6M7 curve flattener	10.5bp	5/22/2026	We think SFRZ6M7 curve flatteners offer a compelling way to express the view that market pricing places too much weight on hawkish Fed tail risks, in response to the oil shock, and the allure of a AI-driven industrial activity renaissance. This relative value expression allows investors to exploit a substantial insurance premium against rate hikes, removes outright duration beta, while not requiring a near-term dovish pivot by the Fed.	The main risk is if fiscal stimulus arrives before the mid-term elections, which would justify currently elevated levels of near-term inflation expectations.
Long 2y (Sep '27) UST SOFR swap spread	-21.6	10/3/2025	We expect softer funding conditions and a steepening of the very front end to cause swap spreads in the front end to widen given recent relationships.	Risks to the trade include firmer funding than expected or a stabilizing job market.

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Global Stock Ratings Distribution

(as of May 31, 2026)

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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1542	42%	465	51%	30%	707	43%
Equal-weight/Hold	1571	43%	369	40%	23%	723	44%
Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	551	15%	86	9%	16%	201	12%
Total	3,667		920			1632	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

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In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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