

US Treasury Market Daily

Yield curve directionality at the zero lower bound

- Yields declined 5-7bp, as equities reversed yesterday's rally, and TIPS breakevens narrowed 5-6bp. With today's move, 30-year real yields closed in negative territory for the first time on record
- Given the heightened risk of the Fed returning to the ZLB, we look at how the market reacted around the final 75bp cut in December 16, 2008: the curve was negatively directional with 10-year yields leading up to the ease, and positively directional following it
- P-STRIPS outstanding increased by \$1.8bn in February, the slowest pace since June 2019, and the bulk of stripping activity remained concentrated in the 28- to 30-year sector
- Yesterday's late-day 10-year note backup surprisingly failed to mean revert the TY dollar-weighted Put/Call ratio z-score back through the sell signal threshold. The indicator is still set for an eventual signal—it just needs a tactical backup or significant trend deceleration to trigger. We continue to look for the 0.825-0.895% area to act as range resistance for March

Fixed Income Strategy

Jay Barry ^{AC}

(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter ^{AC}

(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White

(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman

(1-212) 622-9461
alix.tepper@jpmorgan.com

Natalie Matejkova

(1-212) 834-7218
natalie.matejkova@jpmorgan.com
J.P. Morgan Securities LLC

Statistics for various on the run Treasury yields and curve spreads

		Close	1d chg (bp)	WTD chg (bp)	YTD chg (bp)	3m avg	3m low	3m high	3m pctl.
Yields (%)	4wk	0.97	-2.3	-51.2	-50.8	1.51	0.97	1.60	0%
	13wk	0.62	-8.2	-66.4	-93.5	1.50	0.62	1.58	0%
	26wk	0.51	-15.3	-62.8	-107.4	1.50	0.51	1.60	0%
	52wk	0.47	-10.3	-51.1	-111.3	1.45	0.47	1.59	0%
	2y	0.58	-5.4	-29.2	-95.2	1.44	0.58	1.67	0%
	5y	0.67	-5.6	-23.9	-100.4	1.48	0.67	1.75	0%
	10y	0.92	-6.8	-20.1	-98.1	1.66	0.92	1.93	0%
	30y	1.57	-6.6	-9.7	-81.1	2.13	1.57	2.38	0%
Curves (bp)	2s/5s	8.8	-0.2	5.3	-5.2	3.9	-4.8	12.2	80%
	5s/10s	25.2	-1.1	3.8	2.3	18.7	15.2	26.4	90%
	2s/10s	34.0	-1.4	9.1	-2.9	22.5	11.1	35.4	94%
	10s/30s	64.5	0.1	10.4	17.0	46.6	42.0	64.5	100%
B/E (bp)	5y	130.9	-6.4	-2.5	-37.9	161.8	130.9	172.0	0%
	10y	141.1	-5.2	2.0	-36.2	167.8	139.1	180.3	5%
	30y	158.7	-4.9	4.9	-22.3	174.3	152.9	183.0	19%

Source: J.P. Morgan

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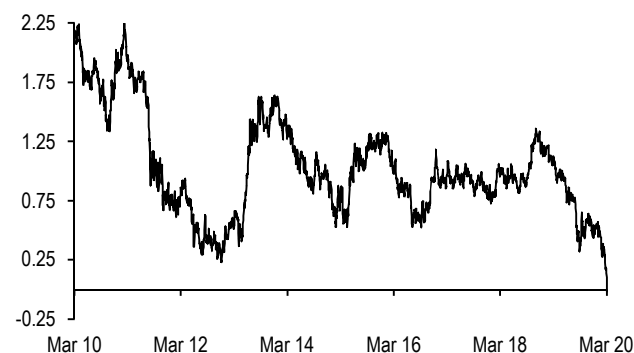
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Market views

Yields declined 5-7bp, as equities reversed yesterday's rally, and TIPS breakevens narrowed 5-6bp. With today's move, 30-year real yields closed in negative territory for the first time on record (**Exhibit 1**). Reported cases of COVID-19 over recent days shows that community spreading is indeed occurring across the US, presenting further downside risks to our forecasts. As we discussed earlier this week, in all but one episode in the modern monetary policy era, the Fed followed up past intermeeting rate cuts with an ease of the same magnitude at the next scheduled policy meeting. Although our baseline scenario is that the Fed only cuts 25bp at its next meeting on March 18, we acknowledge the risk that the Fed cuts by 50bp in two weeks' time. Indeed, OIS forwards are already pricing in about 42bp of easing by March 18. This is not our forecast but should the Fed ease by 50bp, this raises the risk of a swift return to the 0% effective lower bound in relatively short order. With rates already close to the zero lower bound (ZLB) and only so much stimulus at the Fed's disposal, NY Fed President Williams said last year, "it pays to act quickly to lower rates at the first sign of economic distress."¹ Surely enough, after the Fed lowered rates to 1% in October 2008, it followed up with a 75bp ease in December, taking the Fed funds rate to the 0-0.25% range that persisted until late 2015 (**Exhibit 2**).

Exhibit 1: With today's move, 30-year real yields closed in negative territory for the first time on record

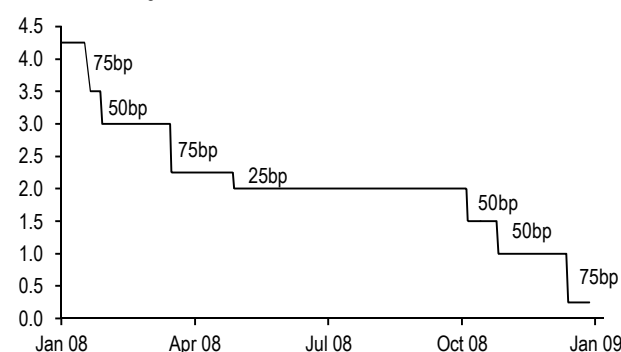
30-year real yields; %



Source: J.P. Morgan

Exhibit 2: After the Fed lowered rates to 1% in October 2008, it followed up with a 75bp ease in December, which brought the rate to the 0-0.25% range

Fed funds rate target; %



Source: J.P. Morgan

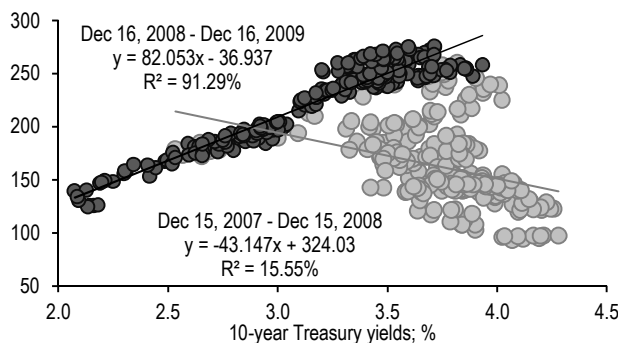
Thus, we think it's worthwhile to look at how the market reacted around the final 75bp cut in December 16, 2008. **Exhibit 3** shows that the year leading up to the December 2008 FOMC meeting, the curve was negatively directional with 10-year yields, steepening as yields declined, and vice versa. As we have noted recently, while the curve bullishly flattened through most of February in a traditional flight-to-quality response, directionality has shifted in recent weeks and the curve has steepened in the move to lower yields, alongside a growing expectation of more imminent Fed action (see [Treasuries](#), 2/28/2020). We continue to hold 2s/10s steepeners right now given the behavior of the curve following other intermeeting eases as well as the risk of further Fed action in two weeks (see [US Treasury Market Daily](#), 3/3/20). However, there is a clear risk, that if the market prices the Fed back to the ZLB, it is likely that the directionality of the curve with respect to rate levels is

¹ <https://www.newyorkfed.org/newsevents/speeches/2019/wil190718>

likely to shift, with the curve becoming positively directional with yields. Exhibit 3 shows this relationship is highly significant, with 10-year yields explaining more than 90% of the variation in the shape of the curve in the year following the move to the ZLB, and the curve flattening by 8.2bp for every 10bp decline in 10-year yields. Turning to the long end, **Exhibit 4** shows that though the same relationship holds, it is substantially looser. In the year prior leading up to the move to the ZLB, 10s/30s displayed almost no directionality with respect to intermediate yield levels. However, over the following year, we observed the same positive directionality, with 10s/30s steepening as 10-year yields rose. **Overall, we think market participants can apply the same playbook should the markets price a return to the ZLB: we can expect the curve directionality to shift positive and for this relationship to be stronger at the front end of the curve compared to the long-end.**

Exhibit 3: The directionality of the front-end curve shifted sharply following the Fed's move to the ZLB...

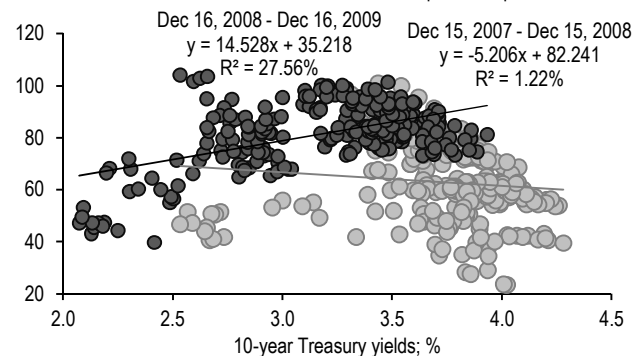
2s/10s Treasury curve regressed on 10-year Treasury yields (%) over Dec 15, 2007 - Dec 15, 2008 and Dec 16, 2008 - Dec 16, 2009 periods; bp



Source: J.P. Morgan

Exhibit 4: ...and though the general relationship holds for the long end as well, it is substantially looser

10s/30s Treasury curve regressed on 10-year Treasury yields (%) over Dec 15, 2007 - Dec 15, 2008 and Dec 16, 2008 - Dec 16, 2009 periods; bp



Source: J.P. Morgan

However, we think there is one caveat: there was robust demand for STRIPS last year even as long-end yields declined and the funded ratio for the largest defined benefit pension funds declined. This seems at odds with prior behavior, but it is clear that there has been an asset reallocation at work, as the fixed income share of pension assets continued to rise. If LDI investors continue to allocate further into fixed income even as yields decline, there is a risk the long end displays a more muted directionality with respect to rate levels.

STRIPS update

This afternoon Treasury released the MSPD for February, which shows **P-STRIPS outstanding rose \$1.8bn over the month, the slowest pace of stripping activity since June 2019 (Exhibit 5)**. Along the curve, activity remained concentrated in the 28- to 30-year sector (**Exhibit 6**). Meanwhile, reconstitution activity was focused in the 20- to 24-year sector.

Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

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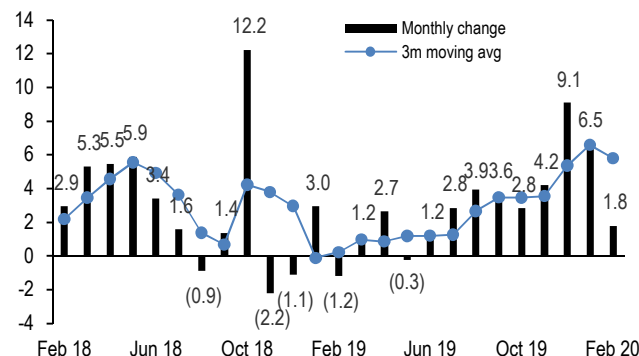
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Exhibit 5: P-STRIPS outstanding increased by \$1.8bn in February, the slowest pace since June 2019

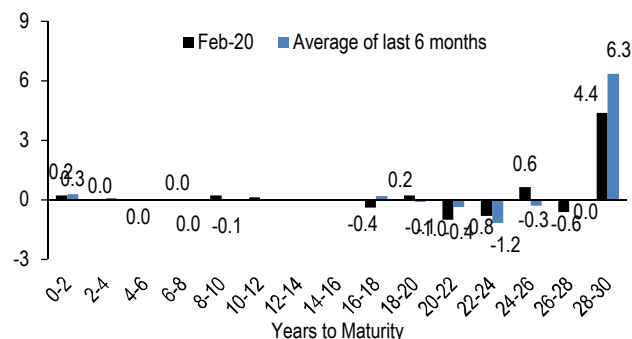
Monthly change in P-STRIPS outstanding and 3-month average; \$bn



Source: US Treasury

Exhibit 6: The bulk of stripping activity remained concentrated in the 28- to 30-year sector

Monthly change in P-STRIPS outstanding by sector in January 2020 vs. prior 6-month average; \$bn



Source: J.P. Morgan

Technical highlights

Exhibit 7: Yesterday's late-day 10-year note backup surprisingly failed to mean revert the TY dollar-weighted Put/Call ratio z-score back through the sell signal threshold. The indicator is still set for an eventual signal, it just needs a tactical backup or significant trend deceleration to trigger. We continue to look for the 0.825-0.895% area to act as range resistance for March 10-year note yield, daily bars; % and the TY dollar-weighted Put/Call ratio z-score



Source: J.P. Morgan, CME, CQG

Surprisingly, yesterday's late-day backup failed to push the TY dollar-weighted Put/Call ratio z-score through the -1.9 standard deviation signal threshold (Exhibit 7). The indicator remains poised for an eventual sell signal, which requires either enough of a tactical backup or significant rally deceleration in the days ahead. We continue to think the **0.825-0.895%** area will act as range resistance for the **10-year note** in March. Tactical support rests at **1.06%** and **1.17%** hourly chart pivots. The latter has the potential to cap yields over the short-term, in our view. The **1.32-1.43%** breakout area likely marks a yield ceiling for the months ahead. To lower yield levels, a break through **0.80%** would turn our attention to longer-term resistance at the **0.625%** Apr 2010-Oct 2018 equal swings objective.

Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

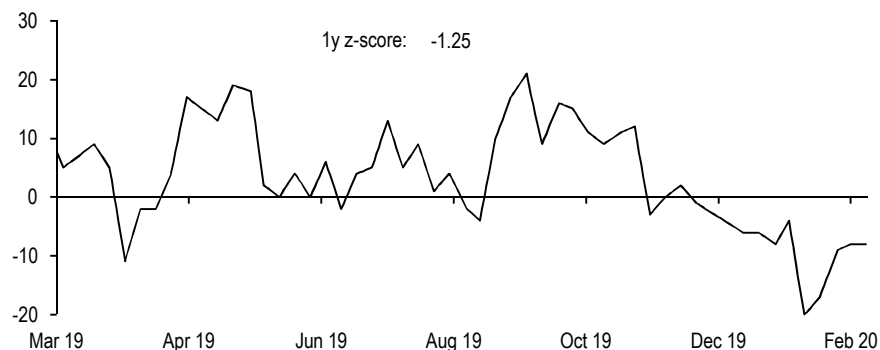
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Appendix: Position technicals overview

Exhibit A1: J.P. Morgan Treasury Client Survey

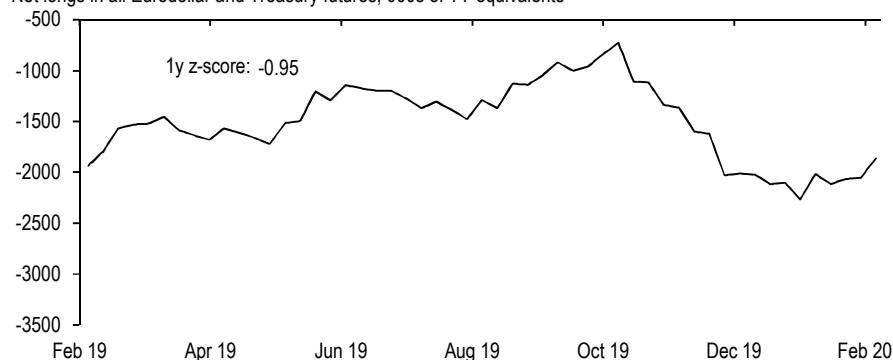
Net longs; %



Source: J.P. Morgan

Exhibit A2: CFTC non-commercial positions

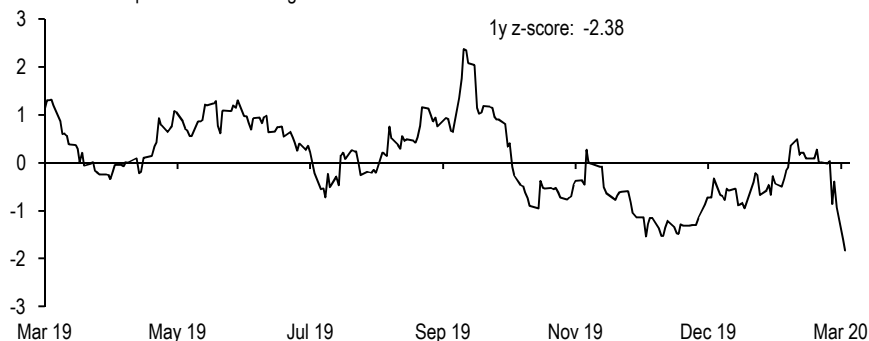
Net longs in all Eurodollar and Treasury futures; 000s of TY equivalents



Source: CFTC

Exhibit A3: CTA exposure to 10-year Treasuries

Partial beta with respect to the J.P. Morgan US 7-10Y bond index in our model for CTA returns*



* Model is a 1-month regression of daily excess returns on the CTA index versus daily excess returns on 1) J.P. Morgan US 7-10Y bond index, 2) J.P. Morgan ex-US Global Bond Index, 3) S&P500 index, 4) J.P. Morgan global cash index, and 5) Goldman Sachs Commodities Index

Source: Bloomberg, SG, J.P. Morgan

Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

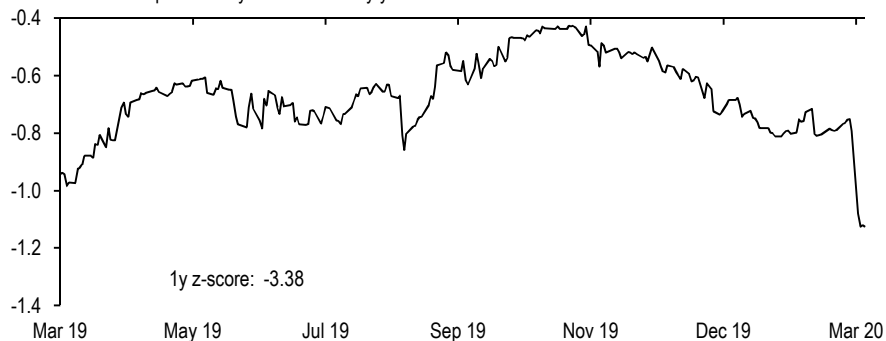
Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

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Exhibit A4: Active Core Bond Fund* Managers' exposure to 10-year Treasuries

Partial beta with respect to 10-year US Treasury yields in our model for active bond fund excess returns**

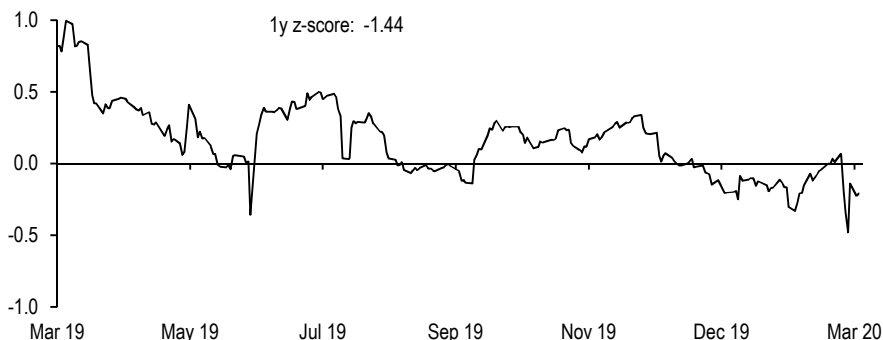


* The core bond fund index is comprised of the 20 largest (by assets under management) actively-managed US core bond funds

** Model is a 3-month regression of daily excess returns on the bond fund index versus daily changes in 1) 10-year US Treasury yields, 2) 5s/30s Treasury curve, 3) constant-maturity 5-year CDX.IG spread, 4) MBS Libor option-adjusted spread, and 5) 3Mx10Y swaption volatility; Source: Bloomberg, J.P. Morgan

Exhibit A5: Macro Hedge Fund exposure to 10-year Treasuries

Partial beta with respect to the J.P. Morgan US 7-10Y bond index in our model for macro hedge fund returns*

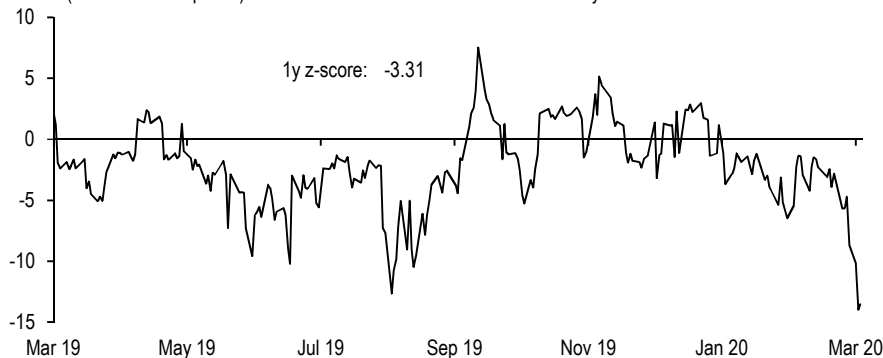


* Model is a six-week regression of daily excess returns on the HFRX Macro/CTA index versus daily excess returns on 1) J.P. Morgan US 7-10Y bond index, 2) J.P. Morgan ex-US Global Bond Index, 3) S&P 500 equity index, 4) MSCI G7 ex-US equity index, 5) J.P. Morgan global cash index, and 6) Goldman Sachs Commodities Index.

Source: Bloomberg, HFR, J.P. Morgan

Exhibit A6: T-note dollar weighed Put/Call ratio

The total (OI * settlement prices) of the individual T-note future Puts divided by the same calculation for Calls



Source: CFTC, Bloomberg, CQG, CME, J.P. Morgan

Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

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Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

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Jay Barry
(1-212) 834-4951
john.f.barry@jpmorgan.com

Jason Hunter
(1-212) 270-0034
jason.x.hunter@jpmorgan.com

Phoebe A White
(1-212) 834-3092
phoebe.a.white@jpmorgan.com

Alix Tepper Floman
(1-212) 622-9461
alix.tepper@jpmorgan.com

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